



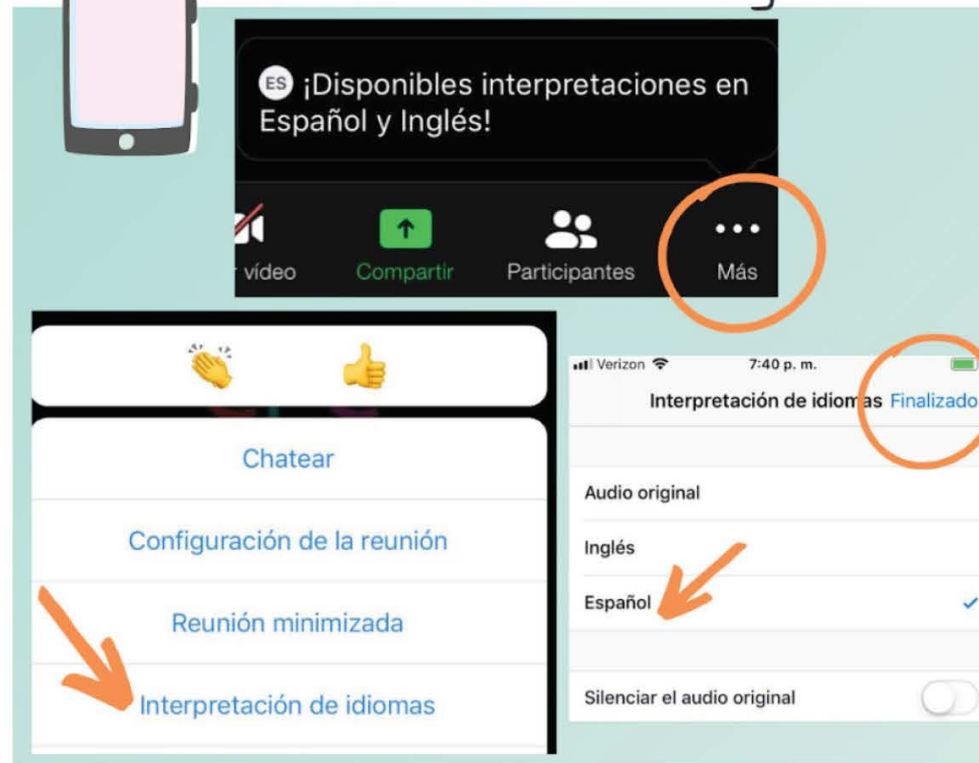
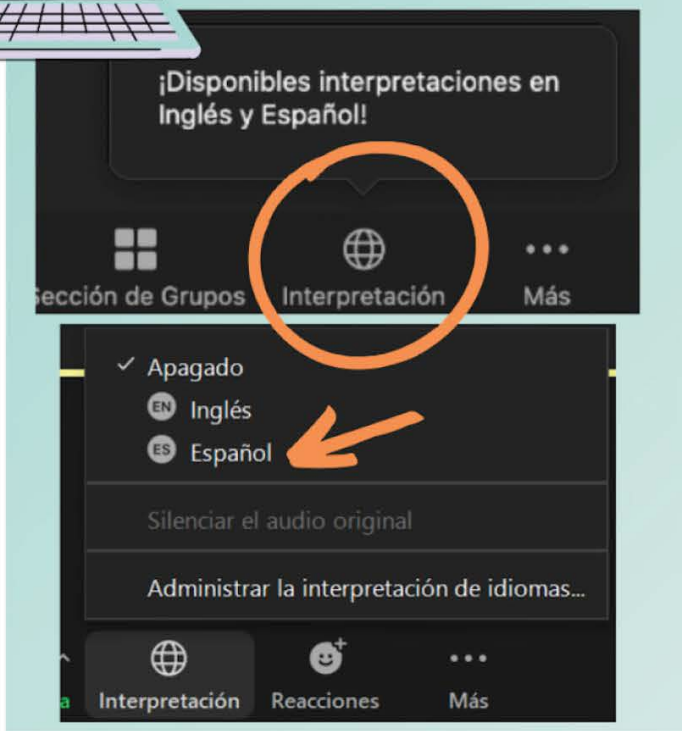
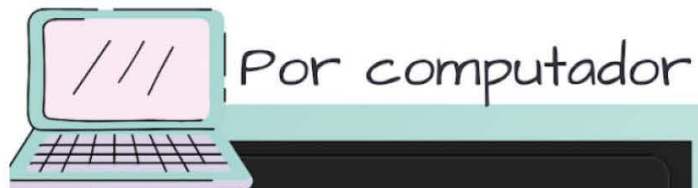
Hill Country Land, Water, and Natural Infrastructure Plan

Virtual Open House
November 16, 2022

Interpretation



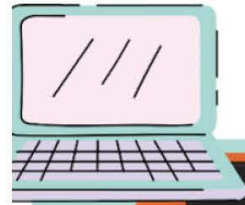
PARA ACCEDER A LA INTERPRETACIÓN



Si le gustaría participar en español, seleccione "Español"

Si tiene alguna dificultad técnica, envíenos un mensaje de texto al (832) 390-1421.
If you have technical difficulties, please text us at (832) 390-1421.

TO ACCESS INTERPRETATION



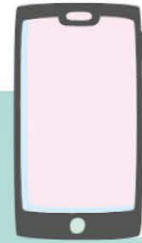
Via computer

English and Spanish interpretation available!

Q&A Interpretation

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✓ English
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Via smartphone

ES Spanish and English interpretation available!

Chat Q&A More

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Meeting Settings
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Language Interpretation

Language Interpretation Done

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English
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If you would like to participate in English, please select "English"

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Open House Goals

1. Create a shared understanding of what the Hill Country Land, Water, and Natural Infrastructure Plan is and what the final Plan will include
2. Provide an overview of the process of developing the Plan
3. Share how the project defines natural infrastructure
4. Share results of Network engagement and community engagement so far
5. Answer questions about the process and preliminary results (everything is still a work in progress!)
6. Gather feedback to inform revisions and next steps



Plan Overview



Texas Hill Country Conservation Network

A coalition of organizations and agencies came together to form the Texas Hill Country Conservation Network (THCCN/the Network) in 2017.

The mission of the Network is to scale up the impact of conservation-focused organizations working throughout the Hill Country.



Planning Goals

Define the most critical natural infrastructure systems in the Hill Country and lay out a vision for greater investment in those systems as the region grows.

- 1. Create a collaborative vision** for the future of Hill Country conservation
- 2. Develop data-driven solutions** informed by extensive community engagement and the best available science
- 3. Catalyze increased funding** for the critical work of protecting, restoring, and enhancing the region's unique lands, waters, and natural infrastructure



What is the “Plan”?

The Plan is ALL the outcomes of the planning process:

1. Shared vision, principles, goals, definitions
2. Collaboratively developed infographics
3. Recommendations and guidance
4. Maps of infrastructure priorities
5. Overall report + county-level summaries
6. Customizable info for communications
7. Data hub



How will the Plan be used?

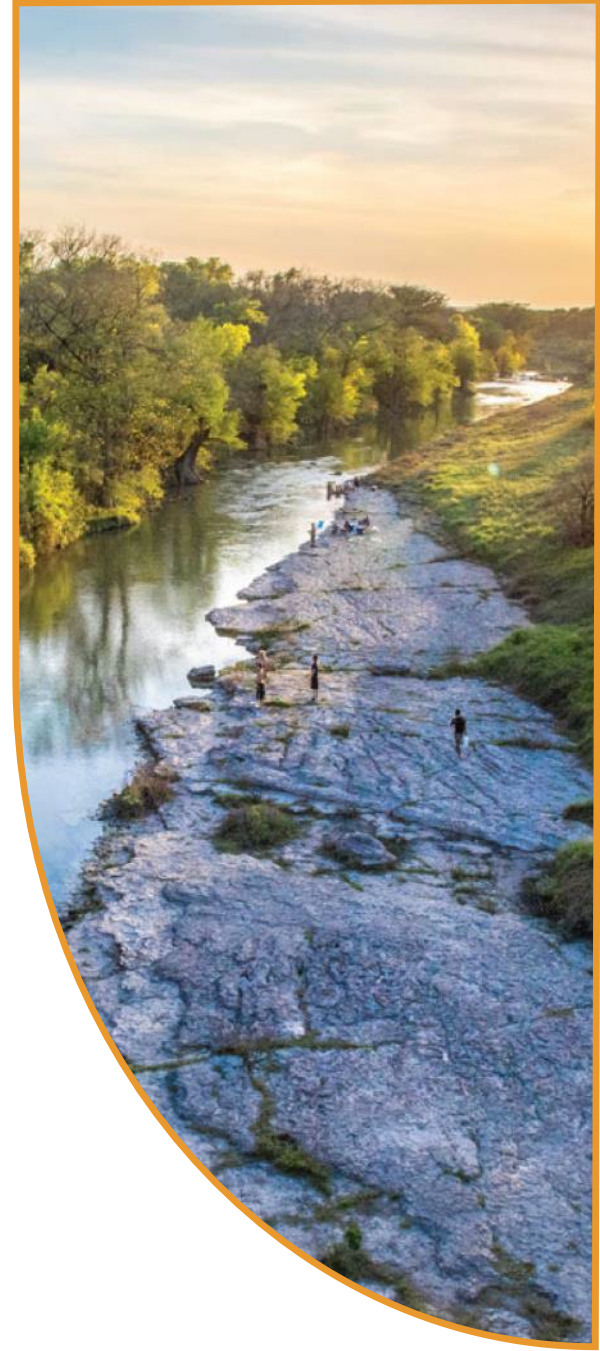
1. As **adaptable guidance** to help inform regional conservation and natural infrastructure efforts
2. As **evidence** to help persuade communities and funders to increase investments
3. To **inform strategy** development by individual organizations and agencies

The Plan is NOT intended to commit any organization, agency, or municipality to a particular priority or approach.



Plan Vision (in progress)

Our vision is a vibrant and thriving Hill Country where sustaining natural infrastructure ensures that every community is resilient in the face of extreme weather and everyone in the region has access to clean water and air and opportunities to connect to nature.



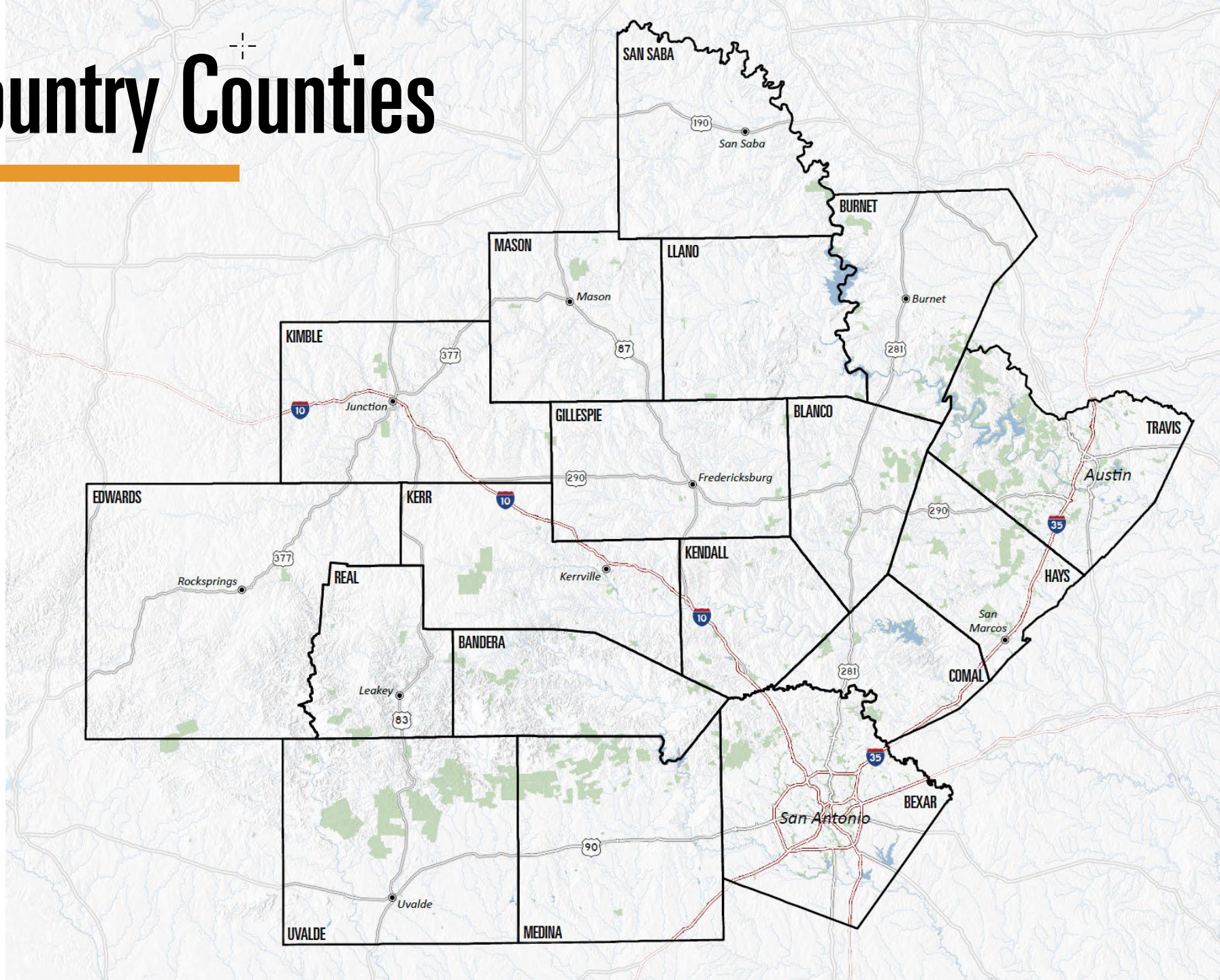
Natural Infrastructure Definition (in progress)

Natural infrastructure is made up of the nature-based systems and features that sustain healthy communities.

Natural infrastructure is the waterways and wetlands, woodlands and forests, grasslands and rangeland, and other nature-based systems and features that enhance water quality, recharge aquifers, protect drinking water, support wildlife and biodiversity, prevent soil erosion, clean the air, reduce flood risk, and minimize the impacts of extreme weather. Urban forests, rain gardens, and open space in parks also represent natural infrastructure.

Protecting, restoring, and enhancing natural infrastructure provides critical and cost-effective environmental, health, social, and economic benefits.

Hill Country Counties



Planning Context

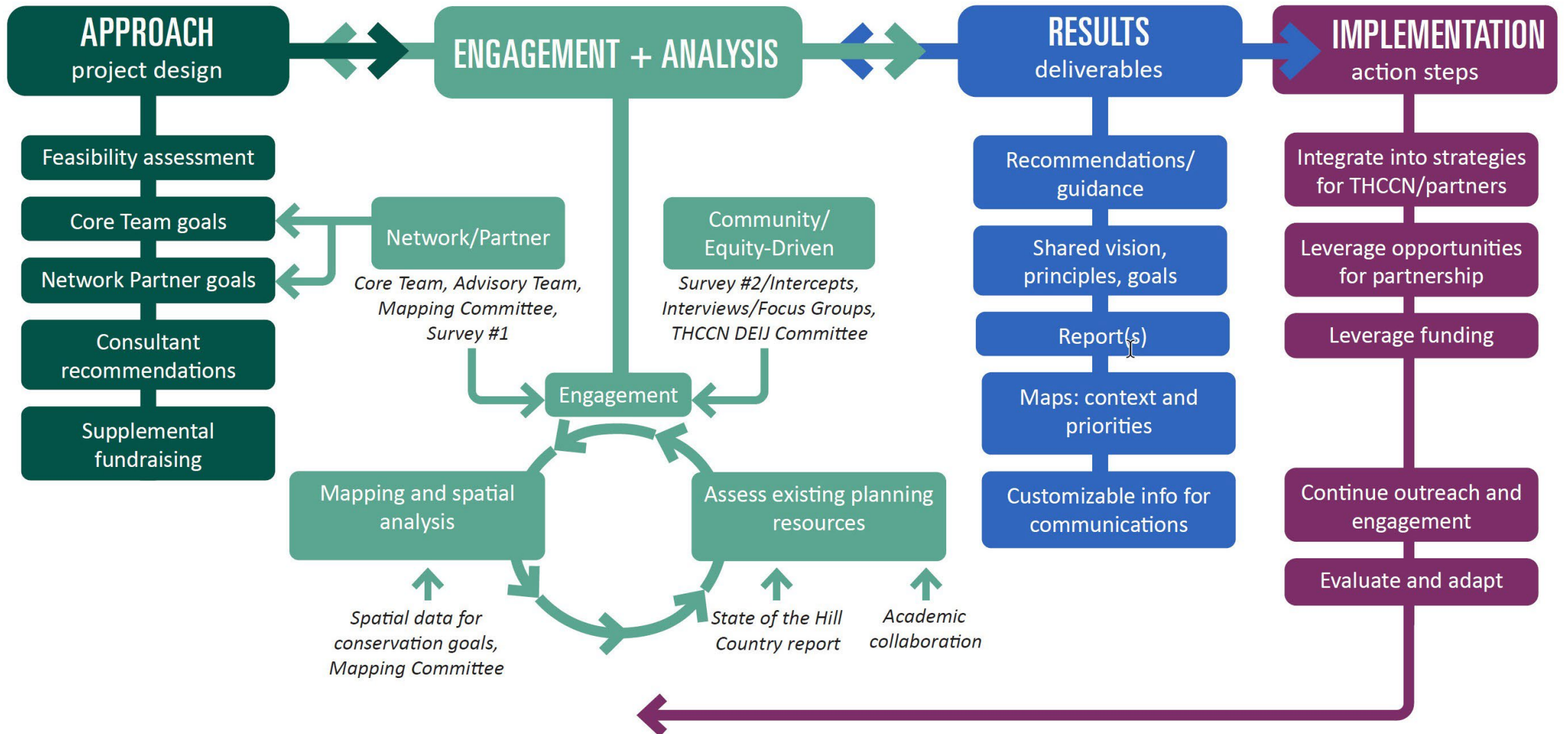
- 18 counties, over 11 million acres, headwaters of 12 rivers, population of 3.8 million (ecological complexity + fast growth)
- 5% of Hill Country protected right now; County governments do not have land use planning authority
- Hugely variable size and demographics among counties:
 - Population from 1,918 (Edwards) to 1.9 million (Bexar)
 - Median income from \$36K (Real) to \$85K (Kendall)
 - Percent w/ college degree from 14% (San Saba) to 50% (Travis)
 - Percent Hispanic/Latinx from 10% (Llano) to 72% (Uvalde)

Building on Existing Plans

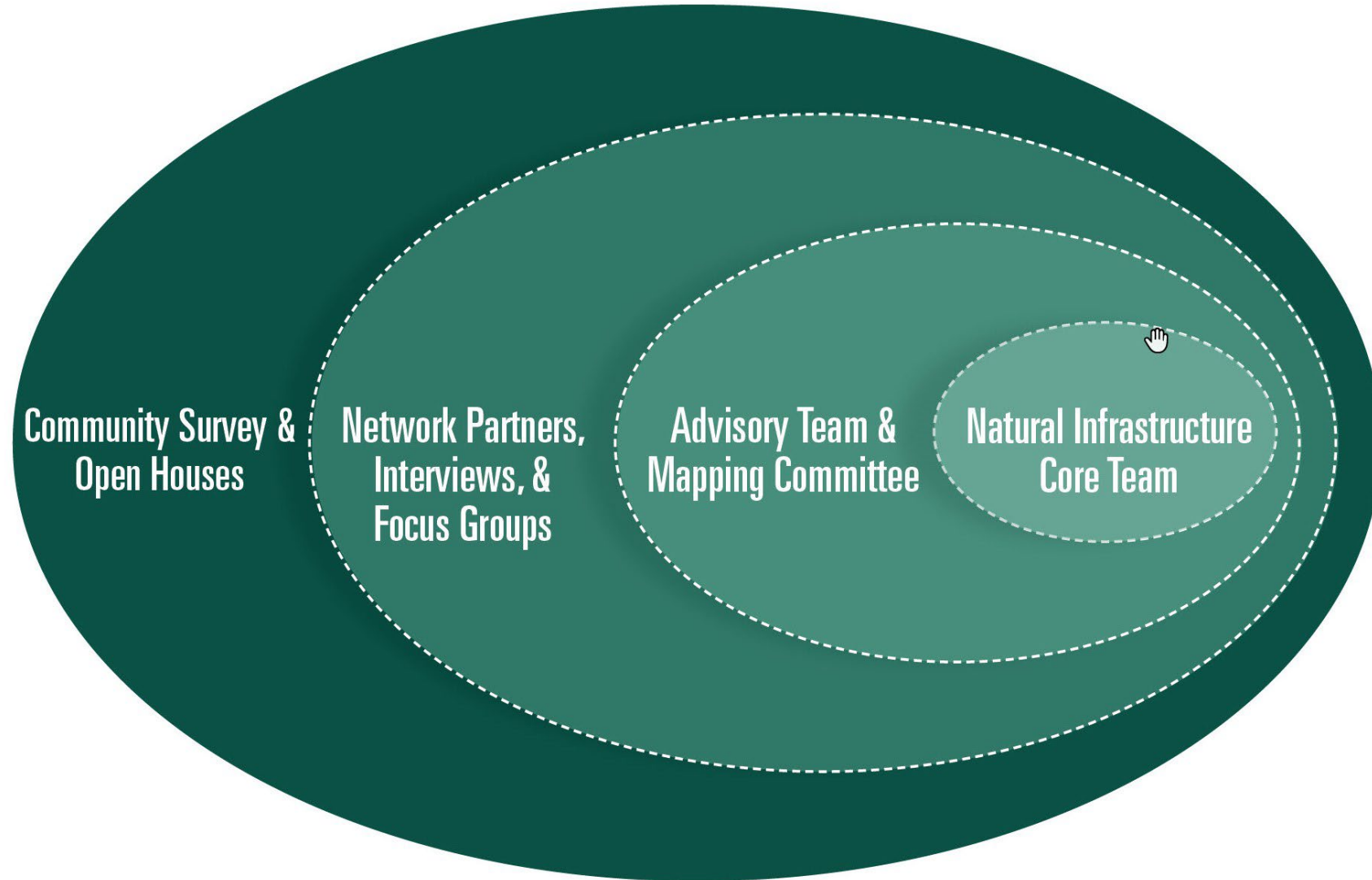
- The State of the Hill Country
- Water and Equity in the Texas Hill Country
- Making the Case for Source Water Protection (Pedernales River Basin)
- Pedernales Watershed Strategic Prioritization
- Guadalupe River Basin Strategic Conservation Plan
- North Llano River Watershed Protection Plan
- Edwards Aquifer Habitat Conservation Plan
- Cypress Creek Watershed Protection Plan
- Regional habitat conservation plans
- Towards a Regional Plan for the Texas Hill Country



Planning Process



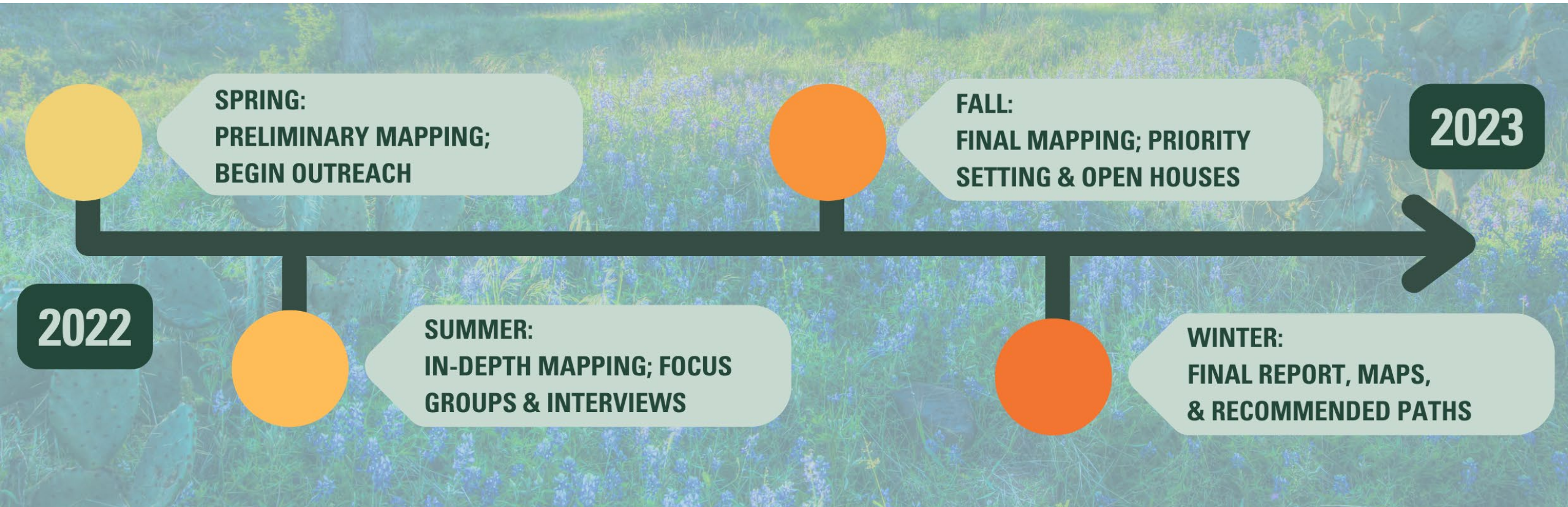
Layers of Engagement



Engagement Approaches and Numbers

- 1. Internal Engagement:** Understand the perspectives and leverage the expertise of THCCN member organizations, conservation practitioners, and other partners
 - ✓ **73** individuals (**50** organizations) participated in Network survey
 - ✓ **62** individuals (**45** organizations) participated in Advisory Team (+ Core Team and Mapping Team)
- 2. External Engagement:** Identify priorities, needs, and concerns of broader communities throughout the Hill Country—with a special focus on understanding the needs of marginalized rural communities and frontline communities
 - ✓ In-person outreach in San Antonio and rural areas
 - ✓ Targeted interviews and focus groups
 - ✓ **2,815 responded to community survey**

Planning Timeline



Network Survey

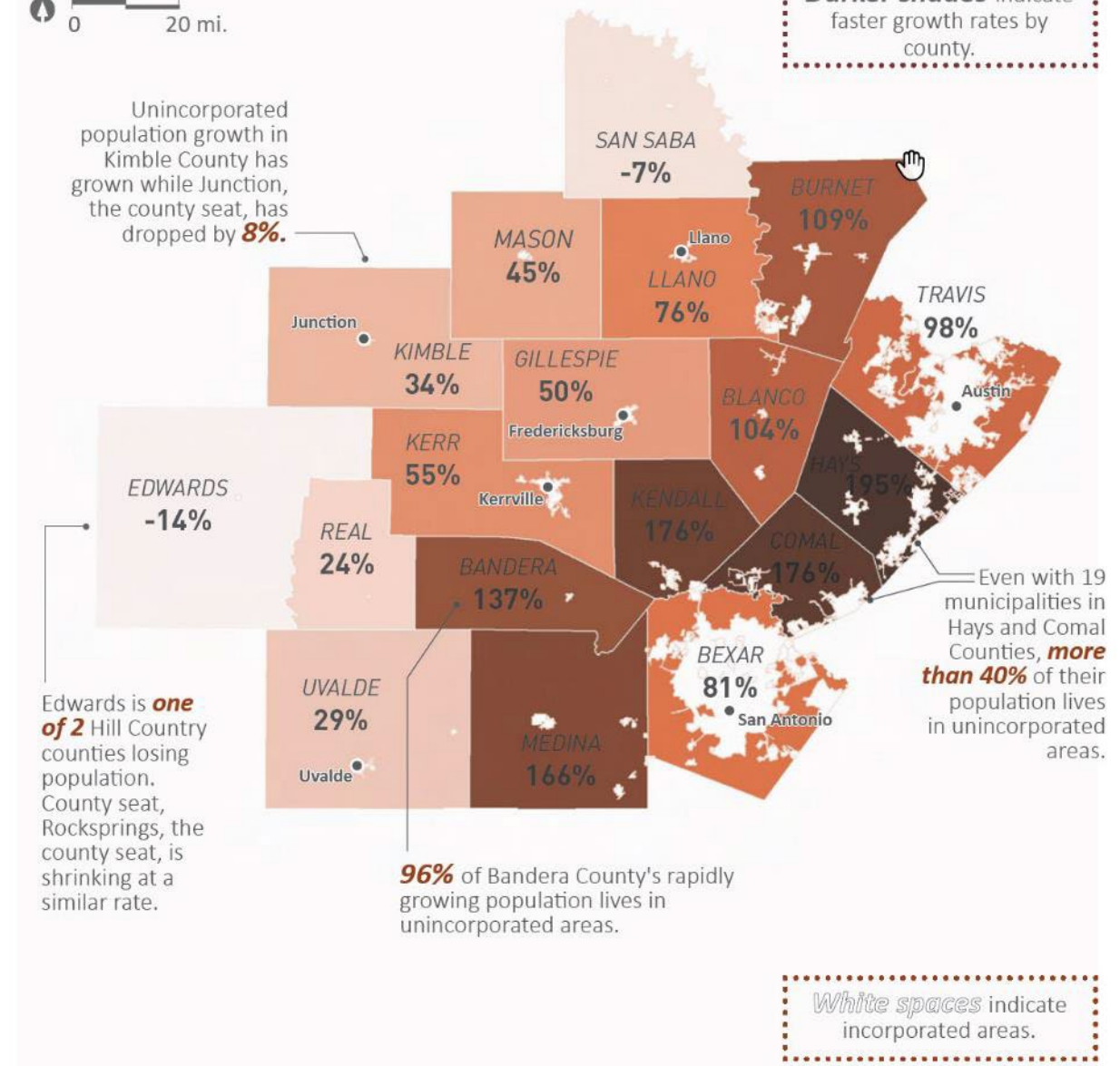


Biggest Obstacles

- Development pressure/growth (56%)
- Lack of public funding (36%)
- Lack of county land use planning authority (29%)

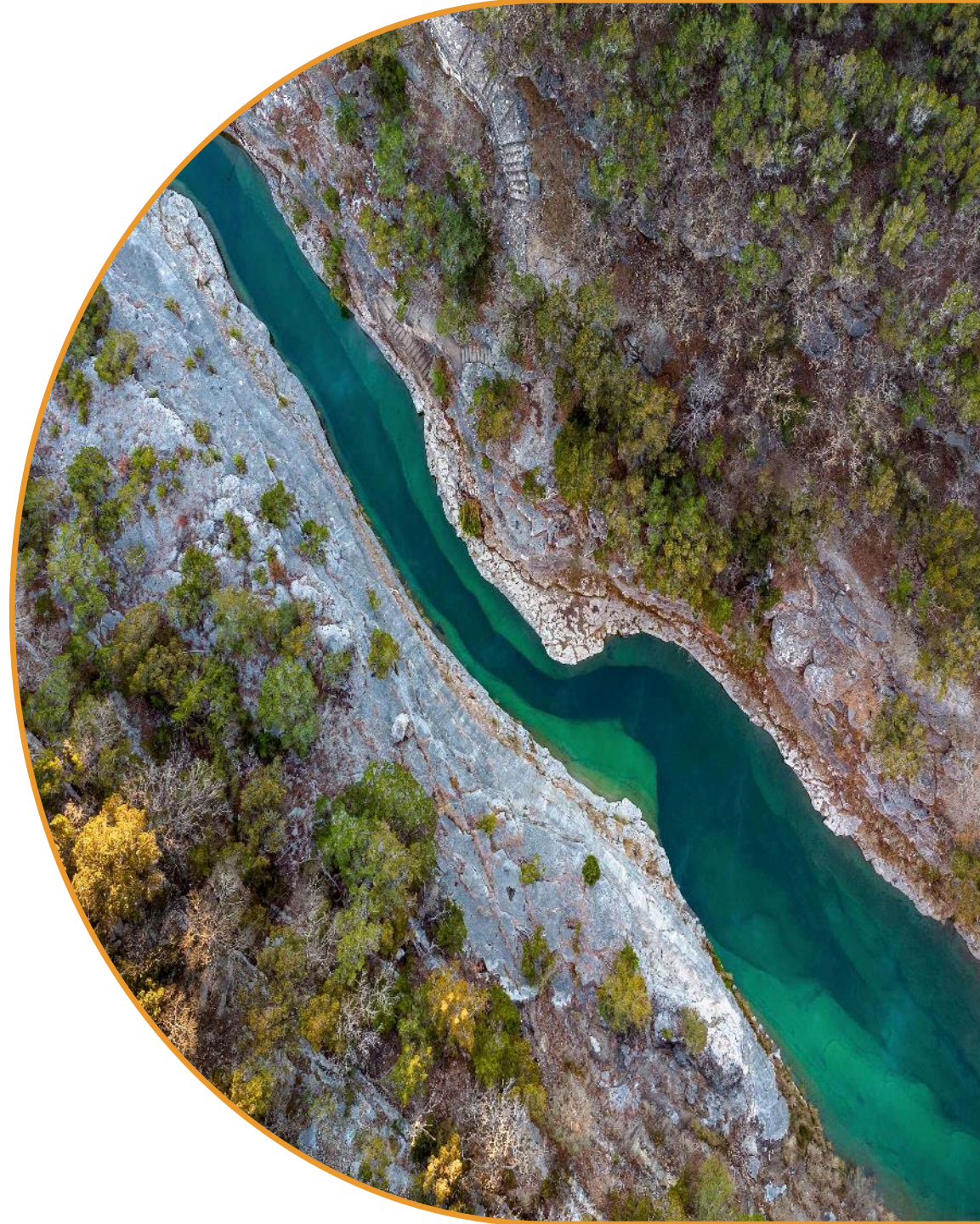
POPULATION GROWTH IN UNINCORPORATED AREAS, 1990 - 2020

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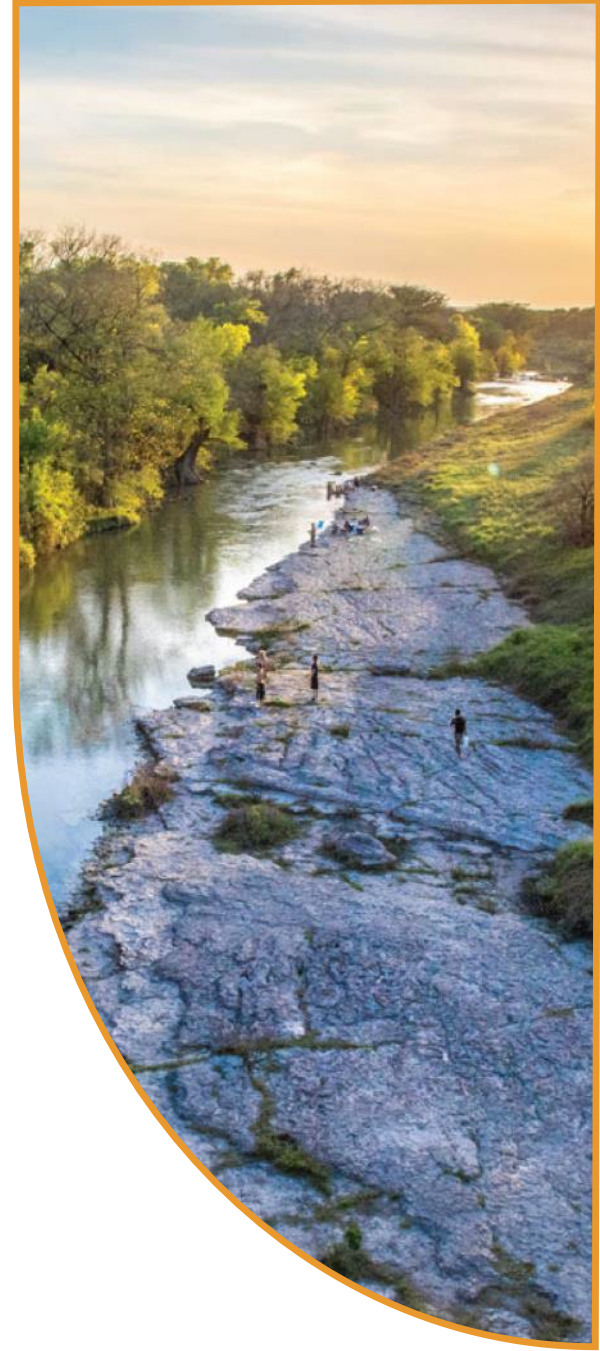
Water is the highest priority (by far).

- 85% said water is what is most special about the Hill Country
- Protecting water quality (70%) and water quantity (67%) are highest priority resource goals



Conservation Goals for Weighted Maps

1. Protect water quality
2. Preserve water supply
3. Provide wildlife habitat and connectivity
4. Increase climate resilience
5. Preserve rural working lands
6. Expand access to outdoor recreation and nature



Community Survey Approach



Community Survey Approach

- Survey open from late May to early August; available in Spanish and English
- Extensive Network outreach, particularly through social media and newsletters; HCA also reached out to Chambers of Commerce and other local groups
- Flyers and intercept surveys in San Antonio and rural communities with high Hispanic/Latinx populations
- Amplification of outreach (compensated) by GAVA, PODER, Indigenous Cultures Institute, Latino Outdoors, and Black Women Who Kayak+

Community Survey Demographics

- Hispanic/Latinx community residents were significantly underrepresented; Black residents were slightly underrepresented
- White/non-Hispanic, Asian, and Native American residents were overrepresented
- Rural residents were overrepresented, and white and rural respondents tended to be somewhat older than other survey participants

Community Survey Results



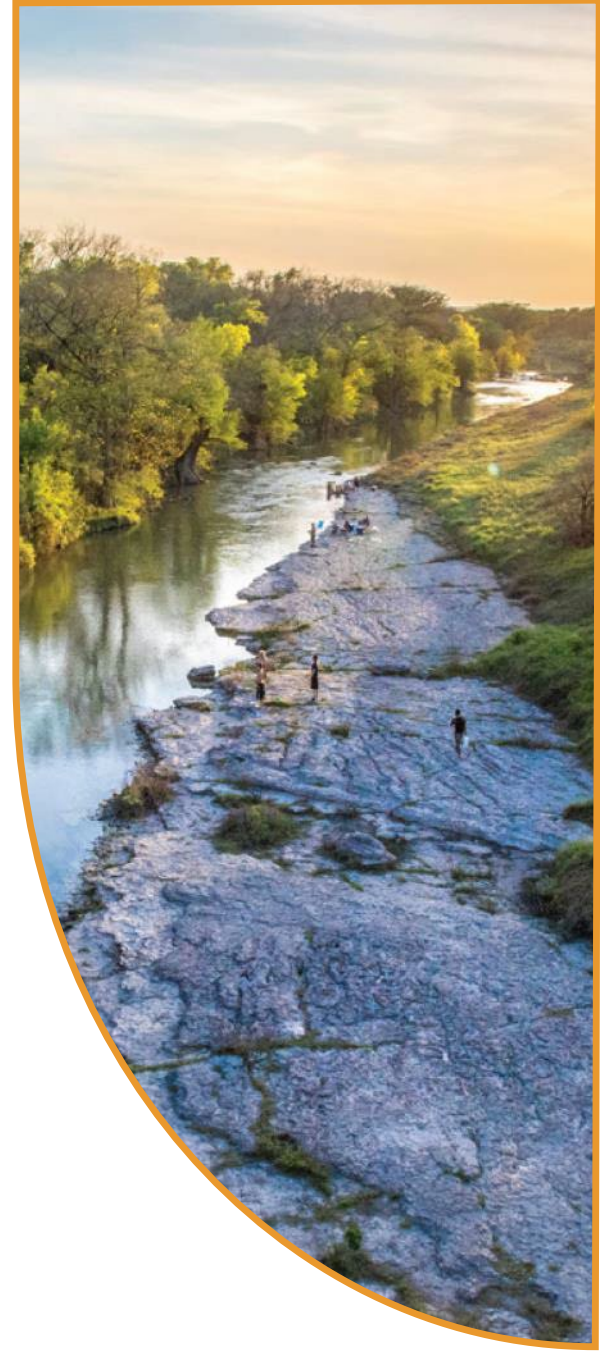
There is VERY strong support for increasing public funding to protect land, water, and natural infrastructure.

Nearly 85% of survey respondents said they would definitely support increasing public funding and only 2% said they would not support funding.



Protecting WATER is survey participants' highest priority conservation goal.

- This includes both protecting water supply (a top priority for 48%) and protecting water quality (a top priority for 44%).
- The highest priorities after protecting water were wildlife habitat and reducing the risk of wildfires.





Most residents are only somewhat satisfied with their access to outdoor recreation and nature.

- Rural residents were generally more satisfied with their existing access to outdoor recreation and nature.
- Connecting with nature is the most popular reason that respondents would like access to parks, trails, waterways, and open spaces (followed by exercise, relaxation, and recreation).



Most community members do not yet fully understand natural infrastructure as defined by the Plan.

- Fewer than 46% of respondents indicated that all the options presented represented natural infrastructure.
- Hispanic/Latinx respondents were mostly likely to see all the options presented as aspects of natural infrastructure (59%).
- Rural residents were by far the most likely to identify “well-managed rangeland” as natural infrastructure (51% of rural residents versus 29% of urban residents).



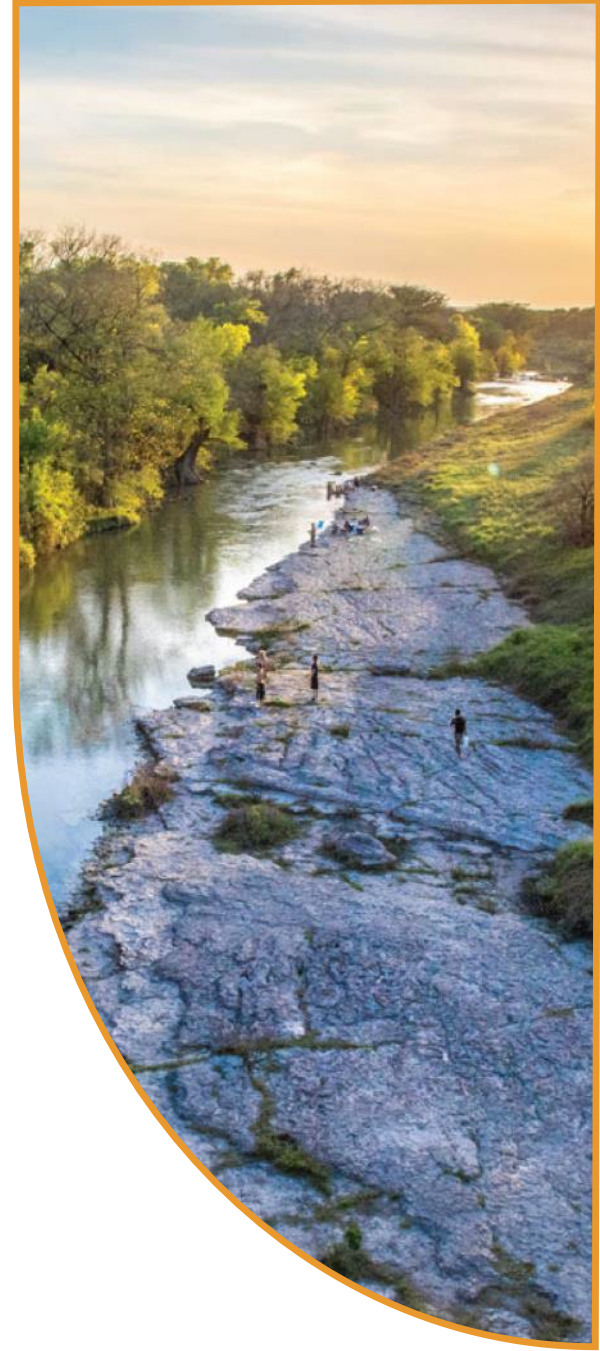
There is significant community concern about preventing light pollution and preserving night skies.

- Light pollution was mentioned 100 times by survey participants.
- A substantial number of responses to open-ended questions involved the need to preserve dark skies in the Hill Country to protect human health, ecological health, and the aesthetic and economic benefits of dark skies.



There are significant differences in the ways that various groups see conservation goals.

- Hispanic/Latinx residents rated all the conservation goals as more important than other ethnic/racial groups did.
- Rural survey participants and Black and Native American survey participants are more likely than others to say that preserving rural working lands is one of their top priorities.
- Climate resilience goals are less likely to be top priorities for rural residents and those with the highest household incomes.



Visualizing Natural Infrastructure



NATURAL INFRASTRUCTURE

OF THE TEXAS HILL COUNTRY



WOODLANDS / FORESTS



GRASSLANDS



FARMS & RANCHLANDS



WETLANDS & RIPARIAN ZONES



WATERWAYS



AQUATIC SYSTEMS



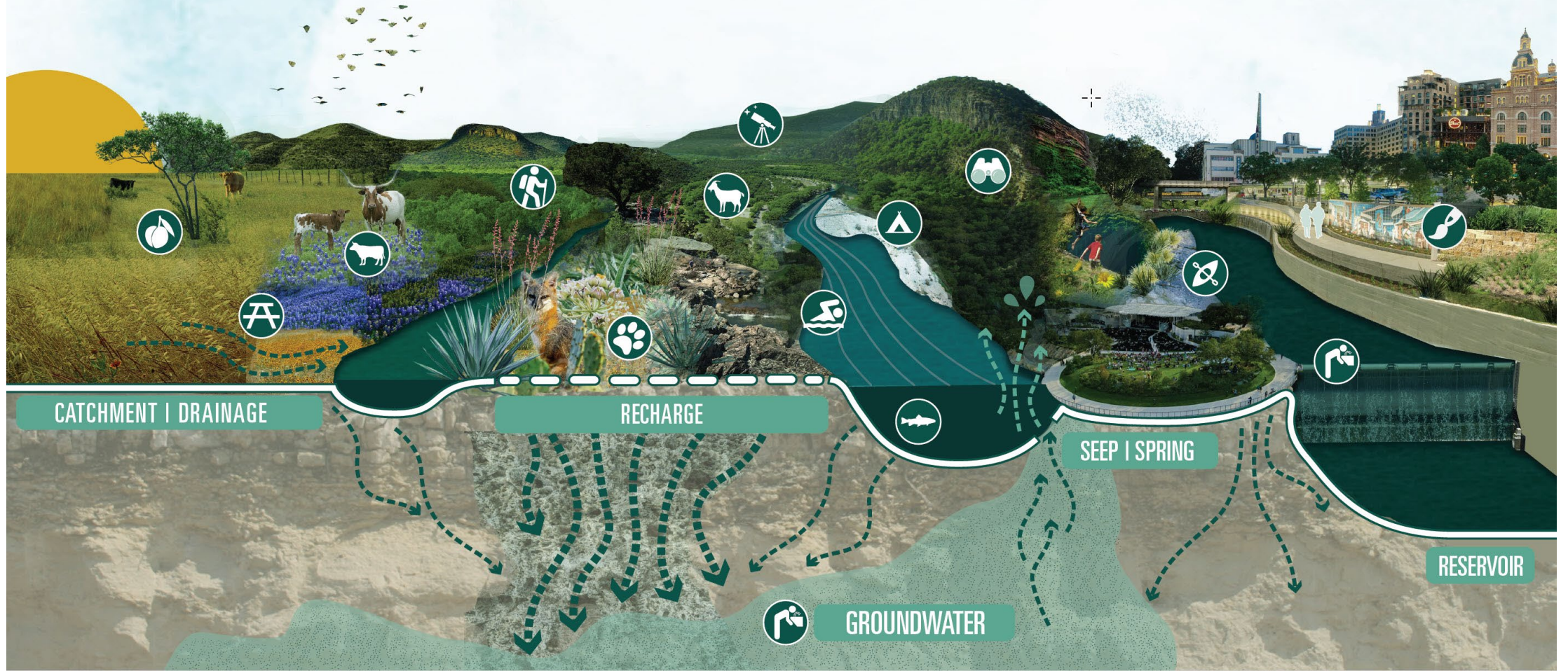
PARKS / OPEN SPACE



URBAN FORESTS



RAIN GARDENS



CATCHMENT | DRAINAGE

RECHARGE

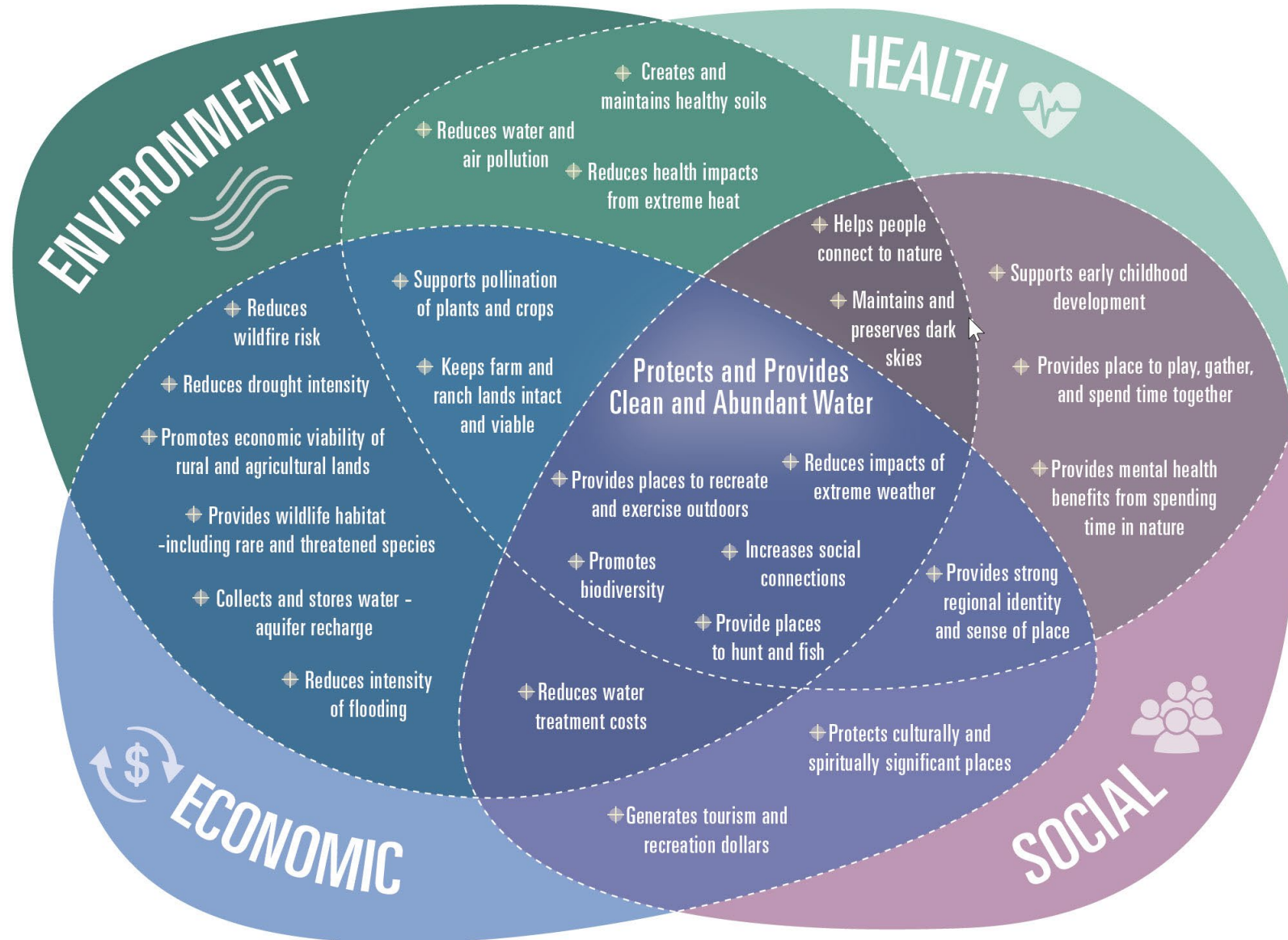
SEEP | SPRING

RESERVOIR

GROUNDWATER

NATURAL INFRASTRUCTURE BENEFITS

IN THE TEXAS HILL COUNTRY



Mapping Our Conservation Goals



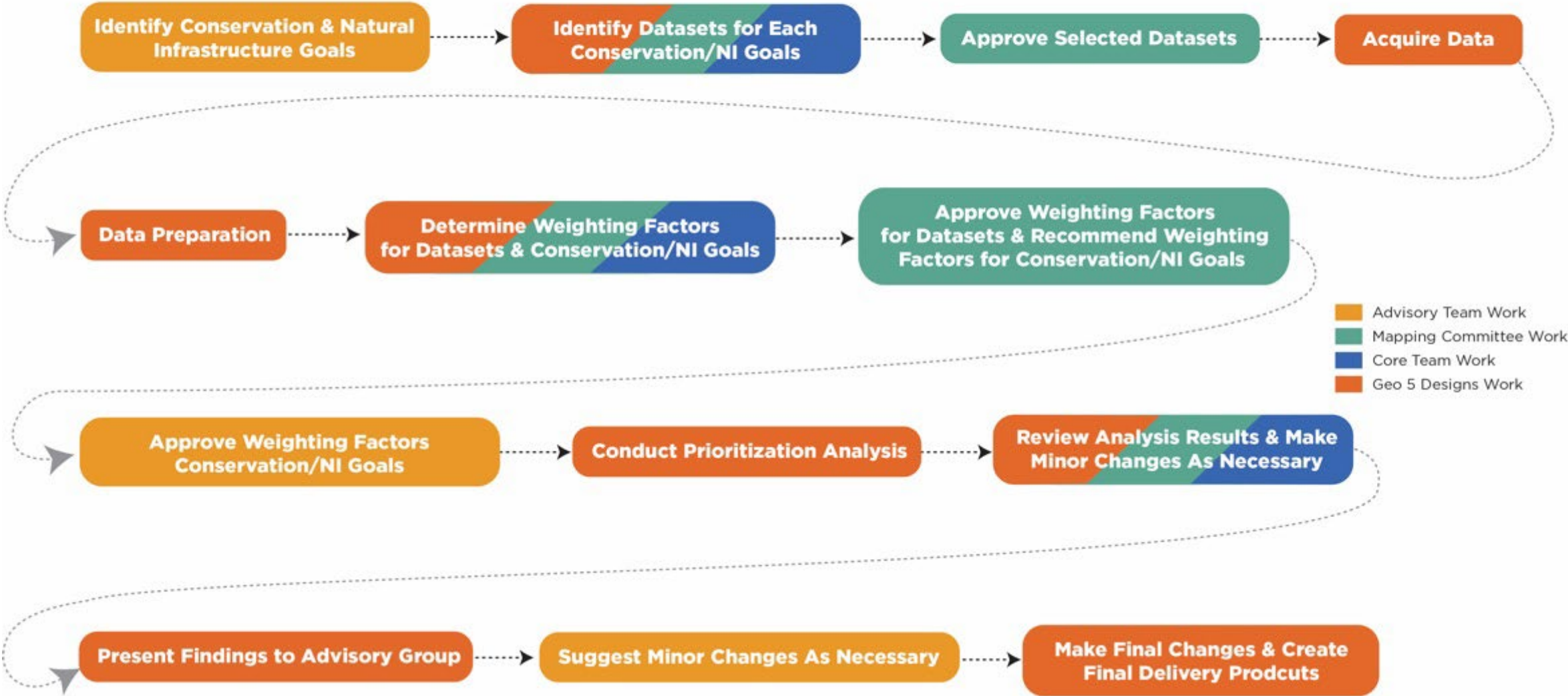
Conservation Goal Mapping

- Six Conservation Goals for weighted mapping were determined through Network Survey
- Data identified by Mapping Committee and Core Team; data classification and weighting within goal determined by Mapping Committee
- Conservation Goal weighting determined based on Community Survey results
- Data Hub in progress
- Analysis conducted by Geo 5 Designs



CONSERVATION PRIORITIZATION PROCESS

Discovering Equitable Conservation Opportunities Using Geospatial Data Analyses



texas hill country conservation network

FINAL CONSERVATION GOAL & CRITERIA WEIGHTING



WATER SUPPLY 26%

- 45% - Protect lands in aquifer recharge and contributing zones
- 33% - Protect karst areas
- 22% - Buffer public water intakes



WATER QUALITY 23%

- 41% - Protect natural lands along streams, rivers, wetlands, and arroyos
- 23% - Protect pristine streams
- 18% - Buffer natural springs
- 18% - Protect areas of high erosion potential



CLIMATE RESILIENCE 22%

- 30% - Protect flood-prone areas from development
- 30% - Protect intact forest areas
- 21% - Protect TNC most Resilient Landscapes
- 19% - Protect areas of increased threat of wildfire



WILDLIFE HABITAT & CONNECTIVITY 12%

- 39% - Protect areas with general high habitat value
- 31% - Protect habitat specifically for rare, threatened or endangered spp.
- 30% - Protect lands with close proximity to other conserved lands



PRESERVING WORKING LANDS 10%

- 39% - Protect larger parcels on the landscape
- 31% - Protect areas of increasing population growth
- 30% - Protect areas of prime and significant soils

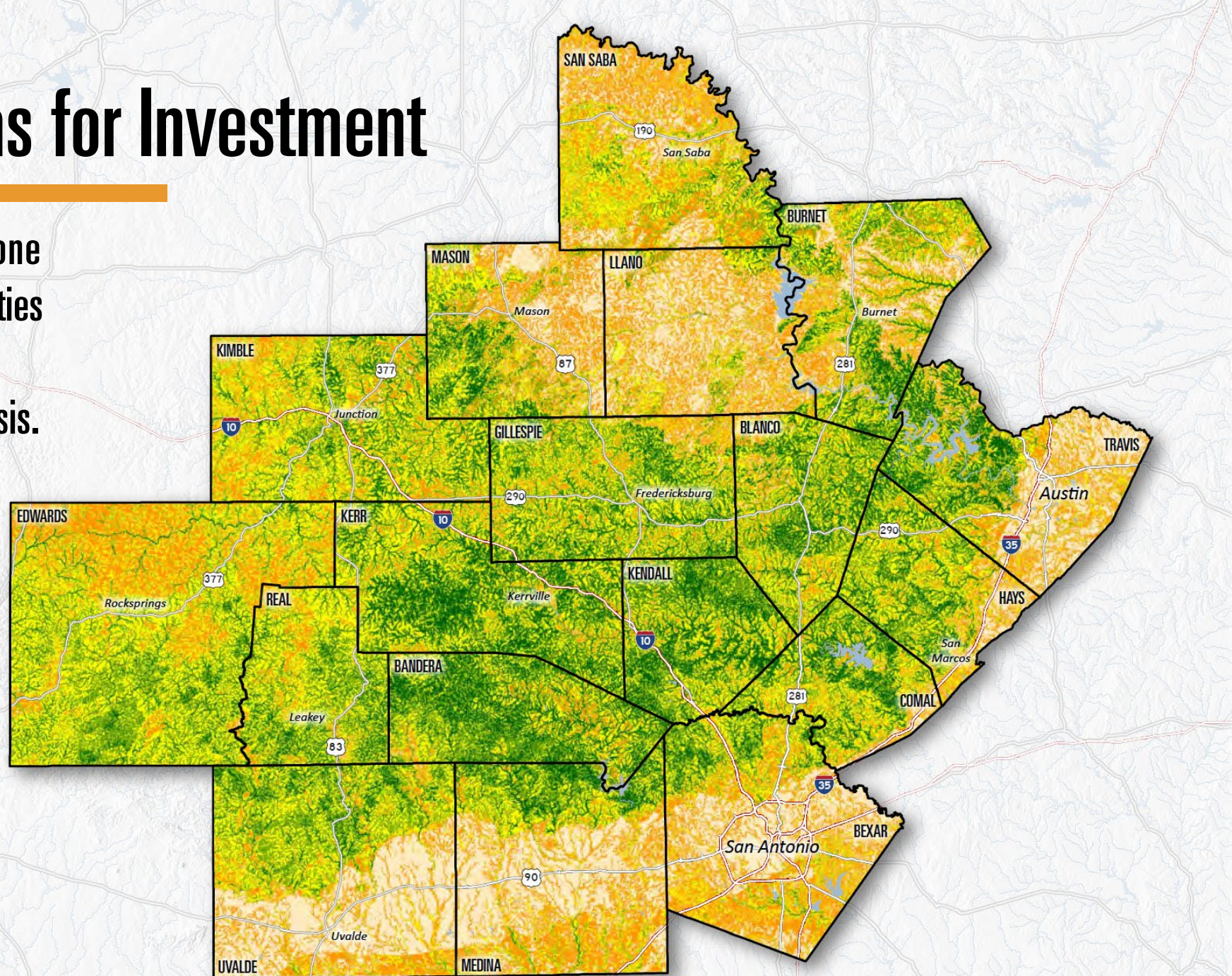


ACCESS TO OUTDOORS & NATURE 7%

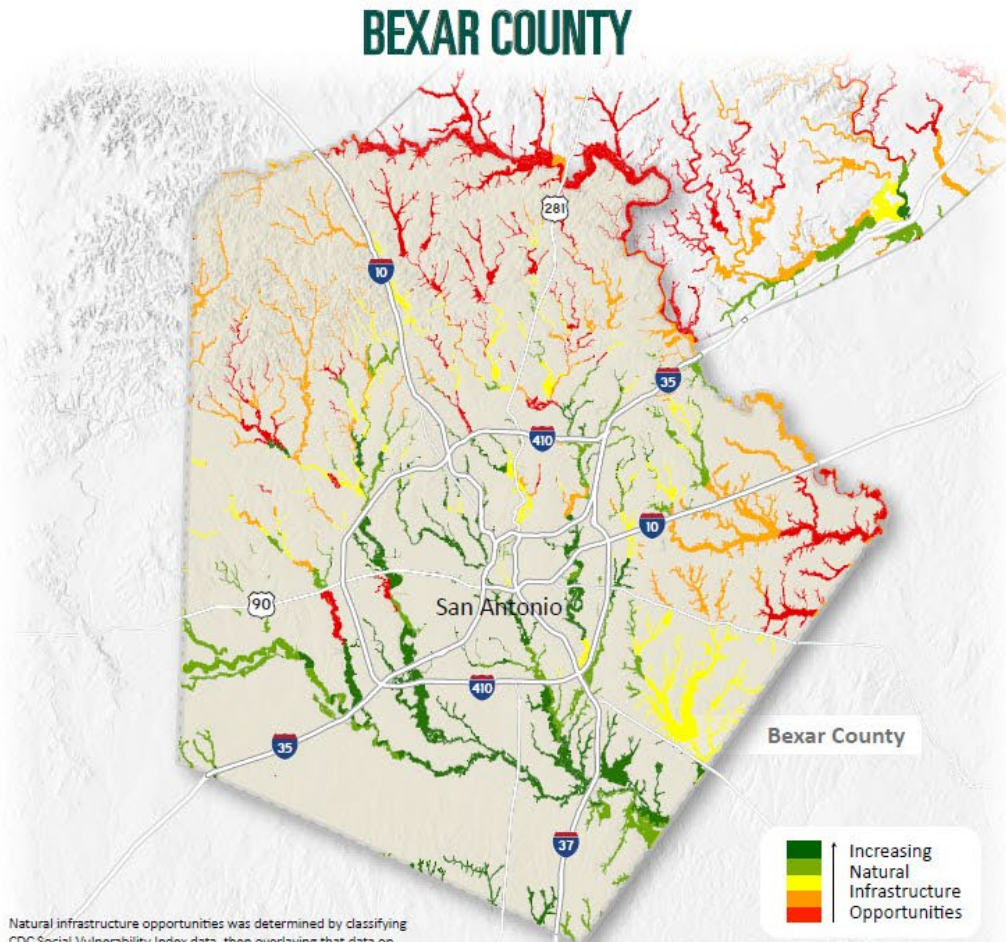
- 28% - Provide open space to improve public health
- 26% - Preserve open space in or near low income/underserved areas
- 26% - Improve access to aquatic recreation opportunities
- 20% - Prioritize protection of areas furthest from existing public lands

Priority Areas for Investment

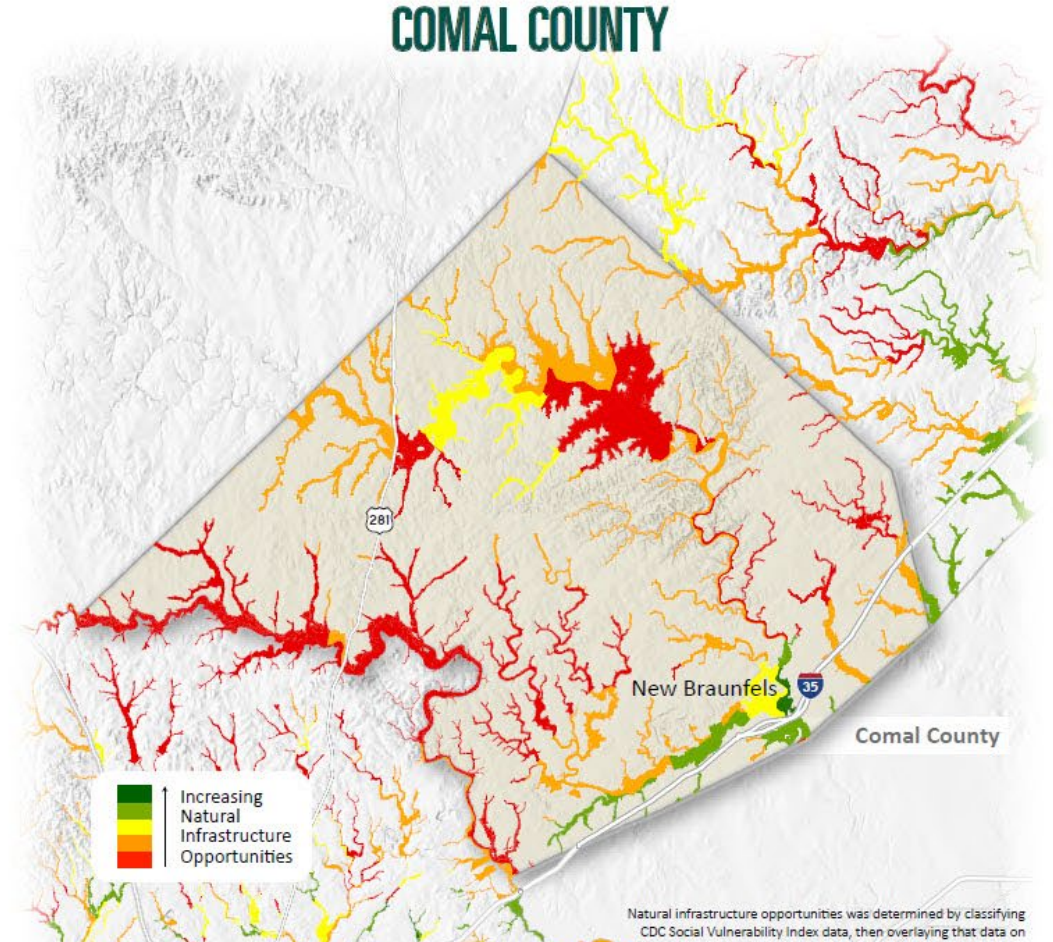
Note: This map is just one tool for looking at priorities based on the weighted conservation goal analysis.



Priority Areas for Natural Infrastructure to Mitigate Flooding

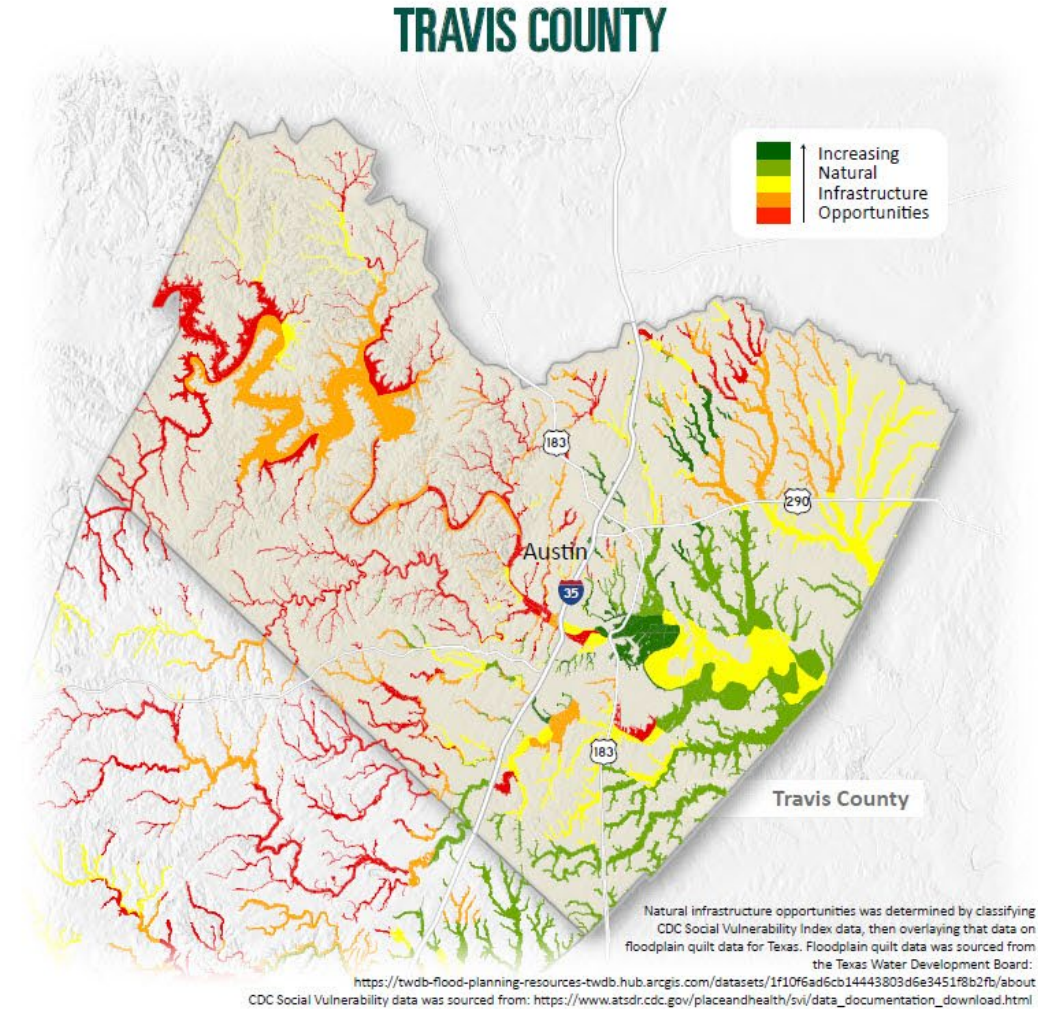
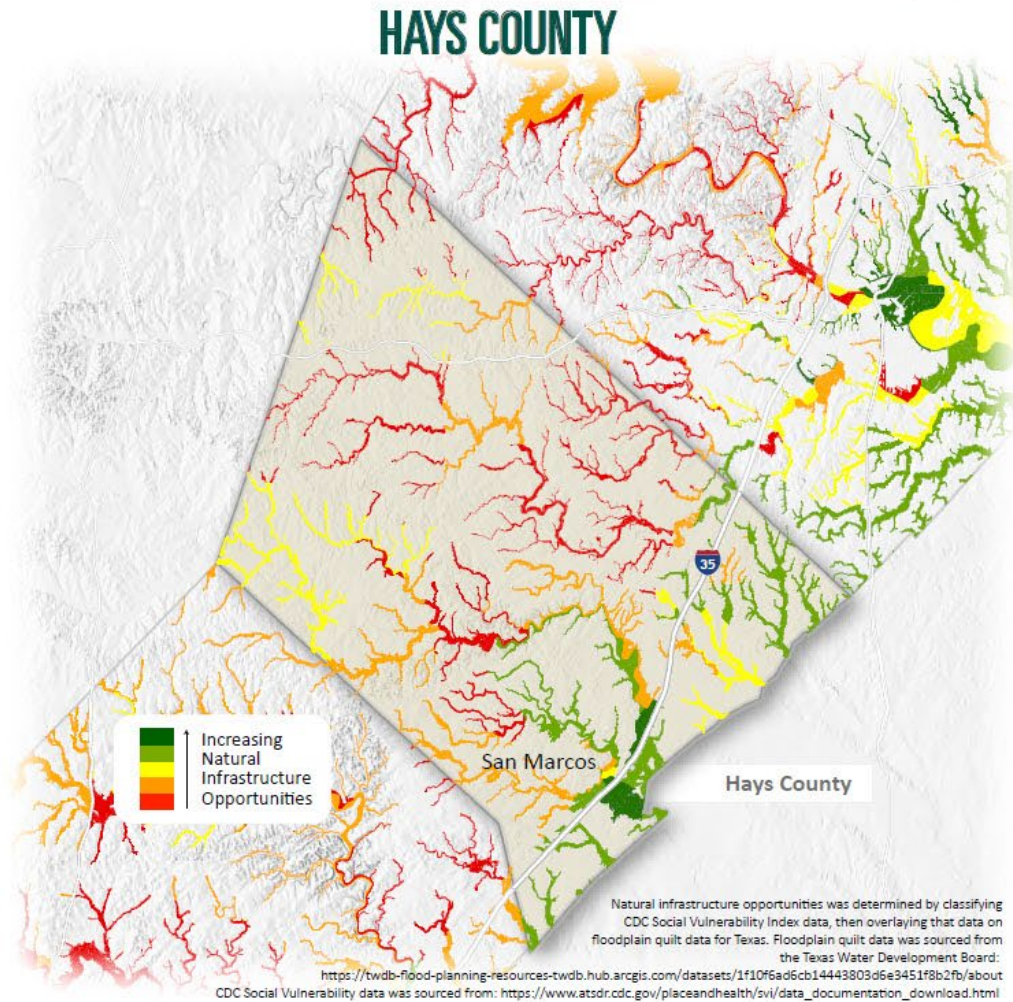


Natural infrastructure opportunities was determined by classifying CDC Social Vulnerability Index data, then overlaying that data on floodplain quilt data for Texas. Floodplain quilt data was sourced from the Texas Water Development Board: <https://twdb-flood-planning-resources-twdb.hub.arcgis.com/datasets/1f10f6ad6cb14443803d6e3451f8b2fb/about>
CDC Social Vulnerability data was sourced from: https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

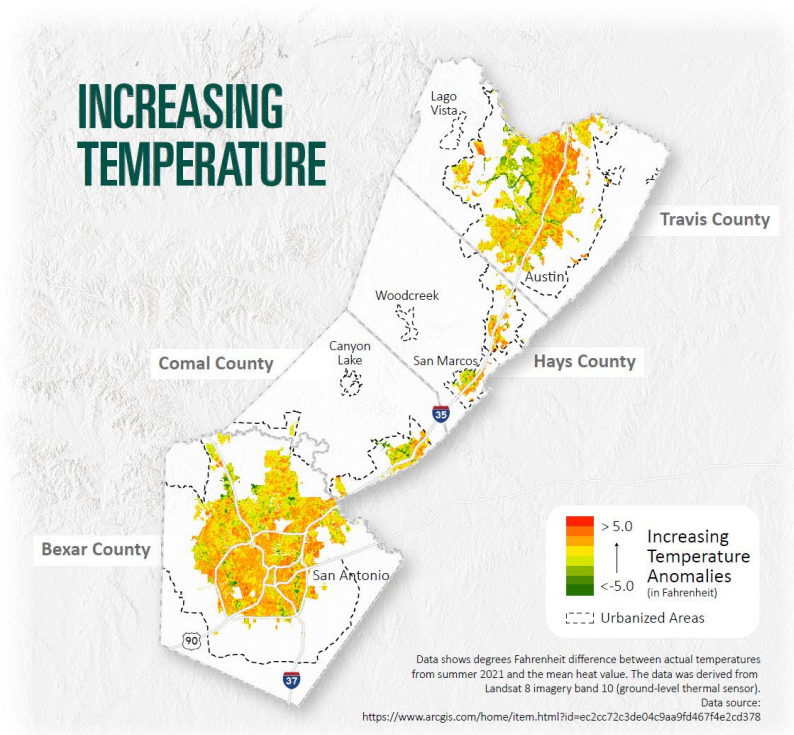
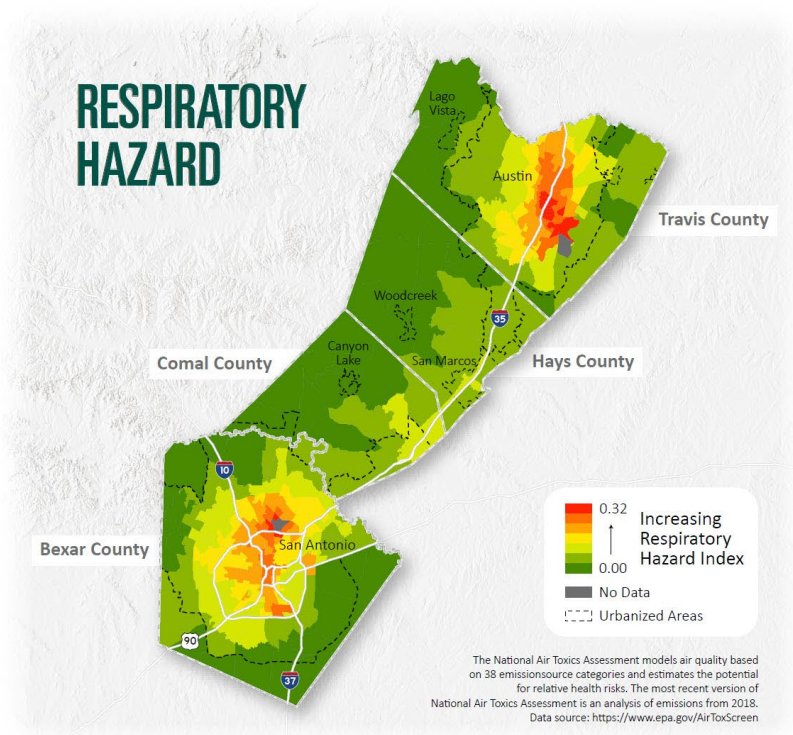
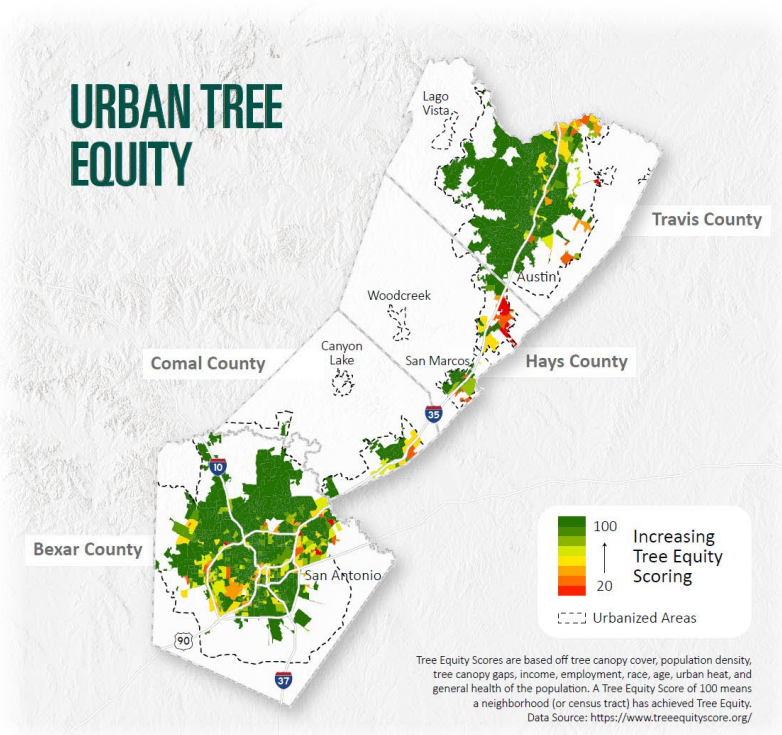


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Priority Areas for Natural Infrastructure to Mitigate Flooding



Priority Areas for Natural Infrastructure to Mitigate Heat



Next Steps and Closing



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The Plan is ALL the outcomes of the planning process:

1. Shared vision, principles, goals, definitions
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How will the Plan be used?

1. As **adaptable guidance** to help inform regional conservation and natural infrastructure efforts
2. As **evidence** to help persuade communities and funders to increase investments
3. To **inform strategy** development by individual organizations and agencies

The Plan is NOT intended to commit any organization, agency, or municipality to a particular priority or approach.



Next Steps

- Make revisions based on open house feedback
- Conduct final interviews and focus groups
- Prepare final overall report and county reports (early 2023) and data hub (by March 2023)



Texas Water Development Board

Thank you! Questions?

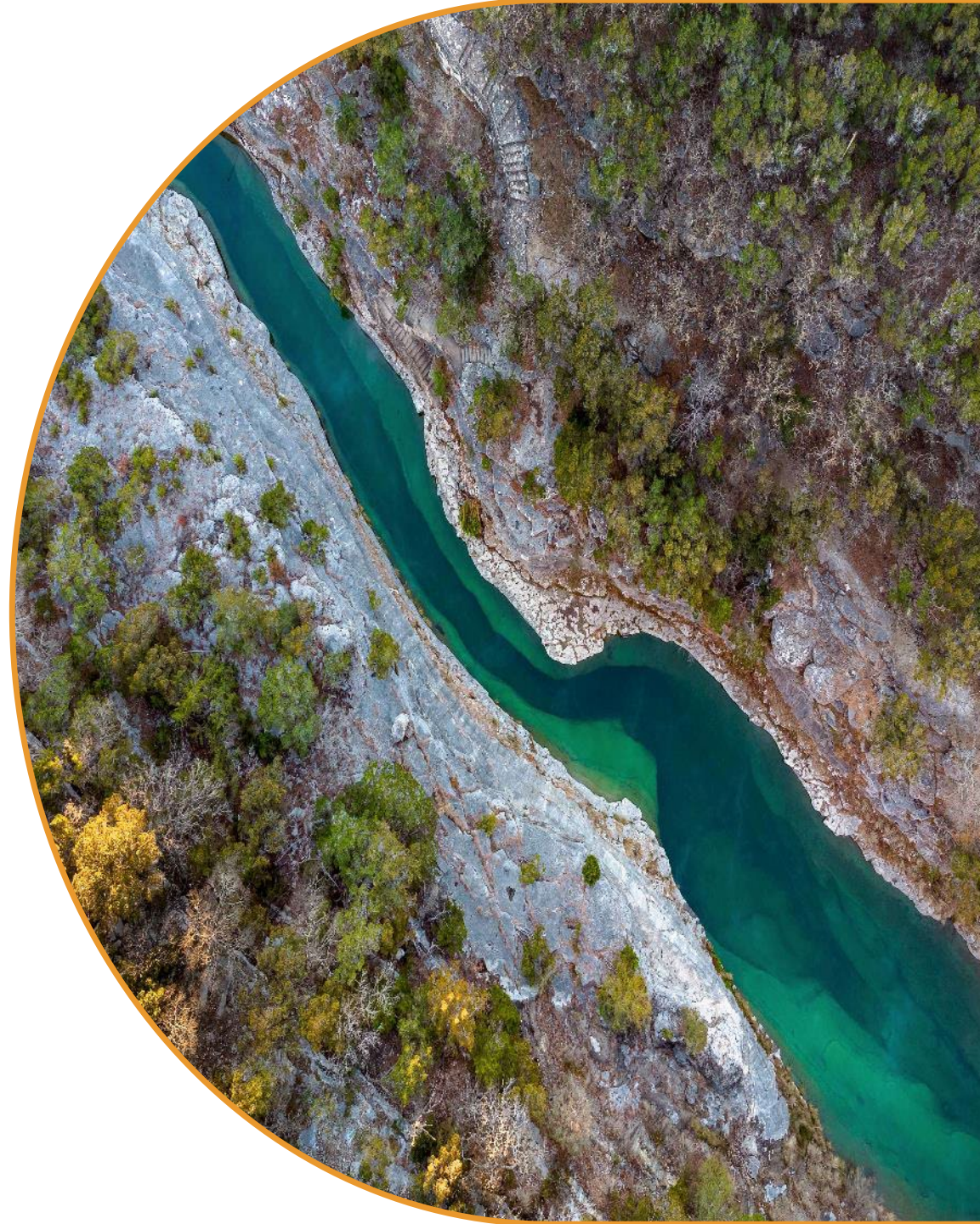
Please fill out the **Open House Survey**:

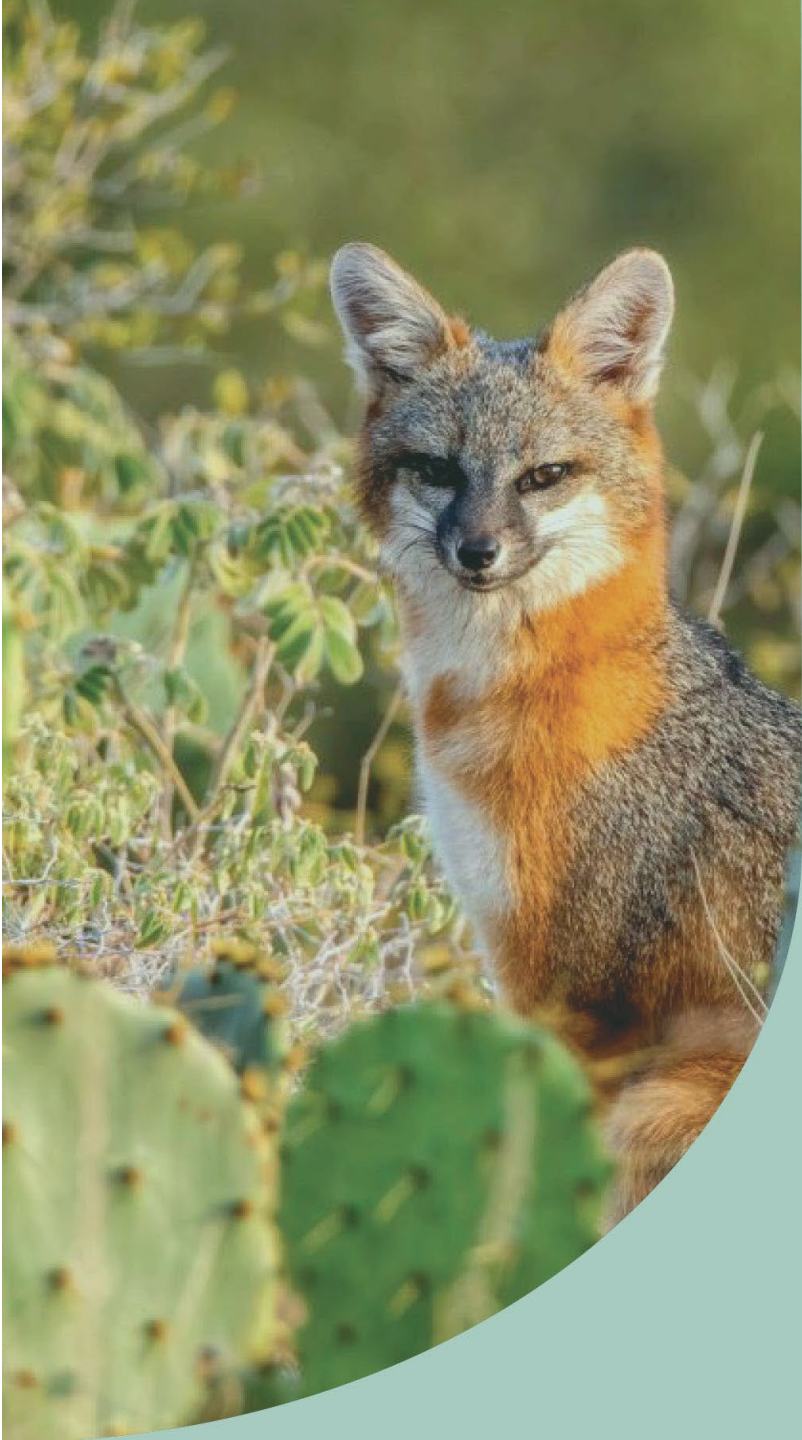
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lang=es_419](https://www.surveymonkey.com/r/2ZMXSNK?lang=es_419) (Español)

*Feel free to reach out with additional
questions and comments:*

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Land and Water Connections Consulting
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texas hill country
conservation network

Land, Water, and Natural Infrastructure Plan
Plan de Terreno, Agua, e Infraestructura Natural

JOIN US.

WE ARE HOSTING A VIRTUAL
OPEN HOUSE ABOUT THE
HILL COUNTRY LAND,
WATER, AND NATURAL
INFRASTRUCTURE PLAN

NOVEMBER 16
AT 6:30P CST

USE LINK BELOW TO REGISTER
[HTTPS://TINYURL.COM/HILLCOUNTRYPLAN](https://tinyurl.com/hillcountryplan)

INVITA UN AMIGO

ESTAMOS ORGANIZANDO UNA EXHIBICIÓN ABIERTA Y VIRTUAL SOBRE EL PLAN DE TERRENO, AGUA, E INFRAESTRUCTURA NATURAL DEL TEXAS HILL COUNTRY

NOVIEMBRE 16 A LAS 6:30P CST – USE EL ENLACE INCLUIDO PARA REGISTRARTE

[HTTPS://TINYURL.COM/HILLCOUNTRYPLAN](https://tinyurl.com/hillcountryplan)

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