

Treasuring Water Regional Conservation Fund

Jacob's Well Groundwater Management Zone
Regional Recharge Study Area

July 15 2020

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Regional Conservation Fund PIF Slide Presentation

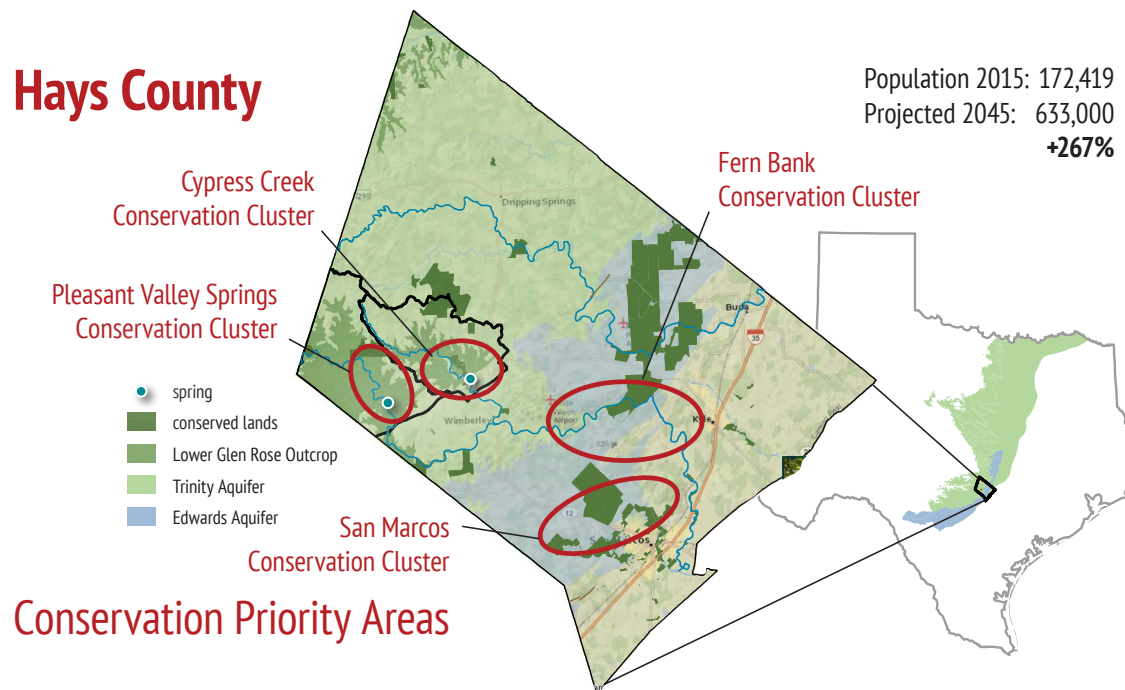
Slide 1:

Treasuring Water

Hearts in the right place will treasure the water of Texas beneath our feet and in the watersheds we inhabit, before we break ground or even draw lines of development. Wimberley Valley Watershed Association began at Jacob's Well in 1996. Today, our mission is anchored at the Well, but we see the greater Hill Country ecosystem under increasing threat. We cannot look away from existential problems of population growth, pipelines, and profits placed before sustainable coexistence in nature that preserves land and water. Our proposed solution for Hays County is establishing a Regional Conservation Fund to conserve strategic lands that will protect groundwater supplies and the source waters for iconic Hill Country streams.

Hays County

Population 2015: 172,419
Projected 2045: 633,000
+267%



Slide 2:

Hays County: Conservation Priority Areas

The Wimberley Valley Watershed Association is a long-time collaborator with the County, Conservation Districts, and more than 150 organizations dedicated to land and water conservation in the Edwards and Trinity Aquifers. That perspective informs our conclusion that the next five years are critical to ensure water supply, flood mitigation, spring flow, and natural habitat. In Hays County's four conservation priority areas,*** land use is changing rapidly to meet projected population growth of 267% from 172,419 in 2015 to 633,000 in 2045.* Lands conserved in the Hill Country totalled 480,437 acres as of 2018, about 4%. Voters approved more than \$1.1 billion between 1992 and 2018 toward conservation funds.** Studies such as the Blanco & Upper San Marcos Watershed Strategic Conservation Prioritization report identified key areas for conservation efforts.*** The conservation needs in the Cypress Creek and Pleasant Valley clusters remain largely unmet. The Regional Conservation Fund asks less than 2% more.

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(*CAMPO 2045 Regional Transportation Plan, **Texas Land Trust Council Conservation Lands Inventory, ***Siglo Group study for the Meadows Center at Texas State for the Blanco and Upper San Marcos watersheds)

Hays County

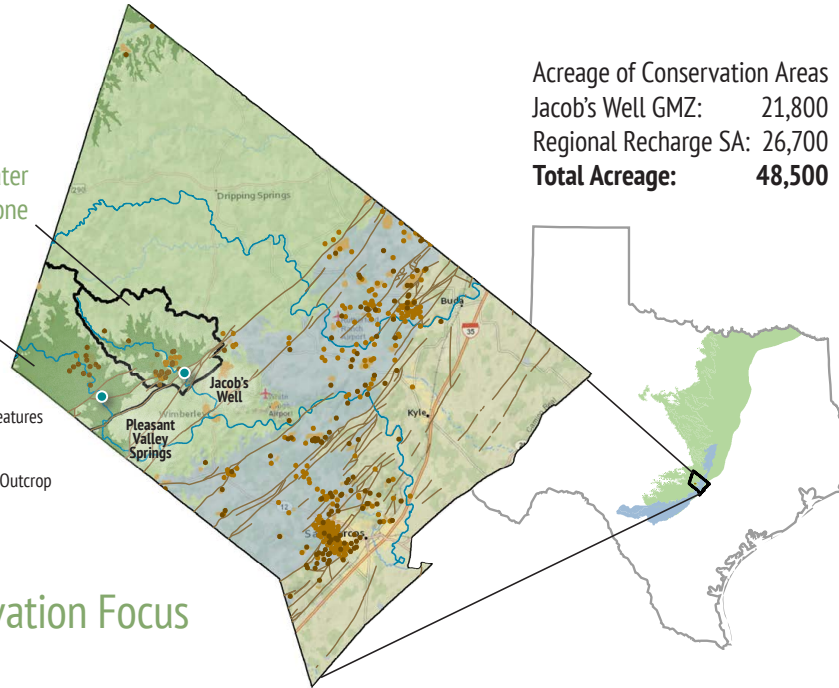
Jacob's Well Groundwater Management Zone

Regional Recharge Study Area

- caves
- sinkholes, karst features
- faults
- Lower Glen Rose Outcrop
- Trinity Aquifer
- Edwards Aquifer

Acreage of Conservation Areas
Jacob's Well GMZ: 21,800
Regional Recharge SA: 26,700
Total Acreage: 48,500

Regional Conservation Focus

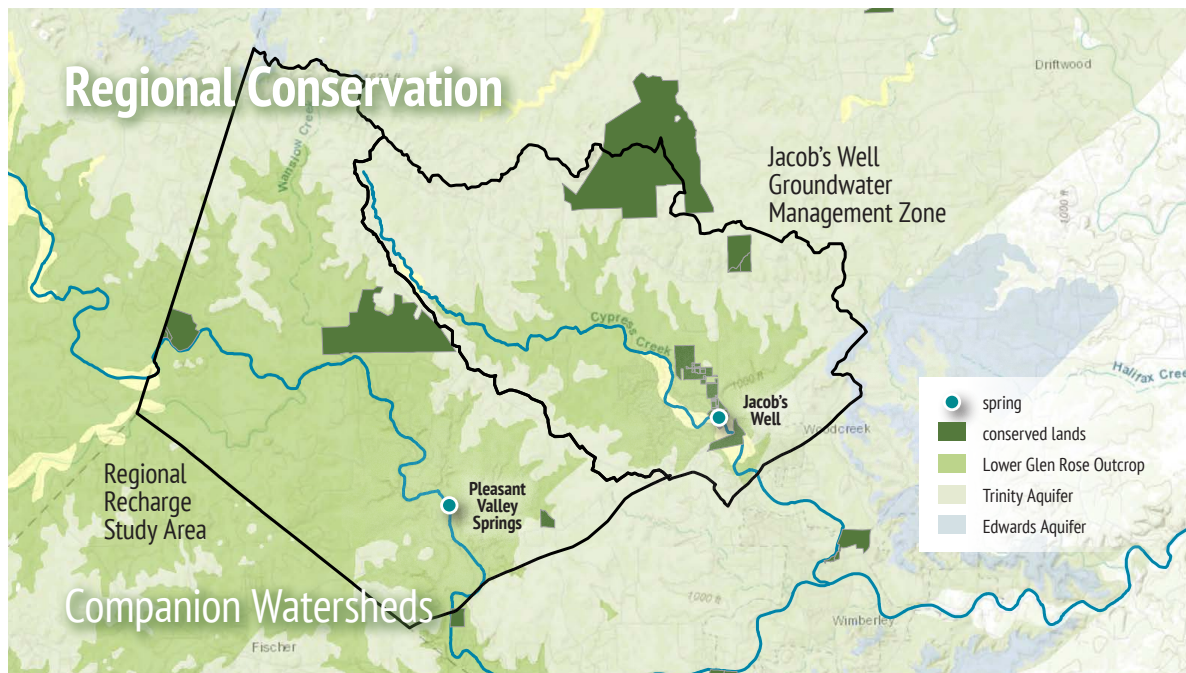


Slide 3:

Hays County: Regional Conservation Focus

The Wimberley Watershed Association proposes that the Regional Conservation Fund concentrate in the two western source water protection priority areas: Jacob's Well Groundwater Management Zone (JWGMZ) and the contiguous Regional Recharge Study Area that includes Pleasant Valley Springs. JWGMZ covers 21,800 total acres within the Cypress Creek watershed and Jacob's Well springshed; residents rely on groundwater as their sole drinking water supply. The Regional Recharge Study Area covers 26,700 total acres, which centers on the Blanco River and Pleasant Valley Springs. Within these priority areas, the Lower Glen Rose Outcrop is the critical hydrogeologic formation to conserve. Its numerous faults and spectacular karst features are conduits that allow for recharge to enter the groundwater system and offer potential for further County natural areas and open spaces. Conservation efforts within these areas protects both groundwater and surface water availability for Hays County.

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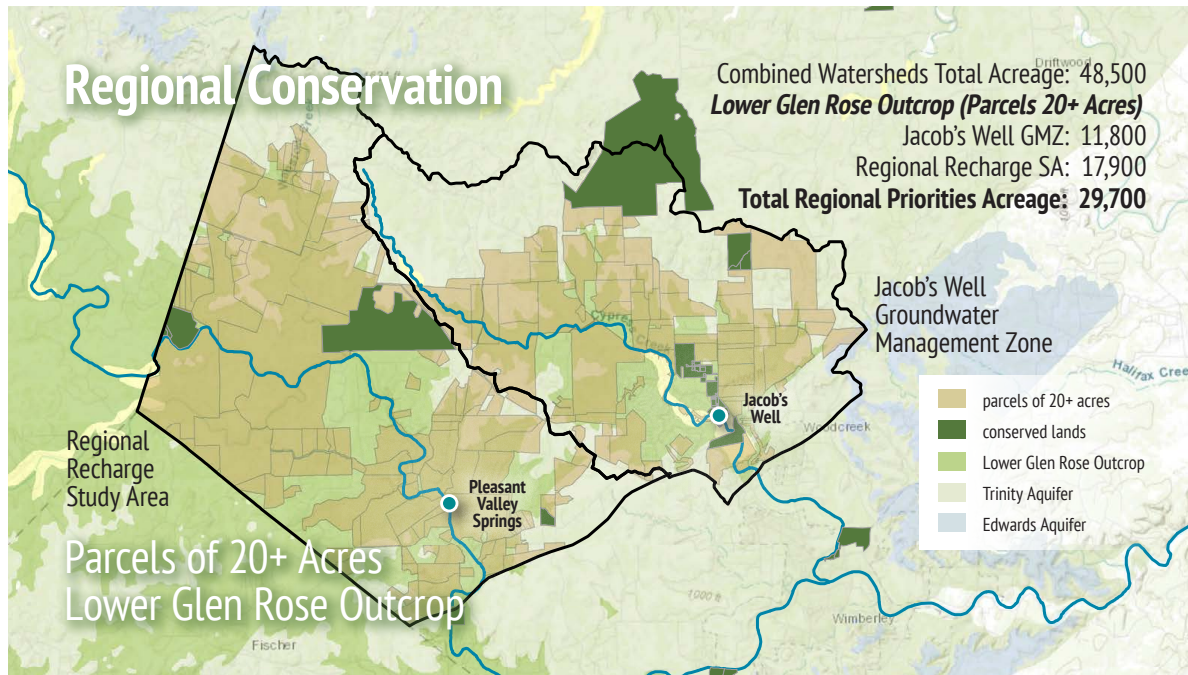


Slide 4:

Regional Conservation: Companion Watersheds

A closer look reveals that the conservation areas established in the region provide coverage, but fail to present a cohesive systemic solution. Concentrating on the Lower Glen Rose Outcrop simplifies the investigation and negotiation process while ensuring that lands conserved fit into a long-term vision and not just opportunistic accumulation. Thoughtful assembly of parcels magnifies the value of each public dollar spent.

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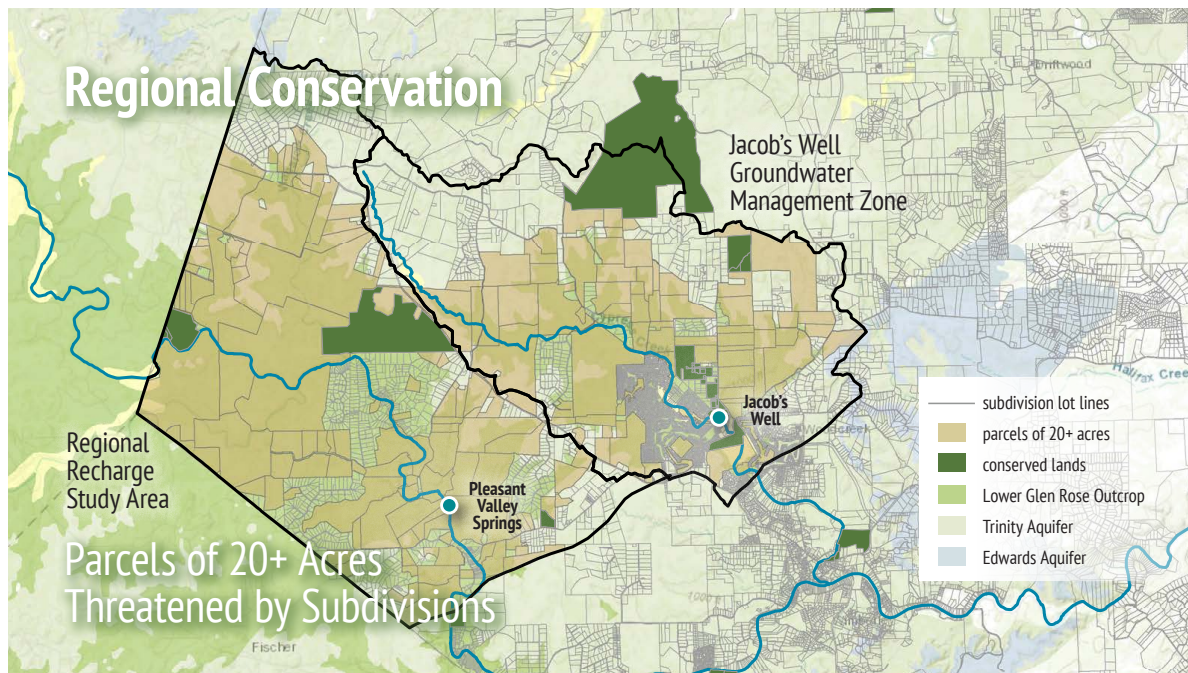


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Slide 5:

Regional Conservation: Lower Glen Rose Outcrop

A survey of Hays Central Appraisal District parcels of 20 acres or greater size that contain some portion of the Lower Glen Rose Outcrop provides an inventory of potential conservation targets. This practical shopping list amounts to 61% of the combined watersheds, just under 30,000 acres. These mostly undeveloped tracts can be conserved today with willing landowners. With development pressures and population increases, in five years, prices will have risen and land will be less available for purchase.

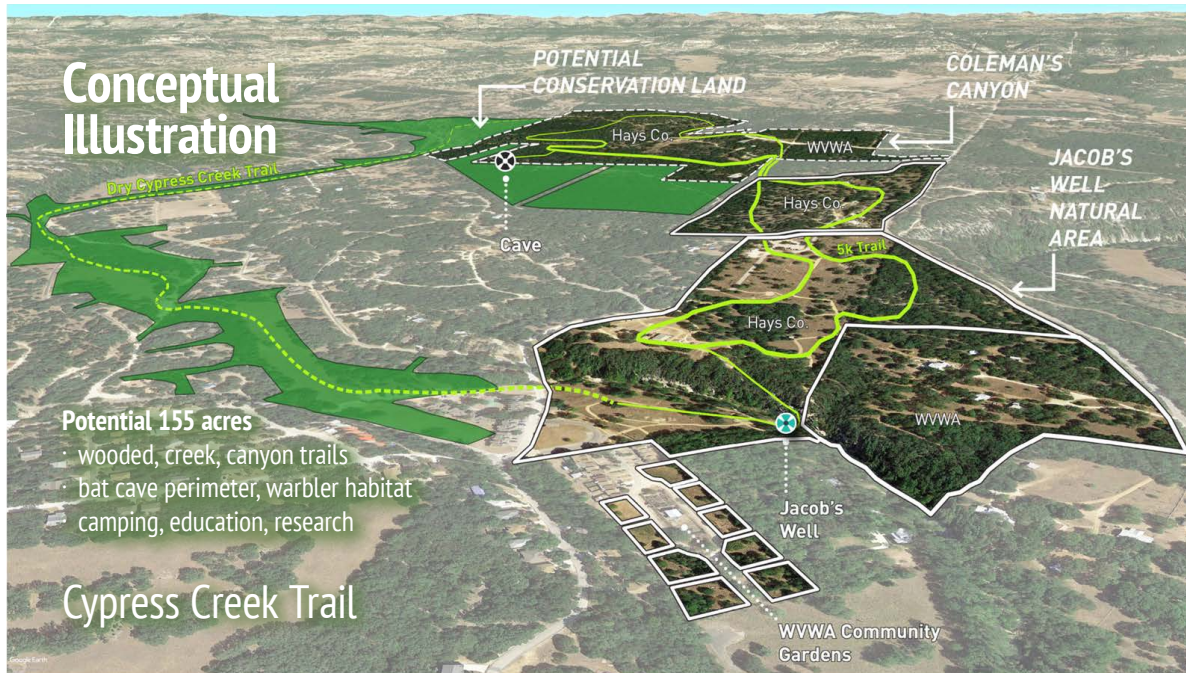


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Slide 6:

Regional Conservation: Threatened by Subdivisions

The alternative to the Regional Conservation Fund proposal and proactive land conservation efforts is already marked on the landscape. Mass residential subdivisions--most notably in the legacy creation long ago of Woodcreek North, and to a lesser degree acreage tracts in Ledgerrock, Burnett Ranch, and Lost Springs--might proliferate and choke off the fragile ecological systems and jeopardize the groundwater resources that supply residents and sustain our creeks and rivers. Conservation investment in Hays County is well under way, but the need is great. Conservation biologists set a minimum of 10 to 15% of an ecosystem to remain intact to support basic function. Current preservation would have to triple to build that floor. More alarming is the 8 to 12% impervious cover limit that watershed scientists say is needed to preserve hydrologic function. Thus, our proposal alone will not provide the full systemic solution that must include conservation development and One Water principles.

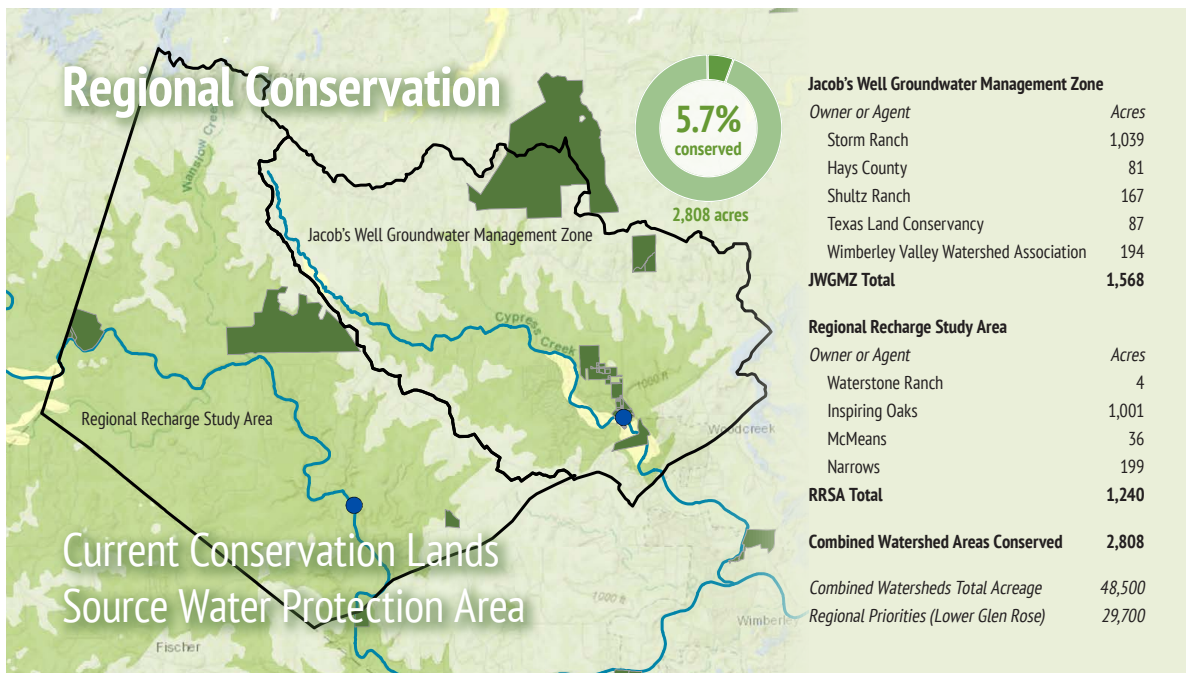


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Slide 7:

Conceptual Illustration: Cypress Creek Trail

In addition to our separate Coleman's Canyon Preserve proposal, we have identified a 155-acre collection of parcels we call Cypress Creek Trail, which would be a potential investment of the Regional Conservation Fund. These parcels are within the high-priority conservation area that include Lower Glen Rose outcrop (Middle Trinity recharge zone) and connect with our existing conserved lands around Jacob's Well and importantly buffer Cypress Creek from already-platted subdivisions. Infill parcels provide a greater perimeter around Wimberley Bat Cave, increasing wooded, dry creek, and canyon trails, plus water quality buffers and habitat for Golden Cheeked Warblers, Mexican Freetail Bats, and prized invertebrate species. The County's plan seeks high priority facilities that Cypress Creek Trail offers: creek access, camp sites and structures, and multi-use trails long enough to expand a Coleman's 5K trail run to be the Cypress Creek 10K. Trail development would open up habitat restoration, scientific research, and environmental education.

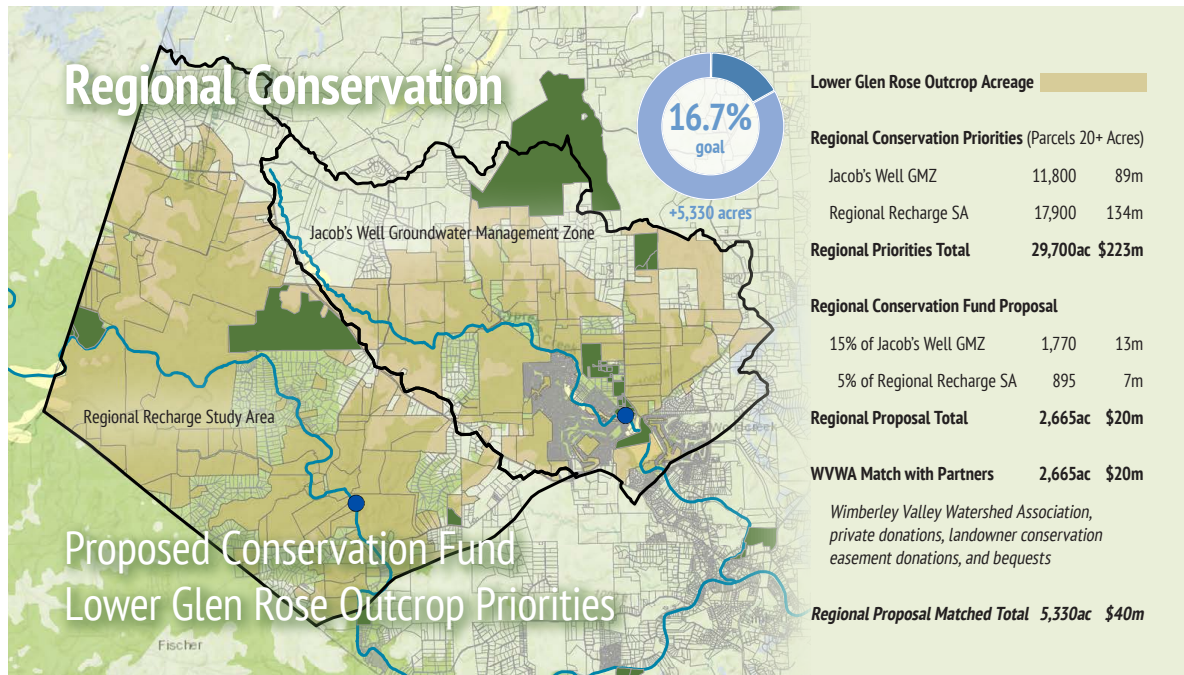


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Slide 8:

Regional Conservation: Current Inventory Successes

The Regional Conservation Fund for Hays County capitalizes on and extends the legacy of 2,808 acres already conserved in the combined areas, which are divided roughly 60% in Jacob's Well Groundwater Management Zone and 40% in the Regional Recharge Study Area. Our proposal is to fund the purchase of an additional 5,330 acres, beginning with the target conservation of Cypress Creek Trail, would continue to emphasize JWGMZ as the more urgent watershed to address, and judiciously add to the study area, as well.



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Slide 9:

Regional Conservation: Priorities and Fund Proposal

In consideration of the combined nearly 30,000 acres in parcels that overlay the Lower Glen Rose Outcrop in both watersheds, we base our proposal on a conservation planning measure of \$7,500 per acre (in a range of \$4,000 to \$10,000), which is the average price that Hays County Habitat Conservation Plan pays for mitigation credits. That suggests a total of \$222.8 million for identified parcels. We recommend targeting 15% of the higher priority Jacob's Well Groundwater Management Zone and 5% of the Regional Recharge Study Area. Because JW GMZ is a smaller territory, the ratio of funds allocated would be only 2-to-1 to achieve the 3-to-1 outcome. These 2,665 combined acres would require an initial 5-year Regional Conservation Fund of \$20 million. Wimberley Valley Watershed Association, acting in the decades-long partnership role with the County, will match that funding directly and through public and private partners to add another 2,665 acres and achieve 30% JWGMZ and 10% RRSA conservation of parcels in the Lower Glen Rose Outcrop. This is framed as a 5-year funding cycle, but would become the primary long-term development mission of the association.



Slide 10:

Q&A