



Conservation Insider

Hello CCCA friends and volunteers!

Here's hoping everyone is recovering from the historic 2021 Texas snow and freeze event. Many of our friends and neighbors have struggled with loss and are trying to restore a normal life. Our thoughts are with those who must rebuild what was lost.

We're excited about the approach of Spring and hopeful that it will bring a sense of relief and renewal!

IMPORTANT REMINDER about our March 9th Special Zoom Presentation

Pre-Registration is needed to receive zoom link.

Annalisa Peace, Executive Director of the Greater Edwards Aquifer Alliance, will join CCCA for a Zoom presentation 6:00-7:00 PM on Tuesday, March 9th. The presentation will address efforts to protect Honey Creek and the adjacent State-owned properties, and describe how waste water and high-density developments impact our environmentally sensitive Hill Country watersheds.

Visit our website home page for more information.

Click here to register: https://docs.google.com/forms/d/e/1FAIpQLSdrIAhATkMLK4ZgoZCS-IMDN-cV0jzYTvTitqFA1Ry__OTDjg/viewform

CCCA NEWS

We do want to share the good news that two Comal groups have accepted our invitation to become new CCCA Partners - the **Heritage Museum of the Texas Hill Country and New Braunfels Chapter of the Native Plant Society of Texas (NPSOT.)** Here's a brief introduction to these two great nonprofit groups:

With a mission of protecting and preserving over 200 dinosaur footprints created during the Cretaceous period, as well as preserving artifacts representing the cultural and rural heritage of the area, the **Heritage Museum** has been a landmark in the Canyon Lake area for over 20 years. First opened to the public as "Dinosaur Flats," the Heritage Museum has an active outdoor education program. Take a look at their website to see all the programs they offer. www.theheritagemuseum.com

Having the **NB Chapter of NPSOT** partner with CCCA means that both of the Comal County chapters as well as the State level NPSOT organization are now all Partners. This shows great support of our efforts to preserve native lands and habitats. This is NPSOT's primary focus as it works to preserve native plants, which support our native wildlife including insects, which are at the base of a major part of the larger food-web. <https://npsot.org/wp/newbraunfels.org>

NEWS AROUND THE HILL COUNTRY

PRESS RELEASE From Texas Parks and Wildlife

Public Help Sought to Report Fish and Wildlife Impacted by Winter Storm Uri

Feb. 23, 2021

AUSTIN – Recent snowfall and freezing temperatures affected many fish and wildlife species throughout the state and now Texas Parks and Wildlife Department (TPWD) is asking for the public's help in reporting any animal mortality events they observe on their property, ranches, or in their neighborhoods through this project on the iNaturalist website. Citizens are encouraged to report observations so that biologists can better understand the impacts of Winter Storm Uri to natural resources. More information at <https://www.comalconservation.org/aquifers--springs.html>

MONTHLY SPOTLIGHT ON AQUIFERS AND SPRINGS

Our **CCCA SPOTLIGHT** explores the delicate balance between the needs of the residents in Comal County and the healthy preservation of our aquifers and springs.

Conserving Our Water, Saving Our Springs - by Helen Ballew for the NBU Connections, published by the New Braunfels Herald Zeitung

Comal Springs is one of the “Great Springs of Texas.” In fact, it is the largest spring system in the American Southwest, and it issues from one of the most prolific groundwater sources in the world – the Edwards Aquifer. These facts might make those of us who live here feel proud, but they should also give us pause. Why? Because the growing demands on the aquifer endanger it and threaten its future as a relatively inexpensive water supply.

The I-35 corridor between San Antonio and Austin is one of the fastest growing regions in the country. More people means more demand on the aquifer, even though we have other (more expensive) water supplies coming on line. Some might say “why worry, we have this vast amount of good clean water underground. We won't run out, and besides it's cheap.” We might not literally run out of fresh drinking water from the aquifer, but if we draw it down too far to get that water, we could lose our great springs. When the springs run dry, the rivers run dry, water-based tourism disappears, and economies dry up. When alternative sources of water are needed to make up the difference, the cost of water goes up.

If the Edwards Aquifer is so important to our community wellbeing and even our pocketbooks, how can we protect this exceptional groundwater supply and its great springs? We can do that first and foremost by conserving water, using less and thus keeping it in the ground. If you don't use it, you don't lose it, and you don't have to pay for it.

We can also ensure a reliable affordable water supply by protecting the land that protects the aquifer. When rainfall collects and drains into the aquifer, the aquifer fills up and its water supply remains available for our judicious use. So, protecting the land that keeps the aquifer full, and being conscientious about water conservation are two important ways we can ensure a clean affordable water supply well into our future.

Helen Ballew is a Vice President of the Comal County Conservation Alliance.

Read at <https://www.comalconservation.org/aquifers--springs.html>

Here's a taste of the latest CCCA column in the Herald Zeitung

VIRUS BLANKETED BY VORTEX = Mischief & More! - By Frank Dietz

As so many of us continue to navigate our way through Covid 19 pandemic restrictions, distances, securing vaccinations and more, Valentine weekend arrived in a whirlwind! In a matter of hours and then days, waves of snow with ice blanketed our entire region with accompanying temperatures in the low teens and single digits! Photos and experiences were being accumulated for the generations. An arctic vortex whirled its way to surround and cover us with wintry mischief most unusual for our region. And, behold, the weather phenomenon remained like a trapped bubble providing temperatures rare and damaging.

This episodic occasion of rare intense winter for our Hill Country and state have brought discoveries, damages, needs and endurance with a list of challenges going forward. From private family and personal circumstances requiring repairs and modifications to public policy matters galore at multiple levels of governance the futuring processes are underway. It will neither be easy nor inexpensive. However, what emerges will be so necessary! The agility and innovation of some will assist in the development of new thinking for protection and preventiveness. The crash or near collapse of other systems and infrastructure will cry out for attention and measures forthcoming. Very little of this from discernment to constructive modifications will come with ease or on the cheap. Mature thoughtfulness and interactive consultations will assist us if we can avoid the pitfalls of blaming, name calling, shouting matches or worse.

There are heroic folks in leadership and neighborliness we could identify in good number. We'll allow them to go unnamed for now but perhaps for celebration in the future.

Read the entire article at <https://www.comalconservation.org/aquifers--springs.html>

HOW ABOUT A VISIT TO THE CANYON LAKE GORGE - a real-life classroom in which visitors learn how the aquifer's underground permeable rock cavities soak up, store, and move rainwater that many in Central Texas depend on for drinking water and irrigation. (read more about the Gorge at <https://www.gbra.org/canyonlakegorge/default.aspx>)

How the Gorge was created

During one week in the summer of 2002, more than 34 inches of rain fell in the upper watershed of the Guadalupe River, setting off a torrent of floodwater that carved a perfectly fascinating geological wonder - the Canyon Lake Gorge - out of the earth.

The flood roared through the Hill Country northwest of New Braunfels, tearing away soil, ripping up huge trees, crumpling houses and sending a rush of water from swollen Canyon Lake over its spillway for the first time since the reservoir was completed in 1964.

The historic flood sliced open the ground below the spillway, creating a gigantic 64-acre Gorge and exposing ancient, cretaceous limestone, fossils and even dinosaur footprints 110 million years old.

It is a textbook example highlighting Hill Country geology and the exposed Trinity Aquifer, clearly showing faults, fractures and seeps in the limestone. Limestone layers created from an ancient sea are visible, and visitors admire waterfalls and springs where the aquifer is exposed.

The Gorge Overlook Trail (GOT) runs along the northern rim of the gorge and is approximately two-miles-long round trip. Safety railings and informational signage at each of the eight observation nodes is currently being installed. Once fully developed, the GOT will allow people of all ages and abilities to view the gorge from above and at their own pace. This hike will

not have an age restriction for younger children and will not require a reservation as with guided tours. Plans are also being developed to make the trail ADA accessible to the first two observation nodes. The ADA trail improvement is made possible through a grant from the Texas Parks and Wildlife Department. (open to the public in early 2021).

More at <https://www.comalconservation.org/aquifers--springs.html>

From our Partners at GEAA <https://aquiferalliance.org/>

Aquifer at Risk

The Edwards Aquifer is the lifeblood for dozens of communities – and millions of people – in Central and SouthCentral Texas. So too for over 60 species of plants and animals that live in the Edwards Aquifer Ecosystem and nowhere else on the planet.

Despite the immeasurable value of this natural resource, human activity – urbanization – now threatens to taint the water of the Edwards Aquifer with a slew of pollutants – from fertilizers and pesticides to toxic metals and sewage spills.

The Edwards Aquifer and its Great Springs are highly vulnerable because of their unique geology and hydrology. Caves, sinkholes, faults, and fractures dot the landscape of the Recharge Zone, where water plunges underground, where it encounters limestone rock that as been eroded over time to create large underground channels for the water to flow.

Save the Aquifer

With the Austin/San Antonio corridor expected to grow continually into the future and demand on Edwards Aquifer water also expected to grow, if we are to protect the quality and quantity of water in the aquifer, we must grow downstream of the sensitive Edwards Aquifer.

We support sustainable development that does not strain local water resources or pollute local water bodies. Some development over the Edwards Aquifer can take place without damaging the aquifer, but not the level of development that business boosters are planning for over the aquifer.

Read more at: <https://www.comalconservation.org/aquifers--springs.html>

For a more in-depth read about our water supply visit our website at

<https://www.comalconservation.org/aquifers--springs.html>

Geology and Ground - Water Resources of Comal County, Texas <https://pubs.usgs.gov/wsp/1138/report.pdf>

We found this paper very informative, interesting and worth reading.

Geologic framework and hydrogeologic characteristics of the Edwards Aquifer outcrop, Comal County, Texas

Abstract

All of the hydrogeologic subdivisions within the Edwards aquifer outcrop in Comal County have some porosity and permeability. The most porous and permeable appear to be hydrogeologic subdivision VI, the Kirschberg evaporite member of the Kainer Formation; hydrogeologic subdivision III, the leached and collapsed members, undivided; and hydrogeologic subdivision II, the cyclic and marine members, undivided, of the Person Formation.....

In Comal County, the Edwards aquifer is probably most vulnerable to surface contamination in the rapidly urbanizing areas on the Edwards aquifer outcrop. Possible contamination can result from spills, leakage of hazardous materials, or runoff onto the intensely faulted and fractured, karstic limestone outcrops characteristic of the recharge zone.

Continue at <https://pubs.er.usgs.gov/publication/wri944117>

That's it for this month. There is much, much more on the CCCA website.

And we hope you will join our Zoom presentation, and please don't forget to register.

Stay safe, stay healthy, enjoy nature! See you next month.

Comal County Conservation Alliance

<https://www.comalconservation.org/>

Info@comalconservation.org

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