

CITY OF BLANCO TEXAS

**Blanco River Valley
Peaceful Balance**

**Growth and
Development
without Discharge**

August 20 2020

THE MEADOWS CENTER
FOR WATER AND THE ENVIRONMENT
TEXAS STATE UNIVERSITY

BLANCO COUNTY
STATE OF TEXAS

WIMBERLEY VALLEY
WATERSHED ASSOCIATION

Protect Our Blanco

SAVE OUR SPRINGS

hill country alliance

Save Barton Creek
Association

City of Blanco Presentation

Protect Our Blanco and related organizations

slide 1:

Peaceful Balance

We ask to join you in a new start toward peaceful cooperation as neighbors along our shared river valley. We hope you will partner with us to build on our points of agreement. If we pool our resources as a team, there can be great fortune for the people of Blanco and a clear future for the waters in the Blanco River Basin. We do not wish to hinder growth and development, only to make sure it occurs without wastewater discharge into the Blanco River.

1

We Share One River

- From Kendall County to Blanco to Wimberley to San Marcos
- From Blanco State Park to The Narrows to El Rancho Cima

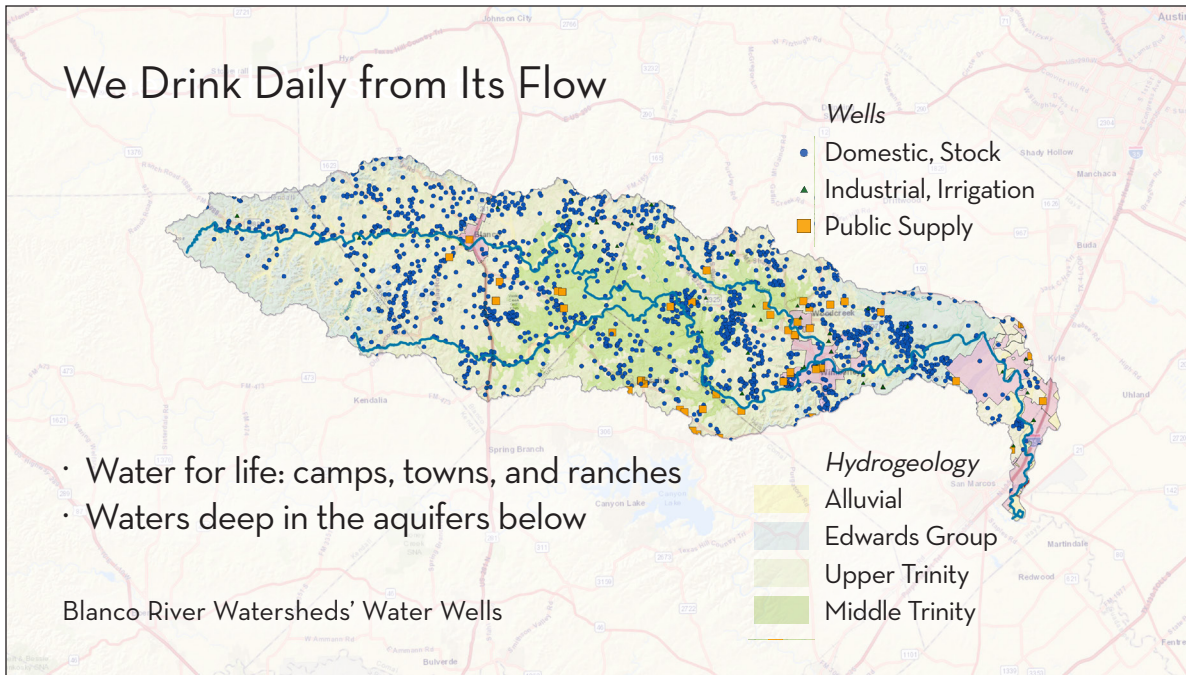
Blanco River Valley

slide 2:

We Share One River

The Blanco River needs our stewardship. It springs out of the ground in Kendall County east of Luckenbach and runs shallow its entire 87 miles until it meets the San Marcos River. To the water, there's no difference between Blanco and Wimberley and San Marcos. They're just another bend in the river, like Blanco State Park, The Narrows, and El Rancho Cima.

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We Drink Daily from Its Flow

We need the Blanco River. The limestone terrain across the 412 square miles of its basin connects surface water and groundwater supplies. The flow in the river helps refill our aquifers, channeling underground through faults, fractures, and caves in the riverbed. The groundwater system, in turn, feeds the river through springs and seeps. Groundwater wells provide the sole source of drinking water for much of the Hill Country. Groundwater declines in Blanco show that alternative water supplies are in desperate need—beneficial reuse of treated wastewater could provide that supply and protect our aquifers.

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Ending Discharge Allows the River to Heal

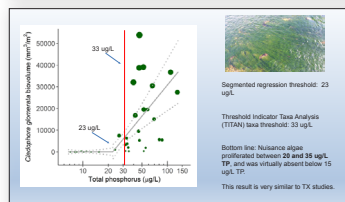
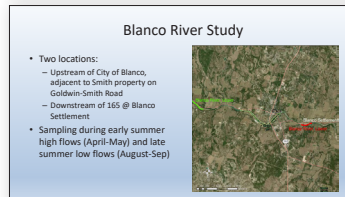
Discharge began in October 2018, after 50 years of no discharge. By the spring of 2019 (as shown), the Blanco River had become filled with algae blooms downstream of effluent discharge. When the wastewater discharge into the Blanco River ended in December 2019, the river's natural healing process returned the water to its former clean and clear appearance. Moreover, contamination levels recovered and aquatic life bounced back.

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Baylor Study Shows Discharge Contaminates Blanco River

- Sampling before and after discharge
- Elevated nutrients from municipal wastewater
- TCEQ allows excessive phosphorus levels
- Discharge leads to algae growth
- Aquatic life significantly altered

Baylor Blanco River Study by Ryan King PhD, Baylor University



slide 5:

Baylor Study Shows Discharge Contaminates Blanco River

The Blanco River was clear, clean, and flowing, and a thriving ecosystem for centuries. In the last 30 years growth and development have depleted aquifer levels and water quality. New development means, more and more, when it rains, it floods, and that can be deadly destructive, as we saw in 2015. We can overwhelm the river with runoff and discharge that turn it into an algae swamp. We can also dry up the Blanco River, if groundwater pumping continues to increase.

A current study by renowned Baylor researcher Ryan King, PhD, scientifically proved and quantified the negative effects of discharge on the river. He sampled before and after discharge, above and below the point of discharge. King documented elevated nutrients from municipal wastewater. Among them, nitrogen and phosphorus were too high to protect the health of the river and prevent eutrophication and algae, even below levels allowed by TCEQ. Meeting current TCEQ standards in the Blanco permit is not enough to inhibit algae and protect aquatic life.

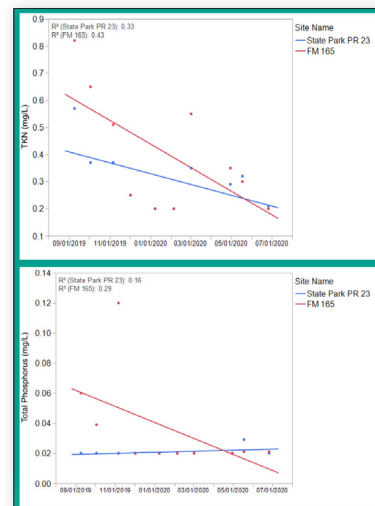
5

Direct Discharge vs. Land Application



- Degradation fell when discharge ended
- Nutrient levels safer with land application

Sandra S. Arismendez PhD, Meadows Center
Water quality data provided by GBRA Clean Rivers Program



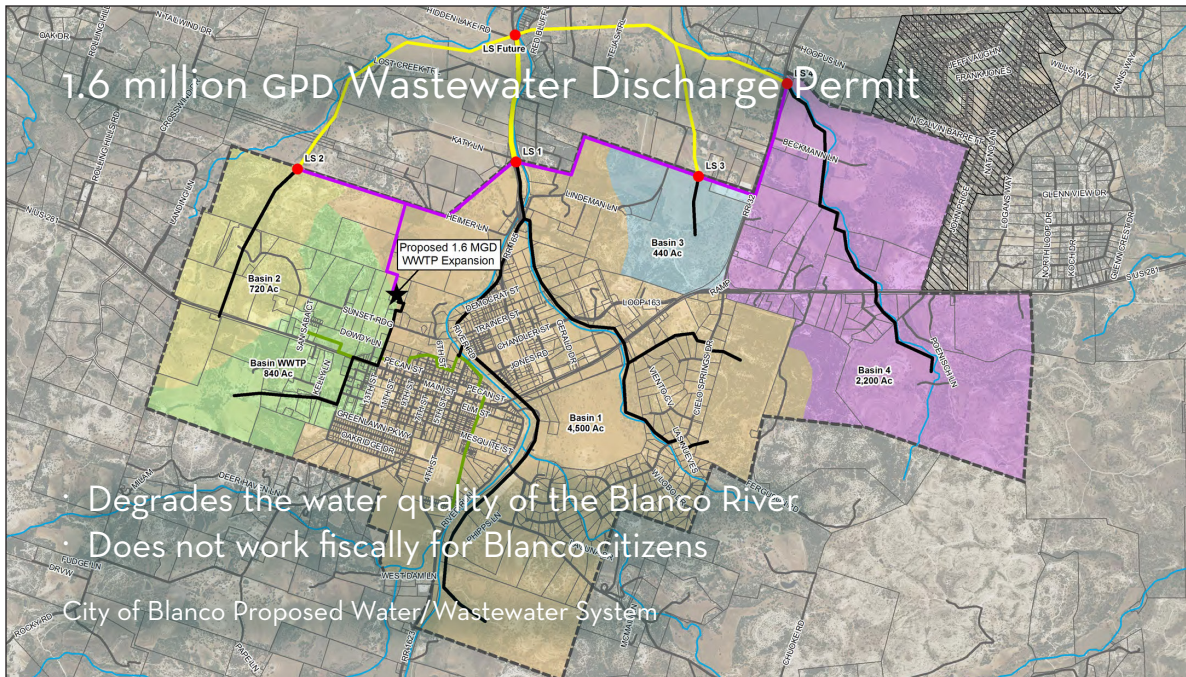
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Direct Discharge vs. Land Application

We are all connected by this river valley, and we ask your help to create a legacy we can all be proud to claim. Working collaboratively can bring more business to Blanco and help the region to grow responsibly, without allowing an influx of people to become the downfall of a unique river. Upstream or downstream, we need to keep the Blanco clean.

Water sampling for the Texas Clean Rivers Program under the auspices of the Guadalupe-Blanco River Authority compared water quality data collected over the last year. Degradation of the river fell when direct discharge into the river ended in December. Nutrient levels dropped to promote river health, proving the preferred practice of land irrigation application.

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1.6 million GPD Wastewater Discharge Permit

Direct discharge is not the answer for the City of Blanco. Discharge degrades the water quality of the river and affects neighbors downstream, and ultimately creates a negative fiscal impact for Blanco citizens.

Engineering is the heart of any long-term solution to keep discharge out of the river, so let's bring together our group with City engineers and consultants in an open exchange of approaches to deal with regional growth. Through collaboration we can develop scenarios and make the calculations for City government to make the best decisions.

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Partners in Regional Planning

- Utilize the existing Meadows Center MOU
- Build a working partnership with the City of Blanco
- Technical, financial resources for a no-discharge solution

slide 8:

Partners in Regional Planning

Let's take the existing agreement with the Meadows Center and create a lasting partnership for the sake of the whole Blanco River Valley. We know what we have works, so we can add to it, rather than starting over completely. We can work with each other and with developers to keep the regional picture in view.

The City of Blanco is looking at millions to pay back today. Instead of tens of millions tomorrow, we can help with technical and financial resources toward a cost-effective no-discharge solution. We have Hays County's written commitment to support the City of Blanco to protect natural resources for its citizens. The County is a good neighbor.

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Requests of Blanco City Council



Please add action item on next Council agenda to:

- **pause wastewater permit amendment**
- **utilize Meadows Center MOU to facilitate working group**
- **authorize engineering study and cost estimates of no-discharge options**

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Requests of Blanco City Council

We are truly all in this together. We are all connected by the river. Let's commit 60 to 90 days, starting with the river in its currently good position, to share information, bring professionals to the same table, and work toward what the valley needs from us to stay healthy.

We ask the City to pause on any further wastewater permitting action to allow ourselves a little breathing room, rather than trying to push and pull at the same time. TCEQ regulations are general and statewide and not well-suited to the Hill Country. We can do better for the City of Blanco and the health of the Blanco River.

During the pause, we ask that a regional working group under the Meadows MOU bring together cities and counties, and landowners and businesses, and nonprofits and researchers committed to serving a river valley that works for all of us.

In support of the working group, we ask for the City's authorization of an engineering study that will include cost estimates of no-discharge options. This would not require any funding by the City, just the willingness to consider alternatives.

We hope the Council will agree that a peaceful balance, as described by these proposed elements of an action item on the next agenda, will ensure growth and development without discharge.