

Routine Sampling Events Document:

Dissolved oxygen

pH

Specific conductivity

E.coli

Water temperature

Total phosphorus

Nitrate nitrogen

Total suspended solids

General riparian conditions

Fish and wildlife species observed

Ammonia Nitrogen

Secchi depth

Algae cover

Water color

Water surface and substrate

Conditions

Water odor

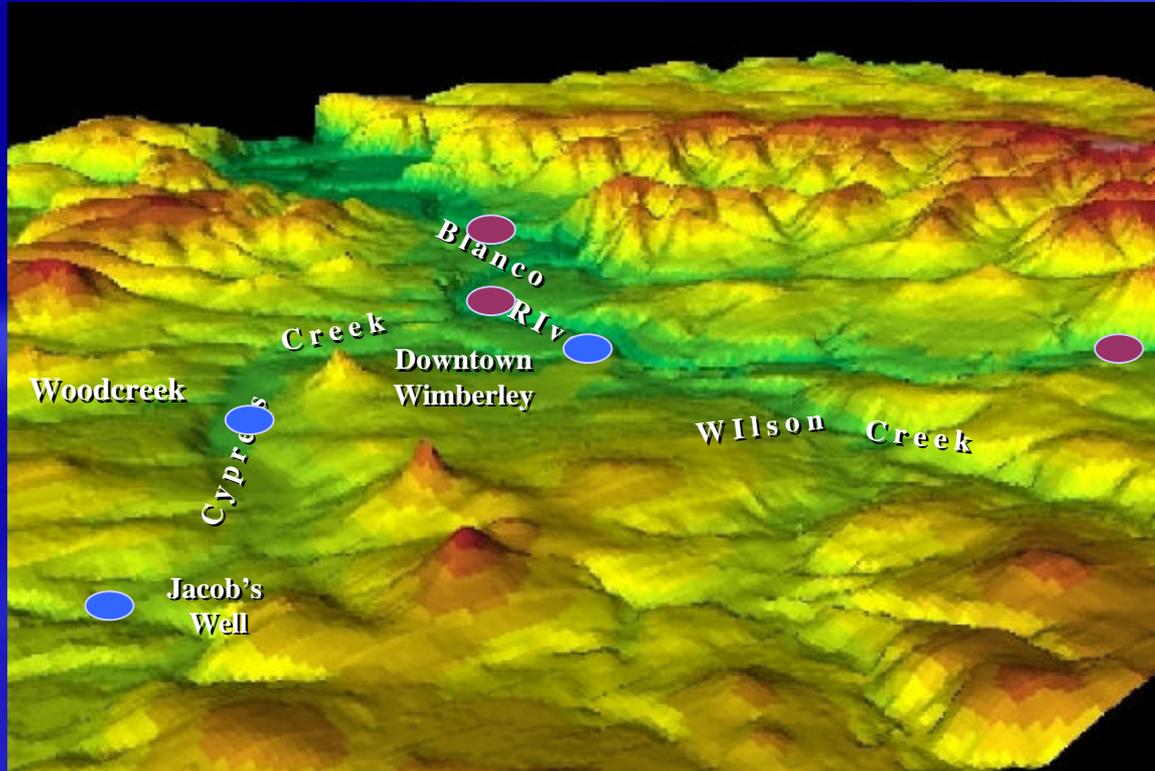
Weather conditions

Flow severity

Precipitation

...to determine if surface waters are suitable for aquatic inhabitants
and contact recreation.





Based on Village of Wimberley-Wimberley Valley Watershed Association-
Clean Rivers Program 2003 – 2004 data:

Surface water quality standards for

screening and assessing

Blanco River and Cypress Creek

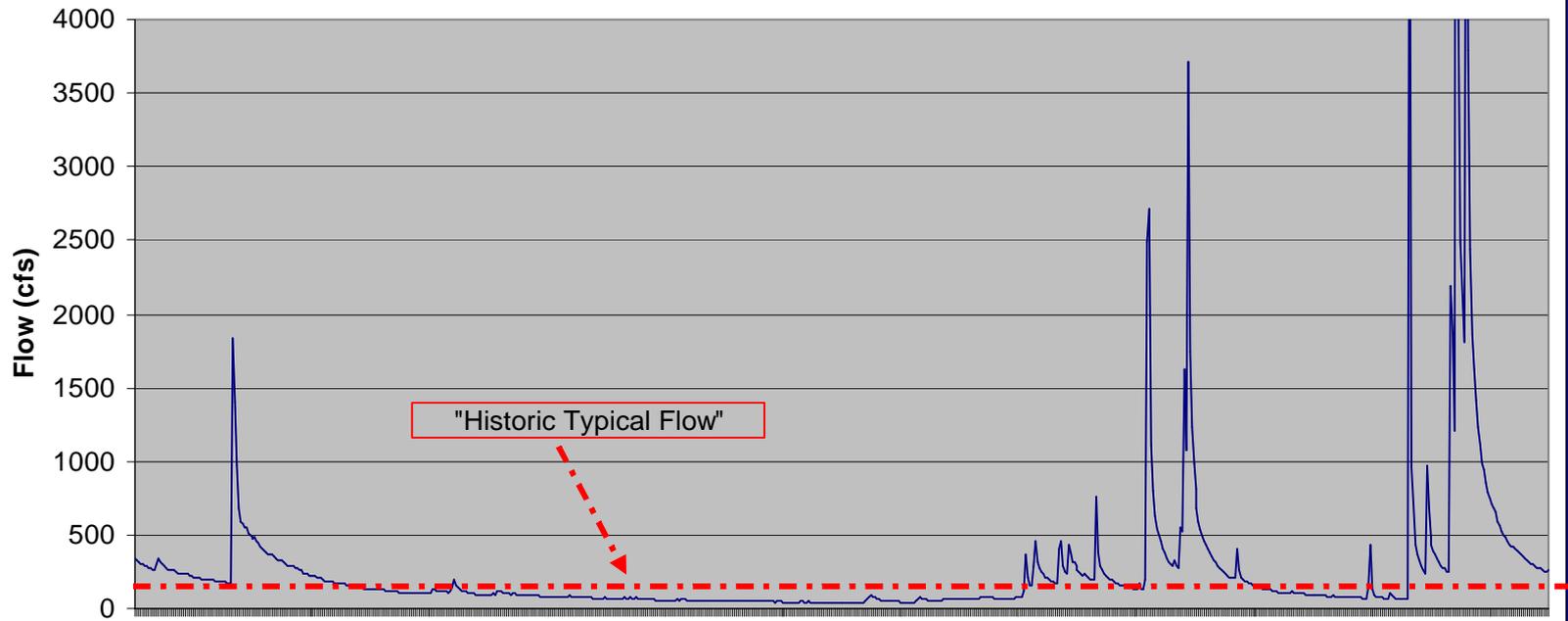
for “AQUATIC LIFE” and

“CONTACT RECREATION” use

are attained.



Blanco River Flow (RR12 USGS 08171000) 2003 - 2004





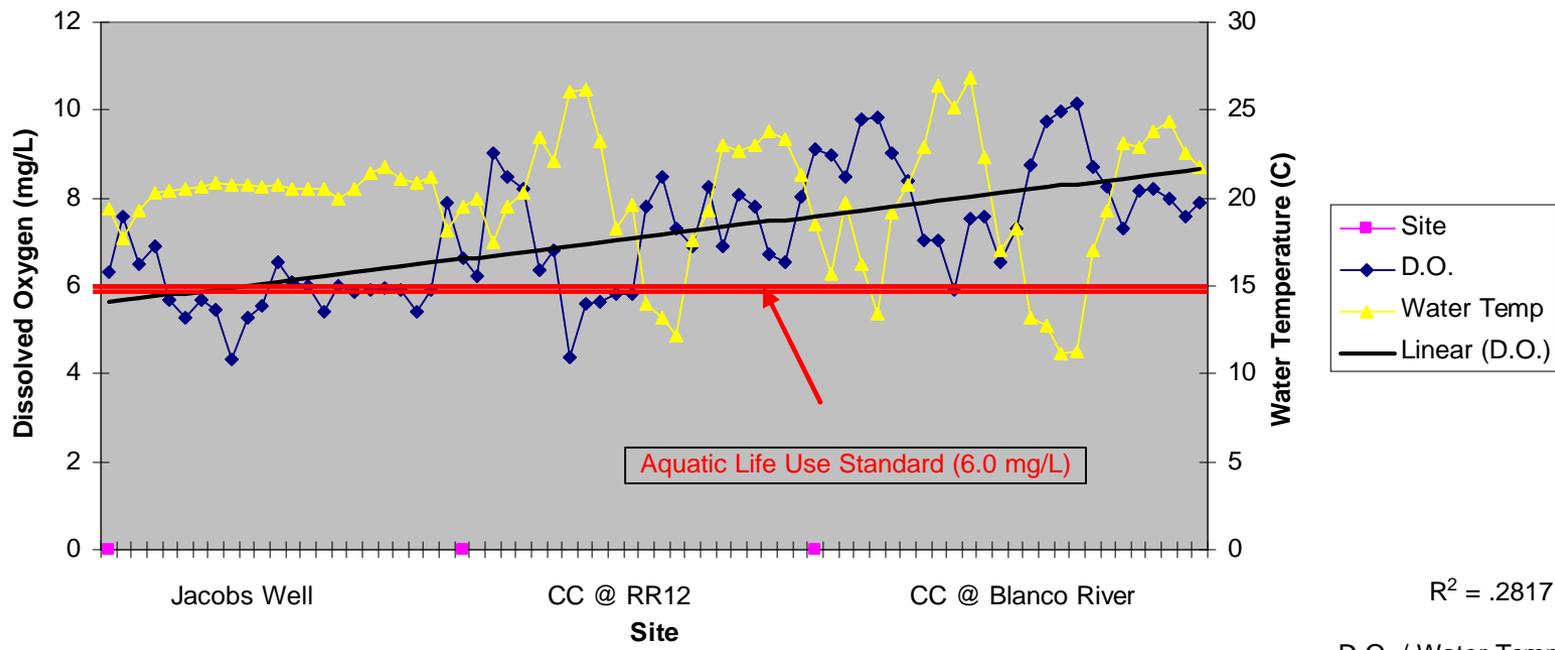


Support for aquatic life use is based on assessment of dissolved oxygen criteria, toxic substances, ambient water and sediment toxicity, and biological screening levels for habitat, fish, and macrobenthos.

Each set of criteria is generally evaluated independently of the others, and impairment of the aquatic life use results when any of the individual criteria are not attained.

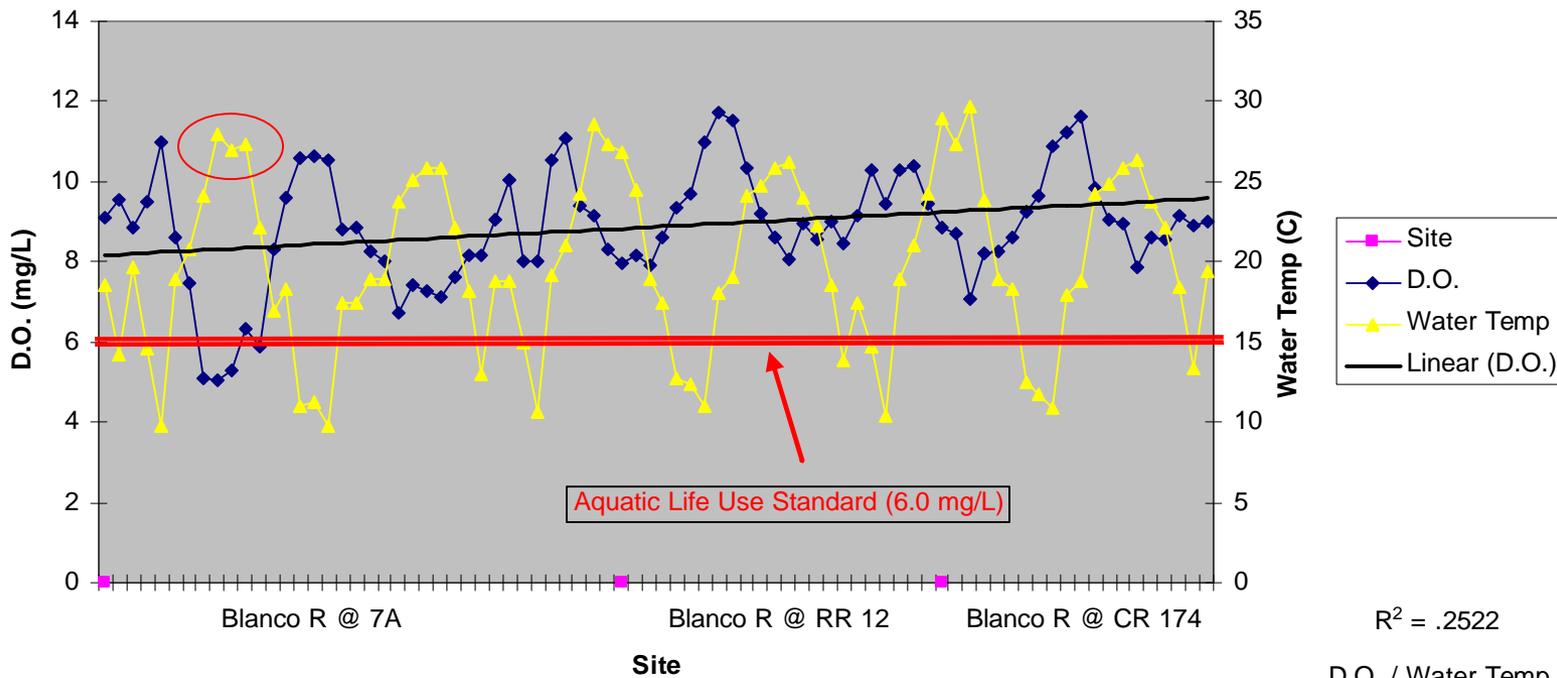


Cypress Creek Dissolved Oxygen & Water Temperature (2003 - 2004)



D.O. / Water Temp

Blanco River Dissolved Oxygen & Water Temperature (2003 - 2004)



$R^2 = .2522$
D.O. / Water Temp

Environmental and human variables that influence pathogens in fresh water:

Rainfall; on-going and previous

Flow

Nonpoint sources such as domestic and wild animals, malfunctioning septic systems or treatment plants, and illicit dumping

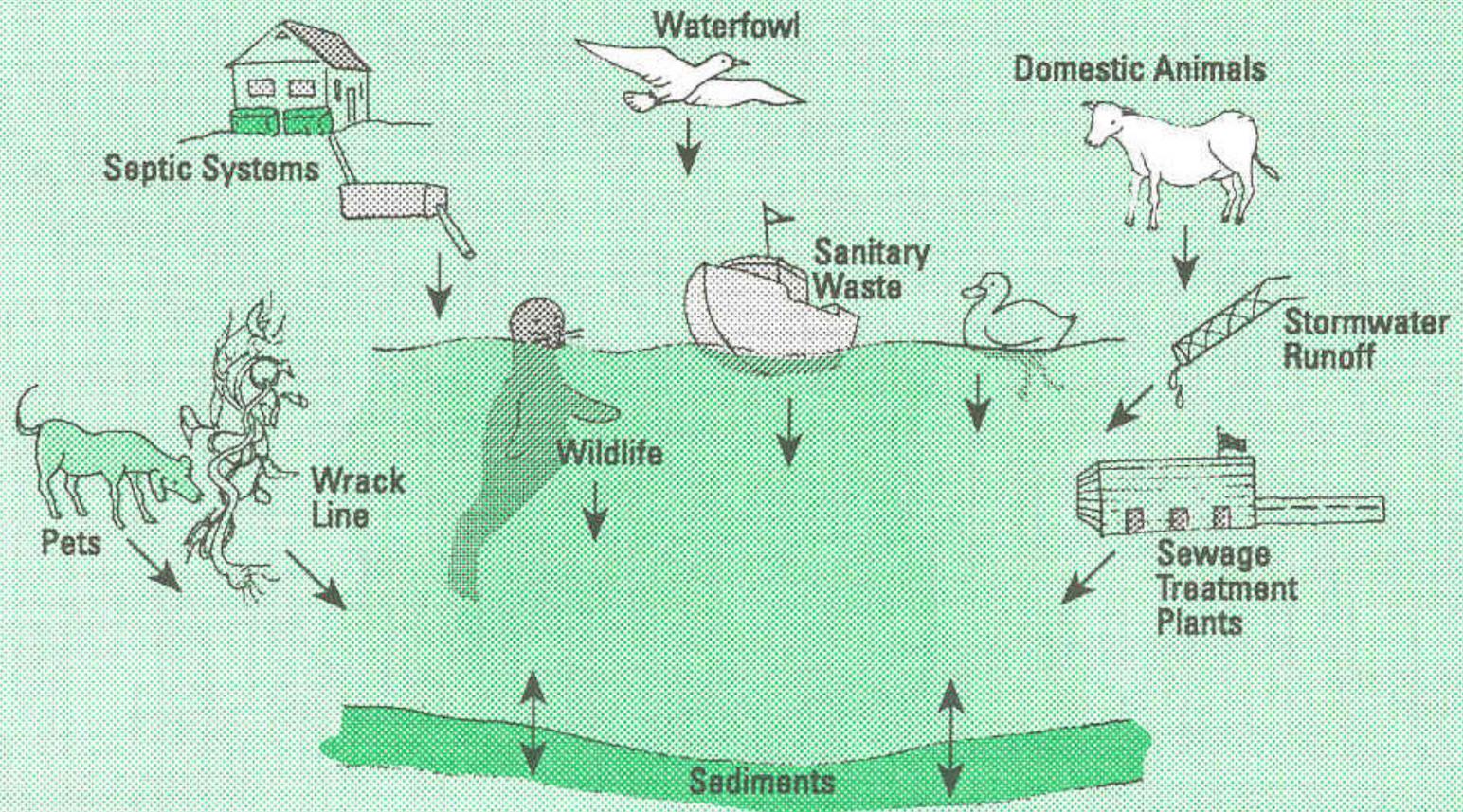
Temperature

Land use

Population density

Impervious cover

Potential Pathways of Fecal Coliforms in the Marine Environment

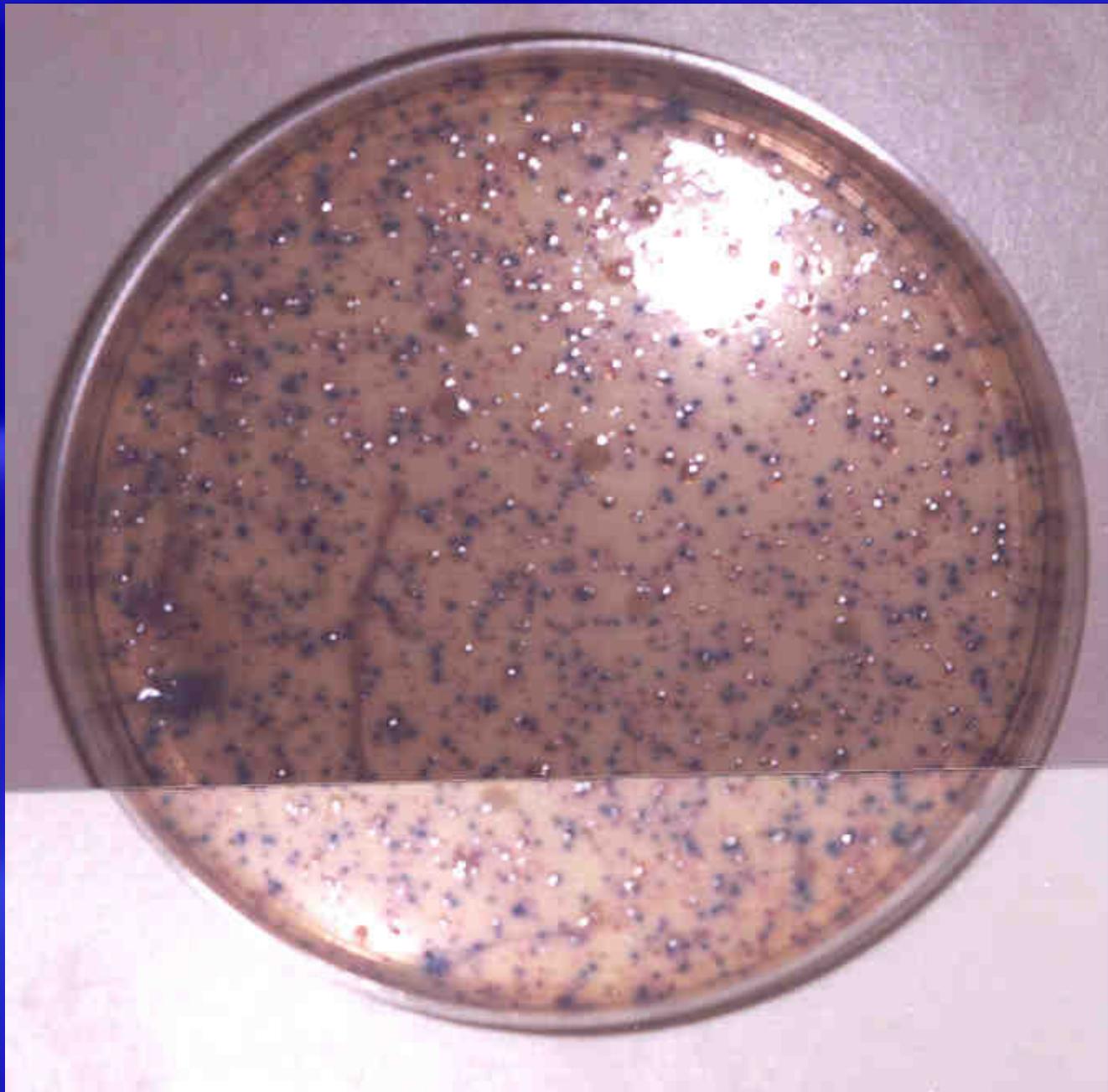


Sewage Spills



What's swimming in the water...besides fish Bacteria and Your Health

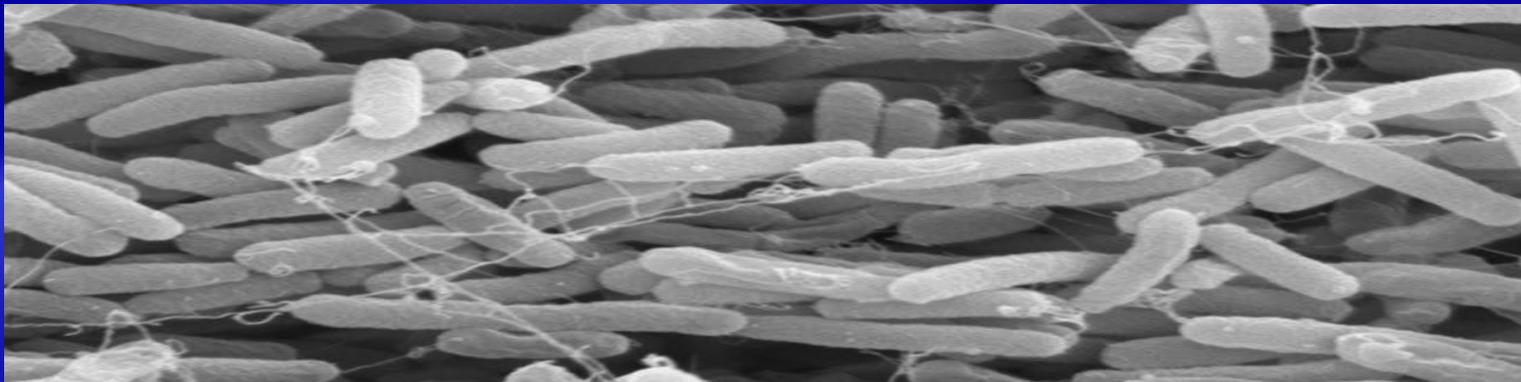




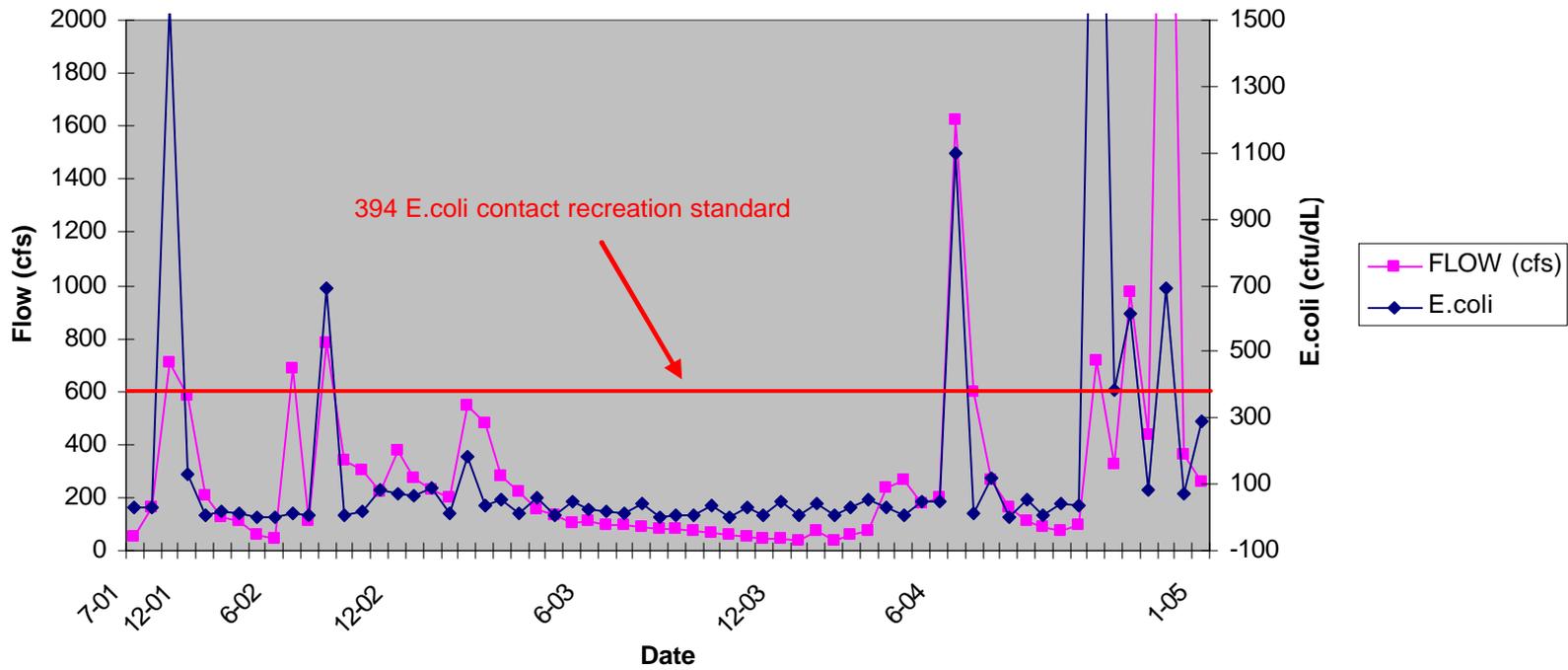
Bacterial Indicators

...like fecal coliform or *E.coli*

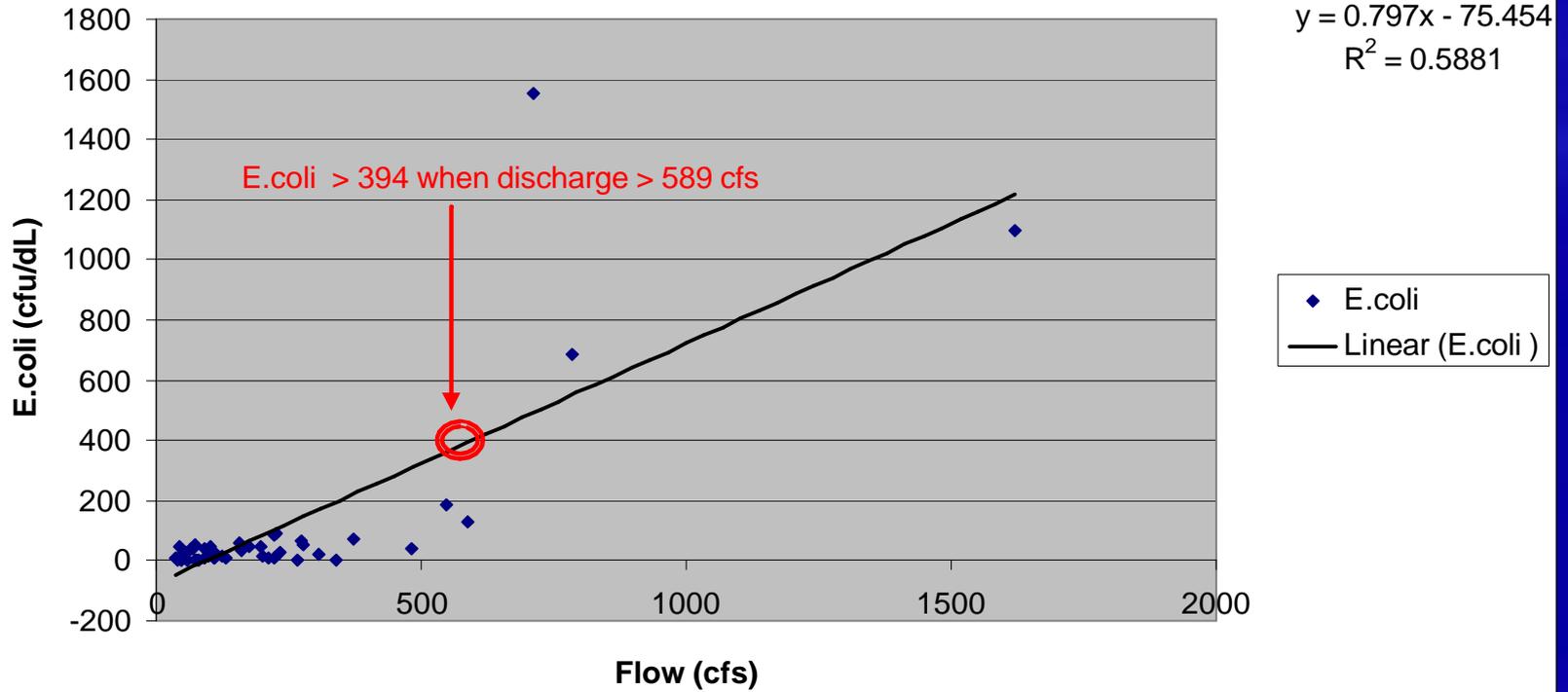
are called indicators because their presence indicates the possibility that disease causing pathogens are present.



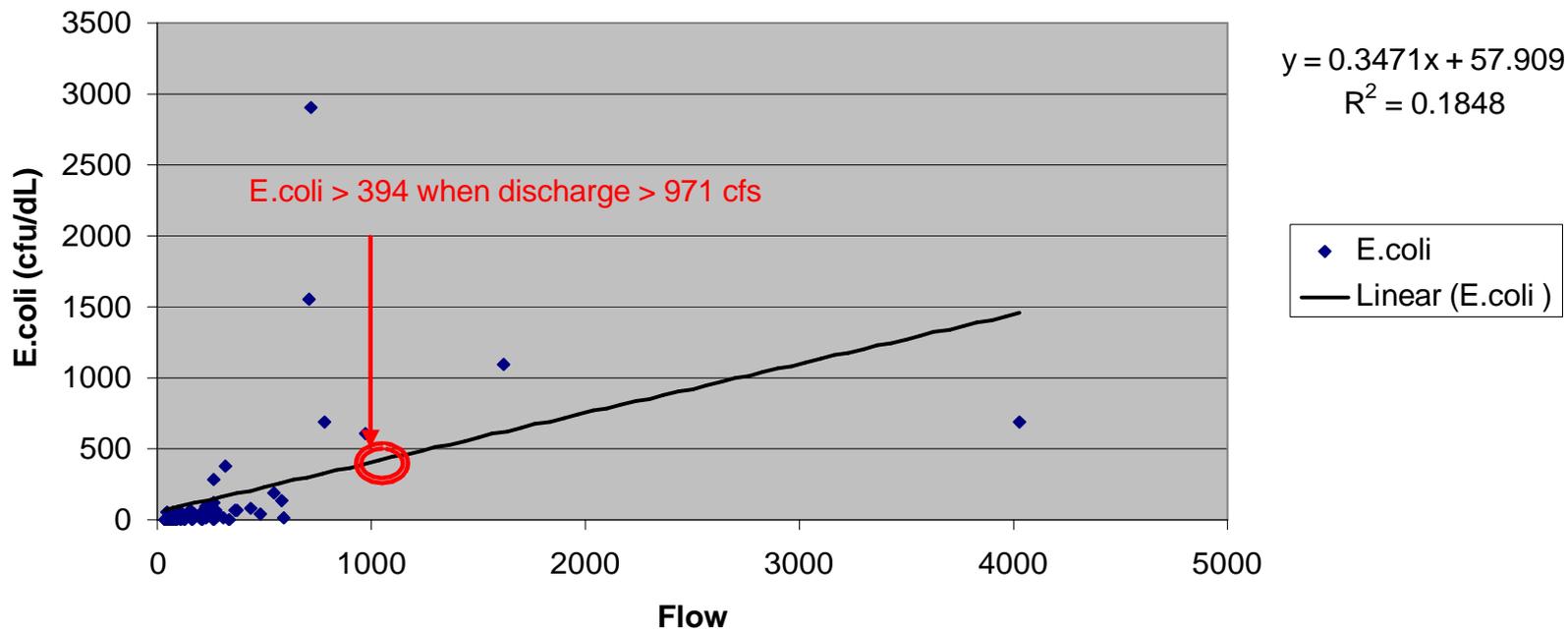
Blanco River E.coli & Flow (2001 - 2005)



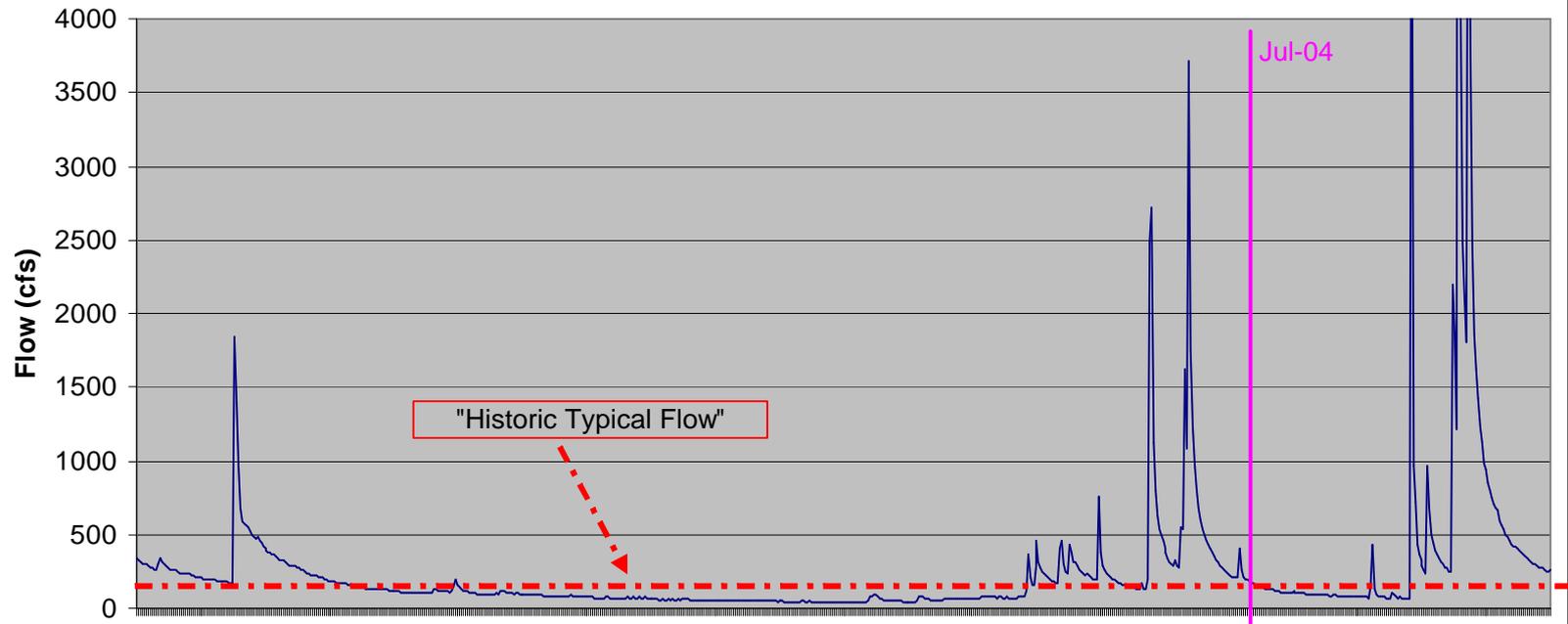
Blanco River 6/2001 to 7/2004 Flow-E.coli Relationship



Blanco River (08171000) 6/2001 to 1/2005 Flow-E.coli Relationship



Blanco River Flow (RR12 USGS 08171000) 2003 - 2004



QUESTIONS about the data?



A large snapping turtle is swimming in a river. The water is dark and filled with dense, green aquatic vegetation. The turtle is positioned in the center-left of the frame, facing towards the right. Its head is slightly raised, and its front legs are extended. The background is a dense thicket of green plants, likely water hyacinths or similar species, which fills most of the frame. The lighting is somewhat dim, suggesting an overcast day or a shaded area of the river.

*Clean Rivers Program Steering Committee Meeting – GBRA
March 30, 2005*

Jason Pinchback
Project Coordinator
Texas Watch

Texas Watch is a collaborative partnership that actively works with the TCEQ, public and private agencies, and the Clean Rivers Program.

Texas Watch is predominantly funded by grants from the U.S. EPA through the Texas Commission on Environmental Quality.

The purpose of this presentation is to serve as an enhancement of the information used by area stakeholders for evaluation of the basin's water quality and watershed education activities.



Monitoring for...

- Dissolved oxygen
- pH
- Specific conductance
- Temperature
- Flow severity
- Secchi depth
- Algae cover
- Land use and riparian observations
- Rainfall

*nutrients and E.coli

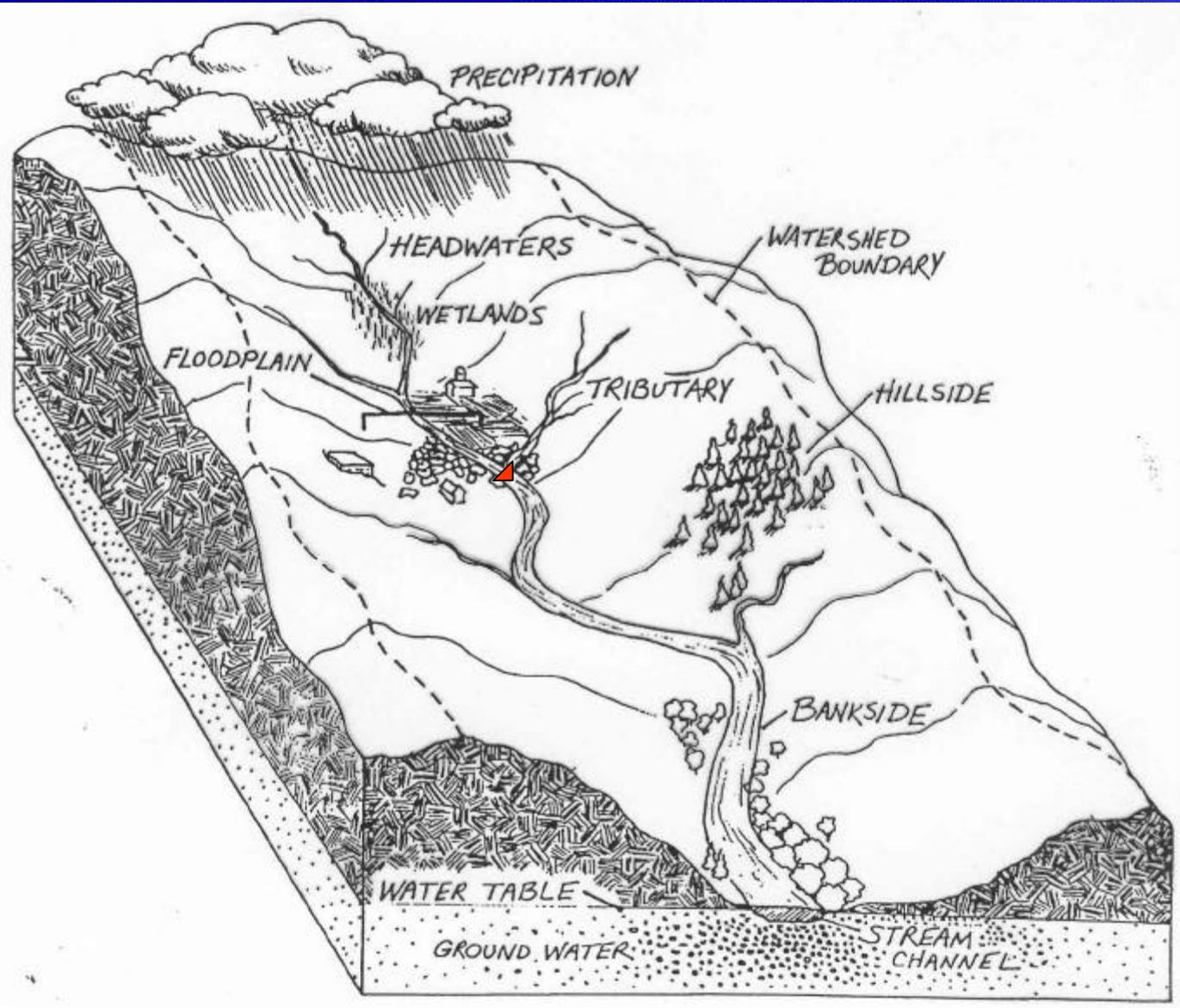


Texas Watch in the basin...

- 23 active monitoring sites
- 138 sampling events in 2004
- 840 sampling events since 2000

The most active groups include: Lindheimer Master Naturalist, San Marcos River Rangers, Blanco River Watch, Wimberley Valley Watershed Association, Texas State Geography Department, Texas State Aquatic Biology, Hays County









A look at San Marcos River Data...

Contact Information

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