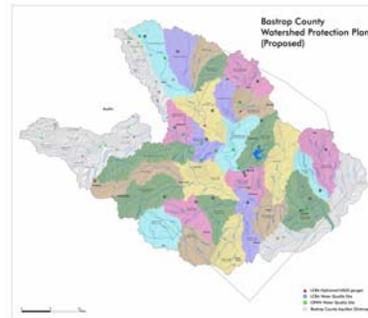


Watershed Protection Initiative for Bastrop County

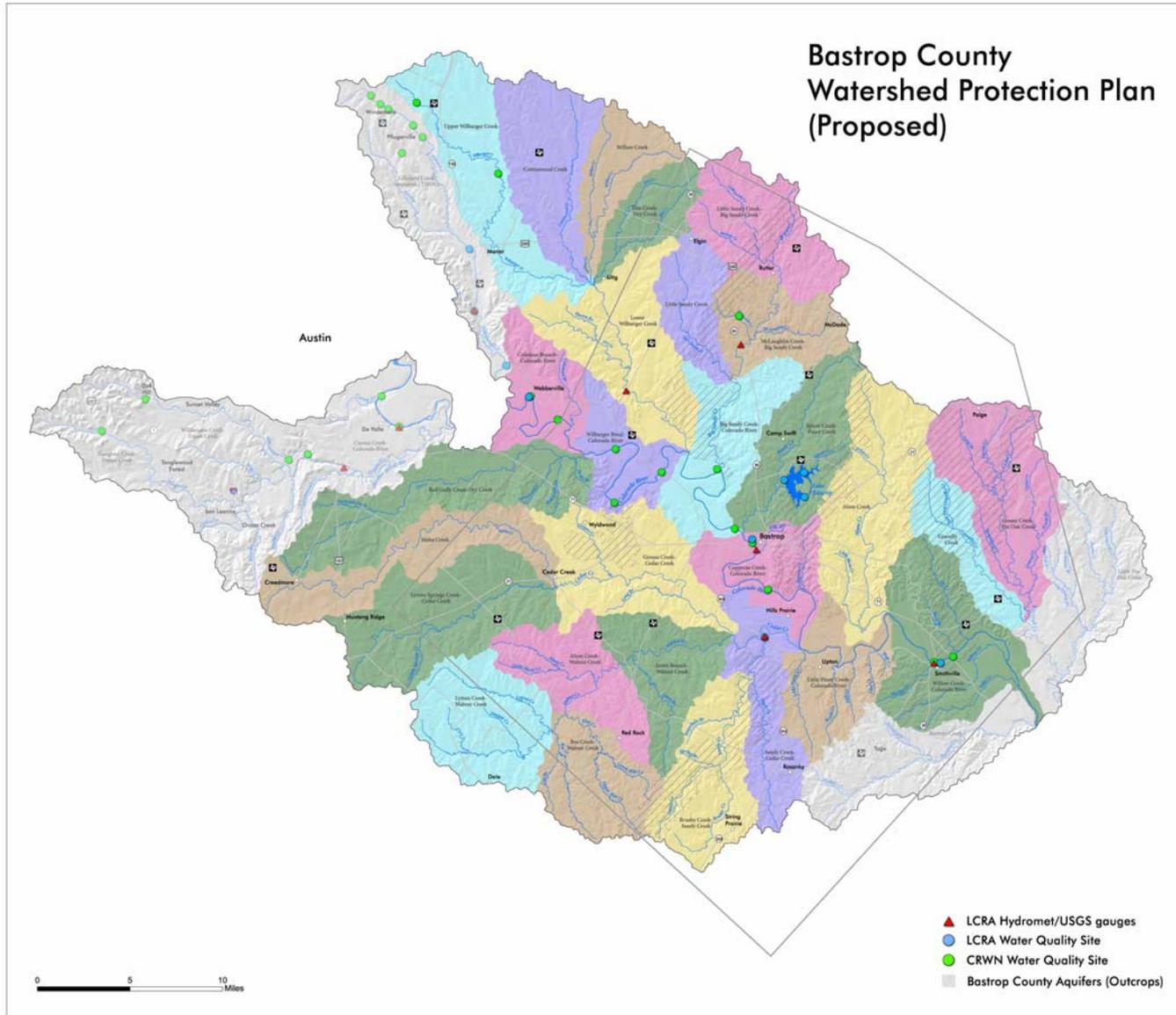


The Lost Pines Region

What is a Watershed?

- A geographic area in which water, sediments, and dissolved materials drain into a common outlet.
- Common outlet can be a stream, lake, playa, estuary, gulf, or ocean.
- Everything that runs off or is discharged into a watershed can affect the quality of the receiving water body.

Bastrop County Watershed



Sub-watersheds*

<u>Sub-watersheds (tributaries)</u>	<u>Acres</u>
Cedar Creek Watershed	225,104
Wilbarger Creek Watershed* (Bastrop and Travis counties)	115,601
Big Sandy Creek Watershed	80,406
Piney Creek Watershed	24,531
Cooperas Creek Watershed	18,056
Alum Creek Watershed	35,159
Willow Creek Watershed	35,125
Gravelly Creek Watershed	12,934
Grassy Creek Watershed	31,587
Red Gully Watershed* (Bastrop and Travis counties)	35,217
Little Piney Creek Watershed	20,400
Coleman Branch Watershed	16,386
Wilbarger Bend Watershed	<u>14,550</u>
Total Acres	665,056

* Not all sub-watersheds are totally within Bastrop County

Acres in Texas WPP Watersheds*

WATERSHED	ACRES	WATERSHED	ACRES
• Cypress Creek	24,299	• Arroyo Colorado	451,840
• Armand Bayou	35,496	• Granger Lake	466,587
• Dickinson Bayou	63,571	• Brady Creek	513,950
• USAR	85,431	• Eagle Mtn Reservoir	550,432
• Hickory Creek	110,635	• Cedar Creek Reservoir	646,380
• Bastrop Bayou	148,317	• Lampasas River	839,800
• Buck Creek	192,581	• Caddo Lake	1,791,871
• Plum Creek	254,080	• Pecos River	12,434,468

* Impaired Watersheds

What is a Watershed Protection Plan?

A coordinated environmental management framework that focuses public and private efforts on a watershed's highest priority problems.

US EPA

Watershed Protection in Texas

- The State of Texas has adopted a watershed approach for preserving and improving water quality.
- The Texas Commission on Environmental Quality (TCEQ) is the lead agency in managing water quality programs.
- The watershed approach evaluates the sources of pollution that may be affecting water quality, establishes priorities, and develops community-based solutions.
- Local stakeholders, working cooperatively and on a voluntary basis, implement those solutions appropriate to the local situation.

Watershed Approach

The watershed approach is commonly characterized by four principles:

- Active stakeholder involvement at a local level
- A geographic focus based on a specific goal or plan
- Action driven by environmental objectives and by strong science and data
- Coordinated priority setting and integrated solutions

Why a Watershed Protection Plan?

- Clean up impaired watersheds
- **Proactively manage un-impaired watersheds**
- Endorsed by US EPA and TCEQ as the preferred method of protecting & improving water quality
- **Qualifies the watershed for funding**

Why Our Watershed?

- **Bastrop County & Central Texas**
 - Exceptional growth
 - Development pressure from Austin
 - Colorado River Basin impairments up-river
 - River Below Longhorn Dam – Bacteria
 - Gilleland Creek (Pflugerville) – Bacteria
 - River and Tourism important resources
 - Desire to protect the Rural Character of the County.

Purposes of Initiative

- To ensure a **sound ecological environment** in Bastrop County that serves the needs of the natural and human communities by protecting and enhancing the land and water interaction as measured by water quality, aquatic and wildlife habitat parameters.
- To assemble and **inform a stakeholder group** in the Bastrop County reach of the lower Colorado River basin capable of developing a Watershed Protection Plan (WPP) that proactively protects and restores the watershed.

How to develop a WPP?

A Six Step Process

- 1. Build Partnerships**
- 2. Characterize the Watershed**
3. Finalize Goals and Identify Solutions
4. Design an Implementation Program
5. Implement Watershed Plan
6. Measure Progress & Make Adjustments

Current Partners

- Organizing Partner
 - Environmental Stewardship
- Resource Partners
 - Lower Colorado River Authority
 - Texas Parks and Wildlife Department



Nine Elements of a WPP

1. **Identification of causes & sources**
2. Estimate of load reductions needed
3. Description of mgt measures needed
4. **Technical & financial assistance needed**
5. **Information & education strategy**
6. Implementation schedule
7. Interim milestones
8. Criteria to determine load reductions
9. Effectiveness monitoring

Current Action Elements

Technical & financial assistance needed

- i. Non 319 Funding
- ii. Ag/Landowner Connections

Information & education strategy

- i. Local Outreach & Education

Identification of causes & sources

- i. LCRA & TCEQ monitoring
- ii. LCRA CRWN Volunteer Monitoring

What is a stakeholder?

A group or individual who:

- Has the responsibility for implementing a decision
- Is affected by the decision
- Has the ability to impede or assist in implementing the decision

Stakeholders Include

- Landowners
- Homeowners
- Local Businesses
- Agricultural Producers
- Industries
- Developers
- Recreation Groups
- Resource Agencies
- City and County Officials
- Planning Groups
 - Regional Water Planning
 - Groundwater Districts
- Conservationists
- Environmental Advocates Civic Groups

Stakeholder Groups

Landowners, Homeowners, and their representatives such as:

- Pines & Prairies Land Trust
- Tahitian Village Property Owners Association
- The Colonies Property Owners Association

Recreational Users & Businesses such as:

- Local Outfitters

Local Businesses and their representatives such as:

- Chambers of Commerce
- Development companies
- Real Estate Agencies

Agricultural Producers and their representatives such as:

- Cattle Ranchers
- Produce Farms
- Organic Farms

Industries and their representatives such as:

- Bastrop ISD
- Manufacturing & Processing

City and County Officials and their representatives such as:

- Bastrop County Judge & Commissioners
- Opportunity Bastrop County Citizens Advisory Committee
- Cities of Bastrop, Smithville, Elgin, Manor, and Webberville
- Unincorporated communities

Environmental Advocates such as:

- **Environmental Stewardship**

Civic Groups such as:

- Rotary Clubs
- Lions Clubs

Regional Planning Groups such as:

- Lower Colorado Regional Water Planning Group
- Lost Pines Groundwater Conservation District
- Groundwater Management Area 12

Water and Wastewater Utilities such as:

- Aqua Water Supply Corporation
- Bluebonnet Electric Cooperative

Conservation Groups such as:

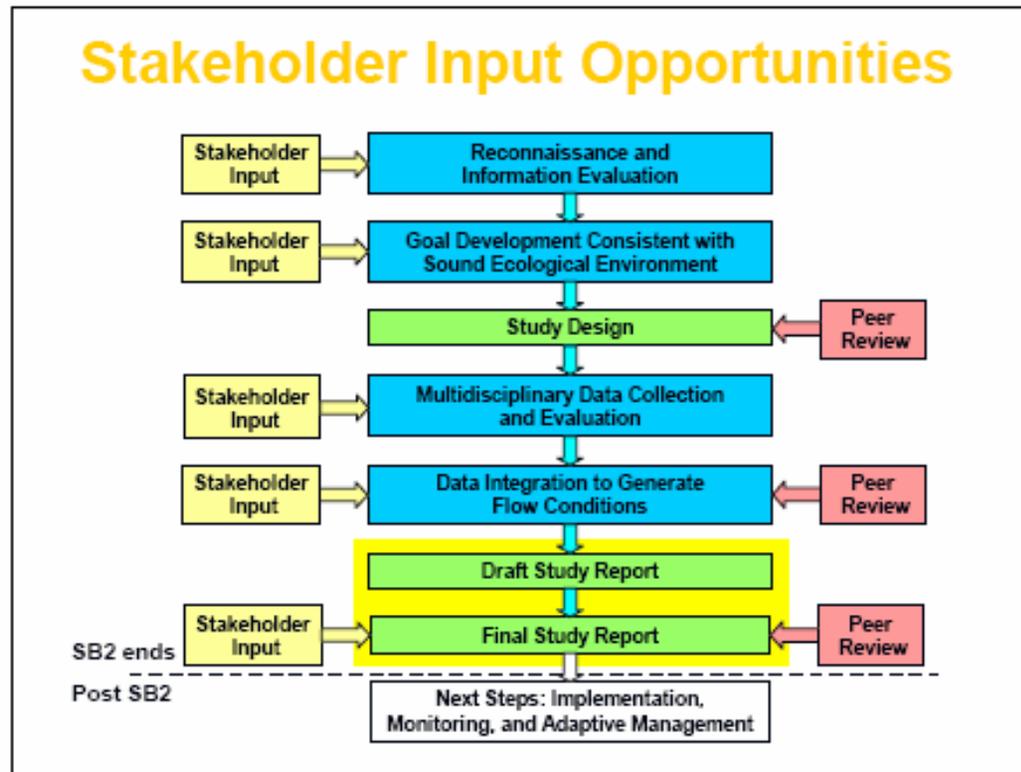
- Austin Bastrop River Corridor Partnership
- Bastrop County Audubon Society
- Bastrop County Sierra Club, Conservation Committee Chapter
- Bastrop County Historical Society and Museum
- Keep Bastrop County Beautiful
- Lost Pines Chapter – Texas Master Naturalists
- Friends of the Lost Pines State Parks
- Cedar Creek Park Association (Bastrop County Park)
- The Trust for Public Land

Resource Agencies

- **Lower Colorado River Authority**
- National Resource Conservation Service
- Texas AgriLife Extension
- **Texas Parks & Wildlife Department**
- Texas State Soil & Water Conservation Board

Bolded organizations have made a commitment to the initiative.

Stakeholder Input



Benefits of WPP

- Addresses all sources and causes of pollution in a watershed (Holistic)
- Voluntary and locally driven
 - Not regulatory and State driven
- **Framework for cooperative local planning**
- Flexible and adaptive
- **Opens door for funding & assistance**
 - State, Federal, and Private
- Protects water quality and environment

Planning in the Region

KEY PLANNING ACTIVITIES:

- Lower Colorado Regional Water Planning Group “Region K”
- Colorado and Lavaca Rivers and Matagorda and Lavaca Bays Environmental Flows Stakeholder Group
- Lost Pines Groundwater Conservation District
- Groundwater Management Area 12
- Lower Colorado River Authority Programs:
 - 100 year water planning
 - Colorado River Watch Network (Texas Stream Team)
 - Clean Rivers Program
 - Illegal Dumping Program
 - Bastrop & Fayette county stakeholder advisory group initiative
- Gilleland Creek TMDL Implementation Plan
- Opportunity Bastrop County
- The Central Texas Greenprint for Growth, Conservation & Economic
- Opportunity Project Discovering the Colorado: A Vision for the Austin – Bastrop River Corridor
- County & City Planning: Bastrop, Smithville, Elgin and unincorporated areas

Funding Opportunities

- Projects and management practices listed in the Watershed Protection Plan get priority funding.
- Matching \$'s & In-kind matching often include projects already required/desired.
- Leverages local \$'s

WPP Will Enable Funding

- US EPA Clean Water Act 319 Grants
 - Through TCEQ or TSSWCB
- LCRA Creekside Conservation Program
- US Fish & Wildlife Services Program
- Natural Resource Conservation Services Programs
- TPWD Land Services
- Trust for Public Land, Greenprint Program

Current Needs

- Funding for:
 - Education & Outreach
 - Create an informed stakeholder base
 - Characterization of Watershed
 - Water Quality Monitoring (Volunteer CRWN Network)
 - Bacteria
 - Flow characterization
 - River, tributaries, alluvial aquifer, springs
- Partnership Commitments
 - Resource Agencies
 - County & Cities
 - Key Organizations