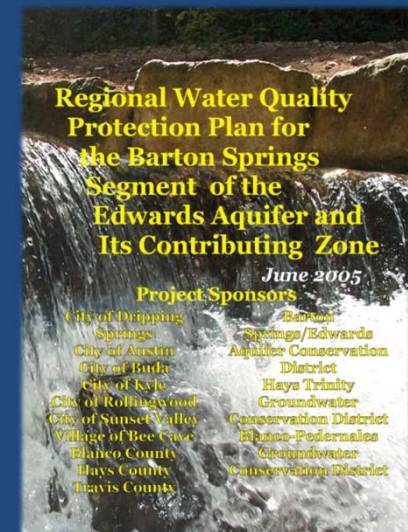


# Water Quality Protection in the Barton Springs Zone

In the Context of  
The Regional Water Quality  
Protection Plan

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May 3, 2012



# RWQPP Water Quality Threats

- Urbanization/Land Conversion
- Withdrawal Exceeds Recharge
- Point Source Discharges
- Stormwater Pollutants
- Domestic Waste Water Pollutants
- Pre-existing Development
- Inadequate Enforcement
- Handling Harmful Materials
- Poor Management of Open Space
- Poor Agricultural Practices

# RWQPP Responses to Threats

- Natural Area /Open Space Conservation
- Transferable Development Rights
- Comprehensive Site Planning/Pre-Development Reviews
- Location of Development Relative to Sensitive Areas
- Limits on Development Intensity
- Control of Hydrologic Regime
- Structural BMPs for Project Discharges
- Local Enforcement of Construction Site Controls



# Responses to Threats - continued

- Wastewater Management
- Alternate Water Sources/Uses and Conservation
- Characteristics of Development
- Land-use Restrictions
- Restrictions on Harmful Materials
- Proper Vegetative Management
- Proper Agricultural Practices
- Protection of Endangered/Threatened Species
- Public Education and Outreach

# WATER QUALITY THREATS and RECOMMENDED RESPONSES

## Regional Water Quality Protection Plan for the Barton Springs Zone

For the Final Version of the Plan, see: [www.waterqualityplan.org](http://www.waterqualityplan.org)

	Natural Area and Open Space Conservation (pp 65-66)*	Transferable Development Rights (pp 66-67)	Comprehensive Site Planning and Pre-Development Review (pp 67-68)	Location of Development Relative to Sensitive Areas (pp 68-71)	Limits on Development Intensity (Impervious Cover) (pp 71-77)	Control of Hydrologic Regime (pp 77-78)	Structural BMPs for Discharges from Developed Land (pp 78-85)	Local Enforcement of Construction Site Controls (pp 85-86)	Wastewater Management (pp 86-90)	Alternate Water Sources/Uses and Conservation (pp 90-95)	Characteristics of Development (p 95)	Land-use Restrictions (pp 95-96)	Restrictions on Harmful Materials (pp 97-98)	Proper Vegetative Management (pp 99-100)	Proper Agricultural Practices (pp 100-101)	Protection of Endangered and Threatened Species (p 101)	Public Education and Outreach (pp 101-104)
Responses to Threats																	
Threats to Water Quality																	
Urbanization/Land Conversion (pp 47-54)*																	
Withdrawal Exceeds Recharge (pp 54-55)																	
Point Source Discharges (pp 55-56)																	
Stormwater Pollutants (pp 56-57)																	
Domestic Waste Water Pollutants (p 58)																	
Pre-existing Development (p 58)																	
Inadequate Enforcement (pp 58-59)																	
Handling Harmful Materials (pp 59-60)																	
Poor Management of "Open Space" (pp 60-61)																	
Poor Agricultural Practices (p 61)																	

\* Page numbers refer to pages of the Regional Water Quality Plan where this topic is discussed.

### Key to Cells

Significant benefit

Some benefit

Little or No benefit



# Three Jurisdictions are Key to Water Quality Protection

<u>Jurisdiction</u>	<u>% of Barton Springs Zone</u>
Hays County	30%
Dripping Springs	30%
<u>Austin</u>	<u>29%</u>
Total	89%

# Growth Pressures Vary Greatly Across the Barton Springs Zone

<u>Jurisdiction</u>	<u>2000-2010 Growth</u>	<u>% Developed</u>
Hays County	103%	?
Dripping Springs	94%	?
Austin	25%	80%

# Water Quality Protection Authorities are Very Different

Hays County	County	Very Limited Authority
Dripping Springs	General Law City	Limited Authority
Austin	Home Rule City	Extensive Authority



# SPECIAL Water Quality Threats

All the threats identified in the  
RWQPP remain,

BUT

A few deserve special mention

# Special Water Quality Threats #1

- Urbanization/Land Conversion
  - Many Cities' rules to regulate development fall short of RWQPP recommendations
  - Counties' limited authority leaves large areas without adequate protection
  - Many areas already developed with minimal or no controls
  - TDRs are a great protection tool, but have not been fully embraced

# Special Water Quality Threats #2

- Point Source Discharges
  - TCEQ approval of Direct Discharge Permits in the Contributing Zone
  - “A flowing stream cleans itself every mile” is another old-fashioned attitude that needs to change.

# Special Water Quality Threats #3

- Withdrawal Exceeds Recharge
  - Kirk Holland will discuss in more depth
  - “The SOLUTION to POLLUTION is DILUTION” is still a prevalent attitude, and a problem.
    - Decreasing stream and aquifer volumes demand GREATER controls, not less, to protect remaining human and environmental uses

# Special Water Quality Threats #4

- Stormwater Pollutants
  - TXDOT needs to coordinate better with local jurisdictions on highway construction in contributing and recharge zones
  - Travis County's newly proposed Stormwater Management Plan must be fully implemented and enforced to be an effective control measure
  - Hays County, where most recharge is derived, currently does not have the county-level authority to offer equivalent protection

# Special Water Quality Threats #5

- Pre-Existing Development
  - All jurisdictions have this problem
  - Austin (80% developed) faces the greatest challenge

# NEW and EMERGING Water Quality Threats

- Texas Supreme Court and the Day Decision
- Economic Hard Times
  - Belt-tightening by Governments, Business & Families
- New Patterns of Development
  - Development Nodes and Activity Centers
- Blanco River Contribution to Barton Springs flow
  - Water Quality Management in new areas

# Conclusions and Recommendations

- Expand inter-jurisdictional cooperation and support – consider a formalized regional structure
- Implement cross-jurisdictional TDR program
- Seek increased authorities where needed – especially for Counties
- Emphasize Public Education efforts to increase public support for needed water quality efforts
- Emphasize water QUANTITY as well as QUALITY



# Conclusions and Recommendations continued

- Do a PROGRESS/TREND review at next Summit:
  - 7 years since RWQPP Completed
  - Urbanization changes:
    - Acres developed and conserved
    - Houses built
    - Auto miles driven, etc.
  - Water quality measurements:
    - Stream and aquifer flow rates
    - Water quality measurements
  - Jurisdictional controls in place:
    - Ordinances
    - Resources
    - Incidents and response capabilities

Most of all:  
Be GOOD NEIGHBORS....

***REMEMBER:***

***We are all downstream from somebody!***