Bacteria "Impairments" within the City of Austin's Jurisdiction

Presented to the City of Austin Environmental Board
March 7, 2012

What is a Bacteria Impairment?

- TCEQ required by the federal Clean Water Act (Section 303 (d)) to regularly identify water bodies not meeting designated uses
  - www.tceq.texas.gov/waterquality/assessment

- Elevated fecal bacteria levels that "impair" contact recreation use of a water body is common

Bacteria Impairments in Austin

Note: Not all WPD data submitted to TCEQ for use in assessment.
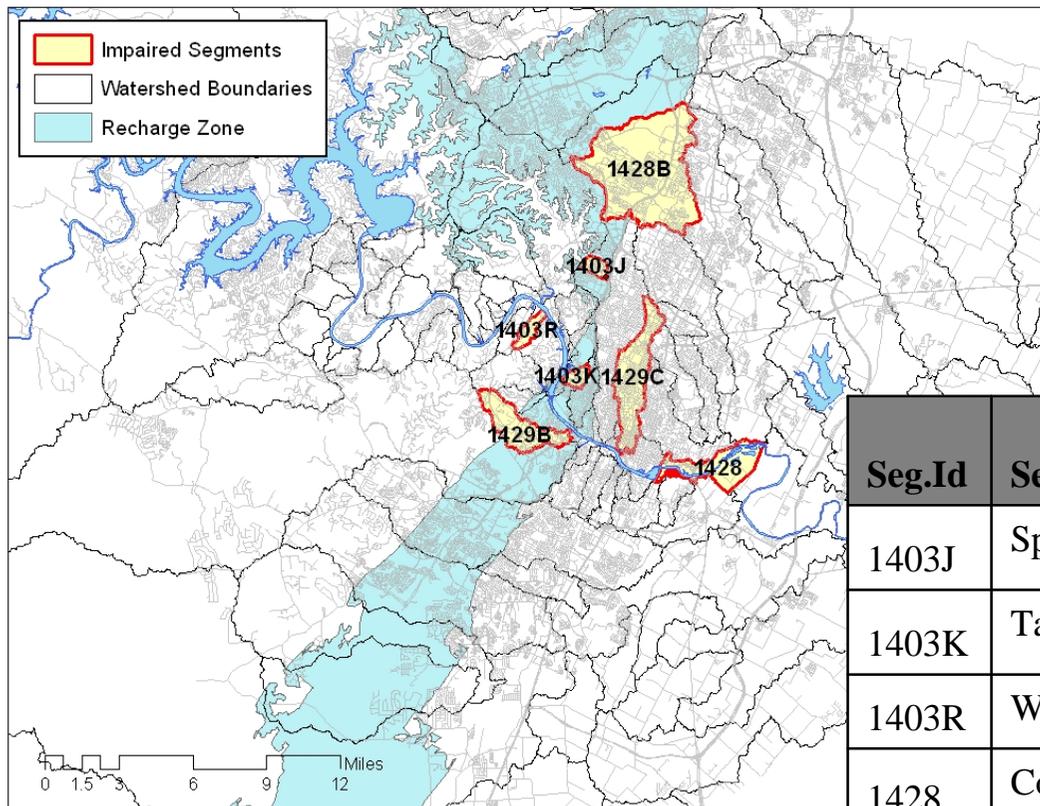
Seg.Id	Segment Name	Year Listed
1403J	Spicewood Springs Trib to Shoal	2002
1403K	Taylor Slough South at Reed Park	2002
1403R	Westlake-Davenport Trib to Lake Austin	2006
1428	Colorado R. below Town Lake	2006
1428B	Walnut Creek upstream of MoPac	2006
1429B	Eanes Creek	1999
1429C	Waller Creek	2004

Why Now?

- WPD and AWU already actively working to find/fix fecal contamination problems citywide

- EPA wants TCEQ to act on 303(d) listings within 13 years

- Lack of action could result in modification of Austin's citywide MS4 TPDES permit

Options to Addressing Impairments?

Five Options:

- Fix and Monitor

- Develop Total Maximum Daily Load and Implementation Plan

- Develop Watershed Protection Plan

- Conduct Recreational Use Attainability Analysis to Change Standards

- Do Nothing

Option 1. Fix and Monitor

Find the problem, fix it, continue monitoring
and resubmit data to TCEQ

Pro:	Con:
• Has been current practice	• City may not be able to find/fix
• Find/fix *specific* problem	• Need $ now to fix infrastructure
• Impairment completely removed	• Will take long time to fix/monitor
• Once fixed, no further action	• City TPDES permit vulnerable

Option 2. TMDL

TCEQ contractor determines the total amount bacteria that must be reduced for water body to support contact recreation. COA participates in stakeholder process to develop Implementation Plan to achieve the necessary bacteria reduction.

Pro:	Con:
• Once scheduled, TPDES safe	• Two year process to develop
• Developed by TCEQ contractor	• TMDL exists in perpetuity
• COA controls level of commitment	• Only addresses bacteria problem
• Can mirror current practices	
• No penalty if bacteria not reduced	
• Stakeholder process	

Options 3. Watershed Protection Plan

COA must develop plans for each watershed to address all types of non-point source pollution.

Pro:	Con:
• Address all contaminants	• Highly labor-intensive
• Existing MP could become WPP	• WPP must be approved by EPA
• Can address problems outside COA jurisdiction	• WPP does not remove impairments from list

Options 4. Use Attainability Analysis

TCEQ contractor determines the appropriate contact recreation use and associated numeric bacteria standard for the water body. Analysis to support change in standard for each water body.

Pro:	Con:
• RUAA would remove 2 impairments from the list	• Inconsistent with current City of Austin policy and practices • Will not address all impairments • Does not fix the problem

Options5. Do Nothing

Take no action, cross fingers and hope for the best.

Pro:	Con:
• ???	• EPA or TCEQ could modify the Citywide MS4 TPDES permit, potentially at significant cost, change of business practices for the City • Fecal contamination continues

Recommended Path Forward

Staff recommending that we go with
Option 2 - TCEQ to develop TMDL:

- Allows City to continue to find/fix fecal contamination
- Reduces possibility of interference with MS4 permit
- Coordinated by TCEQ contractor at no cost to City
- Stakeholder process opportunity for public education
- Minimizes resources required from City (e.g., COA staff involvement)

Timeline

March 2012:

- COA request TCEQ to initiate TMDL

October 2012:

- TCEQ selects coordinating contractor

2013-2014:

- Open stakeholder process to develop TMDL/IP

For More Information

- Visit TCEQ:
  - www.tceq.texas.gov/waterquality/assessment
  - www.tceq.texas.gov/waterquality/tmdl

- Search WPD publications:
  - ci.austin.tx.us/watershed/publications/default.cfm

- Email: Chris.Herrington@austintexas.gov