Proposed Management Measures for Mill Creek

Galen Roberts
Texas A&M AgriLife Extension Service
Mill Creek
April 27, 2015

Management Measures

Proposed primarily to address bacteria concerns in the watershed.

• Measures may be identified to address other types of pollution.
• All measures are voluntary.
• Heavy focus on public outreach and education.

Management Measures

• Urban Nonpoint Source
  • Dog Waste
  • Stormwater
• Wastewater
  • Septic Systems
  • SSO Initiatives
• Agricultural Nonpoint Source
  • Livestock
  • Wildlife & Feral Hogs
**Urban Management Measures**

- Dog Waste
  - Spay/neuter programs
  - Pet waste stations
  - City pet waste ordinances
  - Public education and outreach.

**Urban Management Measures**

- Urban Stormwater Runoff
  - Seek funding for engineering analyses and implementation of targeted control measures.
  - Implement non-structural BMPs, where possible.
  - Public education and outreach.

**Wastewater Management Measures**

- Sanitary Sewer Collection Systems and Overflow Initiatives (SSO)
  - Development of a specialized plan to prevent discharge of wastewater before it reaches a WWTF.
- Household Hazardous Waste Collection (HHW)
  - Seek funding to bolster existing HHW collection programs.
**Wastewater Management Measures**

- Septic Systems (OSSF)
  - Seek funding to extend sanitary sewer service to marginal areas of cities.
  - Seek funding for repair/replacement of failing OSSFs.
  - Outreach and education.

**Agricultural Management Measures**

- Water Quality Management Plans (WQMP)
  - Voluntary, site-specific management plans for individual agricultural operations.
  - WQMPs provide landowners access to state funding for implementation of BMPs.
  - Seek funding to employ SWCD technician to assist landowners in developing WQMPs and obtaining financial incentives.

**Agricultural Management Measures**

- Feral hog control
  - Will seek continued funding for an Extension feral hog position to provide technical assistance to landowners throughout the region.
  - Outreach and education.

- Wildlife
  - Continue to be managed by TPWD.
  - Outreach and education.
**Educational Initiatives**

- Learning Across New Dimensions in Science (L.A.N.D.S) Program
  - Vehicle for introducing environmental science into middle school classrooms.
- BMP Demonstration Areas
  - Washington County Fairgrounds

**Watershed Coordinator**

- Seek funding for a Watershed Coordinator position located in the watershed to coordinate implementation.
  - Provide oversight of project activities.
  - Seek funding for project partners.
  - Organize/coordinate meetings and educational programs.
Implementing Management Measures in Mill Creek

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April 27, 2015

Implementation

- Proposed actions are broken out into two categories:
  - Management Measures
  - Outreach and Education

- Includes new efforts as well as those that are already planned, underway, or ongoing.

Implementation

For each management measure and outreach/education activity we must identify:

- Frequency and/or extent of management measure implementation.
- Schedules and/or milestones.
- Responsible entity.
- Estimated cost.
- Technical and financial assistance needs.
Urban Management Measures

- Dog Waste
  - Spay/neuter programs
  - Pet waste stations
- Stormwater
  - Stormwater assessments
  - Enhance stormwater practices
  - Modify stormwater conveyance systems

Wastewater Management Measures

- SSO Initiative
  - Sewer line testing/replacement
  - Lift station modifications
- Septic Systems (OSSF)
  - Repair
  - Replacement
  - Decommissioning

Wastewater Management Measures

- Household Hazardous Waste, Electronics Recycling, Tire Collection, etc.
  - Frequency
  - Cost
- Ag Chemical Collection Days
  - Frequency
  - Cost
### Agricultural Management Measures

- Water Quality Management Plans (WQMP)
  - WQMP Technician position
  - WQMP development/implementation funds
- Non-Domestic Animal Management
  - Regional feral hog position
  - Feral hog traps

### Monitoring Components

- Targeted Water Quality Monitoring
  - Monthly subwatershed level sampling
  - Bi-annual wet/dry weather sampling
- Comprehensive Stream Assessments
- Wildlife Surveys
- Bacterial Source Tracking

### Outreach and Education

- Educational trainings and workshops
- Public school education programs (L.A.N.D.S.)
- Outreach and advertising
- Soil & Water testing campaigns
- Community stream cleanup events
**Watershed Coordinator**

- New position located in the watershed to coordinate implementation.
  - Provide oversight of project activities.
  - Seek funding for project partners.
  - Organize/coordinate meetings and educational programs.

**Technical & Financial Assistance**

- Technical Assistance
  - Watershed coordinator
  - WQMP technician
  - State/Federal agency personnel
- Financial Assistance
  - Grant funding
  - Incentive programs
  - No/Low interest loans

**Measures of Success**

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Texas A&M AgriLife Extension Service

Mill Creek
March 30, 2015
**Measures of Success**

Intended to track progress and support “Adaptive Implementation” by:

- Setting goals and milestones for implementation of management measures and in-stream water quality.
- Performing sampling and analysis to track implementation effectiveness.

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**Adaptive Implementation**

Tracking and adjusting implementation efforts as needed based on new information.

1. Setting goals and milestones for implementation and in-stream water quality.
2. Tracking management measure implementation.
3. Collecting and analyzing data.
4. Adjusting implementation strategy as needed.

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**Goals and Milestones**

- Set goals and milestones for implementing management measures.
  - Number of management measures implemented.
  - Timeline for implementing management measures.
- Set goals and milestones for in-stream water quality.
**Goals and Milestones**

- 10 year implementation timeline

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<td>139</td>
</tr>
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**Tracking Implementation Progress**

- Track implementation of management measures.
  - Identify what measures are working, and which aren’t.
  - Compare implementation progress to in-stream water quality.

**Sampling and Analysis**

Intended to track progress and support adaptive implementation.
- Continued targeted water quality monitoring.
- Biological stream assessments.
- Bacterial Source Tracking, if needed.
- Update SELECT analysis, if needed.
Next Steps in the Planning Process

Galen Roberts
Texas A&M AgriLife Extension Service
Mill Creek
March 30, 2015

Meeting Dates and Times

- Partnership meetings are slated for the last Monday of each month @ 6pm.
- Will be held here, at the Bleiberville VFD.
- Next meetings:

   May 18?
   June 1?

April 27 Meeting

- Continue discussion on Measures of Success (Section 7)
  - Continued monitoring
- Continue discussion on Implementation (Section 8)
  - Management measures
- Timeline
- $$$
Website: http://millcreek.tamu.edu

- Clearinghouse for all information related to the Partnership
- Meeting info
- Email list signup
- Event registration
- Maps, data, publications and useful links will all be available on the website
- http://millcreek.tamu.edu

Contact Info

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SAVE THE DATE

Mill Creek Partnership Meeting
May 18, 2015: 6pm
Here at the Bleiberville VFD