

Buck Creek Watershed Protection Plan Outline

August 25, 2011

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Watershed Management

- Definition of a watershed
- Watershed's impacts on water quality
- Watershed management approach
- WPP development process



Buck Creek, March 2008

- Private Property Rights
- Adaptive Management

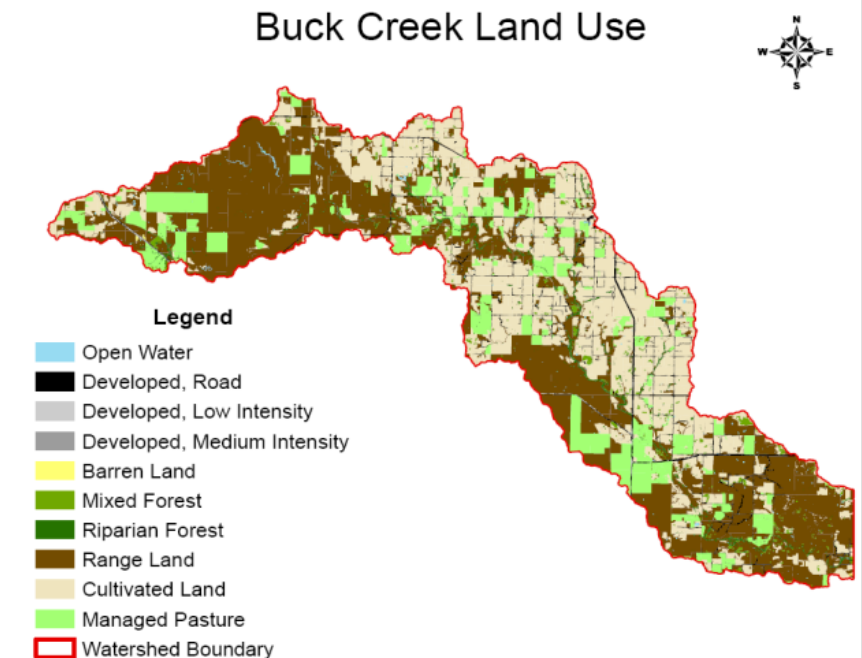
Regional History

- Native Americans
- Early Explorers
- Cattle Ranching
- Railroads
- Farming
- County Formation



Watershed Description

- Watershed Boundaries
- Soils
- Topography
- Land Use / Land Cover
- Ecoregions
- Climate
- Groundwater
- Surface Water
- Historic Water Quality

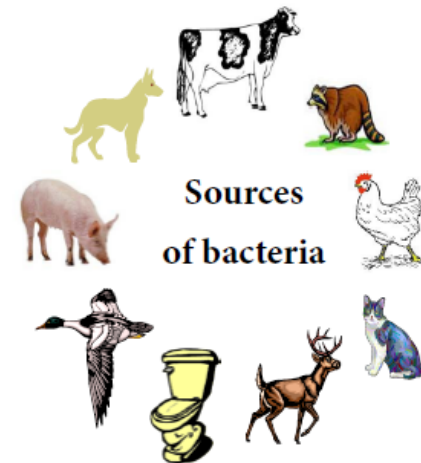


Current Watershed Conditions

- Demographics
- Agricultural Production
- Irrigation Water Use
- Livestock Population Estimates
- Feral Hog Population Estimates
- Deer Population Estimates
- Septic System Estimates
- Oil and Gas Activity
- Current Water Quality

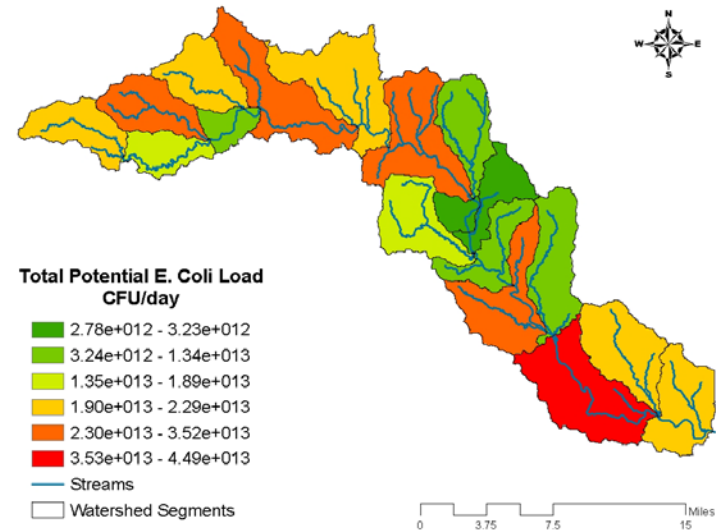
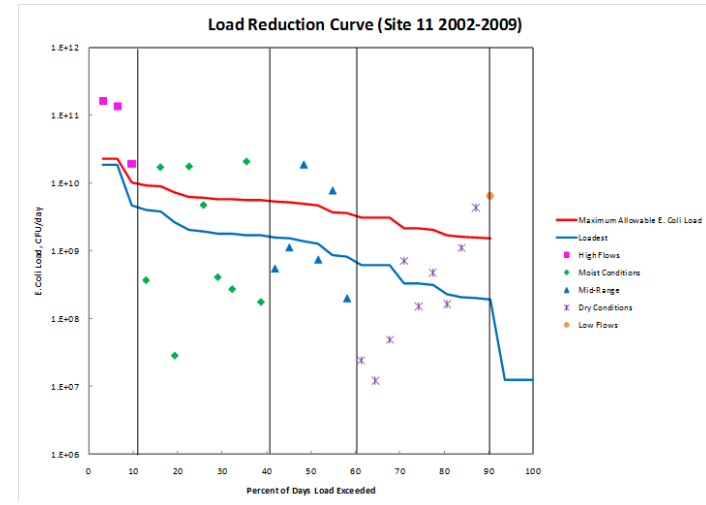
Potential Sources of Pollution

- Two Types of Sources
 - Point: from a defined location
 - Nonpoint: from an undefined location in within the watershed
- Buck Creek only has Nonpoint Sources
- Nonpoint Sources
 - Agriculture
 - Humans
 - Invasive Species
 - Livestock
 - Wildlife



Watershed Analysis Results

- Water Quality Monitoring
- Bacterial Source Tracking
- Load Duration Curve Analysis
- SELECT Modeling analysis



Concerns and Management



- Bacteria and Nitrates
 - Causes and sources
 - Critical management areas
 - Estimated load reductions
 - Needed management measures
 - Technical Assistance

Sources of Financial Assistance



Buck Creek, March 2008

- Federal Funding Programs
 - Farm Bill Programs
 - Clean Water Act Funds
- State Programs
 - Water Pollution Control Grants
 - Clean Rivers Program
 - State Revolving Funds
 - Supplemental Environmental Projects
 - Water Quality Management Plans

Education and Outreach



Buck Creek Stakeholder Meeting, January 2008

- Past Activities
 - Summarizes what has been done
- Future Activities
 - Continue Partnership Meetings
 - Tailor Educational Programs to meet Local Watershed Needs

Measures of Success

- **Removal from the 303(d) List**
- Tracking of management practices implemented in the watershed
- Continued water quality monitoring
- Reduced pollutant loading



Buck Creek Water Quality Monitoring

Implementation Schedule and Milestones

- Outlines implementation schedule
- Provides estimates of Financial Assistance Needs
- Designates Implementation Milestones



Solar Water Pump near Buck Creek

What Specifics Should Be Included?

- WPP is road map for future funding
 - Think of this a business plan
 - EPA will not provide implementation funding if not described in WPP
 - Items must be reasonable and feasible
 - Must result in a cost effective load reduction
- Goals for future management should be outlined



Buck Creek, June 2008

Goals of the WPP

- Initial goal was removal from 303(d) List
- Now this really is a Watershed Protection Plan
- Why continue or set alternate goal?
 - Prevent relisting
 - Need a direction
 - Secure funds to do something
- So what should the goal be?
 - Maintain existing levels
 - Reduce loads by a nominal percent
 - 2 % 5% 10%



Where to go from Here?

- TWRI just received official comments on the draft Buck Creek WPP from TSSWCB
- September 2011: AgriLife Research Vernon, TWRI, others address comments
- October 2011: TSSWCB reviews addressed comments
- November 1, 2011: Final Draft WPP out to Buck Creek Watershed Partnership Members for 15 day review
 - Do you want to have a meeting to discuss?

Where to go from Here?

- November 15, 2011: AgriLife Research Vernon, TWRI address Stakeholder comments
- December 1, 2011: Send to EPA for 60 day review
- February 2011: Address EPA comments
 - Print final version of WPP
 - Distribute to Stakeholders
 - Begin WPP Implementation

Questions?

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