



Catoctin Watershed Project
Stewardship for the Catoctin Creek Watershed



Citizen TMDL Outreach and Monitoring Results 2005-2009

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Loudoun Watershed Watch/Loudoun Wildlife Conservancy
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Citizen Role in Catoctin TMDL Implementation Plan

- **Community Outreach and Public Education** – Loudoun Watershed Watch (LWW) has organized Catoctin Watershed Project (CWP) events, and provide educational materials and displays.
- **Citizen Monitoring** – CWP has provided complementary monitoring to better define implementation progress.

Catoctin Watershed Project

- Organized in 2005 by Loudoun Watershed Watch to help meet stream monitoring and community outreach goals under TMDL IP
- Volunteers from Loudoun Wildlife Conservancy
- Grant funding from:
 - Canaan Valley Institute
 - DEQ
 - Chesapeake Bay Restoration Fund
 - Loudoun Wildlife Conservancy
 - Citizen donations




Community Outreach Projects

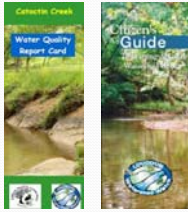


- 2005 Riparian Tree Planting Day – Waterford area with 50 participants and 500 trees
- 2005 Catoctin Creek Clean-up Day – Taylorstown area with 60 participants
- 2006 Riparian Tree Planting Day – Hamilton area with 65 participants and 300 trees
- 2007-8 Riparian Tree Planting – Through Loudoun Wildlife Conservancy Waterford with 100 participants and 600 trees
- Taylorstown Citizen Association – Organizes annual stream days
- Boy Scout Troop 962 - Annual stream clean-up





Community Outreach Educational Materials

- Pamphlets –
 - Citizen's Guide – Starting a Local Watershed Group
 - Catoctin Creek – A Community Treasure pamphlet
 - Catoctin Creek – Water Quality Report Card pamphlet
 - Benefits of Clean Water pamphlet
 - Fecal Bacteria in Stream Water: Public Health Considerations pamphlet
- Website – Educational materials and monitoring data provided at www.loudounwatershedwatch.org
- Logo – Distinctive logo provided on educational materials and T-shirts
- Catoctin Watershed Project - banners and display
- Training – Loudoun Valley High School








Citizen Volunteer Stakeholder's Overall Contributions – 2005-2009

Citizen volunteer organizations have made a substantial contribution to the TMDL IP:

- Community Outreach and Education – publications, website, meetings, etc. = 1200 hrs volunteer time
- Riparian Tree Planting and Stream Clean-up Projects = 1500 hrs volunteer time
- Stream Monitoring – 90 sampling days, 970 samples, 1500 lab analyses = 1500 hrs volunteer time


Recognition -- LWW/CWP received the 2007 Outstanding Organization Award from Virginia Citizens for Water Quality





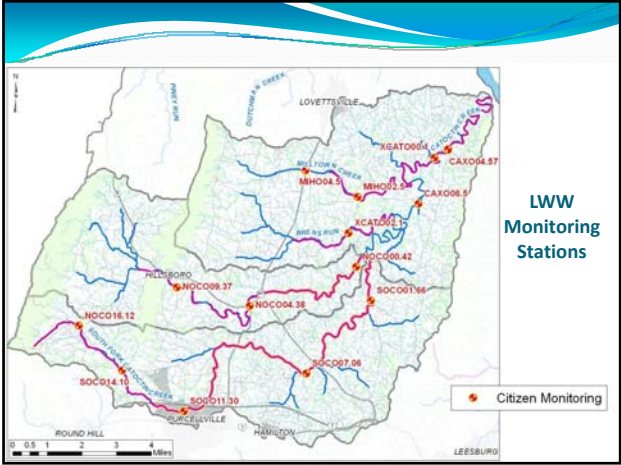


Stream Monitoring Contributions

- Monitoring began June 2005
 - 14 stations
 - Twice monthly (24 times/yr)
 - Over 970 samples collected and analyzed
- Coliscan Easygel protocol to enumerate *E. coli*.
 - Training from DEQ
 - Use Leesburg Wastewater Treatment laboratory
- Analytical Reports – 2006 and 2008
- Data and status reports available on LWW website and uploaded to DEQ citizen monitor website







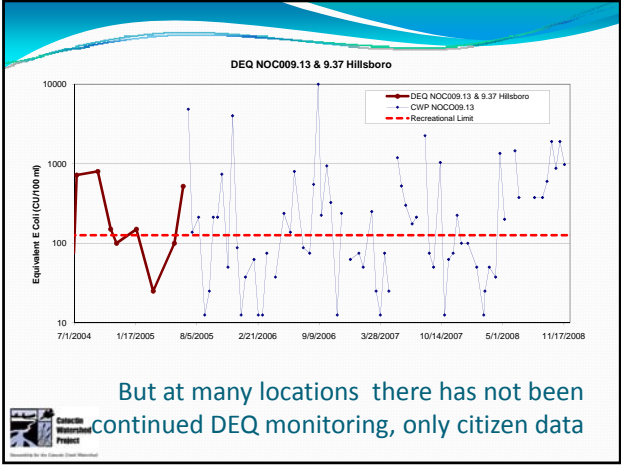
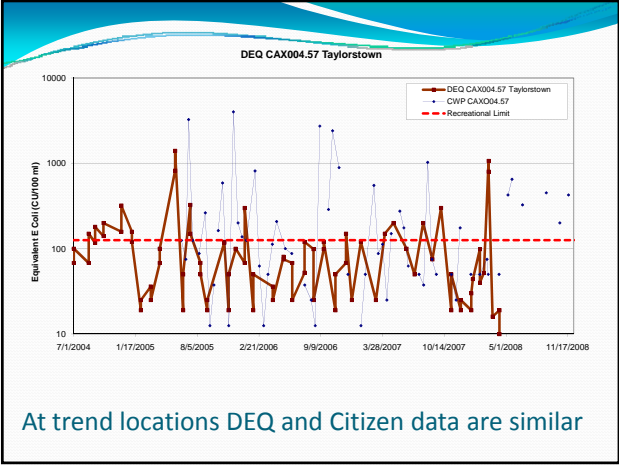
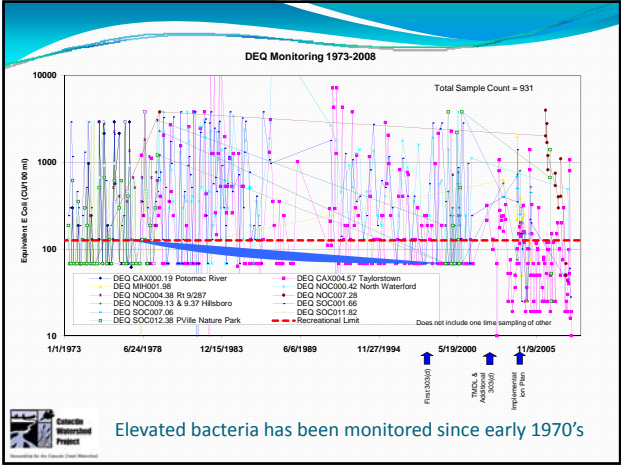


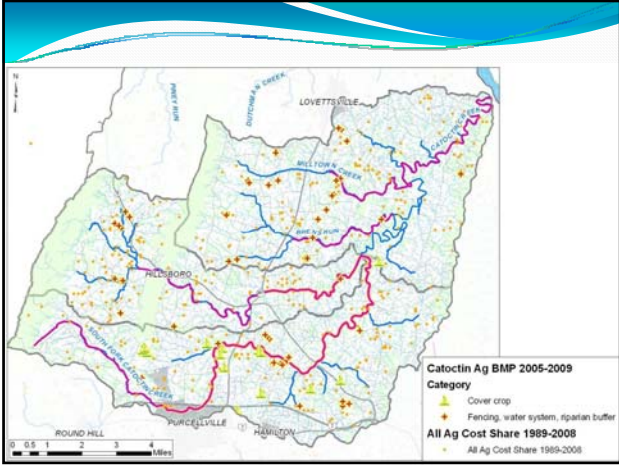
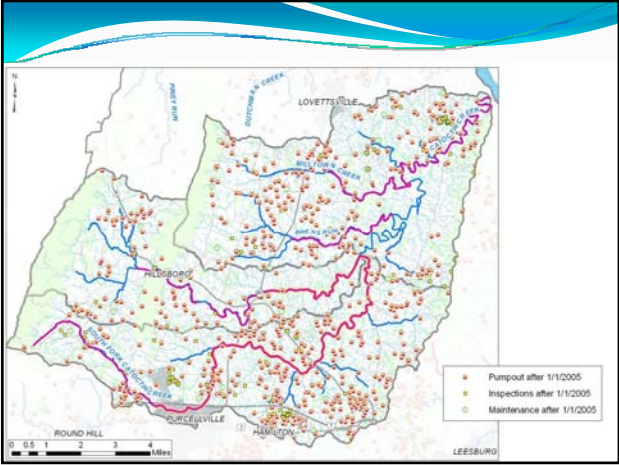
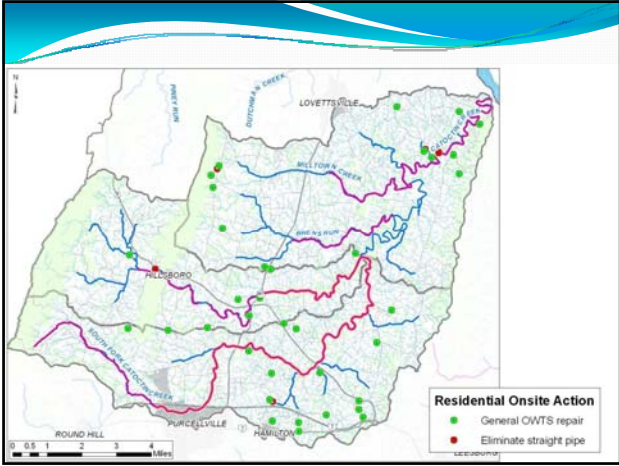
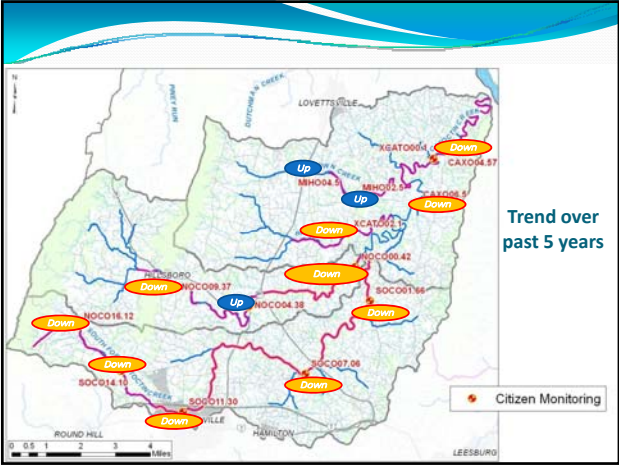
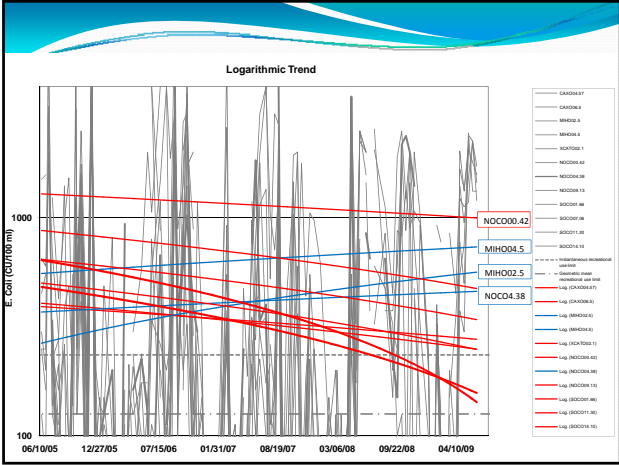
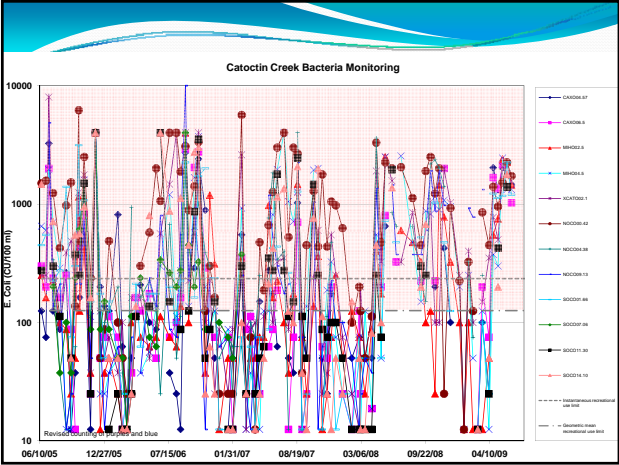
Data Analyses Questions

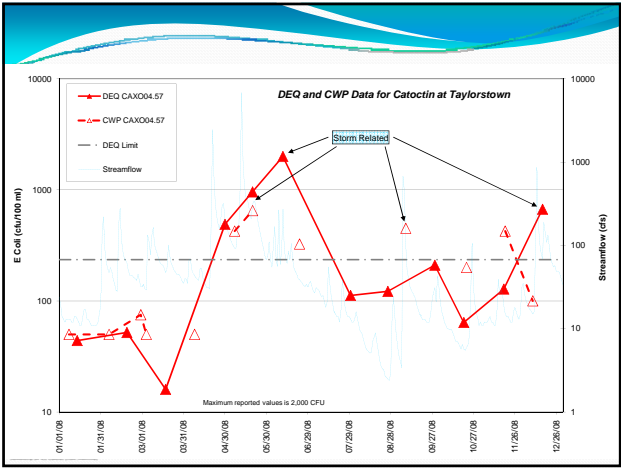
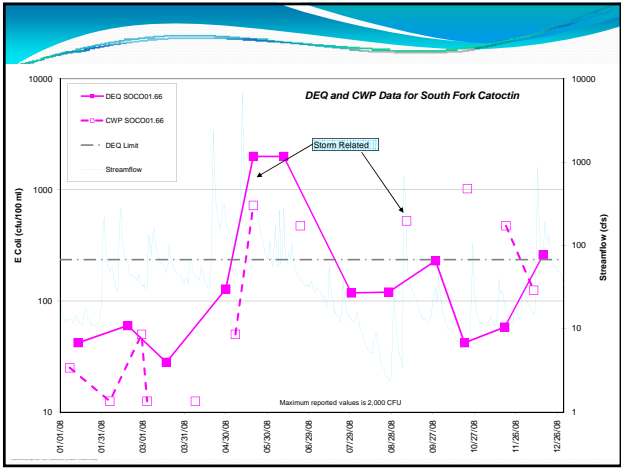
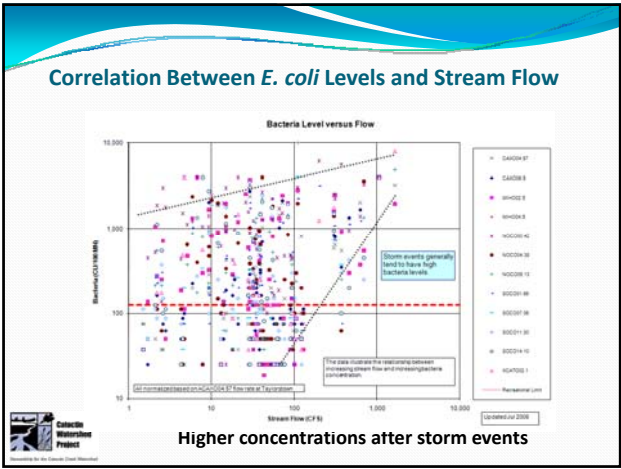
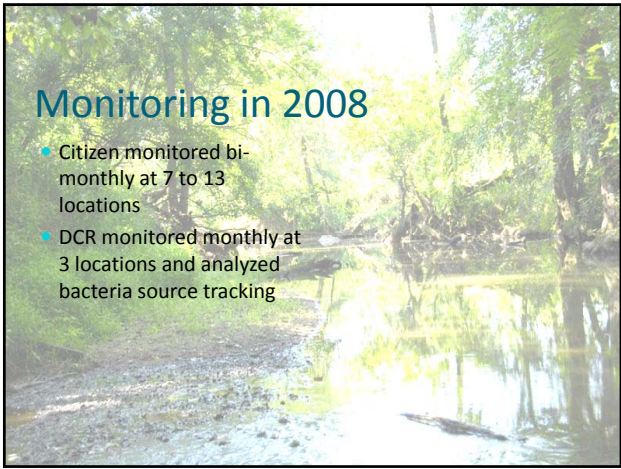
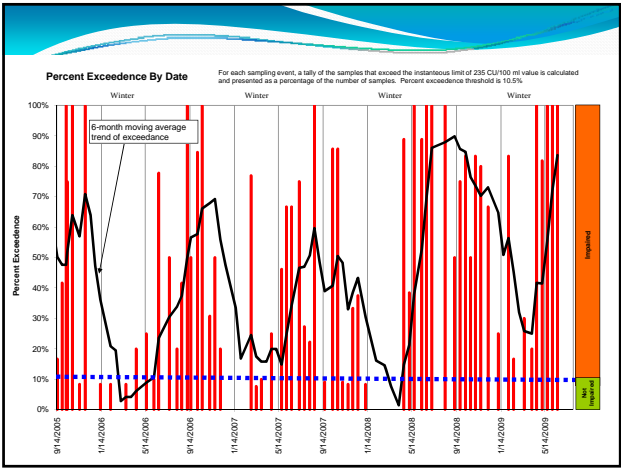
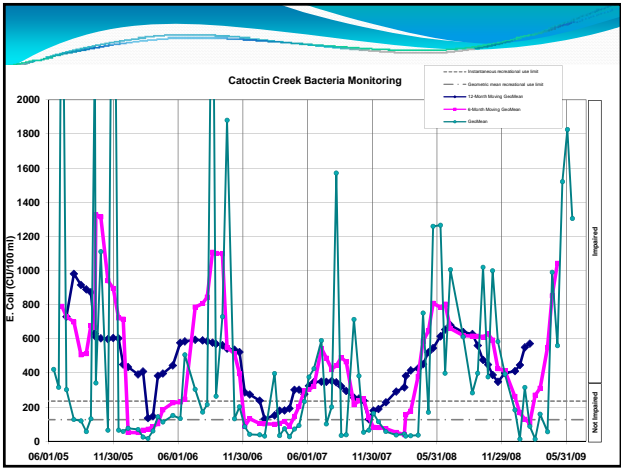
- How does CWP (citizen) data correlate with DEQ data?
- What is the seasonal and overall trend?
- Are water quality conditions improving and where?

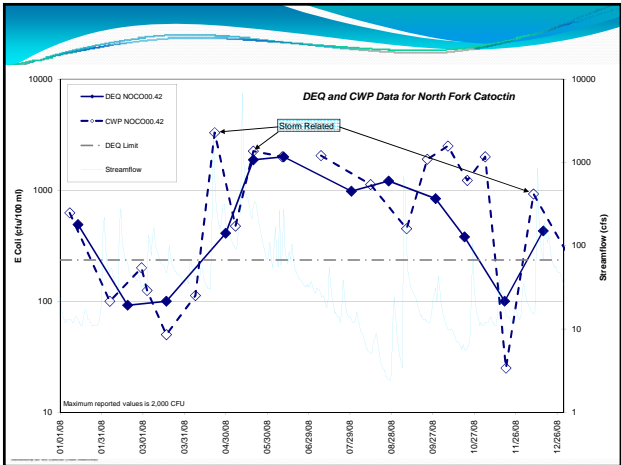






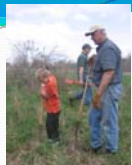






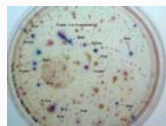
Lessons Learned – Outreach and Education

- Community outreach can be successful
- Difficult for a single volunteer group to organize outreach activities without other stakeholder support:
 - Need non-profit organization for grants
 - Need large number of experienced volunteers
 - Need collaboration with many organizations
- CWP sought collaborative agreement and support from LSWCD in 2007 and Loudoun Watershed Management Stakeholder Steering Committee in 2009, but not successful
- CWP's community outreach program is currently inactive



Lessons Learned – Stream Monitoring

- Volunteer citizen group can conduct stream monitoring for a TMDL IP
- Assessing trends or significant changes requires several years of data
- A monitoring program based on Coliscan Easygel costs \$1200/year, and grant funds are typically available



Recommendations – Public Education

There should be added TMDL education efforts that target new stakeholders moving into the Catoctin watershed.

- Grant funds should be sought to hire a community outreach educator/specialist.
- The "Education" and "Funding" subcommittees of the Watershed Management Stakeholders Steering Committee should be asked to help.



What is next?

- Additional initiatives are needed in the TMDL implementation efforts
- Additional organizational mechanisms are needed to provide complimentary initiatives
- Transition to other impairments (benthic for sediment)



Thanks to the Volunteers!

Finally, recognize volunteer stakeholder support:

- LWW Project Manager: David Ward
- LWW Volunteer Monitors:
 - Otto Gutenson Claudia Kirk
 - Kevin Oliveau Carolyn Randall
 - Steve Gianinno Juanita Koipillai
- LWW Lab Support:
 - David Ward Darrell Schwalm
- Community Outreach Project Leaders:
 - Mark Moszak Ann Larson Darrell Schwalm Joe Coleman
- Other supporting organizations:
 - Town of Leesburg Wastewater Treatment
 - Loudoun Wildlife Conservancy
 - Earthward Consulting

Kate Marincic
David Ward

"We monitor because we care;
we care because we are informed;
we are informed because we monitor."
Cassie Champion of the Minnesota Metropolitan Council