

NPDES Phase II Annual Report



**Report to Ohio EPA Regarding Status of Chester Township
Storm Water Management Program from March 1, 2004 to February
28, 2005 in conformance with 3GQ00075*AG**

**Chester Township
Geauga County, Ohio**

**Chester Town Hall
12702 Chillicothe road
Chesterland, Ohio 44026**

Phone: 1-440-729-7058

Fax: 1-440-729-3679

**Township Trustees:
Charlie Stevens
Patricia M. Mula
James A. Montague**

Public Education & Involvement Plan MCM #1 and #2

2003 Best Management Practices and Measurable Goals

Schedule	BMP and Measurable Goals
	Best Management Practices
January, 2004	<p>Committee members: Storm Water Committee members have changed slightly. Mike Bear (former Township Trustee) has been replaced by Charles Stevens (Newly Elected Township Trustee) and Vicki Domonkis (Geauga County Soil and Water Conservation District, Public Education Assistant) has left the Committee without replacement.</p> <p>Responsible Person: Mike Joyce, Chairman of the Chester Township Storm Water Management Committee (CTSWMC).</p>
May and September 2004	<p>The full Storm Water Management Committee did not meet in Chester in 2004. However, a quorum of Chester Township's Storm Water Management Committee did meet twice at the County level. Of the missing four members, three are township trustees and were kept apprised of, and participated actively, in our program's progress. It is our contention that we have fulfilled this requirement and have found this arrangement to be a superior use of time and resources and will continue this practice for the remaining life of this five year project.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
Original Goal Missed	<p>Survey of storm water understanding: The actual survey for baseline study has been developed by the Geauga Water and Soil Conservation District, the Chagrin River Watershed Partners, and Ohio State University Extension and is completed. The survey is being reviewed by Chester and will be distributed early in 2005.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
Due date not yet reached.	<p>Resurvey by December 31, 2007 to gauge effectiveness of Public Education/Involvement Plan.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
November, 2004	<p>As of November, 2004, the township's website has been fully functional. The Storm Water Management Plan is an integral part of that website. The Storm Water Management Plan, the First Annual Report to OEPA (minus the addendums), and the training schedule for the four (4) educational classes on Storm Water to be held in Chester are all on our website. The Survey on Storm Water Understanding will also be listed on the website shortly. The website address is WWW.CHESTERTWP.NET.</p> <p>Responsible Person: Patricia Mula, Vice Chairwoman, Chester Township Board of Trustees</p>
March, 2004 through February 28,	<p>Newsletter(s): Some 660 Chester Township residents receive "The Geographer" (a newsletter published by Geauga County Soil and Water Conservation District).</p>

Public Education & Involvement Plan MCM #1 and #2	
2005	Responsible Person: Carmella Shale, Director GCSWCD.
March, 2004 to February 28, 2005	<p>“Chester Government Update” written by Township Trustee Patricia Mula in the Chesterland News (weekly newspaper) has carried 4 articles related to Storm Water control.</p> <p>Responsible Person: Patricia Mula, Vice Chairwoman, Chester Township Board of Trustees.</p>
March, 2004 to February 28, 2005	<p>Community Presentations: Both CRWP and GCSWCD presentations are made available to community groups on subjects such as: “Overview of the Chagrin River watershed”, “Nonpoint source pollution”, “Steps residences can take to minimize impacts on environment”, etc. More emphasis will be made in 2004-2005.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
For 2005/2006	<p>Workshops for homeowners on home sewage treatment system: An extensive workshop presentation is currently being developed by the Geauga County Health Department.</p> <p>Responsible Person: Bob Weisdack, County Health Commissioner.</p>
August 24, 2004	<p>A three (3) hour interactive class was held on August 24, 2004 at the Chester Town Hall as part of our on going public education project. The subject was the proper care and maintenance of home septic systems and included a very active question and answer period. The class was hosted by Chester Township and featured experts from the Geauga Health Department, the Chagrin River Watershed Partners, Inc. and the Geauga County Water and Soil Conservation District.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
March, 2004 to February 28, 2005	<p>School Activities: GCSWCD has established an on going stream health watch station West Wood Elementary School (part of the West Geauga School district). Some of Chester Township’s students attend this school.</p> <p>Responsible Person: Annie Rzepka, GCSWCD.</p>
May 1, 2004	<p>Community Activates: Chester Township participated actively in ECO-GEAUGA at The West Woods Nature Center. The event was open for all residents of the Geauga, and neighboring, counties. See addendum</p> <p>Responsible Person: Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
March, 2004 through September 25, 2005	<p>Chester Township residents were informed of, and participated in, Environmental Collections in Geauga County. See addendum</p> <p>Responsible Person: Chuck Mascella, Road Superintendent.</p>

Public Education & Involvement Plan MCM #1 and #2	
March, 2004 to February 28, 2005	<p>Print Media: Five (5) distribution boards were set up for public education and information. The five (5) locations are as followed: Fire Station # 1, Fire Station # 2 was closed, the Police Station, the Town Hall (a small disruption unit in the front vestibule of the town hall and a larger distribution center was mounted in the hall outside of the zoning office and by the rear door to the main meeting room), and the Township's Road Department. The locations are monitored on a monthly basis. The boards provide informational handouts on storm water and activities. The brochures are; "The Solution to Stormwater Pollution" and "After the Storm". See addendum.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
May 21, 2004	<p>Workshops: Chuck Mascella and Mike Joyce attended the workshop "<u>Storm water detention basin design incorporating the NPDES permit requirements</u>" hosted by the Cuyahoga County Soil and Conservation District (see addendum). Several good ideas were brought back and used in our storm water program, particularly in the area of the Road Department's Maintenance Department. Another benefit was in the Zoning Departments understanding of how the retention, detention, and retention/detention basins are designed.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
July 14, 2004	<p>Chuck Mascella (Chester Township Road Superintendent), Carmella Shale (Director of the Geauga County Soil and Water Conservation District), Kyle-Dreyfuss (Director of the Chagrin River Watershed Partners, Inc.) and Mike Joyce (Chester Township Zoning Inspector, Chairman of the Chester Township Storm Water Management Committee) all attended the county wide task force meeting hosted by Bob Phillips of the Geauga County Engineers Office. (All except Bob Phillips are members of the Chester Township Storm Water Management Committee.)</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
<p>Compliance Status, Goals or Activities in 2004 Activities</p> <p>Most 2004 goals were met in the areas of Public Education & Involvement Plan MCM #1 and #2. It seems the area that must be improved is in convincing people of the need to better maintain their erosion / sediment control methods. Inspections assure that the methods are installed, but there is no sense of urgency on the part of the home owners or businesses to maintain these systems. The number of inspections required, especially after a strong rain event, is still a difficult task. Time constraints are still a limiting factor in this area. Another solution must be found.</p>	
<p>The township website was established in November, 2004. Establishing this useful tool was an achieved priority in the 2004 - 2005 timeframe.</p>	

Public Education & Involvement Plan MCM #1 and #2

Chester was able to re-establish the annual Clean Up / Collection Days normally held in the spring and fall of each year for 2005. This is a very positive sign for Chester and win/win situation for the township and the environment.

The water outfalls were defined and located, and the mapping has been started and much of it completed in 2004. The data will be transferred to the GIS system. The Geauga County Soil and Water Conservation District and the Geauga County Auditor's Office are working to include this information as an overlay on the county wide GIS system for both stand alone computer systems and a public accessible website. However, due to county funding problems support for the stand alone GIS system is in jeopardy. Further adaptations will be needed at the township level to be able make the most of both the opportunities and challenges of change. Should the support for the stand alone GIS fail, the township will forced to move up the equipment modification program to both upgrade existing equipment and to acquire new equipment. Studies are currently being undertaken by the township.

Illicit Discharge Detection and Elimination MCM #3

2003 Best Management Practices and Measurable Goals.

By December 31, 2007	Chester Township map storm water sewer system with:
March, 2004 to February 28, 2005. Complete by December 31, 2007.	<p>Location of outfalls: Map committee has been formed at the county level. Both the Geauga County Soil and Water Conservation District and the Geauga County Auditors Office are working to establish the mapping as developed by GCSWCD and the Chester Township Road Department.</p> <p>Responsible Person: Carmella Shale, GCSWCD.</p>
March, 2004 to February 28, 2005.	<p>Implement visual monitoring of the outfall locations by Service Department. Annual visual program has been established, however, documentation system and equipment needs are still being developed.</p> <p>Responsible Person: Chuck Mesilla, Chester Township Road Superintendent.</p>
To be completed by December 31, 2007.	<p>Names and location of surface waters to which outfalls discharge:</p> <p>Data to be added to the County Auditor's GIS system. Responsible Person: Carmella Shale, GCSWCD.</p>
2004 Goal not met	<p>Location (address) of HSTS: Add 50% of the locations of HSTS by December 31, 2004 and finalize by December 31, 2006.</p> <p>Responsible Person: Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
To be complete by December 31, 2007.	<p>Type and size of conduits/ditches through which HSTS discharge:</p> <p>Responsible Person: Chuck Mascella, Road Superintendent.</p>
To be completed by December 31, 2006.	<p>List HSTS: Update storm sewer mapping to include storm sewers, locations of HSTSs, and the names of surface waters.</p> <p>Responsible Person: Robert Phillips, Geauga County Engineering Department.</p>
March, 2004 to February 28, 2005	<p>Develop program to detect and eliminate illicit discharges: Due to the weather conditions there were no dry weather water flows tested in 2004.</p> <p>Responsible Person: Chester Township Storm Water Management Committee.</p>
January 19, 2005.	<p>Study existing Resolution prohibiting illicit discharges: Chester Township Zoning Commission has begun studying the pros and cons of Riparian Setbacks for buildings and/or structures from streams and/or rivers</p>

Illicit Discharge Detection and Elimination MCM #3

in Chester Township.

Responsible Person: Margaret Muehling, Chairperson, Zoning Commission.

Compliance Status of 2004 Activities:

The mapping of septic systems (both on lot and off lot) was not able to be started in 2004. The Geauga County Health Department and the Geauga County Auditor's Office are working to include this information as an overlay on the county wide GIS system for both stand alone computer systems and the Geauga County Auditors website.

The water outfalls were defined and located, and mapping was started in 2004. The Geauga

Construction Site Storm Water Runoff Control MCM #4

2003 Best Management Practices and Measurable Goals:

Schedule	BMP and Measurable Goals
March, 2004 to February 28, 2005.	<p>Erosion and sediment control resolution: No changes are needed to the Chester Township Zoning Resolution at this time. The Zoning Resolution meets or exceeds Phase II Erosion and Sediment Control Regulation. Section 5.00.06 is in place at this time. (see addendum)</p> <p>Responsible Person: Township Trustees</p>
March, 2004 to February 28, 2005.	<p>Define the amount of lot coverage permitted in each of the zoning districts in Chester Township. Sections 5.01.15, 5.02.15, 5.03.16, and 5.04.16 of the Chester Township Zoning Resolution are in place at this time. (See addendum)</p> <p>Responsible Person: Township Trustees.</p>
March, 2004 to February 28, 2005.	<p>GCSWCD Erosion and Control Regulation # 98 is in place at this time.</p> <p>Responsible Person: GCSWCD.</p>
March, 2004 to February 28, 2005.	<p>Enter into Memorandum of Understanding (MOU) with GCSWCD: MOU and fee schedule are in place at this time. (See addendum)</p> <p>Responsible Person: Township Board of Trustees.</p>
March, 2004 to February 28, 2005.	<p>Attend GCSWCD trainings: Zoning Inspector attended all training sessions and refresher courses offered by GCSWCD.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC.</p>
March, 2004 to February 28, 2005.	<p>Chester Township Zoning Inspector and Field Technician from GCSWCD met at several field locations to discuss situation and to train on field conditions.</p> <p>Responsible Person: Zoning Inspector.</p>
March, 2004 to February 28, 2005.	<p>Chester Township Zoning Inspector and Field Technician from GCSWCD met at several field locations with Field Technician from CRWP to discuss situation and to train on field conditions.</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC, Zoning Inspector.</p>
March, 2003 to February 29, 2004.	<p>Review site plans: All site plans for construction that will disturb more than 300 square feet on lots less than 5 acres in area are reviewed by Chester Township Zoning Inspector. All site plans for construction that will disturb more than 300 square feet on lots 5 acres or more are reviewed by GCSWCD. (See addendum)</p> <p>Responsible Person: Mike Joyce, Chairman CTSWMC, Zoning Inspector.</p>
March, 2004 to	<p>Planning Commission and Health District Approval of New Lots: Continuing existing practice of Geauga County Planning Commission and Geauga</p>

Construction Site Storm Water Runoff Control MCM #4

February 28, 2005.	County Health District. Responsible Person: Geauga County Planning Commission and Geauga County Health Department.
March, 2004 to February 28, 2005.	Setbacks: Continuing existing practice as defined in Sections 5.01.15, 5.02.15, 5.03.16, and 5.04.16 of the Chester Township Zoning Resolution. (See addendum) Responsible Person: Mike Joyce, Chairman CTSWMC, Zoning Inspector.
March, 2004 to February 28, 2005.	Water Quality Ponds: No review of BMP's on water quality ponds were made in this time period. Responsible Person: Chester Township Zoning Commission.
March, 2003 to February 29, 2004.	Low Impact Developments: No presentation on Low Impact Developments was made in this time period to the Chester Township Zoning Commission. Responsible Person: GCWSCD and CRWP.
March 24, 2004	Workshop for Development Community: Workshops for Development Community were held on March 23 and March 24, 2004. Responsible Person: GCWSCD and CRWP.
March, 2003 to February 29, 2004.	Database of storm water basins: Information was gathered through the Public Access System (PAS), field visits, and old records to develop a map of existing water basins. The storm water basin map was developed using Arc View GIS and is a living document as new information is added as it becomes available. Responsible Person: Carmella Shale, GCWSCD.

Compliance Status of 2004 Activities:

The current controls that are in place will be maintained as they meet or exceed the minimum requirements of MCM #4. However, there seems to be a need for improvement in the area of convincing people of the need to better maintain their erosion / sediment control methods. Inspections assure that the methods are installed, but there is no sense of urgency on the part of the home owner to maintain systems. The number of inspections to be performed needs to be increased, but additional time is not available. Another solution must be found.

Construction Site Storm Water Runoff Control MCM #4

Effectiveness of 2004 Activities:

Between March of 2004 and February 28, 2005, there have been 16 new homes, 31 home additions, 35 residential accessory building, and 1 commercial addition built (or are under construction) in Chester Township that required sediment control measures. Most of the projects require multiply site inspections for sediment/erosion control. The actual number of inspections varied due to length of time it takes to complete the project and to stabilize the soil. Some sites are still under construction at this time. The number of sites that were required to repair soil and sediment control measures increased due mainly to an increased number of on site inspections by the Zoning Inspector and Geauga County Soil and Water Conservation District.

Post Construction Storm Water Management MCM #5

2003 Best Management Practices and Measurable Goals

Schedule	BMP and Measurable Goals
March, 2004 to February 28, 2005.	<p>Measures for reducing impervious cover: Have maintained existing practices as defined in the Storm Water Management Plan and the Chester Township Zoning Resolution.</p> <p>Responsible Person: Mike Joyce, Zoning Inspector</p>
March, 2004 to February 28, 2005.	<p>Approval of new lots and subdivisions: Have continued existing practices. Geauga County Planning Commission reviews and approved plans. Approval based upon approval of Geauga County Health Department, application of existing regulations, no wet lands impact, and compliance to local Zoning Resolution. Initial and final plans are reviewed Zoning Inspector for input.</p> <p>Responsible Person: Geauga County Planning Commission</p>
March, 2004 to February 28, 2005.	<p>Riparian/wetlands setbacks: County “model zoning” suggests BMPs to be incorporated into adapted by local township zoning commission. Chester’s Zoning Commission is studying the proposal.</p> <p>Responsible Person: Margaret Mueling, Chairperson, Chest Zoning Commission</p>
March, 2004 to February 28, 2005.	<p>Water quality ponds: Update Chapter 927 to include provisions for preference of dry or wet ponds instead of underground pipes or culverts for storm water storage.</p> <p>Responsible Person: Geauga County Engineering Department.</p>
March, 2004 to February 28, 2005.	<p>Document the reduction of impervious surfaces associated with new and redevelopment projects. Evaluation of the effectiveness of the dry/wet pond.</p> <p>Responsible Person: Geauga County Engineering Department.</p>
March, 2004 to February 28, 2005.	<p>Low impact development: Being studied.</p> <p>Responsible Person: GCSWCD and CRWP</p>
March, 2004 to February 28, 2005.	<p>Database of storm water basins: GCSWCD still converting inventory and information collected and disseminating same to township level.</p> <p>Responsible Person: GCSWCD</p>

Post Construction Storm Water Management MCM #5

Compliance Status of 2004 Activities:

Present post construction policies are being maintained. Policy include follow up inspections by Zoning Inspector and GCSWCD to assure the necessary silt and erosion controls are kept in place until the soil is stabilized.

Effectiveness of 2004 Activities:

The number of inspections needs to be increased, or some other plan needs to be developed. There is only a finite amount of time the Zoning Inspector can devote to inspections. GCSWCD has an excellent record of responding to calls from Zoning Inspector, but the number of inspections needed has increased dramatically with the implementation of the Storm Water Management Plan. All sites are inspected but not all sites are inspected as often as required. An example would be a heavy rain in the building season could require fifty site inspections in a single day. That number cannot be accomplished in a week given the other duties the Zoning Inspector must also complete.

Proposed Changes in Post-Construction Storm Water Control Plan:

The Storm Water Management Committee will be discussing this problem and will be searching for a solution. There is nothing that can be done to control the weather and this has been an unusually wet year for this area. We can only be reactive to the weather so new way to react must be found. Ideas will be discussed with the Zoning Commission to study the feasibility to implementing changes into the Zoning Resolution.

Good Housekeeping and Pollution Prevention MCM #6

2003 Best Management Practices and Measurable Goals:

Schedule	BMP and Measurable Goals
March 2004 through end of February 2005	<p>Fleet maintenance: Continuing existing fleet maintenance as outlined by OSHA guidelines.</p> <p>Responsible Person: Chuck Mascella, Road Superintendent</p>
March 2004 through end of February 2005	<p>Salt storage and applications: Continuing current storage and application practices as defined in Storm Water Management Plan.</p> <p>Responsible Person: Chuck Mascella, Road Superintendent</p>
April 2004	<p>Street sweeping: All improved township roads were swept once during the month of April to remove winter debris.</p> <p>Responsible Person: Chuck, Mascella, Road Superintendent</p>
March 2004 through end of February 2005	<p>All public roads close construction access driveways are cleaned by the construction crews working on the different projects. Contractors are required to remove all mud and/or debris that the construction driveway fails to remove from truck / vehicle tires at the end of each work day.</p> <p>Responsible Person: Joe Orosz, Chief, Chester Police Department</p>
March 2004 through end of February 2005	<p>Storm water system maintenance: Continuing current roadside ditch cleaning practices as defined in Storm Water Management Plan. Have yet to implement a plan to seed disturbed areas due to a lack of funding. Expect to implement the seeding plan in 2005. Continuing current inspection practices for the storm water system that is closed piping.</p> <p>Responsible Person: Chuck Mascella, Road Superintendent</p>
March 2004 through end of February 2005	<p>Disposal of waste collected through community operations: Disposal program was reviewed and it was determined that the current practices would be continued.</p> <p>Responsible Person: Chuck Mascella, Road Superintendent</p>
March 2004 through end of February 2005	<p>Implement training program to Township Road Department employees from the workshop hosted by the Cuyahoga County Board of Health regarding prevention or reduction of pollutant runoff from community operations such as fleet and building maintenance and storm water system maintenance. (See addendum)</p> <p>Responsible Person: Chuck Mascella, Road Superintendent</p>