



2005 Progress Report
Storm Water Management Program Plan
Pittsfield Charter Township
NPDES Certificate of Coverage # MIS040021

Submitted in Compliance with General Permit No. MIS040000

1) Compliance Assessment

The permittee shall describe the status of compliance with general permit conditions for public education, public involvement and participation, illicit discharge elimination, post construction storm water management, construction storm water runoff control, and pollution prevention/good housekeeping for municipal operations. The report shall include a description of illicit discharges and illicit connections removed, shall assess the appropriateness of all identified BMPs, and shall describe the progress towards achieving the identified measurable goals for each of the BMPs.

The following charts report the status of implementation of BMPs in the approved Storm Water Management Program Plan for the six minimum measures. The 2005 compliance status and evaluation indicators are listed in the right hand column in **bold**.

5) Upcoming Activities

The permittee shall provide a summary of the storm water activities to be implemented during the next annual reporting cycle. The summary shall include schedules for elimination of any illicit connections identified but not disconnected prior to annual progress report submittal.

The charts display planned activities for 2006 in the right hand column, in *italics*.

6) BMP and Measurable Goal Changes

The permittee shall describe any planned changes in identified BMPs or measurable goals for any of the minimum measures. The permittee shall change or add measurable goals if the Department provides a list of measurable goals for BMPs that the permittee is implementing or proposes to implement, and those measurable goals were not available within a reasonable timeframe to have them identified in the previous annual progress report.

In the left side column of each chart, added BMPs are identified as (New). Changes in timeline or measurable goals are identified with an asterisk (*).

Public Education Plan

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
1.1 Partners for Clean Water information materials	Begin in year 1; ongoing (bulk mailings in years 1, 3, and 4) *years 2,4.	PCT, SEMCOG, HRWC	Quantity of materials distributed, coupon redemptions, increases at home toxics facility and survey of participants	7 posters & 7 tip cards delivered; 350 tip cards distributed. <i>Tip card packets of 5 to be mailed to 17,000 households.</i>
1.2 Community Watershed Calendar	Mail calendars in year 2.	PCT, HRWC	Mail-in survey included with calendar	Calendars mailed in mid-Oct. to 17,000 households. <i>Survey responses to be reported when data available.</i>
1.3 Partners for Clean Waters mass media efforts	Begin in year 1; ongoing)	SEMCOG	Number of media promotion events	7 PSAs produced for 30 sec. spots on local cable TV. <i>Arrange schedule for airing on CTN 17; weather, CNN, ESPN per Comcast contract.</i>
1.4 Information in newsletter	Begin in year 1; ongoing	PCT, SEMCOG, HRWC	Frequency of articles published and number of newsletters distributed	4 articles in FA,WI & SP-SU community bulletins sent to 17,000 households <i>Cont. articles (3 issues@4ea.)</i>
1.5 Web site information	Begin in year 1; ongoing	PCT, WCDC	Number of hits to Pittsfield Charter Township's web page at http://www.pittsfieldtp.org/boards/Natural_Resources_Commission/clean_water (Total YTD all pages =84,544)	Storm Water information and programs on web site; Visit count software reports do not target single page. Est. 500 visits per month. <i>Establish better page view count and increase number.</i>
1.6 Newspaper Advertisements	Begin in year 1; ongoing	HRWC	Frequency and number of ads run; number of inquiry calls received as a result of ads	Contract signed for Fall ad campaign. Schedule not yet established. <i>Renew HRWC contract for ad campaign in >6 papers</i>
1.7 Promotion of Water Resource Protection	Begin in year 1 and ongoing as workshop	PCT	Compilation of promotional efforts; number of attendees from PCT; survey	Workshops held & attendance: Frog & Toad

Workshops	dates are established		of participants after workshops	Survey (53)and Goose Control Methods (35) <i>5 Workshops scheduled</i>
1.8 Volunteer Monitoring Programs: Stream Search, Stream Mapping	Begin in year 1; ongoing	HRWC RRWC	Number of volunteers; resulting stewardship actions taken by participants	RRWC-47 volunteers,14 sites; HRWC-300 vols YTD. <i>Increase RRWC by 2 sites in PCT and 10 new volunteers.</i>
1.9 Storm drain labeling and door hangers (where applicable)	On-going	HRWC	Number of volunteer hours; number of storm drains labeled and number of fliers distributed	Labels designed, ordered; fliers designed. 85 inlets labeled, 200 fliers placed. <i>100 inlets labeled; 200 fliers</i>
1.10 Illicit discharge complaint tracking and response system	Complete in 2 nd year	WCDC, Health Department	Results of tracking and response system (number of reported incidents), reduction in dumping; number of signs posted	<i>Complete set-up in 2006, reports available in 2007.</i>
1.11 Promote soil testing	Begin in year 1; ongoing (repeat each spring)	HRWC, MSU Extension	Coupon redemption rates; compilation of point-of-sale locations where promoted; change in number of soil tests performed	HRWC promotion did not include coupon for year 1. Participation data not yet analyzed. <i>PCT to offer subsidized soil tests 9/18-22.</i>
1.12 Riparian land management brochures	Brochure available in year 3	HRWC. PCT	Number of brochures distributed	<i>To be available in 2007.</i>
1.13 (New) Water Quality Stewardship Video Series on Cable Ch 17	Began in year 1, ongoing	PCT	Number of airings of EPA and Township-produced programs	24 program airings YTD. <i>Increase to 35</i>
1.14 (New) Demonstration Native Prairie and Rain Gardens with Interpretive Signage	Ongoing since 2001.	PCT, MSU Extension, NRCS	Number of requests for booklet, <u>Landscaping for Water Quality</u> ; requests for “Growing Not Mowing” sign; for tours; number of neighborhood garden sites est.	40 books distributed; 5 sign requests; 5 tours given; 1st condo site established. <i>Distribute 40 books, 10 signs, establish 6 garden sites.</i>
1.15 (New) Demonstration Rain Barrels with Signage	Ongoing since 2004.	PCT	Number of requests for info. or tours of 6 installed rain barrels; number of fliers distributed.	4 more rain barrels installed at Twp. & Public Safety. Flier developed, 30 distrib. <i>Install signage. Schedule & publicize tours.</i>

Public Involvement Plan

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
2.1. Public Notice	Year 1, ongoing	PCT	Publication of notice of Storm Water Plan in newspaper, hits on website.	Plan noticed and placed on web site. <i>Work with Co. IT to make visit count to single page available.</i>
2.2 Public Access to Storm Water Plan	Year 2	PCT	Number of people who review the plan in libraries and at township administration building.	<i>Year 2</i>
2.3.a County Level Citizen Advisory Committee	Year 2. * Actually began in Year 1.	PCT, WCDC	Annual survey of citizen advisory committee for feedback	County Phase II CAC meets bi-monthly. Survey results not yet available. <i>Continue meetings, speakers.</i>
2.3.b Pittsfield Charter Township Citizen Advisory Committees	Ongoing since 2003	PCT	Number and percentage of homeowners' & condominium associations sending a representative; number of business owners and institutions attending the Pittsfield Council or joining the Clean Streams Partners Program.	Storm Flow Committee met bi-monthly (6 members); Phase II Advisory Council met annually (18 HOAs & businesses represented). All surveyed for workshop topics of interest. <i>Increase # of HOAs, bus.</i>
2.4 Plan Review	Year 2	PCT	Comments from HRWC, RRWC, SCWC and WCDC	<i>Year 2</i>
2.5 Volunteer Recruitment	Ongoing since 2001	PCT	Public involvement in watershed programs, such as riparian restoration, pond & wetland restoration, invasive plants control, stream cleanup. *Number of new volunteers participating.	Pilot stewardship incentive program developed & offered to nonprofit groups. 26 new volunteers YTD. <i>Publicize incentives, add 24 new volunteers.</i>
2.6 Frog and Toad Survey	Ongoing since 2004	PCT	Number of survey sectors completed; number of volunteers trained and participating	15 of 29 survey sectors completed by 53volunteers. <i>Cover 20 sectors; 65 vols..</i>

Illicit Discharge Elimination Plan

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
1.1. Identification of Illicit Connections	Ongoing since 2004.	WCDC and PCT	Cases of discharge reported and identified; percentage eliminated, percentage of township effectively free of illicit discharges or connections.	Due to high <i>E. coli</i> levels in Swift Run, 24 nearby locations were dye tested & video monitored; 1 illicit connection was identified and eliminated. <i>One location remains to be tested; owner not cooperating and may have water shut off.</i>
1.2 Training of Staff to Identify Illicit Discharges and Connections	Ongoing since 2004.	WCT	Number of field staff trained.	All field staff in Utilities, Parks, Public Safety, Building and Zoning Depts viewed training video (50). <i>Seek additional training materials for on-site use.</i>
1.3 Implementation Plan for the Middle Huron River <i>E.coli</i> TMDL	Ongoing since 2004.	PCT & MHI partners	Water quality monitoring and reporting by the MDEQ	No new data reported.
1.4 The Middle Huron Initiative—Phosphorus TMDL	Agreement Renewed for 2004-2008.	PCT and MHI partners	Water quality monitoring and reporting by the MDEQ, HRWC, U-M	2004 Monitoring Reports by MDEQ, HRWC; Nutrient Mgt. Study Update by U-M <i>Studies ongoing.</i>
1.5 River Raisin <i>E. coli</i> TMDL Partnership	Still unknown.	PCT and RR partners	Water quality monitoring and reporting by the MDEQ	TBA.
2.1 Enforcement of Existing Local Sewer Use Ordinance	Ongoing	PCT and WCDC	Proportion of reported cases successfully resolved or enforced; reduction of time from identification to elimination.	100% of cases identified were eliminated. <i>Develop revolving loan fund to speed elimination.</i>
2.2 Requirement for County Inspection of Hazardous Material Storage	Year 2	PCT	Enactment of new ordinance	Ordinance drafted, under review by Storm Flow Cte. <i>Legal review & enactment.</i>

2.3 Licensing of Lawn Care Service Companies	Year 2	PCT	Enactment of new ordinance	Ordinance drafted, under review. by Storm Flow Cte. <i>Legal review & enactment.</i>
3.1 County Time of Sale Ordinance	Ongoing	WCEHD	Homes identified with illicit discharge problems; reduction in the number over time.	Report not yet available for jurisdiction. <i>Analyze data for trends.</i>
3.2 Development Standards Require County Drain Commissioner Approval of Site Plan	Ongoing	PCT & WCDC	Percentage of new subdivisions with no seepage or overflow from sanitary sewers. * Percent of proposed subdivisions approved, to treat ff, bankfull, 100-year storm.	100% of overflows in subs built prior to standard. <i>*Change measure and gather data accordingly.</i>
3.3. Acquire Legal Authority to Inspect On Site Septic Systems	Year 3	PCT, MDEQ, MI SRF	Enactment of regulation, implementation of contract for inspections with WCEHD	Year 3

Post Construction Storm Water Management

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
BMP 1.1 Comprehensive Plan	Annual updates	PCT	*Completed Plan Updates. Consistent application in zoning decisions	Plan and re-zonings carefully coordinated. Plan update completed. <i>Update Plan for 2006.</i>
1.2 Wetlands Protection Ordinance (Code Article)	Ongoing since 2003.	PCT	Permit applications should predominate over prosecutions; no net loss of wetlands.	13 Wetland Use Permit applications processed; 2 violations cited. <i>Continue strict enforcement.</i>
1.3 Support Private Protection of Open Space	Ongoing since 2001.	PCT, MDA	Total acreage of land permanently protected by conservation easements	Approximately 25 acres. <i>Protect another 120 acres.</i>
1.4 Protection of Public Open Space	Ongoing since 2001.	PCT, SMLC	Permanent public protection of an additional 300 acres (1200 total).	Two new parks being purchased; conservation easements drafted for 800 acres of existing parks. <i>Complete baseline documents, sign contract for monitoring, and record easements.</i>
2.1 Development Standards—Zoning Ordinance	Ongoing since 2001.	PCT	*Incorporate Storm Water BMPs from Mallett’s Creek Guide.	Landscape Standards revised for vegetative BMPs. <i>Revise structural BMPs.</i>
2.2 Development Standards Require County Drain Commissioner Approval of Site Plan	Ongoing since 2001.	PCT, WCDC	* Percent of proposed subdivisions approved by WCDC, to treat first flush, bankfull, 100-year storm.	All proposed site plans reviewed by WCDC. <i>*Change measure and gather data accordingly.</i>
BMP 2.3 Surface Water Quality and Storm Water Management Ordinance	Year 2	PCT	Enactment and implementation.	Year 2.
2.3 Natural Features Protection Ordinance	Year 1	PCT	Enactment and implementation to protect trees, woodlands, prairie, endangered species, native landscapes.	Clarify & resolve legal issues, enforcement methods. Expect enactment in 2005. <i>Implement forms & processes.</i>

2.4 Open Burning Regulations	Ongoing	PCT	Enactment of amendments and implementation.	
3.1 Maintenance Plan Requirement for Storm Water Detention and Retention Facilities	Ongoing	PCT & WCDC	Compliance with plan agreements.	No monitoring or enforcement plan in place; compliance data unknown. <i>Work toward SW Ordinance.</i>
3.2 Licensing and Inspection of BMPs	Year 3, after SW Ordinance enacted.	PCT	Enactment of authorizing ordinance and implementation.	Year 3
3.3 Tree Mitigation Enforcement	Ongoing	PCT	No net loss of tree canopy in the township. *Reforest public and private lands through use of tree mitigation fund in cost-share contracts.	100% enforced in site planning. Policy established on use of mitigation fund. 300 trees planted on public land with fund & grants. Design & implement cost-share contract w/ pilot HOA.
3.4 Soil Erosion and Sedimentation Ordinance	Ongoing	PCT	Monitor and correct sediment discharges, changes of drainage pattern.	Discharge sources corrected by OEO communications. New drainage district established to correct badly designed subdivision. <i>Develop ordinance amendments-stricter BMPs.</i>

Construction Storm Water Runoff Control

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
1.1 Soil Erosion and Sedimentation Control Ordinance	Ongoing	PCT	Yearly comparison of soil permits for rate of compliance and violations	Oct. '04-Oct. '05 soil erosion permits processed: 25; formal violations: 0 <i>Improve inspection capability.</i>
1.2 Revise ordinance to specify more effective BMPs for soil control	Year 2	PCT	Enactment of stricter BMP requirements and seasonal controls.	Amendment in draft. Year 2.
1.3 Train and qualify staff to enforce Soil Erosion and Sedimentation Control	Ongoing	PCT	Maintain and increase the number of qualified enforcement staff.	Loss of 1 certified staff, 1 remaining. Contractor conducting inspections. <i>Get 2 new staff certified.</i>

Pollution Prevention/Good Housekeeping for Municipal Operations

BMP ACTIVITY	TIMELINE (Year 1 in 2005 to Year 4 in 2008)	RESPONSIBILITY	EVALUATION	2005 STATUS <i>Plan for 2006</i>
1.1 Inspection, repair, and maintenance of township buildings	Year 1	PCT, WCEH	Identification and elimination of discharge problems.	All buildings were inspected by the County P2 Program. Problems were cleaned up; storage facilities installed. <i>Repeat inspection in Year 3.</i>
1.2 Clean Streams Partner Assessment	Years 1 and 2	PCT, WCDC	Completion of assessment and improvement plan	Assessment 95% complete. Some improvement steps implemented (expanded recycling). <i>Complete improvement plan.</i>
1.3 Washtenaw County Waste Knot Program	Year 1	PCT, WCCSWM	Achievement of a Waste Knot Award	Initial application incomplete. <i>File complete information.</i>
2.1 Require all new subdivisions to label catch basins	Ongoing since 2003.	PCT	Compliance demonstrated by inspection. *Number of pre-labeled, cast iron catch basins installed.	No C of Os had to be denied due to lack of compliance. <i>Develop data on number installed.</i>
2.2 Apply labels to pre-2003 catch basins	Ongoing since 2003.	PCT	Complete labeling of estimated total of 800 catch basins.	80 installed. Fliers sent to Scouts, civic groups. <i>Continue recruitment and training of neighborhood volunteers.</i>
3.1 Township Employees—Pesticide Certification by Department of Agriculture	Ongoing since 2004.	PCT	Maintain and increase number of employees certified.	Three staff certified. <i>Add one more certified employee.</i>
3.2 Turf management plan	Ongoing since 2001	PCT	Reduced mowing costs.	Costs reduced by 30% compared to 2000. <i>Add rain garden and trees to further reduce turf area.</i>
3.3 Equip new storage room at Parks Department	Year 1	PCT	Inspection and approval by County P2 Program.	New room completed. <i>Maintain proper use.</i>

2) Water Quality Assessment

The permittee shall provide an updated assessment of the water quality conditions within their jurisdiction. Use of data collected by other sources or participation in a group monitoring program is encouraged. Narrative descriptions or a combination of narrative and numeric descriptions may be submitted. **The purpose of this update is to show any obvious changes in the receiving waters since the previous progress report.**

Huron River Watershed

According to the 2004 Streams Monitoring Report by the HRWC, and earlier monitoring reports, phosphorus loading to the Huron River is decreasing somewhat at most middle Huron monitoring sites, with the exception of the Michigan Ave. bridge station in Ypsilanti. UM research indicates that dissolved phosphorus is especially a problem in the summer months, due to upstream nonpoint sources and AAWWTP discharges. The resulting low nitrate to phosphorus ratio produces bluegreen algae blooms. The MDEQ 2005 staff report of nutrient chemistry in Ford and Belleville Lakes characterizes the lakes as “highly eutrophic.” Bottom line: despite signs of improvement, the phosphorus TMDL goals have not yet been met.

River Raisin Watershed

The most recent water quality monitoring data appear in the summary 2000-2004 report of the Adopt-a-Stream volunteer monitoring program. In 2004, fourteen sites were monitored with a richness mean index of 7.3 (number of families found at the site) and richness variance from 2-18, with EPT families ranging from 0-8 per site. Of concern is the fact that the data indicated a steady decrease in richness, taxa, and EPT from 2000 to 2004.

The RRWC has applied to the MDEQ for a 319 grant to support the creation of a Watershed Management Plan. The project will include enhanced water quality monitoring, with synoptic sampling at the 14 sites, and added sampling in the prioritized problem subwatersheds, to evaluate impairments (DO, suspended solids, etc.) which may be leading to the macroinvertebrate declines.

Stony Creek Watershed

The MDEQ has recently established three TMDLS for the Paint Creek subwatershed: *E. coli*, D.O., and Biota. Of greatest concern is the lack of dissolved oxygen, correlated with increasing sedimentation (TSS) and temperature increases, which have led to the impairment of fish habitat in the creek. In the past ten years, the previous cold water fishery has ceased to exist. It appears that an in-stream detention basin installed in 1974, and retrofitted in 1996, is now failing to control the sediment problem and contributes no aeration. Restoration of Paint Creek is now a top goal of the new Stony Creek Watershed Council.

4) Data and Results

The permittee shall provide a summary of all information collected and analyzed, including monitoring data, if any, during the annual reporting cycle.

The complete 2005 Report of the Pittsfield Frog and Toad Survey will be available in late October. More than 50 people have surveyed over 200 wetland sites spanning 21 square miles since 2004 and have accrued over 225 hours of volunteer survey time. A total of 8 species have been recorded since 2004. Although the survey season was unseasonable hot and dry, the frog and toad abundance and species observation did not seem to be greatly affected during the 2005 season; however, some breeding activity was postponed due to absence of sufficient hydrology within the wetlands to breed.

The 2004 Survey Report, by Mifsud and Barton Ecological Consultants, stated that a total of 133 sites, covering 15 square miles, were surveyed by 25 volunteers who donated over 100 hours. Species observed, in descending order of occurrence, were: gray tree frog, chorus frog, spring peeper, American toad, green frog, wood frog, and leopard frog. Many sites provided a rich diversity of anurans.

3) Water Quality Stress Update

The permittee shall provide a description of any water quality stresses newly identified since the previous annual progress report.

No new stresses.

7) Notice of Changes in Reliance on Permitted Drainage System Operators.

No change.

8) Storm Water Drainage System Changes

No change.