

PHASE II STORM WATER NPDES PERMITTING: CASE STUDY FOR GENESEE COUNTY USING PUBLIC ACT 342 APPROACH

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A review of leadership options in Michigan for implementing the Phase II Storm Water Regulations to comply with the National Pollutant Discharge Elimination System (NPDES) was presented in a recent issue of Pipeline (Third Quarter 2002). A previous article identified the permitting options available in Michigan and described why the watershed approach can have certain advantages over the traditional jurisdiction based approach. This article is the third in a series on the Phase II Storm Water Program and provides a case study on the use of Michigan Public Act 342 to implement a Phase II program in Genesee County.

Independent of which approach is selected to comply with the Phase II Regulations, a local mechanism to lead and fund permit activities must be established. As was described by Janis Bobrin, Washtenaw County Drain Commissioner, in the first quarter of 2002 of Pipeline (pg. 14), local leadership plays a critical role no matter which approach is chosen.

As presented in the previous article, the Michigan statutes offer several different approaches for local leadership to implement Phase II regulations no matter which permitting approach is selected. Of the six options available to lead and assign funding responsibilities for Phase II permitting, the Genesee County Drain Commissioner and all communities in the County have agreed to use the County Public Improvement Act, known as Public Act 342.

This article provides a brief summary of how this option can be used, and some limitations or considerations for using it. Following the description, a case study on experience using this approach is presented based on work underway in Genesee County.

COUNTY PUBLIC IMPROVEMENT ACT (PA 342, 1939)

A County Board of Commissioners can use this act to authorize and provide water, sewer, sewage disposal, and garbage collection and disposal services. As defined in the Act, sewers can include storm sewers to transport and collect storm water. The County Board resolution must designate the county agency to supervise, control, manage, and operate the improvements, and facilities and to provide services. The County agencies eligible for designation include the County Road Commission, the Drain Commissioner, or the Board of Public Works. Services of the County Agency can be provided by contract with any other unit of local government.

The County Agency designated by the County Board is responsible to establish just, equitable, and uniform rates, charges, or assessments to be paid for the services provided. Any contracting unit of government may use the following methods of raising funds to pay for services:

- 1) Annual property tax levy
- 2) Special assessments on property
- 3) Rates or charges to service users
- 4) Tax revenue from the state
- 5) Other funds, which may validly be used for the contracted purpose

GENESEE COUNTY APPROACH

The Phase II communities in Genesee County, based on the 2000 Census data, include the following communities:

Atlas Township; Burton; Clayton Township; Clio; Davison; Davison Township; Fenton; Fenton Township; Flint Township; Flushing; Flushing Township; Gaines Township; Genesee Township; Goodrich; Grand Blanc; Grand Blanc Township; Linden; Mount Morris; Mount Morris Township; Mundy Township; Richfield Township; Swartz Creek; Thetford Township; Vienna Township, and the Genesee County Drain Commissioner and Road Commission.

In addition to these communities, the following communities outside of the urbanized area have agreed to participate and will apply for permit coverage:

- Argentine Township
- Forest Township
- Goodrich
- Gaines
- Lennon
- Otisville
- Montrose
- Montrose Township

As a result, all of the communities within Genesee County have agreed to apply for coverage using the Voluntary General Permit and will participate in the watershed planning required by this permit. To prepare this permit application, implement permit requirements, and perform watershed management planning, Genesee County has established a storm water system service district for the entire County under the authority of the Michigan Public Act (PA) 342 of 1939. In addition, each of the communities in the County have executed a contract to use the County 342 Storm Water Service District as the lead agency to provide Phase II permitting services, including watershed management planning.

The decision to use the process established under P.A. 342 was based partly on the existence of service districts in Genesee County to provide water and sewer services for the same communities. The communities' prior experience with this approach and familiarity of working with the Genesee County Drain Commissioner (GCDC) in this leadership role improved local knowledge and willingness to accept adding storm water to the GCDC. A key part of the contract was to develop a funding allocation table to cover costs for the permit application work and project startup activities. The current contract does not cover implementation services required to implement permit requirements.

The watershed boundary map delineates the following five major watersheds:

1. Lower Flint River
2. Middle Flint River
3. Upper Flint River
4. Shiawassee River
5. Cass River

These watersheds are divided into a total of 30 subwatershed-planning areas as delineated on the attached map. Because the magnitude of work involved to perform watershed planning for all of these areas within a two-year period is not realistic, areas will be ranked and prioritized to focus on designated Phase II areas, highly developed and rapidly developing areas, and water quality concerns.

The priority for the first two-year period will be for subwatersheds within the Middle and Lower Flint watersheds. Work may also begin for the Shiawassee River subwatersheds. The second two-year period will begin the watershed planning for the Upper Flint and Cass River watersheds.

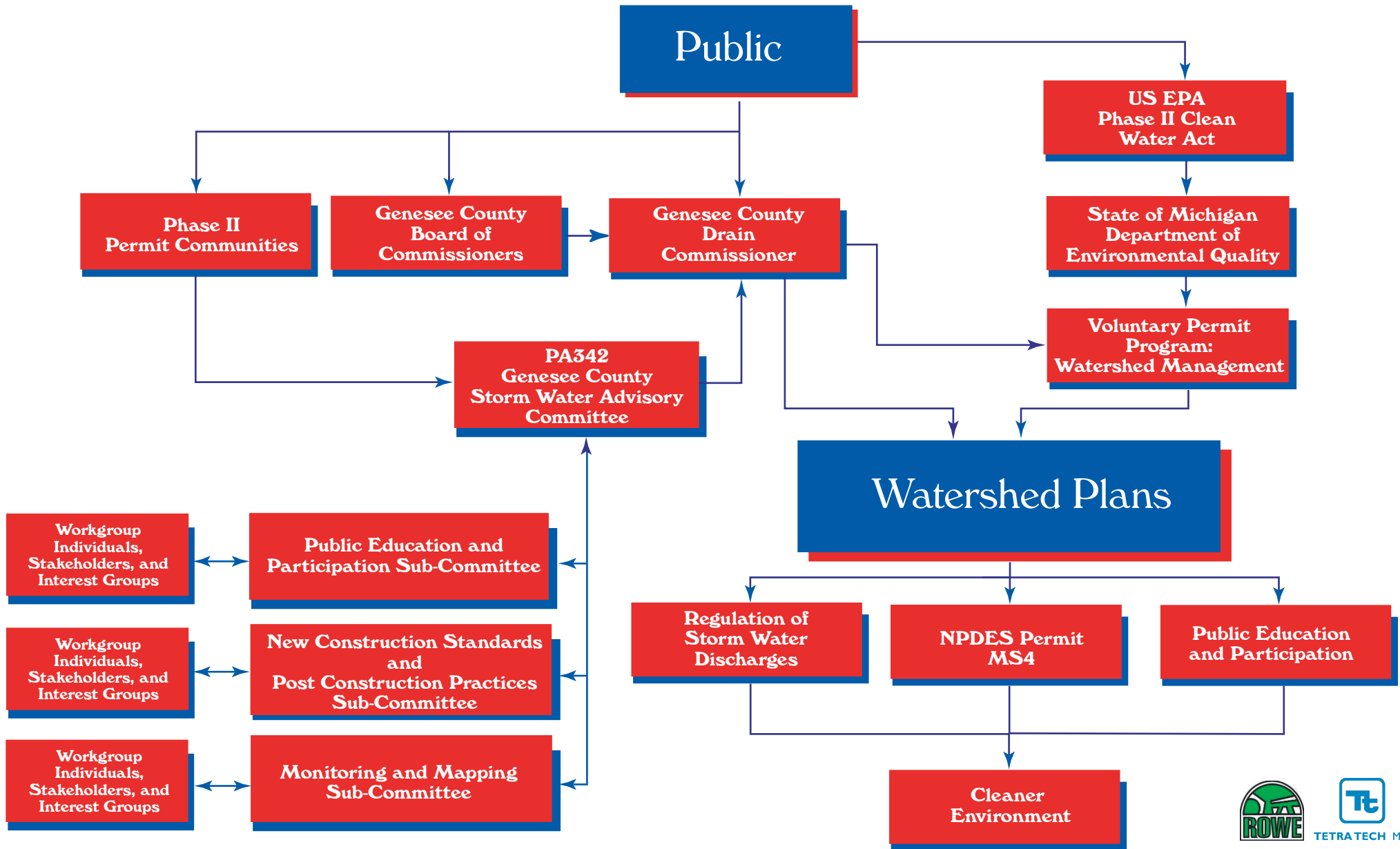
An organizational chart for the Genesee County PA 342 storm water permit and watershed management planning process is presented on Figure 2. The contract for performing the storm water permit and planning work establishes a storm water advisory committee comprised of one representative from each participating community. The advisory committee has sub-committees to deal with details regarding:

1. Public education/participation
2. New construction and post-construction practices
3. Monitoring and mapping

This chart also identifies how the county will perform watershed planning and involve the public.



Storm Water Permit Organizational Chart



Throughout the term of the permit, it is anticipated that a combination of public information mechanisms will be used to inform the Genesee County Phase II Communities' residents, businesses, municipal staff, construction contractors, and visitors of their impact on water quality of the Flint River and tributaries, Shiawassee River and the Cass River. These mechanisms will include a community newsletter, cable TV programs and ads, brochures/flyers at public facilities and public facility displays. Special programs and efforts will be tailored to municipal staff involved with operation and maintenance activities.

To the maximum extent practicable, the Genesee County Phase II Communities will address their responsibilities by promoting and supporting existing public involvement programs, such the Flint River Cleanup, Household Hazardous Waste Collection Day, storm drain stenciling, Project GREEN, Home*A*Syst and the Volunteer Stream Team monitoring program.

Based on comments received from stakeholders, the Genesee County Phase II Communities will initially focus its first year of public education efforts on relatively simple concepts, such as "Watershed Awareness," "Storm Water Management" and "Our Actions Affect the River" targeted at home and business owners in the area. Although the Flint River and its tributaries pass through most of the Phase II Regulated Communities, few people see it on a daily basis. Raising awareness about the connection of the Flint River and its tributaries to the Communities with upstream and downstream public access areas will be a priority.

As the watershed planning process progresses, it is expected that additional priorities will be identified and the Public Education Plan will be modified accordingly. The University of Michigan – Flint will help facilitate this process. A key part of this work will be to survey public knowledge and understanding of water quality issues so that actions and priorities can be set to address the key concerns. This survey can also be used to document the success and effectiveness of proposed activities.

One of the primary actions under the permit is to identify and remove all illicit discharges and connections from the municipal storm sewer system. Genesee County has prepared outfall maps identifying the outfalls, currently known, within the limits of Genesee County. The outfall maps were created in ArcView GIS, this information will be used to establish a database for guiding the screening of outfalls for dry weather flow.

To achieve permit requirements, each outfall will be screened for signs of illicit discharge. Where illicit discharges are suspected, systematic investigation upstream of the outfall will be conducted to trace the discharge to the source. The Michigan Drain Code Section 280.423 prohibits sanitary connections to county drains and gives the GCDC authority to remove illegal connections. The preliminary count of outfalls for Genesee County is as follows:

1. Lower Flint	203
2. Middle Flint	416
3. Upper Flint	102
4. Shiawassee	115
5. Cass	35
Total Outfalls	871

Permit applications were completed and submitted to the MDEQ for review in August.