



TESTIMONY OF MICHAEL SHERMAN

DEPARTMENT OF ENVIRONMENTAL PROTECTION

before the

HOUSE ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

July 15, 1996

Good afternoon Chairman Reber and members of the Committee. I am Michael Sherman, Acting Director of the Bureau of Land and Water Conservation in the Department of Environmental Protection. I thank you for this opportunity to appear before you today to discuss the Commonwealth's Stormwater Management Program, the Storm Water Management Act of 1978 and House Bill 979. I am joined today by Durla Lathia, Chief of the Bureau's Stormwater Management Section. Mr. Lathia has managed the program for the last 10 years. Also joining us is Dave Gromelski, Assistant Counsel for the Department.

I would like to thank the members of the General Assembly for passing Special Session H.B. 2, the Capital Project Flood Protection bill. The projects listed in this bill will provide relief for many communities and improve their implementation of stormwater planning.

The Administration supports the concept of communities and counties voluntarily joining together to solve problems on a regional basis. As the pending legislation attempts to move the



thought process to one of planning on a watershed or regional basis, the Department is already taking a watershed based approach to many of its water programs. Watershed assessment, restoration and pilot watershed projects in our regional offices are involving local government and the public to join us in improving our management of these important resources. Before we discuss the Bill, let me provide some background information on the Commonwealth's Stormwater Management Program and the Act of 1978.

BACKGROUND

Within the last 50 years, Pennsylvania has suffered 20 major floods resulting in total damages of over \$6 billion. Despite investments of over \$1 billion in Federal and State flood control projects, the Pennsylvania State Water Plan estimates that on an actuarial basis, the Commonwealth suffers average residual flood damages of \$60 million annually. Ninety-five (95%) of the Commonwealth's 2,567 communities are designated as flood prone under the National Flood Insurance Program. Over the past year, the Commonwealth has experienced widespread and localized damaging floods, leading to the passage of Special Session HB 2.

Unmanaged new development creates a host of problems. Some of which are:

1. increased flood flows and velocities,
2. accelerated erosion and sedimentation,
3. overburdened carrying capacity of streams and storm sewers,

4. increased cost of public facilities to carry and control stormwater,
5. undermined floodplain management and flood control efforts in downstream communities,
6. reduced ground water recharge,
7. deteriorated stream water quality and
8. threatened public health and safety.

The Commonwealth recognized the need for a stormwater management program and subsequently approved the Storm Water Management Act, No. 167 in October, 1978. The Storm Water Management Act establishes a comprehensive program designed to preserve and restore flood carrying capacity and natural runoff regimes of Commonwealth streams, and to protect and conserve ground waters and ground water recharge areas. The main thrust of the Act is to encourage sound water and land use practices through watershed planning and administration by county and local governments to prevent future stormwater problems. The storm water management program is an integral part of the Commonwealth's flood mitigation efforts, augmenting floodplain management, stream improvements, flood control and preventing degradation of water quality of streams.

The Act requires counties and municipalities to undertake planning and management of stormwater runoff in each of 355 designated watersheds, consistent with sound water and land use practices; to help preserve natural, economic, scenic, aesthetic,

recreational and historical values of the environment. Counties and municipalities are reimbursed up to 75% of their costs in preparing and implementing watershed plans. The Department provides technical, administrative and financial assistance to counties and municipalities from funds appropriated by the General Assembly each fiscal year--\$595,000 was appropriated in FY95, a similar appropriation is provided in FY 96.

The stormwater plans prepared by counties provide criteria and standards for the control of accelerated runoff based on sound hydrologic and hydraulic principles. Those criteria and standards are implemented by local governments through their codes and ordinances. This facilitates consistent stormwater management in the entire watershed and provides protection for public health and safety as well as minimizes the risk of loss to public and private properties.

The Department has developed stormwater management guidelines and model ordinances to assist counties and municipalities to explain concepts of watershed planning, and implement the principles of hydrologic and hydraulic engineering and management of stormwater runoff. The guidelines were approved by the General Assembly in May 1985. Since then, 50 watershed plans by 36 counties have been completed, requiring 489 municipalities to implement stormwater control ordinances. The General Assembly has appropriated \$7,026,000 since 1985 to provide financial assistance to counties and municipalities.

Appropriations over the past five years have averaged \$590,000 per year.

The Department began assisting Pennsylvania Infrastructure Investment Authority (PennVEST) in 1993 to provide financial assistance to municipalities to undertake stormwater construction projects. Over 21 million dollars in loans have been approved for 36 municipal projects. Municipalities, in order to be eligible to obtain a low interest loan from the PennVEST, are required to enact and implement a stormwater ordinance consistent with the Act.

PROGRAM REVIEW/RECOMMENDATIONS

As a result of Governor Ridge's Executive Order and Department Secretary Jim Seif's Secretarial Directive, program staff have participated this past year in the Department's Regulatory Basics Initiative. We have reviewed the existing statute (Act 167) planning guidelines and policies to recommend and offer the following comments.

First, while the Act mandates that all counties prepare and adopt watershed plans for the 355 designated watersheds, some watersheds may not need preparation of detailed watershed plans. It is possible that some counties could easily recommend and implement an effective stormwater control strategy without conducting detailed studies of the watershed.

The Department, in consultation with the counties, could establish a list of priority watersheds requiring planning

efforts and defer planning activities for the nonpriority areas until there will be a need. Until such time that all watershed plans have been prepared by the counties, the Department would encourage municipalities to consider enacting a model stormwater ordinance.

Second, the Act also mandates that watershed plans must include, at a minimum, 13 items listed under Section 5(b), Watershed Stormwater Plan Content. The Department recommends that some of those requirements could be omitted from the plan without affecting the overall quality and effectiveness of the plan. This would save counties and the Department time and money.

Third, the Act requires developers to implement measures to control stormwater runoff from new development activities only. The Act further requires that watershed plans address stormwater impacts of existing land uses on drainage conditions at all locations in the watershed but does not require correction of existing drainage problems.

Fourth, there is no existing mechanism to assure consistent implementation of the required ordinances by all local municipalities. Promotion of increased cooperation between counties and local municipalities should be fostered to allow counties to implement stormwater ordinances on behalf of municipalities that elect not to implement them.

The Department plans to increase outreach and educational programs for local government. Distribution of educational videos for government officials and the public, coupled with a 1997 Stormwater Watershed Symposium and outreach workshops with PennVEST and county conservation districts are also planned for the coming year.

Finally, while the local government share of developing a stormwater management plan is only 25%, it is increasingly difficult for them to come up with the required match. An effort should be made to find other nonstate sources of funds for counties and municipalities to provide their 25% match of the program cost. This would promote increased participation by counties and municipalities who experience financial difficulties funding their 25% matching share.

PROPOSED STORMWATER LEGISLATION

Similar in purpose to the Storm Water Management Act, the intent of HB 979 is to prevent flooding and control stormwater runoff, maintain watershed conditions in a sound hydrologic manner, and encourage consistent regulation and management within designated watersheds. The Bill allows counties and municipalities to come together to create stormwater districts to control the quantity, direction and velocity of stormwater runoff and ensure consistency and implementation of approved watershed plans. District boundaries would follow watershed boundaries and

may include areas outside a county with consent of the boards of commissioners of the adjoining counties. The Bill conveys power to districts to fix, alter, change and collect stormwater utility fees and to issue bonds for the construction, improvement, inspection, and maintenance and operation of stormwater facilities.

Similar bills have been introduced eight times in past with the first bill, SB 1342, which was introduced in 1988. All of the past bills addressed the payment of maintenance and capital improvement needs of stormwater infrastructure systems on a watershed basis. In addition, they assured consistent implementation of stormwater management plans prepared under the Storm Water Management Act. Earlier bills only pertained to the creation of districts in counties of the second class (Allegheny County). Subsequent bills expanded the authorization to include all counties within the Commonwealth.

As mentioned earlier, consistent implementation of stormwater ordinances and regulations based on a technically comprehensive watershed plan is important to a successful stormwater management program. HB 979 would enhance this effort by authorizing the creation of a watershed-wide agency to assume the responsibility of carrying out a consistent watershed based approach. The Department supports this voluntary concept because we believe that a watershed district could consistently implement county and municipal obligations under the Stormwater Management

Act. The district could also obtain loans from PennVEST to undertake stormwater construction projects. These loans could be paid back to PennVEST from revenue generated by the district where the project is located.

COMMENTS ON PROPOSED LEGISLATION

While we support the concept of a voluntary watershed district, we do recommend several changes to make the Bill consistent with the Storm Water Management Act and program. I would like to add that a legal analysis also needs to be conducted to determine if the districts may constitutionally levy taxes, issue bonds and undertake other similar financial transactions.

Since last fall, we have served on a committee established by PennDOT to explore solutions to stormwater drainage problems, and associated maintenance responsibilities and alternative means of financing. This committee consists of members from PennDOT and Department of Environmental Protection, Representative David Steil, Representative Anthony Melio, Betsy Helsel of Senator David Heckler's office, Pennsylvania State Association of Township Supervisors, Pennsylvania State Association of Boroughs, Pennsylvania State Association of County Commissioners, Ted Dorand of Smith Environmental and David French (formerly of the Allegheny County Planning Department). The committee has had several discussions about the Bill and believes that the Bill can

provide effective solutions to address existing and future drainage problems.

Some of the recommended changes include:

1. deleting local approval authority in Section 6(a)(12)(iii) of state projects since consistency with the approved watershed plan is already required by the Storm Water Management Act. We would suggest language authorizing the district to comment upon state projects, and require state agencies to seek and consider the district's comments;

2. clarifying in Section 6 (a) (12) (iii) that the district only reviews and approves plans for activities regulated by the stormwater ordinances that implement the approved watershed stormwater management plan. Further definition of the scope of the district's authority assures that the district duties not conflict or duplicate existing powers and duties provided local municipalities by the Municipalities Planning Code;

3. clarifying that acceptance of stormwater management facilities should be given solely to the district rather than forcing the municipality to accept the responsibility;

4. deleting language in Section 6, p. 8, lines 24-30 and line 1 on page 9 as it conflicts with Section 13 of the Storm Water Management Act. While the Department would encourage and support a mechanism to ensure the ongoing maintenance of these facilities, we feel that it is incorrect to relieve the developer of the obligations established by the Storm Water Management Act;

5. deleting language in Section 6 (a)14 as a separate permit system may not be necessary as long as the district reviews and approves stormwater plans for activities that would discharge stormwater to regional facilities;

6. providing additional enforcement authority for the stormwater management district in Section 13 should be considered because under the Stormwater Management Act, the Department does not have authority to enforce provisions on individual land development activities.

The Department recognizes that the maintenance of stormwater management facilities required by local ordinances has been, and continues to be, an ongoing problem of great concern. In the past, we have suggested that the owners of commercial and industrial developments maintain their own stormwater facilities because these owners have the financial ability to carry out this maintenance. For stormwater management facilities within single family residential areas, we have expressed a concern that developers build the facilities and then move on, frequently leaving individual homeowners or homeowners associations with the maintenance responsibility. Generally this is not an acceptable arrangement and suggest that municipalities or counties accept these facilities as part of their public works infrastructure.

The creation of a stormwater management district is a viable mechanism to establish the procedures to guarantee safe operation

and maintenance of stormwater management facilities. Although I have just mentioned several scenarios, these certainly are not the only ones which would work. We would encourage the creativity of a district and any participating municipality or county to develop whatever measures that would work locally to assure the maintenance of those facilities.

This concludes my specific comments on HB 979. Again, I wish to thank the committee for the opportunity to testify today. The Department supports the concept of allowing counties to voluntarily establish a watershed-wide management district. At this time, I would be happy to answer any questions.

THE SEVEN FUNCTIONS OF STORMWATER MANAGEMENT

- . PLANNING
- . LAND DEVELOPMENT PLAN REVIEW
- . CONSTRUCTION INSPECTION
- . MAINTENANCE
- . ENFORCEMENT
- . EMERGENCY RESPONSE
- . FINANCE

ACT 167 SHORTFALLS

- . Municipal enforcement is fragmented and inconsistent.
- . The Act does not provide for remediation of existing problems.
- . The Act does not provide for adequate funding.

EVALUATION MATRIX

INSTITUTIONAL ALTERNATIVES

	<u>BINDING AGREEMENT</u>	<u>USER FEES</u>	<u>ISSUE BONDS</u>	<u>LOCAL REPRESENTATION</u>	<u>ENFORCEMENT</u>	<u>EASE OF IMPLEMENTATION</u>	<u>FLEXIBILITY TO EXPAND</u>
1. JOINT MUNICIPAL AUTHORITY	∅	0	.
2. ALCOSAN	.	.	.	∅	∅	0	0
3. COUNTY AUTHORITY	∅	.	.
4. ENVIRONMENTAL IMPROVEMENT COMPACT	0	∅
5. STORMWATER DISTRICT	∅	.
6. ALLEGHENY COUNTY DEPARTMENT	.	∅	.	∅	.	.	.
7. CONTRACT WITH PRIVATE COMPANY	∅	.	0	∅	0	0	0
8. FRANCHISE/UTILITY	∅	.	∅	0	∅	0	∅

KEY

- . EXCELLENT
- ∅ POSSIBLE
- 0 DIFFICULT/UNLIKELY

FEASIBLE OPTIONS:

COUNTY DEPARTMENT

Strengths:

Easiest to form

Maximum use of existing county resources

Requires no separate billing mechanism

Weaknesses:

Amend the Second Class County Code for direct enforcement powers

No dedicated funding

Limited to political boundaries of Allegheny County

FEASIBLE OPTIONS:

COUNTY AUTHORITY

Strengths:

- . Simple to form
- . Takes advantage of existing resources
- . A familiar institutional arrangement

Weaknesses:

- . Amend the Municipal Authorities Act
- . No direct enforcement powers
- . Confined to political boundaries of Allegheny County

FEASIBLE OPTIONS:

STORMWATER MANAGEMENT DISTRICT

Strengths:

- . Direct enforcement powers.
- . Defined by watershed boundaries, not limited to political boundaries of Allegheny County.
- . User fee funded.

Weaknesses:

- . Requires passage of enabling legislation.

POWERS AND DUTIES OF THE DISTRICT

Fix Rates and Fees

Issue bonds

Make contracts

Develop regional stormwater management facilities

Review land development plans

Conduct routine construction inspection

Prepare and update watershed plans

Provide accessible data base

Assist municipalities in flood recovery and mitigation

Maintenance of stream channels

POWERS AND DUTIES OF THE DISTRICT

THE DISTRICT WILL NOT OVERRIDE

ANY MUNICIPAL LAND USE POWERS!

FINANCING THE DISTRICT

- . FINANCED BY USER FEES
- . SINGLE RATE FEE FOR RESIDENTIAL PROPERTY REGARDLESS OF SIZE
- . NON-RESIDENTIAL FEES PROPORTIONAL TO PROPERTY SIZE USING RESIDENTIAL MULTIPLES (BASED ON PROPERTY CHARACTERISTICS OF SOILS SLOPE IMPERVIOUS SURFACE)

Storm Water Management User Fee Calculations

PSRM

1. Total projected annual SWM costs for Allegheny County by 1994
(Based upon maintenance requirements identified through interviews with township and county planning personnel)

<table border="1"> <tr> <td>Total Maintenance Costs for SWM Per Year</td> <td>\$ 1,944,810</td> </tr> <tr> <td>Individual Charge</td> <td>\$4.86</td> </tr> </table>	Total Maintenance Costs for SWM Per Year	\$ 1,944,810	Individual Charge	\$4.86	+	<table border="1"> <tr> <td>Overhead Allocation for SWM District</td> <td>\$ 1,058,505</td> </tr> <tr> <td>Individual Charge</td> <td>\$2.65</td> </tr> </table>	Overhead Allocation for SWM District	\$ 1,058,505	Individual Charge	\$2.65	+	<table border="1"> <tr> <td>Cost of Materials, Equipment & Reserve for Capital Expenditures</td> <td>\$ 1,750,329</td> </tr> <tr> <td>Individual Charge</td> <td>\$4.38</td> </tr> </table>	Cost of Materials, Equipment & Reserve for Capital Expenditures	\$ 1,750,329	Individual Charge	\$4.38	+	<table border="1"> <tr> <td>Watershed Specific Capital Expenditure (Over and Above SWM District Reimbursed Costs)</td> <td></td> </tr> </table>	Watershed Specific Capital Expenditure (Over and Above SWM District Reimbursed Costs)		=	<table border="1"> <tr> <td>Total SWM Costs Per Year</td> <td>\$4,753,644</td> </tr> <tr> <td>Individual Charge</td> <td>\$11.88</td> </tr> </table>	Total SWM Costs Per Year	\$4,753,644	Individual Charge	\$11.88
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2. Ratio of residential to commercial/industrial property in Allegheny County is 9 to 1
(based on North Hills sample)

3. However, commercial/industrial property contains 3 times more impervious surface than residential land (this figure is based upon an analysis of data obtained from the Penn State Runoff Model (PSRM-87))

4. Therefore, county storm water costs are allocated between residential and commercial in a 70/30 proportion

5. Based upon the number of households in Allegheny County, identified in Phase I report, the residential assessment for storm water management will range from \$8.50 to \$12.00/household/year

6. The commercial property assessment for storm water management, because of a greater amount of impervious surface per acre, will be a multiple of the residential rate based upon total commercial acreage (minimum - \$25.00)

Exhibit IV

STORMWATER MANAGEMENT

- DISTRICT ORGANIZATION -

BOARD OF DIRECTORS

EXECUTIVE COMMITTEE OF THE BOARD

EXECUTIVE DIRECTOR OF THE DISTRICT

DISTRICT STAFF

