

# Is it time for stormwater utilities?

By **Dave Peifer**, ANJEC Project Director

## **S** stormwater systems are vital and yet ignored

As you drove to work today you were involved with New Jersey's complex web of stormwater management facilities buried under our roads and streets. Generally, most people think little about it unless there is a catastrophic failure like a sinkhole in a road, street flooding or flooded basements.

Much of urban and suburban New Jersey is underlain by this forgotten infrastructure. A short walk observing the conditions of catch basins, connector pipes and outfalls will be enough, in most cases, to convince even the untrained observer that considerable work needs to be done on these systems that are literally falling to pieces. It may be less obvious that these systems do nothing to control the quantity or quality of stormwater discharged to our surface waters.

Stormwater facilities are vital components that protect public and private investment, address public health concerns and largely determine the quality and quantity of surface water in developed areas. It should follow then that adequate public funding and attention should be available for their construction, ongoing maintenance, and reconfiguration to meet present and future conditions. In sum they should be managed as public assets, although this is not generally the case.

Because these systems are hidden underground for the most part they are often "out of site, out of mind." Maintenance is generally provided from the municipal general fund derived from property taxes and administered by the public works department or similar

municipal entity. Money and manpower are often diverted to other "more urgent" purposes.

## **Current management problems**

This approach has some obvious problems, especially in times of economic stress. First, long term planning and administration is difficult for managers who do not know whether funds will be available at all or if so, at what level year after year.

Second, the generally durable nature of the facilities and their hidden locations tend to foster an attitude of "run to failure." Maintenance and repair are deferred year after year, sometimes for decades, resulting in catastrophic or undetected failures. Once the system fails, repairs and remediation are more costly and disruptive than would have been incurred by an organized program of maintenance and repair.

Third, increasing local property taxes to adequately address the needs of the system is always unpopular, and even more so during bad economic conditions. Some means of equitably assigning fees rather than taxing property must be applied if the benefits of a well managed stormwater system are to be achieved.

## **Changing roles of stormwater systems**

New mandates from the federal level (*Clean Water Act*) and implemented through the NJ DEP (*Stormwater Management Rules*) have placed increasing demands on municipalities to more effectively manage stormwater. Nationally, over 60 percent of existing water pollu-

tion originates as nonpoint pollution and much of this is conveyed to our rivers and streams by stormwater systems designed before water quality was a concern.

Meeting the new mandates for stormwater systems will entail a host of adaptations focused on improved maintenance, the use of non-structural best management practices, different design approaches and changing institutional responsibilities. While the focus currently is on applying innovative design techniques to new development, it should be clear that in a highly developed place like New Jersey, remediation and retrofitting of existing systems will be necessary to meet these new requirements.

### **Stormwater utilities: a not-so-new idea**

One remedy to these problems is to create a stormwater utility that has specific authority to plan and implement stormwater system maintenance, repair, construction and upgrading and to collect user fees and issue bonds to fund these activities.

Stormwater utilities were first developed in the early 1970s. The approach quickly spread nationwide because stable funding and adequate capital for stormwater systems have been difficult to obtain. By 2005 over 30 states allowed for the creation and operation of stormwater utilities and over 400 had been created and were in operation nationwide.

### **New Jersey experience**

Despite the national acceptance of the technique, there are still no stormwater utilities established in New Jersey. In 2005, the firm of Camp Dresser and McKee Inc. (CDM) prepared an in-depth report for the Morris County Planning Board

entitled, *Recommendations for Stormwater Utility Implementation in New Jersey*. The report makes specific recommendations for stormwater utility implementation in New Jersey. These include:

- Legislative and/or regulatory action should create, extend, and clarify the basis of authority, and the powers of a stormwater utility;
- State agencies should provide guidance for successful implementation of a stormwater utility to local governments, local government agencies and utility authorities interested in creating a utility;
- State agencies should identify a model user service fee system that can be implemented to fund stormwater management.

Significantly for municipalities, the report states, "Municipalities and counties appear to have the authority to create stormwater utilities at present, under their general powers, but no guidance and direction appears to be available from state agencies for those choosing to do so. To date (2005), no municipality or county in New

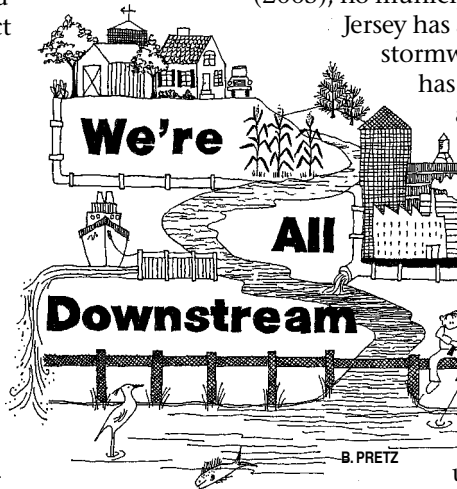
Jersey has attempted to create a stormwater utility. This study

has shown that State agencies are not yet prepared nor

is there adequate coordination between departments to guide local stormwater utility implementation efforts. State agencies should prepare and distribute guidance to local entities for successful stormwater

utility implementation, such as the model implementation process provided in this project."

The report contains detailed guidance for municipalities to implement a stormwater utility in Appendix B, *Guidance for Stormwater Utility Implementation: Greentown Borough*. It outlines the rationale for creating a stormwater utility, methods for establishing a user fee system based in impervious coverage and a step by step approach, including public outreach and education.



## **Current legislation**

In the current legislative session, proposed bills (S1815 and A2577) would establish a stormwater management system pilot project in Ocean County in an enhanced effort to protect Barnegat Bay. The bill finds: “The acquisition, construction, operation, and maintenance of stormwater management systems are essential to the goals of protecting and improving the State’s water quality, and are necessary to prevent and abate nonpoint sources of pollution, minimize stormwater runoff, control flooding, and enhance groundwater recharge.”

The bills would also “require the Department of Environmental Protection to create a stormwater utility guidance manual for municipalities, counties, and authorities seeking to establish stormwater management systems. The manual would establish a mechanism to calculate fees directly related to the specific costs of the stormwater management system.”

## **Conclusion**

Nationwide, stormwater utilities have been in use for several decades and have proven effective in meeting the need for coordinated, predictable system management. New Jersey has been exploring the use of stormwater utilities since at least 2005. Current public fiscal distress and the desire to make these vital infrastructure systems more sustainable may favor the establishment and use of such an approach in New Jersey. The use of asset management techniques within a defined framework of common definitions may also offer the chance for reducing costs in the long term, the reduction of flooding and the improvement of water quality.

For more information contact the ANJEC Resource Center at [resourcenter@anjec.org](mailto:resourcenter@anjec.org) or by calling (973) 539-7547. 