

W W F M M P

WET WEATHER FLOW MANAGEMENT MASTER PLAN

City Launches Development Phase of the WWFMMP

In July, the City of Toronto began working on Step 2, the development phase of the Wet Weather Flow Management Master Plan (WWFMMP). In this phase of this important planning process, we will determine how best to prevent, control and reduce pollution from wet weather flows. When it is implemented, the Master Plan will dramatically improve the health of Toronto's rivers and its waterfront.

This newsletter is designed to tell you about the WWFMMP process and to encourage you to take part in its development. By participating, you can help make our streams, rivers and waterfront cleaner and healthier.

What is Wet Weather Flow?

Wet weather flow is runoff that is generated when it rains or snows. In a natural setting, wet weather flow isn't usually a problem: when it rains, most of the stormwater naturally filters into the ground or is taken up by vegetation.

Because we have paved so much of the city, most of the rain that falls cannot filter into the ground. Instead, stormwater runs off roofs, roads and parking lots, trickles down drainpipes and empties into stormwater grates. It is then conveyed through an

extensive system of storm and combined sewers – 5,800 km in all — to about 2,700 outfalls (outlet pipes) where it gushes into streams, rivers, and Lake Ontario.

Why is Wet Weather Flow a problem?

Uncontrolled wet weather flow can lead to surface flooding, stream-bank erosion, destruction of fish habitat, overloading of the sewer systems causing basement flooding and a host of environmental problems. Stormwater is a major cause of pollution in Toronto's streams, rivers and waterfront because it picks up oil, grease, metals, pesticides and other pollutants and deposits them in streams and along the waterfront. The problem of pollution is exacerbated in the older parts of the city, where combined sewers are still in use. (Combined sewers are single pipes that carry both sanitary sewage and stormwater). In these areas, during large rainstorms, dilute sewage is discharged into our rivers and the waterfront from 80 combined sewer overflows. This can lead to beaches being posted unsafe for swimming because of high bacteria levels.

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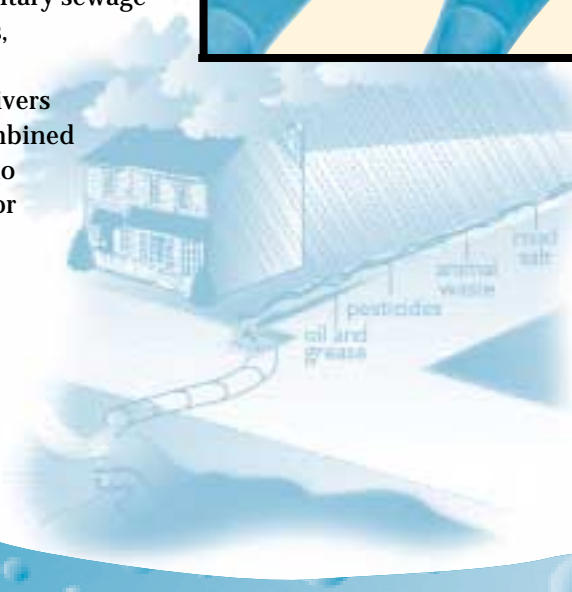
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The Wet Weather Flow Management Master Plan (WWFMMP) is a partnership between agencies, the public and the city to improve the water quality of our rivers and lake. The plan will find ways to prevent, reduce and control the pollution in stormwater runoff.



WWFMMP Goal

To reduce, and ultimately eliminate the adverse effects of wet weather flow on the built and natural environment in a timely and sustainable manner, and to achieve a measurable improvement in ecosystem health of the watersheds.

Highlights of Step 1

The groundwork for the Wet Weather Flow Management Master Plan was laid in Step 1 of the process. In consultation with a multi-stakeholder Steering Committee and the public, City staff and technical consultants gathered and analyzed huge amounts of information and data. Because of this work, we now have a more complete understanding of existing environmental conditions and how wet weather flows affect the environment. Step 1 also saw the development of a unique vision to guide the planning process.

Vision Statement

Wet Weather Flow will be managed on a watershed basis in a manner that recognizes rainwater as a potential resource to be utilized:

- to improve the health of Toronto's watercourses and the nearshore zones of Lake Ontario and

- enhance the natural environment of Toronto's watersheds.

Another important outcome of Step 1 of the Master Plan process was the adoption of a hierarchical approach to managing wet weather flows, one that reflects the "pollution prevention principle":

- **At Source:** First, deal with stormwater where it falls.
- **Conveyance:** Next, deal with stormwater and combined sewage as it is being transported across the city.
- **End-of-Pipe:** Finally, deal with stormwater and combined sewage before it is discharged into our streams, rivers and Lake Ontario.

The end result

- healthier aquatic communities;
- reduced fish consumption advisories;
- less erosion;
- a more natural hydrologic (water movement) cycle;
- increased protection, re-establishment and rehabilitation of wetlands and other ecological features;
- virtual elimination of toxic contaminants in ground and surface waters;
- meeting water and sediment quality objectives and guidelines;
- the elimination of discharges of sanitary sewage;
- improved water quality for recreational use and fewer postings of beaches;
- improved aesthetics including less algae growth;
- reduced basement flooding;
- reduced infiltration and inflow to sanitary sewers; and
- reduced risk to people and property from surface flooding.

Visit our web site at
www.city.toronto.on.ca/involved
– for all the latest new

On to Step 2

The city has been divided into five study areas (see map). Four of these generally conform to the boundaries of the major watersheds (Etobicoke and Mimico Creeks, the Humber River, the Don River, and the Rouge River Highland Creek). The fifth study area includes all the parts of Toronto in which there are still combined sewers. This includes much of the former municipalities of Toronto, York and East York and the southwestern part of Scarborough.

Step 2 of the WWFMMP will be developed in four phases.

Government agencies, area municipalities within the watersheds, watershed groups and the public at large will be consulted throughout the process.

Phase 1: Setting Targets

In this initial phase of Step 2, the technical consultants will be filling data gaps and developing a framework for target-setting. *(August to December 2000)*

Phase 2: Identifying Wet Weather Flow Control Options

In this phase, the City's technical consultants will be compiling a list of all the potential wet weather flow control options. They will then develop evaluation criteria and apply them to each of the options. Finally, they will assess the opportunities that exist in each study area to use the various control options. *(January to June 2001)*

Phase 3: Developing Preferred WWF Management Strategies for Watersheds

During Phase 3, the technical consultants will be evaluating a number of wet weather flow management strategies for each study area against criteria such as effectiveness, cost and siting implications. The outcome of this phase will be a preferred Wet Weather Flow Management Strategy for each study area. *(July to October 2001)*

Phase 4: Developing the Draft City of Toronto WWF Management Strategy

In Phase 4, one Draft Wet Weather Flow Management Strategy for the entire city will be developed along with an Implementation Plan, Monitoring Plan and Funding Mechanisms. *(November to December 2001)*

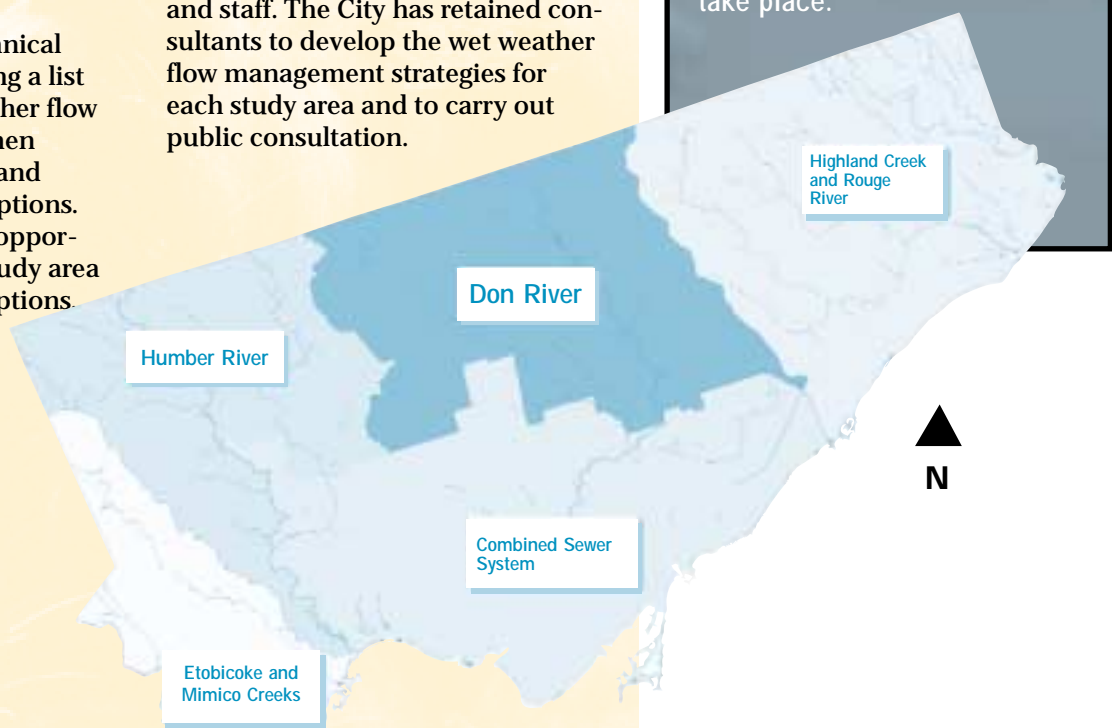
Who's Who

The WWFMMP process is being coordinated by staff from City of Toronto Works and Emergency Services. A Steering Committee has been formed to advise the Commissioner of Works and Emergency Services development of the Master Plan. It includes members of the public, City councillors, representatives from key agencies and staff. The City has retained consultants to develop the wet weather flow management strategies for each study area and to carry out public consultation.

Nature Unleashed

The storm that took place this year on May 12th and 13th provided a graphic illustration of why we need to act now to reduce the environmental impacts of wet weather flow. In this storm, Toronto received an average of 68 mm of rain, an amount that is predicted to fall only once every 50 years.

Because of the extreme storm conditions, wet weather flow exceeded the capacity of sewers in many parts of the city. As a result, over 2,400 basements were flooded, extensive erosion took place in ravines and watercourses, major roads were closed and many roads, bridges, culverts and pipes were damaged. The cost to repair erosion damage alone is estimated to be over \$3 million. When implemented, the Wet Weather Flow Management Master Plan will ensure that this kind of destruction does not take place.





How to contact us

Tracey Ehl
Senior Public
Consultation Coordinator
Metro Hall
Stn. 1180, 18th floor
55 John Street
Toronto, ON M5V 3C6

Tel:
416-392-2996

Fax:
416-395-2974

TTY:
416-397-0831

e-mail:
tehl@city.toronto.on.ca



Works & Emergency Services
Water and Wastewater Services

What can I do to reduce stormwater pollution?

There's a lot that we can all do at home to reduce pollution from wet weather flow. Among other things, you can:

- disconnect your downspout from the storm sewers and collect the water in a rain barrel to use on your lawn or garden;
- replace your paved driveway with interlocking brick or porous material;
- plant more shrubs and trees in your yard;
- eliminate the use of pesticides and fertilizers on your lawns and gardens;
- dispose of used motor oil, paint thinner and other hazardous waste properly so that it doesn't end up in storm or sanitary sewers; and
- conserve water inside and outside your home.

For more information on what you can do and City programs, go to the City's web site at www.city.toronto.on.ca/sewers/storm.htm



Jump in! Help solve water pollution

Workshops on Plan Targets
"What should we be aiming for?"

- Find out about the environmental conditions in your area
- Learn about the Master Plan process
- Explore how you can be involved

Etobicoke/Mimico November 21
Etobicoke Civic Centre
399 The West Mall, Room 1

Humber River November 22
Humberwood Community Centre
850 Humberwood Road, Room 1017

Don River November 23
North York Memorial Community Hall
5110 Yonge Street, Burgundy B Room

Highland/Rouge River November 29
Scarborough Civic Centre
150 Borough Drive, Rooms 31

Combined Sewer Overflows December 4
Metro Hall, 55 John Street, Room 307

All Workshops:
Informal Open House 6:00 p.m.
Formal Work Shop 7:00 to 9:30 p.m.

Please register:
416-392-9365

GET INVOLVED!

Public involvement is an integral and vital part of the WWFMMP process. In Step 2, we will need your advice on a number of important questions.

To get information:

- You can get information on the WWFMMP by contacting us directly by phone, fax or e-mail. See "How to Contact Us".
- You can also read and download WWFMMP documents from the City's web site, www.city.toronto.on.ca/involved

To give us your comments, concerns or questions:

- You can attend one of the consultation forums that will be held over the next 13 months. These begin with Workshops on Targets in November in each of the five study areas.
- You can give us comments by phone, fax, surface mail or e-mail. See "How to Contact Us".
- Starting in late November, you will be able to take part in on-line e-consultation through the City's web site.