



## CITY COUNCIL AGENDA ITEM

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Date: June 12, 2012

To: Michael W. Culpepper, Interim City Manager

From: Timothy Richnak, Public Works Director  
Richard Shepler, Water and Sewer Superintendent

Subject: Review of Outdoor Water Use Restrictions Ordinance

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### Background

**Established** – May 2008 by Troy City Council Resolution

**Goal** – To shift peak hour water usage to between 11:00pm – 5:00am the Detroit Water & Sewerage Department (DWSD) daily exemption period.

The attached graph illustrates how successful Troy has been in shifting the peak water use to the DWSD exclusionary time of 11pm – 5am. The blue line represents the average hourly flow rates of the years 2003-2007 before the water restriction ordinance on the DWSD maximum water pumping day of each year. The red line represents the years 2008- 2011 after the water restriction ordinance was put in place.

There are 3 critical factors that weigh heavy on the rates that Troy gets charged from DWSD and that can be somewhat controlled.

- 1) Peak hour demand: The peak hour rate in which Troy is using, on the day that is the DWSD maximum pumping day. This day is not known until the end of the summer. (excluding 11pm - 5am)
- 2) Maximum day demand: The amount of water that Troy uses on the DWSD maximum pumping day.
- 3) Total annual consumption: The amount of water Troy uses from July 1 – June 30<sup>th</sup> of every year.

There are 2 other major factors that affect Troy's rate from DWSD and they are Distance and Elevation from the DWSD water treatment plants (we can't control these factors).

The DWSD model contract exhibits are up for renegotiation per the contract the second year after the initial signing, the 5<sup>th</sup> year and every 5 years until the 35<sup>th</sup> year. The exhibits were set up in the model contract so they could be changed during these periods without changing the model contract language. The exhibits include peak hour demand, max day demand, total volume and pressures.

Troy begins negotiating fall 2012 for our 5 year anniversary of the contract. The updated contract exhibits will begin July 1, 2013 and go through June 30, 2018. All the data needed to make the best decision possible for negotiating the contract exhibits. We were very successful at estimating these exhibits 3 years ago when



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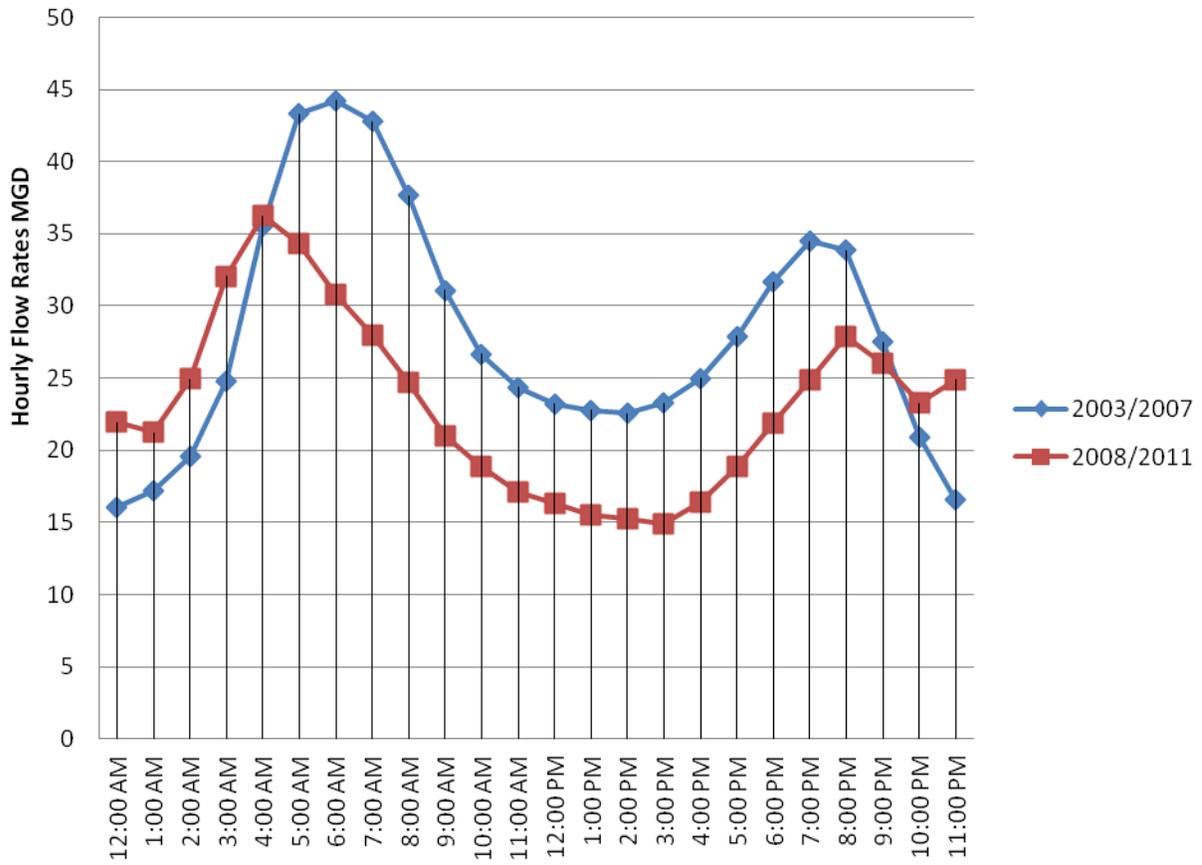
we last negotiated our contract. The real unknown is what the economy is going to do the next 5 years especially the commercial and industrial market and how many vacant properties we will have.

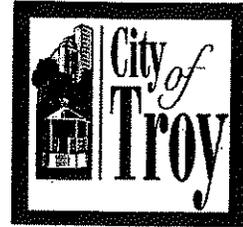
### Educational Elements on the Outdoor Water Restriction Ordinance

- Spring newsletter every year
- Special note on spring water bills
- Website and local cable television
- Newspaper articles when appropriate
- Notice to sprinkler companies
- Special tag on outdoor seasonal water meters for irrigation only
- Special signs will be placed at entrances to subdivisions that require more intensive education
- Letters sent to property owners of reported violations explaining regulations with copy of city ordinance are attached (the initial philosophy of this ordinance was education before regulation)
- Second letter sent to reported violations as necessary
- Superintendent and/or staff make personal visits to violation locations

tlr\S:\Richnak Agenda Items\ Review of Outdoor Water Use Restrictions Ordinance June 2012

## Peak Hour Averages Before vs After Sprinkler Ordinance





We noticed that you've been watering

Summer 2012

RE: Outdoor Automatic Sprinkler Restrictions

Dear Sprinkler System Owner,

The City of Troy has restricted the run time of underground irrigation systems effective June 5, 2008.

On May 19, 2008, Troy City Council approved the recommended ordinance change to restrict the usage of underground irrigation systems (sprinkler systems) to run only from **11pm until 5am daily**. (See Ordinance on back)

This letter is to inform you as an operator of an underground irrigation system of this change and to urge you to set your irrigation timers to go "on" and "off" between the hours of 11pm and 5am. By adjusting timers to this schedule, peak hour water use in the City can be shifted and an annual cost savings of approximately \$500,000 through rate reductions can benefit all water users in the City of Troy. The ordinance only restricts the timing of underground irrigation systems and does not pertain to the initial start up, maintenance or testing of the system.

The primary focus is to reduce peak usage. This is not an effort in conservation of water although conservation is recommended. It is our intent to gain compliance through education and cooperation with the water users in the City of Troy rather than resorting to issuing municipal civil infractions resulting in fines.

Thank you in advance for your cooperation.

***Richard Shepler***

Richard Shepler

Superintendent of Water & Sewer  
City of Troy, Water Division

## City of Troy Ordinance

### Outdoor Water Use Restrictions

12.01 The City of Troy, through its contract with the Detroit Water and Sewerage Department, is obligated to take steps to insure that whenever possible, the use of the municipal water system shall be used during the non-peak hours of 11pm to 5am. To satisfy this contractual commitment, the following municipal water use regulations are in effect:

- A. For those properties in the City of Troy that are serviced by an underground irrigation system, outdoor watering, including the sprinkling of lawns and landscaping, shall only be done during the non-peak hours of 11pm to 5am.
- B. A water user may manually irrigate landscaping at any time, provided the irrigation is not connected to an underground system, and is attended and monitored by the water user.
- C. If the above provisions create a practical hardship for a municipal water user, the municipal water user can petition the Superintendent of the Department of Water and Sewer or his/her designee, asking for relief from one of the above referenced restrictions. The petition shall set forth the requested relief, and shall detail the extraordinary circumstances that would justify the requested relief, as well as the duration of the requested relief. The Director of Public Works or his/her designee can grant or deny or modify the petition, taking into consideration the contractual obligations of the City, as well as the articulated circumstances of the petitioner. The decision of the Director of Public Works or his/her designee shall be final.
- D. Any person, firm, or corporation violating any of the provisions, as set forth in paragraphs A and B, without obtaining relief, as provided in paragraph C, shall be responsible for a municipal civil infraction, in accordance with the provisions of Chapter 100 of the City of Troy ordinances.