Wet Weather Flow Master Plan

25-year plan to reduce effects of wet weather flow

TORONTO Water

Wide ranging environmental stewardship activities

- reducing combined sewer overflows
- storm sewer discharge controls
- conveyance controls
- end-of-pipe
- rainwater harvesting
- green roofs
- stream restoration
- tree planting
- source water land acquisition
- downspout disconnection
- clean, beautify and improve access and stewardship of Toronto's ravines including improved coordination between Divisions for ravine clean-up
- reallocation of resources for increased outfall and beach monitoring programs
- help clean Lake Ontario to make Toronto's beaches more swimmable

Emerging Climate Change Issues

Basement flooding

- Evidence suggests intensity of rainfall events may increase
- August 2005 storm most expensive natural disaster in Ontario history (Insurance Bureau of Canada)
- Vast majority of claims for sewer back-ups
- Over 4,000 basements flooded in Toronto
- City-wide work plan approved by Council in 2006 with 31 priority study areas identified
- Best practices support adaptive management approach including a range of initiatives (lot level controls, surface flow controls, pipe conveyance, controls, downspout disconnection)

Reducing Energy
2007-2011 Capital Plan

TORONTO Water

Infrastructure Renewals and Upgrades

- Implementation of Real time Energy Monitoring at Ashbridges Bay Water Treatment Plant (WTP), Humber WTP. **$ 9 million**
- Optimization of drinking water transmission system pumping. **$ 5 million**
- Wastewater treatment process upgrades including completion of co-generation facility at Humber Wastewater Treatment Plant (WWTP) and fine bubble aeration at Ashbridges Bay WWTP **$23 million**

Reducing Energy
2007-2011 Capital Plan (cont'd.)

TORONTO Water

Infrastructure Renewal and Upgrades

- Facility lighting & electrical upgrades at Ashbridges Bay WWTP, Humber WWTP & R.C. Harris WTP. **$32 million**
- Replacement of pumps and motors with high efficiency units at R.L. Clark and Horgan WTP and booster pumping stations and Humber Bay WTP. **$13 million**

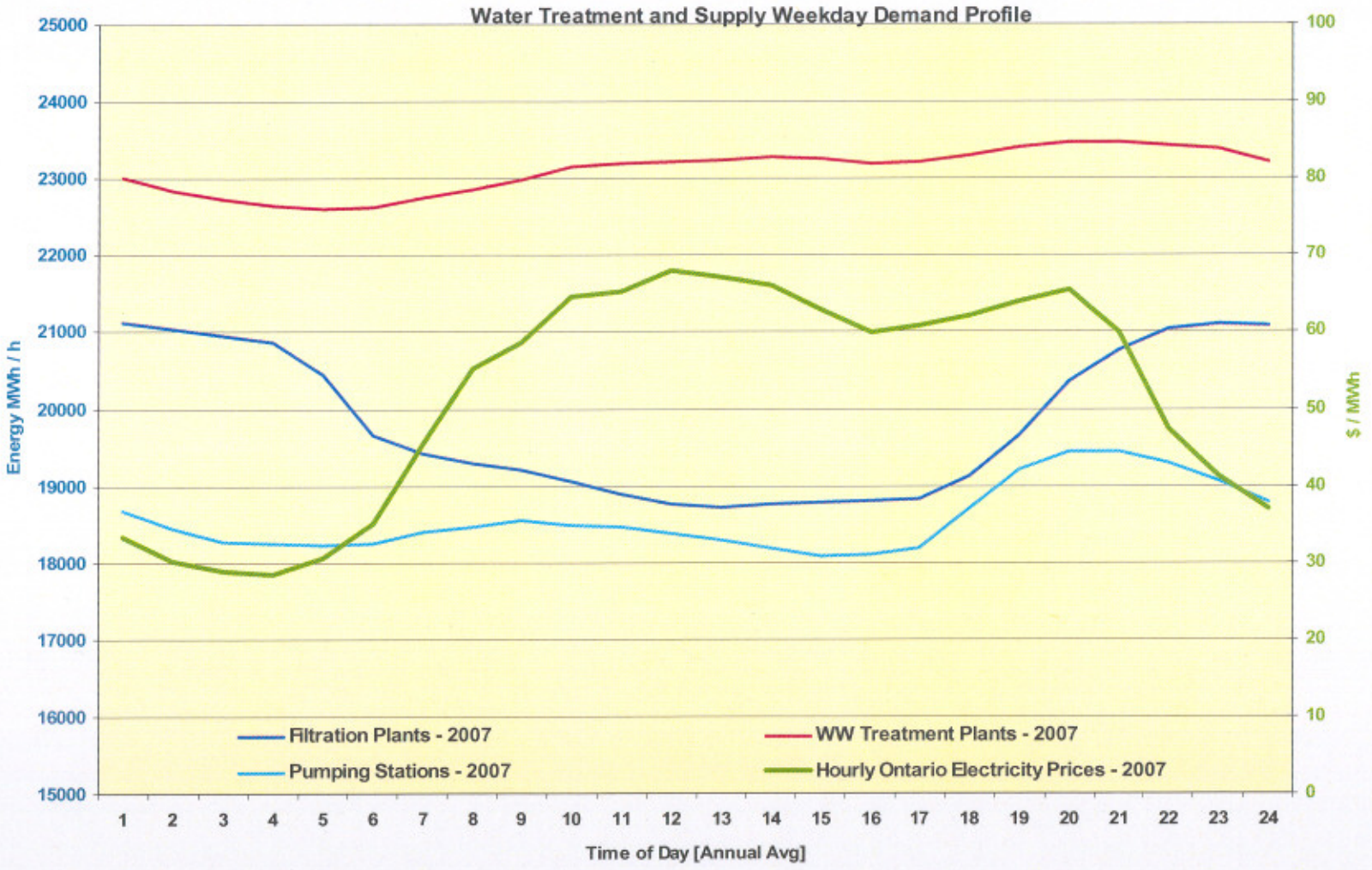
2008 Toronto Water Energy Management

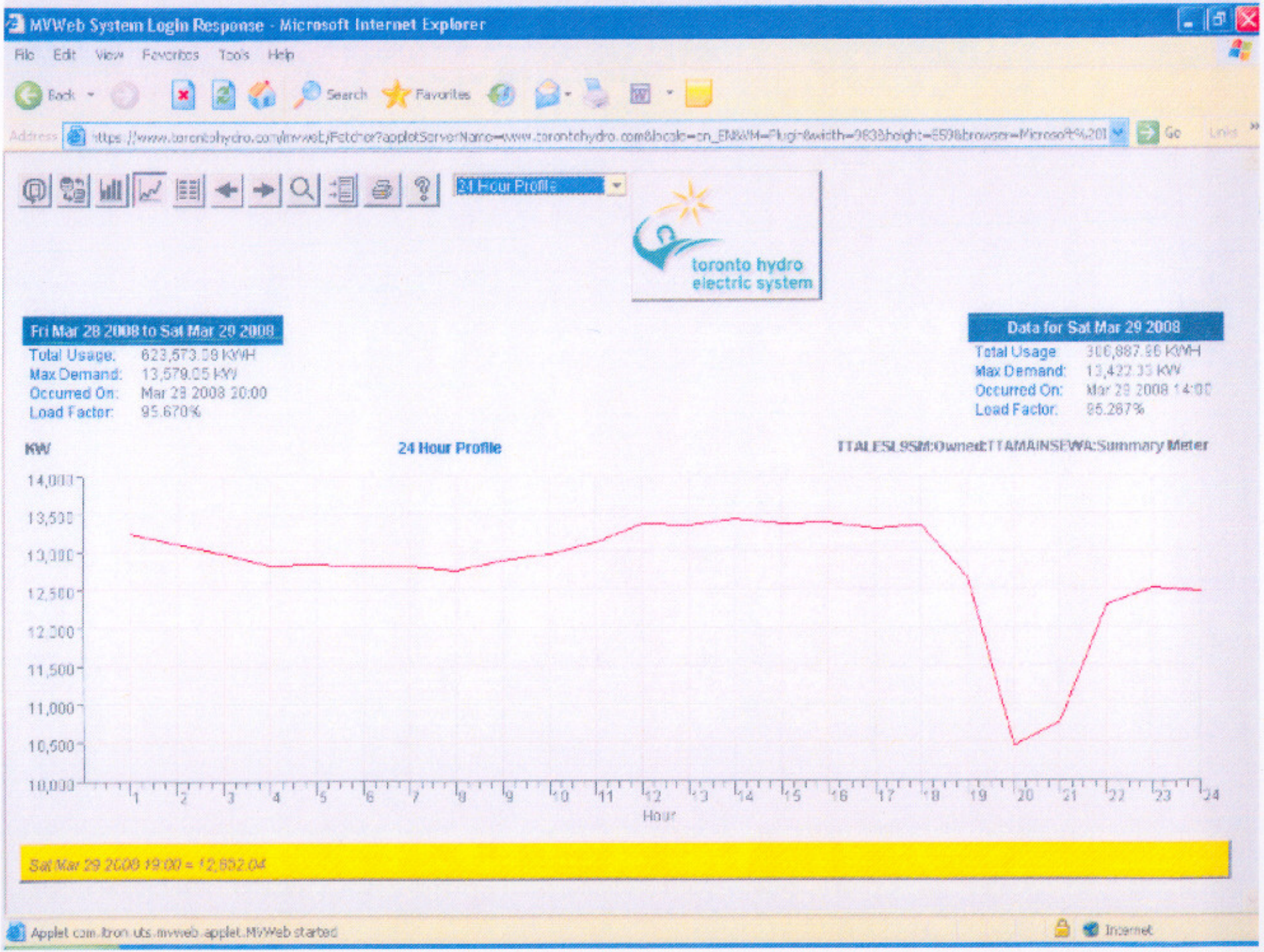
TORONTO Water

Workplan

Task	ABTP	Humber	Highland Creek	Water Supply	Clark	Harris	Horgan
Baseline Analysis	√	√	√	√	√	√	√
Quarterly meetings	√	√	√	√	√	√	√
EMP developed	√	√	√	√	√	√	√
Energy Audits	RFP	2009	90%	RFP	2009	90%	Expansion

Water Treatment – Energy Demands




MVWeb System Login Response - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
24 Hour Profile
toronto hydro electric system
Fri Mar 28 2008 to Sat Mar 29 2008
Total Usage: 623,573.09 KWH
Max Demand: 13,579.05 KW
Occurred On: Mar 28 2008 20:00
Load Factor: 95.670%
Data for Sat Mar 29 2008
Total Usage: 300,887.86 KWH
Max Demand: 13,422.33 KW
Occurred On: Mar 29 2008 14:00
Load Factor: 95.287%
KW
24 Hour Profile
TTALESL95M:Owned:TTAMAINSEWA:Summary Meter
14,000
13,500
13,000
12,500
12,000
11,500
11,000
10,500
10,000
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Hour
Sat Mar 29 2008 19:00 = 12,652.04
Applet com.itron.uts.mvweb.applet.MVWeb started
Internet

myTorontoWater