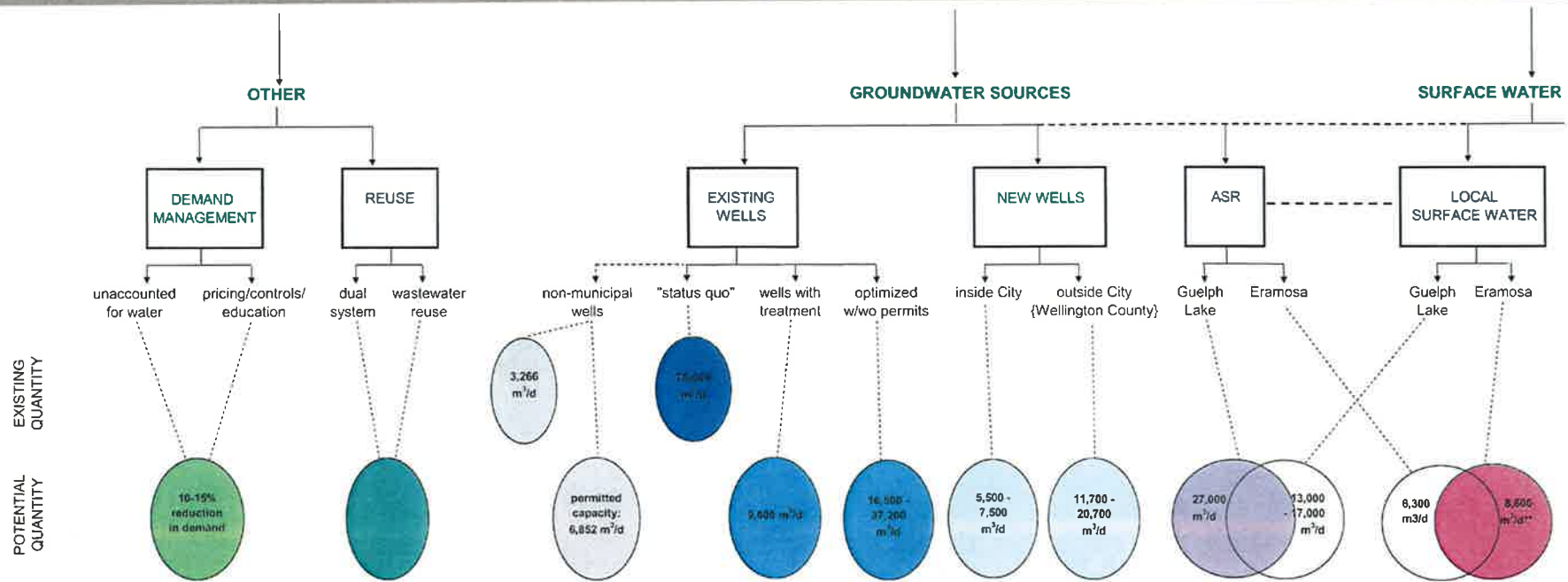


A lot has been going on...

# PROGRESS SINCE 2007 WSMP

**AECOM**

# 2007 WSMP Preferred Solution



## Short Term Recommendations:

- Demand Management / Conservation Programs
- Construct - Arkell Wells 14 & 15
- Investigate - Treatment for Existing Wells: Edinburgh; Clythe; Sacco; Smallfield; Scout Camp wells
- Investigate - Development of Existing Wells: Logan; Fleming; Hauser; McCurdy
- Investigate – New Wells Inside City: Gordon/Clair; Hanlon/Stone/Speedvale/Edinburgh

## Mid-Term Recommendations

- Investigate and Develop - Groundwater Supplies Inside City
- Investigate and develop – Groundwater Supplies Outside of the City

## Long-Term Recommendations

- Local Surface Water Sources – Treatment/ASR

# Water Conservation & Demand Management

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## Community Demand Management/Conservation Goals:

- Reduce 2006 average daily water production by 20% (10.6 MLD) by 2025 – 2006 Water Supply Master Plan
- “Use less water and energy per capita than any comparable Canadian City” - 2007 Community Energy Initiative

Based on these directives staff began development of City’s Water Conservation and Efficiency Strategy, with final strategy endorsed by Council in May of 2009.

- 10 year, \$20 million Community Water Sustainability Strategy
- Goal: Reduce water use by **8.7 MLD by 2019**

**We know it makes sense to use our water wisely. Since 2006, we’ve reduced our average water use by 12% - that means we now use 20% less water than the average person in Ontario.**

# Water Conservation & Demand Management

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## Progress since 2007

2009 Water Conservation Strategy Core Recommendations:

- Multi-sector Focus
- Emphasis on public and youth education
- Harnessing Internal Efficiencies
- Support innovation and capacity building

Funding for strategy and related resources approved by Council in 2010

Full implementation of strategy achieved in late 2011



**GUELPH WATER**  
**OURS TO CONSERVE**

# Water Conservation & Demand Management

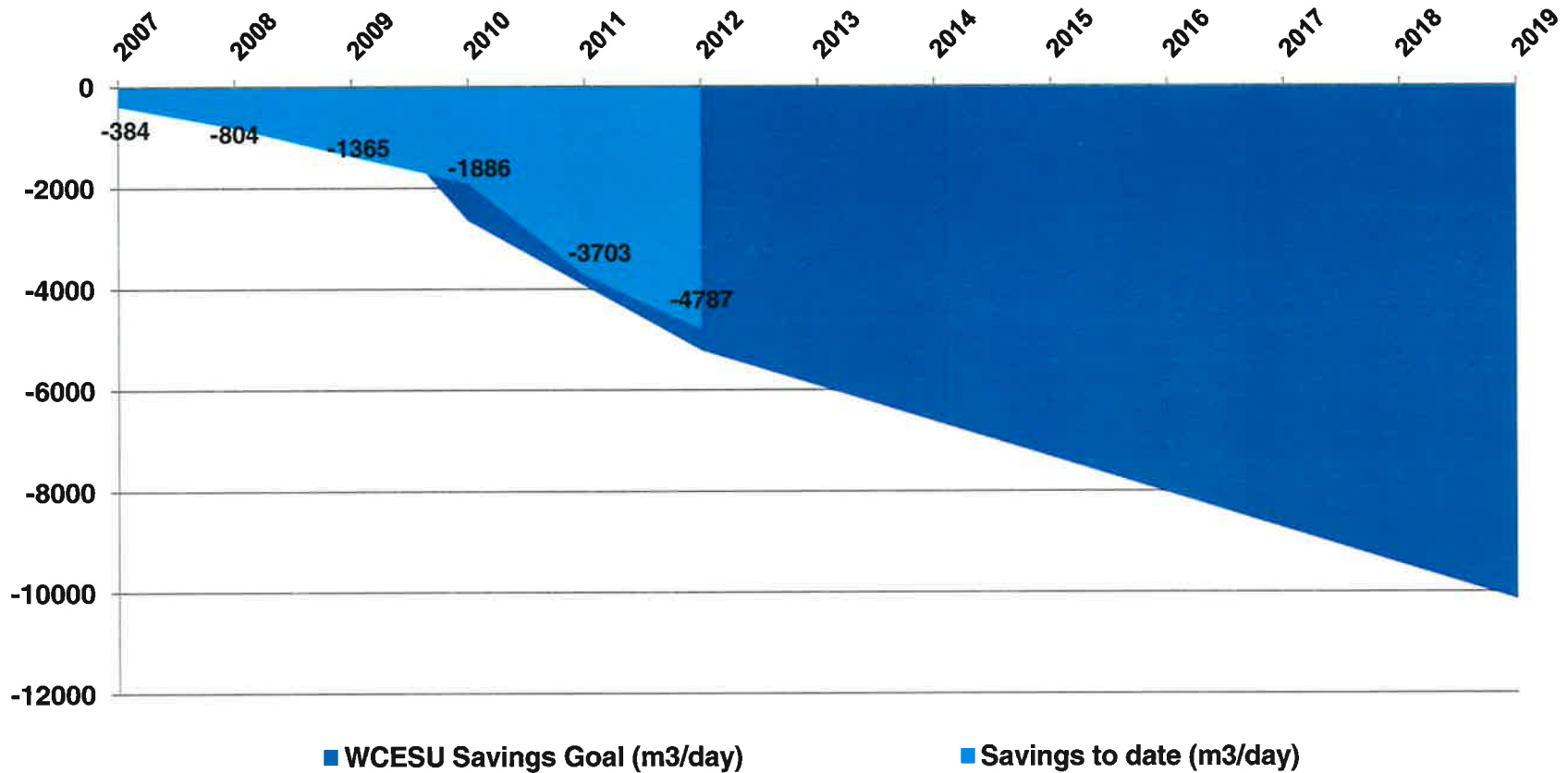
## Guelph Water Conservation Programming Resources:

- Outside Water Use By-law/Program
- Toilet Rebate Program
- Clothes Water Rebate Program
- ICI Capacity Buyback Program
- Blue Built Home Program
- Municipal Leak Detection Program
- Rainwater Harvesting Rebate Program
- Greywater Reuse Rebate Program
- Healthy Landscapes Program
- City Facility Water Efficiency Upgrades and Demonstration Projects
- In-School Education and Partner in Waterloo/Wellington Children's Water Festival



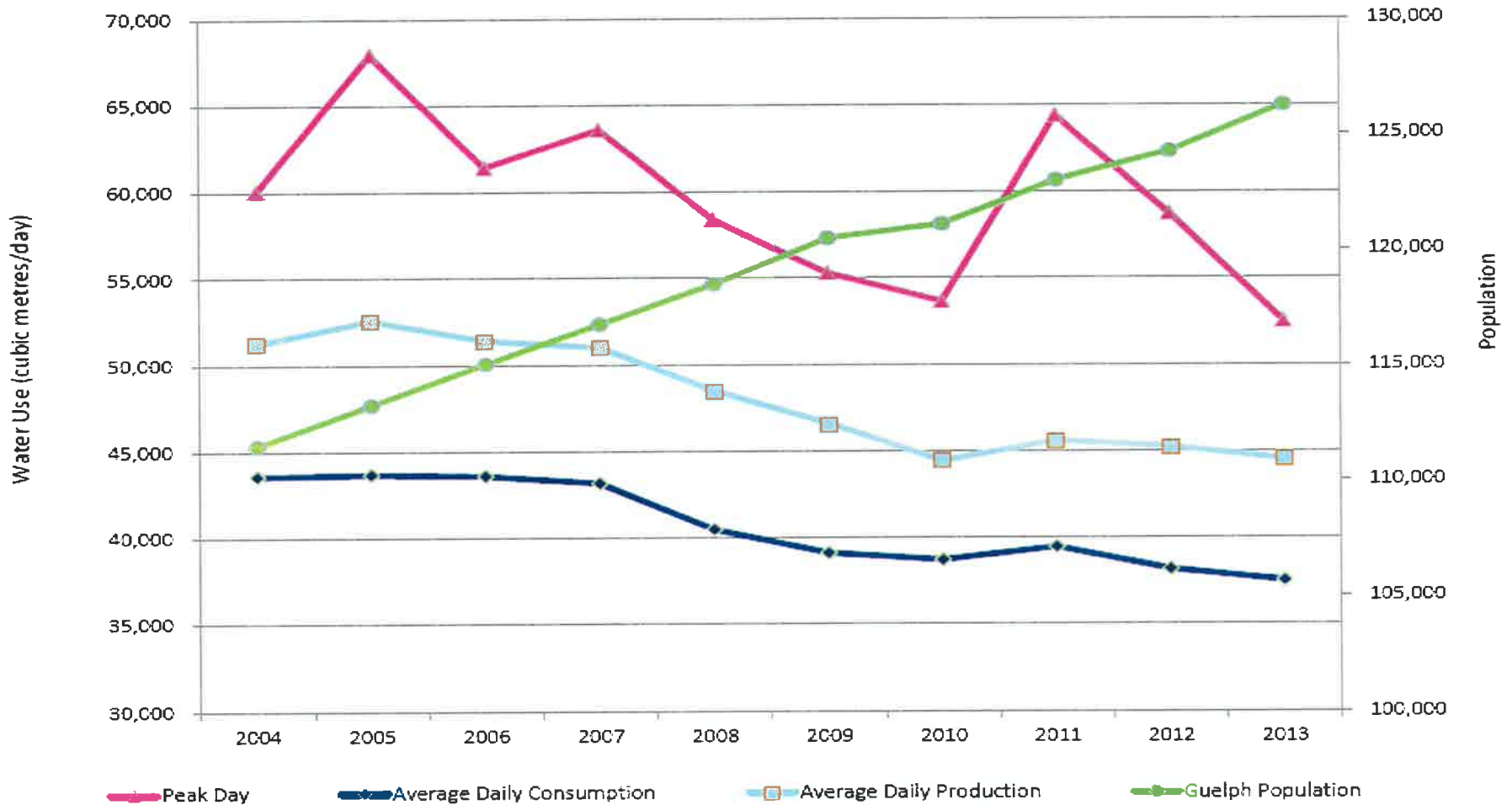
# Water Conservation & Demand Management

## Estimated Annual Savings vs. Annual Program Reduction Targets



# Water Conservation & Demand Management

## Guelph Water Production vs. Water Consumption vs. Population



**Notes:**

Consumption, production and peak day through July, 2013; population projection through late 2013



## City-Wide Studies

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### Progress since 2007

- ***Guelph Tier 3 Water Budget and Local Area Risk Assessment***
  - Objectives:
    - To evaluate the sustainability of City of Guelph's water supply system from a quantity perspective
    - To identify potential threats to that sustainability
    - To help the City manage its reliable water supply system now and in future
  - Output: complex model of Guelph's municipal aquifer system (in and outside the City)
- ***Guelph Drinking Water Source Protection Plan and Policies***
  - Objectives:
    - To comply with Clean Water Act requirement to develop local and watershed based Source Protection Plans
    - To develop policies to protect existing and future drinking water sources from unwanted impacts and harmful contaminants
  - Output: Implementation of Guelph Source Protection policies through Risk Management Plans



# New Infrastructure

## Progress since 2007

- **Construction of Arkell Well 14 & 15 Facilities (2011)**
- **Arkell Adaptive Management Plan and Operational Testing Program (2011 – 2014)**
- investigations and monitoring programs to increase its water taking from the Arkell bedrock wells from 19,584 to 28,800 m<sup>3</sup>/day; elements include:

AMP – focus is potential impacts on Blue Springs Creek ecosystem (located 2km NE of Arkell Spring Grounds)

GMP – groundwater monitoring program

OTP – well field operational strategy to ensure AMP testing requirements are achieved

**Observations to date.....**



## Class EA / Treatability Projects

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Progress since 2007

- *Guelph Southwest Quadrant Water Supply Class EA*
- *Clythe and Helmar Treatability Assessment*
- *Clythe Well Rehabilitation and Assessment*
- *Clythe Well Class EA*



# Hydrogeological Investigations & Studies

## Progress since 2007

- *Smallfield and Sacco Production Wells – Well Rehabilitation and Hydrogeological Assessment*
- *Guelph South Groundwater Supply Investigation*
- *Arkell AMP and OTP*
- *Arkell Spring Grounds – Hydrogeological Study in Support of a Caisson Collector System*





## We'd Like Your Input...



### Questions to consider:

- Should Guelph consider changes to the level of service (water supply) provided by the City of Guelph?
- Do you feel the City's current water conservation goals are adequate? Are there additional goals that should be considered?
- Do you believe the City should consider water use goals for new growth (e.g., industries that require less water or conservation-oriented new residential developments?)
- How much water (i.e., percentage of existing supply capacity) do you believe should be considered as 'back-up' to ensure security of supply?
- Are there existing activities / programs or new approaches that you would like to see continued /prioritized or initiated?
- Are you aware of pressing concerns or issues related to water supply that we should consider while updating the Water Supply Master Plan?