

TRIECA

York Region: Innovative and Sustainable Development Approvals Process – Pilot Project

March 27, 2013





The Sustainable Approach to Water Use

Strategy Goals

- A new way to think about how we use water
- 2. Reduce water use through innovation, conservation, policy and behavioural change
- 3. Plan from 40 years in the future back to the present
- 4. Sustainable Funding Model

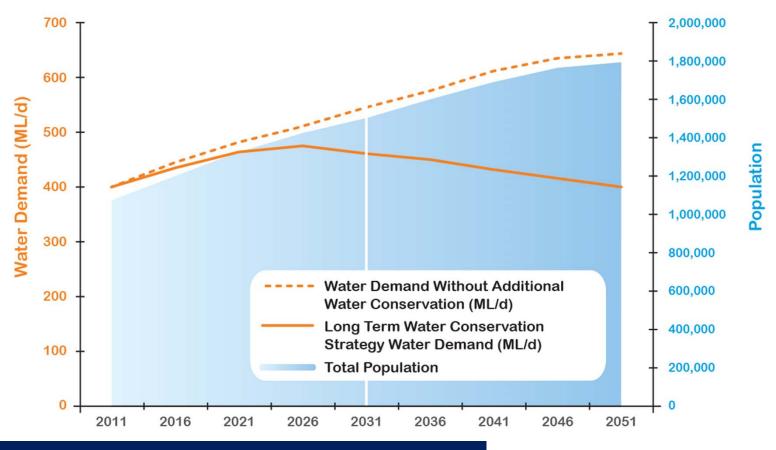








Long Term Water Conservation Strategy



No New Water by 2051







Leading Jurisdictions in Water Conservation

Supply < Demand

- Invest in large scale water conserving technology
- Strict regulations governing water use in residential and ICI sector
- Requirements for new development to have advance water saving technology, appliances and fixtures
- Full political and public support
- State/provincial legislation and regulations requiring jurisdictions and water utilities to meet water saving targets







The Challenge

How to meet the 150 lpcd?

A New Approach:

- 1. Integrated water resource management
- 2. Segment and target the end-user market
- 3. Market-based programming







Incenting Green Building

- Reduced development charges
- 'Bonusing' increased allocation
- Expedited approval







Project Description

- A new development grade related residential pilot study of an expedited approval process for low impact development/green construction.
- Developing green development targets and supporting measures guidance
- Monitoring and evaluating green technology performance















Project PartnersPartially Funded by MOE Showcasing Water Innovation









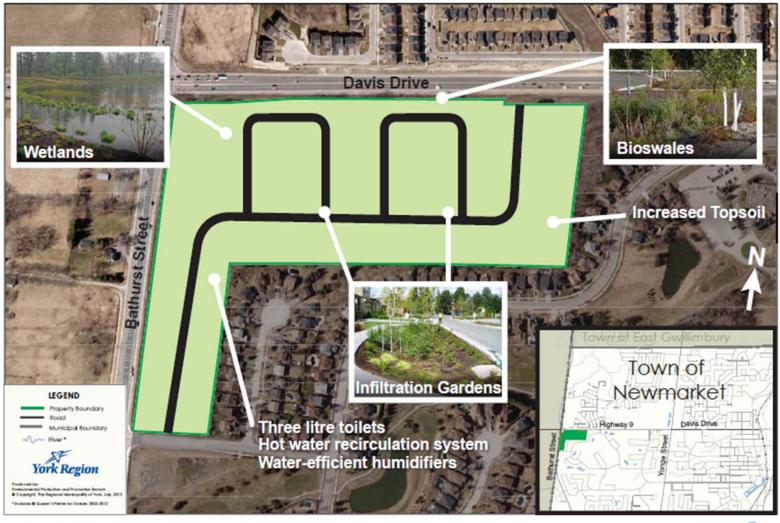








Innovative and Sustainable Design Approvals Pilot Project Key Map









REQUIRMENTS & TARGETS

| CATEGORY | CURRENT REQUIRED | EXPEDITED APPROVAL MINIMUM TARGET |
|-------------------------------------|---|---|
| Stormwater: | | |
| Quality – Phosphorous | Level 1 / Pre=Post Phosphorus, whichever is lower | Further 10% Reduction |
| Quality – Total Suspended Solids | 80% removal of TSS | Further 10% Reduction |
| Quantity – Runoff | 2 to 200 year post to pre control | Same |
| Quantity – Erosion | 5mm Rainfall Runoff Criteria | 25mm Rainfall Runoff Criteria |
| Quantity - Infiltration | Water Balance – maintain existing infiltration | Same |
| Water Conservation | Ontario Building Code | Minimum 25% reduction over Ontario Building Code Standard |
| Energy Conservation | Ontario Building Code | Minimum 25% reduction over Ontario Building Code Standard |







THIS PROJECT WAS MADE POSSIBLE BY:











WHY IS THIS TRIAL BEING DONE?

- Lawn watering can contribute to seasonal water shortages
- Current lawn watering practices contribute to high average household water usage
- To test sustainable alternatives to sod

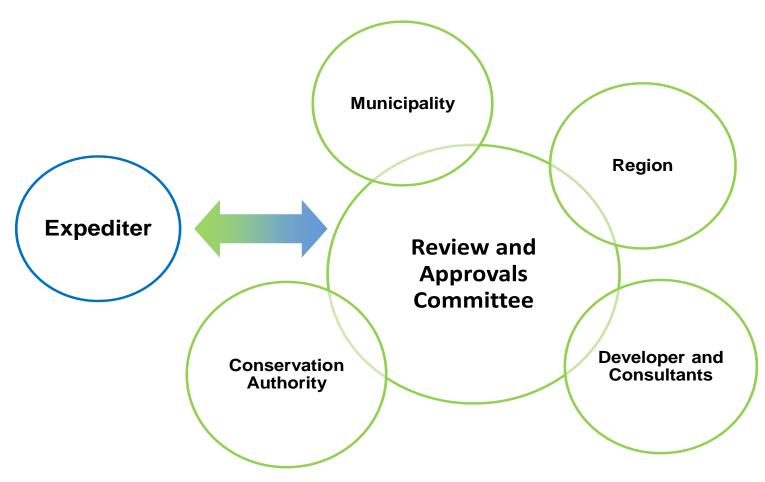
WHAT ARE WE TESTING?

- Whether there is an optimal time of year to sod and/or seed for a successful and healthy lawn
- How the variety of seed and sod mixtures react to drought conditions, disease and pests
- How the seed mixes and sod differ in weed density, turf quality, colour and ground cover





Potential Sustainable Development Approvals Model









Advantages of Expedited Approval

Municipality and Conservation Authority

- Drives sustainable building
- Supports competition for greener building within the industry
- Supports innovation in the marketplace
- Reduces the onus of prescriptive management from government agencies
- Encourages development that create socially & ecological vital communities

Builder/Developer

- Reduces approval times and associated carrying costs, liabilities and project management and administration costs
- Competitive advantage with early to the market return on investment







Next Steps

- Finalizing targets and developing supporting measures
- Develop the expedited approvals process
- Monitor and evaluate pilot project site to quantify efficacy



