



What is HCA's Role?



**Building Resilience and Managing
Change: Climate Change**

Projected Changes and Associated Impacts in Ontario



Infrastructure

- Community infrastructure e.g. water treatment and distribution, energy generation and distribution
- Flooding due to intense storm systems
- Projected decreases in Great Lakes levels

Water

- More frequent water shortages (agricultural areas, urbanizing areas)
- More precipitation and extreme storms

Projected Changes and Associated Impacts in Ontario



Agriculture

- Crop and Livestock
- Other indirect influences –pests, invasive species, weeds and disease, air issues e.g. acid rain, smog.

Health

- Increase in risk of illness and premature death due to heat waves, smog episodes and ecological changes that support the emergence of mosquitoes and various ticks that spread disease.

Projected Changes and Associated Impacts in Ontario



Communities at Risk

- Urban communities will be impacted by the volume and quality of drinking water.
- Frequent extreme temperature and rainfall events resulting in consequences to social and physical infrastructure.

Forests

- A shift will occur to more drought-resistant growth
- Increased instances of spread of disease, fire and blowdown windstorms

Projected Changes and Associated Impacts in Ontario



Ecosystems

- A shift in fish species from cold and cool species to warm water species
- Projected lower water levels in the Great Lakes will damage wetlands thereby impacting shoreline integrity and habitat as a result of increased erosion, poor water quality and increase in invasive species.

Our Principles: Some Terms



Adaptive Environmental Management

Learning by doing and making adjustments to our actions when we learn

Information-based Decision –making

We will seek out and use information on which to base our decisions

Precautionary Approach

We will err on the side of the environment in our deliberations

Collaboration

We will seek out and build partnerships from all sectors on common goals and end points

What are others around us doing?



- Province of Ontario

- ✓ Program to use gas tax to reduce generation of Greenhouse Gases
- ✓ Report to the Premier with 54 recommendations from Advisory Panel
- ✓ I really don't know!!!

- City of Hamilton

- ✓ Developed a series of reports looking at reducing Greenhouse Gas Emissions
- ✓ Seeking input from the community on Local Economy & Business, Education & Skills, Housing & Buildings, Food, Consumption, Moving People, Moving Goods and Supplies, and Water.

- Other CA's (2008 poll)

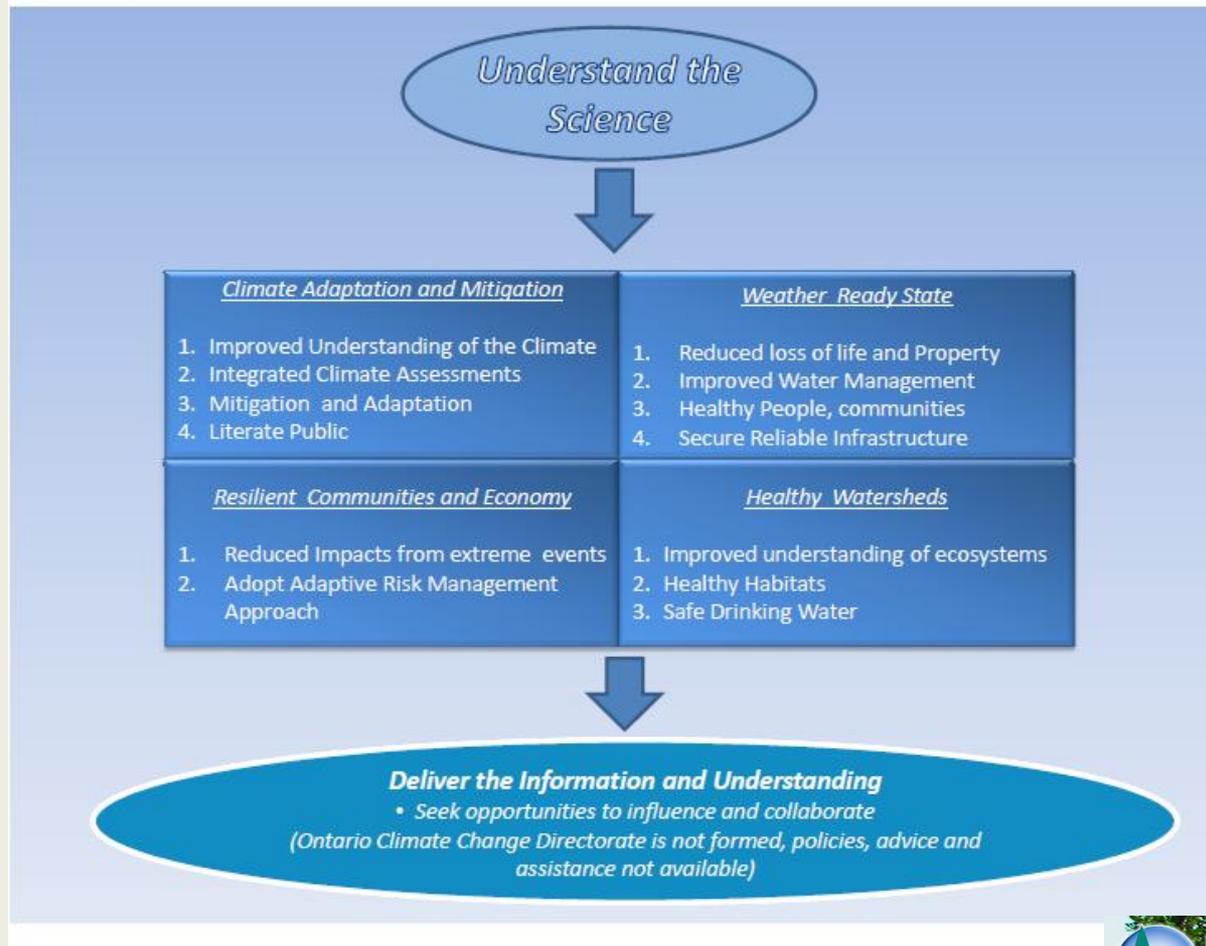
- ✓ 3 CA's had aggressive strategies in place
- ✓ Half were doing technical analyses and projects to raise awareness
- ✓ 32 of 33 interviewed felt CA's have a role in climate change

What are CAs Considering for Adaptive Strategies



- Implementing riparian buffers
- Enhancing and restoring wetlands
- Reforesting
- Putting more storage back on the landscape
- Raising awareness of the impact of northward migration of flora, fauna and disease
- Reviewing and if needed adjusting dam operations
- Implementing good risk management policies
- Maintaining a current watershed plan
- Building Demonstration Projects -Education

Model for Building Resiliency



What does this mean to HCA



We need to continue to manage:

- Our watersheds (features, their functions and linkages) in the face of ongoing and future issues
- Future issues including growth, redevelopment, aging infrastructure, deterioration in water quality, flooding and changing climate
- Within the context of Integrated Watershed Management to address these issues in a proactive manner
- Our programs with climate change as an additional but integrated consideration. These will be small changes initially as we work towards our endpoints

Next Steps



- Continue to dialogue with staff, HCA Board and HCA Foundation work towards a Strategy by December 2011
- Increase HCA's understanding of how the climate is changing and the potential impacts on a local basis e.g. downscaling and vulnerability analyses
- Apply this understanding to HCA's plans and operations with “no regrets” integrated adaptation and mitigation strategies
- Assess the need for policy and guidelines e.g. Stormwater management
- All of the above will be periodically reviewed and updated.