

# WhiteCAP Newsletter

## Whitehorse Climate Change Adaptation Project



### Welcome to WhiteCAP

The Whitehorse Community Climate Change Adaptation Project (WhiteCAP) is an initiative lead by the Northern Climate Exchange (NCE). The NCE is assisting three Yukon communities to develop Climate Change Adaptation Plans through funds from the Northern Strategy. Whitehorse is the second community in the Yukon to be part of this planning process (Dawson was first and Mayo will be next).

The intent of the Community Climate Change Adaptation Projects is to carry out climate change adaptation planning and implementation of pilot adaptation actions in three Yukon communities. The WhiteCAP project began in 2009 and a draft Adaptation Plan for Whitehorse will be completed by Spring 2010 with implementation of select pieces of the plan anticipated to start later in the year.

This project will assist Whitehorse to:

- Assess challenges and opportunities from climate change;
- Develop a plan of action to respond to the challenges and capitalize on the benefits; and
- Implement pilot actions.

Whitehorse will benefit from the project by receiving:

- A comprehensive study of local climate change impacts and the vulnerability of the community;
- Identification of potential opportunities from climate change;
- Identification of community-specific adaptation options;
- Increased community capacity to address climate change; and
- \$100,000 towards adaptation projects identified as priorities by the community.

### WhiteCAP Local Advisory Council and Vision

The main roles of the WhiteCAP Local Advisory Committee (LAC) are to provide a local perspective, to champion the process within the community, and to guide key decisions, including the allocation of money for pilot adaptation projects.

### Upcoming

**7 Jan 2009 - Expert Workshop**  
9 am to 4 pm at Mount Mac  
please contact John Streicker  
john.streicker@gmail.com 332-2222

**14 Jan 2010**  
**Community Coffee House**  
5 pm to 10 pm drop in  
at the Canada Games Centre  
All are welcome!

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## WhiteCAP Local Advisory Council and Vision continued...

The LAC was chosen to balance the broad and overlapping interests / jurisdictions that coexist in Whitehorse while striving for solutions which will be effective and widely supported. We will seek much wider input from the community when we engage in fuller consultation, e.g. through our public workshop on January 7 at Mount Mac. For more information please contact us (Page 4).

The LAC has drafted a working vision statement. We welcome public feedback and comment on it.

**WhiteCAP Vision** *The community of Whitehorse is prepared for and adapting to climate change, including variability and uncertainty, by building capacity, knowledge, resilience and partnerships. Adaptation proactively enhances the sustainable well-being of the community.*

## How will the community of Whitehorse change in the coming years?

Whitehorse is projected to change in the coming decades, not only with a warming climate, but also as a result of growth and development. To understand where the community is vulnerable and where it is resilient, we develop several possible stories of the future. On November 9, 2009, specialists met at Yukon College to brainstorm on these scenarios. The group included experts on climate, economy, infrastructure and planning. The goal was to brainstorm elements of four vulnerability scenarios which will act as a framework for adaptation planning. Below is a synopsis of the four scenarios:

### Scenario 1 - Some Growth and Some Climate Change



After several years without much growth, Whitehorse will grow by 6000 people by 2030. The economy will grow with the Public sector continuing to dominate. Whitehorse is expected to warm by about 1°C in the next 20 years, and 2°C by 2050, with winters changing more than summers. The climate will be windier, with more intense precipitation and be more variable than it has been. Infrastructure strain will continue to increase, but the institutional capacity of the public sector will be sufficient to compensate for the changes. Despite this increased strain on infrastructure the trend toward sustainability will increase.

### Scenario 2 - Lots of Growth; Some Climate Change



Whitehorse is now projecting significant growth, up 12000 people by 2030 and double our current population by 2050! Whitehorse is expected to warm by about 1°C in the next 20 years, and 2°C by 2050, with winters changing more than summers. We expect later freeze-up and earlier break-up. An increasing percentage of the population will be employed by resource, service, commercial & industrial sectors and Whitehorse will continue to be the hub for other Yukon communities. There will be infrastructure development (e.g. 2nd bridge built crossing the Yukon river) but there will be strain on infrastructure as a result of rapid growth and this will result in only moderate development toward sustainability.

## Announcements

### NRTEE

The National Roundtable has just released a report on infrastructure adaptation called *True North*.  
[www.nrtee-trnee.com](http://www.nrtee-trnee.com)

### Dawson

The Community Climate Change Adaptation Plan is now available on line:  
[www.taiga.net/nce/adaptation/dawson.html](http://www.taiga.net/nce/adaptation/dawson.html)

### Geog 290

Yukon College is offering a night course starting in January - Climate Change in the Circumpolar World.  
[www.yukoncollege.yk.ca](http://www.yukoncollege.yk.ca)

## Whitehorse community scenarios continued...

There is always uncertainty with both climate change projections and the expected changes to the community of Whitehorse (population, economic growth, etc.). One of the ways to address this uncertainty is to develop a range of plausible scenarios, which bracket the most likely outcomes. While we won't know which scenario or even which components within a scenario will become our future, we have reasonably high confidence our future Whitehorse will fall within the range of our four possibilities.

### Scenario 3 - Lots of Climate Change; Some Community Growth



In this scenario, Whitehorse population grows by 6000 people by 2030 and 12000 people by 2050. The ratio of government employees in the workforce normalizes. Whitehorse warms by 2°C in the next 20 years, double that by 2050. Winters see more change with warming and an increase in annual snowfall (+10 cm). The climate will be more extreme and go through freeze-thaw more often. There will be some strain on infrastructure due to population growth, but more strain will result from climate change (e.g. snow clearing). Development vs. environment tension persists resulting in low levels of sustainability. Fire risk is significantly increased.

### Scenario 4 - Bright Lights - Big City



Whitehorse growth booms, up 12000 people by 2030 and double our current population by 2050! At the same time, Whitehorse warms 2°C by 2030, double that by 2050. Climate change drives northern sovereignty issues and even higher federal government transfer payments ensue. The climate is more extreme including more intense precipitation and periods of drought. Run-off, increased erosion projected and increased groundwater flooding are projected. Pressure on infrastructure is high, but increases in demand side management leads to a measurable increase in sustainable development.

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## How will we respond to climate change?

### Adaptation

Adaptation responds to the impacts of climate change. It includes actions that reduce, minimize or prevent the negative impacts of climate change on human and natural systems. It also includes actions that position us to take advantage of new opportunities that are presented as a result of climate change.

The WhiteCAP Project is concerned with how the community of Whitehorse will proactively adapt to the changes we now anticipate.

### Mitigation

Mitigation places its focus on the cause of climate change itself. It includes actions that reduce the sources or enhance the sinks (removal) of greenhouse gases.

Mitigation and adaptation are inter-related: mitigation without adaptation leaves us in harms way; adaptation without mitigation leads us towards harm.

Both adapting to and mitigating climate change create a more sustainable future.

### Sustainability

The City of Whitehorse is working to implement an Integrated Community Sustainability Plan. Responding to climate change is a branch of that plan. The WhiteCAP Project thus contributes to the City's work to become more sustainable.

Other community partners which advise the WhiteCAP project include, Kwanlin Dün & Ta'an Kwäch'än First Nations, Yukon Government, the Yukon Conservation Society and the City.



## Northern Climate Exchange

independent information, shared understanding, action on climate change

### WhiteCAP Contact Info

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The mandate of the Northern Climate Exchange (NCE) is to promote an increased understanding of, and to identify appropriate responses to, climate change. NCE facilitates two-way communication between communities and governments, and builds community capacity to address climate change in Yukon and northern Canada.

#### Guiding Principles:

- Recognize that community participation in research and decision making is essential to long term resource, environmental and cultural sustainability in the North;
- Acknowledge that an the exchange of knowledge and expertise can strengthen links across northern Canada and among circumpolar nations; and
- Ensure that an appropriate emphasis is placed on the collection of local information and scientific knowledge in order to best reflect northern insights and needs.