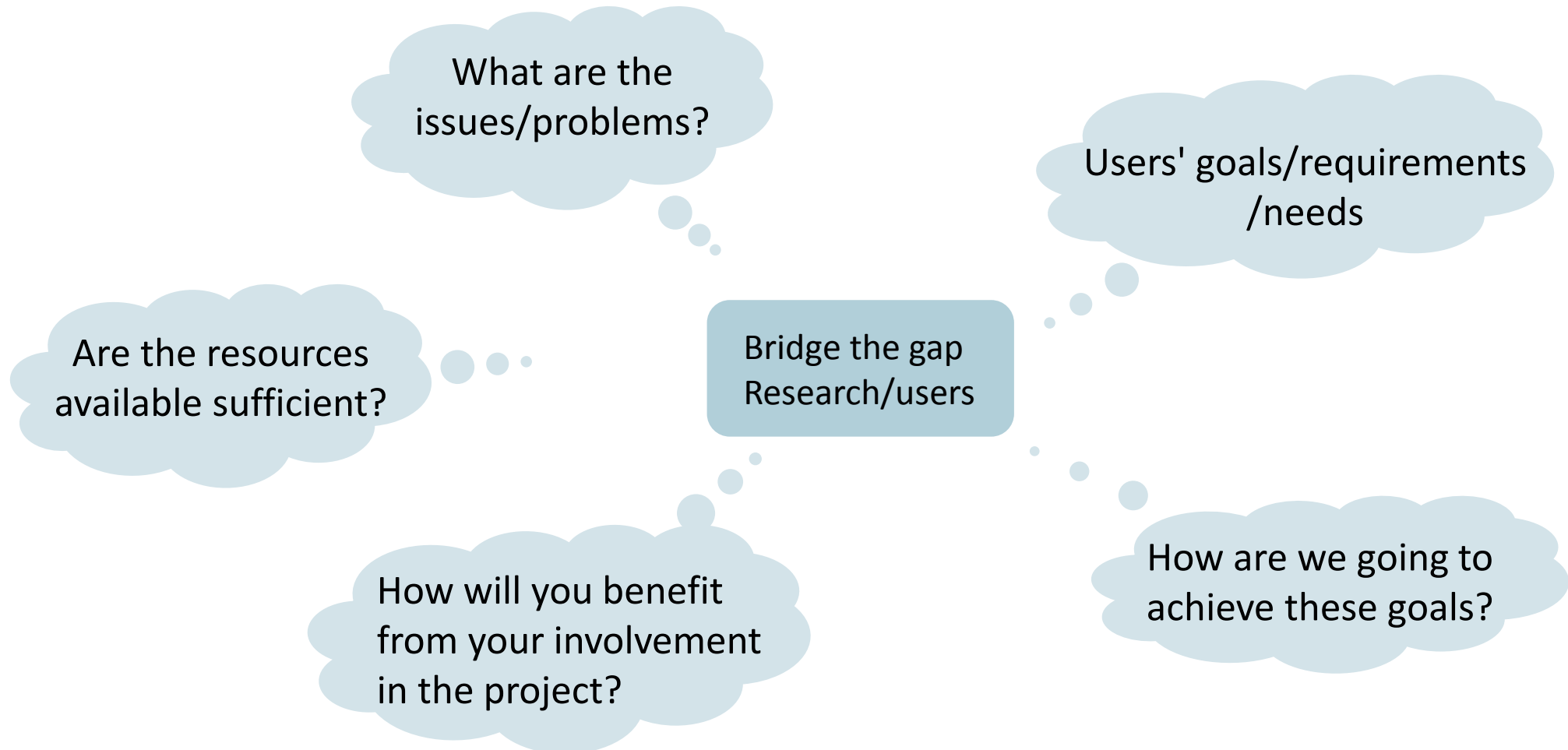


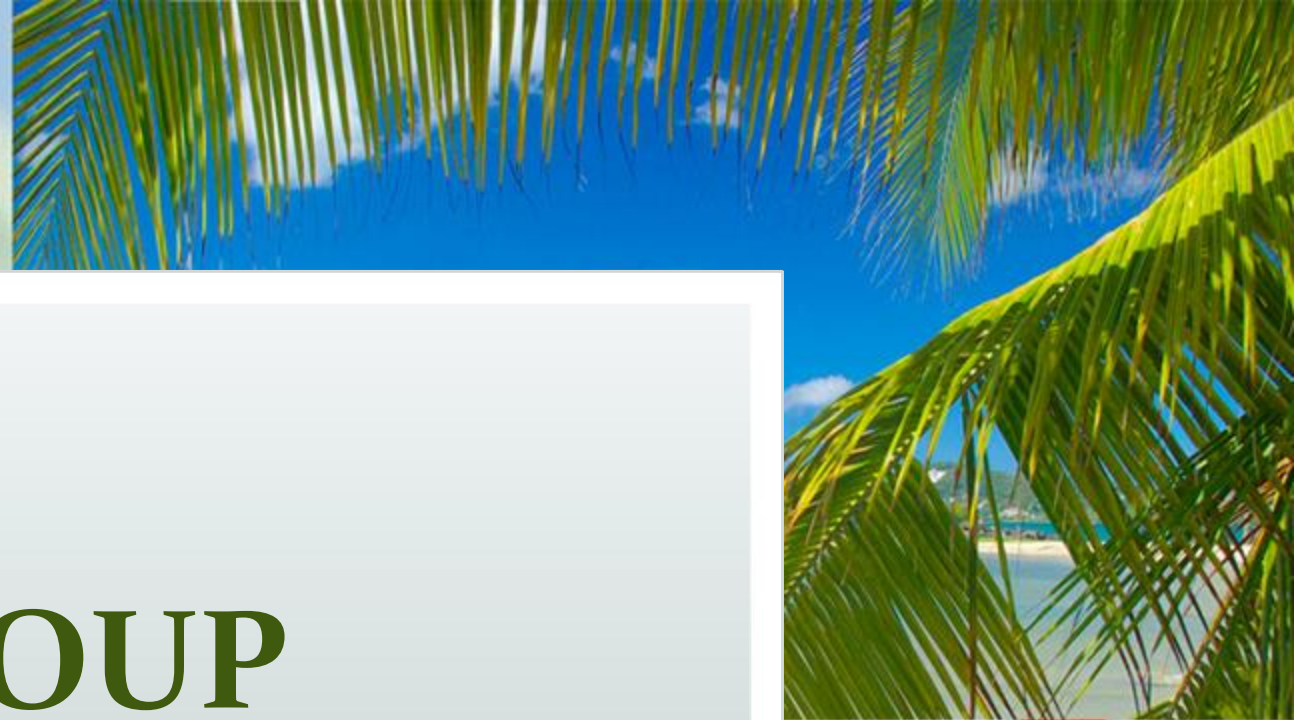
# GROUP DISCUSSION 1





# Gaps and needs from user perspective





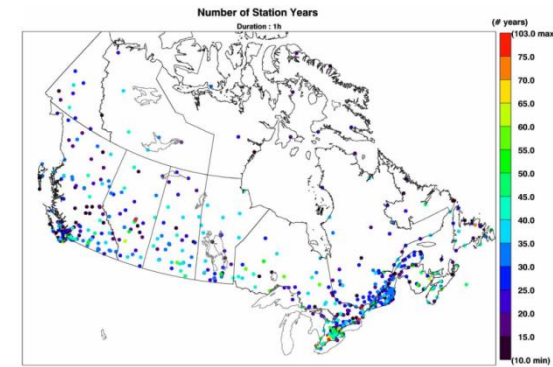
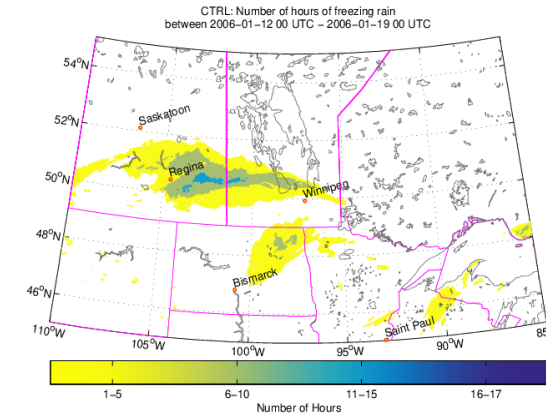
**GROUP  
DISCUSSION 2**



# Science progress and needs

- What are the main issues?
- What are the opportunities?

**Observed/historical data and events**

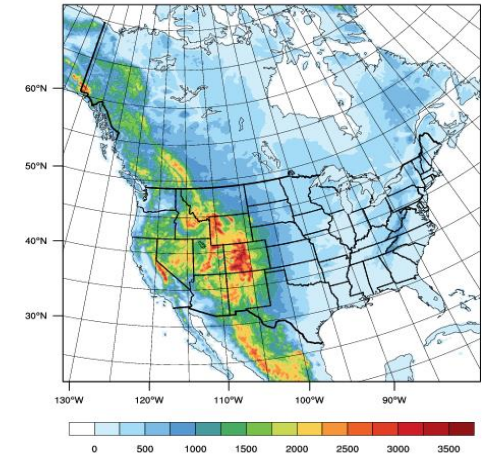
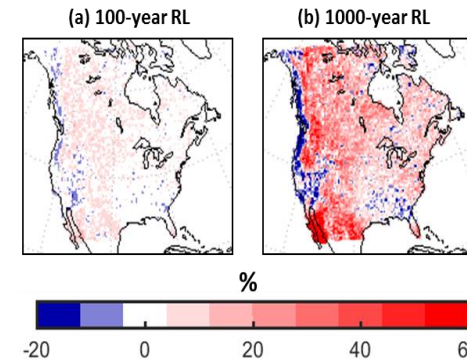
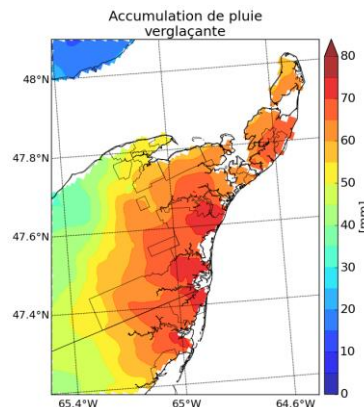


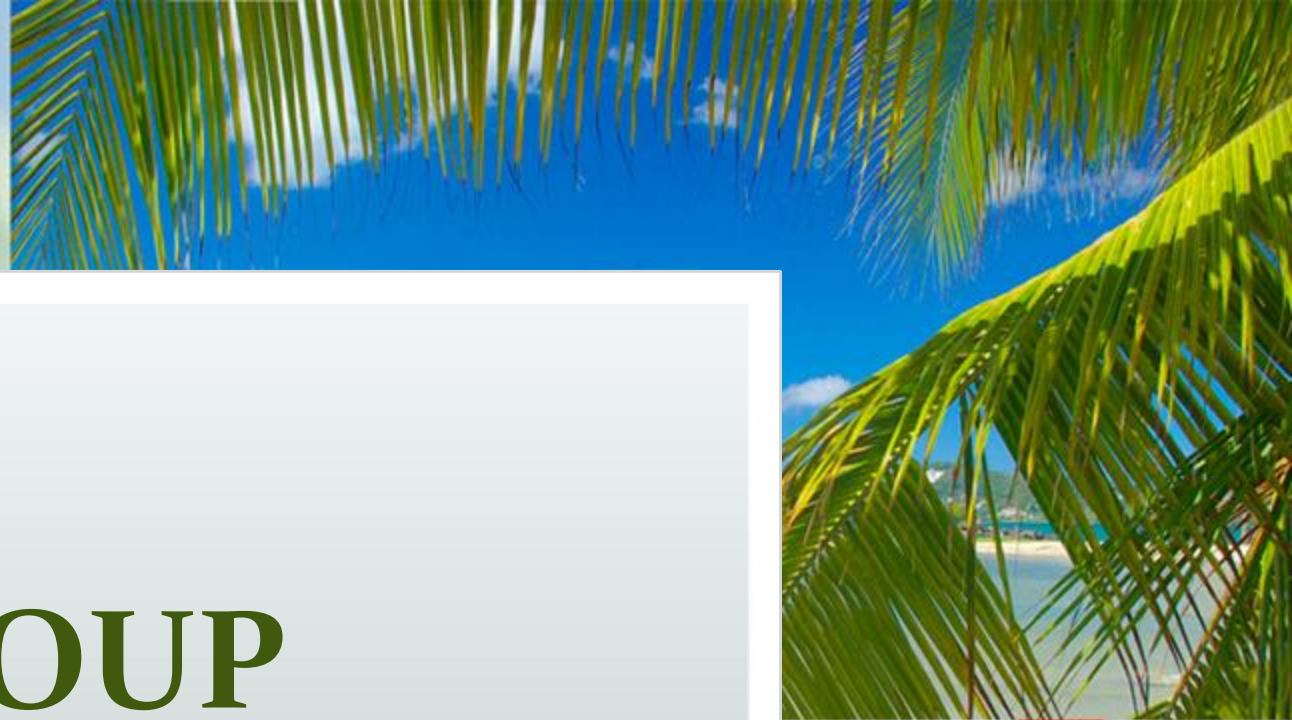
**Future projections, intensity changes**

**New WRF simulations**

**Historical simulations**

**Return periods**





**GROUP  
DISCUSSION 3**





# Funding renewal

## Funding renewal

- Expand the scope of research topics: investigating teleconnection patterns (El-Nino, PDO, NAO,...)
- Incorporate information from improved models (CMIP6 and WRF -4km), and from improved observational and user-provided datasets
- Expand on linkages within GWF

## No funding renewal

- How to manage commitments that will extend beyond phase 1?



Climate-Related Precipitation Extremes  
Les précipitations extrêmes liées au climat



# WORK PLAN

REGINA  
MARCH 26, 2019



# Work plan for year 3

## What do we have?

- Information from users on specific extreme events relevant for each sector
- Lots of model products with various temporal and spatial characteristics
- Knowledge about the science and the observational/model tools

## How are we addressing user needs?

Continue :

- the implementation and evaluation of WRF model over North-America
- producing estimates of the change of the severity of extremes by comparing the WRF historical and PGW simulations
- producing and documenting statistical estimates of relevant changes in hail, heavy rain and freezing precipitation





# Work plan for year 3

- analyzing climate extremes indicators relevant to each sector
- identifying precipitation distribution, intensity and types during storms that caused damages to infrastructure
- assessing the advantages of treating extreme events as compound events
- assessing the potential for improving IDF curves and projecting IDF curve change- the Generalize Extreme Value distribution



# Work plan for year 3

- Continuously check with each user and update their needs (regular calls, meetings, ...)
- Final workshop to ensure that user needs have been met and to receive user feedback on 'what next' for years 4-7
- Ensure all data/model/analysis activities and progress have been documented and/or evaluated



# Important deadlines

- 2<sup>nd</sup> GWF ASM- registration deadline: **April 1, 2019**
- Annual Progress Report 2018-19: **April 30, 2019**
  - Changes in the scheduled budget?
  - A list of publications and academic presentations
  - NEW HQPs (hired during the period April 1, 2018 to March 31, 2019) need to complete an online Self-Identification form on the CFREF website



# Shared links with Health Canada

- Contribution to the UNEP Adaptation Gap report which discuss the important role of early warning and climate modelling(Theme – climate change and health)

<https://www.unenvironment.org/news-and-stories/press-release/growing-gap-between-ambition-and-action-world-prepares-future>

- The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come

<https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2932594-7>

- Lancet Countdown 2018 Report: Briefing for Canadian Policymakers

<https://cape.ca/wp-content/uploads/2018/11/2018-Lancet-Countdown-Policy-Brief-Canada.pdf>

- WHO Special Report on Climate and Health

<https://apps.who.int/iris/handle/10665/276405>