

# The Drought Research Initiative

A wide, flat, brown landscape under a cloudy sky, likely a field during a drought. A wooden fence runs across the foreground, and a dirt path leads into the distance.

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# SOME OF THE ISSUES

- **Will we see more droughts in the future?**
- **How will next season look?**
- **Will there be any break from the drought over the next few days?**

**And:**

- **How can we better cope with drought?**

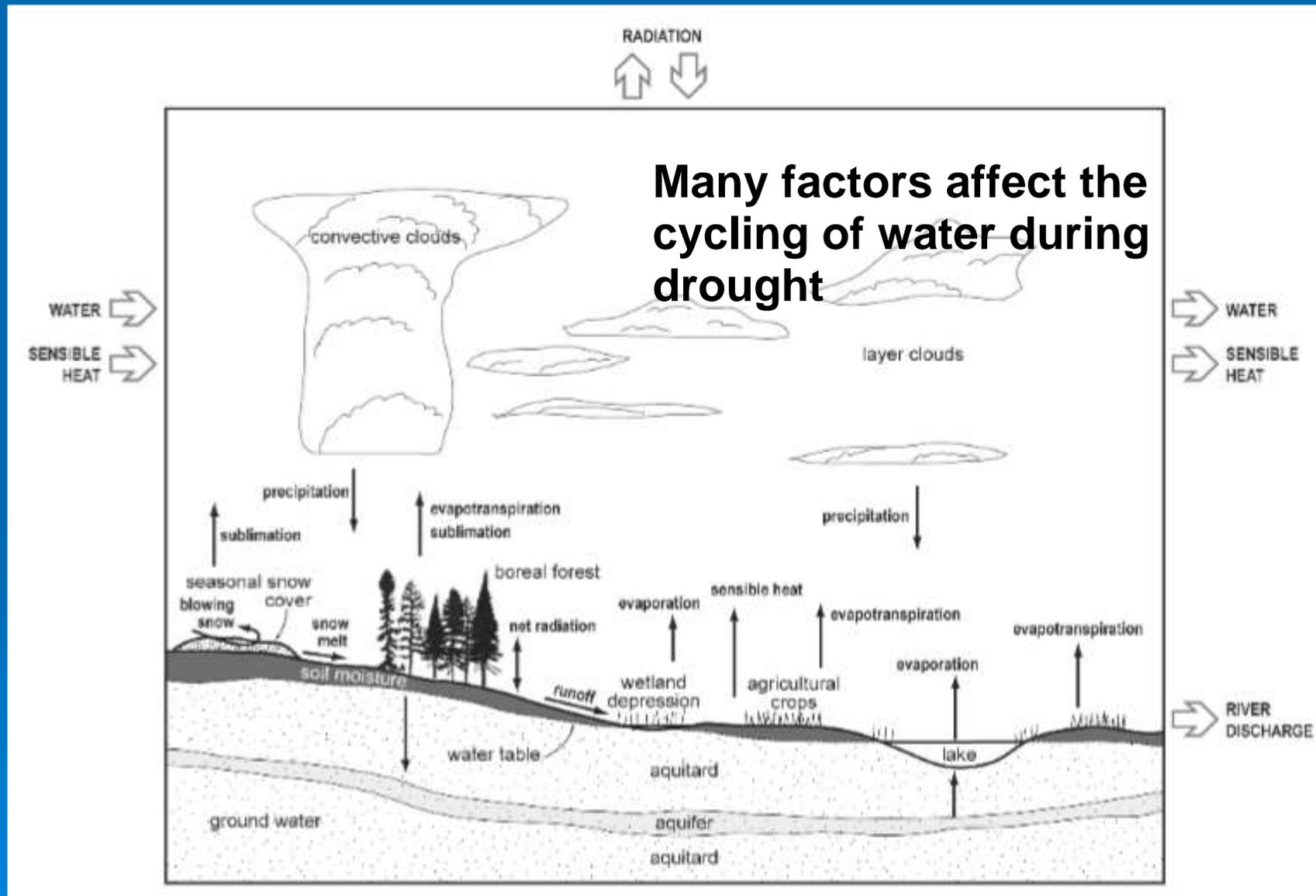
# BUT ...

These are BIG issues

easily said but not easily addressed



# WATER AND ENERGY CYCLING



# OBJECTIVES AND STRATEGY

*The objectives of DRI are:*

- *To better understand the physical characteristics of and processes influencing Canadian Prairie droughts, and*
- *To contribute to their better prediction and to improved societal preparation*

*Strategy:*

- *Focus on the recent severe drought that began in 1999 and largely ended in 2005*

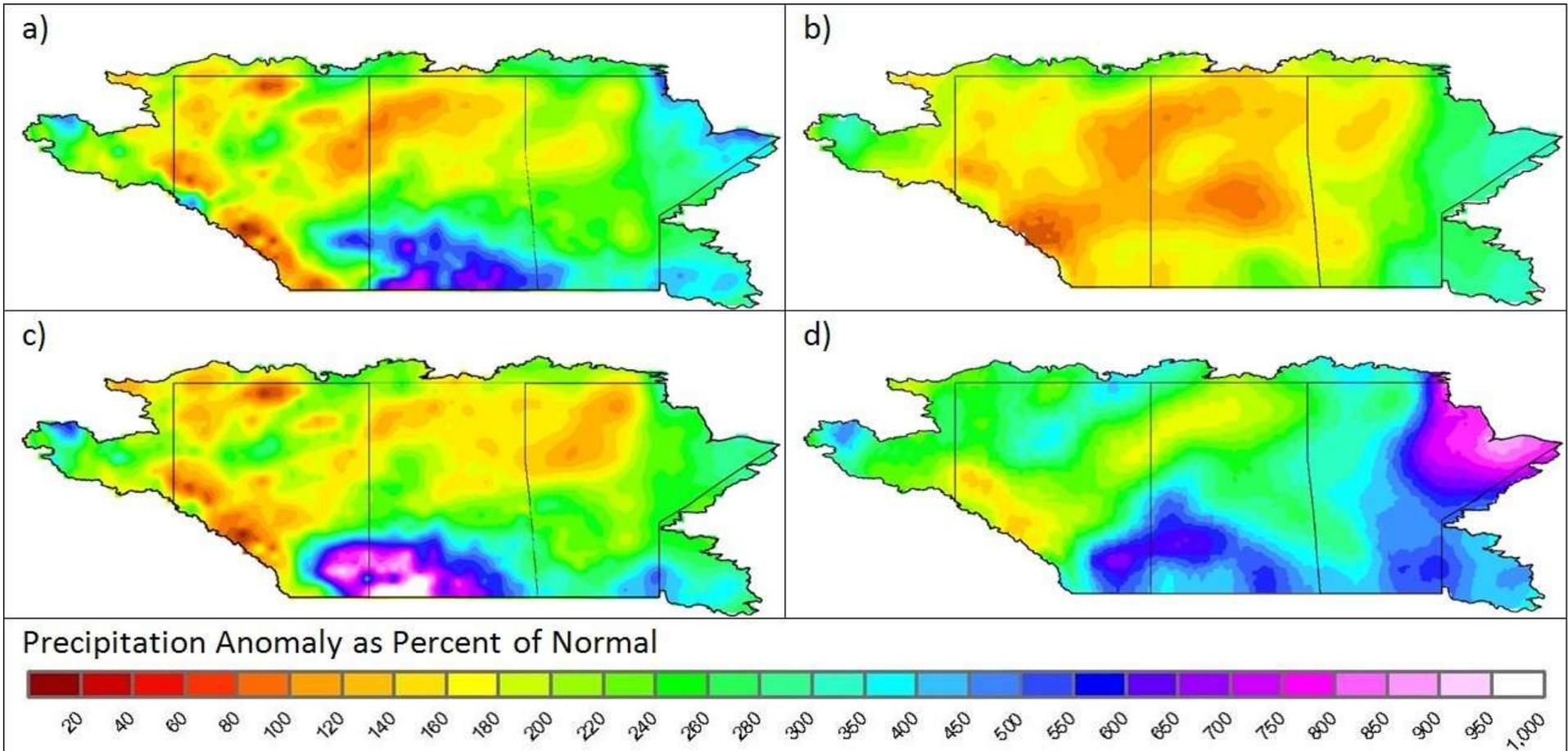
# TIMELINE OF DRI

2002:	Dec	Call for new Network LOIs by CFCAS
2003:	Feb	Initial LOI submitted to CFCAS
	Nov	Acceptance of LOI (3 y Network)
2004:	March 18-19	Drought workshop (5 y Network possible)
	Dec 19	Proposal submission
2005:	June 14	Proposal review
	August	Proposal formally accepted
2006:	Jan 11-12	First workshop
2007:	Jan 11-13	Second workshop
2008:	Jan 17-19	Third workshop
2009:	Jan 26-28	Fourth workshop
2009/10:	Synthesis workshop, User workshops	
2010:	May 12-14	Fifth workshop
2011:	March 31 or ?	Completion of all network activities



The Canadian  
Prairies

# PRECIPITATION ANOMALY



- a. Sept 1, 1998 - Aug 30, 2000
- b. Sept 1, 2000 - May 2002
- c. June 2002 - August 2004
- d. Sept 1, 2004 - Aug 30, 2005

# DRI THEMES

1. Quantify the physical features,
  - flows of water and energy into and out of the region, and
  - storage and redistribution within the region
2. Improve the understanding of processes and feedbacks governing the
  - formation,
  - evolution,
  - cessation and
  - structure of the drought
3. Assess and contribute to reducing uncertainties in the prediction of drought
4. Compare the similarities and differences of current drought to previous droughts and those in other regions
5. Apply our progress to address critical issues of importance to society

# FINAL STATEMENTS

## At the end of DRI:

- “We have **greatly increased our understanding** of drought through a focus on the recent 1999-2004/05 one over the Prairies and we have applied this to **improved prediction.**”
- “We have left a **legacy** of comprehensive datasets, improved observational and modelling techniques, a new generation of drought scientists, and a public better educated about drought.”
- “We have, in partnership with others in Canada and internationally, developed a plan to **improve drought and water cycle prediction at multiple scales.**”

# DRI STATEMENT

January 2009

We have made substantial progress in **unravelling the factors controlling the evolution** of drought and we have better placed this drought into a **larger context**. We have contributed to **national and international efforts** addressing drought and other extremes and we have increased interactions with **those affected by drought**. We are establishing our **legacy framework** including scientific syntheses, contributions to operational agencies, and outreach activities to the general public.

# LAST YEAR'S PROGRESS

- Research advances
- Collective efforts
- Supplemental funding being utilized
- Information management
- International linkages
- ...

# COMING ...

- Synthesis - science and other components
- Application
- Legacy
- Stepping stone ...

# ULTIMATE GOALS

**We always envisioned contributing to major issues:**

- **To better predict droughts over Canada, their detailed structure, and their impacts with increasing confidence**
- **To better assess whether there will be a 'drying of the continental interior' in the future**

# NOW ...

***Move the Network towards its completion***

Our final workshop

Specific sub-objectives include:

- Move towards synthesis and legacy
- Maximize benefits for partners
- ...

Enjoy the workshop!

