



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada



# North American Drought Monitor International Workshop

Ottawa, Ontario

October 15-17, 2008

Canada

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

**North American Drought Monitor Workshop**

**Atelier sur la surveillance des sécheresses à l'échelle nord-américaine**

**Taller del Monitor de Sequía para América del Norte**

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada  
Environment Canada / Environnement Canada

NOAA  
USDA  
CONAGUA  
National Drought Mitigation Center

Canada

# Welcome to the North American Drought Monitor Workshop

# Day 1 – Wednesday October 15, 2008 (Morning)

<b>7:45</b>	<b>Registration</b>		
<b>8:15</b>	<b>Workshop Begins</b> <b>Workshop Administrative Details/Objectives</b>		<b>Trevor Hadwen</b> Agriculture & Agri-Food Canada
<b>8:30</b>	<b>Welcoming Address</b>		<b>Jamshed Merchant</b> Assistant Deputy Minister Agriculture & Agri-Food Canada
<b>8:45</b>	<b>The North American Drought Monitor (NADM): Where Have We Been and Where are We Going.</b>		
	History of the NADM (2002-present) and Status of the NADM in the USA		<b>Richard Heim</b> NOAA/National Climate Data Center
	Vision and Status of the NADM in Canada		<b>Ted O'Brien</b> Environment Canada <b>Trevor Hadwen</b> Agriculture & Agri-Food Canada
	Status of the NADM in Mexico		<b>Valentina Davydova</b> Unidad del Servicio Meteorológico Nacional (Presented by <b>Richard Heim</b> NOAA/National Climatic Data Center)
	Amalgamating the Three National Assessments		<b>Richard Heim</b> NOAA/National Climatic Data Center <b>Trevor Hadwen</b> Agriculture & Agri-Food Canada
<b>10:05</b>	<b>Coffee Break</b>		

# Day 1 – Wednesday October 15, 2008 (Morning)

## **10:25 Drought Response and Management Experiences**

Drought in a Humid Climate: the 2007 Southeast USA Experience

**Tom Fransen**  
North Carolina Division of  
Water Resources – Representing the N.C.  
Drought Management Advisory Council

Viewing the National Integrated Drought Information System through a Portal

**Mark Svoboda**  
National Drought Mitigation Center

The 2001/2002 Canadian Drought Experience; Lessons Learned

**Grace Koshida**  
Environment Canada

## **11:30 Drought: The Australian Experience**

**Lynette Bettio**  
National Climate Centre  
Australian Bureau of Meteorology

## **12:15 Lunch Break (on your own)**

# Day 1 – Wednesday October 15, 2008 (Afternoon)

## **1:30 Exploring Ways to Make NADM More Relevant to Decision Makers**

What Influences Policy Direction? The Case Study of Growing Forward

**Charles Cantin**  
Agriculture & Agri-Food Canada

Long Term Economic Challenges Facing Agriculture

**Tulay Yildirim**  
Agriculture & Agri-Food Canada

A Proposed Drought Strategy for Agriculture and Agri-Food Canada

**Irene Hanuta**  
Agriculture & Agri-Food Canada

Use of Drought Products for Program Delivery- Case study of the LDAP program

**Sherry Sadler**  
Agriculture & Agri-Food Canada

Red River Basin Commission's (RRBC) Drought Preparedness Strategy

**Abul Kashem**  
Manitoba Water Stewardship & Member, RRBC Drought Working Group

## **3:10 Coffee Break**

# Day 1 – Wednesday October 15, 2008 (Afternoon)

## **3:30 Linkages to Policy and Programs Continued**

The US Drought Monitor and Drought  
Payments-USA

**Brad Rippey**  
United States Department of  
Agriculture (USDA)

Cross Border Issues Between Mexico and  
the United States

**Valentina Davydova**  
Unidad del Servicio Meteorológico  
Nacional (Presented by **Richard Heim**  
NOAA/National Climatic Data Center)

Drought Forecasting: Progress, Plans,  
and Relevance

**Doug Lecomte**  
NOAA/Climate Prediction Center

## **4:30 Guided Discussion**

**Ted O'Brien**  
Environment Canada

## **5:15 Session Ends**

## **7:00 Optional Group Supper**

# Day 2 – Thursday October 16, 2008 (Morning)

<b>8:00</b>	<b>Workshop Begins</b>	
	<b>Day 2 Introduction</b>	<b>Trevor Hadwen</b> Agriculture & Agri-Food Canada
<b>8:10</b>	<b>Drought Research and Information Sharing</b>	
	The Drought Research Initiative (DRI)	<b>Rick Lawford</b> DRI CO-ordinator
	Canadian Drought Alert and Monitoring Program (CDAMP) in Southern Ontario	<b>Sharon Fernandez</b> Environment Canada
	Canadian Crop Condition Assessment Program	<b>Frédéric Bédard</b> Statistics Canada
	Vegetation Drought Response Index (VegDRI): A Hybrid-Based Approach for Vegetation Drought Monitoring	<b>Brian Wardlow</b> National Drought Mitigation Center
	New Tools for Monitoring and Assessing Drought	<b>Brian Fuchs</b> National Drought Mitigation Center
	Monitoring Drought Beyond the Americas	<b>Mark Svoboda</b> National Drought Mitigation Center
<b>10:10</b>	<b>Coffee Break</b>	

# Day 2 – Thursday October 16, 2008 (Morning)

## **10:30 Regional Differences in Monitoring Drought**

Monitoring Drought in the Canadian Prairies  
The Alberta Example

**Daniel Itenfis**  
Alberta Agriculture and Rural Development

Monitoring Drought in Canada's Forested Regions

**Richard Carr**  
Natural Resources Canada

Canadian Precipitation Analysis

**Marco Carrera**  
Environment Canada

Temporal Evolution of Low-Flow Regimes in Canada

**Taha Ouarda**  
INRS-ETE

National Water Levels Conditions Mapping

**David Harvey**  
Environment Canada

## **12:15 Lunch Break (on your own)**

# Day 2 – Thursday October 16, 2008 (Afternoon)

## **1:30 Regional Differences in Monitoring Drought (Continued)**

Climate Differences by State

**Laura Edwards**

Western Regional Climate Centre

Mexican Climate Divisions

**Richard Heim**

NOAA/National Climatic Data Center)

State-level Precipitation Ranking for Mexico

**Valentina Davydova**

Unidad del Servicio Meteorológico Nacional  
(Presented by **Richard Heim**  
NOAA/National Climatic Data Center)

Discharge-Duration-Frequency (QDF) Curves for  
Low Flows: Theoretical Issues and Practical  
Problems Mexican Hydrology

**Alin Carsteanu**

CINVESTAV

## **2:50 Coffee Break**

# Day 2 – Thursday October 16, 2008 (Afternoon)

## 3:10 Data and Drought Indicators

Environment Canada - Data Management Issues

**Philip Jarrett / Gilles Fournier**  
Environment Canada

NADM Objective Blends Based on the Living  
Blended Paleo Drought Project

**Richard Heim**  
NOAA/National Climatic Data Center

Data products for enhancing decision support for  
crops, drought and agricultural water management:  
A summary of ongoing AAFC activities

**Andy Davidson**  
Agriculture & Agri-Food Canada

Station-based Indices for Monitoring Drought in  
the United States

**Brad Rippey**  
United States Department of Agriculture  
**Brian Fuchs**  
National Drought Mitigation Center  
**Mark Svoboda**  
National Drought Mitigation Center  
**Richard Heim**  
NOAA/National Climatic Data Center

## 4:20 Open Discussion

## 5:15 Session Ends



# North American Drought Monitor

August 31, 2008

Released: Monday, September 22, 2008

<http://www.ncdc.noaa.gov/nadm.html>

Analysts:

Canada - Trevor Hadwen  
Dwayne Chobarik  
Mexico - Valentina Davydova  
Adelina Encarnación  
Elvia Delgado  
Reynaldo Pascual  
Fernando Romero

U.S.A. - Mark Svoboda\*  
Jay Lawrimore  
Liz Love-Brotak

(\* Responsible for collecting analysts' input & assembling the NA-DM map)

## Intensity:

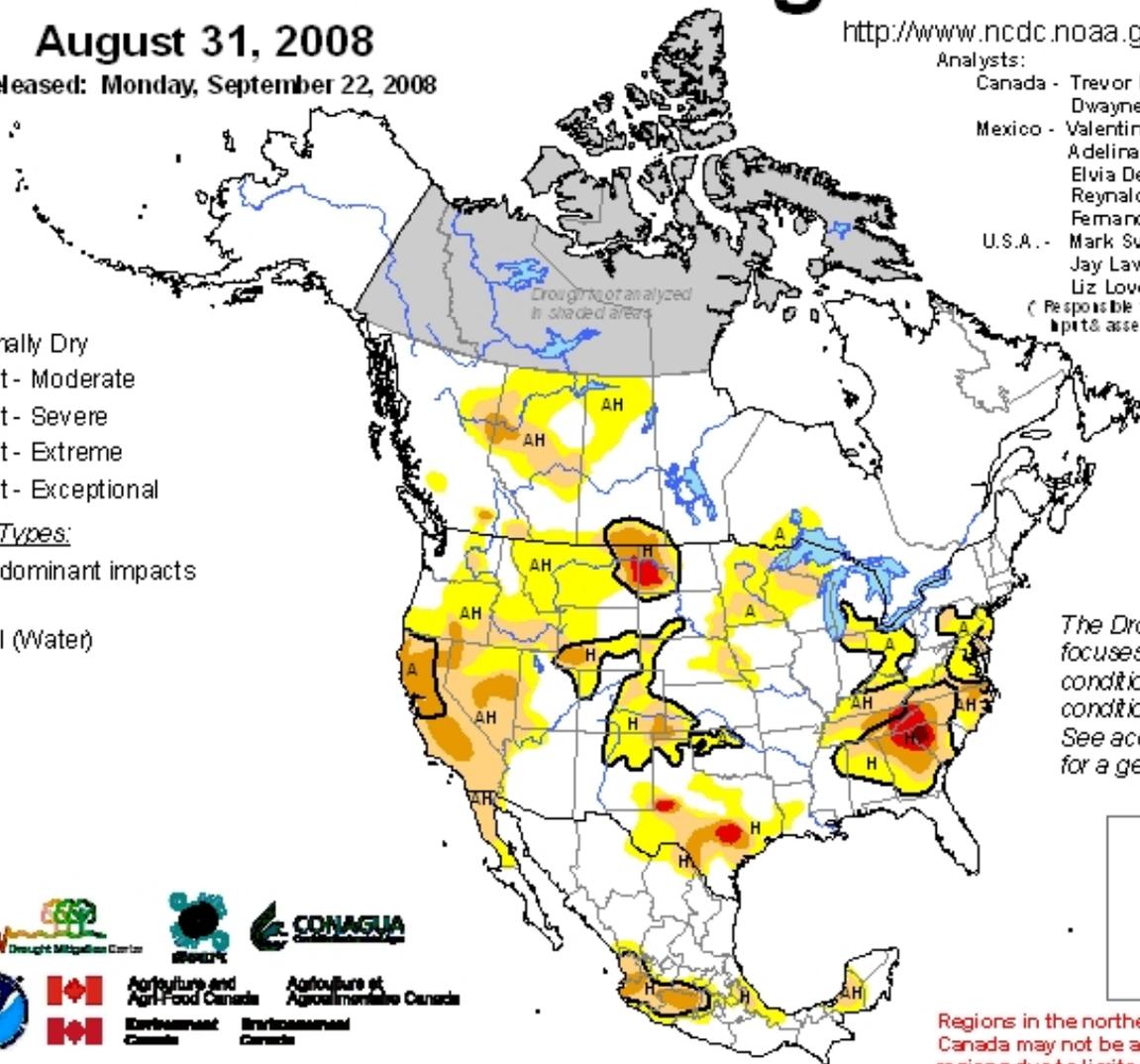
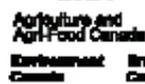
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

## Drought Impact Types:

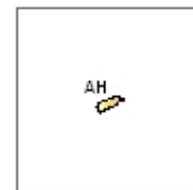
Delineates dominant impacts

A = Agriculture

H = Hydrological (Water)



*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text for a general summary.*



Regions in the northern extremes of Canada may not be as accurate as other regions due to limited information.



Canada 