**Focus questions:**

- What are the changes being witnessed in the water cycle and how will these changes impact the physical, biological, and social environments of the Arctic?
- How does the science of water and the arctic environment relate to public policy, and how can information be translated to decision makers?
- How can we forge international collaborations during IPY and beyond to address these exciting scientific challenges and opportunities?

### Wednesday, 23 May 2007

**1:00 p.m.** Welcome and Introductions

Arctic Forum Co-Chairs:  
Gunhild Rosqvist, Tarfala Research Station and Stockholm University  
Larry Hinzman, International Arctic Research Center  
Claes Hammar, Minister for Trade and Economic Affairs, Sweden

**1:10 p.m.** Opportunities for Arctic Circumpolar Cooperation  
Ambassador Helena Ödmark, Ministry for Foreign Affairs, Sweden  
Swedish Senior Arctic Official

**1:40 p.m.** A Virtual Expedition to Swedish Arctic Research Platforms  
Gunhild Rosqvist, Tarfala Research Station and Stockholm University

### TERRESTRIAL ENVIRONMENT

**2:10 p.m.** Rivers, Lakes, Tundra, and Taiga: A Journey Across Alaska and Northern Canada  
Matthew Sturm, Cold Regions Research and Engineering Laboratory

**2:40 p.m.** Consequences of Permafrost Thawing and Hydrological Changes for Landscape-Scale Greenhouse Gas Exchange  
Torben Christensen, Lund University

**3:10 p.m.** The Roles of Arctic Observatory Networks in Environmental Change Research and Monitoring  
Terry Callaghan, Abisko Research Station and University of Sheffield

**3:40 p.m.** BREAK

**4:00 p.m.** Changing Arctic Rivers  
Stephen Déry, University of Northern British Columbia

**4:30 p.m.** Glacier Change in the Arctic: Important Consequences for Near-Future Sea Level Rise  
Andrew Fountain, Portland State University

**5:00 p.m.** Circumpolar Arctic Mammals and Consequences of Climate Change  
Anders Angerbjörn, Stockholm University

**5:30 p.m.** Summary Remarks  
Arctic Forum Co-Chairs

**6:00 p.m.** Reception (House of Sweden Anna Lindh Hall)

### Thursday, 24 May 2007

**8:00 a.m.** Continental Breakfast

**8:30 a.m.** Welcome and Introductions  
Arctic Forum Co-Chairs

**8:40 a.m.** The Arctic in the Intergovernmental Panel on Climate Change Fourth Assessment Report  
John Walsh, International Arctic Research Center

**SYNTHESIS OF CHANGES IN THE HYDROLOGICAL CYCLE**
9:10 a.m. The ARCSS FreshWater Integration Study: A Synthesis of Changes in the Arctic Hydrologic System
Charles Vörösmarty, University of New Hampshire

MARINE ENVIRONMENT
9:35 a.m. The Arctic Ocean Carbon Cycle in a Changing Environment
Leif Anderson, Göteborg University
10:00 a.m. A Seasonally Ice Free Arctic?
Marika Holland, National Center for Atmospheric Research

10:25 a.m. BREAK

ATMOSPHERE
10:45 a.m. Arctic Atmospheric Modeling: Should We Believe the Models?
Michael Tjernström, Stockholm University
11:00 a.m. Precipitation Changes, Uncertainties, and Associated Impacts to the Arctic Environment
Michael Rawlins, University of New Hampshire

WATER IN THE ARCTIC: PAST AND FUTURE
11:35 a.m. Arctic Atmospheric Hydrologic Cycle from Reanalyses and Climate Change
David Bromwich, Ohio State University

12:00 p.m. Lunch Buffet
1:00 p.m. Poster Session: Highlights of Arctic Research and Education

HUMAN ENVIRONMENT AND NATURAL RESOURCES
2:00 p.m. Vulnerability to Changing Conditions in the Canadian Arctic: The Case of Arctic Bay, Nunavut
Johanna Wandel, University of Guelph
2:25 p.m. Effects of Changes in Water Resources on Northern Societies
Dan White, University of Alaska Fairbanks
2:50 p.m. West Greenland Wildlife: Recent Caribou and Muskox Observations and Future Plans
Christine Cuyler, Greenland Institute of Natural Resources
3:15 p.m. The Narwhal Tusk, Potential as an Arctic Water Probe and Weather Station:
Collaborative and Integrative Studies of Science and Inuit Traditional Knowledge
Martin Nweeia, Harvard University and Smithsonian Institution

3:40 p.m. BREAK

PANEL DISCUSSION
4:00 p.m. Water in the Arctic and International Collaborations: Opportunities During IPY and Beyond
Panel Focus Questions:
1. What are the critical scientific and policy issues with regard to "Water in the Arctic," particularly those related to international collaboration?
2. What is the relationship between water and security, including national/political security issues, access to food and natural resources, and cultural sustainability?
3. What is the most important result, scientific or otherwise, that could come out of IPY? What is the single most important factor to ensure a successful IPY?

Moderator:
Maribeth Murray, University of Alaska Fairbanks

Panelists:
Sara Bowden, Arctic Ocean Sciences Board
Katey Walter, University of Alaska Fairbanks
Inger Marie Gaup Eira, Sami University College
Volker Rachold, International Arctic Science Committee
Dan White, University of Alaska Fairbanks

5:30 p.m. Summary Remarks
Arctic Forum Co-Chairs

6:00 p.m. Adjourn

6:30 p.m. Open Meeting: Human Dimensions of the Arctic System (HARC) - Human Dimensions Research in the Context of IPY.