



MANAGING CLIMATE CHANGE IN HIGH MOUNTAIN GLACIAL WATERSHEDS: PROMOTING SOCIAL, SCIENTIFIC, AND INSTITUTIONAL COLLABORATION

July 11-24, 2013
Huaraz, Peru

July 11, 2013

Participants arrive in Lima

Dinner on your own

July 12, 2013

Participants travel to Huaraz by bus

Dinner on your own

July 13, 2013 Day 1

8:00 - 8:30 Registration

8:30 - 8:40 Welcome by:
TMI – Alton Byers (Confirmed)
USAID – John Furlow (Confirmed)
MINAM – Josefa Rojas (Confirmed)

8:40 – 9:00 Keynote speech – Kenneth Young (confirmed) - *Climate change, people, and mountains*

0900 – 1300 **Session 1: High Mountain Issues of the Andes**

Moderator: Jorge Recharte (Confirmed)

9:00-9:20 Adam French, (Confirmed) University of California Santa Cruz - *Conflict resolution in Paron in context of glacial lakes*

9:20-9:40 Jeff La Frenierre, (Confirmed) Ohio State University - *Monitoring Surface Change on Debris-Covered Glaciers, Volcán Chimborazo, Ecuador*

9:40-10:00 Laura Read (Confirmed), Tufts University - *Community Water Management in the Tres Cuencas Commonwealth*

10:00-10:20 Raúl Augusto Loayza-Muro (Confirmed), Universidad Peruana Cayetano Heredia

– *Hydrology and Water Quality of the Quilcay Watershed (Peru)*

- 10:20-10:40 Dirk Hoffman, (Confirmed) Bolivian Mountain Institute – *Comparison of recently formed glacial lakes in the Bolivian Andes and the Southern Alps of New Zealand - Differences and similarities*
- 10:40-11:10 Break
- 11:10-11:30 Rebecca Cole (Confirmed), American Alpine Club - *Differentiating climatic and anthropogenic alpine vegetation change drivers from 1972 – 2012 in the Cordillera Blanca, Peru*
- 11:30-11:50 Cesar Portocarrero (Confirmed) - *Conflict resolution in Paron in context of glacial lakes*
- 11:50-12:10 Wilfried Haeberli (Confirmed), University of Zurich - *Glacial lake and emerging risk and water issues*
- 12:10-12:30 Jesus Gomez (confirmed), Huascarán National Park – **Topic TBD**
- 12:30-12:50 Alejo Cochachin (Confirmed), Glaciological and Hydrological Resources Unit– **Topic TBD**
- 1:00-2:00 Lunch
- 2:00–5:00 **Session 2: Recent high mountain projects (Tajikistan, Pakistan, Mongolia)**
Moderator: Katalyn Voss
- 2:00-2:20 Mujtaba Hussain (Confirmed), Ministry of Climate Change, Pakistan - *The rising incidents of GLOF in the mountainous regions of Pakistan and the strategy to cope with the challenge*
- 2:20-2:40 Vladimir Aizen (Confirmed), University of Idaho - *Modern and past climate and environmental change impact on regional hydrology and water resources stress in Central Asia*
- 2:40-3:00 Muzaffar Shodmonov (Confirmed), State Agency for Hydrometeorology, Tajikistan – *Recent Glacier-related Projects in Tajikistan*
- 3:00-3:20 Teiji Watanabe (Confirmed), Hokkaido University, Japan - *GLOF Risk in Tajikistan*
- 3:20-3:50 Break
- 3:50-4:10 Robert Mambetkaziev (Confirmed), Civic Foundation UNISON – **Topic TBD**

- 4:10-4:30 Bolot Moldobekov (Confirmed), Central Asian Institute for Applied Geosciences – *Topic TBD*
- 4:30-4:50 Sirodjidin Aslov (Unconfirmed), Tajikistan Ambassador to the United Nations – *Topic TBD*
- 5:30-7:00 Huaraz tour
- 7:00 Dinner, Welcome by Municipality

July 14, 2013 Day 2

- 0900 – 1200 **Session 3: Recent High Mountain Projects in the Himalaya**
Moderator: Brian Peniston
- 9:00-9:20 Ulyana Horodyskyj (Confirmed), University of Colorado, Boulder - *Rates of Change on Spillway Lake, Ngozumpa glacier, Nepal: 2000 - 2013*
- 9:20-9:40 Reinmar Seidler (Confirmed), ATREE - *Climate change in Kanchenjunga TCA: Vulnerabilities and adaptive capacities*
- 9:40-10:00 Dinesh R Bhuju (Confirmed), Resources Himalaya Foundation - *Building Climate Change Resilience Capacity of Mountain People in Nepal*
- 10:00-10:20 Sonam Lhamo (Unconfirmed), Geological Survey of Bhutan – *Global warming and the state of Bhutanese glaciers*
- 10:20-10:50 Break
- 10:50-11:10 Alton Byers (Confirmed), The Mountain Institute & Daene McKinney (Confirmed), University of Texas at Austin - *Imja Risk Reduction: Community-based, Science-driven*
- 11:10-11:30 Dhananjay Regmi (Confirmed), Himalayan Research Expeditions - *Investigation of the Seti River disaster (May 5, 2012) and assessment of past and future mountain hazards facing Pokhara, Nepal and upstream communities*
- 11:30-11:50 Stephanie Spray (Confirmed), Harvard University - *Snow River Film Project, Nepal*
- 12:00-1:00 Lunch
- 1:00 – 4:00 **Session 4: Recent High Mountain Projects in the Himalaya**
Moderator: Andrew Taber
- 1:00-1:20 Francesca Pellicciotti (Confirmed or substitute), ETH - *Including the Sherpa*

Factor in Water Resources Projections in the Nepalese Himalaya

- 1:20-1:40 Paribesh Pradhan (Confirmed), Trek4Education - *Great himalayan Trail*
- 1:40-2:00 Ryan Bartlett and Sarah Freeman (Confirmed), WWF - *Climate resilience in the eastern Himalayas: Integrated approaches to assessing vulnerability and developing adaptation strategies*
- 2:00-2:20 Sonam Sherpa (Confirmed), Kathmandu University – *Topic TBD*
- 2:20-2:50 Break
- 2:50-3:10 Ang Rita Sherpa and Ang Chiri Sherpa (Confirmed), TMI – *Community-based Climate Change Adaptation in the Mount Everest Region of Nepal*
- 3:10-3:30 Gautam Rajkarnikar (Confirmed), Department of Hydrology and Meteorology, Government of Nepal – *GLOF Monitoring in Nepal*
- 3:30-3:50 Siri Jodha Singh Khalsa, (Confirmed) NSIDC, University of Colorado Boulder – *The Contribution to High Asia Runoff from Ice and Snow (CHARIS) Project*
- 3:50-4:10 Carl Schmidt (Confirmed), American Alpine Club – *Topic TBD*
- 7:00 Dinner

July 15, 2013 Day 3

HMGWP, CoP, and Tajikistan Facilitated Discussions

- 9:00-12:00 HMGWP and Community of Practice
Facilitator: Katalyn Voss
Growth, Participant collaboration, Funding opportunities, and Knowledge exchange
- 12:00-1:00 Lunch
- 2:00-5:00 Tajikistan 2014 Workshop Planning
Facilitator: Daene McKinney
- Optional Huaraz tour
- 7:00 Dinner and cultural show

July 16, 2013 Day 4

Field Methods and Modules I

Conference participants divide into 3 groups of about 25 people, each group attends modules 1, 2, or 3

Modules:

1. **Hydrology and water quality of Quilcay watershed**

End-point water sampling and calculations

Lunch: In the field

Location: Quilcay watershed above Huaraz (TBD) (~ 3900 m)

Trainers:

Raul Loayza (confirmed)

Jeff La Frenierre (confirmed)

Molly Polk (confirmed)

Oliver Wigmore (Confirmed)

2. **Conflict resolution in Paron in context of glacial lakes**

Lunch: In the field

Location: Paron Lake and communities (TBD) (~ 4200 m)

Trainers:

Cesar Portocarrero (confirmed)

Laura Read (confirmed)

Rachel Chisolm (confirmed)

Daene McKinney (confirmed)

3. **Glacial lake and emerging risk and water issues**

History in the CB, emerging glacial lakes, hydrology and contemporary issues

Lunch: In the field

Location: Llaca Lake (~ 4400 m)

Trainers:

Wilfreid Haerberli (confirmed)

Marcelo Somos (confirmed)

7:00 Dinner on your own

July 17, 2013 Day 5

All day Churup Lake trek
Lunch: In the field
Leaders: (TBD)

7:00 Dinner on your own

July 18, 2013 Day 6

Field Methods and Modules II

Conference participants divide into 3 groups of about 25 people, each group attends modules 1, 2, or 3.

Modules:

4. GPR at Pastoruri

Design of lake control projects; how good science with local people can lead to sound projects

Lunch: In the field

Location: Pastorouri Glacier (~ 5000 m)

Trainers:

Daene McKinney (confirmed)

Marcelo Somos (confirmed)

Rachel Chisolm (confirmed)

Katalyn Voss (confirmed)

5. V&A, Community Consultations

How we're engaging people: the process and expanded to something much larger

Lunch: In the field

Location: Communities in Quilcay watershed above Huaraz (TBD) (~ 3900 m)

Trainers:

TMI - Jorge Recharte (confirmed)

MINAM – Josepha Rojas (confirmed)

6. Policy tools for high mountain glacial lake and climate change management and adaptation

How science fits into policy (LAPAs, NAPAs, CAPAs & PIPs)

Lunch: At the hotel

Location: Andino Hotel, Huaraz

Trainers:

John Furlow (*confirmed*)

Glen Anderson (*confirmed*) or Meghan Hartman (*confirmed*)

Brian Peniston (*confirmed*)

7:00 Dinner on your own

Quilcahuanca-Palcacocha Expedition (July 19-21, 2013)

July 19, 2013 Day 7

All day Quilcayhuanca valley and basecamp
Evening facilitated discussion: “Community and LAPA in Quilcay Watershed”
Leader: Alton Byers (Confirmed)

Facilitator: Cesar Portocarrero (confirmed)

July 20, 2013 Day 8

All day Cross Huapi Pass, camp at Palcacocha Lake
Leader: Alton Byers (Confirmed)
Evening facilitated discussion: "Hydrology"
Facilitator: Cesar Portocarrero (confirmed)

July 21, 2013 Day 9

All day Field study of Palcacocha Lake, walk to trail head
Leader: Alton Byers (Confirmed)
Morning discussion: "Risk Reduction"
Facilitator: Cesar Portocarrero (confirmed)
Return to Huaraz, overnight

Dinner on your own

July 22, 2013 Day 10

Participants travel to Lima by bus

Dinner on your own

July 23, 2013 Day 11

Participants in Lima

7:00 Closing Dinner

July 24, 2013 Day 12

Participants depart Peru