

# Terrascope Apple Picking

Sunday, September 15

bus leaves 11:30AM, returns ~4PM

e-mail sent out with sign-up for bus



**Mission 2017**

**Tragedy of the Commons  
and  
Teams**

**Monday September 9, 2013**

# Stockholm Statement

SIWI—Stockholm International **W**ater Institute

Bridging the gap between science and policy, the Stockholm Statement is a one page document highlighting current key issues and governance advice from the water community.

The main purpose of the Stockholm Statement in 2013 is to inform and influence the General debate of the sixty-eighth session of the United Nations General Assembly (UNGA 68) in Sept 2013 as the initial findings of the Sustainable Development Goals and Post-2015 consultative processes are presented. SIWI aims to elevate water on global and local political agendas, both as a human right and as an essential productive resource.

# A Call for A Sustainable Development Goal on Water

Water is at the core of sustainable global development and is a cross cutting resource. Within the post-2015 development agenda water should be considered and integrated into all relevant areas, such as energy and food security.

Given the centrality of water for individuals, ecosystems and economic development, water is a powerful tool for cooperation across borders, sectors and communities.

# **A doubling of global water productivity**

Allocating water equitably and efficiently within the ecological constraints will require improved management of water quality, use and reuse of water resources.

Through stronger and smarter incentives for water use and innovative governance, it is possible to globally double the value from each litre of water used.

# **A realisation of the human right to safe drinking water and sanitation**

Investing in water and sanitation is a moral imperative, a basic requirement for safety and dignity and is compelling from an economic reality.

Political leadership and innovative governance are of critical importance to the realisation of the human right to safe water and sanitation.

# **Increased resilience to water-related disasters.**

Water is the fundamental link between the climate, the human society and the natural environment. Water-related disasters such as floods and droughts are the worst and most frequent natural calamities.

Integrating water resource management at all levels in the planning, building and governing of our societies will save lives, livelihoods and assets.

## **Your Mission is to....**

**Your Mission is to devise and plan the implementation of bold new strategies to ensure that all nations — including those considered to be underdeveloped — have access to clean fresh water while preserving fresh water ecosystems. Your plan should include incentives to get people to act on your solutions. This issue cannot be ignored and quite simply, the future of humankind hangs in the balance.**



# Teams for Mission 2017

A starting Point

# **TEAM 1: Organizations concerned with global water security**

What do they do? Do they communicate with one another? Is there a better way to organize?  
How should multi-national efforts be coordinated  
Data acquisition and sharing

Is the United Nations the best way forward?

**United Nations**

<http://www.unwater.org/index.html>

<http://www.un.org/waterforlifedecade/>

# Team 1 (continued)

**World Water Council**

<http://www.worldwatercouncil.org/about-us/vision-mission-strategy/>

**International Rivers**

<http://www.internationalrivers.org/>

**'Water in the Anthropocene: Challenges for Science and Governance. Indicators, Thresholds and Uncertainties of the Global Water System'**

**Global Water System Project: <http://www.gwsp.org/>**

# Teams 2-3: Water security in Asia

More than 60% of global population and rapid rise in population

Growing middle class with increasing dependence on irrigation, meat production, and appliances

More reliance on groundwater

Megacities (e.g. Beijing) cannot provide enough water from within city

# **Team 2: China and Transboundary Rivers**

Borders with India, Pakistan, Myanmar, Vietnam, Laos etc.

Water quality, water storage and flows, ecological issues

Are agreements possible and enforceable?

# **TEAM 3: China's River systems:**

Quality, flow rates, effects of large dams

Limits to growth?

Groundwater supplies for megacities?

Large-scale water diversion projects?

# Team 4: Water, Energy and Natural Resources

Water will outstrip oil as the scarcest vital resource

Fossil fuel production, especially new sources, such as shale gas, tar sands, require abundant water and generate much waste. Is water properly valued?

Develop guidelines ?

Mining pollution of major water resources – e.g. acid mine drainage. Externalities huge—Africa especially big issue

# Team 4 cont. : Biofuels

Global Biofuel Production: set to increase dramatically

Water use: potentially enormous

Less food production more for fuels..

Sustainable??

Cost of water vs. oil



# Team 5: Water in Africa

Surface water: The Nile River Basin—too many dams?

Groundwater: The Karoo basin: water vs. shale gas

The Karoo is unique as unlike the US, it still has the potential to create a natural baseline before shale gas exploration starts; but the time line is less than 5 years

## Africa (cont.)

Using water resources to grow food on leased land in Africa by China and many other countries: exporting water, controlling the water resources on these lands with negative effects on indigenous food production

# **Team 6??: Economics of Natural Resources**

Nature's Services—valuing nature

Roles of private enterprise and government regulation in assuring all basic right to clean water and sanitation