G14 World Café Plenary
Current and Future Challenges for GLEON: Summary and Agenda

Since 2005, GLEON members of all backgrounds and career stages have come together to address common challenges. The challenges are broad in scope and have inspired long-term products in research, education, and outreach. Some examples of GLEON collective challenges are given below:

- The inception of the network in 2005 was driven by the common challenge of developing a global sensor network. This shared challenge generated energy and excitement among founding members, and served to draw in new members to grow the network over subsequent years. By many measures, we have attained the goal of a creating a global lake sensor network, although opportunities for expansion and improvement still remain.

- Creating a collaborative environment for all members at all-hands meetings was a challenge identified during the G6 meeting (2008). In response, the Collaborative Climate Committee was formed and continuously works to make the network welcoming to members of diverse geographic, career, ethnic, gender, age, and disciplinary backgrounds.

- Also in 2008, the need to authentically integrate graduate students into the network was identified, and over time, the challenge of training the next generation of scientists has come to the forefront of GLEON activities: from the student-run Graduate Student Association, to recently funded NSF Macrosystems Biology and COST proposals. Now in 2012, GLEON is at the leading edge among continental sensor networks in graduate student training and professional development.

- Out of the process of establishing a global sensor network, unexpected challenges have arisen, including addressing the cyber-infrastructure needs of our grassroots network. In 2011 at the G13 meeting in New Hampshire, we convened a discussion on identifying cyber-infrastructure needs, which resulted in the creation of the Information Technology (IT) Task Force. The IT Task Force, made up of network members interested and invested in cyber-infrastructure, is now developing and implementing technologies and policies generated by network member discussion and recommendations made at G13.

What challenges will engage members and drive activities forward in the future? Ideally, challenges get members motivated, expand the reach of the network, and are seeds for long-term products. Challenges should be broad in scope, whereby almost every person in the network could imagine contributing in some real way by writing a proposal, leading an activity, or through some other related leadership opportunity.

The G14 World Café discussion on GLEON Current and Future Challenges will kick-off discussion and synthesis activities with the following goals:

- Identify our network’s emerging challenges for the next 3-5 years
- Map out specific goals associated with bringing challenges to fruition
- Learn about GLEON funding opportunities to receive support to meet goals
Are challenges different from working groups or science themes we already use to structure our activities? Yes, challenges are broader than working group science themes. GLEON has many themes that drive science activities at meetings. Here, we define themes as distinctive from whole-network challenges, in that themes are defined by working groups and do not necessarily involve all members. Challenges tend to be broader in scope and have potential to be contributed to by any and all members (e.g. graduate student training or development of information management for a grassroots network).

Outline for World Café Discussions at G14 meeting:

- Wednesday Oct 17 9:30-10:30: Introduction to Challenges World Café (Paul Hanson)
- Thursday Oct 18 13:30-15:00: Revisiting common Challenges and laying groundwork for next steps (Paul Hanson)