GEO AquaWatch 2022 Meeting

Day 3 Discussion Summary

Review of Current Situation

GEO Engagement Priorities

UN World Conference on Disaster Risk Reduction
2015 Sendai Japan

SUSTAINABLE DEVELOPMENT GOALS

PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

The New Urban Agenda

AquaWatch Mission

The mission of AquaWatch is to:

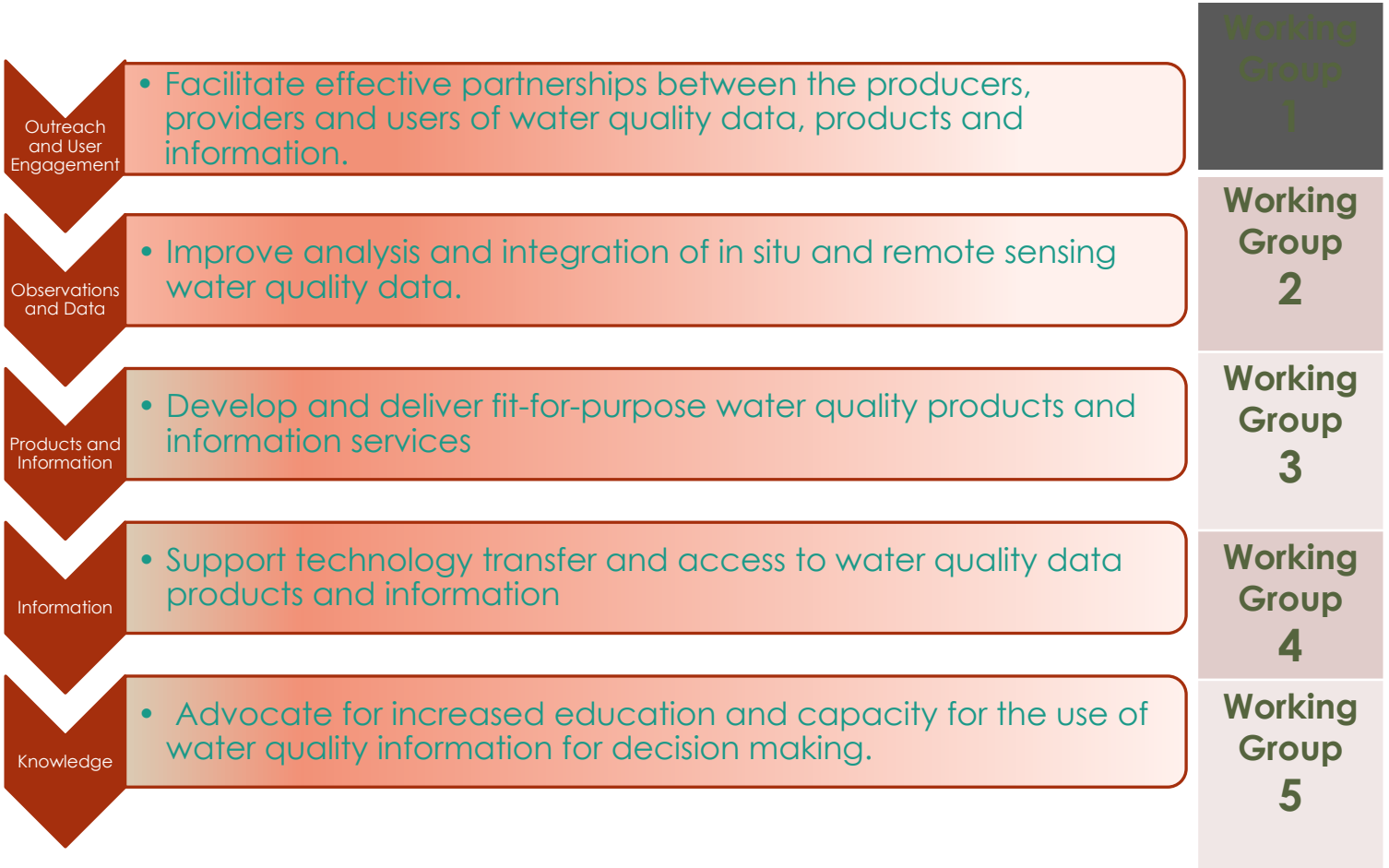
Improve the coordination, delivery and utilization of water quality information for the benefit of society

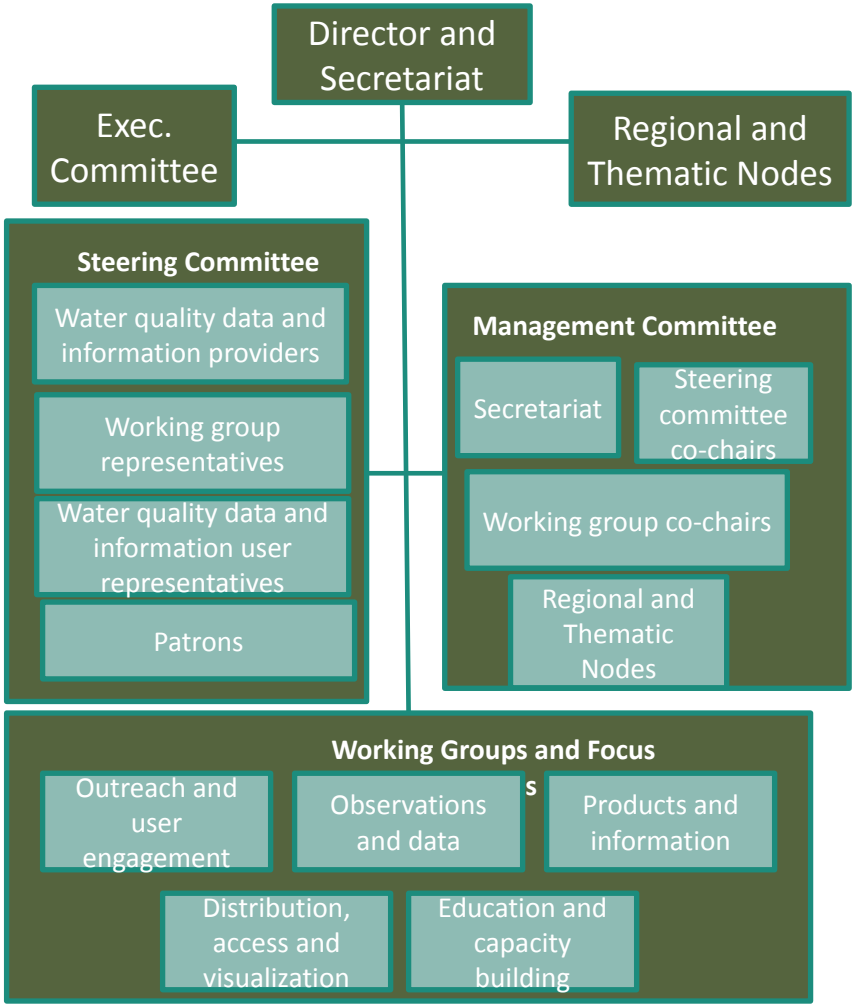
GEO AquaWatch Goal

- AquaWatch aims to develop and build the global capacity and utility of Earth Observation-derived water quality data, products and information to support water resources management and decision making.

Chesapeake Bay Buoy – NOAA Image

Lakes Mendota & Monona -University of Wisconsin SSEC image


Outreach and User Engagement
• Facilitate effective partnerships between the producers, providers and users of water quality data, products and information.
Working Group 1
Observations and Data
• Improve analysis and integration of in situ and remote sensing water quality data.
Working Group 2
Products and Information
• Develop and deliver fit-for-purpose water quality products and information services
Working Group 3
Information
• Support technology transfer and access to water quality data products and information
Working Group 4
Knowledge
• Advocate for increased education and capacity for the use of water quality information for decision making.
Working Group 5


Director and Secretariat
Exec. Committee
Regional and Thematic Nodes
Steering Committee
Water quality data and information providers
Working group representatives
Water quality data and information user representatives
Patrons
Management Committee
Secretariat
Steering committee co-chairs
Working group co-chairs
Regional and Thematic Nodes
Working Groups and Focus
Outreach and user engagement
Observations and data
Products and information
Distribution, access and visualization
Education and capacity building

Day 3 Feedback

Organizational Structure

Should there be changes to the current governance structure (Director, working groups)?

- Need to consolidate and refocus working groups
  - Two cross-cutting working groups (Stakeholder engagement & technical)
  - Thematic working groups (can be co-lead with other initiatives)
  - Develop sub-teams to tackle specific issues (such as atmospheric correction, etc.)
  - Overlap regional nodes and EuroGEO, AMERIGEO, ASIA PACIFIC GEO etc=> should AW liaise better with regional nodes?
- A Director is helpful - but we need a new one!
- Need to clarify roles of Committees

What's working and what's not?

Working

- Social media
- Focused tasks

Not working

- Need more diversity in expertise and geography
- Need better reviews and reporting on progress
- Not all working groups are active
- Need to switch up leadership
- Similar efforts popping up
- Not getting international recognition and buy in

How do we engage more people in AquaWatch

- Actively invite people
- More interactive online events
- Ask people to represent AquaWatch in their countries & agencies
- Improve communication that BSc, Msc, PhD and postdocs and ECR all very welcome to join: there is no threshold for being active in GEO-AW
- Offering Courses for ECR
- Communication in multiple languages to target different regions (for example, Spanish for Latin America and French for Western Africa).

Should objectives be re-crafted? What role should AquaWatch play in the data & product world?

- Yes - should be clarified/simplified
- Should GEO-AW provide services or the services industry or both? Is there a logical synergy between GEO-AW and services industry?
-

Are there funding opportunities to support programmatic activities?

- Actively participate in UN and SDG implementation
- Strategy for approaching donors
- Look to AID agencies (e.g., USAID)
- Should GEO-AW convene UNESCO, UNEP, UNGEMS, FAO, WorldBank, Asia DB, Africa DB, Foreign Aid Departments for longer term funding for GEO-AW activities (to be carried out by….????)
- Individual PI funding/secondments

Day 3 Feedback

Future Directions

What issues are facing the water quality community today and in the future that AquaWatch can collectively tackle?

- Atmospheric correction
- Capacity development/training : strong support from students, postdocs and ECR for Face to Face or Online courses or hybrid: GEO-AW to help get funding.
- How-to manuals
- Should we establish specialty groups or more thematic nodes: e.g. atmospheric correction and adjacency effect correction? ARD-IRD, in situ measurements, validation etc
- Standards (such as In situ optical measurements standards)
- Cal/Val data is missing in many areas
- Bandwidth and capacity in many countries is a challenge

How can we more effectively accomplish AW tasks?

- More online events, more interaction
- Mentoring of Students and Postdocs and ECRs
- Need to define measurable goals and deliverables
- Do a better job of documenting with the community has accomplished (such as moving forward ARD)

Identify and set regional priorities

- Look to the user feedback synthesis (WG1 activity)
- Look at the outputs of the WG3 paper
- Understand priorities of users in different areas
- Focus on uncertainty and quality assurance
- Do we still want to focus on the water quality information service?
- Where should we focus on between compiling best practices and developing new products?
  - Many people working on new products
  - A need for curating products and understanding uncertainties

Should objectives be re-crafted? What role should AquaWatch play in the data & product world?

- Need to be streamlined
- Need specific well defined, measurable and achievable objectives and deliverables for each year
- Should consider helping with data processing and statistical analysis of data

Next Step Discussion Questions

For Discussion Today

1. **What is the baseline (minimum list of activities) we know we can accomplish in 2022-24?**
2. **What is the aspirational state for GEOAquaWatch?**
   a. Are we shifting focus to Best practices compilation and Quality Assessment?
   b. Or is there still a desire to build a Water Quality Information Service?
   c. Shall we pursue being a GEO Flagship? If so by when? And funded by what mechanism???
3. **What should the role of the new European (we need one for each continent!) and thematic nodes be in this?**
4. **How do we get more community contributions - leadership and activity participation?**
   a. Should this be the role of the Steering Committee? What is AquaWatch's relationship with the WWQA? What is our preferred method for engaging with them? Same for the Primewater Earth observation community of practice? And International Water Association IWA.
5. **Any volunteers for serving on a review committee of the organization and governance changes for GEOAquaWatch?**

For Discussion Today

- NOAA has funded the GEO-AW Secretariat and director multiple years (and a BIG THANK YOU). How do we get other agencies to chip in? Should we pro-actively approach agencies for funding a core team? NOAA understands the necessity-how do we convince other agencies?
- We all need to promote GEO-AquaWatch to our national (space, academic, large science-technology institutes etc.) for more support and sponsoring. It is possible for country's GEO contributions to be earmarked for specific activities!!!