WMO-OGC Workshop

“GroundWaterML2 standard”

10 March 2022, 12:00 – 16:00 (UTC), Online
WMO-OGC Workshop “GroundWaterML2 standard”

Background

GroundWaterML 2 (GWML2) is an OGC and WMO standard from the WaterML2.0 suite of standards developed under the umbrella of the OGC/WMO Hydrology Domain Working Group.

Objectives

• Introduction to GWML2 standard and its scope
• Demonstrations of the GWML2 implementation from France, Canada, United States, Australia and New Zealand
• Panel discussion on the benefits of GWML2 implementation
• Moderated discussion on further GWML2 implementation
WMO-OGC Workshop “GroundWaterML2 standard”

WMO-UNEP-UNESCO-WHO-OGC
co-organized Workshop Series on Water Quality Monitoring
hosted under the banner of the World Water Quality Alliance (WWQA)
Proposed series of workshops in 2022-2023

bringing together UN agencies to address the broad spectrum of water quality monitoring, including modelling, earth observation, citizen sciences etc.

- Support Members in getting up to a basic level of implementing existing global guidance
- Following up on WMO’s role and commitment within the recently approved Hydrology Action Plan
- Foster innovation for water quality monitoring
- GEMS/Water’s revision strategy development
- Contribute to the World Water Quality Alliance (WWQA) and World Water Quality Assessment process
- At the end of the workshop series, a synthesis workshop is foreseen to see how the water quality monitoring community can enhance WQ monitoring from a holistic perspective
WORKSHOP SERIES ON WATER QUALITY MONITORING

Opening Workshop

Day 1: 29 March 2022, 11:00 - 14:00 UTC
Day 2: 30 March 2022, 11:00 - 16:00 UTC
Day 3: 31 March 2022, 11:00 - 16:00 UTC

Virtual Format
Opening Workshop

Objectives

1. **Identifying** potential synergies and mutual contributions between WMO-UNEP-WHO-UNESCO on in-situ water quality data observations, management and sharing

2. **Defining** a WMO-UNEP-WHO-UNESCO coordination mechanism on in-situ water quality data observations, management and sharing

3. **Identifying** the steps for the development of a joint WMO-UNEP-WHO-UNESCO work plan for regulatory and guidance material related to in-situ monitoring systems, from data collection to data sharing and use

4. **Identifying** the way of interconnecting WHOS with GEMStat and other existing in-situ water quality data platforms and systems, and how to connect these to the World Water Quality Assessment under development

5. **Identifying** how to support the WaterML data exchange standard development in the domain of Water Quality: updating OGC WaterML-WQ Best Practice document and endorse an international standard on Water Quality data exchange

6. **Defining** the Roadmap for an international [OGC Interoperability Experiment on Water Quality data](#) with pilot use cases (e.g., Lake Victoria, Lake Chad)
## Opening Workshop Day 3

<table>
<thead>
<tr>
<th>Time (UTC)</th>
<th>Agenda Item</th>
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<tbody>
<tr>
<td>11:00 – 11:05</td>
<td>Opening&lt;br&gt; <em>Tony Boston</em></td>
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<tr>
<td>11:05 – 11:10</td>
<td>Introduction&lt;br&gt; <em>Silvano Pecora</em></td>
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<td>11:10 – 11:40</td>
<td>Panel discussion: Water quality data in practice&lt;br&gt; <em>Philipp Saile, Dwane Young, Sylvain Grellet</em></td>
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<td>11:40 – 12:10</td>
<td>WHOS &amp; Discovery and Access Broker (DAB) technology&lt;br&gt; <em>Igor Chernov, Enrico Boldrini</em></td>
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<td>12:10 – 12:50</td>
<td>Moderated discussion&lt;br&gt; Interoperability and interconnection of the existing Water Quality Data Systems&lt;br&gt; Moderator: <em>Sylvain Grellet</em></td>
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<td>12:50 – 13:00</td>
<td>Coffee break</td>
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<td>13:00 – 13:30</td>
<td>Water quality Ontology and WaterML-WQ&lt;br&gt; <em>Bruce Simons, Simon Cox</em></td>
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<td>13:30 – 14:30</td>
<td>Moderated discussion&lt;br&gt; Identifying how to support the WaterML development in the domain of Water Quality: API identification and usage, WQ taxonomies/ontologies improvement and endorsing an international standard on Water Quality data exchange&lt;br&gt; Moderator: <em>Simon Cox</em></td>
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<td>14:30 – 14:45</td>
<td>Water Quality Data Interoperability Experiment&lt;br&gt; <em>Silvano Pecora</em></td>
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<td>14:45 – 15:30</td>
<td>Moderated Discussion&lt;br&gt; Defining the Roadmap for the Interoperability Experiment of water quality data with pilot use cases&lt;br&gt; Moderator: <em>David Blodgett</em></td>
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<td>15:30 – 15:50</td>
<td>Way forward for the Roadmap</td>
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<td>15:50 – 16:00</td>
<td>Closing&lt;br&gt; <em>Johannes Cullmann</em></td>
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Opening Workshop

Workshop Series on Water Quality Monitoring
Opening Workshop

Day 1
29 March 2022
11.00 - 14.00 UTC

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Day 3
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11.00 - 16.00 UTC

Regulatory and Guidance material on Water Quality
Coordinated operational support to UN Member States & WWQA
Water Quality Data Interoperability Experiment

Consult the Workshop Agenda:
- Day 1
- Day 2
- Day 3

For more information, view the Workshop Concept Note

Proposed series of workshops in 2022-2023

1. Interoperability of EO and RS data
2. Interoperability of modelling data
3. Needs and requirements of Member States in the area of WQ monitoring
4. Complementary data sources for tracking SDG 6.3.2: citizen science and other local level monitoring
5. Triangulation approach for obtaining an overview on water quality (could serve as a synthesis workshop)
6. Innovative approaches and technologies for Water Quality Monitoring
7. Assessing surface and ground water quality using drinking water quality data
8. Water quality frameworks – setting health based national standards and implementing preventive risk management for drinking-water and recreational water quality
9. Capacity development for water quality monitoring using approaches mentioned above
10. Monitoring emerging pollutants and microplastics
Thank you!