



# Bathing Water Directive

## Policy Review



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## Authors

Camille Parrod, ACTeon

With thanks to:

Verena Mattheiß, ACTeon

Josselin Rouillard, Ecologic Institute (Review)

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## Acknowledgments & Disclaimer

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## Bathing Water Directive

Policy Review
<p><b>Name/Type of the Legal Act or Policy</b></p>
<p>BWD, Bathing Water Directive, Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC</p> <p>Amending acts: 1) Regulation (EC) No <a href="#">596/2009</a> ; 2) Directive <a href="#">2013/64/EU</a></p> <p>It replaces Directive 76/160/CEE of 1976. Among the changes, new bacteria in the water are measured: E. coli and intestinal enterococci, which are indicators of bacteria in bathing water.</p> <p>Preceding Communication: Commission Proposal COM (2002) 581 Final: Proposed Directive of the European Parliament and the Council concerning the quality of bathing water (24.12.02).</p>
<p><b>Entry into force</b></p>
<p>24<sup>th</sup> March 2006</p>
<p><b>Departments/Units in charge</b></p>
<p>European Commission: <a href="#">Joe Hennon</a> (+32 2 295 35 93); <a href="#">Monica Westeren</a> (+32 2 299 18 30)</p> <p>European Environment Agency: <a href="#">Arthur Finn Girling</a> (+45 33 36 71 09); <a href="#">Iben Stanhardt</a> (+45 33 36 71 68)</p> <p>DG ENV, Dir. C Quality of Life, Water &amp; Air, 1. Water</p> <p>Avenue de Beaulieu 5/Beaulieulaan 5</p> <p>1160 Bruxelles/Brussel</p> <p>Belgique</p> <p><i>Mr MISIGA Pavel</i></p> <p><i>Head of Unit</i></p> <p><i>Tel: +32 229-94420</i></p> <p><i>Mail: env-water@ec.europa.eu</i></p>
<p><b>Common Implementation strategy (CIS processes)</b></p>
<p>There is a Bathing Water Committee. Art. 16.1 states “The Commission shall be assisted by a committee”. Following a workshop on bathing water profiles (Namur, 27–28 June 2007), the Regulatory Committee under the Bathing Water Directive in its meeting of 26 November 2007 discussed the findings of this workshop and agreed to create a working group to develop a document reflecting best knowledge and practice on bathing water profiles (<a href="#">Report</a></p>

[on Bathing Water Profiles, 2009](#)). It might not exist anymore as there is no more information on its activities.

There is a Commission Expert Group on the Implementation of the Bathing Water Directive (2006/7/EC) (E02936) which is still active. The informal Expert Group on the Implementation of the Bathing Water Directive provides advice and expertise to the Commission and its services in relation to the implementation of the latter Directive. Contact: ENV-C02-ARES@ec.europa.eu or ENV-WATER@ec.europa.eu

[CIS work programme 2013–2015](#): Work on BWD has been integrated in the new structure as one theme of the Water Management group.

[CIS guidance document n° 23](#) – “Eutrophication Assessment in the Context of European Water Policies”: while the old Bathing Waters Directive (76/160/EEC) does not require a direct assessment of eutrophication (rather, the monitoring of several parameters relevant to the assessment of eutrophication), the new one requires bathing water profiles to be established – when the bathing water profile indicates a tendency for proliferation of macro-algae and/or marine phytoplankton, investigations shall be undertaken to determine their acceptability and health risks and adequate management measures shall be taken, including information to the public.

#### **Administrative body handling implementation in MS**

In France, the water and biodiversity and risk prevention divisions of the Ministry of Ecology, Sustainable Development and Energy are responsible for the elaboration and transmission to the European Commission of the national implementation reports, contributing to the Water Information System for Europe (WISE). The water and biodiversity division is assisted by the ONEMA (National Agency for Water and Aquatic Environments) for data collection. A national reporting system is set up with a basin coordination group responsible for the collection of data from competent authorities. The Observation and statistics department of the Sustainable development division of the ministry of Ecology also contributes to data collection.

In the UK, the Environment Agency is responsible for monitoring water quality. The Environment Agency has developed a system to give a daily assessment of the water quality risk at a number of bathing waters. Sites covered by the system can be found on the tool: [Bathing Water Data Explorer](#). Anyone can recommend that a bathing water should be designated or de-designated. Local councils are required to provide public information showing that the area is a bathing water and giving information about water quality and potential pollution sources. “The revised Directive poses a number of challenges for Department of Environment Food and Rural Affairs (Defra), the Environment Agency, local authorities and beach operators. It aims to set more stringent water quality standards and also puts a stronger emphasis on beach management and public information.”

In Germany, the Länder are responsible for the enforcement of the legal provisions, i. e. for the designation and monitoring of EU bathing waters. They publish information on bathing water quality on the internet ([information points/Auskunftsstellen](#)). More information is also provided on the relevant health authorities of the counties and municipalities.

<p><b>Main Objective</b></p>
<p>Art. 1.2. “The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC.”</p> <p>Report on Bathing Water Profiles (2009): “The main objective of the 2006/7/EC bathing water Directive is to reduce gastroenteritis and other waterborne health risks.”</p>
<p><b>Principles included in the legal text</b></p>
<p>Preamble (12): “Since the objectives of this Directive, namely the attainment by the Member States, on the basis of common standards, of a good bathing water quality and a high level of protection throughout the Community, cannot be sufficiently achieved by the Member States and can be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Art. 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives”</p>
<p><b>Other objectives/Key concepts/key elements of the legislation</b></p>
<p>It requires Members States to monitor and assess the bathing water for at least two parameters of (faecal) bacteria. In addition, they must inform the public about bathing water quality and beach management, through the so-called bathing water profiles. These profiles contain for instance information on the kind of pollution and sources that affect the quality of the bathing water and are a risk to bathers' health. In this light, the Commission introduced <a href="#">a symbol on bathing water classification</a> in 2011.</p>
<p><b>Terminology</b></p>
<p>A key term concerns “bathing waters”, which are to be considered as “any element of surface water where the competent authority expects a large number of people to bathe and has not imposed a permanent bathing prohibition, or issued permanent advice against bathing” (Art. 1.3)</p> <p>Also, ‘pollution’ means the presence of microbiological contamination or other organisms or waste affecting bathing water quality and presenting a risk to bathers' health as referred to in Art. 8 and 9 and Annex I, column A” (Bathing Water Profiles report)</p> <p>‘Poor, sufficient, good and excellent quality’: please refer to Annex II for definitions. Example: Bathing waters are to be classified as ‘poor’ if, in the set of bathing water quality data for the last assessment period, the percentile values for microbiological enumerations are worse than the ‘sufficient’ values set out in Annex I, column D.</p> <p>Other definitions are included in Art. 2 (namely: “competent authority”, “permanent”, “large number”, “bathing season”, “management measures”, “short-term pollution”, “abnormal situation”, “set of bathing water quality data”, “bathing water quality assessment”, “cyanobacterial proliferation”, “public concerned”, ‘surface water’, ‘groundwater’, ‘inland water’, ‘transitional waters’, ‘coastal water’ and ‘river basin’).</p>

### Derogations

There are no derogations to the Directive. Directive 2006/7/EC repeals Directive 76/160/EEC. A major change concerns the number of parameters for analysis used to monitor and assess the quality of bathing waters and to classify them, i.e. two (intestinal enterococci and escherichia coli) instead of nineteen. Other parameters could be taken into account, such as the presence of cyanobacteria or microalgae.

### Types of management measures

Each year, the Member States shall identify the bathing waters in their territory and define the length of the bathing season. They shall establish monitoring at the location most used by bathers or where the risk of pollution is greatest. Monitoring shall take place by means of sampling: four samples, including one before the start of the bathing season; three samples only if the seasons does not exceed eight weeks or if the region is subject to special geographical constraints. Member States shall communicate the results of their monitoring to the Commission with a description of the water quality management measures. Monitoring may be suspended exceptionally once the Commission has been informed. Water quality is assessed on the basis of microbiological data defined according to the parameters described in Annex I. Member States shall then establish a classification of waters of poor, sufficient, good or excellent quality. This classification shall comply with the criteria set out in Annex II. All bathing waters in the EU must be at least of sufficient quality by the end of the 2015 bathing season. Furthermore, Member States are to take the necessary measures to improve the number of bathing waters of good or excellent quality. If quality is poor, Member States shall adopt the necessary measures to manage and eliminate pollution, and to protect and inform bathers.

The Directive provides for profiles to be established to identify possible pollution, for one or more than one contiguous bathing waters. In particular, they comprise an assessment of: the physical, geographical and hydrological characteristics of the bathing water and of other surface waters in the catchment area; pollution and sources thereof; management measures. These profiles must be established by 24 March 2011. Member States shall adopt exceptional measures if unexpected situations deteriorate the quality of waters or represent a risk to bathers' health. According to Art. 7, "Such measures shall include information to the public and, if necessary, a temporary bathing prohibition."

Appropriate monitoring must also be implemented if there is a risk of proliferation of algae. The authorities responsible must therefore: take management measures and provide information immediately if a proliferation of cyanobacteria (or blue algae) occurs; assess the health risks if there is a proliferation of macro-algae and/or marine phytoplankton. In short : 'management measures' means the following measures undertaken with respect to bathing water: (a) establishing and maintaining a bathing water profile; (b) establishing a monitoring calendar; (c) monitoring bathing water; (d) assessing bathing water quality; (e) classifying bathing water; (f) identifying and assessing causes of pollution that might affect bathing waters and impair bathers' health; (g) giving information to the public; (h) taking action to prevent bathers' exposure to pollution; (i) taking action to reduce the risk of pollution;

<p><b>Spatial coverage</b></p>
<p>The Directive applies to surface waters that can be used for bathing except for swimming pools and spa pools, confined waters subject to treatment or used for therapeutic purposes and confined waters artificially separated from surface water and groundwater. Bathing waters include inland, coastal and transitional waters.</p>
<p><b>Reporting units – what are the specific transposition requirements</b></p>
<p>Member States must monitor the bathing waters every year. Member States should also prepare a description of bathing waters and the potential impacts and threats to water quality, both as an information for citizens and as a management tool for the responsible authorities, through the so-called bathing water profiles. They could include in particular a description of the area concerned, any sources of pollution and the location of the water monitoring points. Every year the Commission publishes a summary report on the quality of bathing water, based on the reports that the Member States should submit to it before the start of each bathing season. At present, the Commission and the European Environment Agency publish an EU-wide report covering all 28 Member States, both in a <a href="#">paper and online version</a>. <a href="#">Reports on individual Member States</a>, the so-called national country reports, are also available online.</p>
<p><b>Management unit</b></p>
<p>Bathing waters (see definition above). Member States shall annually identify all bathing waters and define the length of the bathing season (Art. 3). There are differing quality criteria between inland waters and coastal waters and transitional waters (Annex I of the Directive).</p>
<p><b>Key planning steps</b></p>
<p>Monitoring (Art. 3): Member States shall annually identify all bathing waters and define the length of the bathing season. They shall define monitoring points, which are either where most bathers are expected or where the greatest risk of pollution is expected, according to the bathing water profile. A monitoring calendar for each bathing water shall be established before the start of each bathing season. It should provide for at least four samples to be taken per season (except where the season is very short or where there are special geographic constraints). Member States shall ensure that the analysis of bathing water quality takes place in accordance with the reference methods specified in Annex I and the rules set out in Annex V.</p> <ol style="list-style-type: none"> <li>1 Bathing water quality assessment (Art. 4): Member States shall ensure that sets of bathing water quality data are compiled through the monitoring of the parameters set out in Annex I, column A. Sets of bathing water data used to carry out bathing water quality assessments shall always comprise at least 16 samples or, in the special circumstances referred to in Annex IV, paragraph 2, 12 samples.</li> <li>2 Classification and quality status of bathing waters (Art. 5): The waters are classified according to their level of quality: poor, sufficient, good or excellent, linked to clear numerical quality standards for bacteriological quality. The category "sufficient" is the minimum quality threshold that all Member States should attain by the end of the 2015</li> </ol>

season at the latest. Where water is classified as "poor", Member States should take certain management measures, e.g. banning bathing or posting a notice advising against it, providing information to the public, and suitable corrective measures.

- 3 Bathing water profiles (Art. 6) : Member States shall ensure that bathing water profiles are established in accordance with Annex III. Each bathing water profile may cover a single bathing water or more than one contiguous bathing waters. These profiles describe the potential impacts and threats to water quality, both as an information for citizens and as a management tool for the responsible authorities.
- 4 Public participation is encouraged (especially related to the establishment, review and updating of lists of bathing waters). The Directive also ensures timely information of the public during the bathing season, with an obligation for Member States to disseminate actively and promptly information on bathing water quality (Art. 12). In particular, notices banning or advising against bathing should be rapidly and easily identifiable.
- 5 Reports (Art. 13): Member States shall provide the Commission with the results of the monitoring and with the bathing water quality assessment for each bathing water body, as well as with a description of significant management measures taken. Member States shall provide this information annually by 31 December in relation to the preceding bathing season. The Commission shall publish an annual summary report on bathing water quality in the Community, including bathing water classifications, conformity with this Directive and significant management measures undertaken. The Commission shall publish this report by 30 April every year, including via the Internet.

#### Timelines

By 2008: the Commission shall submit a report to the European Parliament and to the Council;

By 24 March 2008: Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive; Before 24 March 2008 : identification of all bathing waters and definition of length of bathing season in all MS (shall then be notified to the Commission annually, including the reason for any change compared to the preceding year); From the start of the fifth bathing season after 24 March 2008: information concerning bathing waters shall be disseminated to the public;

When monitoring of bathing water has started under this Directive: annual reporting to the Commission shall be made;

By 30 April every year: the Commission shall publish an annual summary report on bathing water quality in the Community, including bathing water classifications;

By 24 March 2010: The Commission shall present a draft of the measures to be taken with respect to information providance as to the current bathing water classification and any bathing prohibition or advice against bathing (indicated by a clear symbol);

By 24 March 2011: Bathing water profiles shall be established for the first time;

By the end of 2014: MS shall submit written observations to the Commission on that report including on the need for any further research or assessments which may be required to assist the Commission in its review of this Directive;

By the end of the 2015 bathing season: the first classification according to the requirements of this Directive shall be completed. All bathing waters must be at least “sufficient”;

No later than 2020: the Commission shall review this Directive with particular regard to the parameters for bathing water quality, including whether it would be appropriate to phase out the ‘sufficient’ classification or modify the applicable standards, and shall present if necessary appropriate legislative proposals in accordance with Art. 251 of the Treaty.

In the case of bathing waters classified as ‘good’, ‘sufficient’ or ‘poor’, the bathing water profile is to be reviewed regularly: at least every 4 years for ‘good’, 3 years for ‘sufficient’ and 2 years for ‘poor’.

#### **Integration/coordination issues with other related pieces of legislation**

Preamble (7) states : “In order to increase efficiency and wise use of resources, this Directive needs to be closely coordinated with other Community legislation on water, such as Council Directives 91/271/EEC of 21 May 1991 concerning urban waste-water treatment, 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources and Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.” Synergies are made regarding definitions of ‘surface water’, ‘groundwater’, ‘inland water’, ‘transitional waters’, ‘coastal water’ and ‘river basin’ (they have the same meaning as in Directive 2000/60/EC). Also regarding the establishment, reviewing and updating of bathing water profiles, adequate use shall be made of data obtained from monitoring and assessments carried out pursuant to Directive 2000/60/EC (framework for Community action in the field of water policy) that are relevant for this Directive (Art. 6 and 13).

#### **Coordination issues with the EU Biodiversity Strategy**

In general, measures that help improve water quality and reduce pollutants can have a positive impact on Targets 2 and 4.

#### **Relevance to ecosystems/habitats?**

Surface water, groundwater, confined waters, inland water, transitional waters, coastal water, river basin. Note: The Directive focuses on surface waters (coastal and inland) where a large number of people is expected to bathe during touristic seasons. Aquatic ecosystems (inland waters, rivers, lakes, coastal and marine inlet waters, transitional waters) are therefore the main ones concerned, but the focus is on public health (as opposed to environmental protection for the sake of environmental protection). The Directive focuses on the presence of microbiological contamination or other organisms or waste affecting bathing water quality in order to protect bathers’ health in priority. However, the context of spatial and temporal concentration of activities linked to bathing and other touristic activities (sports, food, etc.) represents a considerable pressure on the coasts and natural habitats. This aspect is not addressed by the Directive but it affects the quality of the water as well as ecosystems and aquatic biodiversity. Bathing can be considered as an ecosystem service (provision of recreational services). Data collected on the quality of water under this Directive can thus

serve as an indicator for this ecosystem service. It has been analyzed that “managing coastal zones solely in terms of public health could have potentially negative consequences on a range of other social and cultural ecosystem services, e.g. recreation.” (Quilliam RS, Kinzelman J, Brunner J and Oliver DM, “Resolving conflicts in public health protection and ecosystem service provision at designated bathing waters”. J Environ Manage. 2015 Sep 15;161:237–42.)

**Drivers**

It is very much linked to the UWWTD drivers (wastewater discharges from industries and houses).

Water uses for bathing purposes are addressed but not as a driver for pollution; the effects of other drivers for the protection of bathers seem to be the focus (such as wastewater discharges). The Bathing Water Profiles must address the other drivers (including the identification and assessment of causes of pollution). The guidance on the elaboration of Bathing Water Profiles provides the following indicative list of sources of pollution and pollution routes: Wastewater treatments; Sewage overflow; wrong connections, untreated discharges; Scattered dwellings and touristic resorts discharges; Rainwater discharge; Road run-off; Slaughterhouses or manure processing plants; Cattle in the meadows (if so, what kind of cattle); Leaching of manure and manure run-off; Dairy farms with the possibility of yard run-off towards ditches; Agricultural hinterland; Rivers, ditches, canals (influence of connected waters from other watersheds, also e.g. via pumping stations or sluices/locks) etc.; Swirling and/or release of sediment, dredged sludge on sewage sludge; Recreational boating and charter shipping (untreated discharges); Inland shipping (untreated discharges); Houseboats; Bathers; Domestic animals on the beach; Birds colonies; Fauna (animals living in the wild), rats, etc.; Groundwaters inputs; Cooling water discharge; Industrial (e.g. agro-food industry) and discharges from mining.

**Pressures**

Pollution: the presence of microbiological contamination or other organisms or waste affecting bathing water quality and presenting a risk to bathers' health.

**Assessment of Environmental State**

It assesses the quantity of microbiological elements (Intestinal enterococci; Escherichia coli) present in bathing water and sets restrictions. Appropriate measures must be taken to limit their presence to authorized levels and manage risks. This includes: surveillance, early warning systems and monitoring; prevention, reduction or elimination of the causes of pollution (Annex II). The guidance on the elaboration of Bathing Water Profiles recommends to consider the following: the influence of precipitation; climate data for the concerned Member State can be downloaded from various meteorological stations; a correlation may exist with heavy rain, sewer overflow or manure run-off, for example; the influence of the maximum temperature and the number of sun hours; there may be a correlation with recreational pressure; the influence of the direction of the wind; the periods (division in time) in which exceedances occur. Is this at the beginning of the bathing season, at the end of the season or is it different every year. There may be a correlation with ongoing activities in the

surrounding area, the breeding season of birds or the spreading of manure, for example; has the area been transformed, which might explain the exceedances; bathing prohibitions (or advice against bathing); registration of complaints; bacteriological data, and also changes in the other bathing water parameters; numbers of visitors (influence of bathing); times of sampling/testing; all other bathing water parameters (water temperature, acidity, etc.). Indicators for inland waters:

A	B	C	D	E
Parameter	Excellent quality	Good quality	Sufficient	Reference methods of analysis
Intestinal enterococci (cfu/100 ml)	200	400	330	ISO 7899-1 or ISO 7899-2
Escherichia coli (cfu/100 ml)	500	1000	900	ISO 9308-3 or ISO 9308-1

For coastal waters and transitional waters:

A	B	C	D	E
Parameter	Excellent quality	Good quality	Sufficient	Reference methods of analysis
Intestinal enterococci (cfu/100 ml)	100	200	185	ISO 7899-1 or ISO 7899-2
Escherichia coli (cfu/100 ml)	250	500	500	ISO 9308-3 or ISO 9308-1

### Assessment of Status

It assesses the quantity of microbiological elements (Intestinal enterococci; Escherichia coli) present in bathing water and sets restrictions. Appropriate measures must be taken to limit their presence to authorized levels and manage risks. This includes: surveillance, early warning systems and monitoring; prevention, reduction or elimination of the causes of pollution (Annex II). Sufficient quality (with associated limits in the amounts of microbiological presence) as a reference for the assessment. Annex I of the Directive. Waters are classified according to their quality levels: excellent, good, sufficient or poor/non-compliant. Notices banning or advising against bathing should be rapidly and easily identifiable. The Commission adopted on the 27 May 2011 a decision establishing a symbol for information to the public on bathing water classification and any bathing prohibition.

**Data**

The state of bathing waters is shown in EEA's interactive map. The map shows monitoring locations and quality of bathing water from 2004 until 2014. The last compliance report (2014) also includes some data.

**Funding**

*No information found at the European level.*

In France, Water Agencies (Agences de l'eau) provide funds for local authorities to establish the water profiles of their bathing waters. Department councils (conseil départemental) also had complementary funds – however this may evolve with coming institutional and regulatory reforms.

## About AQUACROSS

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Knowledge, Assessment, and Management for AQUATIC Biodiversity and Ecosystem Services aCROSS EU policies (AQUACROSS) aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services. Funded by Europe's Horizon 2020 research programme, AQUACROSS seeks to advance knowledge and application of ecosystem-based management (EBM) for aquatic ecosystems to support the timely achievement of the EU 2020 Biodiversity Strategy targets.

Aquatic ecosystems are rich in biodiversity and home to a diverse array of species and habitats, providing numerous economic and societal benefits to Europe. Many of these valuable ecosystems are at risk of being irreversibly damaged by human activities and pressures, including pollution, contamination, invasive species, overfishing and climate change. These pressures threaten the sustainability of these ecosystems, their provision of ecosystem services and ultimately human well-being.

AQUACROSS responds to pressing societal and economic needs, tackling policy challenges from an integrated perspective and adding value to the use of available knowledge. Through advancing science and knowledge; connecting science, policy and business; and supporting the achievement of EU and international biodiversity targets, AQUACROSS aims to improve ecosystem-based management of aquatic ecosystems across Europe.

The project consortium is made up of sixteen partners from across Europe and led by Ecologic Institute in Berlin, Germany.

## AQUACROSS PARTNERS

Ecologic Institute (ECOLOGIC) | Germany

Leibniz Institute of Freshwater Ecology and Inland Fisheries (FVB-IGB) | Germany

Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) | France

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ACTeon – Innovation, Policy, Environment (ACTeon) | France

University of Liverpool (ULIV) | United Kingdom

University College Cork, National University of Ireland (UCC) | Ireland

Royal Belgian Institute of Natural Sciences (RBINS) | Belgium

Stockholm University, Stockholm Resilience Centre (SU-SRC) | Sweden

Danube Delta National Institute for Research & Development (INCDDD) | Romania

Eawag – Swiss Federal Institute of Aquatic Science and Technology (EAWAG) | Switzerland

International Union for Conservation of Nature (IUCN) | Belgium

BC3 Basque Centre for Climate Change (BC3) | Spain

Contact Coordinator

[aquacross@ecologic.eu](mailto:aquacross@ecologic.eu)

Duration

Dr. Manuel Lago, Ecologic Institute  
1 June 2015 to 30 November 2018

Website

Twitter

LinkedIn

ResearchGate

<http://aquacross.eu/>

@AquaBiodiv

[www.linkedin.com/groups/AQUACROSS-8355424/about](http://www.linkedin.com/groups/AQUACROSS-8355424/about)

<https://goo.gl/lcdtZC>