BIOLOGICAL STATUS OF SURFACE WATER BODIES

WATER 3

The Water Framework Directive 2000/60/EC requires Member States to ensure that the flora and fauna of their surface water bodies[1] are in good status, i.e. close to natural conditions. The biological status of water bodies is assessed on the basis of the composition and abundance of populations of different indicator groups.

Four indicator groups

The network for monitoring the biological quality of water bodies is based on four biological indicator groups: benthic diatoms (microalgae attached to the bottom of water courses), macrophytes (higher plants), benthic macroinvertebrates (insects, molluscs, worms, etc.) and fish. The corresponding indices are the Specific Pollution Sensitivity Index (*Indice de polluosensibilité spécifique - IPS*) for benthic diatoms, the Macrophyte Biological Index for Rivers (*Indice biologique macrophytique en rivière - IBMR*) for macrophytes, the Standardized Global Biological Index (*Indice biologique global normalisé - IBGN*) for macroinvertebrates and the Biotic Index of Fish Integrity (*Indice biotique d'intégrité piscicole - IBIP*) for fish.

The usual divide between north and south of the Sambre-et-Meuse line

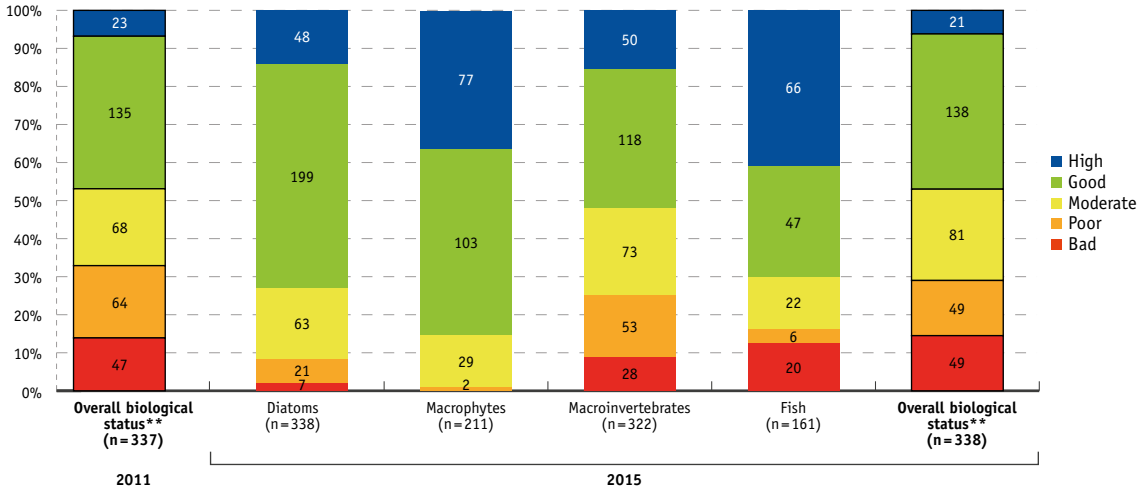
In 2015, 47% of the water bodies inspected had good or high overall biological quality[2]. This finding was similar to the assessment carried out in 2011. The poorer quality water bodies were located mainly north of the Sambre-et-Meuse line (Scheldt basin, north of the sub-basins of the Sambre and Meuse downstream) where the vast majority of them had moderate to bad quality water[3] due to greater land take, the presence of industry and intensive crop-growing. The low flows[4] of some water courses reinforce the negative impacts of waste water discharges. In addition, many water courses are largely channelled or modified, resulting in a degradation of habitats and loss of biodiversity.

Progress towards good status

Despite the reduction of some pollution (point source and diffuse pollution)[5], the increase in the rate of waste water treatment[6] and the ecological restoration of certain water courses, ecosystems are slowly recovering. The implementation[7] of the measures envisaged in the second cycle of the River Basin Management Plans (RBMPs) for 2021[8] should allow a gradual improvement towards the good status[9] required by the Water Framework Directive 2000/60/EC by 2027.

[1] The concept of surface water body is defined in the Water Framework Directive as a distinct and significant part of surface waters (e.g. lake, reservoir, river, stream, canal, part of river, stream or canal) | [2] Not including lakes | [3] → Map 26 | [4] → WATER 2 | [5] → WATER 4 & AGRI 9 | [6] → WATER 18, 19 & 20 | [7] As part of other plans and programmes (e.g. agri-environmental programmes), → AGRI 10) | [8] → WATER 21 | [9] → WATER 1

Fig. WATER 3-1 Status of surface water bodies* in Wallonia according to biological indicator groups



n = number of water bodies out of a total of 354
It should be noted that the water body is the unit used for assessing the status of aquatic environments at the European level.
A water body may include several monitoring stations.

** Lakes not included*
*** The overall biological status takes into account the temporal evolution and spatial variability of stations as well as the diversity of information resulting from the different indicators groups.*

SOERW 2017 – Sources: SPW - DGO3 - DEMNA; SPW - DGO3 - DEE