

Quality surface water, 2019

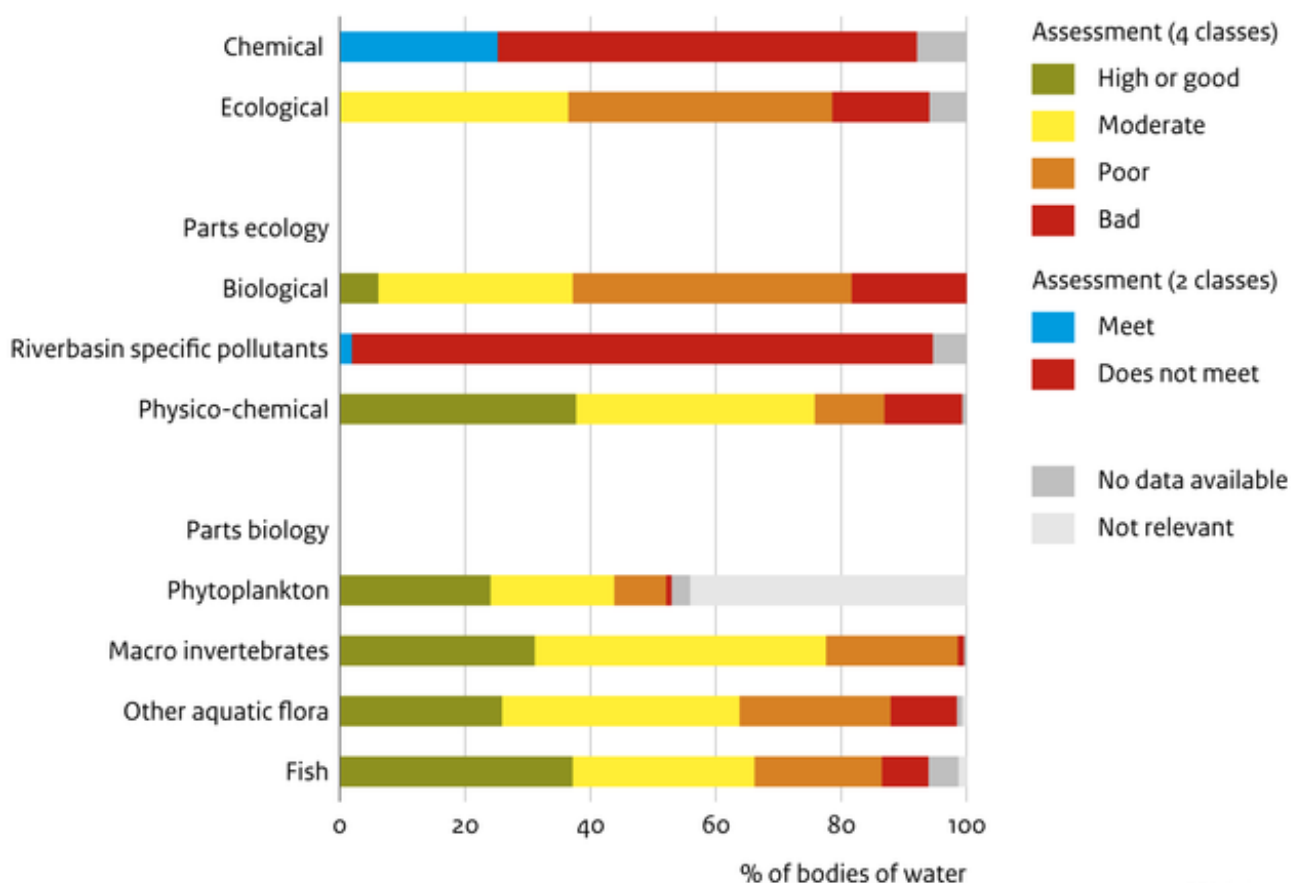
Indicator | 14 January 2021

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Most water bodies do not meet the quality requirements as laid down in the European Water Framework Directive (WFD). The chemical quality is in most water bodies insufficient. The ecological quality ranges from moderate to poor. This is the result of the biological evaluation and the presence of various substances.

[figuurgroep]

Assessment quality surface waters according Water Framework Directive, 2019

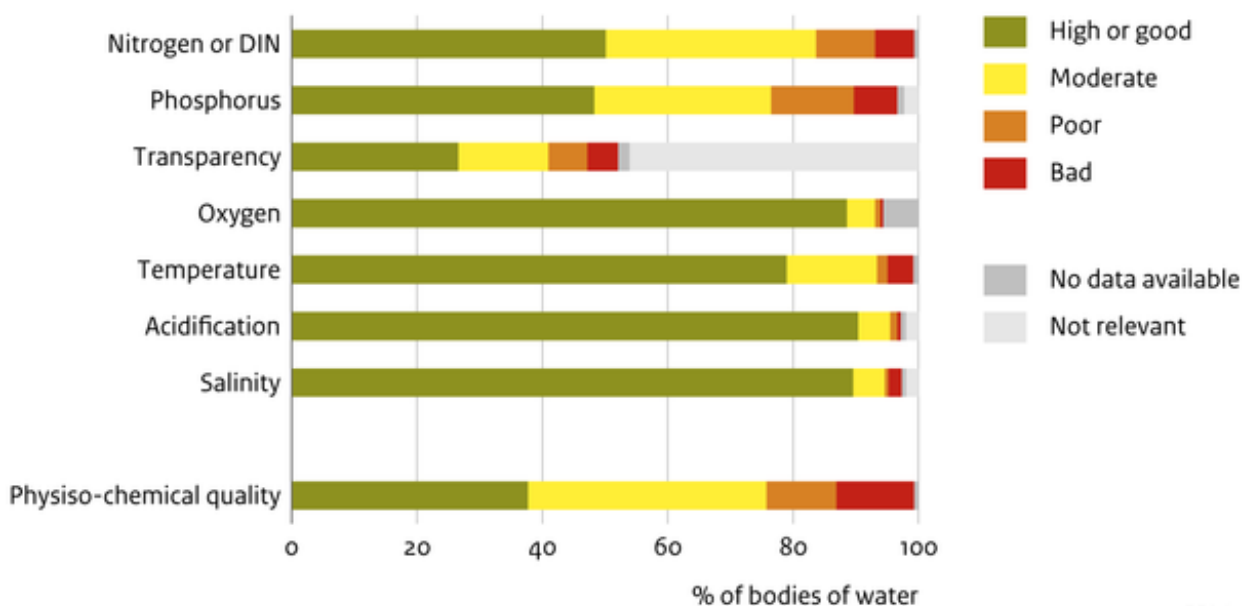


Source: IHW (Waterboards, RWS); adapted by PBL

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Physico-chemical quality of surface water according Water Framework Directive, 2019



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Evaluation method surface water

The quality of surface water is expressed in the chemical quality and the ecological quality. The ecological quality is predominantly defined by the biological quality, furthermore with the assessment of river basin specific pollutants and the physio-chemical quality. The WFD includes a method to evaluate the quality of surface water:

Ecological quality

Throughout the Netherlands, the ecological quality level ranges between moderate and poor, the label 'very good' is not assigned. The biological quality of 44 bodies of water of the 710 is good, but none of them have a good ecological quality. Nitrogen and phosphorus are the components with the highest number of waterbodies that does not meet the standard. The quality based on the river basin specific pollutants is in nearly all bodies of water insufficient.

Chemical quality

The chemical quality level is in a quart of the bodies of water in the Netherlands adequate. The chemical quality is based on 45 substances or group of substances specified on the European level.

Main causes

The main causes for the moderate to poor quality of Dutch surface water are:

- high concentrations of persistent substances due to emissions in the past. The evaluation of the chemical condition and the river basin specific substances is not sufficient, due to the presence of persistent substances or emissions from the past decades.
- Overfertilization with the nutrients nitrogen and phosphorus. These chemical elements cause algae growth.
- Water management. Most streams have been straightened and the banks leave very little or no room for the natural habitats of plants and animals. The banks of most lakes and channels are braced with rocks, making it impossible for ecosystems to develop. The water level is nearly always controlled, which limits the dynamics of the natural environment.
- The presence of pumping stations and dams. Fish can hardly migrate. Fish passages are constructed to improve this situation.
- Pesticides cause large-scale death of water flea populations.

References

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Relevant information

Technical information

Reference for this page

CBS, PBL, RIVM, WUR (2021). [Quality surface water, 2019](#) [9] (indicator 1438, version 08 , 14 January 2021). www.environmentaldata.nl. Statistics Netherlands (CBS), The Hague; PBL Netherlands

Environmental Assessment Agency, The Hague; RIVM National Institute for Public Health and the Environment, Bilthoven; and Wageningen University and Research, Wageningen.

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