SLOVENSKI STANDARD
oSIST prEN 16039:2026

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Kakovost vode - Navodilo za ocenjevanje hidromorfoloških značilnosti jezer

Water quality - Guidance standard on assessing the hydromorphological features of lakes

Wasserbeschaffenheit - Anleitung zur Beurteilung hydromorphologischer Eigenschaften von Standgewässern

Qualité de l'eau - Guide pour l'évaluation des caractéristiques hydromorphologiques des lacs

Ta slovenski standard je istoveten z: **prEN 16039**

ICS:

13.060.10	Voda iz naravnih virov	Water of natural resources

oSIST prEN 16039:2026 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
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Will supersede EN 16039:2011

English Version

Water quality - Guidance standard on assessing the hydromorphological features of lakes

Qualité de l'eau - Guide pour l'évaluation des caractéristiques hydromorphologiques des lacs

Wasserbeschaffenheit - Anleitung zur Beurteilung hydromorphologischer Eigenschaften von Standgewässern

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 230.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 16039:2026) has been prepared by Technical Committee CEN/TC 230 “Water analysis”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16039:2011.

The main changes in prEN 16039:2026 compared to EN 16039:2011 are:

— technological advances in the use of remote sensing methods have been added to monitoring lake hydromorphology procedures and the methodologies have been updated according to the experiences collected during application of the methods since the first publication of the document.

Introduction

This document contains lists of lake features and guidance on how to record, analyse and interpret the data obtained from desk-top, remote sensing and field surveys. In this document the word 'lake' is used as a generic term for standing waters, including natural and modified lakes, reservoirs and excavated pits.

The physical character of a lake is defined by its morphometry (size and shape), by its hydrological and sediment supply regimes, and by the nature of its riparian and aquatic vegetation, all of which are contingent on the landscape setting of the lake–catchment system and its environmental history. Ensuring that the key physical characteristics and associated physical processes operating within lakes are accurately and consistently assessed across different lake types is essential in understanding a lake's resilience to the effects of human pressures in helping to understand the extent to which its biodiversity could have diminished. The assessment of physical characteristics and processes is required for a range of purposes, including the EC Water Framework Directive (WFD) [1], the EC Habitats Directive [2], the EC Floods Directive, the EC Biodiversity Strategy for 2030, for Environmental Impact Assessment, and for lake management and restoration, all of which are vehicles for addressing the climate and nature emergencies.

The WFD requires physical features of surface waters to be considered when assessing 'ecological status' and refers to these features as hydromorphological. Annex V of the WFD lists two categories of hydromorphological 'quality elements' for assessing lakes – 'hydrological regime' and 'morphological conditions' – each sub-divided into several specified characteristics. Those in the hydrological category comprise the quantity and dynamics of flow, level, residence time and connection to groundwaters, whereas those in the morphological category are lake depth variation, quantity and structure of the substrate and the structure and condition of the lake shore zone.

The Habitats Directive applies to a wide range of terrestrial, freshwater and marine habitats and species. The Directive requires Member States to maintain or restore these to 'favourable conservation status', partly by designating Special Areas of Conservation (SACs). The EU Biodiversity Strategy for 2030 is closely related to the Habitats Directive in that it seeks to expand the area of SACs. For lakes, the process of selection and monitoring SACs involves recording and regularly assessing a suite of physical, chemical and biological features. A standard approach to hydromorphological assessment, although not specifically required by the Directive, thus enables the contribution of physical structure and hydrology to favourable conservation status to be assessed, and allows comparisons to be made between Member States.

The Floods Directive requires Member States to develop flood risk assessments, maps, and management plans for both current and future flood risk. As with the Habitats Directive, a standard approach to hydromorphological assessment is not specifically required, but it can nevertheless provide an enhanced understanding of how lakes and their catchments can contribute to flood risk management.

NOTE In this document, 'assessment' is used as a broad term referring to the general description and characterization of lake features and the pressures that impinge upon them. It is not used to imply particular levels of 'quality' or 'value', whether related to ecological status under the WFD or more generally.