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DEVELOPMENT OF CLASSIFICATION SYSTEM AND BIOLOGICAL REFERENCE CONDITIONS FOR BULGARIAN RIVERS AND LAKES ACCORDING TO THE WATER FRAMEWORK DIRECTIVE

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ABSTRACT. The study focused on sampling procedures and analysis of biological and physico-chemical quality elements (according to the EU Water Framework Directive (WFD)) and aimed at defining reference conditions and sites, maximum ecological potential, specific physico-chemical and hydromorphological conditions for assessed surface water types of “rivers” and “lakes” categories. Biological quality elements (BQE) and their metrics were selected in compliance with WFD requirements and its additional guidelines. All five compulsory BQEs were surveyed (phytoplankton, macrophyte flora, phytobenthos, macrozoobenthos, fish fauna) towards establishing rivers and lakes ecological status and potential. Current research indicates a certain necessity for integration of all assessments and analysis of ecological status/potential and their direct link to the measurement and monitoring programmes in Bulgaria.

CLIMATE CHANGE AND THE IMPACT ON AGRICULTURE IN REPUBLIC OF MACEDONIA

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ABSTRACT. The agriculture sector is one of the most important sectors in Macedonian economy and it is the second source of gas emission in the country. The agriculture sector will face serious impact of global climate change which will alert on climate significantly. According to the climate scenarios, the most vulnerable agricultural areas to climate change in Republic of Macedonia are Povardarie, southeastern part of the country, south Vardar valley, valley of Skopje and Kumanovo, Ovche Pole, Pelagonija, Plog and Prespa/Ohrid region. In this paper analysis of climate change and evaluation of its impact on agriculture in Republic of Macedonia are presented.