

Hungary

Supporting nature conservation in Hungary

Mapping provided by the Department of Geodesy, Remote Sensing and Land Offices (BFKH FTFF) in Hungary is supporting a European Union Nature Conservation Strategy Project.

BFKH FTFF (formerly FÖMI) is a key contributor of mapping tasks for the goals in the four development fields of Natura, Ecosystem services, Landscape character and Green infrastructure. The most significant of the thematic maps provided is the first National Ecosystem Map of Hungary, the base layer for which is the land cover layer of the national Land Parcel Identification System (LPIS). Further datasets focusing on various

thematic fields, such as Copernicus HRL 2015 Water and Wetness (WAW), data from the National Forest Information System (ESZIR), were also added.

The Ecosystem Map depicts the country using six main categories with 57 third level classes. Its development has demonstrated new uses of geospatial data with new methodology as well as efficient collaboration between several Hungarian institutes. A further significant project output is a full national radiometrically raw ortho mosaic.

In Hungary, the large majority of surface waters and the totality of subsurface waters are the sole property of the Hungarian State, and their exploitation and all activities leading to qualitative or quantitative changes are subject to authorisation. BFKH FTFF is participating in the Development of the Agricultural Water Usage Information and Control Framework Project which aims to reduce administrative burdens on users by developing a fully electronic process for water usage authorisation.

The system will also provide actual, reliable water usage data for authorities and relevant environmental data for farmers to facilitate irrigation planning. BFKH FTFF's main task is the provision of authoritative geospatial data to underpin the decision support system developed to deliver this for farmers. The data is derived from various sources, including the national cadastral data base, digital elevation model, infrastructure networks and remote sensing. BFKH FTFF has also extended its Geoshop portal to provide a one-stop solution for irrigation investment planning offices to obtain all relevant authoritative geospatial data through a single electronic transaction.

A methodology based on the analysis of Earth Observation has also been developed to enable the separation of irrigated and non-irrigated arable parcels. Surveys based on this methodology are planned for the authoritative control of irrigation, as well as in the development of future irrigation strategies.

