

DELINEATE THE FUNCTIONAL HYDROGRAPHIC NETWORK

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Description

When management practices along river banks are constrained by administrative rules or have to be implemented, it is crucial to have a precise location and delineation of the river system, especially upslope where the hydrographic network is diffuse and artificial ditches and natural rivulets are difficult to discriminate.

Rationale

The choice of the beginning of the hydrographic system is often based on unclear criteria that generally lead to underestimation of the length of the functional stream network: the stream springs locations may vary with the season (the stream course expanding in winter). In Brittany this underestimation may concern up to 20% of the total length of the stream network.

Three criteria can be considered to delineate the functional hydrographic network.

- The current and local observations: presence of a thalweg, river banks, of a specific substrate or indicators of aquatic life (plant or animal life),
- The seasonal observations: the presence of a spring precisely located, or water flowing during rainless periods.
- The past and ancient observations: written (ancient map and cadastral register) or oral memory (previous owners, old people, especially when rivulets are channelized).

References

WFD, 2003. Common Implementation Strategy. Guidance document n°2. Identification of water bodies, European Communities, Luxembourg.