

# River Bed Vegetation Map

Submitted by *Rijkswaterstaat*, the Directorate-General for Public Works and Water Management

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## Rijkswaterstaat

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## Size of organisation

>5000;  
people directly involved: 6-10

## Type of sector

Environment, climate change, agriculture  
(incl. food safety) and fishery; Transport  
and infrastructure

## Key words of the project

Flood safety, floodplain management,  
online consultation

Large areas of the Netherlands are prone to flooding from the rivers Rhine and Meuse. One of the responsibilities of the Dutch department for Public Works and Water Management (*Rijkswaterstaat*) is to enable a safe discharge of floods by keeping the river bed as smooth and obstacle-free as possible. A potential risk to flood safety is the unchecked development of vegetation in the flood plains of the river. To manage this risk *Rijkswaterstaat* has recently (2014) set a standard in the form of a river bed vegetation map (in Dutch: *Vegetatielegger*). This map indicates what type of vegetation is allowed to grow on which location in the river bed from a flood risk point of view. All vegetation is categorised into four classes, each with a distinct resistance to flow. Although *Rijkswaterstaat* is the river manager, most flood plains are privately owned by some 13,000 unique individuals and businesses. Imposing restrictions on the development of vegetation, thus limiting the use of these lands for economical or ecological purposes, affects their interests. The river bed vegetation map is a new legal instrument. Therefore it is subject to appeal by stakeholders.

From the start of the project, nature management organisations were actively involved in the development of the river bed vegetation map. In close cooperation with these large professional stakeholders, the specifications of the map were drawn up. Moreover *Rijkswaterstaat* realised that the many private landowners and tenants also had to be included at an early stage in the process. The challenge was to find an efficient, informal and interactive way to gain insight in their interests and concerns. Additional goals were to benefit from their knowledge to improve the map, to increase understanding and support for the map and its purpose, and to expedite the formal participation process in a later stage of the project.

The solution was to engage the private landowners and tenants in an online and offline consultation strategy. All 13,000 received a letter in which they were informed about the introduction of the river bed vegetation map and its purpose. They were invited to an interactive website that published a draft version of the vegetation map. By entering their address in a search field, they could zoom to their own property. They were also asked to check whether their property had been correctly mapped and respond by dragging and dropping an arrow with their comments. Statistics of their online behaviour show that 9% of the stakeholders submitted one or more proposals for correction, 60% visited the website but did not take any further action, and 31% did not respond at all. These figures constitute an extremely high response rate.

The online consultation strategy resulted in a better informed public, a considerable improvement of the river bed vegetation map and an increased support for its purpose. Of the 1,200 participants who submitted a reaction on the website, only 40 formally opposed at a later stage to the river bed vegetation map. The Minister of Infrastructure and the Environment approved the river bed vegetation map in October 2014. It now constitutes the basis on which *Rijkswaterstaat* performs its vegetation management of the flood plains.