

ODUG Benefits Case for releasing the River Network Centreline

Description & Request Overview

Vector based centrelines of rivers and other watercourses in England and Wales attributed with local names of the watercourses has not been released under open government licence.

Surface water available under OS open data Vector District maps is a related dataset but does not include any attribution such as river network name nor are rivers mapped continuously.

Data Release Rationale

A set of river network centrelines would enable the public to see the length and course of each river and stream in open mapping products, and identify those rivers and streams by name.

Release of this data would enhance leisure applications, tourism and outdoor pursuits. Enabling developers to include the river network as a standard layer on free web-based maps would also help familiarise the public with names and locations of their local watercourses. This would support greater awareness of flood risk and environmental concerns associated with rivers and streams.

Target User Description – Community Fit

The availability for the data could have wide reaching use for Business, Personal, Community and Research. The request has identified a gap in the provision of OS open data.

Benefits

A generalised river network centreline dataset has the potential for widespread use for outdoor leisure activities such as fishing and watersports, the protection, conservation and restoration of local rivers by community groups, flood alerts and warning, insurance claims and assessment as a result of flooding and property evaluation.

The release of a river centreline river network as open data could bring therefore a multitude of opportunities and benefits:

The value of natural rivers has an impact on property prices and other services such as outdoor activities. The economic value of ecosystems has been assessed at several million pounds (see <http://uknea.unep-wcmc.org/> UK National Ecosystem Assessment (NEA))

Knowing where rivers are and linking them to other information has a potential value to fishing and watersport users. Monthly participation counts from the 2011-2012 http://www.sportengland.org/research/active_people_survey.aspx Sport England Active People Survey, for sports usually associated with the river network indicate the potential number of beneficiaries of the data:

- angling 980,100
- canoeing and kayaking 147,800

- rowing 60,100

The use of an authoritative river map would support the work of hundreds of community groups that help to protect, conserve and restore local rivers. Data about river section are crucial information to coordinate these activities <http://www.ukrivers.net/network.html>

Publishing the location of rivers and their names could enhance flood warning alerts, and the prevention of flooding as the potential risk of any flooding event can be demonstrated to the individual householder. Using mobile phone apps could show the distance from a river section that may be flooding. In addition, the location of rivers after a flood event can help the householder in insurance claims leading to more accurate and detailed assessments.

To include the data in free open data applications such as Open Street Map enables the onward use in apps. Good examples for the onward use are demonstrated by the release of datasets under OGL by the <http://canalrivertrust.org.uk/> Canal & River Trust. The data includes canal centrelines and network junction points, towpaths, aqueducts and bridges. River network data are missing to complete a water network dataset for the UK alongside the existing Open Street Map data. The availability of data could have the potential for onwards innovative applications in any of the above named use cases.

More detailed information about the above benefits examples are available on request.

Barriers and Requirements for Release

The Environment Agency created the data partially from Ordnance Survey Mastermap and from local surveys, EA officer local knowledge and local authority information. The data includes Ordnance Survey derived data rights and Environment Agency intellectual property rights. Both prevent the release of the data under Open Government Licence at the moment, however, data can be requested for non-commercial use under an enduser license for £ 1. The dataset can be purchased for commercial use at a price of £ 15,000 for unlimited terminal use and £ 1,875 (12.5% of the list price) for single terminal use plus OS royalty charges.

OS and EA have considered to create a generalised river network dataset from the detailed dataset which may meet the needs of this data request. The feasibility for proposing a generalised river network dataset as open data needs to be further explored with OS and EA. Potentially initial investment to create a generalised dataset may be required, however, onward provision and costs should only be proportional to the distribution cost of the data.

There are no known privacy risks of releasing the data.

Recommendations

Following the example of the Canal and River Trust ODUG recommends to OS and the Environment Agency to provide a proposal for the free release of a river network centreline dataset as part of medium to small scale open location infrastructure to DSB. There should be no significant costs or barriers for publishing a generalised river network datasets as an open dataset suitable for leisure and other uses.