FINALIST ★ 2016 ★

epaCatchments
Healthy • Resilient • Productive
Valued water resources supporting vibrant communities

catchments.ie
Water from source to sea

Waters & communities
Healthy Waters supporting Vibrant Communities

Local Authority Waters and Communities Office

The Waters and Communities Office has been established to carry out public consultation and engagement, and to coordinate the activities of all 31 local authorities in areas connected with the Water Framework Directive.

epa
Environmental Protection Agency
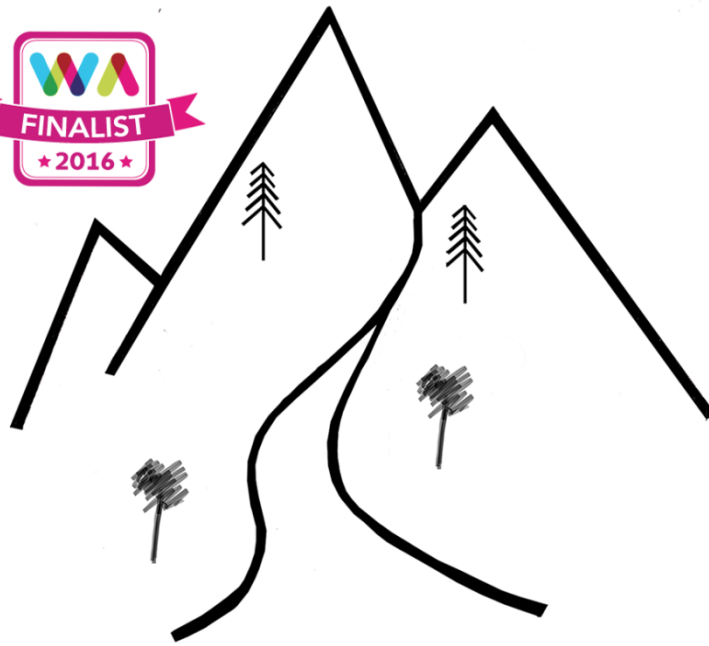An Ghníomhaireacht um Chaomhnú Comhshaoil

Environmental Protection Agency

The EPA is responsible for coordinating the monitoring, assessment and reporting on the status of our 4829 waterbodies, looking at trends and changes and determining which waterbodies are at risk and what could be causing this, and drafting environmental objectives and measures for each.
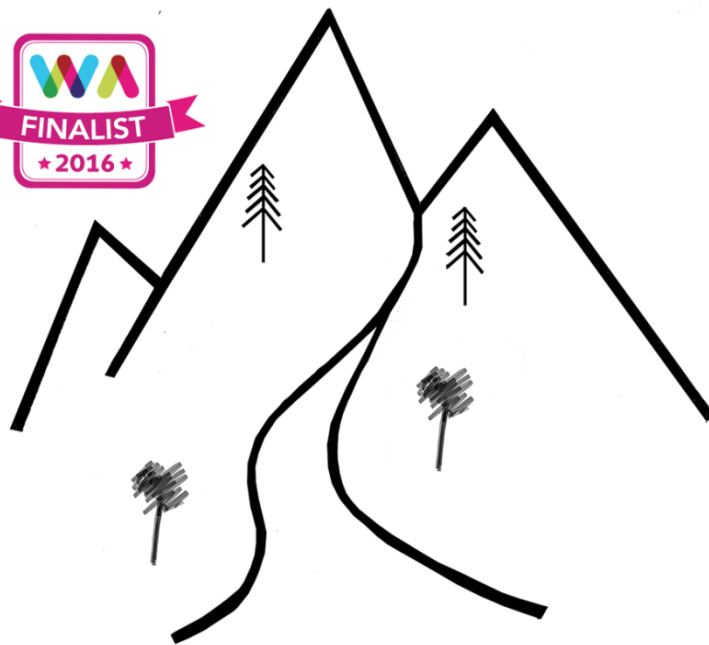
An Roinn Tithíochta, Pleanála, Pobail agus Rialtais Áitiúil
Department of Housing, Planning, Community and Local Government

Department of Housing, Planning, Community and Local Government

The Department is responsible for making sure that the right policies, regulations and resources are in place to implement the Water Framework Directive, and developing a River Basin Management Plan and Programme of Measures that will be implemented after public consultation, and sign off by the Minister.

Open Source
CMS - Wordpress
Maps - OpenLayers 3, GeoServer, GeoNetwork and OpenStreetMap

Open Data
(where possible)
API to access the EPA's public Catchment information
Access WFD Map layers via OGC WMS &WFS
Access WFD Map layers via EPA Metadata Catalague
Access WFD Map layers via ISDE portal

catchments.ie   Home   News   Stories   Learn +   Maps   Data   Resources   Contact

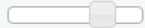Explore   WFD Risk   Water Quality   Environmental Pressures   Protected Areas   Susceptibility   Find Water Feature

Explore map layers

⊗ **River Water Quality Status: 2010-2012**   ↑ ↓ ⓘ
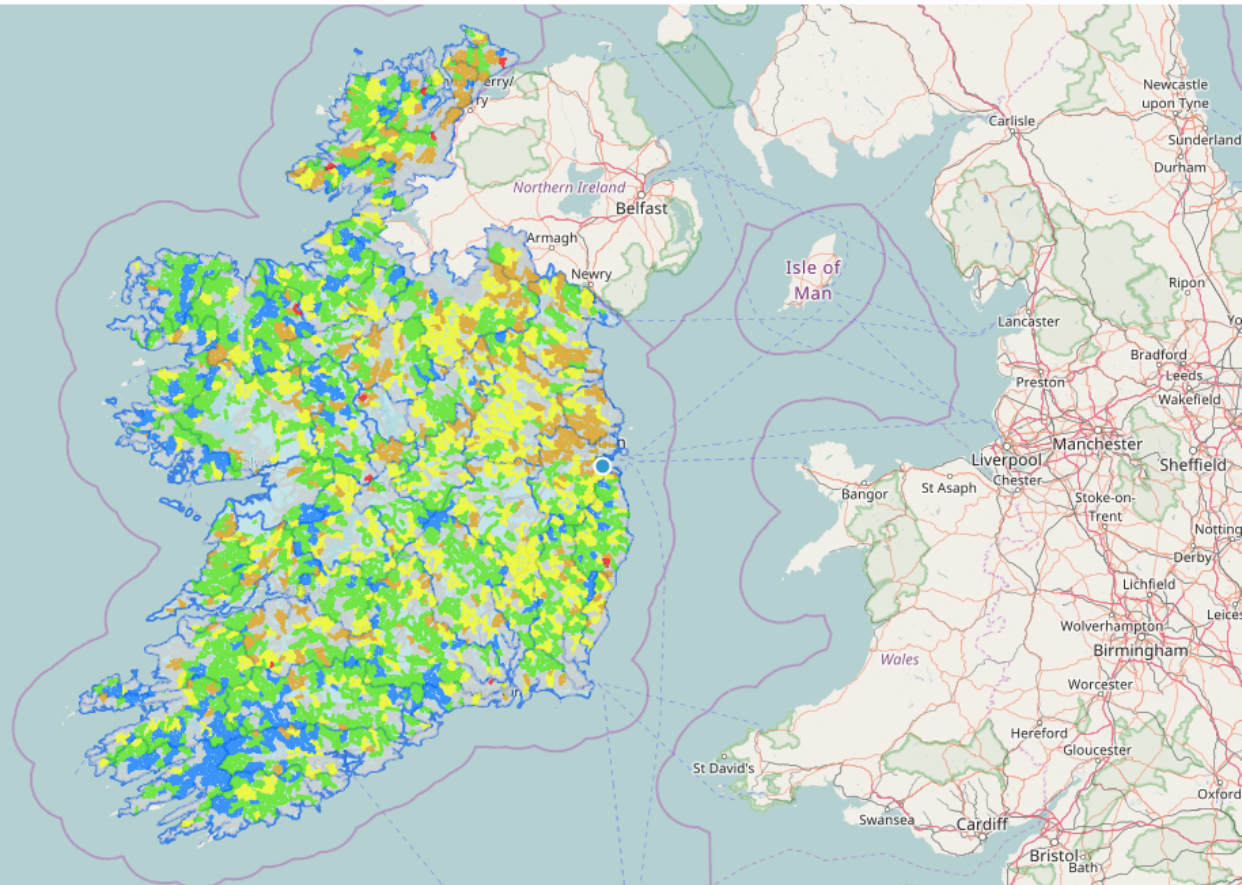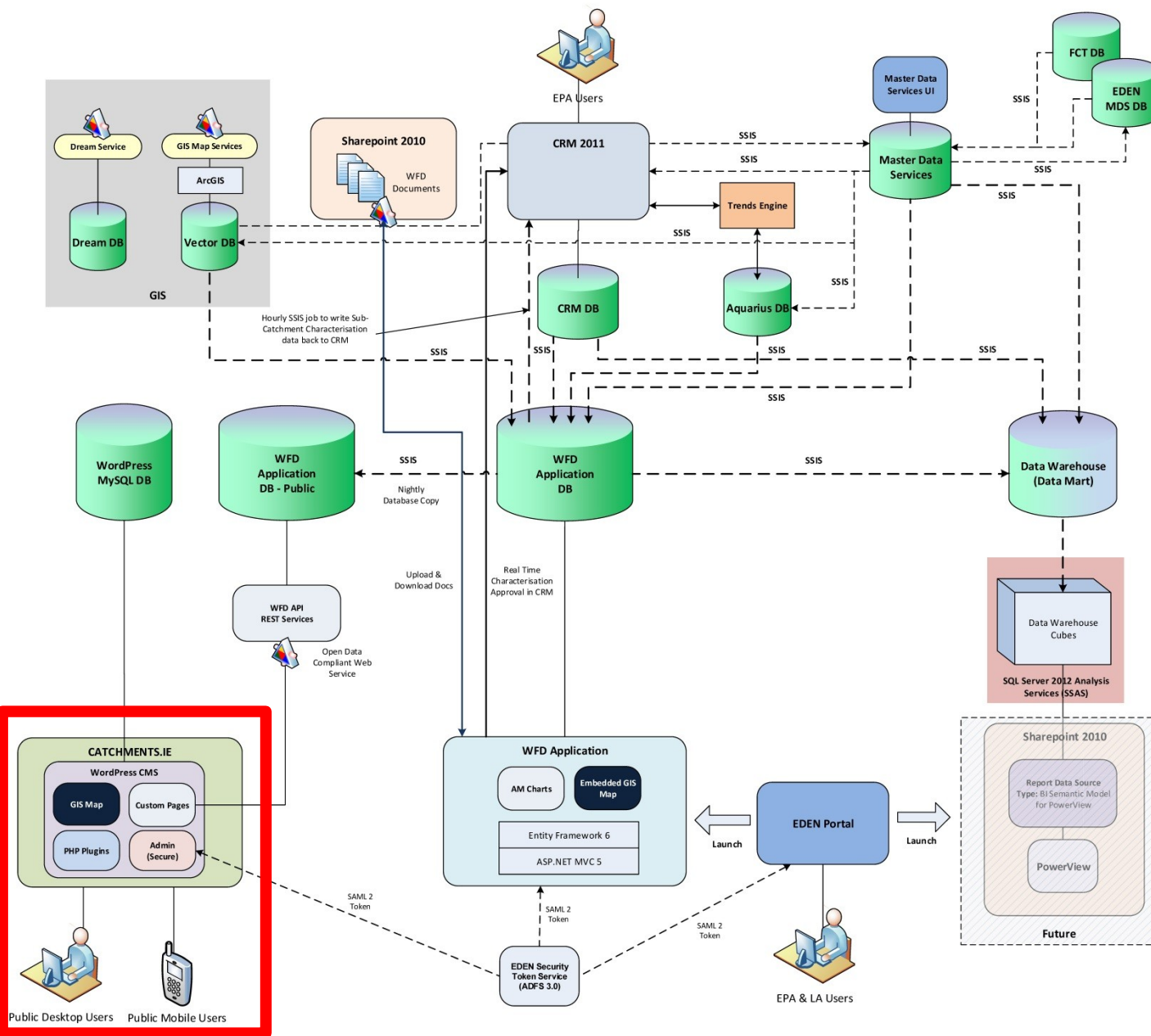River waterbody status during the 2010-2012 assessment cycle.

⊗ **Catchments**   ↑ ↓ ⓘ

Map legend

River Water Quality Status: 2010-2012

High
Good
Moderate
Poor
Bad

River Water Quality Status 2010-

WFD System Architecture Diagram

Catchments.ie = the tip of the iceberg of systems and data

Map- Client Side

- Simple Map Viewer
- Built using OpenLayers 3 Opensource Library
- KnocoutJS + Jquery + HTML + Bootstrap
- Responsive
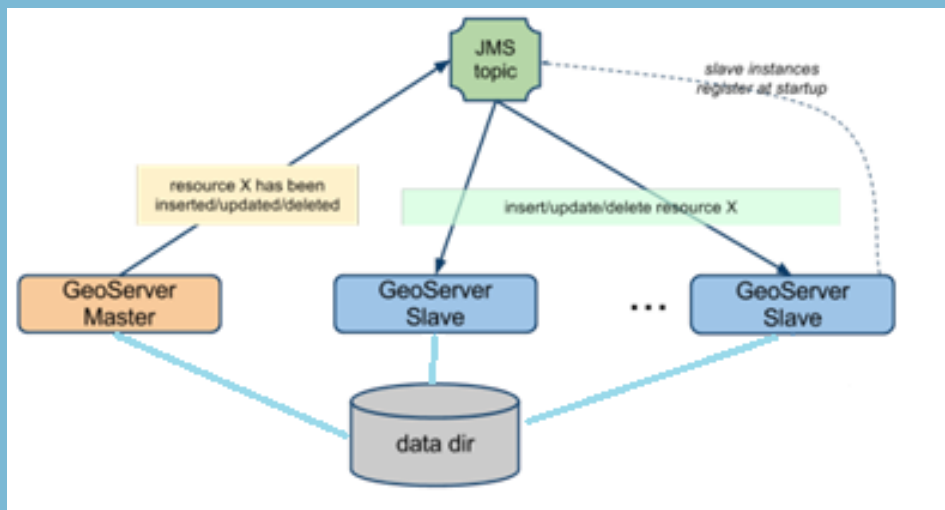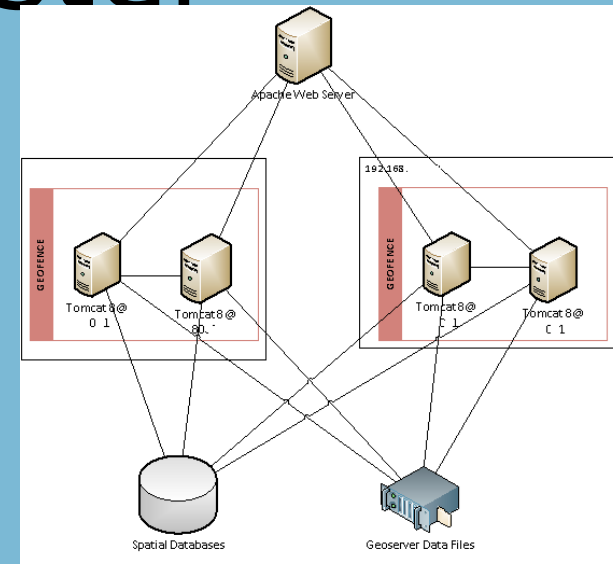- OpenStreet Map as base map
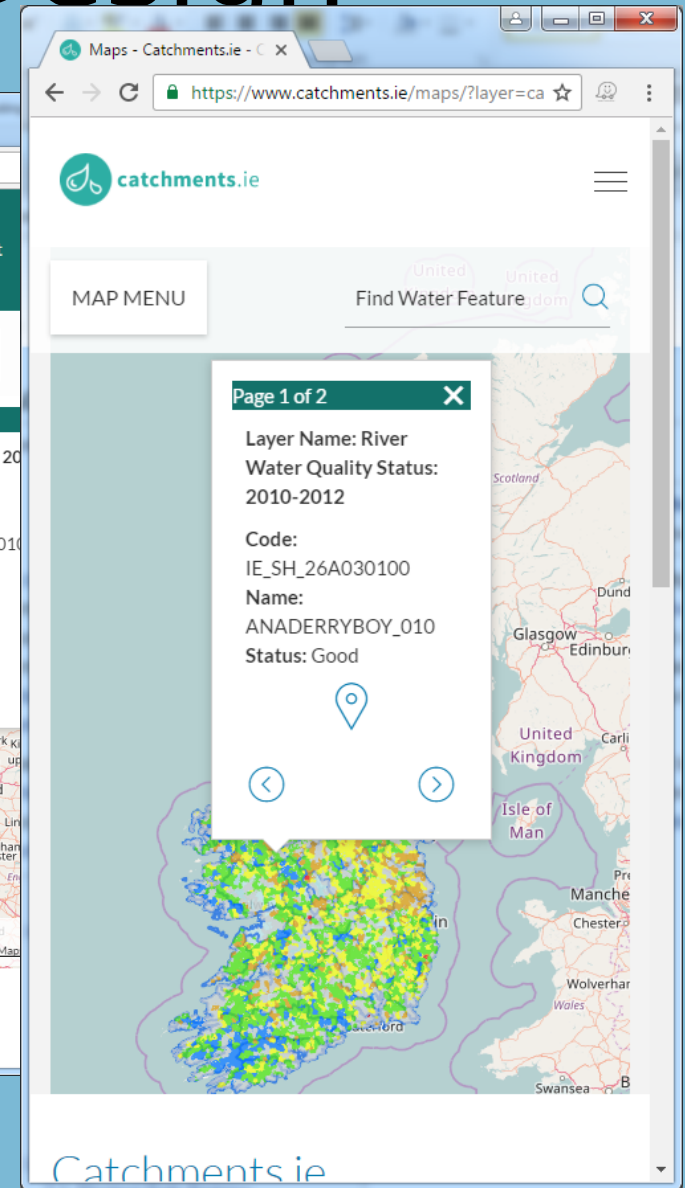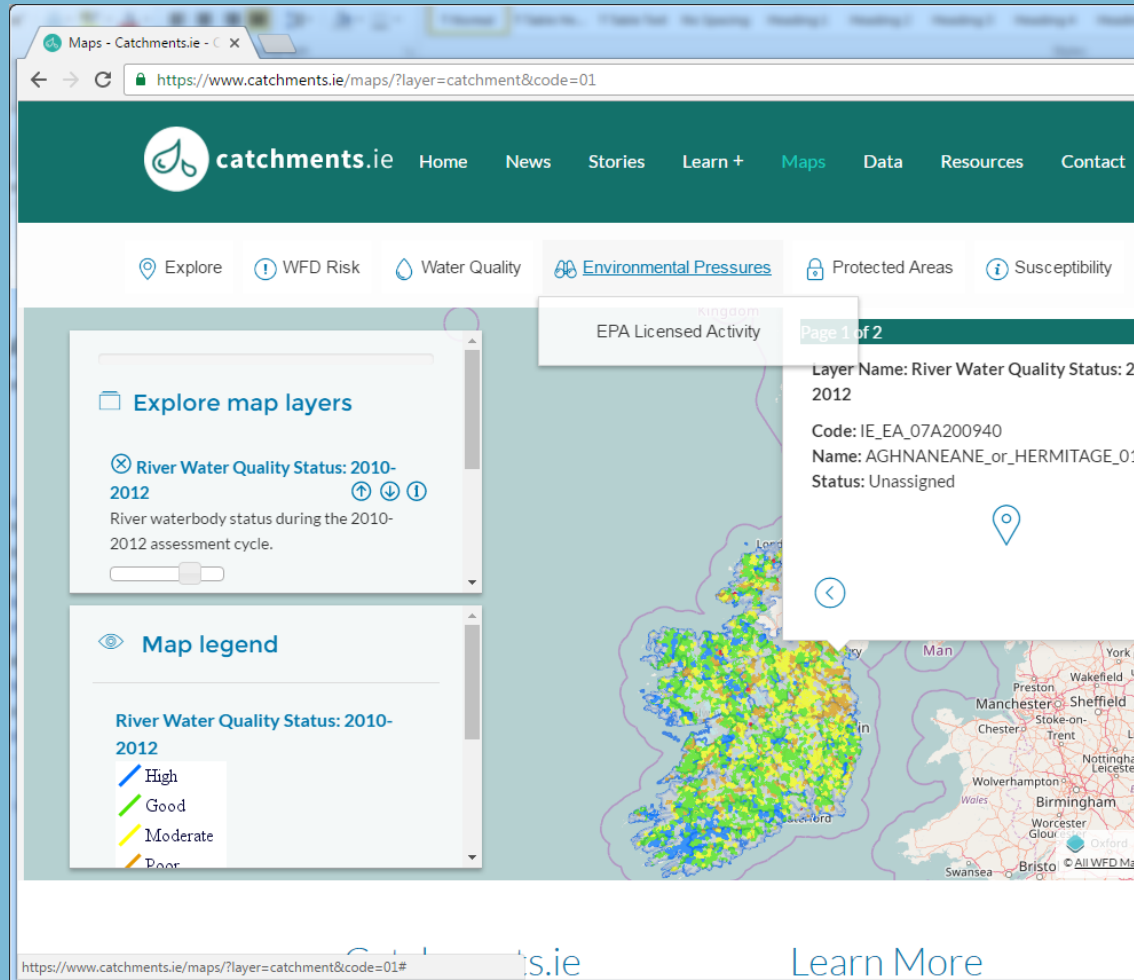
Map - Server Side

- *GeoServer-* map server (WMS, WFS)
- *GeoFence-* authentication/authorization engine
- *GeoNetwork-* metadata catalogue (ISDE Node)
- *GeoWebCache–* map tiles, GeoServer integration
- MS SQL Server- EPA's enterprise DBMS
- *Apache Server-* Load balancing
- Data is in native Projection System
- On the fly reprojection for non-cached requests

GeoServer Cluster

- 2 Virtual Servers
- 4 GeoServer instances
- 2 GeoFence instances
- Shared Configuration
- 1 master, 3 slave instances
- Apache ActiveMQ
- Static layers are cached via GeoWebCache

http://docs.geoserver.org/stable/en/user/community/jms-cluster/index.html

Responsive Design

2016 Realex Payments Web Awards

- Best Science and Technology – Sponsored by BT Young Scientists

- Most Innovative