Scotland's environment

Scotland's Environment Web Spotfire

1. Background

Tools are being developed for Scotland's Environment website that will help improve understanding of Scotland's environment through new ways to present, visualise and analyse data. One of the tools being developed to make environmental data more accessible and easier to access is Spotfire.

Spotfire is a visual data analysis tool. It can rapidly read data from vast quantities of raw data, from any source and multiple sources all at once. It allows the user to interactively interrogate data using various forms of presentation including maps, tables

and graphs. Spotfire applications on Scotland's Environment website will provide users with a platform which will allow them to analyse and view multiple levels of data, allowing it to be filtered as required (by spatial area and data complexity).



2. Key Messages and Opportunities

- Scotland's Environment Web is using Spotfire to help users analyse and view data on the environment, and to filter information relevant to their area of interest or level of understanding.
- Spotfire technology can help people understand and analyse the data. The easy-to-use images and graphs produced by Spotfire can significantly reduce the amount of explanatory text often required when presenting data sets.
- Spotfire is a web-based tool and can be used without the need to download additional tools.
 Everything needed to use it is available through Scotland's Environment Web.
- By providing data in a vibrant and interactive way, it becomes more engaging and useful information can be drawn from it. This increases the likelihood of data influencing decisions and change behaviours through an improved and more widespread understanding.
- Through Scotland's Environment Web, Spotfire applications can be used by a wide variety of people with varying data interests and expertise.
 This can range from the general public, teachers and students, policy officers and environmental assessment specialists.



3. Description





Scotland's Environment Web (LIFE+) funding has been used to invest in Spotfire data analysis and visualisation software. Spotfire will allow users to:

- Read data from multiple data sources (e.g. Excel, CSV, XML, web services and databases including Oracle and SQL) in one place.
- Relate, transform, manipulate and calculate new data from existing datasets.
- Maintain live links to data published by partners, allowing for regular automated updates for datasets that are refreshed on a regular basis. This ensures that the most up-to-date data is always presented.
- Build up a report of data from the <u>state of</u> <u>environment</u> reports.
- Images, graphs and data tables shown in the application can be exported as images, CSV files and PDF documents for use in reports and presentations.

Guidance on how to use the Spotfire applications will be included on screen. Each application will vary in its complexity and the refore the audiences it is most suitable for.

One of the major benefits of Spotfire is that the interactive graphs and images can be integrated into other pages of information in Scotland's Environment website. This supports a key driver of the project where it seeks to move away from static, text-heavy, published reports to more dynamic, engaging and interesting data and information presentations which can help the user get more interested in data, improve their understanding of environmental issues, help to inform decisions and encourage positive action to protect and improve the environment.

4. Contact Us

If you are interested in finding out more about the Scotland's Environment Web (LIFE+) project or have any comments about Spotfire technology, contact seweb.administrator@sepa.org.uk



5. Supporting Documents

Scotland's Environment Web

Connect magazine Spotfire article

TIBCO Spotfire Website

