

# EEA Briefing

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## Eye on Earth Watches

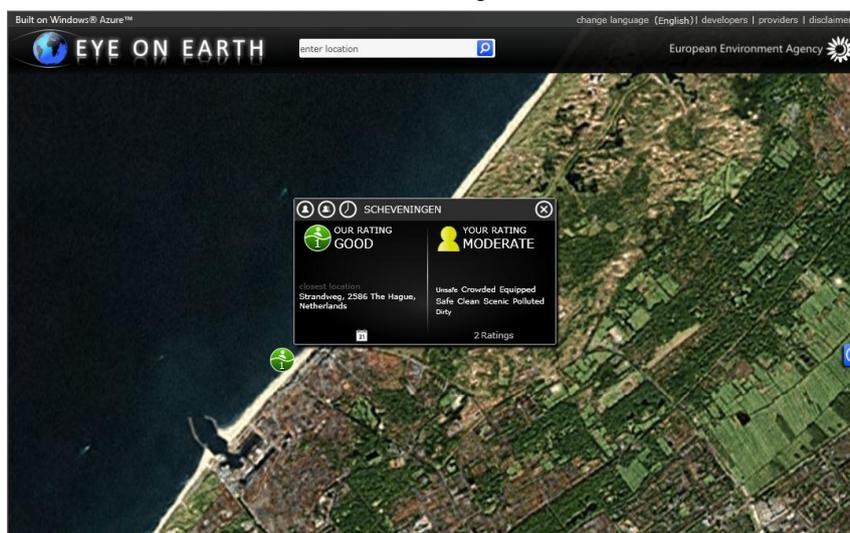
**Summary:** *Eye on Earth* is a 'social data website' for creating and sharing environmental information. In May 2008, *Eye on Earth* was launched with *WaterWatch*, an online interactive map of Europe that presents the latest available official water quality data. This was followed in November 2009 with *AirWatch* providing near real-time data on three air pollutants. Both *Watches* allow users to provide their own online *ratings*. In the future, EEA aims to engage citizens in the observation and reporting of environmental data to fill important knowledge gaps. Additional environmental topics will be added to *Watches* such as noise and invasive species.

### A multi-directional communication platform

*Eye on Earth* is a 'social data website' for creating and sharing environmental information. *Watches* are a key component of *Eye on Earth* that aim to: collect and compile environmental data from diverse sources; transform that data into relevant information; and make information accessible to a wide diversity of audiences. *Watch* users can interact with EEA and/or with each other through: feedback about *Eye on Earth* (e.g. How is the platform useful?); personal *ratings* of local environmental quality; and *citizen science*. Information within the platform exists in various levels of complexity, is powered by social media and web services, and is presented in multiple languages where possible.

The *Eye on Earth* platform was first launched by EEA in May 2008 with *WaterWatch*, an online interactive map of Europe that presents the latest available official water quality data from over 22,000 monitoring stations in 28 countries (in accordance with the EU Bathing Water Quality Directive). The quality of water bodies is also historically assessed for past years according to color codes: Green – compliant with EU guide and mandatory values; Yellow – insufficiently sampled or not sampled; and Red – not compliant with mandatory values, or waters were closed due to bad quality. *WaterWatch* allows users to provide their own online ratings (Good, Moderate, or Bad) on water quality (e.g. of their local beaches), which can be compared with corresponding official EEA data. For example, 195 ratings were sent in for the beach at Scheveningen, Netherlands in 2008.

**Figure 1:** *WaterWatch* for the beach at Scheveningen, Netherlands



In November 2009, *AirWatch* was launched, using Microsoft's new Windows cloud technology. *AirWatch* provides near real-time data on three specific air pollutants (ground level ozone, particulate matter, and nitrogen dioxide) made available from over 1,000 air-quality measurement stations in 32 European countries. The platform further uses modeling to allow users to get an indication of air quality anywhere in Europe (not only in the proximity of measurement stations). The possible health effects from high concentrations are also explained. As with *WaterWatch*, citizens can input their own ratings of local air quality online.

**Figure 2:** *AirWatch* for a monitoring station in Denmark



### Widening the platform to additional scientists and topics

In the future, citizens will be able to provide their own data to the *Watches* through *citizen science*, defined as: Public involvement in projects or on-going programmes of scientific work by which individual volunteers or networks of volunteers, many of whom may have no specific scientific training, perform or manage research-related tasks such as observation, measurement or computation. EEA's vision here is to engage the public in the observation and reporting of environmental data and information to fill important gaps in our knowledge and understanding of Europe's environment. For example, citizen scientists will be able to track invasions of alien species by recording photos and sounds with smart phone applications.

*Watches* for additional environmental topics, to be added to *Eye on Earth* soon, include:

- *NoiseWatch*: Launch expected after summer 2011, with figures for 164 cities
- Sea surface temperature: An extension to *WaterWatch*
- Others: *NatureWatch* (Invasive alien species); Marine litter; Land use

EEA facilitates the development of *Eye on Earth* with partners such as Microsoft Corporation and Esri, a U.S.-based developer of GIS mapping software. *Watches* harness cutting-edge technological innovations to combine environmental data with geospatial data.

[Visit Eye on Earth Watches here](#)