

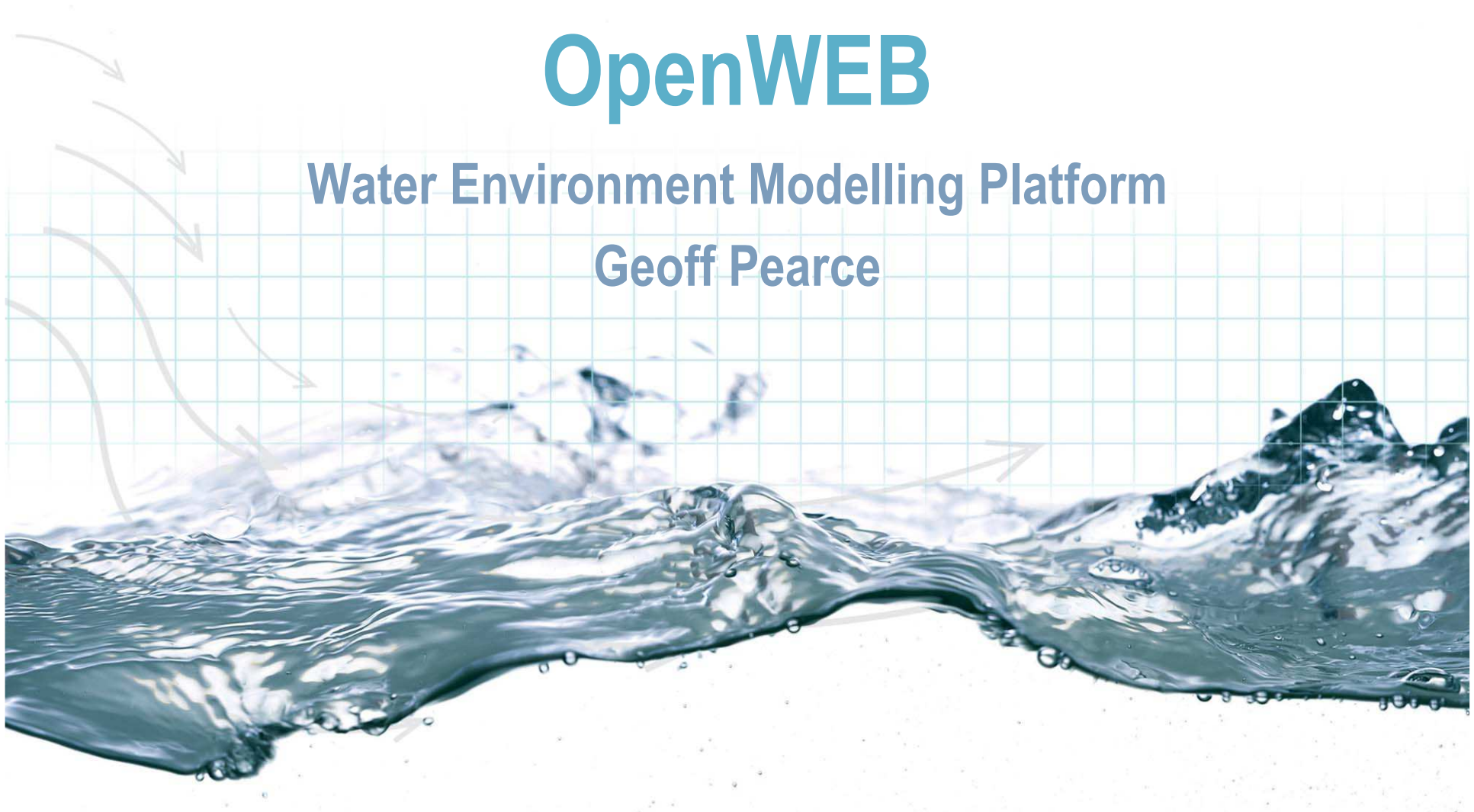


HR Wallingford  
*Working with water*

# OpenWEB

Water Environment Modelling Platform

Geoff Pearce



## The need for the OpenWEB initiative

### Researchers

- Face difficulty in taking their good ideas through to the end-user community.
- Need access to a suite of models (or have to write their own) in order to tackle specific problems of interest.

### Practitioners

- Difficult to keep track of the broad research base
- Time consuming to bring the most promising ideas forward.

### OpenWEB

- OpenWeb is a collaborative initiative between research centres and the academic community in the UK.
- It promotes the development of a common platform.
- It is to be used by academics for teaching and research, with a clear path for industry take-up.

## OpenWEB Aims

- identifying and managing new knowledge;
- developing a dialogue between key academic partners;
- minimising duplication of effort within the research community;
- easier translating of research into applications;
- increasing the commercial potential of research outputs

### OpenWEB includes a software platform to

- stimulate UK academic research in environmental modelling and
- facilitate knowledge transfer from the research community into application.

### The goals are to

- establish a conduit between state-of-the-art science
- provide a comprehensive range of high quality models available for the water environment.



## OpenWEB Partners (First Phase)

- Birmingham
- Bristol
- Cardiff
- Exeter
- Imperial
- Newcastle
- Heriot-Watt
- Oxford
- Plymouth
- CEH?

# OpenWEB is a unique cooperation between researchers and software users:

- quick start to research initiatives that involve modelling
- fast-track research outputs into productive tools
- researchers not side-tracked into developing routines and procedures
- access to relevant data sets for testing of approaches
- focuses resources on key areas
- users can choose the most appropriate approach
- reduces duplication of effort

Hydraulics	Run-off, flow, advection-dispersion, waves, wave-structure interaction
Transport	Sediments, contaminants, debris
Morphology	River, estuary, coast
Ecology	Wetland, fluvial, brackish, marine
Engineering	Loading, dynamic response, soil-structure interaction, reliability analysis
Socio-economics	Development, social movement and response, economics, futures
Data management	Data access, assimilation, and analysis
Decision Support	Risk, optimisation, scenarios, knowledge synthesis, visualisation

## What's in it for Research Partners?

- **Easy access to existing tools and methods**
- **System of: systems and modelling capability**
- **Mechanism for knowledge transfer**
  - develop metrics to reflect needs
- **Identified route through to exploitation**
  - Advantage in grant applications
  - Commercial opportunities more readily identified
- **Full recognition of IPR**
- **Student placement and teaching opportunities**

## What's in it for the Industry Partners?

- Access to a wide range of modelling tools
- Easy access to latest research advances
- Quality controlled software
- Delivery of a development tool kit (- not operational tools)

## Present development at OpenWEB

- SDK
- New Editor with improved functionality

## Phase 1


- Standard Open MI core
- Proto-type input/output with standard data model
- Standard set of visualisation tools

## Phase 2

- Improved GUI interface to define model interactions
- Wrapping of existing models
- Exploration of application to risk modelling work flows

# Example of OpenWEB community portal

Team Site
Welcome Quillon Harpham |


TEST OpenWeb TEST
This Site

Home | Contactsdemo | demohelpdesk | it team | **TEST OpenWeb TEST**
Site Actions

View All Site Content

**Pictures**

**Documents**

- Development Library
- Open Web Portal
- Open Web Wiki

**Lists**

- Calendar
- Tasks
- Open Web Community

**Discussions**

- Open Web Discussions

**Sites**

**People and Groups**

Recycle Bin

Team Site > TEST OpenWeb TEST


Evaluation of this platform for the Open Web project.

**Welcome**

**Welcome to the Open Web Portal** NEW

by Quillon Harpham 6/4/2008 12:27 PM

**Welcome to the Open Web Portal**



Some text welcoming people to the Open Web Portal. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox jumps over the lazy dog. The quick brown fox...

**About the Open Web Portal** NEW

by Quillon Harpham 6/4/2008 12:37 PM

**About the Open Web Portal**

Some text describing the Open Web Portal and the community which uses it. A description of what's here and all the varying features. Instruction on where to go for help and how to become a member of the Open Web Community.

...

Add new announcement

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**Announcements**

**A Second Announcement** NEW

by Quillon Harpham 6/4/2008 12:44 PM

The second announcement.

**Launch of the test Open Web portal** NEW

by Quillon Harpham 6/4/2008 12:43 PM

The test Open Web portal has been launched. Quillon Harpham and Tony Swiatoniowski are administrators. Both IS and Informatics can view and contribute to the database.

Add new announcement

---

**Open Web Discussions**

Subject

**Example Question** NEW

**A discussion topic** NEW

Add new discussion

**Open Web Community**

Company	Last Name	First Name	E-mail Address
<b>Company : College of Example Town (1)</b>			
<b>Company : Example University (1)</b>			
<b>Company : HR Wallingford Ltd (2)</b>			
HR Wallingford Ltd	Harpham	Quillon	q.harpham@hrwallingford.co.uk
HR Wallingford Ltd	Millard	Keiran	tkm@hrwallingford.co.uk
<b>Company : University of Example (1)</b>			
<b>Company : Wallingford Software (1)</b>			
Add new item			

Team Site

Welcome Quillon Harpham

HR Wallingford TEST OpenWeb TEST

Home Contactsdemo demohelpdesk it team **TEST OpenWeb TEST** Site Actions

Team Site > TEST OpenWeb TEST > Development Library

## Development Library

A library of Open MI wrapped models under development for use by the Open Web Community.

New Upload Actions Settings View: **All Documents**

Type	Name	Modified	Modified By
Folder	PenmanX	5/22/2008 1:43 PM	Quillon Harpham
Folder	RFSM	5/22/2008 1:44 PM	Quillon Harpham
Folder	SandFlow	5/22/2008 1:44 PM	Quillon Harpham
Folder	SWAN	5/21/2008 3:37 PM	Quillon Harpham

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