

Future Water Quality Improvements

An Environment Agency View

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30 November 2005

CIWEM Conference

Issues arising from the Periodic Review process

create a better place

Water Framework Directive

Key Objectives:

reduce pollution, prevent deterioration and
improve the health of aquatic ecosystems
promote the sustainable use of water

Reduce the impact of floods and droughts

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Water Framework Directive

Water for Life and Livelihoods

Regulations are in force

The Environment Agency
is the Competent Authority

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STATUTORY INSTRUMENTS

2003 No. 3242

WATER RESOURCES, ENGLAND AND WALES

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003

<i>Made</i>	- - - -	<i>10th December 2003</i>
<i>Laid before Parliament</i>		<i>11th December 2003</i>
<i>Coming into force</i>	- -	<i>2nd January 2004</i>

The Secretary of State and the National Assembly for Wales, acting respectively in relation to river basin districts that are wholly in England and river basin districts that are wholly in Wales (a), and jointly in relation to river basin districts that are partly in England and partly in Wales, being designated (b) for the purposes of section 2(2) of the European Communities Act 1972 (c) in relation to matters relating to water resources, in exercise of the powers conferred upon them by that section, hereby make the following Regulations:

Title, commencement, extent and application

1. These Regulations—

- (a) may be cited as the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003 and shall come into force on 2nd January 2004;
- (b) extend to England and Wales; and
- (c) apply only in relation to river basins districts identified by regulation **Error! Reference source not found.** (d).

Interpretation

2.— (1) In these Regulations—

- “the Agency” means the Environment Agency;
- “the appropriate authority” means—
 - (a) in relation to a river basin district that is wholly in England, the Secretary of State;
 - (b) in relation to a river basin district that is wholly in Wales, the Assembly; and
 - (c) in relation to a river basin district that is partly in England and partly in Wales, the Secretary of State and the Assembly acting jointly;
- “the Assembly” means the National Assembly for Wales;
- “body of water” means a body of groundwater or a body of surface water;

(a) The terms “river basin district”, “England” and “Wales” have the same meaning for this purpose as in the Regulations, and are defined in regulation 2(1).
 (b) S.I. 2003/2901.
 (c) 1972 c. 68.
 (d) The river basin districts identified by regulation 4(1) do not include any that are partly in England and partly in Scotland.

Water Framework Directive

Water for Life and Livelihoods

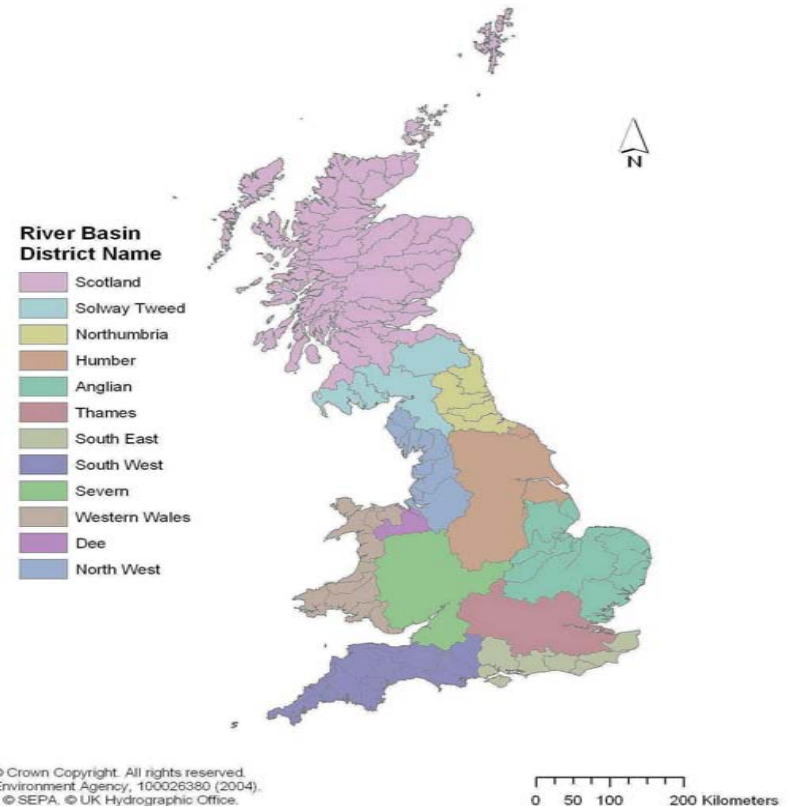
River Basin
Building Blocks

UK

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UK Article 3 Report on Water Framework Directive 2004

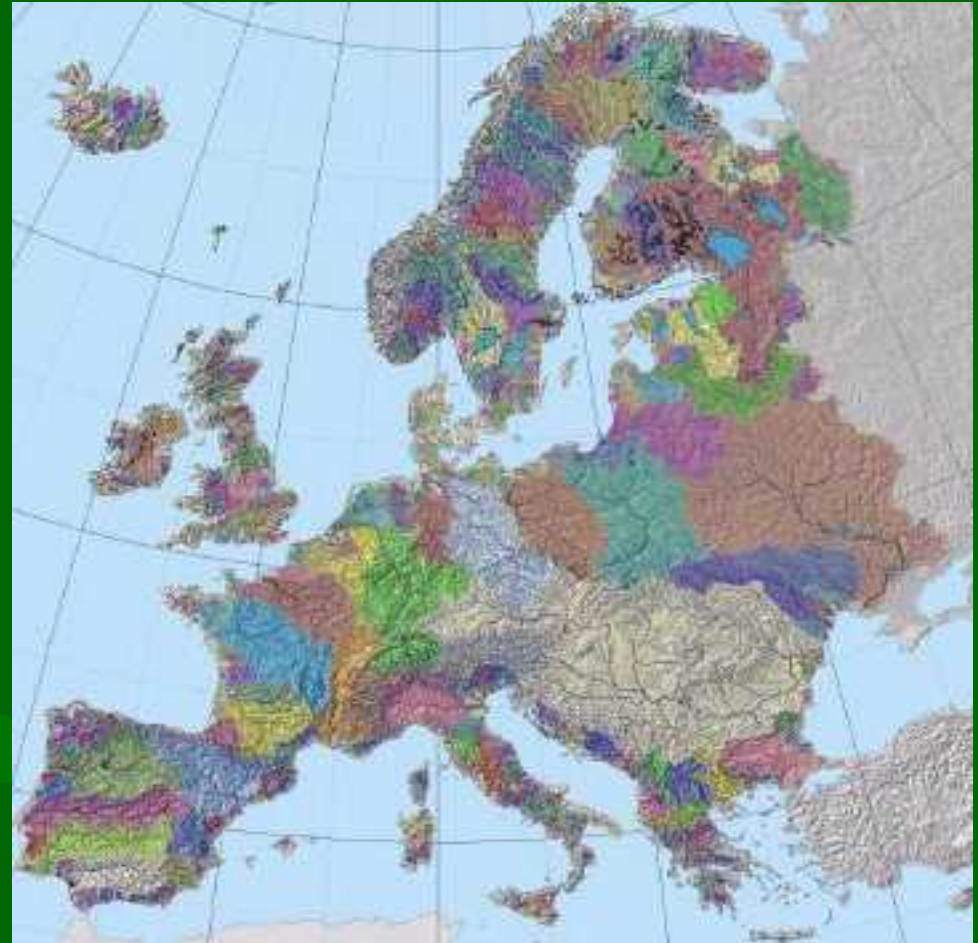
River Basins



Water Framework Directive

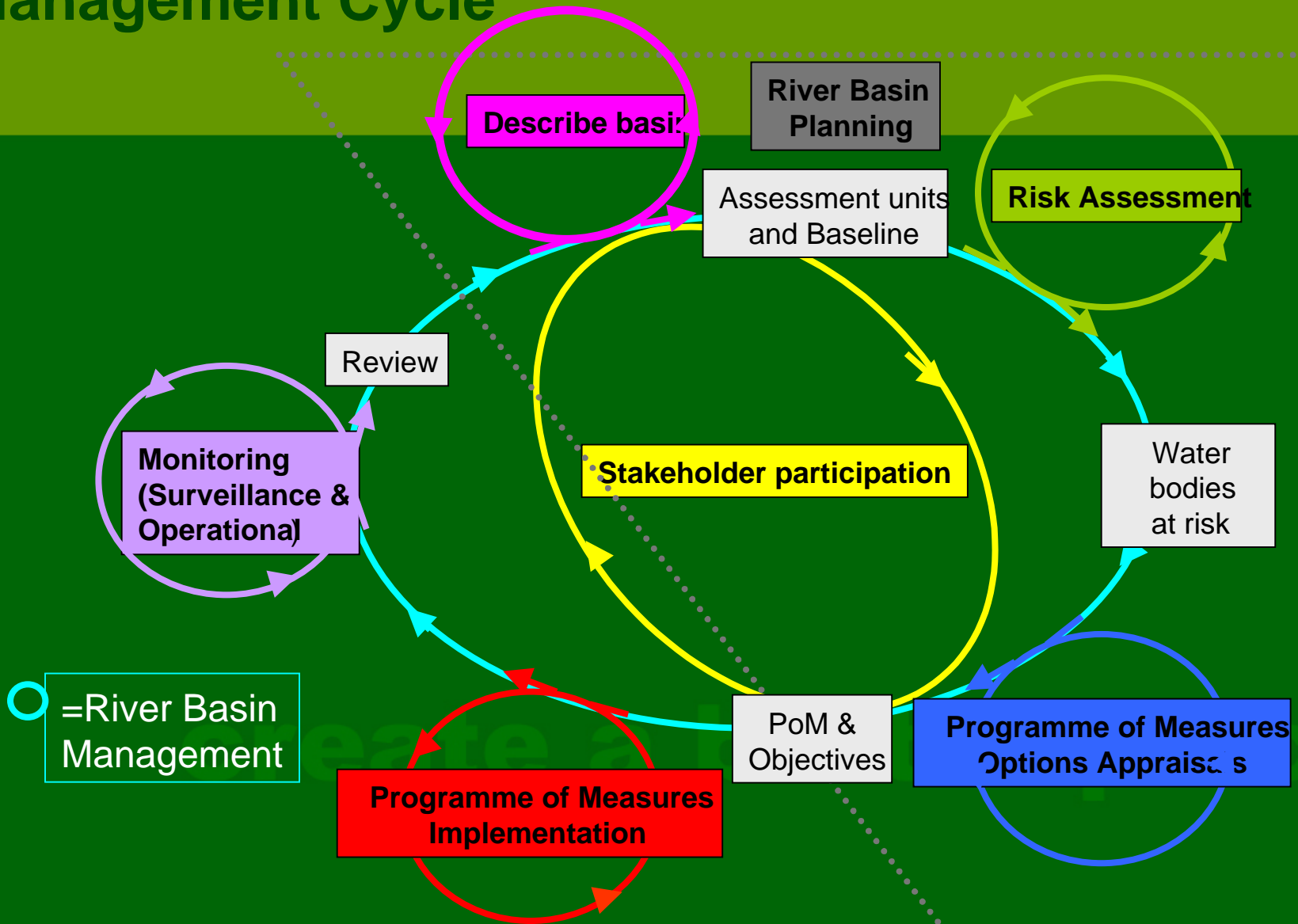
Water for Life and Livelihoods

European River Basins

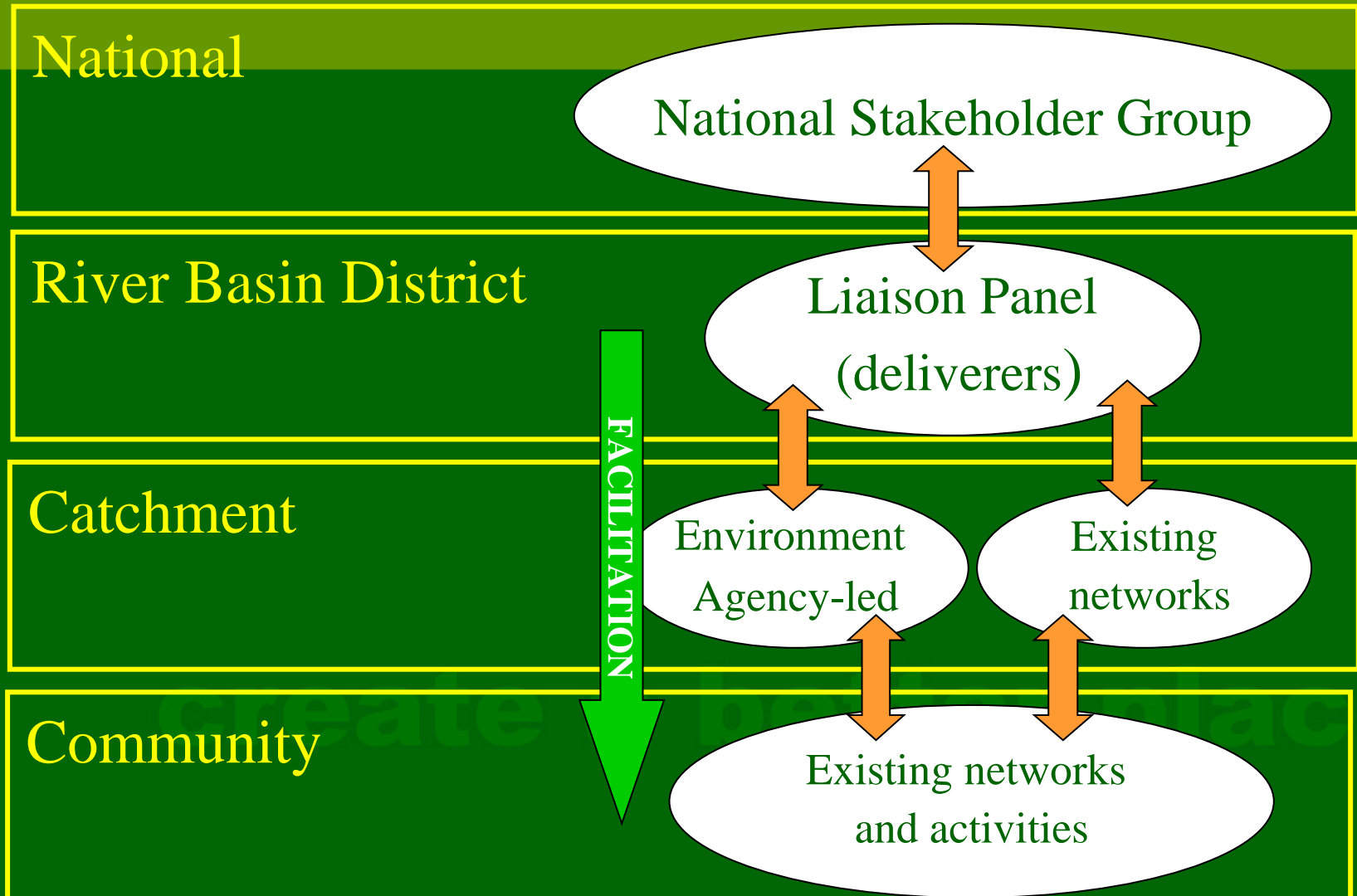


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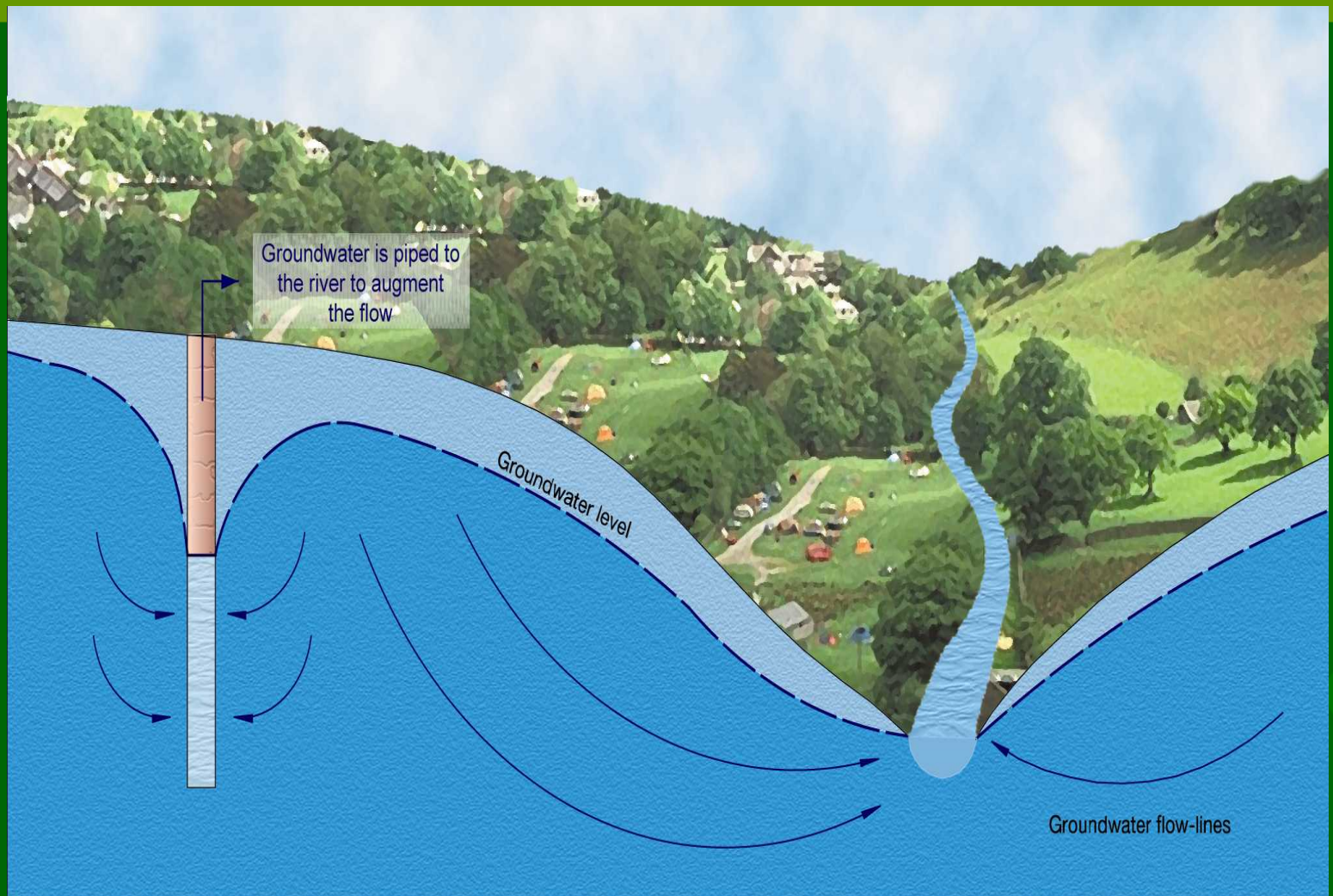
Water Framework Directive Management Cycle



Stakeholders - what will we actually do?



Integrated land and water management

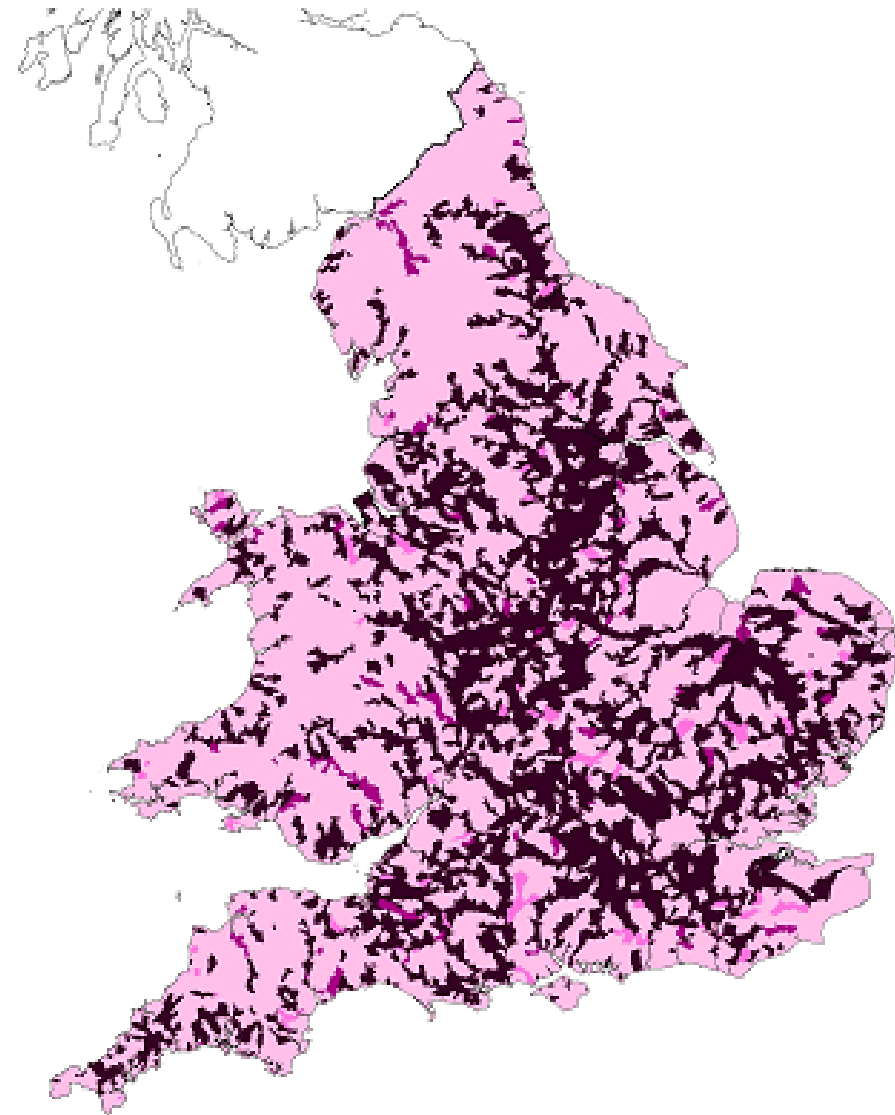


Water Framework Directive

Risk Assessment

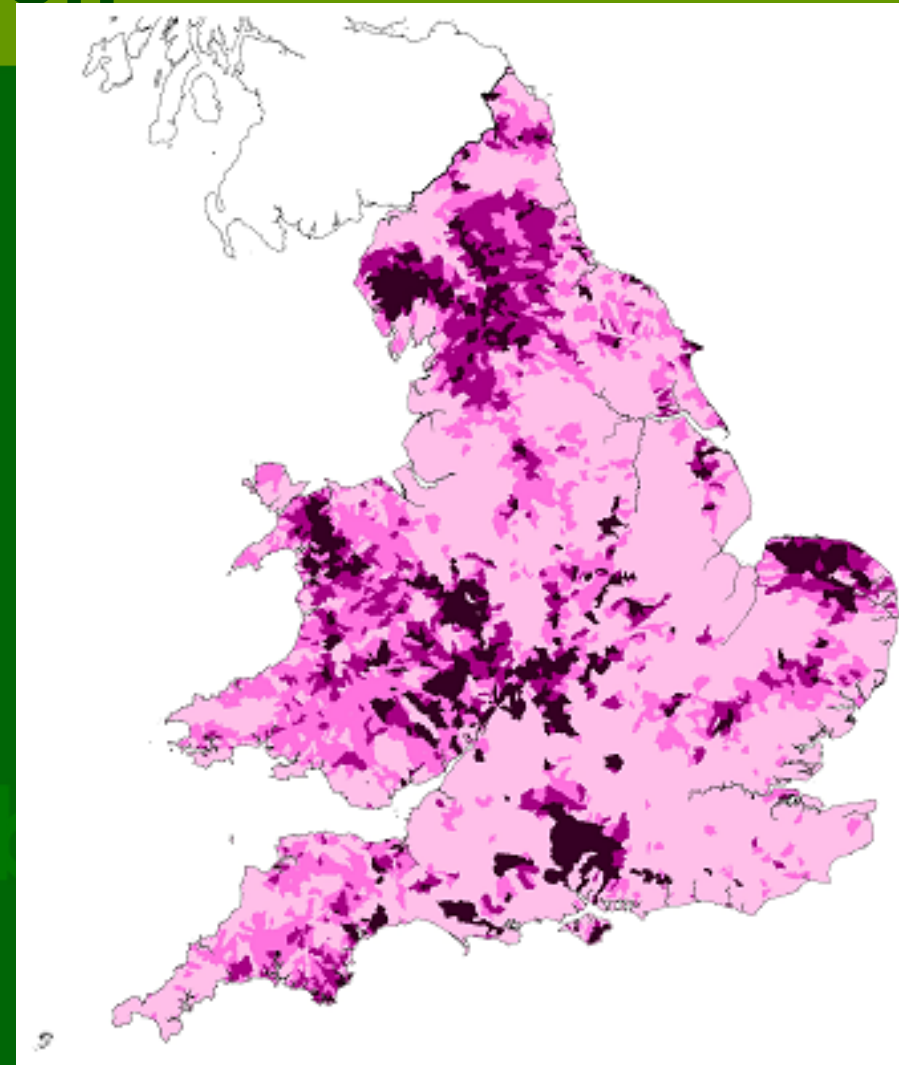
Rivers Point Source Pollution

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Rural diffuse pollution

Rivers at risk of failing objectives of Water Framework Framework from agricultural sources of nutrients, pesticides and sediment



An Ecology-based Directive

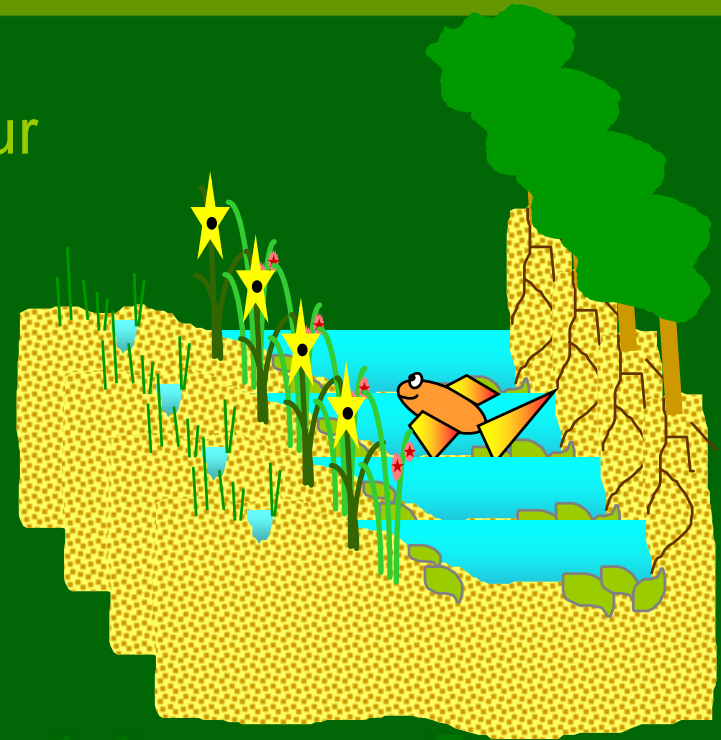
Good ecology is determined by four key aspects of the environment;

biology

chemical water quality

physical structure

water quantity



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WFD Classification Framework

Classification schemes

- Describe the state of the water environment
- Confirm effectiveness of measures

Environmental Standards

- Define water quality, hydrology & morphology conditions needed to support biology
- Used to identify measures (e.g. licensing)
- Help to set objectives for water bodies

*Create a better place
Supported by data from monitoring and risk
assessments*

WFD classification and environmental standards



Biological methods

Intercalibration

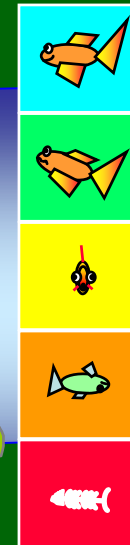
Classification scheme

Environmental standards

Chemical standards

Flow standards

Habitat standards



River Basin Management Plans & Programmes of Measures

...to a better place

Water Framework Directive

Programme of measures

Programme of measures

- set out within RBMP
- sets out the plan of how to meet WFD Environmental Objectives

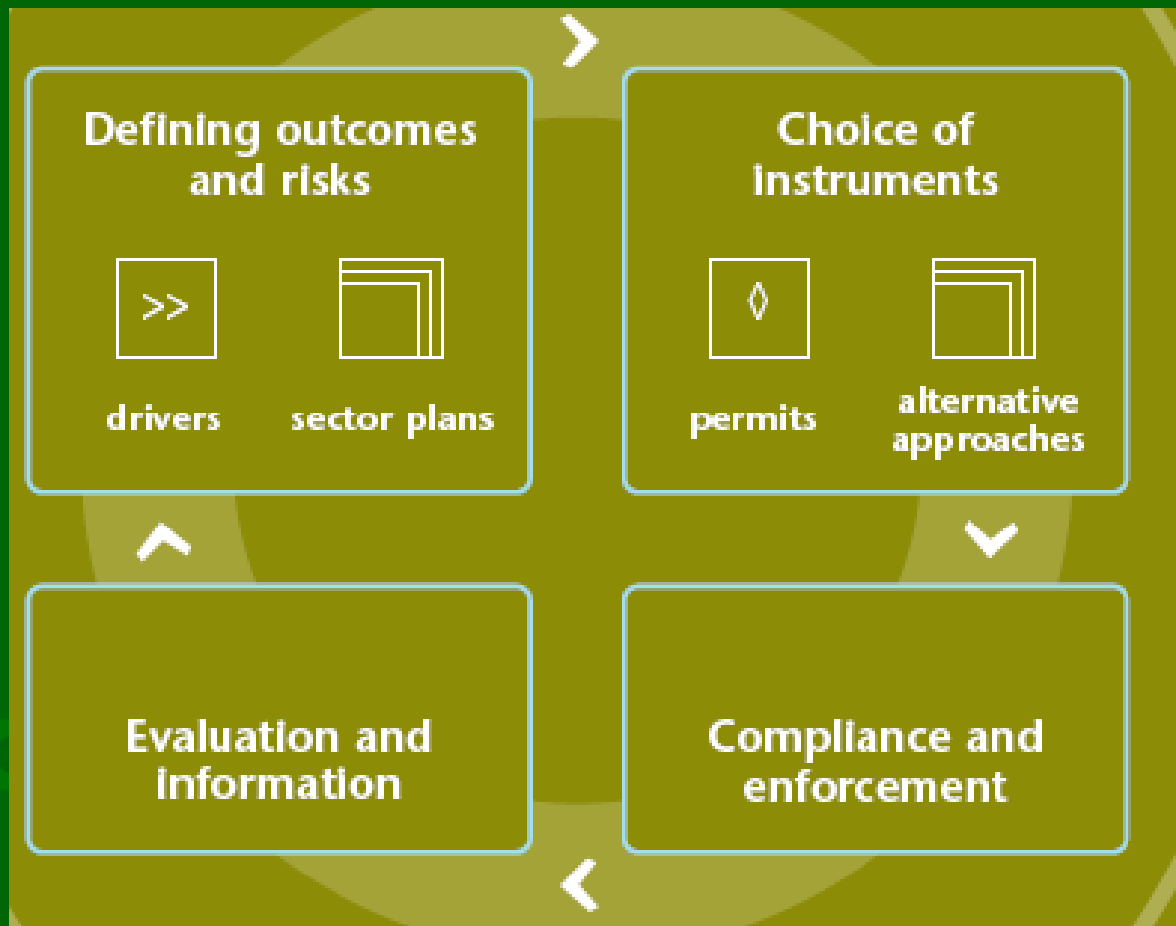
Basic measures

- obligatory
- existing EU Legislation
- controls on main pressures

Supplementary measures

- optional
- non-exhaustive list of measures
- projects, initiatives, codes of practice

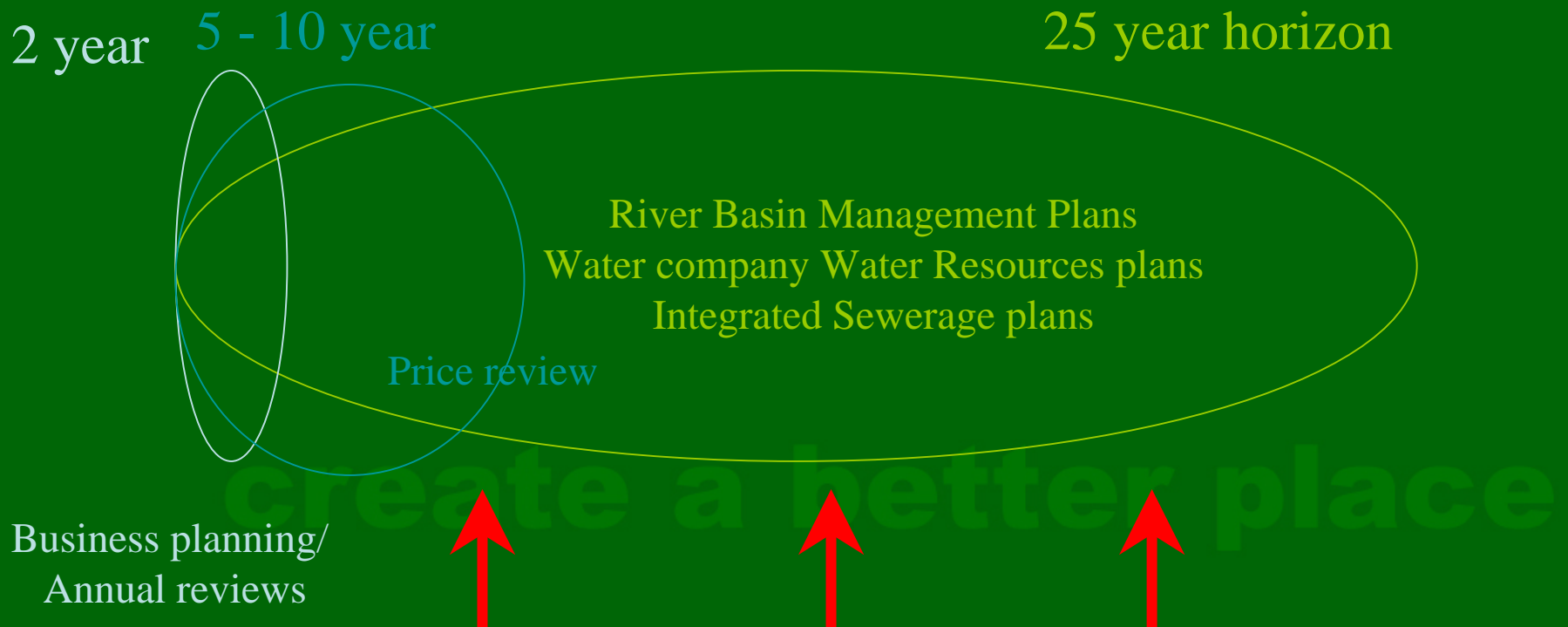
Changing the way we regulate



Achieve long-term planning framework

Water Framework Directive 3 Cycles to 2027

Must meet good status by 2015 - or alternative objectives



Is there a case for a different approach to Regulation ?

Mature water industry

Good record against discharge consents

Backstop of PR04 permits

Hampton and deregulatory environment

Achieve greater parity with other sectors

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What might the approach be ?

We should ask the industry to come forward with a plan

Clear and transparent obligations

Greater flexibility

Optimise capital and revenue options

Catchment based solutions -may cross sectors

Be an integral part of a long term strategy

Part of a package of risk reduction measures

Go beyond regulation!

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What might regulation look like?

Mix of Basic and Supplementary measures

Permits and 'operating agreements'

Determine how best to minimise impact on catchment

Agreed to in the programme of measures

Hard regulation could follow if not adhered to

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Industry Challenges

Take a wider view

- end of pipe
- treatment options - capital and revenue
- network optimisation
- trade effluent control
- source control

Develop a view of the 'end point'

- What would a STW look like in 2050
- True risk based approach
- Transfer expertise

Continue to develop 'social capital'

Work with the regulators and not be inhibited by them

Water Framework Directive

Key Deadlines

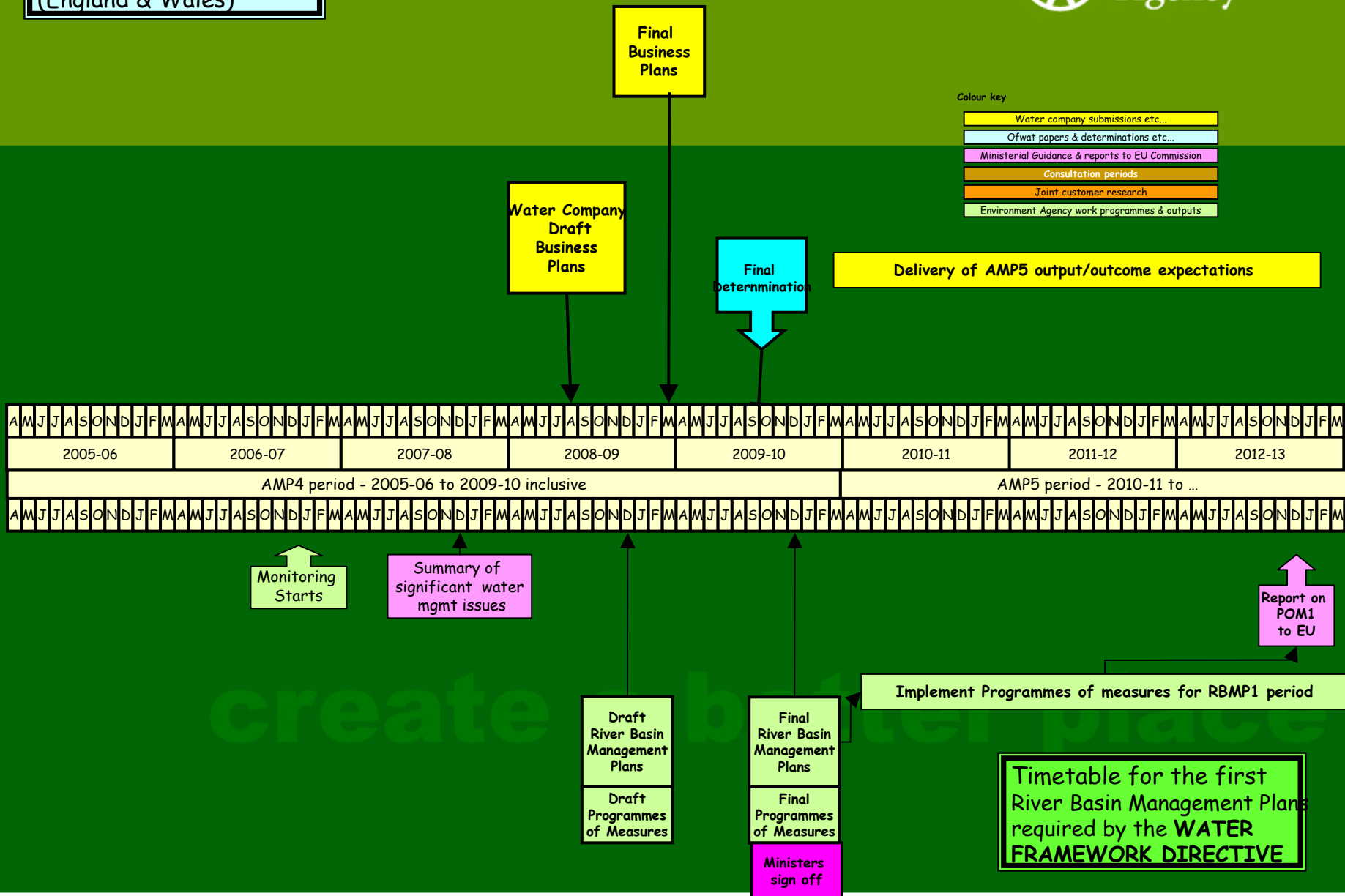
2000	Directive entered into force	}	3 years to prepare
2003	Transposition		
2004	Characterise basins		
2006	Publish plan for producing RBMPs	}	6 years to analyse issues and prepare plan
2009	Establish programme of measures		
2012	Programme of measures operational	}	3 years to put schemes in place
2015	Objectives met?		

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Possible timetable for the 2009 water price review (England & Wales)

Colour key

- Water company submissions etc...
- Ofwat papers & determinations etc...
- Ministerial Guidance & reports to EU Commission
- Consultation periods
- Joint customer research
- Environment Agency work programmes & outputs



Timetable for the first River Basin Management Plans required by the WATER FRAMEWORK DIRECTIVE

The Challenge Ahead



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