

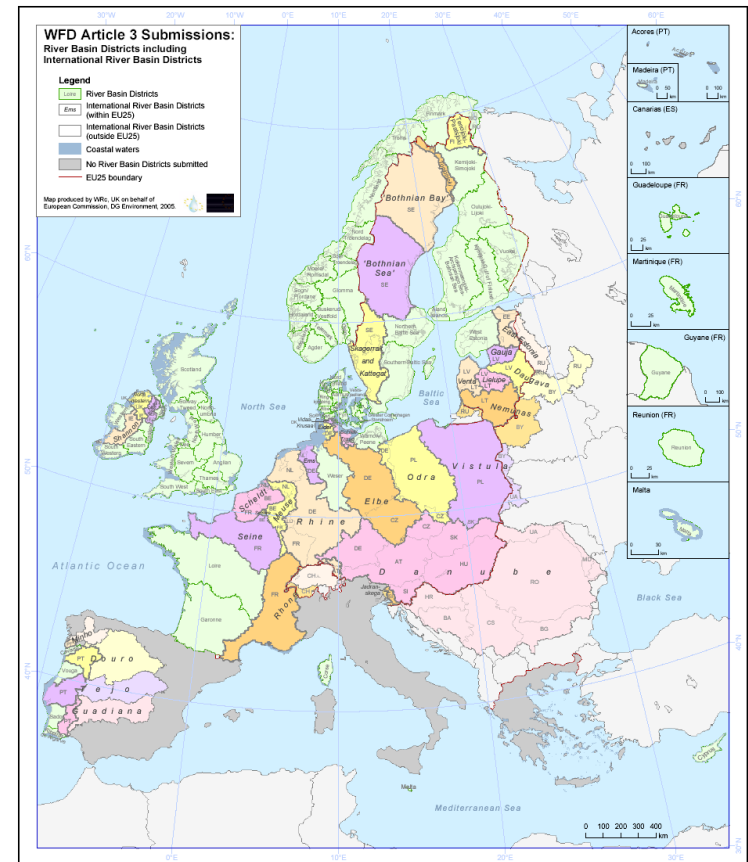
***Water Framework Directive
(2000/60/EC)***

***Colin Byrne
Water Inspector
Department of the Environment Heritage and Local
Government***



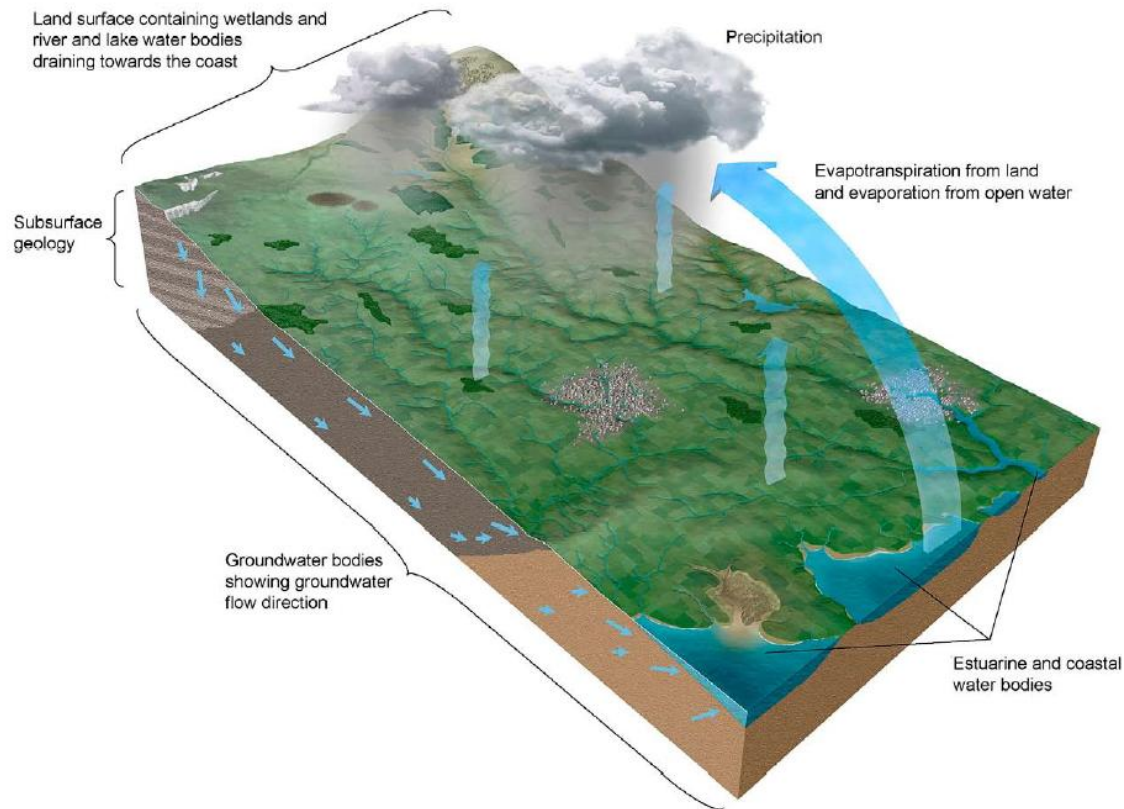
New approach to protecting waters

- River Basin is the best management unit
- Central to the EU Water Framework Directive (came into force Dec. 2000)



River Basin Management

Figure 5.1 The WFD seeks to Protect All Waters of the Hydrological Cycle: Groundwaters, Rivers, Lakes, Estuaries, Coastal Waters and Wetlands (Source: www.wfdvisual.com)



Source: EPA



Why a new Water Framework Directive ?



- **Framework for an Integrated European Water Policy**
 - **Water Framework Directive (2000/60/EC)**
 - + “Daughter” **Groundwater Directive (2006/118/EC)**
- **1990’s – EU recognised need for further action to protect all freshwater resources**
- **Many older directives relevant to water protection, but**
 - **fragmented**
 - **Inconsistent**
 - **Lack of clear targets**



Principles of the Water Framework Directive

- River basin plans will set clear and comprehensive water quality objectives for all waters by specified deadlines
- Objectives provide certainty and boundaries within which development must happen !
- Objectives are legally binding
- But the Water Framework Directive is pragmatic – it recognises socio-economic realities
 - Under some restricted circumstances exemptions may apply where sustainable development is of overriding benefit
 - e.g. critical flood defences, water storage or port facilities



Water Framework Directive Objectives

To protect & improve water quality to conform
with at least good status by 2015

(Some exemptions provided for)

*Water Framework
Directive, 2000*



*Became law in Ireland in
2003*

Protected area objectives must also be achieved

- Areas designated for the following purposes
 - ✓ drinking water abstractions
 - ✓ shellfish waters
 - ✓ bathing waters
 - ✓ nutrient sensitive areas
 - ✓ for the conservation of protected species and natural habitats (Natura 2000)



Restore



All Pressures must be managed

Diffuse source pollution
(example: agriculture)



Abstractions
(example: domestic / industrial)



Point source pollution
(example: wastewater discharges)



Physical modifications
(example: dams, land drainage)



Implementation in Ireland to-date

- 4 National and 3 International River Basin Districts
- Competent authorities –
 - Local authorities
 - Environmental Protection Agency
- 4,987 surface water bodies and 757 groundwater bodies



Implementation strategy

- **34 local authorities cooperate across 7 River Basin Districts**
- **Coordinating authority**
- **Consultancy support**
- **National coordination and technical committees to ensure consistency**
- **Northern Ireland & Rep. of Ireland Coordination Group**
 - NS SHARE Project (INTERREG IIIa)
- **River Basin Advisory Councils (Art.13 public participation)**
 - **Representatives: Political, Environmental NGOs, Business, Agriculture, Recreation, Community and Academic**
 - **Role is to advise and make recommendations**
 - **Public authorities must take account of input from Advisory Councils**

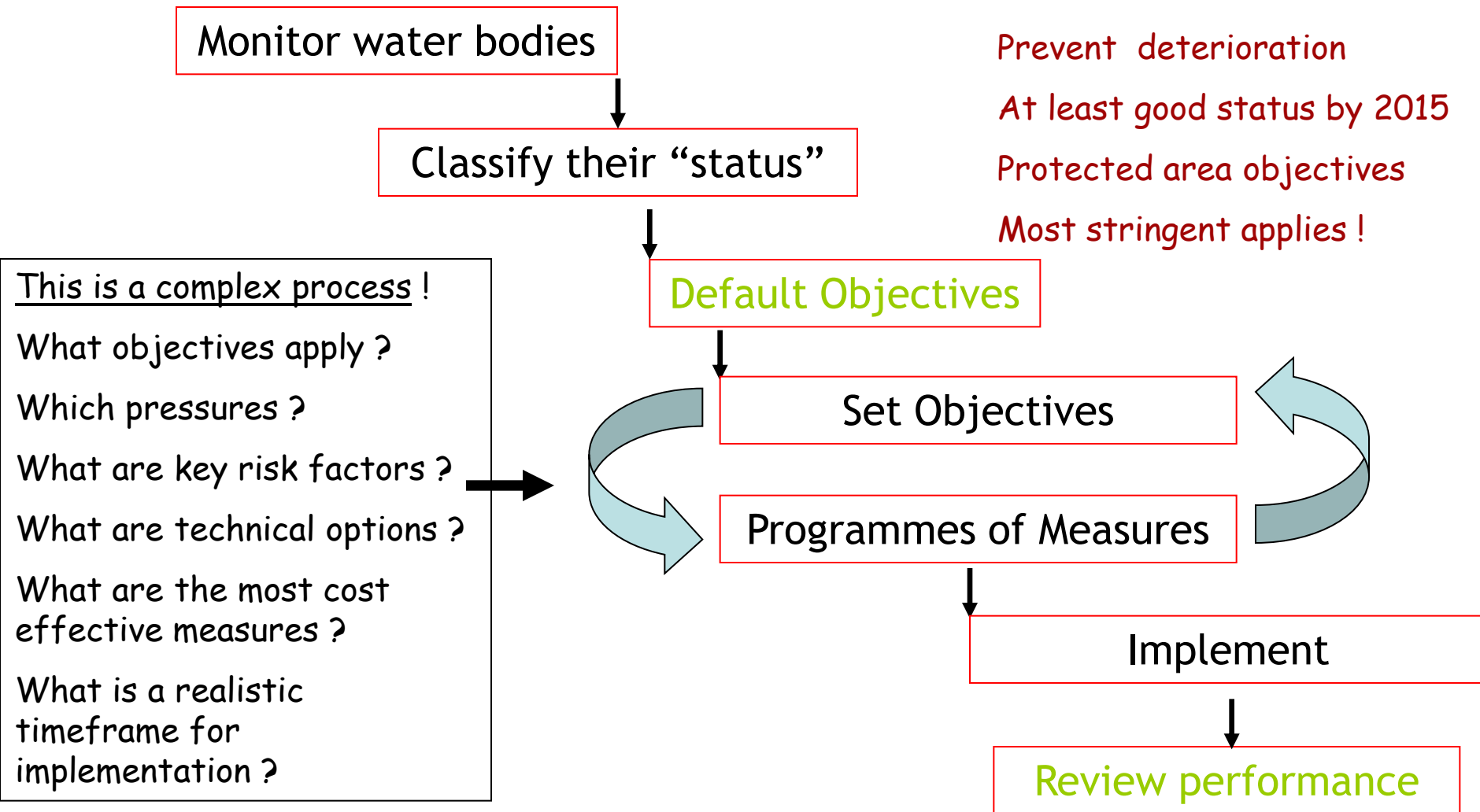


Timetable for implementation

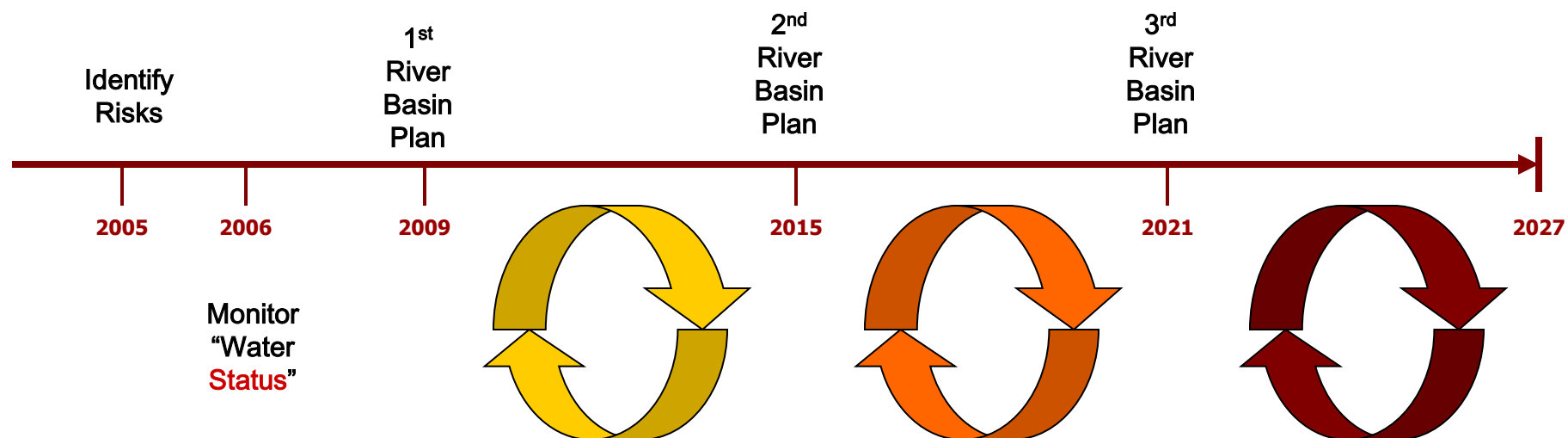
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Competent Authorities / RBDs			X									
Characterisation				X								
Classifications systems								X				
Programme of Monitoring						X						
RBMP work programme						X						
Monitoring - operational							X					
Overview of significant issues							X					
Draft RBMP								X				
Environmental Objectives									X			
Programmes of Measures									X			
Published RBMP									X			
Water Pricing Policy										X		
Programme of Measures - operational												X



River Basin Planning Process



River Basin Planning Cycles



Long-term trends in river water quality (1987-2006)

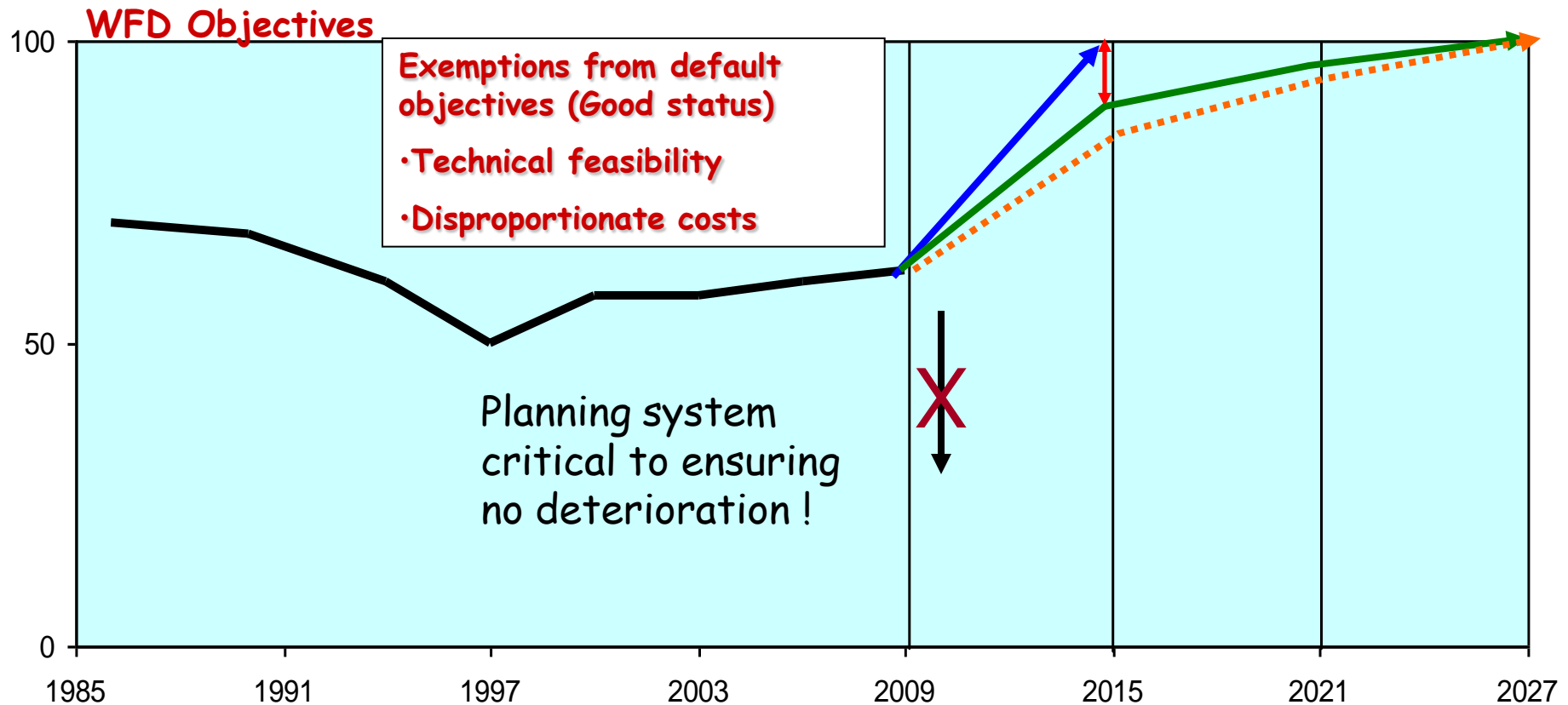
Figure 7.2 Long-Term River Trends (13,240 km baseline) (Source: Clabby *et al.*, 2008)



Source:EPA

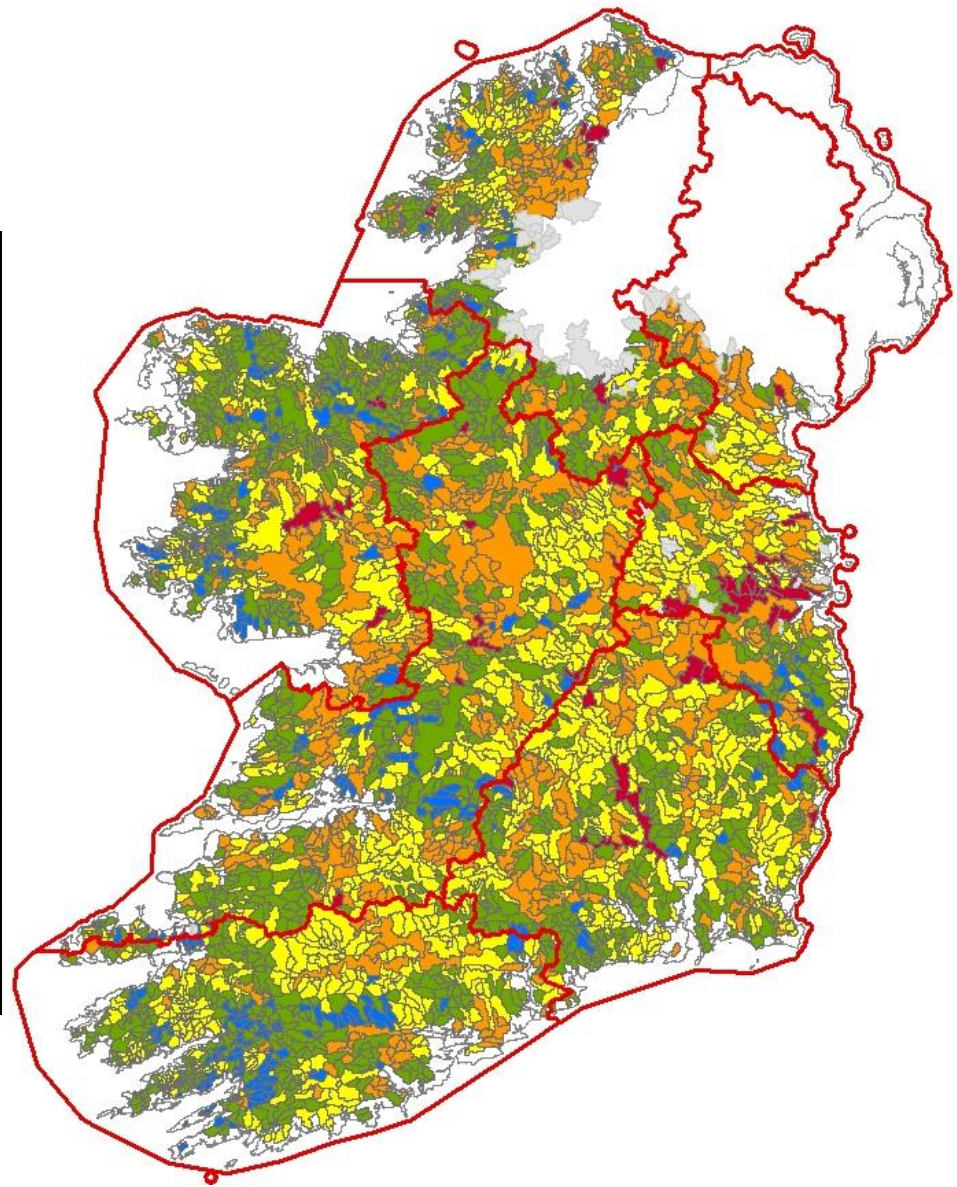


“Setting Objectives” over the River Basin Management Cycles (2009-2027)



Interim Status: River Quality

RIVERS	Number	% by number
High	485	11%
Good	1,598	35%
Moderate	1,562	35%
Poor	751	17%
Bad	68	2%
Total	4,525	



Environmental Objectives in Plans

	High or Good status	
	<i>Currently</i>	<i>By 2015</i>
Rivers	2,493 (54%)	3,173 (69%)
Lakes	533 (65%)	683 (84%)



Surface water classification

Status is the general health of the water environment measured by the biology, chemistry and physical environment

Status

High

Good

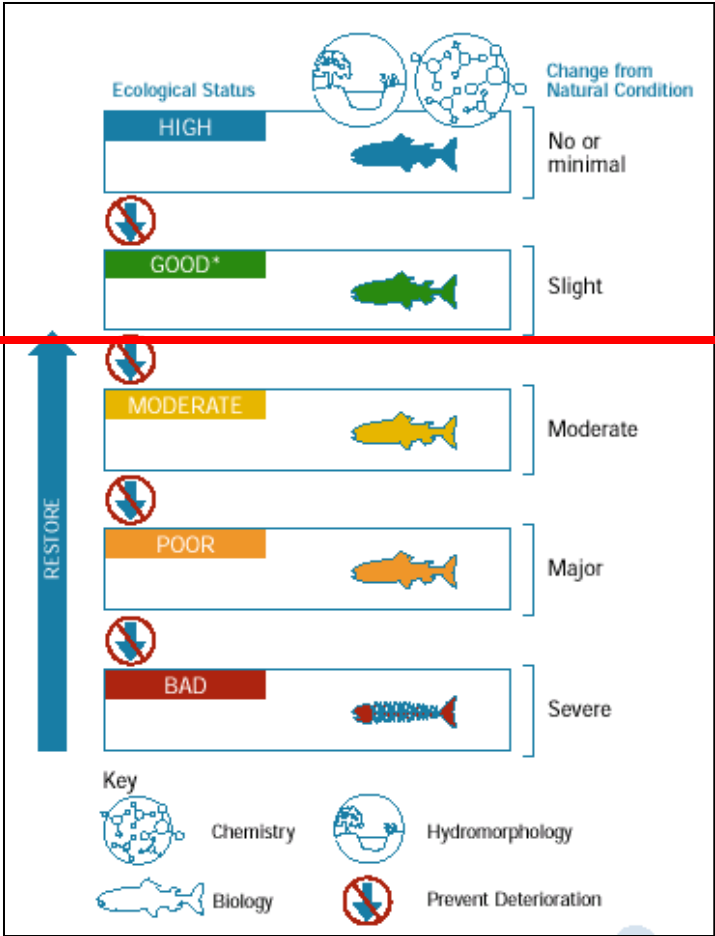
Pass WFD

Moderate

Fail WFD

Poor

Bad



How healthy is a river ?

Very sensitive



More tolerant



Very tolerant



Unpolluted



Highly polluted

What are Programmes of Measures ?

Existing EU Directives

- Bathing Waters
- Birds
- Drinking Water
- Environmental Impact Assessment
- Habitats
- Integrated Pollution Prevention Control
- Major Accidents (Seveso)
- Nitrates
- Plant Protection Products
- Sewage Sludge
- Urban Waste-water Treatment

Additional Specified Measures

- Cost recovery of water services
- Efficient and sustainable water use
- Protection of drinking water sources
- Abstractions and impoundments

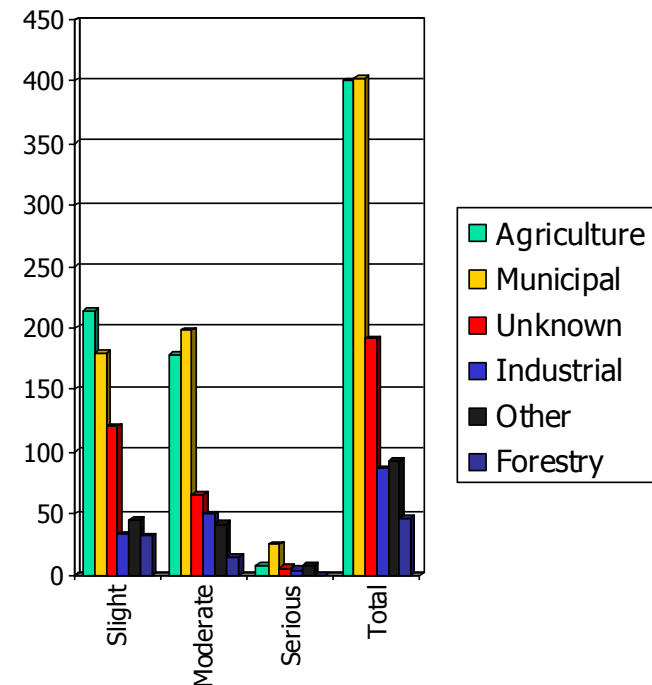
Supplementary Measures

Additional measures necessary to achieve environmental objectives



Key management issues

- **‘Municipal’ discharges**
 - Includes sewage, waterworks effluent, septic tank effluent and diffuse urban inputs
- **Agriculture**
- **Success in these areas will be central to delivering on our obligations under the WFD**



Nitrates Directive

- **Binding code of good agricultural practice**
- **Applicable to all farmers**
- **Farm waste management (€2 billion since 2006)**
- **Survey indicated up to 31% farms may be non-compliant**
- **Risk based programme of inspections and enforcement under way**
- **Some geographical areas may pose difficulties**
- **Extensive monitoring + Agricultural Catchment Programme**
- **Ongoing review of National Action Programme**
 - **may identify need for additional measures**



Urban waste water treatment and dangerous substances Directives

- **€2.3 billion invested (2000-2006) meeting 90% of infrastructure needs**
- **€2.5 billion estimated over 2007-2013**
- **Focus to date on infrastructure**
- **Operational aspects need improvement**
- **New authorisation regulations (2007) for urban discharges being phased in. Must aim to achieve WFD objectives**
- **Additional measures may involve higher standards of treatment to remove priority substances where necessary**



Key new measures

Recent Legislation giving further legal effect to measures

- | | |
|------|---|
| 2009 | European Communities Environmental Objectives
(Surface Waters) Regulations |
| 2010 | European Communities Environmental Objectives
(Groundwater) Regulations |



New Surface water environmental objectives regulations

SI 272 of 2009

- Provisions
 - Classification of surface waters
 - Gives legal effect to standards
 - Basis for setting environmental objectives
 - Legal obligation to achieve objectives
 - Requirement for pollutant inventories and pollution reduction plans and programmes
 - Responsibility on all listed public authorities to aim to achieve objectives



New Surface water standards

- Legally binding standards established by national regulations
- Biological quality elements (six initially)
- Chemical and physico-chemical elements supporting biology
 - priority substances (41 substances)
 - temperature, DO, BOD, salinity, acidification, nutrients
 - other substances discharged in significant quantities (18 substances)
 - mixing zones and naturally occurring metal background levels
- New EQSs took effect for new licences including licence reviews
- Programming element needed to ensure that new licencing regimes are made operational in time to support WFD deadlines
- Phosphorus and dangerous substances regulations to be revoked



Surface water discharges authorisation systems - reviews

Authorisation systems under the following;

- Water Pollution Acts
- Environmental Protection Agency Acts
- Waste Management Act
- Fisheries Acts
- Foreshore Acts
- Waste Water Authorisation Regulations 2007

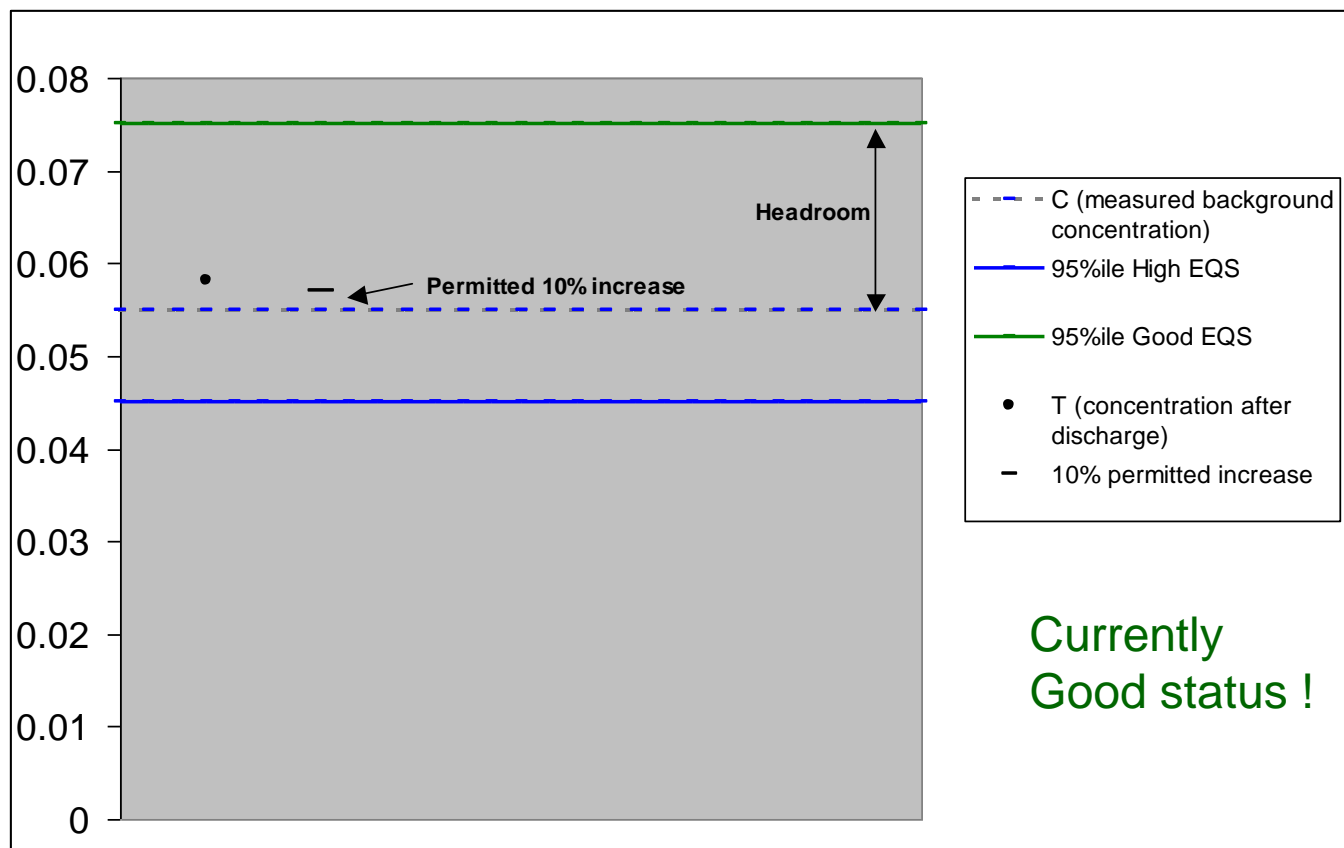
Other Acts

- Petroleum and Minerals Development Acts
- Dumping at Sea Acts



Technical assessment of discharge authorisations

Authorised discharges must not cause significant deterioration in status !



Critical measures for Cycle 1 (2010 to 2015)

- Urban waste water discharges
 - authorisations and investment priorities
- Agricultural sources of pollution
 - strengthened enforcement of Good Agricultural Practice Regulations (Nitrates Directive)
- Control of un-sewered waste water discharges
 - new code of practice, new legislation (standards, monitoring and inspections)
- Review of water pricing policy



Progress with adoption of River Basin Management Plans

- Plans to be adopted by Councils
 - by 30 April by reserved function
 - or by 14 May by executive function
- All 34 local authorities have now adopted plans !
- EPA to report to the Minister on plans by 31 May indicating any amendments considered necessary
- Minister to make amendments (if any) by 30 June



River Basin Management Plans

State of play May 2010

▪Reminder of deadlines :

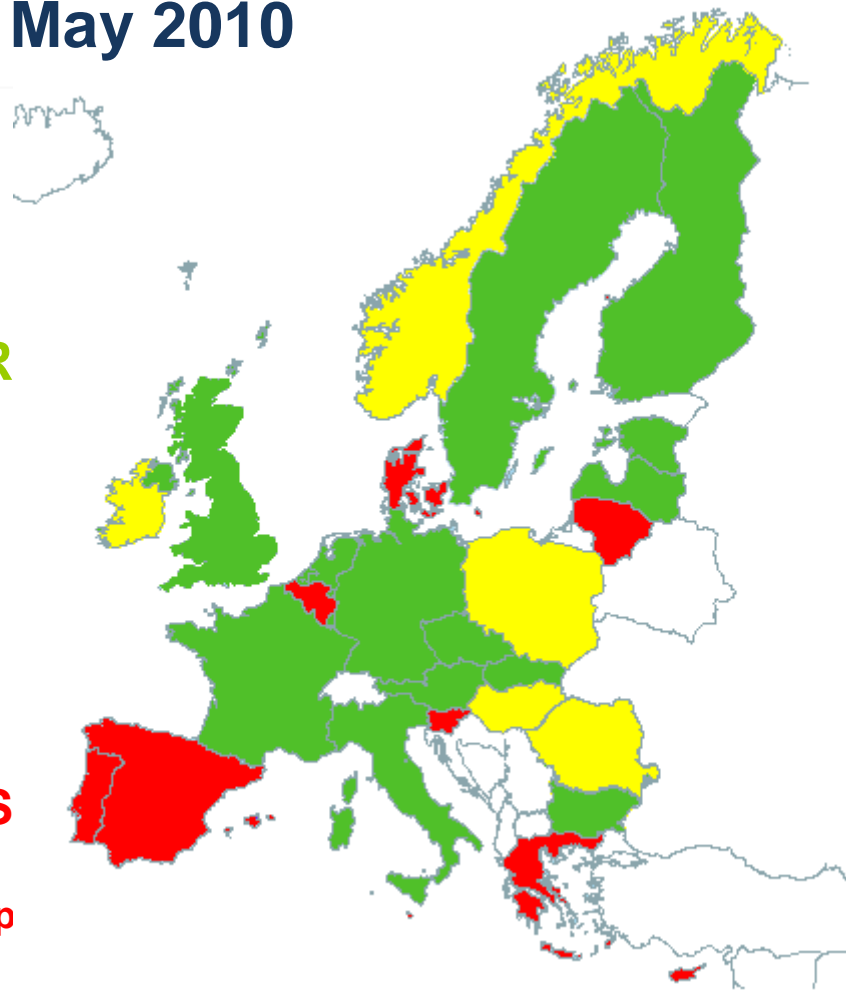
- 22.3.2008 : start of consultations draft RBMP
- 22.12.2009 : publication of RBMP
- 22.3.2010 : Reporting to the Commission

Published : AT, BG, CZ, DE, EE, FI, FR
IT, LU, LV, NL, SE, SK, UK

Adopted and not yet published :
IE, HU, PL, RO + NO

Consultation status :

- Member States consultations still ongoing : DK, SI, LT.
- Partial consultation : BE (1 out of 4), ES (22 out of 24) not started !
- Not yet started ! EL, MT, PT - CY (Feb-Sep 2010 ?)



Public consultation on plans

Over 300 Submissions received

High Level Issues

- Objectives overly ambitious (unachievable)
- Plans too vague re objectives and measures
- Exemptions need to be adequately justified
- Need to specify future administrative and coordination arrangements

Responses

- Objectives reviewed in terms of technical feasibility and natural recovery
- More detail on measures provided in Water Management Unit Action Plans
- Administrative arrangements to be reviewed



River Basin Planning Outputs

- North-South Coordination Document
 - 'Managing our Shared Waters'
- River Basin Management Plan
- Water Management Unit Action Plans
- Online Water-Maps tool (www.wfdireland.ie)
- Background Documents
- Sub-basin plans (Freshwater Pearl Mussel)



Key challenges

- Complex Institutional arrangements – responsibilities across several government departments
- Difficult economic climate for securing future funding (19% decline in tax receipts in 2009)
- Securing full implementation of existing directives (e.g. Nitrates and urban waste water treatment)
 - Enforcement programmes are labour intensive
 - Vital to ensure resources within public service are used efficiently. Options such as shared services being considered



Relevant documents



- Water Framework Directive (2000/60/EC)
- Groundwater Directive (2006/118/EC)
- Surface water priority substances EQS Directive (2008/105/EC)
- European Communities (Water Policy) Regulations 2003 (SI 722 of 2003)
 - Amending regulations (SI 413 of 2005)
 - Amending regulations (SI 219 of 2008)
 - Amending regulations (SI 93 of 2010)
- European Communities Environmental objectives (Surface waters) Regulations 2009 (SI 272 of 2009)
- European Communities Environmental objectives (Groundwater) Regulations 2010 (SI 9 of 2010)
- River Basin Management Planning – A practical guide for public authorities (June 2008)





Thank you



Cornhshool, Oldhreachl agus Riallas Áitiúil
Environment, Heritage and Local Government

