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Water Framework Directive 2nd April 2009

Event report

Author:

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Attendees3

Introduction

This report provides a summary of the main sessions performed during the Water Framework Directive Workshop held at the Defra Innovation Centre on 2nd April 2009.

The workshop was facilitated by Jason Macleod from the Defra Innovation centre facilitation team.

Attendees

The attendees were:

Alison Cross
Alice Hall
Jo Hodgkins
Dr Ronni Edmonds-Brown
Dave Burgess
Dave Brown
Fran Southgate
Beth Nightingale
Karen
Martin Buckland
Roger Lerry
Bruce Tremayne
Robin Ford
Ken Austin
Rachel Martin
Jason Lavender
Ken Burgin
Charlie Butt
Leah Rumble

Dave Willis
Ian Hepburn
Frank Lucas
Amber Harrison
Andy Turton
Jo Simmons
Myles Thomas
Chris Catling
Joe Stevens
Lawrence Talks

Graham Scholey
Katharine Parkes
David Steel

Purpose

- To share implications of the WFD and subsequent plans
- To validate measures and their prioritisation
- To identify responsibilities and interdependencies for delivery
- To articulate outcomes and resource requirements of key measures
- To create ownership of the plan across the sector

Agenda

- Arrival from 9.30
- Introduction 10.00
 - Why are we here?
 - Role of the panel
 - Tensions
 - Questions
 - Shared vision statements - panel
- What are the implications of the WFD? 10.30
 - Presentation
 - WFD
 - 2 river basins
 - Themes
 - Categorisation – Must\should\could?
 - Q&A
- What will we do? 11.00
 - Themed discussions (and river basin?)
 - Prioritisation
 - Recommended changes
 - Reasoning
 - Implications
 - Feedback and plenary to panel
- Lunch 12.30
- How might we do it? 1.15
 - Themed discussions (and river basin?)
 - Measures (Action Planning)
 - Answer key questions
Who\Support\Issues\Steps\Outcomes\Resources?
- What will we do? 2.30
 - Panel presentation - tensions
 - Themed presentations
 - Panel questions
- Summary 3.25
- Close 3.30

Group 1

Area: Thames Basin Actions

Action: Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan

1. What support is needed to help deliver this action? What and who?

- Statutory bodies
- Universities – wildlife trusts etc

2. What practical considerations are there?

- Lack of expertise within volume bodies
- Ecological cost

3. Is there anything else we need to bear in mind?

- Spending priorities
- Already a framework – no new action just plans

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames Basin Actions

Undertake research into the affects of evasive non-native species on good ecological status

1. What support is needed to help deliver this action? What and who?

- Need to identify tie-in with academic instructions including cefas, Defra
- Monitoring programmes to inform where we do research

2. What practical considerations are there?

- Lack of funding – gain support from research councils

3. Is there anything else we need to bear in mind?

- Statutory land management

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Significant headway possible – ongoing need

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- R Lee re crayfish
- Ashdown rivers and new forest
- Cefas

Action: Remove and control

1. What support is needed to help deliver this action? What and who?

- Train land manager

2. What practical considerations are there?

- Irradication technologies – best practice

3. Is there anything else we need to bear in mind?

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames Basin Actions

Action: Develop and share best practice on invasive non-native species control

1. What support is needed to help deliver this action? What and who?

Look internationally, nationally, regionally and locally – establish groups and networks and forums

- Need for coordinated approach – EA?
- Focus on important area / species
- Deliver training
- Bring in local resource
- Networks – physical and web-site based

2. What practical considerations are there?

- Other non-EA resource available, however EA need to coordinate and pump prime. Encourage partnership working

3. Is there anything else we need to bear in mind?

- Forum established good tool for this – national, regional, local

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- 2015 realistic for planning and monitoring but not significant eradication

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- Solent – significant coastal alien species problems in marine and investible areas

Group 1

Area: Thames Basin Actions

Establish training, guidance and education campaigns on invasive non-native species. Target the guides at river users, garden centres and other commercial outlets

1. What support is needed to help deliver this action? What and who?

- Existing ENGO network must be involved
- Legislative support to discourage releases
- Economic incentives for commercial organisations
- Clear, easy to use ID materials

2. What practical considerations are there?

- Identify high risk areas for particular species and target awareness there – mobilise volunteers
- easy reporting system
- Use of LSCs

3. Is there anything else we need to bear in mind?

- Not overwhelming people with too much information

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Certainly realistic, could be bought forward:
- Tranche 1: producing guidance by 2012
- Tranche 2: implementation by 2015 – mobilisation of volunteer movement

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- Both Southeast and Thames R&D

Group 1

Area: Thames Basin Actions

Action: Monitoring parasites and diseases in the wind

1. What support is needed to help deliver this action? What and who?

- Awareness, recognition, health checks

2. What practical considerations are there?

- I.D. skills
- Tighten legislation on imports

3. Is there anything else we need to bear in mind?

- ? reference to non-native parasites

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- If monitoring ongoing - maybe

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- All that contain fish / crayfish

Action: establish non-native species forum

1. What support is needed to help deliver this action? What and who?

- EA is in a position to do this
- Needs to link with local biodiversity forums to join up work and secure their achievements

2. What practical considerations are there?

- Identify key players / participants
- Terms of reference for the group need to be agreed

3. Is there anything else we need to bear in mind?

- Need to look for local experience and good practice

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Could be done immediately

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: Investigate the possible introduction of the White Clawed Crayfish at strategic points around the river basin

1. What support is needed to help deliver this action? What and who?

- IUCN reintroduction criteria
- Containment
- Public awareness
- Ex situ breeding stock available

2. What practical considerations are there?

- Crayfish plague – public access safe or ark sites? Feasibility

3. Is there anything else we need to bear in mind?

- Resources

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes (maybe!)

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- Wendover / Grand Union Canal – planning issue

Group 3

Area: South east basin actions

Action: Establish and maintain local advice led partnerships to address rural diffuse source pollution. Outcome: Additional diffuse pollution projects established to supplement Catchment Sensitive Farming.

Reduce diffuse pollution in surface waters by 15%, with associated improvements in relevant water quality parameters. Help reverse trends for nitrate pollution in associated groundwater

1. What support is needed to help deliver this action? What and who?

- Consider use of farming and wildlife advisory service or SIM better education – residents, landowners and small scale industry.
Misconnections – resources
- Promote initiatives to enhance biodiversity reedbeds and wetlands to tackle run-off and diffuse pollutions on a farm scale
- Link to environmental stewardship schemes
- Monitoring and success

2. What practical considerations are there?

- Enforcement programmes need developing where partnership not working
- SUDS
- Lack of funding
- Greater communication NGO's and EA

3. Is there anything else we need to bear in mind?

- Wetland habitats
- Flexibility
- Sharing best practice
- 15% reduction – what's the rationale

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 3

Area: South east basin actions

Action: Improve street and green space cleaning and management practice including chemical application where risk or evidence of impact. Outcome: identification of areas where chemical and physical chemical pollutants are contributing to the failure to achieve good ecological status. In these areas we can work with local authorities to review and improve their street and green space management practices, and to produce guidance to help convert brownfield land into accessible green spaces. Prevent and limit the release of contaminants to groundwater

1. What support is needed to help deliver this action? What and who?

- Raise awareness – public and contractors / operatives
- Incorporate SUD into planning / new development
- Regulate – impose fines
- Use local biodiversity GPS to coordinate action

2. What practical considerations are there?

3. Is there anything else we need to bear in mind?

- Don't forget brownfield biodiversity interest
- Identify buffer zones – creation
- Local highways practices – reduce use of herbicides

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 3

Area: Thames basin actions

Action: promote land management best practice at commercial sites, such as golf courses, playing fields, parks and railway lines

1. What support is needed to help deliver this action? What and who?

- Train land managers
- Wildlife trusts well placed to deliver advice
- Educate land managers that it is in their interests
- Local biodiversity groups to ban insecticide use

2. What practical considerations are there?

- Water control golf courses
- Buffer zones around water courses

3. Is there anything else we need to bear in mind?

- Reduce impermeable surfaces
- Include agriculture, urban, industrial roads
- Don't just promote – need to enforce

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 3

Area: South east basin actions

Action: promote good practice to ensure sensitive management of fish farming and water cress farms, where evidence of point or diffuse pollution. Outcome: fish and cress farms do not contribute to deterioration in quality of rural waters

1. What support is needed to help deliver this action? What and who?

- Provide free training and demonstrate how it benefits them. Corporate responsibility – eco branding to promote. Speak to supermarkets
- Promote traditional small scale-extensive, organic

2. What practical considerations are there?

3. Is there anything else we need to bear in mind?

- Enforcement where necessary
- Fish and W/C are affected by sewage pollution
- Technical solutions to fish waste management
- Reduced stocking rates

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: establish training, guidance and education campaigns on invasive non-native species. Target the guides at river users, garden centres and other commercial outlets

1. What support is needed to help deliver this action? What and who?

- Presumes we know what needs to be done. Treat as a CSR opportunity. Economic incentive required to encourage commercial outlets. Target ramblers and cyclists, farmers etc and include local interest and local user groups – use their media.
- Picture keys, coastal forum can help
- Legislation
- Electronic informants

2. What practical considerations are there?

- Provenance – supply chains – mandatory to identify
- Identify highest risk areas
- Guidance / info to vols
- Species with multiple names
- Educate public on best practice

3. Is there anything else we need to bear in mind?

- Use existing forums and interest groups
- NGOs well placed to assist

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes. Volume networks could be galvanised to provide early result

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Action: establish non-native species forum

1. What support is needed to help deliver this action? What and who?

- EA is in a position to do this
- Needs to link with local biodiversity forums to join up work and secure their achievements

2. What practical considerations are there?

- Identify key players / participants
- Terms of reference for the group need to be agreed

3. Is there anything else we need to bear in mind?

- Need to look for local experience and good practice

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Could be done immediately

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: monitoring parasites and diseases in the wild

1. What support is needed to help deliver this action? What and who?

- Engage LAs and universities

2. What practical considerations are there?

- Cost and methodology, may not secure outcomes that justify cost
- ID skills required
- Tighten legislation on imports

3. Is there anything else we need to bear in mind?

- Does this refer to non native parasites and diseases?
- Potentially very specialist. Could use species recording groups

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Do we have sufficient starting knowledge to be able to meet this date?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan

1. What support is needed to help deliver this action? What and who?

- Engage interest and help of volunteers – especially young people
- Sell need to those who control budgets

2. What practical considerations are there?

- Do volunteers know what to do
- Monitoring of success and maintaining NNIS free areas
- Identify ecological cost of species to justify spending on priority actions

3. Is there anything else we need to bear in mind?

- Already UK framework – need action not plans
- Use of FISK as baseline to formulate management plan

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: undertake research into the effects of invasive non-native species on good ecological status

1. What support is needed to help deliver this action? What and who?

- Partnerships with academia
- Literature review – Europe and UK
- Monitoring

2. What practical considerations are there?

- Funding – research
- Guidance e.g. LA's, public bodies
- Climate change – may influence spread of INNS and guide what else arrives

3. Is there anything else we need to bear in mind?

- Particular natives affected? And how targeting resources – no point researching INNS if effect minimal

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes – already some work ongoing.

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: further investigations to improve understanding of the impact of non-native species

1. What support is needed to help deliver this action? What and who?

- Co-ordination with academic institutions
- Presentations to wide variety of groups, not only ENGOs of existence and risks
- Link with recording groups

2. What practical considerations are there?

- Resources required – financial and personal

3. Is there anything else we need to bear in mind?

- Climate change
- Simple monitoring could be undertaken by volunteers under guidance / efficiency training and linked to action

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes
- No – will be on-going. Also need to react to new species arriving that may become a problem

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Action: remove and control NN15

1. What support is needed to help deliver this action? What and who?

- Funding and delivery – who is doing what and how?
- Education and training land managers, local amenity groups
- Success stories – develop efficient methods and share best practice
- Someone to establish best practice and inform others

2. What practical considerations are there?

- Coordination at river basin level needed – start with head streams to downstream and hotspots
- Free training and equipment to those involved
- Sustained political will and funding to those involved / affected
- ID of hot spots and source sites is important
- Many local groups are keen to take action and just need support

3. Is there anything else we need to bear in mind?

- Should those who profited from spread be asked to help pay for clear up
- ENGO - have vast networks of volunteers / for education which can be mobilised – link to GB strategy

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Public concerns need to address / educate

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: investigate the possible introduction of the White Clawed Crayfish at strategic points around river basin

1. What support is needed to help deliver this action? What and who?

- IUCN reintroduction criteria need to be met
- Use stock from ex site breeding programmes
- General public are becoming aware that action is required – they need guidance

2. What practical considerations are there?

- Crayfish plague spread by members of public visiting other water bodies – biosecurity
- Need to be sure that site is isolated from risk of signal crayfish
- Investigate if signal crayfish can be excluded or contained in present areas

3. Is there anything else we need to bear in mind?

- Banning public would be worse than living with the wrong sort of crayfish
- Be realistic. Research to date signals, once established cannot be eliminated, precluding pre-establishment of white claws where signals are present

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- Identify specific rivers / areas and work up a project of funding – consider Dour (Dover area) as isolated from others and free of signals

Action: establish non-native species forum

1. What support is needed to help deliver this action? What and who?

- Biodiversity forum has already been established
- Technical support and funding

2. What practical considerations are there?

- Must be done at river basin level
- ID key players to join forum
- Potential to train volunteers
- Train specific actions needed

3. Is there anything else we need to bear in mind?

- Action must be prioritised over process
- Tap into different experiences / evidence at local level

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Could be done as soon as tomorrow theoretically

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 1

Area: Thames basin actions

Action: develop and share best practice on invasive non-native species control

1. What support is needed to help deliver this action? What and who?

- Clear communication from central body as minefield of info already
- Training for land managers, advisory through institutions

2. What practical considerations are there?

- Use risk approach to risk assessment

3. Is there anything else we need to bear in mind?

- Identify expertise of organisation, not just in UK. Include species not on list where evidence of control currently unavailable

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Easy – website resource. Allows distribution to wider audiences

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

- Should be every catchment where non-natives are an issue

Group 2

Area: South east basin actions

Action: where appropriate modify, mitigate or remove unsustainable flood defences. Outcome: flood defences do not contribute to less than good ecological status or potential, where feasible and not disproportionate, and in line with CFMP and SMP policies.

1. What support is needed to help deliver this action? What and who?

- Who defines what is unsustainable
- Needs substantial policy will, community support – but are there techniques that will deliver both objectives

2. What practical considerations are there?

3. Is there anything else we need to bear in mind?

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Ambition is a must

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Group 1

Area: Thames basin actions

Action: further investigations to improve understanding of the impact of non-native species

1. What support is needed to help deliver this action? What and who?

- Partnerships with academia and link with species

2. What practical considerations are there?

- Awareness-raising
- Resources

3. Is there anything else we need to bear in mind?

- Climate change
- Volunteers / local recording groups have potential to assist field work and maintaining if guided by specialists / agency

4. Is our completion date of 2015 realistic or could it be even more ambitious?

- Yes, but some work likely to be ongoing and new arrivals / problems may arise in future planning cycles

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body(s) and give reasons

Group 2

Area: Thames basin actions

Action: Encourage the return of salmon and sea trout to the Thames river basin as an indicator of environmental conditions

1. What support is needed to help deliver this action? What and who?

Involvement of RRC

2. What practical considerations are there?

3. Is there anything else we need to bear in mind?

Evidence to back up use of indicators

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Group 2

Area: Thames basin actions

Action: Encourage the return of salmon and sea trout to the Thames river basin as an indicator of environmental conditions

1. What support is needed to help deliver this action? What and who?

Involvement of Thames river restoration trust

2. What practical considerations are there?

Need to reconcile fish passage and flood control measures. Allocation of funds relative to other projects and issues

3. Is there anything else we need to bear in mind?

Encourage needs to be clearly defined, for example, does this mean barrier removal?

4. Is our completion date of 2015 realistic or could it be even more ambitious?

Unrealistic, to achieve 2015 target – clear plans must be in place?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Group 2

Area: Thames basin actions

Action: Investigate channel restoration projects to improve flow regime and habitat

1. What support is needed to help deliver this action? What and who?

All interested parties need to be involved with identifying opportunities, strategic overview complimented by local opportunities. Resources key. Support of local groups identifying where benefits are achievable

2. What practical considerations are there?

River specific planning
Site identification

3. Is there anything else we need to bear in mind?

Local planning priorities
Ability to mobilise resources

4. Is our completion date of 2015 realistic or could it be even more ambitious?

Only if can prioritise investigations to give chance of finding good opportunities

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Yes – Maidenhead waterways and other identified by group 1

Group 2

Area: Thames basin actions

Action: Instigate channel restoration projects to improve flow regime and habitat creation

1. What support is needed to help deliver this action? What and who?

Funding streams via targeted organisations

Chiltern chalk streams

Local co-ordination of landowners

2. What practical considerations are there?

Compromising other interests such as heritage

3. Is there anything else we need to bear in mind?

Ensure no adverse consequences to other river sections up or downstream

4. Is our completion date of 2015 realistic or could it be even more ambitious?

It damn well should be

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

River Gade

Group 2

Area: Thames basin actions

Action: Instigate channel restoration projects to improve flow regime and habitat creation

1. What support is needed to help deliver this action? What and who?

Should be a will

River restoration fund required

Recognition that restored rivers offer other benefits

Undertake feasibility studies for catchments

2. What practical considerations are there?

Investigations should be for sites etc – not principles - that preclude delivery

3. Is there anything else we need to bear in mind?

Public awareness – publicise wider benefits for society

4. Is our completion date of 2015 realistic or could it be even more ambitious?

Yes. Possible to deliver feasibility studies at least

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Wandle?

Wye?

Group 2

Area: Thames basin actions

Action: Improve and maintain fish movement appropriate flow releases and water level management

1. What support is needed to help deliver this action? What and who?

Geomorphology studies re sediment movement, maintaining open water under a water management system

2. What practical considerations are there?

3. Is there anything else we need to bear in mind?

4. Is our completion date of 2015 realistic or could it be even more ambitious?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Group 2

Area: Thames basin actions

Action: Further investigations to improve understanding of habitat restoration required to achieve GES

1. What support is needed to help deliver this action? What and who?

Ensure diffuse pollution issues solved before conduct restoration

2. What practical considerations are there?

Ensure not re-inventing the wheel

3. Is there anything else we need to bear in mind?

Continuous habitats not just the fish. Consider other species

4. Is our completion date of 2015 realistic or could it be even more ambitious?

Yes – should be a first phase

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Group 2

Area: Thames basin actions

Action: Further investigations to improve understanding of habitat restoration required to achieve GES

1. What support is needed to help deliver this action? What and who?

Investigate diffuse pollution problems before integrated restoration project

Problems of public perception

Collaboration with other bodies and volunteers

2. What practical considerations are there?

Money spent on investigation rather than action

3. Is there anything else we need to bear in mind?

Holistic approach on environmental improvements

4. Is our completion date of 2015 realistic or could it be even more ambitious?

Not ambitious enough?

5. Can this action be applied to any specific water body(s) in this catchment?

If yes, name the water body and give reasons

Will happen if plan is approved	Could happen if there is more certainty
<p>will Undertake research into the effects of invasive non-native species on good ecological status</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	<p>1 Could</p> <p>Investigate the possible introduction of the White Clawed Crayfish at strategic points around the river basin.</p> <p>THAMES BASIN ACTIONS</p>
<p>will Implement the action plan to support the “Invasive non-native species framework strategy for Great Britain” (see Annex F) prioritising the achievement of “no deterioration”.</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	<p>2 Could</p> <p>Further investigations to improve understanding of habitat restoration required to achieve GES.</p> <p>THAMES BASIN ACTIONS</p>
<p>will Remove and control invasive non-native species from problem sites and promote good habitat management</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
<p>will Develop and share best practice on invasive non-native species control</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
<p>will Promote greater public awareness through the production of identification guides for key species, including aquatic invasive non-native species. Target the guides at river users, garden centres and other commercial outlets.</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
<p>will Improve early detection of invasive non-native species by disseminating and developing species identification guides and training key groups. Outcome: Improve knowledge and reduce spread of alien species</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	
<p>will New or enhanced local education campaigns to prevent non-native species introduction. Outcome: Improve awareness of risks. Reduce spread of non-native species</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	

<p>will Remove invasive non-native species from sites that are at risk of becoming a source, where feasible. Outcome: High risk sites cleared of this pressure</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Implement the action plan to support the “Invasive non-native species framework strategy for Great Britain” (see Annex F) prioritising the achievement of “no deterioration”.</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Remove invasive non-native species from sites that are at risk of becoming a source, where feasible. Outcome: High risk sites cleared of this pressure</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Undertake research into the effects of invasive non-native species on good ecological status</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
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Will happen if plan is approved	Could happen if there is more certainty
<p>will Improve early detection of invasive non-native species by disseminating and developing species identification guides and training key groups. Outcome: Improve knowledge and reduce spread of alien species</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	<p>1 Could</p> <p>Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan</p> <p>THAMES BASIN ACTIONS</p>
<p>will Remove invasive non-native species from sites that are at risk of becoming a source, where feasible. Outcome: High risk sites cleared of this pressure</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	<p>1 Could</p> <p>Develop and share best practice on invasive non-native species control</p> <p>THAMES BASIN ACTIONS</p>
<p>will Implement the action plan to support the “Invasive non-native species framework strategy for Great Britain” (see Annex F) prioritising the achievement of “no deterioration”.</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	<p>1 Could</p> <p>Investigate the possible introduction of the White Clawed Crayfish at strategic points around the river basin.</p> <p>THAMES BASIN ACTIONS</p>
<p>will Remove invasive non-native species from sites that are at risk of becoming a source, where feasible. Outcome: High risk sites cleared of this pressure</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p>	<p>1 Could</p> <p>Undertake research into the effects of invasive non-native species on good ecological status</p> <p>THAMES BASIN ACTIONS</p>
<p>will Promote greater public awareness through the production of identification guides for key species, including aquatic invasive non-native species. Target the guides at river users, garden centres and other commercial outlets.</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	<p>1 Could</p> <p>Monitoring parasites & diseases in the wild</p> <p>THAMES BASIN ACTIONS</p>
<p>will Develop and share best practice on invasive non-native species control</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
<p>will Implement the action plan to support the “Invasive non-native species framework strategy for Great Britain” (see Annex F) prioritising the achievement of “no deterioration”.</p>	

<p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Remove invasive non-native species from sites that are at risk of becoming a source, where feasible. Outcome: High risk sites cleared of this pressure</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Set up a strategic, robust and reliable network of volunteer 'spotters' to assist with the management of invasive non-native species, impacts of litter and notification of environmental issues.</p> <p>1</p> <p>THAMES BASIN ACTIONS</p> <p>will New or enhanced local education campaigns to prevent non-native species introduction. Outcome: Improve awareness of risks. Reduce spread of non-native species</p> <p>1</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Undertake research into the effects of invasive non-native species on good ecological status</p> <p>1</p> <p>THAMES BASIN ACTIONS</p>	
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Will happen if plan is approved	Could happen if there is more certainty
<p>will Modify or remove physical obstructions to fish passage at priority sites. Outcome: All physical obstructions identified and prioritised. 25 obstructions addressed in the first plan. Sea trout, salmon and eels have access to X new km of river and estuary.</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Undertake managed realignment and allow more natural management of coastline outside built up areas where appropriate. Outcome: Managed realignment undertaken at approximately 10 sites covering over 20km of coast by 2021, and 15 by 2027. SSSI targets are met, BAP targets are met.</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Restore flows to support good status through removal of physical impediments to flow and other habitat management. Improvements on flow and ecology at locations at risk. Outcome: Improvements on flow and ecology at locations at risk water bodies.</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Develop a regional fish pass strategy identifying the top 100 opportunities to improve fish populations</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Work with angling consultatives, clubs, institutes and fishery owners to promote best fishery management practices involving habitat management, fish stocking, fish health and angling</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Instigate channel restoration projects to improve flow regime and habitat creation</p> <p>2</p>	<p>2 Could</p> <p>Encourage the return of salmon and sea trout to the Thames River Basin as an indicator of environmental conditions</p> <p>THAMES BASIN ACTIONS</p> <p>2 Could</p> <p>Take strategic opportunities to improve ecology through habitat creation and enhancement. Outcome: 37 candidate water bodies have been identified, including the River Adur in Sussex at Knepp Castle, the Royal Military Canal in Kent, and the Anton in Hamps</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>1 Could</p> <p>Further investigations to improve understanding of the impact of non-native species</p> <p>THAMES BASIN ACTIONS</p> <p>2 Could</p> <p>Improve and maintain fish movement Appropriate flow releases and water level management Appropriate sediment management</p> <p>THAMES BASIN ACTIONS</p> <p>1 Could</p> <p>Secure resources for management of invasive non-native species and to support the implementation of a non-native species management plan</p> <p>THAMES BASIN ACTIONS</p>

<p>THAMES BASIN ACTIONS</p> <p>will Develop strategic plans to improve ecology through habitat creation and enhancement</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion and the associated impacts.</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Investigate impacts of river engineering works on fish populations relating to noise, vibration, sedimentation and habitat modification</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Improve ecology by addressing physical morphology and flow pressures including culverts, closed watercourses, pinch points and in-channel structures.</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Improve habitats and ecology by addressing physical pressures including culverts, closed watercourses, pinch points and in channel structures. Outcome: Mitigation and restoration measures in place where this will improve biological outcomes. Prioritise urban areas. Current target = 10km enhanced for the region per year. Developments in the District will improve habitats as part of their development</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Support River Ray Landscape Restoration Project</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Continue to promote the River Wye Strategy with the local authority to seek physical habitat restoration.</p>	
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2 THAMES BASIN ACTIONS	
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Will happen if plan is approved	Could happen if there is more certainty
<p>will Undertake managed realignment and allow more natural management of coastline outside built up areas where appropriate. Outcome: Managed realignment undertaken at approximately 10 sites covering over 20km of coast by 2021, and 15 by 2027. SSSI targets are met, BAP targets are met.</p> <p>2 SOUTH EAST BASIN ACTIONS</p> <p>will Work with angling consultatives, clubs, institutes and fishery owners to promote best fishery management practices involving habitat management, fish stocking, fish health and angling</p> <p>2 THAMES BASIN ACTIONS</p> <p>will Work with anglers, fishing clubs, boat users and riparian owners to identify areas of bankside erosion and the associated impacts.</p> <p>2 THAMES BASIN ACTIONS</p> <p>will Develop strategic plans to improve ecology through habitat creation and enhancement</p> <p>2 THAMES BASIN ACTIONS</p> <p>will Develop a regional fish pass strategy identifying the top 100 opportunities to improve fish populations</p> <p>2 THAMES BASIN ACTIONS</p> <p>will Continue to promote the River Wye Strategy with the local authority to seek physical habitat restoration.</p> <p>2 THAMES BASIN ACTIONS</p> <p>will Modify or remove physical obstructions to fish passage at priority sites. Outcome: All physical obstructions identified and</p>	<p>1 Could Further investigations to improve understanding of the impact of non-native species THAMES BASIN ACTIONS</p> <p>2 Could Take strategic opportunities to improve ecology through habitat creation and enhancement. Outcome: 37 candidate water bodies have been identified, including the River Adur in Sussex at Knepp Castle, the Royal Military Canal in Kent, and the Anton in Hamps SOUTH EAST BASIN ACTIONS</p> <p>2 Could Where appropriate modify, mitigate or remove unsustainable flood defences. Outcome: Flood defences do not contribute to less than good ecological status or potential, where feasible and not disproportionate, and in line with CFMP and SMP policies. SOUTH EAST BASIN ACTIONS</p> <p>2 Could Improve and maintain fish movement Appropriate flow releases and water level management Appropriate sediment management THAMES BASIN ACTIONS</p> <p>2 Could Instigate channel restoration projects to improve flow regime and habitat creation THAMES BASIN ACTIONS</p> <p>2 Could Encourage the return of salmon and sea trout to the Thames River Basin as an indicator of environmental conditions THAMES BASIN ACTIONS</p>

<p>prioritised. 25 obstructions addressed in the first plan. Sea trout, salmon and eels have access to X new km of river and estuary.</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Instigate channel restoration projects to improve flow regime and habitat creation</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Develop and communicate best practice guidance to ensure river engineering works cause minimal impacts for fish populations</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Investigate impacts of river engineering works on fish populations relating to noise, vibration, sedimentation and habitat modification</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Improve ecology by addressing physical morphology and flow pressures including culverts, closed watercourses, pinch points and in-channel structures.</p> <p>2</p> <p>THAMES BASIN ACTIONS</p> <p>will Improve habitats and ecology by addressing physical pressures including culverts, closed watercourses, pinch points and in channel structures. Outcome: Mitigation and restoration measures in place where this will improve biological outcomes. Prioritise urban areas. Current target = 10km enhanced for the region per year. Developments in the District will improve habitats as part of their development</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p> <p>will Restore flows to support good status through removal of physical impediments to flow and other habitat management. Improvements on flow and ecology at locations at risk. Outcome: Improvements on flow and ecology at</p>	
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<p>locations at risk water bodies.</p> <p>2</p> <p>SOUTH EAST BASIN ACTIONS</p>	
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Key issues tackling diffuse pollution

Street and green spaces / commercial sites

- Raise awareness – public contractors and operatives
- Incorporate SUDS into planning / new developments
- Needs to be regulated – fines imposed
- Can use local biodiversity gaps to co-ordinate action
- Reduce use of pesticides
- Incorporate mitigation measures such as buffer zones / strips
- Demonstrate the benefits of reducing DP
- Fish and cress farms – corporate responsibility use supply chain to influence producer
- Technical solutions to fish waste

Additional diffuse pollution projects

- Make use of biodiversity / advisory groups to deliver messages
- Education program – for small scale industry and have owners
- Promote habitats to mitigate DP
- Monitor success
- Enforcement required where voluntary approach not working

Concerns

- Lack of funding
- Need to ensure measures incorporate other areas
- Need to look at water control measures – opportunities with harvesting and re-use
- 15% reduction to surface waters – need to understand rationale

Diffuse issues

- SUDS do not remove toxic contamination (hazardous waste that needs disposal) recommend to mitigate urban diffuse

Messages

- ENGO's will be key players in delivering some elements of RBMP's
- Structures are not yet in place to mobilise and NGO's as co-deliverers of the plans
- ENGO contributions justify a raising of the level of ambition. We need to identify resources for this

Tensions

- It's a river basin management plan, not a water body management plan
- WFD objectives likely to conflict with some other demands or uses of water bodies
- Resource availability constrains ambition

Hopes

- More ambition
- Increase/develop evidence base soon
- To be listened to
- Understand what WFD is all about
- Positive actions to take away
- Line of sight for partnership work is clear and resources available
- Get a sense of measures across regions e.g. chalk streams
- Find out about how to navigate this huge document
- Better equipped to comment
- If done properly it should work well
- That plan readable, understandable, deliverable

Fears

- HMWBs loading to plans
- Disproportionate costs a barrier
- Not enough ££
- Plan is just a process – failure to deliver
- 1st choice not ambitious enough
- Conflicting interests leads to stalemate
- Worries WFD will not affect issues at local level
- WFD will not have teeth to tackle issues
- Tunnel vision
- Lack of pragmatism
- SE growth
- Not enough teeth to tackle urban diffuse

Key messages

Invasive species

- Need to be realistic/prioritise
- Locally keen to act – please support (roles for volunteers)
- Accurate info research
- Rapid response capacity
- Yes to a forum – action not thinking shop!
- Public awareness
- Line in sand

- Tighten legislation

Concerns

Invasive species

- £
- Climate change bringing more
- Sustainability of action
- Will need to achieve good status / potential going to be strong enough driver for this
- Are we doing best possible on making evidence and cost/benefit based, strong case
- Does this continued existence of a NNIS preclude GES or GEP?
- Are NNIS a material planning consideration
- One out all out system...
- Prioritise on the basis of “no deterioration”

Habitat restoration and fish passage summary

1. Mitigate and modify flood defences
2. Take strategic opportunities to improve ecology throughout habitat improvement
3. Further investigate to improve understanding of habitat restoration required to achieve GES

Key messages

- Terminology – clarity needed
- Ambition and political will needed
- Multifunctional approach
- Use local knowledge and initiatives
- Not ambitious enough for 2105 targets
- Commitment to delivery not strategy
- Need to improve La's/farmers
- Chalk stream as a priority?
- Need more scientific understanding

Key concerns

- Costs – short term expensive but long term benefits
- Duplication – local vs landscape scale, between initiatives with different drivers
- Address other first?
- Flood defence verses restoration = need for education
- Links with wetland vision?