### OBJECTIVE

A. Prevent any deterioration of status * in any water body.

* In the Water Framework Directive, water body status terms are: high, good, moderate, poor and bad.

<table>
<thead>
<tr>
<th>TARGET</th>
<th>PROGRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015, 2021, 2027</td>
<td>Not achieved. Warwickshire has 76 water bodies, either completely or partially within the county boundary, in 3 catchments. In Cycle 1 (2009-2015) 4 water bodies had deteriorated and have not yet recovered: 3 in the Warwickshire Avon Catchment – deteriorating elements were macrobentos / phytobenthos, fish and dissolved oxygen respectively. 1 in the Tame Anker Mease Catchment - deteriorating element was dissolved oxygen. In Cycle 2 (2016-2021) 4 water bodies with ‘face value’ deteriorations require further investigation: 2 in the Warwickshire Avon Catchment - deteriorating elements were ammonia and macrobenthos / phytobenthos at one site and ammonia and phosphate at the other. 2 in the Cherwell Catchment - deteriorating elements were dissolved oxygen and phosphate respectively.</td>
</tr>
</tbody>
</table>

B. Improve all WFD failing water bodies to Good Ecological Status (GES) or to Good Ecological Potential (GEP) if heavily modified.

| 2027 | In progress. Warwickshire Avon Catchment; objectives for improvement by 2015 were achieved for 12 poor, now ‘moderate’, waterbodies but failed for 1 ‘poor’ waterbody: Breach Bk – source to confluence with R Sowe. Tame Anker Mease catchment: objectives for improvement by 2015 were achieved for 2 poor, now ‘moderate’, waterbodies and 2 bad, now ‘poor’, waterbodies. Cherwell Catchment: improvement objectives for 7 water bodies are all for 2027. |


| ongoing | In progress. Annex II species: UK has special responsibility for otter, Atlantic salmon and river lamprey; others are white clawed crayfish, spined loach and bullhead. Priority habitats are: alder woodland on floodplains; rivers with floating vegetation often dominated by water-crowfoot. Environment Agency has responsibility for fish populations and undertakes monitoring of water courses, informing Water Framework Directive status reports. The UK list of priority species remains an important reference source for the ‘UK Post-2010 Biodiversity Framework’ which succeeded the UK BAP in July 2012. Red Data Book species: IUCN continues to monitor and maintain these lists. |

**Key to status: 2010:** ⬆️ Any improvement ↔️ No change ⬇️ Decline

**2016:** ⬆️ Good progress ⬆️ Some progress ↔️ No change ⬇️ Decline
<table>
<thead>
<tr>
<th>PROPOSED ACTIONS</th>
<th>BY</th>
<th>REPORTED PROGRESS</th>
<th>NO. OF SITES/ ITEMS</th>
<th>TOTAL AREA/ LENGTH</th>
<th>% OF TARGET</th>
<th>ACTION STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PL1. Ensure that any site meeting the relevant criteria is considered for designation as a SSSI.</strong></td>
<td>ongoing</td>
<td>In progress. Natural England (NE): no new designations.</td>
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</tbody>
</table>
| **PL2. Assess and notify all qualifying water courses as LWSs and enter onto database:** including the Tame by April 2017, the Leam and Anker by Dec 2017, the Itchen, Cole, Dene and Stour by Dec 2018, and the Sowe and Sherbourne by Dec 2019. | 2015 - 2019 | In progress.  
- **Tame Valley Wetlands Landscape Partnership:** an officer is working with the Environment agency (EA) to write a citation; to be finished by June.  
- **Habitat Biodiversity Audit Team:** an accurate digitised database of the county’s key water courses/corridors has been established.  
- **Warwickshire Wildlife Trust (WWT):** will further progress this action.  
- **Sherbourne Partnership:** a plan of action for the river is being developed which will help to lead to this.  
- **LWS citations** have not been progressed for Leam and Anker as yet, although the Anker Valley partnership is identifying possible projects for enhancement along the river. Targets to be reviewed and re set in light of resources. |                      |                    |             |               |
| **PL3. Ensure that all statutory Permissions and Consents, including new developments and abstractions, wherever possible enhance the environment and as a minimum avoid an adverse impact on the aquatic environment.** | ongoing | In progress.  
- **EA:** has centralised permitting process. The figure will be the number of permits that the Environment Agency has dealt with in Warwickshire through the National Permitting Service on the assumption that we should be ensuring no adverse impacts during the determination. |                      |                    |             | ME |               |
| **PL4. Ensure that water bodies are recognised as important biodiversity assets in Local Development Plans and Neighbourhood Plans.** | ongoing | Some progress.  
- **Warwickshire County Council (WCC):** 3 key wetlands have been formally designated as LNRs or Country Parks:  
  - Kingsbury Meadow 2014  
  - Abbey Green Park  
  - Cole End Park  
- **Tame Valley Wetlands:** recognised in the North Warwickshire Borough Council local plan as an important asset. | 4 sites |                    |             |               |             | ME |               |
| **PL5. Actively review and comment on planning applications to fulfil biodiversity net gain on all developments.** | ongoing | In progress.  
- **EA:** comments on planning applications in relation to flood risk, geomorphology, and ensuring that watercourses are either protected from modification or as far as practical restored in line with WFD objectives. We also ensure that a minimum 8 metre easement is provided between developments and watercourses to support the ecological functioning of rivers. The EA team who oversee biodiversity |                      |                    |             | ME |               |
aspects of applications only see a small number of the total.

**WCC:** oversees and comments on planning applications that may affect water bodies, using National Policy Planning Framework (NPPF) and local plan and strategies, to enhance the natural environment by reducing negative impact from development.

**WWT:** assesses and comments on planning applications with the aim of enhancing the natural environment and protecting wildlife. This includes asking for rivers to be re-instated, restored and protected, e.g. asking that buffers between watercourses and developments are provided or that new wetland features are designed into the landscape plans.

### PL6. Implement the national requirement for Sustainable Urban Drainage Schemes (SUDS) in all new housing schemes of more than 10 dwellings as well as commercial and industrial developments, using the opportunity to create new habitats.

<table>
<thead>
<tr>
<th>Details</th>
<th>Status</th>
<th>Project Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WCC:</strong> implements this for Surface Water Management Plan for flooding issues meeting 10 houses plus threshold if it is part of a highways development.</td>
<td>In progress.</td>
<td>3 LAs</td>
</tr>
<tr>
<td><strong>Solihull Metropolitan Borough Council (SMBC):</strong> implements this Surface Water Management Plan for flooding.</td>
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<tr>
<td><strong>Coventry City Council:</strong> is the designated Lead Local Flood Authority for Coventry and as such it is a Statutory Consultant as part of the planning process for all major planning applications where SuDS should be implemented. Once the new Local Plan is adopted by the City’s Planning Service, it will be a requirement of all development to ensure SuDS are implemented on a wide scale throughout the City to manage down local flood risk and that of the wider River Severn Catchment.</td>
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### SM1. Use the Catchment Based Approach (through the Tame Anker Mease and Warwickshire Avon Catchment Host Partnerships) to identify and deliver mitigation measures required to improve condition of water bodies.

<table>
<thead>
<tr>
<th>Details</th>
<th>Timeframe</th>
<th>Project Details</th>
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<tbody>
<tr>
<td><strong>Tame/Anker/Mease Catchment Plan:</strong> 2011/12 - produced through Defra’s Catchment Based Approach pilot project (Birmingham &amp; Black Country Wildlife Trust BBCWT). River restoration and habitat creation project at Whitacre Heath SSSI; by WWT/TVW team, delivered via Heritage Lottery Fund funding. A revised plan was finalised in March 2017. In addition a chart of proposed projects with outline details has been produced (May 2017).</td>
<td>2015, 2021, 2027</td>
<td>2 plans 3 sites</td>
</tr>
<tr>
<td><strong>Severn Trent Water (STW)</strong> - hosts the Tame, Anker, Mease catchment partnership with the aim of embedding collaborative working at a river catchment scale to deliver improvements to our water environments. Sub-catchment hosts are: Warwickshire Wildlife Trust &amp; Trent Rivers Trust (Lower Tame in North Warwickshire &amp; Stafford); Trent Rivers Trust &amp; Severn Trent Water (Lower Tame, Anker and Mease); and Wildlife Trust for Birmingham and the Black Country (Upper Tame Birmingham and Black Country).</td>
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<tr>
<td><strong>Warwickshire Avon Catchment Plan:</strong> A plan was finalised in March 2017. In addition, a chart of proposed projects with outline details has been</td>
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<tr>
<td>Action</td>
<td>Status</td>
<td>Details</td>
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</table>
| **SM2.** Actively work with partners and agencies to ensure that development proposals do not affect the integrity of watercourses, ensuring WFD Assessments are carried out where necessary. | Ongoing | In progress.  
Solihull Metropolitan Borough Council (SMBC): 2016 - ‘Solihull River Corridor Improvement Plan (ShRimP)’ produced in partnership with the EA: outlines aspirations for the Borough’s rivers including the Cole, Hatchford Brook and Blythe.  
WWT:  
• Coventry Brooks report 2013 – comprised walkovers to note all structures along all brooks and potential improvements across Coventry in; these have been mapped on GIS layers. Funded by EA and referenced by EA and Coventry City Council.  
• Tame Valley Wetland HLF project 2014-18: delivers river restoration in line with Environment Agency priorities. |
| **SM3.** Actively work with partners and agencies to ensure that all flood defence works result in an overall environmental gain to aquatic and riparian habitats. | Ongoing | Some progress.  
Warwickshire County Council (WCC): Strategic Flood Risk Management Strategy (2015) implements this action by:  
• working with partners to encourage flood management activities by riparian landowners on ordinary watercourses and flood defence structures.  
• promoting environmentally sustainable solutions including deculverting, natural flood risk management, blue/green infrastructure, increased tree cover, catchment sensitive farming.  
• aiming to ensure a no net loss of biodiversity and where possible look to provide a net gain through habitat creation and enhancement, contributing to wider environmental objectives.  
Local Flood Authorities: have written Surface Water management plans; some are looking to use Natural flood management processes as part of flood solutions.  
Warwickshire, Coventry and Solihull Strategic Flood Forum: meets | 4 partners | 5 partners |
quarterly to discuss flood issues across the county - has discussed natural flood management; WCC and WWT are developing a trial project at Fillongley 2016.

**Shipston-on-Stour Flood Action Group:** 2016 - a project is being developed with landowners to implement natural flood management upstream of the town; Coventry University is providing the technical input.

**EA Capital programme:** 2012-14 - Lower Tame flood defence schemes incorporated river improvements and associated wetland habitat creation.

### SM4. Deliver Restoration Projects to improve water quality and ecology.

<table>
<thead>
<tr>
<th>2015, 2021, 2027</th>
<th>In progress.</th>
</tr>
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<tbody>
<tr>
<td><strong>WWT:</strong></td>
<td></td>
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<tr>
<td>• <strong>Tame Valley Wetlands Landscape Partnership:</strong> 2014-2018 – an HLF scheme including river restoration and habitat creation projects, adding connectivity to provide resilient ecological networks: 50ha wetland habitat creation at Kingsbury Water Park; 1000m river bank reprofile at Whitacre Heath; creation of an island and backwater in R. Tame.</td>
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<tr>
<td>• <strong>Guphill Brook, Coventry:</strong> 2016 - river enhancement work comprises 400m of improved bank and river corridor, creation of fish refuges and installation of woody debris’ 8 black poplar trees planted and spilling along eroding river bank to create protected bank area.</td>
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<tr>
<td>• with <strong>Coventry City Council (CCC) / Nuneaton &amp; Bedworth Borough Council (NBBC):</strong> 2015 – 2017 - HLF funded water vole recovery project includes habitat improvement on stretches of Coventry Brooks, R. Anker, R. Sherbourne and tributaries.</td>
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<tr>
<td>• <strong>Nature Improvement Areas (NIA) Defra funded programme 2012-2015:</strong></td>
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<tr>
<td>• In 2013 the Anker Valley Living Landscape partnership was initiated with funding from NE; it identified objectives and projects in 2014.</td>
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<tr>
<td>• In 2014 the Tame Valley Wetlands Landscape Partnership scheme began, supported by the Heritage Lottery Fund, continuing to mid-2018: continuing restoration of rivers and associated wetlands habitat is a future theme for post 2018.</td>
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</table>

### SM5. Implement schemes to tackle identified issues on priority sites (see RM1) for water course/corridor improvement to ensure that no water bodies in Warwickshire deteriorate, and continue to aim for Good Ecological Status.

| 2015 | In progress. |
| 2015 | |
| **WWT:** | |
| • **River Restoration and Scrape Creation at Whitacre Heath SSSI:** De-culverting improvements on the Sowe through Longford Park. |
| • **EA:** 2009 - restoration project on R Swift. |
| • **Cemex:** movement of 1.8+ km of the R. Cole in three sections including... |
| SM6. | Actively work to ensure that flow levels are sufficient to sustain characteristic habitats and species ensuring they are investigated through the AMP process. | 2014, 2019, 2024 | In progress.  
**EA:** monitors the flow on main rivers, with supplementation when necessary. It works with a range of organisations to fulfil ‘Restoring Sustainable Abstraction’ (RSA), a programme of work that identifies, investigates and solves environmental risks or problems caused by unsustainable licensed water abstraction throughout England and Wales. The goal is to allow water abstraction to continue in a way that the environment can sustain. | 8 sites |
| SM7. | Prioritise the removal of physical barriers to fish movement e.g. weirs and culverts from water bodies wherever possible, re-naturalise rivers and encourage and enable fish migration using any means and opportunities e.g. planning, capital schemes, flood defence consents, landowner negotiation. | 2027 | In progress.  
**By EA through:**  
- weir removals and fish pass installations on EA gauging stations to improve fish migration.  
- weir removal on R Arrow at Alcester (2012), and at Oversley.  
- removal of weirs or fish pass installation on the Sowe at Baginton (2012) and Stoneleigh (2013).  
- deculverting of the St John's Brook in Warwick.  
- establishment of fish fry refuge and deculverting of stream as part of the Broom flood alleviation scheme (2013).  
- fish passes on weirs on Alne in Henley (2010).  
- establishment of fish fry refuge and deculverting of stream as part of the Broom flood alleviation scheme (2013).  
- fish passes on weirs on Alne in Henley (2010).  
- | 8 sites |
| SM8. | Ensure that any weir repair work incorporates fish pass and eel pass solutions that are in line with Salmon & Freshwater Fisheries Act 1975 (SAFFA) and eel regulation. | ongoing | Some progress.  
**EA:**  
- implements this action on main rivers, recording and reporting to Defra the number of kilometres of waterbody enhanced. This includes weir removal and opening up rivers to fish passage. On non-main rivers the lead local flood authority should partially take this role but EA is the lead and tries to work with partners to deliver this.  
- is responsible for ensuring eel passage even on non-main rivers and are able to serve notice on weir owners to remove obstructions to eel passage.  
**Severn Rivers Trust (SRT):** 2016 - a fish pass near Southam is at the planning stage. A feasibility study and final design on the structure have been undertaken. | 8 sites |
| SM9. | Actively implement invasive non-native species eradication plans to include Himalayan Balsam (*Impatiens glandulifera*), Japanese Knotweed (*Fallopia japonica*), and North American mink (*Neovison vison*). Prevent the spread of non-native crayfish and killer and demon shrimps through effective biosecurity measures (see CP4). |
| 2027 | Some progress.  
Himalayan balsam is being removed regularly by:  
- WWT: at Whitacre Heath and Clowes Wood  
- Friends of Longford Park: at Guphill Brook and Longford Park (Coventry).  
- Coleshill WWT local group: at Cole End Park.  
- Friends of R. Sowe: on R Sowe.  
- CCC: strimmed in Coventry City to reduce seeding.  
- Earlswood Wildlife Partnership, Earlswood Lakes and surrounding area  
- West Midland Bird Club, at Lady Walk reserve.  
Mink monitoring by WWT:  
- alongside otter survey across the county, and specifically in Coventry and Nuneaton with Water Vole recovery project.  
- continuing monitoring at Brandon Marsh SSSI. |

| SM10. | Address sedimentation and rural diffuse pollution runoff by implementing a range of solutions including: SUDs, fencing and buffer margins, and run-off attenuation features. |
| 2015, 2021, 2027 | In progress.  
SRT:  
- 2008–2015: worked on R.Leam as the priority area to address metaldehyde levels in river and drinking water to meet EU standards; funded by Severn Trent Water (STW).  
- with NE, STW and the University of Warwick: an in-ditch wetland project promoting features to help to reduce pesticide peaks without taking up valuable space.  
STW: 2015 - established landowner catchment co-ordinators on the impact of pesticides and chemicals on drinking water. |

| SM11. | Tackle urban diffuse pollution through community engagement e.g. projects such as Yellow Fish, Love Your River, and using the Catchment based Approach, applying the 10 point Plan to correct both residential and industrial misconnections, and other sources e.g. urban and road run off. |
| 2015, 2021, 2027 | Some progress.  
Midland Urban Communities Initiative (MURCI): projects included the ‘Yellow Fish’ and ‘Love Your River’ projects in Coventry. Ended 2014.  
WWT: the ‘Coventry Brooks Plan’ in March 2013 identified opportunities and issues within the water bodies within the city to improve the water environment. Implemented at Longford Park and Guphill Brook. |

| SM12. | Tackle point source pollution issues through sewage treatment discharges and combined sewage overflows (CSOs). |
| 2027 | In progress.  
STW: is working (in AMP6 2015-2020), to improve 24 sewage treatment works in the Warwickshire Avon Catchment area, all for phosphate removal and one for both phosphate and ammonia. |
### SM13. Protect rivers from a changing climate, utilising initiatives such as Woodland for Water, CSF and agri-environment schemes administered by NE:
- by adapting them through strategic tree planting to keep sheltered areas of rivers cool for fish and invertebrates.
- by providing low flow channels necessary in extreme dry periods that will additionally benefit water voles.
- by reconnecting rivers with their flood plains.

Some progress.
NE: uptake of ELS and HLS options for buffer strips next to water courses, and areas to prevent run-off, protects and enhances river and stream corridors.

**WWT:**
- **Tame Valley Wetlands Landscape Partnership:** re-naturalisation of 520m of riverbank by re-profiling.
- **Kingsbury Water Park:** creation of 140m of new river channel plus fish refuge, restoration of 0.1ha island and planting of 15 native trees including 10 black poplars.

**SRT:**
- 2013 - implemented several projects to prevent cattle poaching and establish tree planting along the R. Leam.
- 2014 - riparian tree planting of 3515 trees.

<table>
<thead>
<tr>
<th>SM14. Create artificial sand martin nesting banks above the flood level. 2 to be installed in the Tame Valley by 2017.</th>
<th>2017</th>
<th>Achieved.</th>
<th>3 banks</th>
<th>150%</th>
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<tbody>
<tr>
<td><strong>WWT:</strong> sand martin bank installed April /May 2016 at Kingsbury Water park by Tame Valley Wetlands team; a second was constructed in 2016.</td>
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<tr>
<td><strong>EA:</strong> 2014 - at Water Orton.</td>
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### RM1. Conduct catchment walkover surveys to identify reasons for failure to inform River Basin Management Plan Actions.

<table>
<thead>
<tr>
<th>2015, 2021, 2027</th>
<th>In progress.</th>
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</table>
| **EA:** conducts Catchment Walkovers and surveys of Warwickshire's 76 water bodies to identify pressures which adversely affect water quality and ecology, i.e. deterioration of dissolved oxygen, fish, macrophytes and phytobenthos. This information is described in the RBMP as Reasons For Failure (RFF). In May 2016, 48 were classified as ‘moderate’, 24 ‘poor’ and 4 ‘bad’:
- In *Tame Anker Mease Catchment*: 19 waterbodies - 7 ‘moderate’, 10 ‘poor’ and 2 ‘bad’: Temple Balsall Brook from source to R Blythe; R Bourn source to R Tame.
- In *Cherwell Catchment*: 7 waterbodies: 2 ‘moderate’ and 5 ‘poor’. | | | |

### RM2. Report on the progress of restoration schemes and WFD status at each RBMP review and through partnerships.

<table>
<thead>
<tr>
<th>2015, 2021, 2027</th>
<th>Achieved.</th>
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<tbody>
<tr>
<td><strong>EA:</strong> 2016 - RMBP delivered, in partnership with business, water industry, NGO’s and others, including Catchment Partnerships.</td>
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### RM3. Use data from structured fish catches for assessment of water quality.

<table>
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<tr>
<th>ongoing</th>
<th>In progress.</th>
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<tbody>
<tr>
<td><strong>EA:</strong> undertakes fish surveys for WFD classification purposes, monitoring 100m of all rivers every 3 years as part of the WFD assessment process.</td>
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</table>

### CP1. Organise and deliver information

| ongoing | In progress. |
| CP2. | Develop innovative invertebrate monitoring schemes engaging communities in learning about and monitoring their local rivers and streams. | 2015 | Some progress.  
EA: carries out monitoring of watercourses throughout Warwickshire to fulfil WFD requirements, including water and invertebrate sampling, fish and macrophyte surveys.  
Tame Valley Wetlands Landscape Partnership: will implement FIN/BBCWT system of surveying fresh invertebrates.  
Friends of R. Sowe, working as a Waterside Care group: monitoring of various invertebrate groups and birds at certain key stretches of watercourse, including at Coombe Country Park, measuring:  
- water quality - temperature, turbidity, ammonia and pH  
- invertebrates - by kick survey for 3 x 1 min. | 2 sites min. |   |
| CP3. | Ensure that any interested parties associated with the water environment engage and contribute to the consultations associated with the RBMP process. | 2015, 2021, 2027 | Achieved.  
WWT:  
- its response to RBMP consultation encouraged responses via catchments.  
- organised Catchment Partnership meetings in Tame / Anker / Mease with STW, and Warwickshire Avon in conjunction with SRT, all of which engaged a range of partners in developing and finalising Catchment Plans and projects; project lists completed for 2016. |   |   |
| CP4. | Actively promote Check Clean Dry Campaign to protect native species from non-native species threats and diseases. | ongoing | In progress.  
EA: the campaign is on the website.  
WWT: needs to refresh its policy with information at sites. |   |   |
| CP5. | Create an action plan for fish to inform and focus on actions required to tackle fish population failures and migration issues. | 2017 | Some action.  
LBAP / EA: a draft plan has been produced, awaiting expert input. |   |   |