

Water quality planning – Profile AMP5 schemes and report targets for the AMP5 environmental outcome measures

Operational instruction

84_10

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What's this document about?

This document specifies how Regions and Areas should profile the scheme numbers and environmental outcomes for each year of the AMP5 period. This will enable the Environment Agency to track delivery of the overall AMP5 National Environment Programme, enable reporting of targets for Corporate Scorecard Measure 7 "Water companies deliver improvements in line with their Asset Management Plans" and assess the benefits of water quality schemes as they are delivered over the 5-year AMP5 period.



Document details

Who does this apply to?

Regional/area WQ planning teams
Regional/area GW&CL teams
Regional PR09 coordinators
WQ and LQ E&B teams
OTS teams

It may also be useful to the following teams:

- Environment Management teams
- National Permitting Service.



Related documents



Feedback

Contact for queries

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Introduction

Scope

By the end of February 2010, we identified the number of schemes and the environmental outcomes that were expected to be accrued each year of the AMP5 National Environment Programme at an Environment Agency regional level. This information will be reported each year as Corporate Scorecard Measure 7 “Water companies deliver improvements in line with their Asset Management Plans” (definition form attached as Annex 1) in Q2 through Regional Business Planning routes and to Water Quality Policy team, using the Environmental Outcome Measures Summary Table.

What do I have to do?

The stages in the process

As part of the development of the National Environment Programme (NEP) for PR09 the environmental outcomes have been identified for each proposed improvement scheme. This work was completed at the end of 2009. Now that the Final Determination has been received from Ofwat, we can now also determine when schemes will be delivered in each of the 5 AMP years. We need to use both these pieces of information to profile when schemes will be delivered and assess the environmental outcomes for each of the 5 years of the AMP5 period.

The stages of the process are described in the table below.

Stage	Description
1	Calculate the environmental outcome measures in Water Quality Outcome Measures and Combined Measures , for each year of the AMP5 period. Many of the environmental outcome measures for individual assets will have been calculated as part of the work in developing the initial National Environment Programme and for the Overall Environmental Outcomes work completed at the end of 2009. Please use this information wherever possible.
2	Enter the results as the target for each year into the Environmental Outcome Measures Summary Table (attached as Annex 2).
3	Quality assure the spreadsheet and return to Andrea Burton (Head Office – Water Quality Policy) by 28 th February 2010.
5	The overall results for the Region may not be the sum of the measures for each Area in the Region as this may result in double counting. This is particularly the case where a river or estuary being improved forms the border between two Areas, or where two adjoining Areas are improving a unit of coastal water (e.g. SAC or SPA). Where a water body being improved is adjacent to two Regions, the Regional PR09 Coordinators should consult to find out if the water body is being counted in the measures for both regions. Where this is the case record it as a comment appended to the cell (in the reporting spreadsheet) of the Regional measure.

Measuring the environmental outputs

Measures to use

All lengths are to be reported in kilometres (km)
All areas are to be reported in square kilometres (km²)

Driver specific measures

The environmental outcome measures contained in [Water Quality Outcome Measures](#) relate to the environmental changes estimated to result from improvement schemes assigned to a single driver (or driver group).

Each of the environmental outcome measures (as defined in each row of the tables) are independent of each other.

Example: Groups of schemes in a catchment resulting from the U1 driver and the F1a driver may affect the same stretch of river, say 5 km in length. This 5 km will be assigned to both the U1 indicator **and** the F1a measure in [Water Quality Outcome Measures](#).

However, where two or more schemes affect the same length of river (e.g. two qualifying discharges affect a specific Sensitive Area (U2 driver) then that length of river is counted only once under the relevant measure.

Total environmental output measures

The environmental outcome measures contained in [Combined Measures](#) relate to the environmental changes that may result from improvement schemes assigned to **groups** of drivers. Care should be taken to ensure that there is no double counting of benefits when deriving the results for these measures.

Example: Consider the measure 'Total length of river improved or prevented from deteriorating'. Possible drivers include U1 (P removal schemes), U2, H1, H3, WFD2 and I1. **Diagrams A and B** below illustrate how the length is identified in two different cases.

Diagram A Overlapping designations (see [Combined Measures](#))

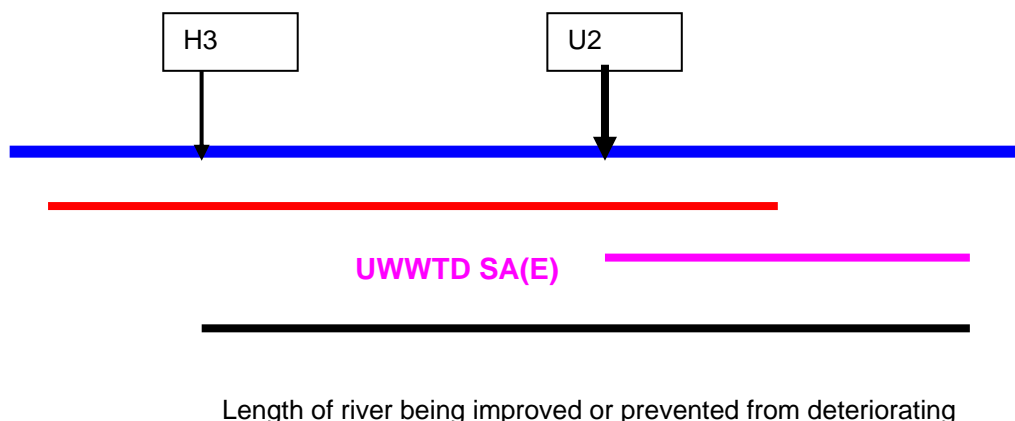
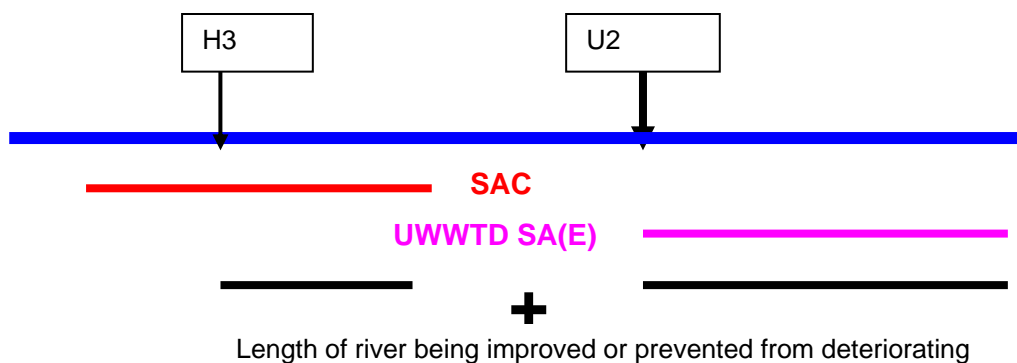


Diagram B Discrete designations (see [Combined Measures](#))



Calculating environmental outcome measures

Investigations Where only a requirement for an investigation has been identified, do not include the unit of the environment to be investigated in the output measures. There is a separate measure for counting the number of investigations we deliver each year.

UWWTD sensitive areas

Rivers

This is the whole length of the designated Sensitive Area, from the first upstream direct qualifying discharge to the downstream boundary of the Sensitive Area. This length of river is counted only once, regardless of the number of direct and indirect qualifying discharges. As a QA check the length of river calculated centrally in each Sensitive Area is contained in **Length of Riverine Stretches designated as a result of the 2005 review of Sensitive Areas.**

Estuarine and coastal waters

The area of water body in the Sensitive Area is contained in the reports regions submitted to head office in support of the proposal to designation the Sensitive Area. As a QA check the area of the water body calculated centrally in each Sensitive Area is contained in [Area of reservoir, estuarine and coastal waters.](#)

Fresh water fish, WFD, no deterioration

Fresh Water Fish Directive, the Water Framework Directive (ammonia, BOD, phosphorus and dissolved oxygen) and No Deterioration (flow) environmental indicators are based on GQA stretch lengths. Identify the stretch (or stretches) improved (or prevented from deteriorating) by a scheme (or group of schemes). Use the GQA stretch lengths (from the GQA database) to assign the environmental indicator.

Nature conservation environmental indicators for designated sites

The length of watercourse will be as defined by EN/CCW in the designation of the site. From this identify the length affected by a water company asset (discharge).

Rivers

If say a discharge enters a watercourse halfway down the designated reach, then the environmental indicator is the length of river from the discharge point to the end of the designation. However, if the discharge (or results of an abstraction) represents a barrier to migratory fish (and the species in question is one of the reasons for designation) then the environmental outcome measure is the whole length of the designated reach.

SSSIs

For improvements to SSSIs only include in the outcome measures those SSSIs that are NOT part of a Habitats Directive site (SAC or SPA).

Unsatisfactory intermittent discharges

Only the number of improvement schemes is required for this environmental measure in [Combined Measures.](#)

UID1

This should now include all Thames Tideway schemes.

The numbers for other non UID1 drivers should be included where there are improvements to intermittent discharges. This will include for example intermittents included under the F1a, B1, rB1, rB2, S1, WFD1 and WFD2 drivers.

Marine environment

In the absence of site specific information; where only the length of coastline affected by an improvement scheme is known, multiply the length (km) by 0.5 to give the area (km²).

Water quality outcome measures

Ref	Driver	Environmental outcome measure
1.1	U1 and U2 (P removal schemes), H1, I1 (P removal), BAP1, L1, WFD2	Length of river at a reduced risk of eutrophication
1.2	H1-H7, I1-I4, BAP1	Length of river improved towards international and national conservation objectives
1.3	F1a	Length of river improved currently significantly failing fwf standards
1.4	FLOW1	Length of river prevented from deteriorating and resulting from an RQO failure
1.5	WFD1-4	Length of river improved currently significantly failing wfd standards
1.6	B1, rB1, rB2	Number of bathing waters improved to or maintained at sufficient status under the current and revised bathing waters directive
1.7	S1	Number of Shellfish Waters improved towards achieving compliance with the Guideline coliform flesh standard of the Shellfish Waters Directive
1.8	U1 and U2 (N removal schemes), H2, I1 (N removal), BAP1	Area of coastal water at a reduced risk of eutrophication
1.9	H1-H7, I1-I4	Area of coastal water improved towards international and national conservation objectives

Combined measures

Ref	Driver	Environmental outcome measure
2.1	U1, U2, F1a, WFD1, WFD2, WFD3, WFD4, FLOW1, H1-H7, I1-I4, BAP1, L1, UID1	Total length of river improved or prevented from deteriorating
2.2	U1, U2, H1-H7, I1-I4, BAP1, L1, UID1	Total area of estuarine and coastal waters improved or prevented from deteriorating
2.3	UID1 and UIDs with other non UID drivers (e.g. F1a, B1, rB1, rB2, S1)	Number of unsatisfactory intermittent sewage discharges improved
2.4	All drivers	Number of schemes delivered under <u>all</u> drivers
2.5	All drivers	Number of investigations delivered under <u>all</u> drivers

Length of riverine stretches designated as a result of the 2005 UWWTD review of Sensitive Areas

Site name	Region	Designation status	Length (km)
Badsey Brook	Midlands	SA(E)	2.0
Rea Brook	Midlands	SA(E)	23.0
River Itchen	Midlands	SA(E)	10.0
River Mease	Midlands	SA(E)	31.3
River Salwarpe	Midlands	SA(E)	25.0
River Strine/Strine Brook	Midlands	SA(E)	13.5
River Swift	Midlands	SA(E)	11.0
River Tern	Midlands	SA(E)	40.2
River Trent	Midlands	SA(E)	270.4
Rivers Strout Smestow	Midlands	SA(E)	42.8
Glaze Brook	North West	SA(E)	12.2
River Dane	North West	SA(E)	43.9
River Tame	North West	SA(E)	31.2
River Yeo	South West	SA(E)	43.0
Rivers Brue, Sheppey and Alham	South West	SA(E)	63.2
Little Stour	Southern	SA(E)	6.5
River Hamble	Southern	SA(E)	4.8
River Rother West	Southern	SA(E)	34.6
Tidal River Great Stour	Southern	SA(E)	15.0
Waldron Ghyll/Fiver Cuckmere	Southern	SA(E)	18.2

Area of reservoir, estuarine and coastal waters designated as a result of the 2005 UWWTD review of Sensitive Areas

Site Name	Region	Designation Status	Area (km ²)
Lower Fal Estuary	South West	SA(E)/PW(E)	27
Slapton Ley	South West	PW(E)	0.77
Bewl Reservoir	Southern	SA(E)	3.18
Darwell Reservoir	Southern	SA(E)	0.64
Hamble Estuary	Southern	SA(E)/PW(E)	2.23
Medina Estuary	Southern	SA(E)/PW(E)	1.6
Newtown Harbour	Southern	SA(E)/PW(E)	2.1

Related documents

Links

No related documents

Annex 1 - Corporate Scorecard Definition Form

<p>Measure reporting period The first quarter that this measure is reported in eg. Q2</p>	<p>Q2 (2011)</p>
<p>Units e.g. Number of sites, £m</p>	<p>Km for 1 - 6 below Km² for 7 - 10 below Number for 11 and 12 below</p>
<p>Detailed definition This states clearly what is included and excluded from the measure</p>	<p>1.1 Length (km) of river at a reduced risk of eutrophication. 1.2. Length of river (km) improved towards international and national conservation objectives under drivers H1, H2, H5 and H7 and I1 – I4. 1.3. Length (km) of river improved currently significantly failing under Freshwater Fish (driver F1a). 1.4. Length (km) of river prevented from deteriorating under the discharge limits driver FLOW1. 1.5. Length (km) of river improved currently significantly failing WFD standards (drivers WFD 1-4) 1.6. Number of bathing waters improved maintained under driver B1 (relating to the current bathing water Directive Mandatory standards) and rB1 and rB2 (relating to the revised bathing Water Directive related to 'poor' and 'sufficient' waters). 1.7. Number of shellfish waters improved or maintained under Shellfish Water Directive driver S1 (for shellfish waters already designated under the Shellfish Water Directive) 1.8. Area (km²) of coastal water at a reduced risk of eutrophication. 1.9. Area (km²) of coastal water improved towards international and national conservation objectives under drivers H1, H2 and H5 H7 and I1 – I4.</p> <p>2.1. Number of unsatisfactory intermittent discharges improved under driver UID1. 2.2. Number of schemes delivered under all drivers 2.3. Number of investigations delivered under all drivers. 2.4. Total length of river (km) improved or maintained (no double counting) 2.5. Total area of coastal water (km²) improved or maintained (no double counting)</p>
<p>Detailed calculation Detailed formulas used to calculate the measure</p>	<p>Incorporated in 'Detailed definition' above.</p>
<p>Data Source What system is being used to gather the data, what is being reported, when the report is run, who is responsible for running the report. If the data is reported in DES, is it provided nationally or locally?</p>	<p>Reported in DES and provided locally.</p>

<p>Target The Corporate Scorecard target that this measure has to achieve for 2010/15</p>	<p>Length (km) and area (km²) targets will be provided for each year by regions initially after PR09 Final Determination and once National Environment Programme profiling has been completed with water companies in January 2009.</p> <p>Targets likely to be available by end February/early March 2010. Targets and actual km or km² delivered will be cumulative totals. So for example, Year 2 target and actual will include years 1 and 2 and by the end of the 5-year period, all 5 years' data will be included in the figures provided.</p> <p>But in subsequent years (due to PR09 / AMP5 change protocol) targets and actual delivered will be assessed by regions on an annual basis in Quarter 2 of the financial year after scheme completion. The target will be that 100% of planned outcomes will be delivered.</p> <p>The first data will be reported by operational teams in Q2 of 2011 - the end of the first year of AMP5 delivery.</p>
<p>Tolerances</p>	
<p>Red</p>	<p><90%</p>
<p>Amber</p>	<p>90% to 99.9%</p>
<p>Green</p>	<p>100%</p>
<p>What do we do as an organisation if the measure turns amber or red ?</p>	<p>Initially we would ask for an explanation from the regional team. As there are many factors affecting delivery of AMP schemes, we must all recognise that there is the possibility of failing this measure for reasons outside the control of the EA e.g. planning issues. These reasons are valid and will be part of the explanation should a target not be met.</p> <p>If there are water company performance issues these will be dealt with in the first instance by the region and action could include meetings with Water company MD and EA Regional Director.</p> <p>This would also be recognised as poor environmental performance and feed into the agenda for discussion at the annual water company performance meetings in the autumn each year, chaired by David Jordan, Director of Operations. A worse case scenario would be for us to request that Ofwat 'put the water company on report' requiring the water company to report on AMP delivery progress each quarter, as we have instigated in 2009 for United Utilities.</p>
<p>Additional notes</p>	<p>Groundwater investigations will be included in the National Environment Programme. We are able to monitor delivery progress on water company catchment management schemes. Those schemes under the Drinking Water Inspectorate we don't directly control and are not included in this definition.</p>
<p>Future development</p>	
<p>Approved</p>	
<p>Signed off and verified by Policy Lead</p>	
<p>Approved</p>	
<p>Signed off by Owner (Director)</p>	