Moving towards common standards monitoring guidance targets for SAC rivers

Record of decisions

Introduction

Targets for water quality and flows are determined for Natura 2000 sites by Natural England with reference to Common Standards Monitoring Guidance (CSMG). Targets for these elements similarly form the basis for assessments of the ecological status of water bodies under the Water Framework Directive (WFD). Water dependant Natura 2000 sites are defined as protected areas under the WFD.

Where possible a single target should be set for elements that are common to the water body and coincident Natura 2000 protected area. However, where achievement of the targets based on CSMG is not possible in the next river basin planning cycle then interim progress goals have been agreed by Natural England and the Environment Agency. These can be in the form of numerical targets or, if inappropriate to set quantitative targets, descriptive measures that will achieve, by 2021, progress towards the long term targets set using CSMG.Where only the CSMG target is expressed, this is the target for 2021.

This document summarizes the decisions made by Natural England and the Environment Agency on the standards that need to be achieved for elements of environmental quality that support the achievement of objectives for the named Natura 2000 protected area. The draft second river basin management plans were used to consult the public about the locally proposed measures and targets. Note that for Cumbria rivers, the need to gather additional data and extended discussions meant that the values were not available during the updated River Basin Management Plan consultation.

Where it has not been possible to agree specific targets, usually because further technical work is required, these will be indicated by an asterisk or referenced by a comment against the target. In these cases the proposed CSMG target is included as advice from Natural England but it is subject to further validation throughout the period of the consultation and beyond. Where no interim goal or CSMG targets are specified, it is currently considered that the elements are not relevant, or are insufficiently understood for this river.

GB102076070560 Howe Grain (river)

Solway Tweed River Basin District

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	7	7; Unit 218 Meeting nn tgt of 7
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Unit 201 mtg CSMG NN tgt of 15; Unit 202 - use s.pt on 201 & same NN target
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Unit 203 - Int tgt and CSMG tgt is SAC max, feasibility to be assessed of mtg nn of 7 in long term
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Unit 204, mtg SAC nn of 15
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; Part of Unit 209 Hoff Beck,CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	25; 1 of WBs in U 209, tgt is for unit as a whole; feas'y of nn 15 needs to be reviewed
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows		Highly regulated, need to base flow targets on RoC decisions
Low-moderate flows		…..further discussion needed to agree targets
Moderate-high flows		
High flows		
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Part of Unit 216 (River Lowther) , mtg nn target
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.025	0.025
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows		Highly regulated, need to base flow targets on RoC decisions
Low-moderate flows		…..further discussion needed to agree targets
Moderate-high flows		
High flows		
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Unit 216 (Upper Lowther), mtg nn target
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	Original SAC targets. No assessment pt above Ullswater. Flow target is acceptable to EA
Low-moderate flows	10	"..as long term & interim, but modelled figures from WRGIS may need further assessment
Moderate-high flows	10	"…in the event of a permit application.
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	7	7; Unit 217 mtg nn tgt of 7
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG target Table 2, is WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	31; U 206 Int is WFD H, EA have not agreed CSMG SAC max of 15, feas'y of mtg to be assessed
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows		Highly regulated flow, need to base targets on outcome of RoC, further discussion
Low-moderate flows		….needed to agree targets
Moderate-high flows		
High flows		
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	40; Part of unit 216, has own tgts - int is orig SAC, 2027 tgt is WFD G 28ug, * CSMG is SAC max
Acidification		
pH		n/a P cont'd…. * EA have not agreed SAC max as long term, feasibility to be assessed
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; U208, meeting SAC max 15, review feas'y of mtg nn of 7 in long term
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	25; U 209 Lower Hoff = WB 0820 Mtg SAC max of 25; close to nr.n of 15, feas'y of mtg to be assessed……
Acidification		
pH		n/a P cont'd…….in meantime, agree SAC max as CSMG
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	25; Unit 212 mtg SAC max of 25, assess feas'y of mtg nn 15
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	26; U211 Int is WFD H, * CSMG is SAC max, which is not agreed by EA. Feas'y to be assessed. Cont'd..
Acidification		
pH		n/a …. P Cont'd…part of unit is in GB 102076070960 & has diff tgt, see separate entry
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.025	0.025
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; U205&207, CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	25; Unit 205 and 207: Int tgt set as SAC max, part of 210 is in this WB where int tgt is 33 WFD H
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	10; U213 Meets Table 3, ok as interim target; there is a question of whether it is meeting WFD High..
Low-moderate flows	15	15; ..at present. Until clarified, Table 2 WFD High is not agreed by EA as long term target.
Moderate-high flows	20	20
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	60; U 213 Int tgt set as original SAC, CSMG is SAC max 25*, which is not agreed by EA. Cont'd….
Acidification		
pH		n/a ….P Cont'd Feasibility of meeting SAC max in long term to be assessed
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	26; U211 Int is WFD H, * CSMG is SAC max, which is not agreed by EA. Feas'y to be assessed. Cont'd..
Acidification		
pH		n/a …. P Cont'd…part of unit is in GB 102076070960 & has diff tgt, see separate entry
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.025	0.025
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	26; U211 Int is WFD H, * CSMG is SAC max, which is not agreed by EA. Feas'y to be assessed. Cont'd..
Acidification		
pH		n/a …. P Cont'd…part of unit is in GB 102076070960 & has diff tgt, see separate entry
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CCMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	15	15
High flows	15	15
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	44; U220, set WFD G as int target, *CSMG SAC max is not agreed by EA, feas'y of meeting…. Cont'd….
Acidification		
pH		n/a ……P cont'd……SAC max to be assessed
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; U 214, CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	24; Unit 214: Int tgt is WFD H, *CSMG SAC max 15 is not agreed by EA; Cont'd….
Acidification		
pH		n/a …….P cont'd……feasibility of mtg SAC max in long term to be assessed.
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; Part Unit 211; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Part U 211, mtg CSMG SAC max of 15, not NN of 7; see also GB102076070930 for separate tgt
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	Or should this be CSMG Table 2? EA do not agree these or more stringent targets..
Low-moderate flows	15	…..because of flow exceedence of low flow tgts; further work required to agree long term..
Moderate-high flows	20	….flow objectives; in the interim WFD supports good (i.e. EFI) will be applied as a minimum
High flows	10	…in permitting
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	30; U215, mtg int tgt WFD H of 30, *CSMG SAC max is 25, not agreed by EA. Cont'd….
Acidification		
pH		n/a …..Cont'd P: part of U 210 - WFD H is int tgt of 33, *CSMG SAC max 25, not agreed by EA.
Acid Nuetralising Capacity (ANC)		n/a …..Cont'd P Assess feasibility of mtg SAC max on both U215 and U210 in long term.
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	CSMG Table 3 flow tgts are not agreed by EA because of UU abstraction, further work..
Low-moderate flows	15	….is requiredto agree long term objectives, in the interim , WFD supports good (i.e. EFI) as
Moderate-high flows	20	…a minimum will be applied in permitting decisions.
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	20	20; Unit 222 Mtg int target of SAC max 20, assess feas'y of nn of 10
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; In U214; CSMG Table 2, WFD High, agreed.
Low-moderate flows	10	10
Moderate-high flows	15	15
High flows	15	15
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	41; In Unit 214, but higher P than in Crowdundle Beck, hence lower interim tgt of WFD Good
Acidification		
pH		n/a ….P cont'd….The CSMG target of 15 is SAC max; this is not agreed by EA……
Acid Nuetralising Capacity (ANC)		n/a……P cont'd….Feasibility of meeting SAC max in this WB in long term to be assessed.
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	L Lowther U216, affected by UU abstraction. Table 3 flow standards not agreed by EA, needs..
Low-moderate flows	15	….further work to agree long term targets with ref to RoC; in interim, EA will apply WFD supports..
Moderate-high flows	20	….good (i.e. EFI) as a minimum in permitting decisions
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	15; Part U 216, mtg NN of 15
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	EA do not agree long term CSMG targets, presumed effect of Ullswater abstraction..
Low-moderate flows	15	….further work needed to agree long term targets, in the interim EA will apply WFD…
Moderate-high flows	20	….supports good (i.e. EFI) as a minimum in permitting.
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	16	16; Unit 221, WFD H as int tgt < CSMG max of 20, assess feas'y of nn 10
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	14	14; Unit 233, mtg WFD H, will review feas'y of mtg nn tgt of 10 in the long term
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	14	14; Unit 233, mtg WFD H, will review feasibility of mtg nn tgt of 10 in the long term
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.025	0.025
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; U 214, CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	15	24; Unit 214: Int tgt is WFD H, *CSMG SAC max 15 is not agreed by EA; Cont'd….
Acidification		
pH		n/a …….P cont'd……feasibility of mtg SAC max in long term to be assessed.
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.025	0.025
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	25	51; U223, WFD good as int target, *EA have not agreed CSMG tgt of SAC max*, cont'd…
Acidification		
pH		n/a……P cont'd…..Feasibility of mtg SAC max to be assessed.
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	10; EA can agree Table 3 of CSMG as long term and interim target; minor deviation at..
Low-moderate flows	10	15; …low flows from Table 2 target; need to consider further whether we can agree Table 2 in long
Moderate-high flows	10	20; ….term.
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	30	30; U 234 mtg WFD H of 23 agree as CSMG & assess feas'y of nn 15; U 235 mtg nn 30, set as tgt
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	6 Units in this WB: 215, 224, 225, 226, 232 & 236, CSMG Table 3 River targets applied to all…
Low-moderate flows	15	…EA do not agree to CSMG long term targets for the 6 units in this WB, further work needed to agree
Moderate-high flows	20	…long term tgts; in interim, EA will apply WFD supports good (i.e. EFI) as a minimum in permitting
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	50	50; U 236 tgt is SAC max; 224, 226 mtg NN 30; 225 is WFD H of 27; 232 is WFD H of 38;
Acidification		
pH		n/a…..P cont'd..4 of 5 units are at NN or better; only 236 is below
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	10; U 228, 230 & 231; long term CSMG is table 2, WFD High,though not agreed by EA because of deviation.
Low-moderate flows	10	15; …..at low flow Q95 - further work needed to agree long term tgts; Interim targets agreed is Table 3.
Moderate-high flows	10	20
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	30	30; U 231 & 230 mtg SAC NN 30; U 228 mtg WFD H of 28, set as tgt as < NN of 30
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	10	CSMG flow tgts in table 3 are not agreed by EA, further work needed to agree long term targets…
Low-moderate flows	15	…with reference to RoC decisions that are not in WRGIS. In the interim, EA will apply WFD…
Moderate-high flows	20	….supports good (i.e. EFI) as a minimum in permitting.
High flows	10	
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	27	27; Unit 227 mtg WFD H of 27, < nn 30
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow)		
Low flows	5	5; CSMG Table 2, WFD High, agreed
Low-moderate flows	10	10
Moderate-high flows	10	10
High flows	10	10
Soluble Reactive Phosphorus ('orthophosphate' expressed as P)		
As annual and growing season means (µg/L)	30	30; Unit 229, mtg nn tgt of 30
Acidification		
pH		n/a
Acid Nuetralising Capacity (ANC)		n/a
Organic Pollution		
Un-ionised ammonia (mg/L as 95%ile)	0.030	0.03
Total ammonia (mg/L as 90%ile)	0.250	0.25
Mean Biological Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% saturation as 10%ile)	85	85

The targets and goals underpinning the conservation objectives for rivers within River Eden Natura 2000 site have been jointly agreed between Natural England and the Environment Agency.

Natural England

Comment: See audit trail and flow chart for record of discussions. Note that contrary to the standard wording of the database, the SRP targets relate only to annual means, not to growing season means - CSMG targets for the latter have not been agreed by EA.

Agreed by: Simon Humphries

Date: 20 May 2016

Environment Agency

Comment: A technical feasibility assessment will need to be undertaken where it has not been possible to agree long term CSMG targets.

Agreed by: Stewart Mounsey

Date: 07 June 2016