# 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	<b>/</b> )	
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 ('orthophosphat	e' expre	ssed as P)
As annual and growing season means (µg/L)	7	7; Unit 218 Meeting nn tgt of 7
Acidification		
рН		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

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	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 ('orthophosphat	e' expre	ssed 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		
рН		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

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GB102076070600 Scandal Beck (river)		Solway Tweed River Basin Distric
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	v)	
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 ('orthophospha	te' expre	ssed 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		
рН		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

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Dissolved Oxygen (% saturation as 10%ile)

GB102076070620 Belah (Lower) (river)		Solway Tweed
	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 ('orthophosphat	e' expres	ssed as P)
As annual and growing season means (µg/L)	15	15; Unit 204, mtg SAC nn of 15
Acidification		
рН		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

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GB102076070640	Scale Beck (river)		Solway Tweed Rive
		CSMG	
		Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviation	s from daily naturalised flow	)	
Low flows		5	5; Part of Unit 209 Hoff Beck, CSMG table 2, WFD High, agreed
Low-moderate flo	WS	10	10
Moderate-high flo	ows	10	10
High flows		10	10
Soluble Reactive P	hosphorus ('orthophosphate	e' expre	ssed as P)
As annual and gro	owing 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			
рН			n/a
Acid Nuetralising	Capacity (ANC)		n/a
<b>Organic Pollution</b>			
Un-ionised ammo	onia (mg/L as 95%ile)	0.030	0.03
Total ammonia (n	ng/L as 90%ile)	0.250	0.25
Mean Biological C	Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead
Dissolved Oxyger	n (% saturation as 10%ile)	85	85

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**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

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

		Somay installation
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised	low)	
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 ('orthophosp	hate' expres	ssed as P)
As annual and growing season means (µg	J/L) 7	7; Unit 217 mtg nn tgt of 7
Acidification		
рН		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	e) 85	85

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GB102076070710 Helm Beck (river)		Solway Tweed River Basin Dis
	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	e' expres	ssed 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		
рН		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
As annual and growing season means (µg/L)  Acidification pH Acid Nuetralising Capacity (ANC)  Organic Pollution Un-ionised ammonia (mg/L as 95%ile) Total ammonia (mg/L as 90%ile) Mean Biological Oxygen Demand (mg/L)	0.030 0.250	31; U 206 Int is WFD H, EA have not agreed CSMG SAC max of 15, feas'y of mtg to be assessed  n/a n/a  0.03 0.25 EA no longer measure BOD, will rely on DO instead

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**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)

GB102076070770 Hilton Beck (river)		Solway Twee
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<i>ı</i> )	
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 ('orthophosphat	e' expre	ssed 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		
рН		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

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OBTOLOT COTOLO TION BO		Comay Throat River Basin
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from dail	ly 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 Phosphoru	s ('orthophosphate' expre	ssed as P)
As annual and growing seas	son 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		
рН		n/a P cont'din 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 De	mand (mg/L)	EA no longer measure BOD, will rely on DO instead
Dissolved Oxygen (% satura	ation as 10%ile) 85	85

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Mean Biological Oxygen Demand (mg/L)

Dissolved Oxygen (% saturation as 10%ile)

GB102076070640 River Lyverinet (river)		Solway Twe
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<i>ı</i> )	
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 ('orthophosphat	e' expres	ssed 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		
рН		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

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EA no longer measure BOD, will rely on DO instead

Dissolved Oxygen (% saturation as 10%ile)

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GB102070070000 Trout Beck (Kirby Trio	ie) (iive	Solway Tweed River Dasin District
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow		micrim rogicss coar (quantitative target or assoriptive measure) by 2021
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 ('orthophosphat	e' expres	ssed 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		
рН		n/a P Cont'dpart 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

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	p	
	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 ('orthophosphat	e' expre	ssed 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		
рН		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

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GB102076070900 River Leith (river)		Solway Tweed River Basin Distric
	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 ('orthophosphat	e' expre	ssed 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		
рН		n/aP 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

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OD 102010010310 Dultiliwalte Deck (11vel	,	Colway Tweed River Basin Bistilet
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<i>ı</i> )	
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 ('orthophosphat	e' expre	ssed 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		
рН		n/a P Cont'dpart 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

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Dissolved Oxygen (% saturation as 10%ile)

GB102076070930	Trout Beck (river)		Solway Tweed River Basin District
		CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations	s from daily naturalised flow	)	
Low flows		5	5; CSMG Table 2, WFD High, agreed
Low-moderate flow	WS	10	10
Moderate-high flow	WS	10	10
High flows		10	10
Soluble Reactive Ph	nosphorus ('orthophosphate	e' expre	ssed as P)
As annual and gro	owing 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			
рН			n/a P Cont'dpart of unit is in GB 102076070960 & has diff tgt, see separate entry
Acid Nuetralising (	Capacity (ANC)		n/a
Organic Pollution			
Un-ionised ammor	nia (mg/L as 95%ile)	0.030	0.03
Total ammonia (m	g/L as 90%ile)	0.250	0.25
Mean Biological O	xygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead

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CSMG
Target

Flows (% deviations from daily naturalised flow)

Low flows 5 5; CCMG Table 2, WFD High, agreed 10 10

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)

OD 1020/00/0330 Crowddidie Deck (11ve	71 <i>)</i>	Colway Tweed I
	CSMG	Interim Drawnes Coal (accontitative toward or descriptive messure) by 2021
	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	e' expres	ssed 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		
рН		n/aP cont'dfeasibility 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

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OBTOZOTOOTOOO OWINGAIC BOOK III Bail	.011 (1140	Colling Twoca Tivel Bacill Bloth
	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 ('orthophosphai	e' expre	ssed 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		
рН		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

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GB 1020/00/0300 River Edem (liver)		Solway I weed Kivel Basili L
	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	•	mermi rogicss coar (quantitative target or descriptive measure) by 2021
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 ('orthophosphat	e' expre	ssed 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/aCont'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/aCont'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

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Flows	(% deviations fro	om 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)

GB102076071000	Milburn Beck (river)		Solway Tweed River Basi
		CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviation	s from daily naturalised flov	<i>I</i> )	
Low flows		5	5; In U214; CSMG Table 2, WFD High, agreed.
Low-moderate flo	WS	10	10
Moderate-high flo	WS	15	15
High flows		15	15
Soluble Reactive Pl	hosphorus ('orthophospha	e' expres	ssed as P)
As annual and gro	owing season means (µg/L)	15	41; In Unit 214, but higher P than in Crowdundle Beck, hence lower interim tgt of WFD Good
Acidification			
рН			n/aP cont'dThe CSMG target of 15 is SAC max; this is not agreed by EA
Acid Nuetralising	Capacity (ANC)		n/aP cont'dFeasibility of meeting SAC max in this WB in long term to be assessed.
<b>Organic Pollution</b>			
Un-ionised ammo	nia (mg/L as 95%ile)	0.030	0.03
Total ammonia (m	ng/L as 90%ile)	0.250	0.25
Mean Biological C	Oxygen Demand (mg/L)		EA no longer measure BOD, will rely on DO instead

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Flows	(% deviations fro	om 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

River Eden

Flows	(% deviations	from dail	v naturalised	flow)
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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

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Flows (% deviations from daily naturalised flow)

Low flows 5 5; CSMG table 2, WFD High, agreed

Low-moderate flows1010Moderate-high flows1010High flows1010

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

	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<i>I</i> )	
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 ('orthophosphat	te' expre	ssed 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		
рН		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

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Total ammonia (mg/L as 90%ile)

Mean Biological Oxygen Demand (mg/L)

Dissolved Oxygen (% saturation as 10%ile)

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	CSMG	
	<b>Target</b>	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<i>'</i> )	
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 ('orthophosphat	e' expre	ssed 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		
рН		n/aP cont'dfeasibility 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

0.250

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0.25

85

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EA no longer measure BOD, will rely on DO instead

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Flows (% deviations from daily naturalised flow)

Low flows	5	5; CSMG Table 2, WFD High, agreed
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Low-moderate flows1010Moderate-high flows1010High flows1010

# 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

	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 ('orthophosphat	e' expres	ssed 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		
рН		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

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	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				
рН		n/aP cont'd4 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		

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	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				
рН		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		

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	CSMG Target	Interim Progress Goal (quantitative target or descriptive measure) by 2021
Flows (% deviations from daily naturalised flow	<b>v</b> )	
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 ('orthophospha	te' expre	ssed as P)
As annual and growing season means (µg/L)	27	27; Unit 227 mtg WFD H of 27, < nn 30
Acidification		
рН		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

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GB102076074080 King water (river)		Solway Twe
	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 ('orthophosphat	te' expre	ssed as P)
As annual and growing season means (µg/L)	30	30; Unit 229, mtg nn tgt of 30
Acidification		
рН		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

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

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