Solway Region

Water of Luce: Grade 3



Summary Table

			Percentage chance meeting requirement						
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	$\begin{array}{c} {\rm Total~egg} \\ {\rm requirement^a} \end{array}$	2018	2019	2020	2021	2022	Overall	Grade
2.08	$535,\!000$	1,114,000	48.35	41.37	90.94	26.99	53.14	0.52158	3

^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon





Monthly flow data





Monthly stock estimates (out of season in black)



Annual estimated stock



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females





Monthly number of spawning females



3. Converting Number of Spawners to Number of Eggs



Egg contents of females

Monthly number of eggs



 $Total\ annual\ egg\ numbers$



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	48.35
2019	41.37
2020	90.94
2021	26.99
2022	53.14

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 588,902 square meters of known salmon habitat in the Water of Luce and a further 38,145 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

River Bladnoch SAC: Grade 3



Summary Table

			Per	centage	e chance	e meetin	g requir	rement	
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
1.64	780,000	1,277,000	44.9	63.8	72.82	24.42	31.47	0.47482	3
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^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon





Monthly flow data





Monthly stock estimates (out of season in black)





Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females









3. Converting Number of Spawners to Number of Eggs



Egg contents of females







Total annual egg numbers

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	44.90
2019	63.80
2020	72.82
2021	24.42
2022	31.47

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 797,354 square meters of known salmon habitat in the River Bladnoch SAC and a further 179,359 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

River Cree: Grade 1



Summary Table

			1 01	centage	chance	meeting	g require	ement	
Eggs required $(m^2)^a$	$\begin{array}{l} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
2.05 1	,047,000	2,144,000	83.24	87.52	91.66	77.92	87.55	0.85578	1

^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon



Reported Catches (black = retained, blue = released)

Monthly flow data





Monthly stock estimates (out of season in black)





Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females

Ages of fish







3. Converting Number of Spawners to Number of Eggs



Egg contents of females





Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



Total annual egg numbers

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	83.24
2019	87.52
2020	91.66
2021	77.92
2022	87.55

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 1,128,969 square meters of known salmon habitat in the River Cree and a further 122,953 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

Water of Fleet: Grade 3



Summary Table

			Per	centage	chance	meetin	g requi	rement	
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
1.42	157,000	222,000	5.68	8.02	35.58	0.91	5.22	0.11082	3
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^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)



Monthly flow data





Monthly stock estimates (out of season in black)



Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females





Monthly number of spawning females



3. Converting Number of Spawners to Number of Eggs



Egg contents of females

Monthly number of eggs





Total annual egg numbers

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	5.68
2019	8.02
2020	35.58
2021	0.91
2022	5.22

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 146,909 square meters of known salmon habitat in the Water of Fleet and a further 63,941 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

River Dee (Kirkcudbrightshire): Grade 3



Summary Table

		Percentage chance meeting requirement					rement		
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
0.71	1,445,000	1,024,000	34.49	5.06	19.64	5.56	5.91	0.14132	3
0		•. •							

^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon

Reported Catches (black = retained, blue = released)



Monthly flow data





Monthly stock estimates (out of season in black)





Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females









3. Converting Number of Spawners to Number of Eggs



Egg contents of females









Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	34.49
2019	5.06
2020	19.64
2021	5.56
2022	5.91

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 1,399,661 square meters of known salmon habitat in the River Dee (Kirkcudbrightshire) and a further 487,108 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

Urr Water: Grade 3



Summary Table

		Percentage chance meeting requirement							
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
1.85	468,000	869,000	70.21	67.08	79.93	22.36	30.73	0.54062	3
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^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon





Monthly flow data





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Annual estimated stock

Monthly stock estimates (out of season in black)



Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females









3. Converting Number of Spawners to Number of Eggs



Egg contents of females









Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	70.21
2019	67.08
2020	79.93
2021	22.36
2022	30.73

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 511,012 square meters of known salmon habitat in the Urr Water and a further 41,351 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

River Nith: Grade 3



Summary Table

			Percentage chance meeting requirement						
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
2.38	4,228,000	10,054,000	37.82	55.29	54.95	18.95	40.72	0.41546	3

^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon



Reported Catches (black = retained, blue = released)

Monthly flow data





Monthly stock estimates (out of season in black)





Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females









3. Converting Number of Spawners to Number of Eggs



Egg contents of females

Monthly number of eggs



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



Total annual egg numbers

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	37.82
2019	55.29
2020	54.95
2021	18.95
2022	40.72

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 4,573,785 square meters of known salmon habitat in the River Nith and a further 457,919 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).





Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)

River Annan: Grade 3



Summary Table

			Percentage chance meeting requirement						
Eggs required $(m^2)^a$	$\begin{array}{c} Area \\ (m^2)^a \end{array}$	Total egg requirement ^a	2018	2019	2020	2021	2022	Overall	Grade
1.68	3,786,000	6,339,000	27.81	43.37	49.9	13.81	39.94	0.34966	3
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^a Figures presented are median values

1. Converting Reported Catches to Numbers of Returning Salmon



Reported Catches (black = retained, blue = released)

Monthly flow data





Monthly stock estimates (out of season in black)





Annual estimated stock

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Annual catch as a proportion of stock



2. Converting Numbers of Returning Salmon to Numbers of Spawning Females

Ages of fish







3. Converting Number of Spawners to Number of Eggs



Egg contents of females

Monthly number of eggs





Total annual egg numbers

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).

Year	Percentage above
2018	27.81
2019	43.37
2020	49.90
2021	13.81
2022	39.94

4. Egg requirement

Areas of salmon habitat in square meters

There is an estimated 4,119,796 square meters of known salmon habitat in the River Annan and a further 365,158 square meters where salmon may be present.

Egg requirement



Plot shows 50, 70 and 90% of the estimates (wide to narrow bars).



5. Percentage chance that the egg requirement has been reached

Plot shows 50, 70 and 90% of the estimates (wide to narrow bars). Shaded areas represent 50, 70 and 90% of the estimated egg requirements (dark to light areas)