## Solway Region

## Water of Luce: Grade 3



## Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 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 |

${ }^{\text {a }}$ 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)


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

Annual estimated stock


Annual catch as a proportion of stock

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


Monthly number of spawning females


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

## 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



| 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


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

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 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 |

[^0]
## 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)


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

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


Monthly number of spawning females


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

## 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 | 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


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

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  | Grade |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | $\begin{aligned} & \text { Area } \\ & \left(\mathrm{m}^{2}\right)^{\mathrm{a}} \end{aligned}$ | Total egg requirement ${ }^{\text {a }}$ | 2018 | 2019 | 2020 | 2021 | 2022 | Overall |  |
| 2.05 | 1,047,000 | 2,144,000 | 83.24 | 87.52 | 91.66 | 77.92 | 87.55 | 0.85578 | 1 |

${ }^{\text {a }}$ 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)


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

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


Monthly number of spawning females


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

## 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 | 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



## 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

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement ${ }^{\mathrm{a}}$ | 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 |

[^1]
## 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


Monthly number of spawning females


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

## 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 | 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



## 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 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement $^{\mathrm{a}}$ | 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 |

${ }^{\text {a }}$ 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



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

## 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 | 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



## 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 <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement ${ }^{\mathrm{a}}$ | 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 |

[^2]
## 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


Monthly number of spawning females


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

## 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 | 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


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 <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement | 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 |  |

${ }^{\mathrm{a}}$ 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)


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

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


Monthly number of spawning females


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

## 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


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 Annan: Grade 3



Summary Table

|  |  |  | Percentage chance meeting requirement |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs required <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Area <br> $\left(\mathrm{m}^{2}\right)^{\mathrm{a}}$ | Total egg <br> requirement ${ }^{\mathrm{a}}$ | 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 |

${ }^{\mathrm{a}}$ 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)


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

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


Monthly number of spawning females


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

## 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 | 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



## 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)


[^0]:    ${ }^{\text {a }}$ Figures presented are median values

[^1]:    ${ }^{\text {a }}$ Figures presented are median values

[^2]:    ${ }^{\text {a }}$ Figures presented are median values

