

██████████
Flood Risk Management Team
Dumfries & Galloway Council

Our Ref: 9331
Your Ref: NmgFRM12

By email only to: newtonstewartFPS@dumgal.gov.uk

SEPA Email Contact:
planning.south@sepa.org.uk

30 June 2023

Dear ██████████

Flood Risk Management (Scotland) Act 2009
Newton Stewart Flood Protection Scheme, Newton Stewart, Dumfries and Galloway

Thank you for consulting SEPA on the Newton Stewart Flood Protection Scheme (FPS) on 23 May 2023. We acknowledge the project is identified as an action within the published [Flood Risk Management Plan: Solway Local Plan District](#) (22 December 2021) and that it has been developed with early engagement with us.

We have reviewed the FPS Statement (dated 27 April 2023), accompanying reports and technical drawing package and can confirm we have **no objection** to the FPS. However, the engineering works associated with the project will require a separate authorisation from SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR). We strongly **recommend** you engage in pre-CAR application discussions with our Water Permitting Team (waterpermitting@sepa.org.uk) as based on the information currently available to us it is likely this project may require a derogation determination.

Please note our further advice and recommendations below.

Advice for the planning authority

1. Flood risk

- 1.1 We have no objection to the principle of the scheme development. There is no requirement for schemes to meet a 200 year plus climate change standard of protection, however the higher the level of protection offered, the more benefit the scheme is likely to provide. It should be ensured that the works do not result in an increase in flood risk elsewhere.
- 1.2 We note the supporting Hydrology and Hydraulic Modelling report was undertaken in 2012 and refined in 2017 and 2018, with climate change flows updated in 2019. In that time there have been updates to policy, guidance and data. Ahead of the scheme construction commencing, we **recommend** that the underlying data in the modelling is brought up to date to ensure the best understanding of what level of protection the scheme will offer.



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- 1.3 As per our [climate change allowances guidance](#), the current level of climate change to be applied in the Solway region is 53% flow uplift for catchments over 50km² and 38% rainfall uplift for catchments between 30 and 50km². The predicted sea level rise is 0.88m by 2100.
- 1.4 The Hydrology and Hydraulic Modelling report states that the 1 year coastal flood level of 5.81mAOD was taken from the Coastal Flood Boundary (CFB) dataset and used in the joint probability analysis. This was taken from the dataset point 1524-20-Main-M. The CFB dataset was updated in 2018. Based on the current extrapolated estuary dataset, the point closest to Newton Stewart is 1524-17-Estuary-Main with a 1 year level of 6.06mAOD.
- 1.5 We also **recommend** that the observed flow records are brought up to date for undertaking the flow estimation. At present the 2015 flood event remains the highest on record at the Newton Stewart gauging station. We are aware that the 2015 event damaged the footbridge downstream of the gauge due to a build of debris against it, the bridge was removed in 2016 (this is also mentioned in the Hydrology and Hydraulic Modelling report). This may have elevated flood levels during the 2015 event and future floods of the same magnitude may produce a slightly lower peak flood level for the same flows.

2. Engineering works in the water environment

- 2.1 The installation of flood walls, embankments and erosion protection will require authorisation from us under the CAR. Given the need to protect Newton Stewart from flooding we have no objection to the project however due to potential morphological impacts it may be subject to a derogation determination to assess this further. We have offered further comments on the potential morphological impacts of the FPS in Appendix 1.
- 2.2 We strongly **recommend** you engage in pre-CAR application discussions with our Water Permitting Team as soon as possible to discuss the licence activities required for this project and regulatory requirements. Please note applications need to be submitted before determination can commence and the process can take up to 4 months.
- 2.3 The erosion protection proposed on the righthand bank downstream of the Sparling Bridge (GG5) should be clarified at the regulatory stage. We previously recommended the use of trees for riverbank protection along this stretch which could be implemented under General Binding Rule (GBR) 25 of CAR. The FPS presents an opportunity to explore greener bank protection which would be more environmentally friendly and beneficial for biodiversity.
- 2.4 Further information regarding the reprofiling planned at the A75 bridge (GC6) and Sparling Bridge (SC9) will also be required at the CAR stage as it is not clear what this will involve.
- 2.5 Please note this advice is given without prejudice to any decision made on elements of the proposal regulated by us, which may take into account factors not considered at this stage.

3. Construction management and pollution prevention

- 3.1 The risk of silt pollution entering the rivers during construction is very high therefore strict well planned pollution prevention measures are required. We welcome the commitment to prepare and implement a Construction Environmental Management Plan (CEMP) to describe the methods and techniques to be employed to reduce the risk of pollution.
- 3.2 Construction sites that discharge water run-off to the water environment covering an area greater than 4ha require a licence under CAR. Below this threshold you need to comply with [GBR10](#) which requires, amongst other things, all reasonable steps be taken to ensure the discharge does not result in pollution of the water environment. We may also request a Pollution Prevention Plan (PPP) to demonstrate thorough process of mitigation. It may be advisable to include a PPP with the CEMP. We **recommend** the regulatory requirements in relation to construction run off are discussed with our Water Permitting Team.

- 3.3 The River Cree is the location for the sparring fish to spawn, this occurs around February time. Works should not be carried out around the River Cree during spawning season (October to May). The Galloway Fisheries Trust will have an interest in this project and should also be consulted.
- 3.4 We understand biosecurity measures to prevent the inadvertent spread of invasive non-native species are to be provided in the CEMP which we welcome. This should include measures such as the check-clean-dry procedure. There is further information on invasive non-native species on our [website](#) and in the [Biosecurity and management of invasive non-native species for construction sites and Controlled Activities](#) guidance.

4. Surface water drainage

- 4.1 We understand a surface water drainage system is to be constructed on the dry side of the FPS to collect and convey water that would otherwise pool behind the defences. Any discharge of surface water to the water environment must be in accordance with the principles of the SUDS Manual (C753) and CAR (specifically GBR 10). Further information on this matter can be found on our [website](#) and within our [CAR Practical Guide](#).

5. Site waste management

- 5.1 Any waste materials imported to the site must be stored and used only in accordance with a waste management licence or exemption under the Waste Management Licensing (Scotland) Regulations 2011 (WML). Similarly, any waste materials removed from the site must be disposed of in accordance with these regulations. The applicant should also be fully aware of the relevant requirements relating to the transport of controlled waste by registered carriers and the furnishing and keeping of duty of care waste transfer notes.

6. Other planning matters

- 6.1 For all other planning matters, please see the standing advice in Table 2 of our [trriage framework and standing advice](#).

7. Regulatory advice

- 7.1 Details of regulatory requirements and good practice advice can be found on our [website](#). If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the local compliance team at: SWS@sepa.org.uk.

If you have queries relating to this letter, please contact us at planning.south@sepa.org.uk.

Yours faithfully

[Redacted signature]

Planning Service

Disclaimer: This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages - www.sepa.org.uk/environment/land/planning/](http://www.sepa.org.uk/environment/land/planning/)

Appendix 1 – Hydromorphology Advice

1.1 We previously reviewed the Geomorphology Impact Assessment (dated 06 December 2018) undertaken in support of the project and offered comments on 10 November 2021 (SEPA Ref. 2898). We note the project description and drawings do not show significant changes compared to the documents reviewed in 2021. Additionally, we understand the final version of the Geomorphology Impact Assessment (dated 18 May 2020) is largely the same as the version we considered albeit with minor text formatting changes.

Provisional environmental standard test

1.2 This is a provisional Environmental Standard test based on the existing information. More detailed assessments on the impacts of the FPS will be completed at the CAR stage. In summary, based on the assessments below, the works will have an impact at a local scale for both water bodies and the Good Practice test must be carried out. The Good Practice test includes the following three aspects:

1. Demonstrate need
2. Consider a range of options
3. Include mitigation

1.3 For the River Cree, there is a single activity breach that will need to be assessed by our Water Permitting team once we have of the final designs and data for CAR. The single activity limit is the maximum extent of an individual pressure which, in its own right, would cause a significant and long-term impact on the water environment. As a result, it is likely that this will require a derogation determination at the CAR stage. There is further information on this in Section 1.5.3 of our [Regulatory Method \(WAT-RM-02\) – Regulation of Licence-level Engineering Activities](#) and our [Regulatory Method \(WAT-RM-34\) Derogation Determination - Adverse Impacts on the Water Environment](#).

River Cree u/s Newton Stewart (ID10520)

1.4 This waterbody is currently good for morphology. With the new engineering works the water body classification will be impacted by a single activity breach and also a local scale downgrade.

ENVIRONMENTAL STANDARDS TEST																																	
<i>Enter data into "REGULATION" MPD & RVD interface tabs AND enter local reach length</i>																																	
LOCAL SCALE		WATERBODY SCALE <small>Test Required? YES</small>																															
Enter Reach Length (m)	1000	Is Waterbody <Good status?	No																														
	<table border="1"><thead><tr><th></th><th>Channel</th><th>Banks</th></tr></thead><tbody><tr><td>Current capacity used:</td><td>61%</td><td>28%</td></tr><tr><td>Current classification:</td><td colspan="2">POOR</td></tr><tr><td>Revised capacity used:</td><td>100%</td><td>45%</td></tr><tr><td>Revised classification:</td><td colspan="2">BAD</td></tr></tbody></table>		Channel	Banks	Current capacity used:	61%	28%	Current classification:	POOR		Revised capacity used:	100%	45%	Revised classification:	BAD			<table border="1"><thead><tr><th></th><th>Channel</th><th>Banks</th></tr></thead><tbody><tr><td>Current capacity used:</td><td>18%</td><td>14%</td></tr><tr><td>Current classification:</td><td colspan="2">GOOD</td></tr><tr><td>Revised capacity used:</td><td>21%</td><td>15%</td></tr><tr><td>Revised classification:</td><td colspan="2">GOOD</td></tr></tbody></table>		Channel	Banks	Current capacity used:	18%	14%	Current classification:	GOOD		Revised capacity used:	21%	15%	Revised classification:	GOOD	
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OUTCOME:	FAIL	Is Single Activity Limit (SAL) Breached?	YES																														
Reason for fail:	Reach downgraded	OUTCOME:	FAIL																														
ENVIRONMENTAL STANDARDS TEST		FAIL - Waterbody at Risk																															
OUTCOME:		Reason for fail: Single activity limit breached																															
<i>Is Good Practice Test Required?</i>		<i>Yes - Waterbody at Risk</i>																															

Penkiln Burn (ID10533)

1.5 The Penkiln Burn is currently high for morphology. With the new engineering works there is a local scale downgrade.

ENVIRONMENTAL STANDARDS TEST		
<i>Enter data into "REGULATION" MPD & RVD interface tabs AND enter local reach length</i>		
LOCAL SCALE		
Enter Reach Length (m)	500	
	Channel	Banks
Current capacity used:	0%	0%
Current classification:	HIGH	
Revised capacity used:	33%	14%
Revised classification:	MODERATE	
OUTCOME:	FAIL	
Reason for fail:	Reach downgraded	
ENVIRONMENTAL STANDARDS TEST		
OUTCOME:		
Local Standard Breached		
<i>Is Good Practice Test Required?</i>		
Yes - local standard breached		

WATERBODY SCALE		
Test Required? YES		
Is Waterbody <Good status?	No	
	Channel	Banks
Current capacity used:	4%	4%
Current classification:	HIGH	
Revised capacity used:	5%	5%
Revised classification:	HIGH	
Is Single Activity Limit (SAL) Breached?	No	
OUTCOME:	PASS	

Additional comments and recommendations

1.6 When we considered an earlier version of the Geomorphology Impact Assessment we made a number of comments in relation to:

- Considering future morphological changes of the channels. Particularly around the Bluebell Island. This assessment would support the type of measures that could be put in place to avoid failing of gabions and subsequent adjustment that could impact the FPS and properties on the left bank of the Penkiln Burn.
- Houses on right bank (west bank opposite to Bluebell Island) not included in the FPS. This section presents clear erosion undermining bank protection, and it has been highlighted in the model as high scour potential.

1.7 However, we acknowledge at this stage that the houses on right bank (West bank) and gabions on the island are not within the scope of the scheme however we recommend that our previous morphological advice continues to be considered as the project progresses.