

OCTOBER 2023 WEATHER EVENT – UPDATE

1.0 INTRODUCTION

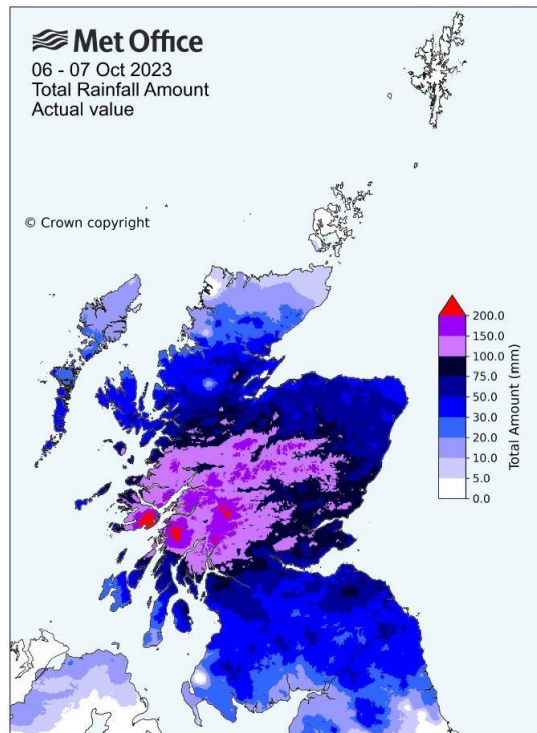
- 1.1 This is a follow up to the report presented to Council on 25 April 2024 in respect of the October 2023 weather event. A number of projects have become increasingly more complex as the full extent of the damage, underlying ground conditions and a number of other factors have emerged. This report provides a detailed update on the various flood sites, provides information relating to the estimated overspends within the various projects and also proposes a range of measures for Members to consider which could be used to cover the estimated overspends.

2.0 RECOMMENDATIONS

- 2.1 It is recommended that the Policy and Resources Committee:-
- a. Note the updates on the works undertaken and completed and those that are ongoing.
 - b. Notes the revised forecast overspend of £3.853m that is currently unfunded.
 - c. Approves that options 1, 2 and 3 as detailed in the table at paragraph 3.10 are used to fund the overspend and defer consideration of the remainder of the overspend once the Crown Estate Funding and Place Based Investment funding is confirmed for 2024-25.

3.0 DETAIL

- 3.1 Following a period of unprecedented wet weather where there was a level of rainfall that left ground conditions very wet and in many cases saturated, over a months' worth of rain fell over a 36 hour period starting Friday 6 October 2023 and running into Saturday 7 October 2023. This was the wettest 2-day period on record for Scotland since 1891 (MET Office report). Argyll and Bute was the worst affected area as shown in the chart below:



- 3.2 The works carried out following the rain event were extensive with dozens of locations requiring attention from simple cleansing of a small drain to significant landslides and bridge replacements.
- 3.3 A significant amount of work has been undertaken and completed thus far. Some examples include:
- Various bridges – Tree and debris clearance to minimise flood risk at Bridgend Bridge, Upper Stronafian Bridge and Victoria Bridge (Cowal) and Glenmallon Bridge and Lindowan Burn Bridge (Helensburgh & Lomond). Confined space inspections and clearance was also completed to reduce the flood risk at structures in Helensburgh.
 - B828 Glenmore Bridge (Cowal) – Repairs to damaged parapets and training walls caused landslide. Works undertaken by internal Structures Maintenance Team
 - B839 Lochgoilhead Bridge (Cowal) – Repairs to the scoured and exposed bridge abutments and central pier foundations, reinstatement of erosion protection along the riverbank and riverbed. Working with Ross MacArthur Contractors to ensure bridge remained open to public and local community was not shut off, especially given the closure of the nearby B828 road due to landslips.
 - B828 Glenmore Road (Cowal) – Rock anchor repairs to rebuild eroded and missing road edges and verges, damaged road culverts and road restrain

systems caused by landslip and rockfall. Working with Geo-Rope to completion, the road was reopened following separate remedial works by Forestry and Land Scotland to remove further risk of rockfall to users.

- Ri Cruin Bridge – bridge abutment repair, scour protection works and invert pitching repairs carried out in conjunction with DA MacDonald and the Council’s Bridge Squad team.
- A815 Landslip clearance to reopen the road in conjunction with the reopening of the A83 as a vital route to and from Cowal. This site is immediately adjacent to the “Dunoon Road End Straights” section of the A83 beside the Rest and Be Thankful and ongoing monitoring of this site continues.

3.4 The following table summarises locations where works are still outstanding. The most significant area of work relates to the A816, Kintraw, Ardfern landslide and further information on this is also provided within Appendix A. Further information relating to the financial estimates is included within the table at paragraph 3.6.

LOCATION	ONGOING WORKS	SCHEDULED COMPLETION
A816-110 Cuilfail Hotel Bridge, Kilmelford	Following severe damage, this bridge was immediately closed to traffic, demolished, a new structure installed and reopened to traffic in under two weeks. Hydrological, Bathymetric & Ecological Studies are now nearing completion alongside consultations with SEPA. Ongoing designs of rock armour, bridge parapet, bridge training walls and narrow footway on the upstream side of the bridge. Contract award for the above described Phase 2 works was made after the Council’s Bellwin claim in February 2024 and are higher than the figure which was included in the claim.	Site works due to re-start mid August 2024 aiming to be complete before winter.
B844-010 Kilniver Bridge	Phase 1 emergency works to protect the bridge and the B844 road completed November 2023. Previously proposed Phase 2 designs and works (scour protection) now being incorporated into Local Bridge Maintenance Fund scheme. Designs being carried out in-house with a view to works being tendered mid 2025. Any risks incurred from the delays to the Phase 2 works are being monitored and controlled to ensure the road network remains safe.	Late Summer 2026

C30 Ford to Malevich	Works completed and road fully reopened. As the emergency works progressed, rock was found to be much deeper than anticipated, costs to secure engineering solution to rock were therefore higher than previous estimates.	July 2024
B836-060 Balliemore Bridge, Glen Lean	Following severe damage to and partial collapse of existing bridge, a temporary bridge and associated road alignment was installed in under 2 months, with the alternative route opening on 1 st December 2023. Next steps are construction of a new, permanent bridge and removal of the temporary structure. The Council's attempts to seek engagement from OpenReach to remove their apparatus from within the bridge to allow the bridge to be demolished are ongoing. At this stage it appears that OpenReach will charge the Council circa £230k for this and their works will take around 2 months. This will also require an extended hire period for the temporary bridge.	Late 2024 / Early 2025
A816 Bealach Mor, Kintraw, Ardfern catch pits at base of unstable slope	Licence To Occupy discussions are still ongoing between the Council and the Landowner. Works along the toe of the slope have been reviewed and at this time further landslip and rockfall events are within a predictable pattern, however, further significant landslides could occur at this location. We are now studying the option of installing rockfall protection barriers within the road corridor, which would no longer require catch pits and fencing as previously proposed. Further information (including budget costs) is described in more detail in Appendix A.	See Appendix A for timescales
A816 Bealach Mor, Kintraw, Ardfern convoy system 'v' fixed traffic lights	Road Safety Audit has been progressed and identified some amendments to the road layout, these have been incorporated into the proposed works detailed later in this report. Hard wired traffic lights being designed for installation in due course. Further information (including budget costs) is described in more detail in Appendix A.	End of September 2024
A816 Bealach Mor, Kintraw, Ardfern – permanent diversion onto	Archaeologist has carried out further investigative works and have given positive feedback. The next stage is further design work including ground investigation, environmental impact assessment and	3 – 5 years

a widened alignment of the emergency route	additional archaeological matters which will allow for permissions to be sought and a final design progressed for a permanent solution. A new, separate contract is being progressed for this element of permanent works as a scope for these will be able to be developed and prepared by the Council in advance. Cost options are being worked up, further information will be included in the next update.	
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Update to the Financial Estimates

- 3.5 The report to Council in April advised that the estimated costs related to the weather incident amounted to £10.543m. A claim amounting to £5.494m of revenue costs was submitted to Scottish Government at the end of the 4 month period and after deducting our threshold of £0.529m this results in a net claim of £4.965m – £4.353m of this has been received with the final £0.612m outstanding from Scottish Government whilst final checks are being made. The Council secured a further £2.3m of funding as part of the budget negotiations and the remainder was funded by either Council reserves or borrowing as part of the budget agreed in February 2024.
- 3.6 A number of projects have become increasingly more complex as the full extent of the damage, underlying ground conditions and a number of other factors have emerged and as a result costs have increased to those estimated in the report to Council in April 2024. The table below details the revised estimates and the increase in cost that is not currently budgeted for along with reasons for the increase.

Scheme	Feb 2024 Estimate £000	Movement Between Interim and Final Bellwin Claim £000	Total Funded Position £000	July 2024 Updated Estimate £000	Increase from Funded Position £000	Reasons for Increase
B836-060 Balliemore Bridge (Glen Lean) – Revenue	752	(57)	695	1,150	455	Due to the nature of the extreme weather event damage to Balliemore Bridge, and following consultation with other Scottish Councils, it was anticipated that notifying OpenReach that the bridge was damaged beyond repair that they would divert their apparatus at their own cost to protect their infrastructure. OpenReach have not been in agreement with this and have insisted that the Council pay to divert and reinstate the apparatus in accordance with regular NRSWA

						<p>Legislation processes. Current legal advice is to progress this route.</p> <p>Feb 24 estimate did not include diversion of OpenReach apparatus (£230k) and associated costs for delays to phase 2 works due to OpenReach diversion including extended hire of temporary bridge (at a higher weekly rate, circa £100k), traffic management, inspections and management (circa £125k) until new, permanent bridge is constructed late 24 / early 25.</p>
B836-060 Balliemore Bridge (Glen Lean) – Capital	1,448	0	1,448	1,448	0	n/a
A816 Bealach Mor (Ardfern / Kintraw) Landslip – Revenue	2,809	94	2,903	5,155	2,252	<p>Previously proposed Catchpit & Bund, estimated at a cost of £1.35m, was not included in Bellwin Claim in Feb 2024.</p> <p>Land access delays have incurred additional costs for traffic management, project management, maintenance & ongoing stabilisation of current works, standing time.</p> <p>Roads Safety Audit has now been concluded and recommends additional safety measures which will allow the removal of the traffic management convoy arrangement to reduce long term costs. Installation of these measures along with the traffic light system will incur additional costs in the short term.</p>
A816 Bealach Mor (Ardfern / Kintraw) Landslip – Capital scheme for long term, permanent realignment	1,100	0	1,100	1,100	0	n/a
C030 Kilmaha Landslip - Revenue	315	83	398	864	466	<p>Rock head found much deeper than anticipated - requiring redesigns for longer and additional anchors, support beams and higher spec mesh.</p> <p>Weather and material delivery delays.</p>

						Higher tonnage of rock armour from earlier scheme on site than reported / estimated. Vehicle Barriers now included due to the significant difference in level exposed by the new arrangement.
U014 Scammadale Landslip - Revenue	454	(83)	371	838	467	Rock head found much deeper than anticipated - requiring redesigns for longer and additional anchors, support beams and higher spec mesh. Weather and material delivery delays. Assistance to residents and businesses as this lifeline cul-de-sac road could not be fully closed. Vehicle Barriers now included due to the significant difference in level exposed by the new arrangement.
A816-110 Cuilfail Hotel Bridge, Kilmelford – Revenue Emergency Response	200	0	200	200	0	n/a
A816-110 Cuilfail Hotel Bridge, Kilmelford – Permanent Capital	1,800	0	1,800	2,086	286	Contract cost for Phase 2 works confirmed after Bellwin claim. This also now include rock armour to protect upstream and downstream embankment protection. These capital works were not eligible for Bellwin scheme.
Other Revenue Schemes	1,665	102	1,767	1,694	(73)	This line captures the following: Bridge Debris Clearances Lochgoilhead Bridge Repairs Roads Workers time and materials for all repairs and flood works they carried out Costs came in lower thanks to emergency response works at Ri Cruin Bridge being suffice and removing the need for further works during the summer as was initially forecast.
Revenue Totals	6,195	139	6,334	9,901	3,567	

Capital Totals	4,348	0	4,348	4,634	286	
Overall Weather Event Totals	10,543	139	10,682	14,535	3,853	

Next Steps

- 3.7 Our current focus is to complete the various works still outstanding and to continue to monitor slopes where debris flows may affect the road network. Current status, options and associated cost estimates (including substantiation of costs which have gone over the original estimates made at the time of the Council's Bellwin claim) for the ongoing schemes.
- 3.8 Climate change is a significant challenge to the Council for a number of reasons but not least it is a challenge for the road and transport infrastructure. This report highlights the challenges from the October weather incident and the report in April highlighted some of the challenges faced over the last decade or so. The road and wider transport system provides the economic backbone for our communities. We need to have infrastructure which is fit for purpose and sufficiently resilient to withstand the increasing weather challenges we are experiencing which are linked closely to climate change. The building of a bypass on the A816, strengthening bridges, and modifying roadside ditches are all adaptations being progressed to better accommodate some of the climate changes we are seeing. However, more will be needed and whilst the works mentioned above will increase our infrastructure resilience to future weather events, the network overall is fragile and unable to cope with significant weather events.
- 3.9 It will be necessary to see more infrastructure investment put in place to enable climate change adaptations to be made. The level of investment will be significant, and the Council will need to consider how its funding can be assembled and what lobbying can be progressed with Scottish and UK Governments.

Options to be considered to fund overspend

- 3.10 The revised estimates give rise to a £3.853m overspend that will require to be funded. The Council's current unallocated General Fund Balance (not taking into account other overspends that are reported in the budget monitoring pack) is £2.259m. This overspend would therefore mean the Council would have to use the General Fund contingency and a recovery plan would require to be put in place to bring the General Fund out of contingency. A number of options have been outlined below that could fund the forecast overspend.

No.	Options	Amount £000	Comment/Implications
1	Pause previously approved Roads	2,029	This will impact on the condition of the road network

	Reconstruction Schemes (see detail in Appendix B)		and with much reduced capital block for next year there is no guarantee that the previously programmed schemes will be able to be progressed. Unclear as to the impact of Roads Condition Index (RCI) but likely not to be positive.
2	Use £50k revenue within loans fund street lighting improvements for prudential borrowing, this could raise £750k of funding.	780	Will reduce the number of column replacements and lighting cable repairs impacting on the resilience of the lighting network.
3	Utilise some of the unallocated capital funding for street lighting cable and column replacements	100	Will reduce the number of column replacements and lighting cable repairs impacting on the resilience of the lighting network.
	Sub-Total	2,909	
	Balance from one of the following:		
4	Use Crown Estate and Place Based Investment Funding to fund the remaining balance	944 OR	This would limit the opportunities to use this funding for other projects across the Council area. Funding has not been confirmed for either schemes for 2024-25 yet.
5	Use Unallocated General Fund Reserves	944 OR	This would reduce the level of unallocated General Fund reserves significantly and based on the other overspends currently being reported (see separate budget pack report) this would reduce the unallocated General Fund to £0.214m.
6	Reallocate capital funding set aside for the waste transfer station and use prudential borrowing to fund waste transfer station (this would have a revenue implication	944	This will cost £0.061m in recurring revenue expenditure that will need to be added to the loans fund.

3.11 It is recommended that the Policy and Resources Committee agree to Options 1-3 in the table above that will fund £2.909m of the overspend. The remainder of the overspend could be considered later in the financial year once the Crown

Estate Funding and Place Based Investment funding is confirmed for 2024-25.

4.0 CONCLUSION

- 4.1 This report summarises and provides update on the works that have been undertaken and completed and those that are ongoing in relation to the extreme weather event which occurred on the weekend of 7 October 2023 and which was the wettest 2-day period on record for Scotland since 1891 in which Argyll and Bute was the worst affected area.
- 4.2 The report also provides an update on the cost estimates and these give rise to £3.853m overspend that will require to be funded. A number of options to fund the overspend have been outlined within the report.

5.0 IMPLICATIONS

- 5.1 Policy – policies in place for climate change, coast protection etc where applicable these policies are being worked to.
- 5.2 Financial – new costs pressures have no identified funds to respond to the infrastructure damage. A Bellwin claim was progressed for eligible costs up to February 2024. Works not eligible for Bellwin will need to be funded, with previous estimates receiving funding following an earlier report and additional funding requirements now identified within this report.
- 5.3 Legal – various land agreements necessary for individual locations.
- 5.4 HR – none known.
- 5.5 Fairer Scotland Duty:
 - 5.5.1 Equalities - protected characteristics – none known.
 - 5.5.2 Socio-economic Duty – none known.
 - 5.5.3 Islands – none known.
- 5.6 Climate Change – the impact of the storm is very closely linked to climate change and the October event has highlighted to need for further adaptation to be made to infrastructure to increase our resilience to future weather events. The level of investment to improve resilience is expected to be significant.
- 5.7 Risk – significant risk of similar future events impacting our infrastructure.
- 5.8 Customer Service – none known.
- 5.9 Rights of the Child (UNCRC) – investment to improve our road network will contribute to a safer environment for young people to thrive in.

APPENDICES:

Appendix A – A816 Bealach Mor (Ardfern/Kintraw) Landslip

Appendix B – Roads Reconstruction Schemes proposed to be paused

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5 August 2024

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