## Kinross, Milnathort, Glenrothes and Kinglassie (Potentially Vulnerable Area 10/04)

Local Plan District	Local authority	Main catchment
Forth Estuary	Fife Council and Perth & Kinross Council	River Leven (Fife)



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## Summary of Progress for Kinross, Milnathort, Glenrothes and Kinglassie

There are approximately 210 residential properties and 150 non-residential properties at risk of flooding. The Annual Average Damages are approximately £1,200,000. Further information can be found in LFRMP under PVA 10/04.

Perth & Kinross Council are progressing the outline design of the South Kinross Flood Protecton Scheme. Scottish Water have also completed a S16 Assessment of the Kinross sewer network. The Kinross Flood Resileince Group has also been set up.

Scottish Water has completed works on the sewer network serving Milnathort. Perth & Kinross Council have progressed the outline design of the Milnathort Surface Water Flood Protection Scheme, while taking cognisance of Scottish Water's work. A draft Surface Water Management Plan has been developed as part of this work and this - together with the flood scheme - will be subject to community consultation in early 2023.

## Overview of actions to manage flooding in Kinross, Milnathort, Glenrothes and Kinglassie (PVA 10/04)

PVA	Flood protection Scheme/Works	Natural flood management works	New flood warning	Flood protection study	Natural flood management study	Surface water plan/study	Strategic mapping and modelling	Maintain flood protection scheme*	Maintain flood warning	Flood forecasting	Property level protection scheme	Community flood action groups	Self help	Awareness raising	Maintenance	Site protection plans	Emergency plans/response	Planning policies
10/04	Α		Α	G		Α	G	G		G		N/A	G	G	G		G	G

Summary of progress of actions to manage flood risk in the Kinross, Milnathort, Glenrothes and Kinglassie (PVA 10/04)

Action	Status (Red; Amber; Green)	Description	Delivery Lead	Planned Dates	Progress in Delivery, including key deliverables and dates	Revised dates and planned actions to complete / address delay
Flood Protection Scheme / Works (100080006)	A	A flood protection scheme has been proposed for Milnathort to address surface water flooding. The scheme would consist of pumping stations and provide a 1 in 100 year (plus climate change) standard of protection.	Perth & Kinross Council	2016- 2019	The outline design of the Milnathort Surface Water Flood Protection Scheme commenced in November 2018. The contract was awarded to consulting engineers, Sweco UK Ltd. The outline design is currently nearing completion and will be subject to community consultation in early 2023. The flood scheme will be published in 2023.	The flood protection scheme is currently programmed for completion in the 2024/25 financial year.

Flood Protection Scheme / Works (100110006)	A	A flood protection scheme has been proposed for South Kinross to address flooding from the South Queich, Gelly Burn and Clash Burn. The scheme would consist of flood defence walls and provide a 1 in 200 year (plus climate change) standard of protection.	Perth & Kinross Council	2017- 2021	The outline design of the South Kinross Flood Protection Scheme commenced in February 2019. The contract was awarded to consulting engineers, RPS Group. The outline design is currently ongoing and will be subject to community consultation in early 2023. The flood scheme will be published in 2023.	The flood protection scheme is currently programmed for completion in the 2025/26 financial year.
New Flood Warning (100990010)	A	The area under consideration includes properties affected by flooding in Fife and Perth & Kinross and is likely to include Kinross.Further feasibility assessment will be required to assess delivery potential and the final detail of communities for which warnings can be provided will be determined during the scoping process.	SEPA	May 2021	SEPA undertook an initial feasibility study for Leven and Glenrothes which concluded a new flood warning scheme was not recommended at the present time due to the uncertainty in the degree of flood risk. However this is to be reviewed further on completion of the Leven flood study, which was underway at the time of the feasibility assessment. This is to confirm flood risk for Leven and Glenrothes.	Review Leven and Glenrothes flood study (when complete) and update feasibility study if necessary.
Flood Protection Study (100120005)	G	A Study looking at surface water management in Glenrothes is scheduled to start in 2017. This study may identify future study needs that would be taken forward in the second flood risk management cycle.	Fife Council	2016- 2020	On track to deliver as scheduled in the LFRMP.	Flood Study to be completed during financial year 2022-23. Further works dependent on outcomes from Flood Study.
Surface Water Plan/Study (100040018)	G	The Leven and eastern Methil area will be covered by a surface water management plan or plans (SWMP) that set objectives for the management of	Fife Council	2016- 2021	Study planned to start towards the end of 2019.	Surface Water Management Plan to be completed wihtin Cycle 2

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		surface water flood risk and identify the				
		most sustainable actions to achieve the				
		objectives. Scottish Water will provide				
		local knowledge and understanding of				
		the sewer network. This includes				
		Scottish Water corporate data (as				
		applicable) and, where available,				
		outputs of Section 16 or integrated				
		catchment studies, to assist with the				
		surface water management planning				
		process.				
Surface	G	An integrated catchment study covering	Scottish	2021	Complete	
Water		the Leven Valley catchment will be	Water in			
Plan/Study		carried out to improve knowledge and	partnership			
(100040019)		understanding of the interactions	with local			
		between the above ground and below	authorities			
		ground drainage network e.g. the sewer				
		network, watercourses and (where				
		applicable) the sea.				
		This will improve the understanding of				
		local surface water flood risk. The stated				
		timescales and funding arrangements				
		between Scottish Water and Fife				
		Council will take the studies through the				
		scoping and modelling phases to define				
		the significant flooding issues in the				
		catchment. After this has been				
		completed, it is expected that the				
		integrated catchment study partnerships				
		will remain in place and will progress to				
		develop solutions to the significant				
		flooding issues.				

Surface Water Plan/Study (100080018)	A	Milnathort will be covered by a surface water management plan that sets objectives for the management of surface water flood risk and identify the most sustainable actions to achieve the objectives. Perth & Kinross Council had previously engaged consultants, Atkins, to produce the Milnathort Surface Water Investigation study which was completed in 2011. This study recommended a surface water flood protection scheme (involving drainage measures, underground storage and pumping stations). The proposed scheme will provide a 1:100 year standard of protection against surface water flooding, and will include an additional allowance for climate change. This action will be implemented through the Milnathort Surface Water Flood Protection Scheme Action (ID) 100080006. Scottish Water will provide local knowledge and understanding of the sewer network. This includes Scottish Water corporate data (as applicable) and, where available, outputs of Section 16 or integrated catchment studies, to assist with the surface water management planning	Perth & Kinross Council	2016-2019	The development of the Milnathort surface water management plan commence in November 2018. The contract was awarded to consulting engineers, Sweco UK Ltd. This action is being implemented in conjunction with the Milnathort Surface Water Flood Protection Scheme (Action ID 100080006).	The draft surface water management plan will be subject to community consultation in eary 2023, prior to being finalised.
Surface Water Plan/Study (101030018)	Α	process.  The Glenrothes and Markinch areas will be covered by a surface water management plan or plans (SWMP) that set objectives for the management of	Fife Council	2016- 2021.		Surface Water Management Plan to be completed wihtin Cycle 2

		surface water flood risk and identify the most sustainable actions to achieve the objectives. Scottish Water will provide local knowledge and understanding of the sewer network. This includes Scottish Water corporate data (as applicable) and, where available, outputs of Section 16 or integrated catchment studies, to assist with the surface water management planning process.				
Surface Water Plan/Study (101030019)	G	An integrated catchment study covering the Leven Valley catchment will be carried out to improve knowledge and understanding of the interactions between the above ground and below ground drainage network e.g. the sewer network, watercourses and (where applicable) the sea.  This will improve the understanding of local surface water flood risk. The stated timescales and funding arrangements between Scottish Water and Fife Council will take the studies through the Scoping and Modelling phases to define the significant flooding issues in the catchment. After this has been completed, it is expected that the integrated catchment study partnerships will remain in place and will progress to develop solutions to the significant flooding issues.	Scottish Water in partnership with local authorities	2018-2021	Flow Survey complete. Manhole and ancillary survey complete. Watercourse surveys complete.	Historical Verification & Catchment Flood Assessment delivery.

2006 and 2010.  Flood G Link to Scottish Flood Forecasting SEPA Ongoing Refer to FINAL progress Refer to the planned action	Strategic mapping and modelling (100990019)  Maintain Flood Protection Scheme (100100017)	G	Scottish Water will review the assessment of flood risk within the highest risk sewer catchments to improve knowledge and understanding of surface water flood risk. Scottish Water will undertake further investigation and modelling in the Kinross, Leven Valley and Milnathort sewer catchments to improve knowledge and understanding of flood risk in this area, as required under S16 of the Flood Risk Management (Scotland) Act 2009.  Perth & Kinross Council continue to maintain the existing flood protection schemes along the Back Burn in Milnathort. These include the Milnathort Flood Protection Schemes completed in	Scottish Water  Perth & Kinross Council	2021 Ongoing	Perth & Kinross Council carries out routine inspections of the existing flood defences in Milnathort. Maintenance works are carried out as required.	Routine inspections will continue to be carried out as part of the Council's statutory duties.
forecasting (100990009)  Service Refer to Figure 3; page 26  Community Flood Action Groups (100100012)  Service Refer to Figure 3; page 26  N/A  A community resilience group operated in this area and was supported by Perth & Kinross Council to develop community resilience plans. This action has been  Service Refer to Figure 3; page 26  Community N/A  Previously, there were no operational community resilience groups in Milnathort or Kinross Flood Resilience Group on a priority needs	(100990009)  Community Flood Action Groups	G N/A	Link to Scottish Flood Forecasting Service Refer to Figure 3; page 26 A community resilience group operated in this area and was supported by Perth & Kinross Council to develop community resilience plans. This action has been included in SEPA's Flood Risk Management Strategy however, this	SEPA	Ongoing N/A	report.  Previously, there were no operational community resilience groups in Milnathort or Kinross. However the Kinross Flood Resilience Group has recently been set	Perth & Kinross Council will continue to coordinate with the

Self help (100990011)	G	Raising community awareness of self help measures available to protect property Refer to Figure 3; page 26	Community		No additional self help activities have been carried out in this PVA, beyond those already described in Figure 3 of this report.	No planned actions in this PVA, further to the planned actions described in Figure 3 of this report.
Awareness raising (100990013)	G	Raising Community Awareness of flood risk Refer to Figure 3; page 29	Responsible Authorities	Ongoing	Further to the awareness raising actions described in Figure 3 of this report, Perth & Kinross Council has carried out additional awareness raising activity in Kinross following recent flooding events and in conjunction with the South Kinross Flood Protection Scheme (Action ID 100110006). This included community flood bulletins and an online community meeting.	Further to the planned actions described in Figure 3 (LPD wide actions) of this report. Perth & Kinross Council plan to carry out awareness raising in conjunction with the flood schemes in Milnathort and South Kinross (Action ID's 100080006 & 100110006).
Maintenance (100990007)	G	Maintenance at locations where flood risk has been identified Refer to Figure 3; page 33	Responsible Authorities and asset / land managers	Ongoing	No additional maintenance activities been carried out in this PVA, beyond those already described in Figure 3 of this report.	No planned actions in this PVA, further to the planned actions described in Figure 3 of this report.
Emergency plans / response (100990014)	G	Raise awareness of plans and actions in place for flood incidents Refer to figure 3; page 37	Category 1 and 2 Responders	Ongoing	No additional emergency/planning respose activities have been carried out in this PVA, beyond those already described in Figure 3 of this report.	Further to the planned actions described in Figure 3 of this report. Fife Council Emergency Plan will be updated by the end of financial year 2022-23.

					Fife Council Updated Flood Emergency Plan published Nov 2018.	
Planning Policy (100010001)	G	LPD reflects flood risk Refer to Figure 3; page 40	Planning Authority	Ongoing	No additional planning policy actions have been carried out in this PVA, beyond those already described in Figure 3 of this report.	No planned actions in this PVA, further to the planned actions described in Figure 3 of this report.