

Glasgow City Council

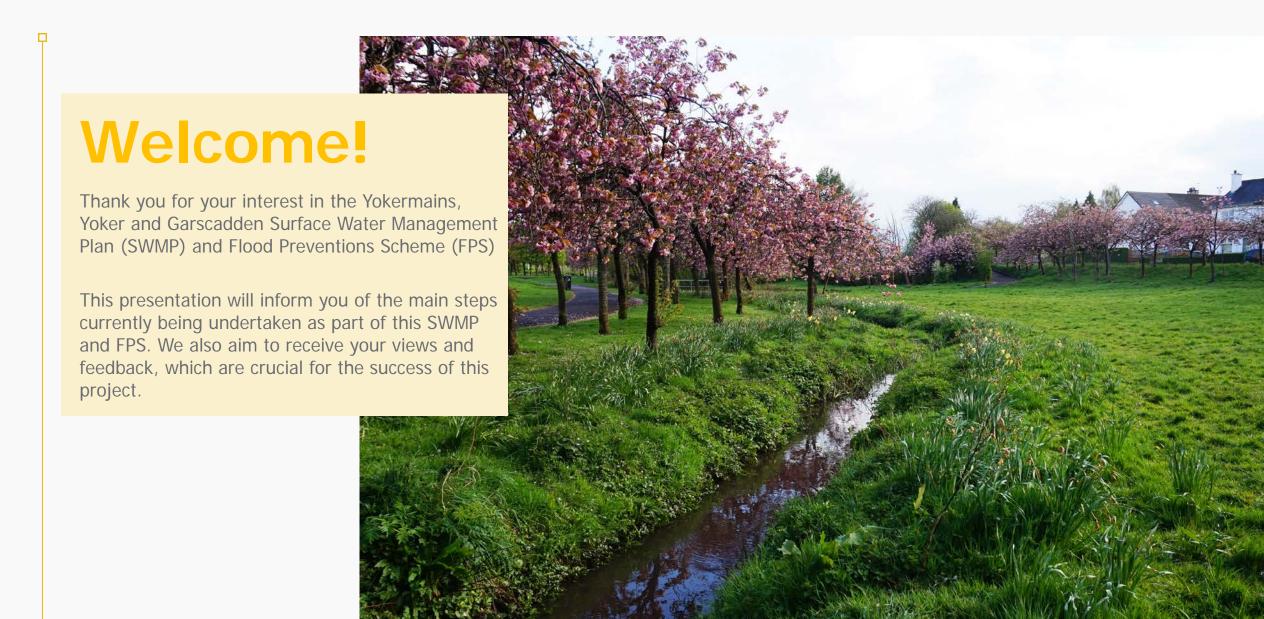
Yokermains, Yoker and Garscadden
Surface Water Management Plan (SWMP)
and Flood Prevention Scheme (FPS) —
Public Consultation

18th December 2020

Dr Doug Lewis, Amey Consulting Technical Director

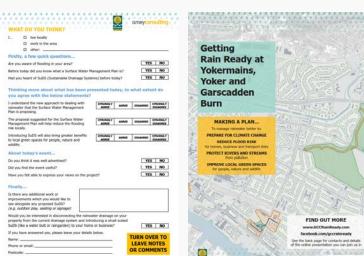
Laura Galloway, GCC Flood Risk Officer





We'd love to get your feedback





We would like to know...

- Have you witness any flooding in your area or are you aware of any problems related to surface water in your area?
- What are your thoughts regarding the proposed options?
- Other issues you would like to comment

Please, you can respond:

- Directly into the chat box at any moment during this presentation.
- Emailing us at GCCRainReady@amey.co.uk
- By post, either sending us back the questionnaire with the prepaid envelope or to:

Amey, Precision House McNeil Drive, Eurocentral Motherwell ML1 4UR

We will record and review carefully all of your comments, so you can help us improve the Surface Water Management Plan



Why?

The Yokermains/Yoker/Garscadden areas have been identified as having the potential to flood as weather changes due to climate change and city growth.

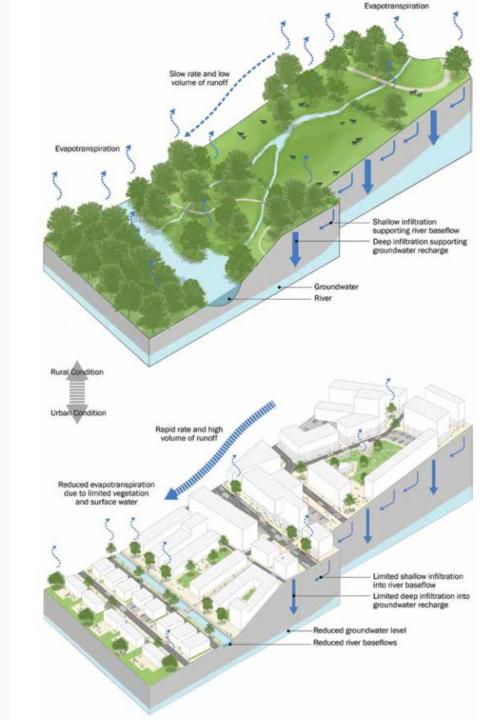
The SWMP and FPS evaluate the causes of flooding within the area and identifies opportunities to reduce the occurrence and impact of flooding on the local community.









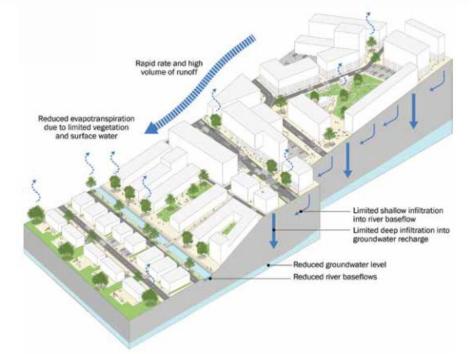


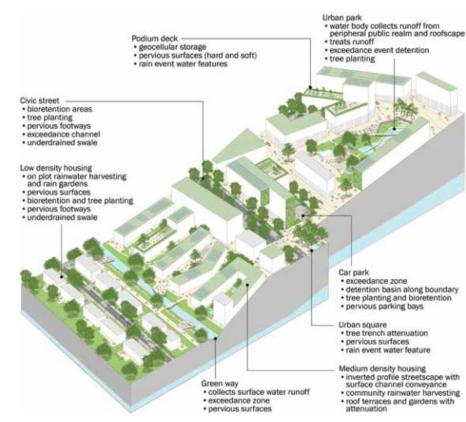
How?

SUSTAINABLE URBAN DRAINAGE SYSTEMS and NATURAL FLOOD MANAGEMENT

The strategy is to minimise the impact on the natural landscape by imitating natural drainage processes using Sustainable Drainage Systems (SuDS) and Natural Flood Management (NFM) techniques.

SuDS and NFM have innovative designs that collect, store and treat (reduce pollution) runoff flows, before releasing it slowly back into the river environment.





SUSTAINABLE URBAN DRAINAGE SYSTEMS and NATURAL FLOOD MANAGEMENT

























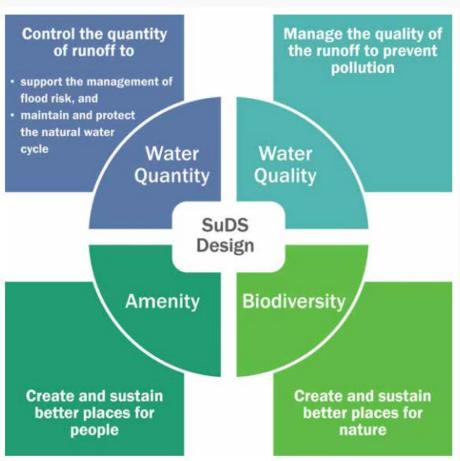




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SuDS Benefits





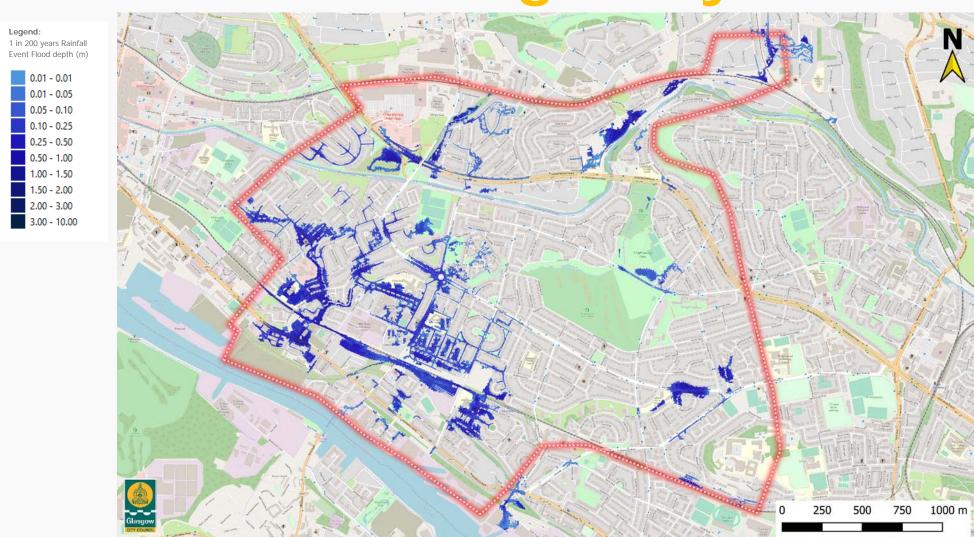


What's going on in Yoker?

We collected and analysed the available data covering a wide range of features, and using computer models we predict which areas are most likely to flood during heavy rainfall events.



Predicted Flooding 200 year event





What are we proposing?

A number of strategies have been developed which target flooding at specific locations within Yoker area.

A selection of the key strategies are presented in the following slides.



Yoker Burn Culvert Dumbarton Rd and Cooperage Ct

Culvert Renovation / Sediment Removal & Culvert Upsizing

Culvert and sewer network predicted to start flooding for 1 year rainfall events at Dumbarton Road.

Historical records confirm frequent flooding events happening in this area.



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Culverted beneath Dumbarton Road and Cooperage Court



Proposed options involve:

- Existing culvert renovation and sediment removal
- Culvert upsizing, laying another
 1.8 m diameter culvert alongside







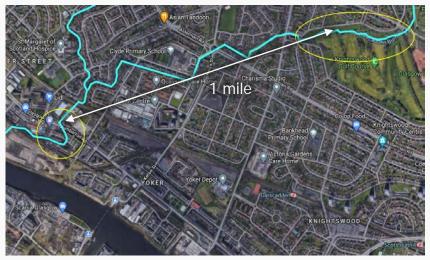
Kightswood Park

Culvert and sewer network predicted to flood at 1 year rainfall events at Dumbarton Road

Garscadden Burn merges with Yoker Burn downstream, flowing beneath the affected area

Interventions within Knightswood Park can help reduce predicted flooding at Dumbarton Road







| Kightswood Park & Golf Course

Natural Flood Management (NFM) interventions are proposed along Garscadden Burn

Increase storage and reduce flows downstream

Techniques include restoration, enhancement and alteration of natural features and characteristics

Examples of NFM are floodplain and riparian woodland, instream structures, floodplain restoration





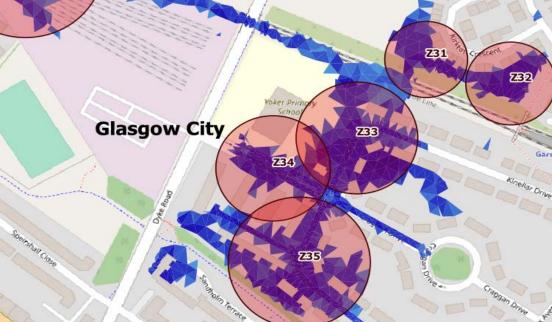


Dyke Road

Sewer network predicted to start flooding at 30 year rainfall events along Craggan Drive, Lesmuir Place and Kinellar Drive.







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Dyke Road SuDS

Proposal is new surface water drainage system collecting runoff from roofs and roads along Craggan Drive, Lesmuir Place and Speirshall Cl

Yoker Sports Centre and Yoker Depot also to be disconnected

Runoff directed into a basin west of Dyke Road with landscaping enhancing unused area.

Discharging into Yokermains Burn







High rainfall short-duration storms

Affected areas located at the top of drainage system. These upper drainage network areas have been reviewed for the potential to implement source control features.

Source controls would be located within private properties or highway areas, and their purpose is to manage rainfall close to where it falls.

Examples are rainwater harvesting and green roofs.











The following potential areas and flood zones have been identified:

- Westerton Area
- Duntreath Avenue
- Lincoln Avenue
- Dyke Street / Craggan Drive
- Kirkton Avenue
- Alderman Road / Wykeham Road





Thank you!

Any questions?

We'd love to hear your suggestions and feedback!



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