



The Metropolitan Glasgow Strategic Drainage Partnership

The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) is an innovative and collaborative venture between local authorities (Glasgow City Council leading), the Scottish Environment Protection Agency (SEPA), Scottish Water, Scottish Enterprise, Clyde Gateway and Scottish Canals that will upgrade and modernise the Glasgow area's drainage and sewerage network, reduce flooding and support urban development requirements while improving water quality and the environment.

MGSDP work highlighted at Scottish Water Glasgow investment launch

The MGSDP's work was highlighted and its profile raised in late February when Scottish Water announced the biggest investment in the Greater Glasgow area's waste water network in more than a century.

At a high-profile launch event at Glasgow Science Centre, Scottish Water announced it was starting a £250m, five-year programme of work which will improve the river quality and the natural environment of the River Clyde and its tributaries, enable the city to grow and develop, alleviate sewer flooding and adapt to the potential impacts of climate change.

The Scottish Water event, which was attended by Deputy First Minister Nicola Sturgeon, the Cabinet Secretary for Infrastructure, Investment and Cities, and Gordon Matheson, the Glasgow City Council Leader, heard how the investment will support the start of the transformation of the city's ageing drainage network into a modern, integrated and sustainable drainage system fit for the needs of the 21st century.

The MGSDP featured prominently at the event, which was also attended by key officials and staff from MGSDP organisations and other stakeholders.

Scottish Water's investment follows years of collaboration and studies by the MGSDP. The partnership's work, including comprehensive studies and computer modelling to fully understand how watercourses and drainage systems interact, received considerable praise at the launch event.

A key message at Scottish Water's event was that the collaborative working between the MGSDP members had led to a clear understanding of how rivers, burns, roads, developments and waste water infrastructure interact and that this had helped Scottish Water identify the most effective long-term solutions to modernise the city's waste water network and support urban development requirements, while improving water quality and the environment.

Scottish Water's investment launch received widespread media coverage including STV evening news, BBC Reporting Scotland, national newspapers such as The Herald, The Scotsman and the Scottish Daily Mail, local newspaper the Evening Times, several radio stations and the BBC, STV and Daily Record news websites.

The MGSDP and its work was mentioned in some of this coverage, helping to raise the profile of the partnership, its work and its aims and objectives.



Geoff Aitkenhead (*Scottish Water's Asset Management Director*), Nicola Sturgeon (*Deputy First Minister*) and Gordon Matheson (*Glasgow City Council Leader*).

Delivering the MGSDP's vision

Improvements to waste water networks and urban watercourses to address existing chronic capacity issues are only part of the long-term drainage strategy for the city. Key to achieving the long-term objectives for Glasgow will be implementation of the MGSDP's 50 year vision for sustainable drainage. This is where the management of increasing surface water due to the impacts of climate change and 'urban creep' is supported through planning policy and the use of blue/green infrastructure including "fit-for-purpose place-making".

The key players

The key players and what they said at the launch event about Scottish Water's investment and the MGSDP

Geoff Aitkenhead, Scottish Water's Asset Management Director and a member of the MGSDP board, said: *"By working with our MGSDP partners, we have been able to find integrated drainage solutions for the future which will provide knowledge and experience that can be used across the rest of Scotland, with the Glasgow area being seen as a template of good practice."*

"Scottish Water's investment is only one part of the answer, although a major component, to the pressures on the drainage network to cope with the sheer volume of waste water and surface water run-off happening in today's climate and the anticipated climate of the future."

Deputy First Minister Nicola Sturgeon, Cabinet Secretary for Infrastructure, Investment and Cities, said at the launch: *"I am delighted to support this essential investment which is being taken forward in partnership with local authorities and SEPA. This £250 million is a first step in a much larger investment programme to improve Glasgow's drainage and sewerage infrastructure. This investment is essential to Glasgow's economic prosperity. It will improve the environment and ensure that new customers can connect to this essential public service."*

Gordon Matheson, leader of Glasgow City Council, said: *"I welcome Scottish Water's major investment announcement. As a city built on the banks of the River Clyde, we are keenly aware of the importance of looking after and managing our natural resources."*

"Waste water facilities are something we can take for granted but they provide a vital service for every one of us – 24 hours a day, seven days a week."

"Scottish Water's investment, and the fact that it will help Glasgow continue to grow and flourish and protect and enhance our environment, is great news for the city."



David Sigsworth, Chairman of the Scottish Environment Protection Agency (SEPA), said: *"This is an important step forward in improving the natural environment of the River Clyde and alleviating sewer flooding in Glasgow. The Wastewater Strategy aims to enhance water quality in around 43 miles of the Clyde and its tributaries, and help protect and improve biodiversity in the area."*

"SEPA has worked closely with Scottish Water to support the development of the long-term strategy for the Clyde catchment and to help create solutions which address the needs of the city. We look forward to further sustainable growth for the Greater Glasgow area in the coming years as the plans are implemented."



Investment

Highlights of Scottish Water's investment

Scottish Water's £250 million first phase investment includes: improvements to more than 200 Combined Sewer Overflows (CSO's) and reducing the flood risk at more than 40 known locations across the Glasgow area.

Further significant investment is being identified in a planned programme, which could see a total in excess of £0.5 billion being invested in the waste water infrastructure in Greater Glasgow.



The waste water improvements in the south west of Glasgow in the first phase, which will include upgrades to CSO's, will deal with excess surface water with the aim of taking it away from areas where there are known 'pinchpoints' which cause restrictions to the system, giving rise to pollution and sewer flooding incidents.

These waste water improvements will allow waste water to be stored during heavy rainfall and then to be taken to Shieldhall Waste Water Treatment Works (WWTW) to be treated. Shieldhall WWTW will be improved to ensure it can cope.



The planned flooding projects include investment of about £10.5 million in Elmvale Row in the Springburn area. Frequent flooding here is caused by overloading of the trunk sewer system and is exacerbated by the low-lying nature of a block of flats. A total of 10 properties are deemed to be at risk of internal flooding and 24 at risk of external flooding.

In Shafton Road in the Knightswood area, where the flooding of homes has been caused by an over-loaded sewer, a solution valued at £1.2 million is to be installed. This involves the construction of a new CSO at Summerston. At the moment in Shafton Road there are 27 properties which have been affected by frequent internal flooding and 35 affected by external flooding.

In Strowan Crescent in the Tollcross/Shettleston area, a £1.7 million project involving a new transfer sewer and storage, will take 25 properties off the at risk of flooding register.

Other flooding investment includes projects at Lethamhill Road, Fullarton Avenue, Baillieston Road/Sandyhills Road, Ardgay Street and Aikenhead Road.

State-of-the-art sustainable urban drainage

Feasibility study under way for state-of-the-art sustainable urban drainage system in North Glasgow

The MGSDP has commissioned a concept and feasibility study for a cutting-edge integrated sustainable urban drainage system (SUDS) at North Glasgow, led by one of the newest partners to the MGSDP, Scottish Canals.

The North Glasgow Integrated Water Management Study (NGIWMS) aims to develop innovative improvements in water quality, surface water management and flood risk systems through the pioneering fusion of old and new technologies.



Utilising the area's canal network as a key element of the drainage infrastructure while augmenting it with state-of-the-art sensor technology and analytical tools, the NGIWMS will primarily focus on Sighthill - a potential site for the 2018 Youth Olympic Games - in order to better understand, communicate and react to the water status of the area.



The system will integrate information on predictive weather patterns and current water quantity, flow and quality with the deployment of environmentally friendly bio-remediation techniques and the use of natural water quality systems. The final system would be capable of assessing and reacting to this bank of information, deploying appropriate interventions on a semi-autonomous basis to hold, slow, clean and divert surface water.

Practicable yet cutting edge in terms of the current thinking around sustainable urban drainage and sensor analytics, this highly intelligent system of controls, synchronised with the Lowland Canal system, will optimise water retention during normal

weather conditions. The same system will also proactively react to forecasts of extreme weather to minimise potential flooding and pollution risks and maximise overall system health.

A candidate for a Glasgow Future Cities Project, the NGIWMS will see the area essentially functioning as a microcosm of a hydro nation using a Smart City system. Intelligent analytics and control, intimately coupled to the sensor and image data streams, will provide more accessible, accurate data and the ability to utilise it effectively within a true Dynamic Water Management system.

Ambitious new vision at Scottish Parliament

Scottish Canals launches ambitious new vision at Scottish Parliament

Scottish Canals has unveiled its plans to continue the renaissance of the nation's waterways with the launch of its new vision at an event at the Scottish Parliament.

In front of an audience of MSPs, staff, and senior representatives from the public, private and third sectors, Scottish Canals Board Chair Dr Jon Hargreaves and Chief Executive Steve Dunlop outlined ambitious plans to place Scotland's canals at the heart of the nation's economic and social prosperity once again.



Steve Dunlop (Scottish Canals Chief Executive)

Launched alongside the Scottish Government's new policy for the country's canals, the vision - 'Safeguarding our heritage, Building our future' – will see Scottish Canals expand upon the success of recent years by extending its reach beyond the canal banks and into local communities and businesses.

By helping to create stronger communities, attracting new customers and income, and working with empowered and motivated people, Scottish Canals hopes to stimulate business growth, job creation and income generation in order to benefit local communities and safeguard the 250-year-old Scheduled Monuments for generations to come.



Duncan Sutherland (Scottish Canals Board Member), Steve Dunlop (Scottish Canals Chief Executive), Stuart McMillan (West Scotland MSP), Keith Brown (Transport Minister)".

Steve Dunlop said: *"This is an incredibly exciting time as we seek to reposition ourselves, once again, as an organisation which can contribute significantly to the Scottish Government's growth agenda."*

"We plan to develop Scotland's canals in ways our forebears would never have imagined. Working with partners to invest in – and drive forward – high profile projects such as The Helix and the Pinkston Paddlesports Centre, our vision will see Scottish Canals stimulate business, create jobs and help to promote Scotland as a fantastic tourist destination."

Transport Minister Keith Brown said: *"Scotland's canals are a great national asset and their continued revival will not only see them become bustling centres of activity for recreation, tourism and sport, but play a part in wider regeneration."*

For additional information Visit our website at www.mgsdp.org for more information on our work and previous briefing notes.



www.glasgow.gov.uk



www.southlanarkshire.gov.uk



www.scottishcanals.co.uk



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