



The Metropolitan Glasgow Strategic Drainage Partnership

The Metropolitan Glasgow Strategic Drainage Partnership (MGSDP) is a collaborative venture between Glasgow City Council, the Scottish Environment Protection Agency (SEPA), Scottish Water, Scottish Enterprise, Clyde Gateway, Clydeplan, South Lanarkshire Council, Scottish Canals, Renfrewshire Council, East Dunbartonshire Council, North Lanarkshire Council and Network Rail. The MGSDP Vision is to transform how the city region thinks about and manages rainfall to end uncontrolled flooding and improve water quality. This vision will be realised through partnership working shaped by the MGSDP Guiding Principles.

MGSDP at the 3rd European Climate Change Adaptation (ECCA) Conference 2017, Glasgow, 5th-9th June



The 3rd European Climate Change Adaptation (ECCA) Conference 2017 - www.ecca2017.eu - was held in Glasgow between 5th to 9th June, and the MGSDP was well represented.

In addition to the MGSDP leading a Session entitled Managing rainfall to control flooding and improve water quality on the 7th June, the MGSDP also participated in a 'challenge' event, led by Climate-KIC (the EU's main climate innovation initiative) - www.climate-kic.org on urban flood mitigation with the aim of identifying interventions to attenuate surface water runoff in urban areas that can be retrofitted to commercial or residential

properties, to reduce flood risk. The SuDSBox team won the prize of £20,000 support from Climate-KIC, and further information on the challenge event is available here:

www.climate-kic.org/news/climate-kic-ecca-2017/

Also, on 8th June, the MGSDP led an excursion of over 30 people on a tour of some key surface water management interventions in the east end of Glasgow at Carstairs St, Strathclyde St, Shawfield and the Games Village, which was very well received by those that attended.

Scottish Ministers Approve Second Strategic Development Plan for the Glasgow City Region

On 24th July, Scottish Ministers approved, with modifications, the second Strategic Development Plan for the Glasgow City Region. The Strategic Development Plan sets out a development strategy over the next 20 years of where new development should be located and a policy framework to help deliver sustainable economic growth, shape good quality places and enhance the quality of life in the Glasgow city region. The Plan focuses on growing the economy of the city region in a low carbon and sustainable manner and setting out a planning framework which positively encourages investment within the city region

For further information, visit the Clydeplan website - www.clydeplan-sdpa.gov.uk

Climate Ready Clyde – Formal Launch at ECCA

Formally launched at the ECCA 2017 Conference, Climate Ready Clyde is a cross-sector partnership initiative to adapt to a changing climate, making Glasgow City Region a better place to live, work and do business. 10 partners are pooling their resources, alongside the Scottish Government, to assess the risks and opportunities from rising temperatures and seas and heavier rainfall, and develop a strategy and action plan.

The approach was showcased at ECCA as one of the leading activities in Scotland, with significant interest from all over the world about how adaptation is part of the City Region's approach to economic and social development.

The Scotsman also covered it as part of a piece on the wider changes needed for adaptation. The secretariat is now beginning the process of reviewing evidence of climate risks and opportunities before engaging partners more widely. To get involved or follow progress visit the Climate Ready Clyde webpage – www.sniffer.org.uk/climatereadyclyde or tweet @ClimaReadyClyde.



Cabinet Secretary for Environment, Climate Change and Land Reform Roseanna Cunningham, with interim Climate Ready Clyde Chair, James Curran

Heather Avenue Flood Alleviation Scheme Completed

Due to a history of flood events at Heather Avenue, Bearsden, East Dunbartonshire Council undertook flood alleviation and improvement works within the Heather Avenue Park area. Having determined the existing drainage regime in the area and undertaken analysis and review of a range of options, works were progressed to minimise flood risk to the local community. These works comprised:-

- Removal of the existing footbridge and replacing with new;
- Installation of a trash screen at the new bridge to prevent any blockages at the culvert inlet downstream;



New footbridge and trash screen, with bunded storage area in background.

- Creation of low level bunds and re-profiling of existing open grass areas to provide overland flow route paths to areas where flood waters can be temporarily stored, away from existing properties, then returned back to the existing watercourse when the storm event has passed and water levels allow.

The works were undertaken between January to March 2017 and the scheme is now in operation and protecting properties.



New bunded storage area and outlet back into watercourse.

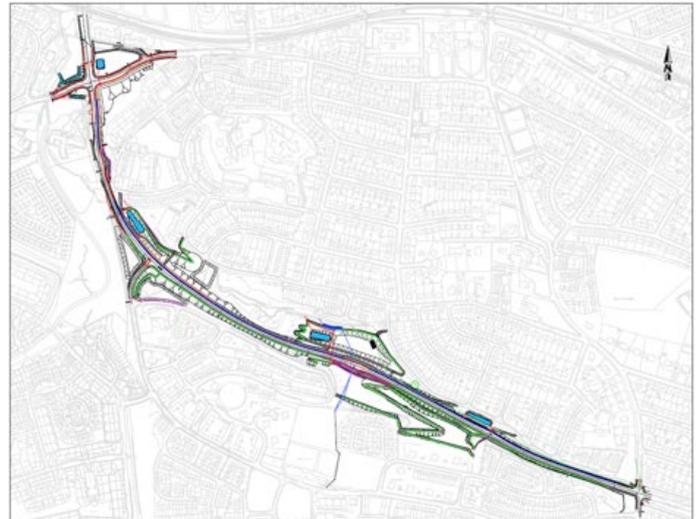
Cathkin Relief Road Opened in February 2017

Funded as one of the first Glasgow City Region City Deal infrastructure projects, the £18.6m Cathkin Relief Road opened on Friday 24th February 2017.

Delivered by Land Engineering on behalf of South Lanarkshire Council, the single-carriageway road runs for a mile between Mill Street and Burnside Road. In addition to the new 7.3m wide carriageway there is a 2m wide footway on the south side and a 3m wide combined cycleway/footway on the north side.

The road also includes a number of SuDS elements – swales and basins – to manage surface water runoff in a sustainable way, along with extensive areas of tree and woodland shrub planted, hedges and hedgerow trees planted and areas of wildflower meadow seeded to supplement the existing woodland areas which were retained.

The road will improve connectivity, reduce congestion at peak times, improve public transport reliability and integration and reduce traffic impacts on neighbouring residential type roads as part of SLC's objective of enhancing the local and strategic road network.



Cathkin Relief Road showing location of SuDS swales and basins

For further information, visit the South Lanarkshire Council website - www.southlanarkshire.gov.uk/press/article/1720/first_major_transport_project_of_city_deal

Carstairs Street Highway Raingardens

Delivered as part of ongoing, phased, regeneration works in the South Dalmarnock area, Clyde Gateway has delivered the latest element of improvement works as part of a wider key routes and spaces project.

The scheme, which was funded by Clyde Gateway and delivered by Glasgow City Council, sees the delivery of enhancements to the existing road, footway and lighting infrastructure together with environmental improvements including a new sustainable urban drainage scheme in the form of highway raingardens.

The raingardens receive runoff from the carriageway, which is then filtered and attenuated prior to being discharged via a new strategic surface water outfall pipe to the River Clyde, instead of being directed into the combined sewer network for treatment.

The improvements to Carstairs Street provide a high-quality direct link between Dalmarnock Station, the River Clyde and across the new pedestrian bridge to Shawfield where the 11 hectare Magenta site is starting to see development.



Highway raingardens at Carstairs Street



For further information, visit the Clyde Gateway website - www.clydegateway.com

Neptune Steps Rocks Maryhill Locks

One of the toughest swimming races in the UK took place in Glasgow's Forth & Clyde Canal on March 18th, with almost 400 elite athletes taking on the challenge of the world's only uphill swimming course.

Red Bull Neptune Steps challenged swimmers to take on a 420m sprint-swim up Maryhill Locks, climbing the eight locks that dominate the famous stretch of the canal and



tackling various obstacles on their way to the finish line.

Organised by Red Bull and Scottish Canals, more than 2500 people turned out on the day to witness the race.

Glaswegian Mark Deans eventually emerged victorious, taking the Neptune Steps crown for the third year running.



For further information, visit the Scottish Canals website - www.scottishcanals.co.uk

Shieldhall Tunnel Construction Reaches Halfway Point

Construction of Scottish Water's flagship Shieldhall Tunnel project, in the south of Glasgow, the biggest waste water tunnel ever to be built in Scotland, reached Queen's Park at the end of August.

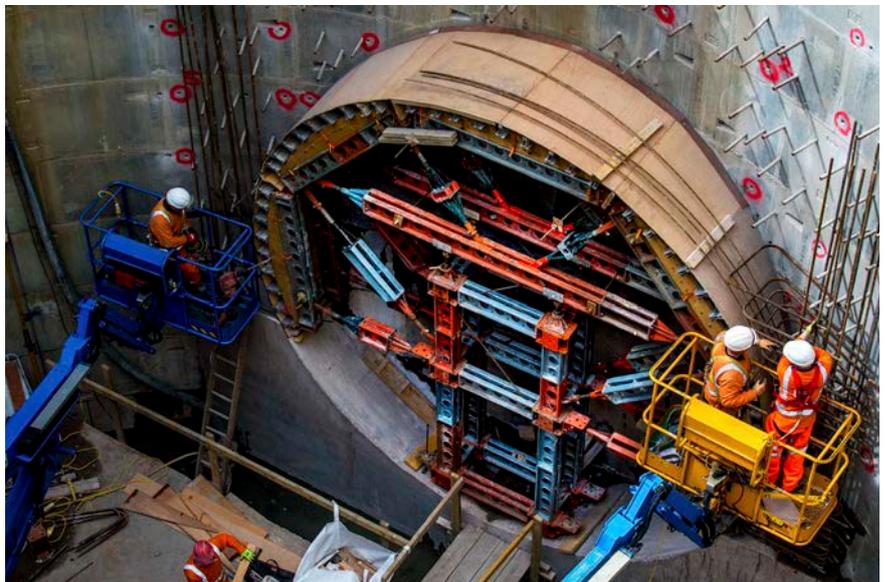
The £100m tunnel, which will enable Scottish Water to improve water quality in the River Clyde and its tributaries and tackle flooding in various parts of the south of Glasgow area, will, at 3.1 miles long, be five times longer than the Clyde Tunnel.

Engineers working on the 1000 tonne, 180-metre-long tunnel boring machine (TBM), started construction of the tunnel when the TBM was launched last July and are expected to complete the main tunnelling works later this year. The TBM is tunnelling at a speed of about two millimetres per minute through challenging ground which includes boulders, clay, hard sandstone, glacial tills and old coal workings.

The first half of the tunnel construction has taken it under Bellahouston Park, the Glasgow to Paisley railway line and the M77. The route of the tunnel was chosen to maximise the use of parkland and minimise disruption. As it inches its way along the route, preparatory work is progressing at Queens Park where work is continuing on the construction of an exit shaft for the

TBM and a smaller tunnel from that shaft to another shaft which will use a newly-installed flume to connect the tunnel to the existing network.

The tunnel, which at 4.7 metres in diameter will be big enough to fit a double decker bus inside, is a key part of Scottish Water's £250m, five-year programme of work, launched in 2013, to improve river water quality and the natural environment. The programme is the biggest investment in the Greater Glasgow area's waste water infrastructure in more than a century.



TBM reception / exit shaft in Queen's Park. Image credit SNS

Flooding Project Completed in Drumchapel, Glasgow

Scottish Water has completed a project in the Drumchapel area of Glasgow which will tackle flooding that has affected six properties.

The £1.8m investment in waste water infrastructure, which started in December 2016, will help reduce the risk of sewer flooding which has affected properties in the Moraine Avenue area. The work included the installation of a new storage tank and associated pipework and manholes in the grassed area between Kirkhope Drive and Blairdardie Road, which have increased the storage capacity in the local network.

To enable the Moraine Avenue work to progress, with the construction of a new manhole on Kirkhope Drive between Moraine Avenue and Moraine Drive, there was some road traffic management. Scottish Water thanks affected residents and road users for their patience and understanding while this work was carried out.

Scottish Water, Glasgow City Council and East Dunbartonshire Council are continuing to collaborate to develop the Drumchapel Surface Water Management Plan, which will identify and deliver in the coming years

For further information on the Moraine Avenue project, visit the Scottish Water website - www.scottishwater.co.uk

integrated project interventions to manage surface water upstream and reduce the risks and impacts of flooding across the catchment area.



Storage tank at Moraine Avenue under construction

SNH Green Infrastructure Fund Round 2 Awards

Scottish Natural Heritage (SNH) is awarding £3 million to five projects which will improve local greenspace in some of the most deprived areas in Scotland. The SNH funding comes from the European Regional Development Fund (ERDF), and once match funding from other sources is added will result in a total investment of £7.3 million.

Two of the five projects are in the core MGSDP area:-

Blairbeth Urban Park (South Lanarkshire Council) – Blairbeth Golf Club, to the south of the Castlemilk and Fernhill areas of Glasgow, closed in 2015, with the land reverting back to the Council. Without action, the site was at risk of becoming derelict through vandalism, fly-tipping and other anti-social behaviour. This project will turn the area into a new urban park, improving the biodiversity of the site, through landscaping, wildflower meadows, native tree corridors and a natural wetland, as well as encouraging community use through a new path network, natural play areas, allotments and engagement with local schools. The Total Project Cost is £871k of which the contribution from ERDF is £349k.

Halfway Community Park (Southside Housing Association, Glasgow) – This project will develop a new community park in a currently underused and poor-quality area of open space next to Moss Heights high-rise blocks in the Cardonald area of Glasgow. The project will improve biodiversity, provide space for active and

passive recreation and improve public safety through landscaping, tree and shrub planting, construction of a community growing space, a green gym, a natural play area and removing cars from the area in front of the high rise flats. Total Project Cost is £2.2m of which the contribution from ERDF is £901k.

Glasgow City Council is working with Southside Housing Association to maximise the potential opportunity for surface water management as part of the Halfway Community Park greenspace intervention, linking with the Hillington / Cardonald Surface Water Management Plan (SWMP).



European Union



gov.scot

EUROPE & SCOTLAND

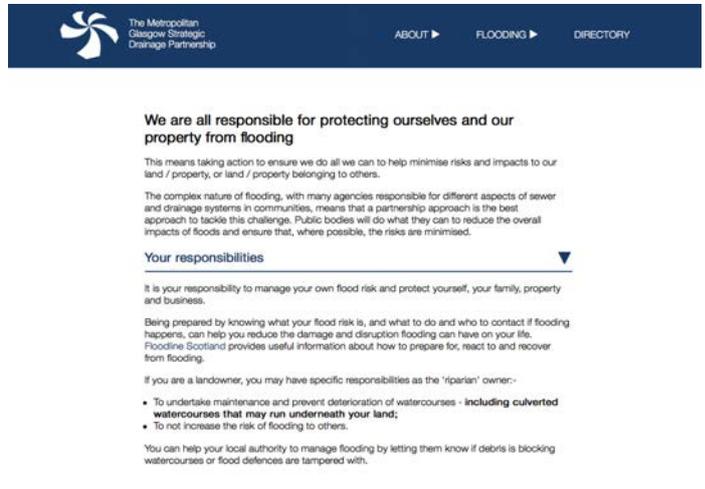
European Regional Development Fund
Investing in a Smart, Sustainable and Inclusive Future



**Green
Infrastructure**
making places for people
a' cruthachadh àitichean do dhaoine

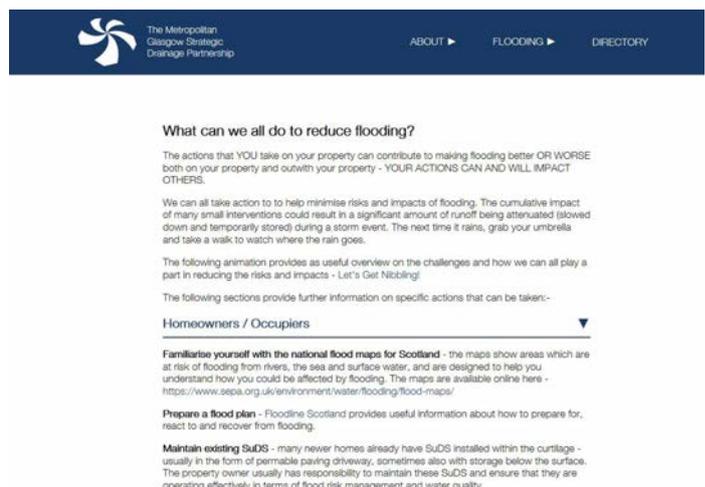
MGSDP Twitter Account and Updated Website Launched

An updated website for the MGSDP was launched in May. The website, still using the previous address – www.mgsdp.org – provides a more modern, mobile friendly interface for the MGSDP.



The MGSDP Guiding Principles...

The MGSDP Vision and Objectives will be realised through collaborative working shaped by the following guiding principles:



The MGSDP has also set up a Twitter account – [@The_MGSDP](https://twitter.com/The_MGSDP) – to highlight key partner and industry items of interest.

For more information on our work to deliver the MGSDP Vision, visit our website at: www.mgsdp.org



www.glasgow.gov.uk



www.scottishwater.co.uk



www.sepa.org.uk



www.clydegateway.com



www.clydeplan-sdpa.gov.uk



www.scottishcanals.co.uk



www.southlanarkshire.gov.uk



www.renfrewshire.gov.uk



www.northlanarkshire.gov.uk



www.networkrail.co.uk



www.eastdunbarton.gov.uk