MATCH FUNDERS

SWELL PARTNERS

Swell news

OFFICIAL NEWSLETTER OF THE
SHARED WATERS ENHANCEMENT & LOUGHS LEGACY

AUTUMN / WINTER 2021

IN THIS EDITION

www.swellproject.com

This project has been supported by the European Union's INTERREG VA Programme, managed by the Special EU Programmes Body (SEUPB).

Welcome to our Autumn/Winter 2021 Ezine for the Shared Waters Enhancement & Loughs Legacy (SWELL) project.

I have recently taken over from my colleague Martin Gillen as NI Water Programme Lead for the SWELL project and am delighted to join the team at a time when the project is gaining new momentum. Following the completion of the four NI Water SWELL projects between Winter and Spring, we were delighted to see Irish Water's upgrades breaking ground in the Summer.

In this newsletter we bring you news on the commissioning of NI Water's SWELL projects and provide links to technical case studies where you can read the full construction story on each of these significant upgrades.

We are delighted in this edition to also bring you news and photos from site showing the excellent progress Irish Water is making on its three SWELL projects in County Donegal and its plans for commencing work in Omeath, Co. Louth.

Although in recent times we have not been able to arrange stakeholder site visits to showcase progress on the ground, we have continued to present project updates online to different interest groups including the Association of Project Management and the board of East Border Region.

From the outset of the Covid-19 pandemic, the SWELL project team has fully embraced the concept of online working and continues to meet regularly to share information and best practice using the Teams platform. I would like to take this opportunity to thank NI Water's SWELL partners - Irish Water, the Agri-Food & Biosciences Institute (AFBI), Loughs Agency and East Border Region – who have all embraced new ways of working to keep both the construction element of the project and the important modelling work on programme. Finally, I'd like to pay tribute to the efforts of NI Water's contractors and consultants who have worked in a collaborative manner to successfully complete and commission the four strategic projects in Northern Ireland.

On behalf of the SWELL team, I hope you enjoy reading about the fantastic progress being made on this important INTERREG VA-funded project and wish you all a safe and happy Christmas. We look forward to bringing you further updates on the SWELL project in the new year.

Eoin Gilmore
SWELL Programme Lead
NI Water

NI WATER COMPLETES SWELL UPGRADES AS PROJECT REACHES THE HALFWAY STAGE

SWELL lead partner, NI Water marked the halfway stage of the project earlier this year with the completion of all four of its wastewater upgrades at Warrenpoint, Newry, Donemana and Strabane.

Eoin Gilmore, NI Water Programme Lead for SWELL commented: "We are delighted to successfully commission new wastewater infrastructure at Warrenpoint Wastewater Treatment Works and Newpoint Wastewater Pumping Station (Newry) located in the Carlingford Lough drainage basin and at Strabane Wastewater Treatment Works and Donemana Wastewater Treatment Works located in the Lough Foyle drainage basin.

"The work carried out at these key NI Water sites involved extensive upgrades of the existing wastewater assets to improve the quality of discharge to the respective waterways which impact on the shared waters of Carlingford Lough and Lough Foyle.

"The completion of these four sites marks a major milestone in the overall SWELL project and I would like to thank NI Water's project management support team from McAdam Construction Consultancy Services and all our local contractors - GEDA, Water Solutions Ireland, GRAHAM, BSG Civil Engineering and Deane Public Works - who worked tirelessly through very challenging times to successfully deliver this new infrastructure."

Congratulating the SWELL team on reaching this key milestone, Gina McIntyre, Chief Executive of the SEUPB said: "SWELL is one of the highest value projects to be funded under the EU INTERREG VA Programme and as such represents a significant long-term investment in our natural water resources. Key infrastructure is now in place, and despite restrictions, the project is delivering upon its objectives. I would also like to commend the SWELL partners, on both sides of the border, for the innovative solutions that they are making, to ensure that this project will be delivered on time," she continued.

See below for a brief overview on the NI Water SWELL upgrades and an aerial photo to show the completed site. A link to a more detailed case study on each of the four NI Water SWELL upgrades, along with construction progress photos, is included for each.

Warrenpoint Wastewater Treatment Works (WwTW)

Completed December 2020

Extensive upgrade of the existing treatment works to address potential loss of untreated wastewater to Carlingford Lough. Operational problems at Warrenpoint had historically been due to excessive flows being pumped to the inlet works. This problem was exacerbated by network infiltration/tidal ingress and inadequate flow balancing at the WwTW. As the biggest of all eight SWELL wastewater upgrades, a new inlet works, activated sludge process, attenuation tank and aeration tanks were among the myriad of new assets constructed at Warrenpoint WwTW to improve inlet flow management and provide effective use of storm storage facilities during periods of heavy or prolonged rainfall.

Read the case study on the Warrenpoint WwTW SWELL upgrade by clicking this link: https://waterprojectsonline.com/custom_case_study/warrenpoint-wwtw-2021/

NI Water projects contract teams

Warrenpoint WwTW
McAdam
Construction Consultancy
Services
GEDA Construction
Water Solutions Ireland
Atkins

Newpoint WwPS (Newry)
McAdam
Construction Consultancy
Services
GRAHAM
AECOM

Donemana WwTW
McAdam
Construction Consultancy
Services
Deane Public Works
Water Solutions Ireland
AECOM

Strabane WwTW
McAdam
Construction Consultancy
Services
BSG
Doran Consulting

Newpoint Wastewater Pumping Station (WwPS)
Completed March 2021

Newpoint WwPS operates with three wastewater pumps transferring flow (approximately 500 litres per second) to Newry WwTW, as well as four storm pumps that pump storm water flows to two storage tanks within the WwPS site. Under the SWELL project, new coarse screening equipment was provided to protect the existing pumps from blockages and reduce the potential for loss of wastewater to the adjacent Newry River. These new screens act like giant sieves to remove all of the rags and other items which have been flushed down toilets. Fine screening apparatus was also installed on the storm tank overflow which provides further protection to the river during periods of prolonged heavy rainfall. This was a complex project carried out on an extremely confined site adjacent to the Newry River.

Read the case study on the Newpoint WwPS SWELL upgrade by clicking this link: https://waterprojectsonline.com/custom_case_study/newpoint-wwps-2021/

Strabane Wastewater Treatment Works (WwTW)
Completed October 2020

The upgrade of Strabane WwTW included the construction of a new inlet reception chamber with new screw pumps to lift incoming wastewater flows to the existing preliminary treatment works. As a result of the SWELL upgrade - during periods of prolonged heavy rainfall - flows greater than storm flows are screened to 6mm and pumped to the receiving watercourse. A new inlet balance tank has been constructed at a high level, sized to deal with normal operational flows. During storm events additional flows are diverted via the overflow weir to the existing storm tanks (with screenings caught in a new 6mm side weir screen) and returned to the inlet works for treatment.

Read the case study on the Strabane WwTW SWELL upgrade by clicking this link: https://waterprojectsonline.com/custom_case_study/strabane-wwtw-2021/

Donemana Wastewater Treatment Works (WwTW)
Completed November 2020

A modern replacement WwTW comprising inlet works, two new primary settlement tanks, three new rotating biological contactors, two new final settlement tanks, a refurbished storm tank and a new sludge holding tank.

To facilitate the phased demolition of the existing works and construction of the new works, a compact temporary treatment plant was set up to maintain treatment capabilities in line with the required consent standards.

Read the case study on Donemana WwTW SWELL upgrade by clicking this link: https://waterprojectsonline.com/custom_case_study/donemana-2021/

IRISH WATER BREAK GROUND AND MAKE BIG STRIDES ON SWELL PROJECTS

Summer 2021 saw SWELL partners Irish Water reach another key milestone on the project as ground was broken on its portfolio of wastewater projects in the Lough Foyle catchment. The three projects, all of which are located in County Donegal, are in the areas of Lifford, Carrigans and Killea.

Irish Water's fourth SWELL upgrade is in the Carlingford Lough catchment and involves a wastewater network improvement project in Omeath, County Louth. The work in Omeath is due to get underway on site in November 2021, following CCTV investigations carried out in the village in August.

Since the project's launch in June 2019, Irish Water's SWELL team has been busy gaining the necessary approvals, including planning permissions and managing site preparation activities for the construction work to commence. Irish Water proceeded with the procurement for their SWELL project sites to be awarded as one contract. The successful contractor, BSG, was appointed in Spring 2021 allowing the detailed construction designs for the new wastewater treatment plants to be finalised. At this stage, the team also progressed with site clearance and preparation works to enable the start of the main contruction works.

BSG continue to make excellent progress on all sites with works due to be significantly complete by Q1 2022. Each of the Donegal wastewater projects is currently scheduled to achieve beneficial use in early 2022. Beneficial use means that the new wastewater treatment process is in operation, but site finishes and ancillary works are still to be completed. Once Irish Water have achieved beneficial use at their new wastewater treatment plants, AFBI will complete its post-construction modelling work.

Irish Water's projects are due to be fully complete by mid 2022. Here we are delighted to report the fantastic progress being made on all three of the County Donegal sites:

Killea Wastewater Treatment Plant (WwTP)

Construction start July 2021

Excellent progress is being made on the construction of the new Killea wastewater treatment plant which will provide secondary treatment. The primary settlement tanks, Rotating Biological Contactor (RBC) treatment units and final settlement tanks are now installed. The storm tank has also been completed and the new control building is underway with other ancillary works at the site continuing.

Carrigans Wastewater Treatment Plant (WwTP)

Construction start August 2021

Upgrade works at Carrigans involve the abandonment of the existing primary treatment system and the discharge to the adjacent Carrigans River. The old system will be replaced by a new pumping station at the existing Carrigans site with a new 3400m pipeline extending to Irish Water's existing St. Johnston wastewater treatment plant. This new pipeline has been successfully installed and commissioned with work due to commence on the new pumping station before the end of 2021.

Lifford Wastewater Treatment Plant (WwTP)

Construction start June 2021

The new WwTP being constructed in Lifford is the most significant of the Irish Water upgrades. The existing Lifford wastewater treatment plant was constructed in 1967. This existing plant provides only primary treatment and has been operating over capacity. Primary treatment is similar in nature to a domestic septic tank, providing only very basic wastewater treatment.

The new WwTP is being constructed on the same site as the existing treatment plant, with some new land added to accommodate the larger new WwTP. The new WwTP will provide secondary treatment using Rotating Biological Contactor (RBC) technology which will vastly improve the quality of discharge to the river Foyle. The works at Lifford also include the upgrading of pumps and the sewer network at Sally Gardens pumping station. The new plant will have the capacity to treat up to 3,000 population equivalent (PE) of wastewater. This will provide an increased wastewater treatment capacity for the town of Lifford and environs, allowing for future development and population growth in the area.

The site for the new Lifford WwTP is compact at 2000m², presenting a challenging location to build the sizable new plant that is being constructed. Major excavation works were required to reduce site levels down to allow for construction of the WwTP, with 4000m³ of earth excavated (equivalent to 450 lorry loads of material). Significant progress has been made at the Lifford site in a short space of time. All primary settlement tanks, Rotating Biological Contactor (RBC) treatment units and final settlement tanks are now installed. The storm tank has also been completed. Foundations for the new inlet works and the new control building are now constructed while improvements to the sewerage network in Lifford have got underway.

Existing Lifford WwTP

Early site works

Lifford site team

Installation of RBCs

MEET THE IRISH WATER SWELL TEAM

There are two Irish Water staff working full time on the SWELL project. Patrick Carty is the SWELL Infrastructure Specialist within the Asset Delivery Department and Conor Gilleran is the SWELL Project Management Office Specialist within the Asset Management Department. Patrick and Conor have been working for several years on the SWELL project and are excited to see physical construction progressing on site.

Patrick Carty

Speaking about his involvement in the SWELL project and working alongside NI Water, Patrick noted that the SWELL project is a particularly interesting and exciting project for a number of reasons: "It is a really interesting blend of people working together to form a diverse project team on the SWELL project. With the SWELL project, we are working to a different project team structure than would normally be the case for Irish Water Asset Delivery. There have been great opportunities for knowledge sharing and efficiencies through working with Northern Ireland Water, who are established as a national utility much longer than Irish Water. I am looking forward to progressing the construction of the Irish Water wastewater projects over the coming months. It will be a brilliant outcome and unique situation that we will have come to on delivery of improvements on both sides of the border."

Conor Gilleran

Conor added: "The SWELL project is delivering targeted wastewater asset improvements, on both sides of the border in a truly collaborative way. Irish Water will deliver a significant new WwTP at Lifford and only about 500m downstream Northern Ireland Water have already completed a significant upgrade at Strabane WwTP. Together the two utilities are improving water quality for all. The SWELL project is a great demonstration of the power of project partnerships. The partnership is bringing the two water utilities together to deliver the best possible benefits for the environment and the people of Lough Foyle and Carlingford Lough. The programme of scientific work with AFBI is adding value beyond the construction of new assets. The water quality sampling and integrated environmental modelling being developed will give us a far greater understanding of what affects the water quality in these two complex coastal ecosystems and will be of great benefit to the water utilities, AFBI and other stakeholders."

IRISH WATER SITE PREPARATORY WORKS

From the outset Irish Water's project delivery team has played a proactive role in preparing the way for the main works across the four SWELL sites, including conducting environmental surveys.

A notable environmental risk at the Lifford site which posed a challenge for Irish Water was the presence of the Invasive Species Giant Hogweed.

Irish Water appointed an Invasive Species Specialist to oversee the safe clearance of the Giant Hogweed plants from the site before construction works commenced.

Invasive species biosecurity measures at the Lifford site

Giant Hogweed at Lifford site

INNOVATIVE AND SUSTAINABLE THINKING

To improve treatment processes Irish Water is utilising innovative technology in the form of a storm flush system on the Lifford and Killea projects.

The Eliquo Hydrok CWF Storm Flush® system

This technology provides a highly effective non-powered cleaning system for all storm water retention tanks. This utilises the storm water for the flushing process thus requiring no additional fresh water. Additionally, the technology does not cause any lost volume in the storm tanks and in some cases reduces the civil and carbon footprint of any tanks that may need constructing.

There are a number of benefits of the storm flush system. It uses no energy or water resources, as it cleans using zero external power and requires no external water supply. In addition, it operates without controls, has no moving parts and has a self-priming and flushing operation that flushes even after partial fillings. Eliquo Hydrok is the company behind this environmentally considerate, cost effective and practical solution.

SWELL MODELLING UPDATE

Setting it apart from other wastewater schemes, the SWELL project includes for an ambitious modelling strategy that seeks to develop unique ecosystem 'legacy' models for both the Lough Foyle and Carlingford Lough drainage catchments.

This ecosystem modelling approach, with built-in source apportionment, represents a first-time integration of urban drainage, river, coastal and ecology models on a catchment-wide cross-border basis.

AFBI's role within the SWELL project is to coordinate, manage and implement the science programme which underpins the project. This includes field sampling within the relevant catchments and marine waters - with the support of the Loughs Agency - data management and ecosystem modelling..

Here Adele Boyd, Senior Scientific Officer with AFBI, provides an overview on the progress being made on the development of these important ecosystem models which will be instrumental in planning future investment in wastewater assets.

The SWELL legacy models will be available to be utilised by the project partners and government departments after completion of the project. These models will enable us to predict how changes within the catchments can affect water quality within the wider ecosystem and impact upon the Water Framework Directive status of rivers and sea loughs.

AFBI's work on the development of the SWELL Legacy Ecosystem Models is progressing on schedule as follows:

SWAT models built and initial calibrations of hydrology complete

Soil and Water Assessment Tool (SWAT) river model development for both catchments is being undertaken for AFBI by specialist modelling consultant Longline Environmental.

SWAT models have been built for both catchments and initial calibrations of water quantity have been completed. Water quality calibrations will be undertaken once the Drainage Area Plan (DAP) programme being undertaken by the water utilities has been completed.

Pre-improvement sampling complete

AFBI, supported by Loughs Agency, are responsible for for the delivery of the SWELL sampling and monitoring programme within the coastal and freshwater environment, with NI Water undertaking sampling and monitoring of wastewater assets.

In total, 24 sites in the Carlingford catchment and 46 in the Foyle catchment were selected for routine freshwater sampling with river flow data being provided from DfI Rivers Hydrometric Stations.

Marine sampling is undertaken at 12 stations within Carlingford Lough and 14 stations within Lough Foyle.

The pre-improvement sampling programme of the SWELL project commenced in April 2019 and continued until mid-March 2020.

Sampling sites within the sea loughs were selected to cover both the inner and outer regions of the loughs to provide good spatial coverage of the area, and include sites in close proximity to the mouth of the main freshwater rivers within the catchments. Water samples were collected 1m below the surface and 1m above the seabed at each sample site. During these surveys Lough Foyle and Carlingford Lough were monitored routinely for physical, chemical and biological parameters. Sites were sampled every two weeks (weather permitting) within this period.

As part of the pre-improvement sampling programme, roughly 1,600 marine samples were collected within Lough Foyle and Carlingford Lough. Approximately 800 samples

were analysed for marine nutrients, and almost 800 were analysed for E. coli.

During the pre-improvement sampling programme of the SWELL project, the Foyle and Carlingford catchments were also monitored routinely for physical, chemical and biological parameters. Sites were sampled every two weeks within this period. As part of this programme, approximately 3,200 freshwater samples were collected within the Foyle and Carlingford catchments. Approximately 1,600 samples were analysed for freshwater nutrients, and approximately 1,600 were analysed for Escherichia coli.

A selection of marine and freshwater samples have also been chosen for analysis for Microbial Source Tracking (MST).

Post-improvement sampling underway

During the post-improvement sampling programme of the SWELL project, the Foyle and Carlingford catchments are being monitored routinely for physical, chemical and biological parameters from June 2021 for a period of 12 months and take out 'between June 2021 and December. The same sites investigated during the pre-improvement sampling programme are being sampled as part of the post-improvement sampling programme, with sites sampled every two weeks within this period.

Post improvement sampling commenced within the Carlingford catchment on the 1st June 2021 and on the 2nd of June 2021 within Carlingford Lough.

Rainfall reactive sampling undertaken

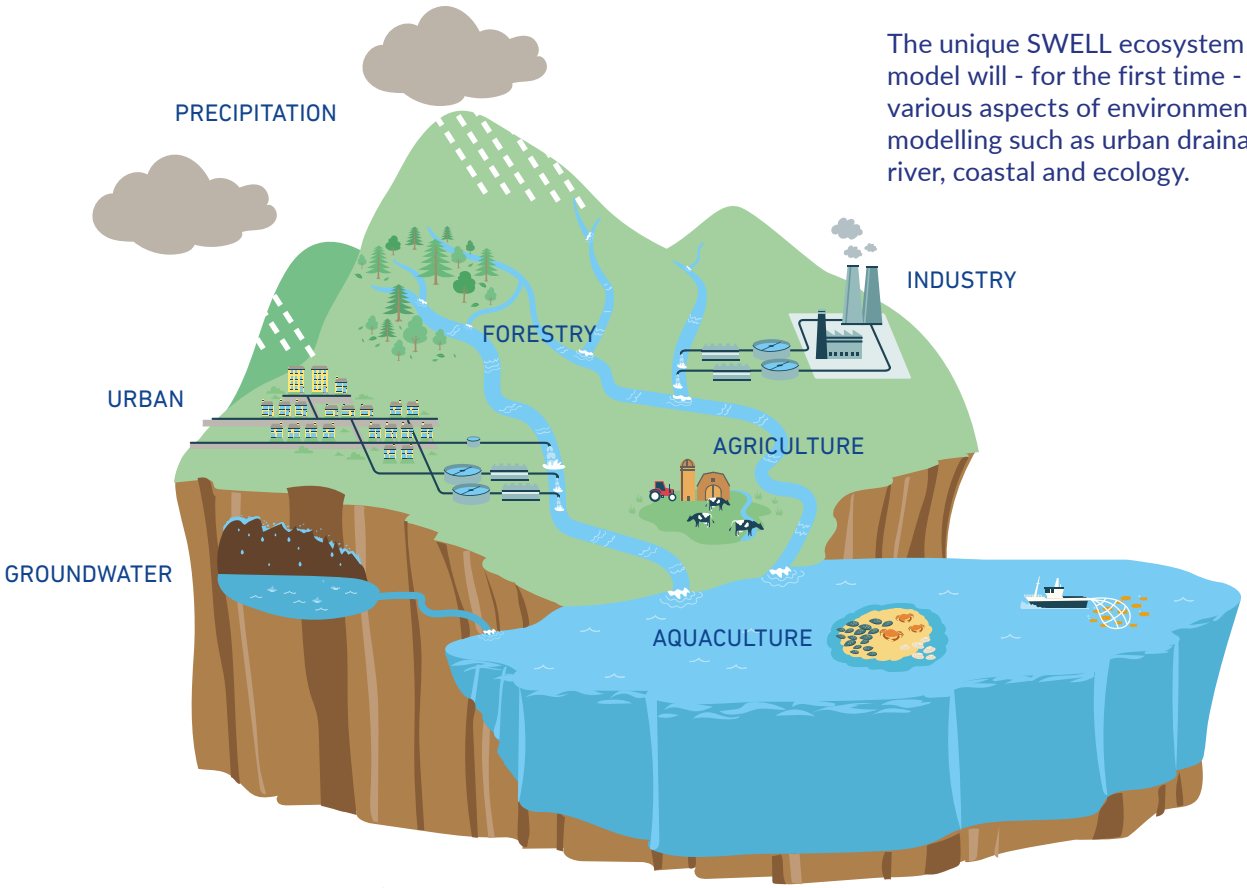
A major area of concern relating to water quality and compliance with the Water Framework Directive is increased loads of nutrients and bacteria entering freshwater and coastal waterbodies under intense wet weather conditions. Periods of intense rainfall can greatly influence what enters waterways within a short period of time.

Heavy rainfall can result in increased runoff from agricultural areas and in the discharge of dilute wastewater from Combined Sewer Overflows (CSOs). Water quality can be significantly affected by both the quality and quantity of agricultural runoff and the quality and quantity of CSO spills.

Therefore, as part of the SWAT modelling calibration and validation process and to inform an understanding of these potential impacts within the SWELL catchments, rainfall reactive sampling is being undertaken for selected river and network overflow sites to monitor both bacterial and nutrient fluxes during wet weather events.

Three priority sites were identified within the Foyle catchment (all of which are around the town of Omagh) and two within the Carlingford catchment (both of which are within the Newry area).

Samples are being collected using ISCO Refrigerated Autosamplers or ISCO 6712 Portable Autosamplers. These programmable, stand-alone samplers, extract water samples automatically according to a preprogrammed schedule, up to a maximum capacity of 24L. So far during the SWELL project the three reactive sampling sites within the Foyle catchment have been sampled three times (towards the end of 2020) and the two sites within the Carlingford catchment have been sampled twice (at the start of 2021). Weather forecasts are constantly monitored for potential future reactive sampling conditions.



The unique SWELL ecosystem model will - for the first time - link various aspects of environmental modelling such as urban drainage, river, coastal and ecology.

WEATHER STATIONS DEPLOYED

To enable real-time monitoring of rainfall adjacent to the reactive sampling sites located around Omagh, within the Foyle catchment, AFBI installed a SWELL-funded weather station on 11th of September 2020 behind the AFBI Omagh office. This instrument measures parameters such as rainfall, temperature, humidity, wind speed and wind direction. To facilitate real-time monitoring in the vicinity of the Newry reactive sampling sites within the Carlingford catchment, a SWELL weather station was deployed within NI Water's Newry Depot at Carnbane Industrial Estate on the 13th of November 2020.

THE LEGACY OF THE SWELL MODELS

These unique ecosystem models will be used in the future by the water utilities to facilitate water quality compliance assessments with respect to the EU Water Framework Directive and will inform sustainable asset planning through the apportionment of bacterial and nutrient loading contributions from wastewater and diffuse agricultural sources.

Once all eight of the SWELL capital wastewater asset upgrades have been completed, the models can validate that the required INTERREG VA programme outputs and results indicators have been achieved.

Subsequently, on completion of the SWELL project, the ecosystem models will be held in public ownership to provide a sustainable legacy tool for cross-border use by water utilities, environmental regulators and other stakeholders.

Ultimately, these legacy models will provide a useful platform for future engagement and the progression of an evidence-based decision-making approach to legislative compliance that builds on the skills, relationships and investment planning techniques developed by the SWELL project.

SWELL MODELS TO BENEFIT FROM NEW NI WATER DAP PROGRAMME

Drainage Area Plan (DAP) models have been used for many years by both NI Water and Irish Water to simulate the hydraulic performance of sewerage networks within urban areas.

The SWELL project utilises an innovative modelling approach whereby these DAP models are integrated with river and coastal models to take cognisance of the entire drainage catchment as an ecosystem. Outputs from available DAP models within the Carlingford and Foyle drainage catchments provide estimates of the bacterial and nutrient pollutant load being discharged from wastewater assets in response to heavy rainfall.

28 DAP models were identified for integration into the SWELL ecosystem models. These include models for Derry/Londonderry, Strabane, Warrenpoint, Lifford and Omeath, which were purposely built and funded under the INTERREG VA programme. The remaining models generally comprise historical and/or unverified models, with some being considered as unrepresentative of actual operational performance or unsuitable for water quality impact assessment purposes.

To ensure that all the DAP models within the Carlingford and Foyle catchments were "fit for SWELL water quality purposes", consultant support McAdam (and modelling partner Wood plc) were appointed by NI Water during November 2020 to undertake a review and update of the DAP models in parallel to the main SWELL modelling work. The work, which has been separately funded by NI Water, is a multi-stage process that updates the models and improves the model performance by verifying the outputs against long-term telemetry data recorded at the major assets within each network.

DAP model update and modification work is currently on programme and nearing completion. Once completed, the models will be run to simulate the operation of the sewerage networks against a 10-year continuous rainfall time series of Met Office rain radar data for the period 2011 to 2020. The resulting outputs will provide a representation of network discharges (volume, duration and frequency of spill). These model outputs will be converted to pollutographs by applying default or sampled bacterial and nutrient concentrations to the generated flows to provide an estimate of the pollutant loadings for inclusion within the appropriate coastal or river catchment model.

The additional investment provided by NI Water to improve DAP model performance further demonstrates the company's commitment to utilising the SWELL legacy models to drive future water quality improvements within the Carlingford and Foyle catchments. The integrated environmental modelling approach is considered to provide the evidence base for a sustainable long-term asset investment plan and enable optimisation of capital and operational efficiencies for key PC21 projects.

PROFILING OUR PARTNERS

The SWELL project benefits from the expertise of five partners – NI Water, Irish Water, AFBI, Loughs Agency and East Border Region (EBR) - in the delivery of its four-year programme of work.

Here we find out a bit more about the background to EBR and meet two of their staff - involved from the outset of the SWELL project - who have been instrumental in the successful financial management and governance of the project to date.

Formed in 1976, East Border Region (EBR) is one of the longest established local authority-led cross-border groups in Europe. The modern day EBR has developed into a multi skilled, multi-faceted cross-border organisation, proficient in the draw down and management of EU-funded projects.

Today EBR is partner in nine Ireland/NI-based INTERREG VA Projects, working with 60 other partners on projects totalling €104million. For these EBR provides a dedicated service including project development, project coordination, financial management and compliance in respect of EU-funded projects.

As a partner on the SWELL project, EBR performs a unique role in terms of financial verification to ensure that all funding is drawn down in line with the rules and procedures of the EU INTERREG VA Programme.

The EBR team who work on the SWELL project includes Dette Hughes and Lorraine Stewart, both of whom have been working with EBR for over 18 years and have extensive experience of working on EU-funded cross-border projects.

SWELL is the first project that EBR has worked on that involves wastewater treatment projects and ecosystem modelling. However, EBR Finance Officer, Lorraine Stewart says it doesn't matter what the project is, the role of EBR is the same: "The role of EBR on EU-funded projects is quite niche in that the work we carry out is exactly the same regardless of what the project is actually doing. So if it's building a new wastewater treatment plant, an SME support programme or carrying out research into heart disease, the EU rules which must be followed are exactly the same and our role is to work with Partners to ensure 100% compliance."

SWELL partners with EBR members at Warrenpoint WwTW (February 2020)

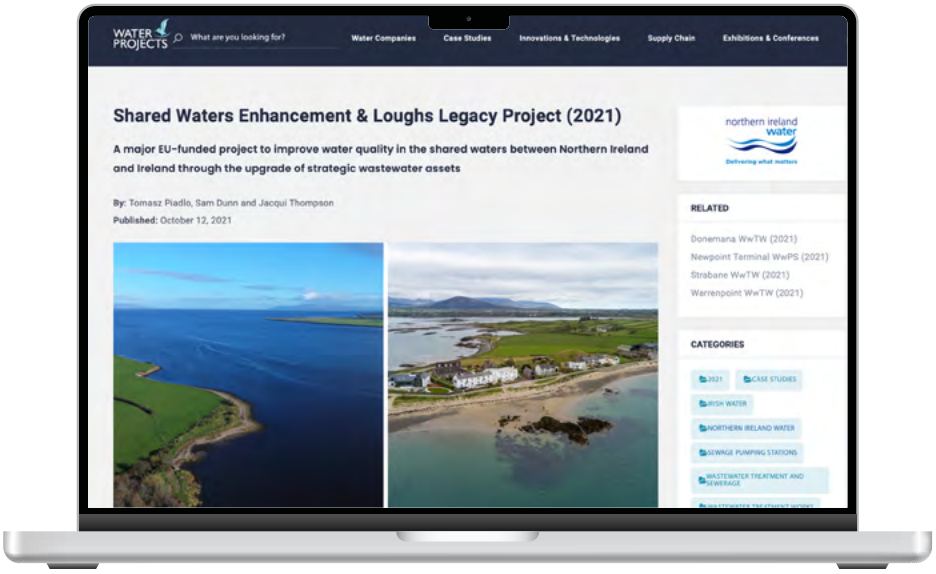
Dette Hughes, Programme Manager stated that the most interesting part of her job is the range of stakeholders she engages with on a daily basis: "Because EBR works with so many cross-border consortiums we deal with a varied array of projects. During the course of a week I could be dealing with a range of projects including Greenways, Biodiversity Conservation or installation of Electric Vehicle Charge points. Regardless of the activities, the key element of a successful cross-border project is a strong partnership, built on trust, which works together for mutual benefit. This is the case in the SWELL Project which has a very strong consortium and is testament to their success to date."

Dette Hughes, Programme Manager

Lorraine Stewart, Finance Officer

SWELL CASE STUDIES NET OVER 10,000 VIEWS

Technical case studies compiled for UK Water Projects on the four NI Water SWELL upgrades have had over 10,000 views collectively since they were uploaded online in September 2021.



UK Water Projects (print edition) and Water Projects Online feature some of the highest profile water and wastewater projects being undertaken throughout the UK.

Following completion of the four upgrades in spring 2021, NI Water and its SWELL consultants and contractors set about telling the technical story behind each of the SWELL upgrades.

Roger Hammond, editor of UK Water Projects said: "We are delighted to feature the EU-funded SWELL project in the 2021 print and online editions of UK Water Projects. Water Projects Online gives water companies, authorities and their supply chain a platform to publish case studies and technical papers dedicated to the water and wastewater industry. The articles demonstrate the work being undertaken to provide the highest standards of treatment and reliable distribution for potable water, wastewater and flood alleviation, meeting environmental demands and ensuring resilience and sustainable and energy efficient networks."

SWELL IN THE NEWS

We are delighted that the progress on the SWELL project has continued to feature in national and local newspapers, radio stations and across all social media channels. Here are just a few of the headlines the project has made:


GLASS HALF FULL FOR SWELL PROJECT


Lifford's looking SWELL
The Shared Waters Enhancement and Loughs Legacy cross-border project starts
€35m
The Shared Waters Enhancement and Loughs Legacy cross-border project starts at Lifford


WaterBriefing
NI Water takes major step forward in £6m Warrenpoint Wastewater Treatment Works upgrade
NI Water has taken a major step forward in the £6 million upgrade of Warrenpoint Wastewater Treatment Works (WwTW) with the 'seeding' of the new Activated Sludge Plant (ASP).


Mourne Observer
Mourne Observer - Down Edition | 07/10/2020
£6m upgrade at local plant will improve water quality in lough


Mid-Ulster Mail
Mid-Ulster Mail | 29/04/2021
Local contractor delivers a 'SWELL' job
Swell


Newry Democrat
Newry Democrat | 08/06/2021
Newpoint gets a SWELL upgrade!

NI WATER CONTRACTOR SHORTLISTED FOR CONSTRUCTION AWARD

NI Water's appointed contractor for the SWELL upgrade at Strabane was shortlisted for a prestigious construction award earlier this year.

BSG, who carried out extensive upgrades to Strabane Wastewater Treatment Works, including the installation of three enormous screw pumps – the longest ever manufactured by the supplier – was one of only three companies to make it to the final of the Transport & Utilities category in this year's Construction Excellence Awards.

NIW, BSG and McAdam staff pictured in front of the new screw pumps which weigh 24T each (November 2019)

CONSTRUCTION EXCELLENCE AWARDS 2021

NI WATER CONTRACTORS PERFORM BEYOND COMPLIANCE

Contractors working for NI Water on their SWELL upgrades have all earned 'Performance Beyond Compliance' certificates as part of the Considerate Constructors Scheme (CCS) which they signed up to at the start of the project.

CCS is a not-for-profit organisation which seeks to improve the image of the construction industry by striving to promote and achieve best practice. Sites, companies and suppliers that register with the scheme are monitored against a five-point code of 'Considerate Practice' which commits them to: care about appearance, respect the community, protect the environment, secure everyone's safety and value their workforce.

Congratulating the SWELL contractors on their achievements, Eoin Gilmore, SWELL Programme Lead, said: "In line with NI Water's corporate values, it is paramount that our contractors show respect for their workforces and their surroundings and ultimately be seen as considerate constructors.
I would like to thank all our SWELL contracting teams who have worked through very challenging times to ensure that robust measures are in place to protect and support their workforce, safeguard the environment and minimise impact for local communities."

MATCH FUNDERS

Department of Agriculture, Environment and Rural Affairs
An Roinn Tithíochta, Rialtais Áitiúil agus Oidhreachta Department of Housing, Local Government and Heritage

SWELL PARTNERS

northern ireland water Delivering what matters
UISCE EIREANN WATER
EAST BORDER REGION
afbi AGRI-FOOD & BIOSCIENCES INSTITUTE
Loughs Agency

www.swellproject.com

This project has been supported by the European Union's INTERREG VA Programme, managed by the Special EU Programmes Body (SEUPB).