

## Annex 4: Work Plans

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
1	Project Management/Mobilisation	July 2016	December 2022	10%
Partners' Involvement				
Responsible partner		NIW		
Involved partners		IW,AFBI,LA, EBR		
<p>Describe how the project will be managed. Include information on:</p> <ul style="list-style-type: none"><li>- Structure, responsibilities, and procedures for the day-to-day management and co-ordination;</li><li>- Communication within the partnership;</li><li>- Detail on the appropriate phases for preparation, implementation, reporting monitoring, evaluation, follow-up and dissemination of the project;</li><li>- Risk and quality management (what are the key risks which could impact on the delivery of this element/activity and how will the risk be managed/mitigated)</li></ul> <p>The project will be managed centrally through the Programme Management Office (PMO). This office, resourced by staff from all Partners and headed up by NIW as Lead Partner will be set up to ensure that the projects outputs and results are delivered on time and on budget and that it fulfils the obligations of the lead partner as outlined in the programme rules. The PMO will provide the essential overall direction, coordination, governance and clear leadership to ensure that the shared resources and expertise are utilised effectively. The PMO will be headed by a Programme Leader with added multi-disciplinary staff support from representatives of all partners to cover project management, finance, communications and other technical duties using skillsets, technical knowledge and expertise within the PMO team to successfully manage the project and ensure eligibility of costs.</p> <p>The Programme Leader will have overall responsibility for communications and the day-to-day management and co-ordination of the activities in each work package. The project organogram (detailed in the business case) shows the how each of the partner organisations are delegated a sub-programme manager who will relay information on progress of delegated work packages to the programme leader. There will be a constant flow of information to and from the PMO to facilitate accurate and detailed reporting to the Steering Committee, SEUPB and with partners and stakeholders. This effective communication stream will assist the programme leader to efficiently and effectively manage and mitigate all financial and non-financial aspects of the project implementation, monitoring and evaluation and ascertain whether the project is on schedule in both cost and time profiling, forecasting and in the delivery of outputs.</p> <p>The programme leader will also be responsible for ensuring the quality of each individual work package in terms of preparation and implementation of each individual activity. There will be regular reporting of activity before, during and after each activity is undertaken. All risks associated with each activity will be logged on the project risk register (attached with business case) as and when risks are identified and they will be mitigated and risk assessed according to the scoring matrix.</p>				

The Programme Lead role will be the Senior Responsible officer for the project and this role will require extensive project life cycle experience in the delivery of complex multi-disciplinary projects and has expertise in risk management and mitigation, change and quality management to deal with the full range of technical issues surrounding the project. This full time project role within the PMO will include; co-ordinating activities, programming, reporting and liaising with SEUPB, procurement and capital delivery duties and in managing risks will have ultimate responsibility to sign off on all financial claims. NIW as Lead Partner will also provide a Cost Manager resource. This finance/technical administration role will require a thorough understanding of the project and programme rules in relation to financial and budgetary compliance. Extensive liaison with all the project partners and SEUPB is required to collate and verify valuations in accordance with the strict EU rules and regulations.

Please describe activities within work plan 1.			
Activity 1.1	Leadership & Governance	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO lead in the efficient and effective performance of his management/leadership duties will issue clear and concise instruction to direct the project to keep it on time and on budget whilst ensuring proper governance.		
Activity 1.2	Change Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO lead will be assisted by the project team in the management of change and the impact that this may have in terms of time and cost, but also in terms of the impact of financial forecasting and reporting to SEUPB.		
Activity 1.3	Risk Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO will hold regular risk workshops at which the risk register will be disseminated among the various partner organisations. The PMO will be responsible for ensuring that high risk items are mitigated against and for updating the risk register should project circumstances change and as new risks are identified.		
Activity 1.4	Programme Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO Lead, in conjunction with the PMO sub-programme managers will be responsible for management of the project timeline and identifying as soon as practicably possible any issues which are to impact on the programme. These issues should be mitigated through the risk register and contingencies put in place to ensure programme delivery outputs.		
Activity 1.5	Financial Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO Lead will be responsible for sign-off of all project claims, assisted by EBR, the cost manager and associated partner cost managers. They will also be responsible for financial forecasting and reprofiling of costs during the project life cycle.		
Activity 1.6	Quality Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO Lead will liaise with the PMO partner representatives to ensure that the balance between time, cost, quality and sustainability is maintained in order to deliver the project outputs. Health & Safety will take paramount over all decisions and is non-negotiable in the balancing process.		
Activity 1.7	Communications Management	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO will seek advice from the communications consultant, internal partner organizations communications teams, EBR and the publicity guidance in relation to publication of all project related communications. They will have the final determination of the content and quality of communications, in conjunction with SEUPB.		

<b>Activity</b> <b>1.8</b>	Stakeholder Engagement	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	Similarly to communications management, the PMO will liaise directly with stakeholders on the project on a regular basis. This engagement will be carried out in line with the publicity guidance and every effort will be made to manage stakeholders' expectations and impact, both internally and externally.		
<b>Activity</b> <b>1.9</b>	Benefits Realisation	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO Lead will have ultimate responsibility for the realization of benefits as detailed in the benefits realization plan. The PMO will update and monitor the benefits realization plan as the project commences.		
<b>Activity</b> <b>1.10</b>	Reporting & Auditing	Start month <i>Letter of Offer</i>	End month <i>Project End</i>
	The PMO will compile and manage all necessary reporting requirements of the project. This will be through the management and governance structure detailed in the business case with the flow of information going through the PMO to SEUPB (joint secretariat/managing authority), SWELL project steering committee, Partner Board Members and DFP/DRD as required.		

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
2	Communications	July 2016	December 2022	1%
Partners' Involvement				
Responsible partner		NIW		
Involved partners		IW,AFBI,LA, EBR		
Describe the communications activities of the project. Include information on:				
<ul style="list-style-type: none"><li>- Structure, responsibilities and procedures for external communications;</li><li>- Adherence to EU and mandatory programme publicity requirements;</li><li>- Responsibility and plans for quality communication tools;</li><li>- Communications methodology;</li><li>- Risks associated with communications activities and how they will be addressed.</li></ul>				
<p>A Communications Manager, who will be appointed to the Programme Management Office as part of the external consultancy resource, will be responsible for co-ordinating and managing all external communications.</p>				
<p>Partners will be aware of the appropriate mechanisms and channels for communications and will follow the procedures for approving and issuing of external correspondence in relation to the SWELL project.</p>				
<p>The communications plan has been developed in line with EU publicity requirements for Interreg projects and the Communications Manager, working alongside the PMO, will ensure that EU programme publicity requirements are met.</p>				
<p>Central to carrying out effective communications on the SWELL project will be the production of a range of information tools including a project website; project leaflets; information boards and external signage. To ensure high quality publicity material is produced, the Communications Manager will use professional design and print services for the production of all marketing and communications materials.</p>				
<p>The communications plan gives a detailed overview of how communications will be carried out with a range of internal and external stakeholders. Whilst the plan highlights a number of stakeholders known at this stage, it is important to note that the plan will be regularly reviewed to ensure any newly identified stakeholders are targeted. The activities outlined in the communications plan will be evaluated as the project progresses and if necessary the plan will be amended to ensure key objectives are being achieved.</p>				
<p>Attention to detail and a close working relationship with all project partners and SEUPB will help to minimize risk associated with the communications activities. The Communications Manager will ensure all external communications are approved by project partners and SEUPB prior to issuing and will ensure that all these key internal stakeholders are kept up to date with information and progress relating to the SWELL project.</p>				
<p>A crisis communications contingency plan will be drafted and agreed with all project partners and the SEUPB ahead of award funding to ensure that any potential negative press coverage is duly addressed if required.</p>				

Please describe activities within work plan 2.			
<b>Activity 2.1</b>	Develop SWELL brand/logo	Start month (07.2016)	End month (07.2016)
	Liaise with project partners to discuss project to ensure key themes are incorporated into the project logo.		
<b>Activity 2.2</b>	Set up SWELL project website	Start month (07.2016)	End month (Ongoing)
	Work with project partners to collate information relating to all aspects of the project. Edit information and source appropriate pictorial content to accompany text. Launch of website to coincide with project launch event.		
<b>Activity 2.3</b>	Produce SWELL information leaflets and range of information pull up banners	Start month (07.2016)	End month (09.2016)
	Produce a simple information leaflet to highlight what's involved in the project and the environmental benefits which could result. Design a range of easy-to-carry promotional/information pull-up banners that will be used for information events; project launch; school visits etc.		
<b>Activity 2.4</b>	Produce SWELL site banners to be erected along river/lough edges to publicise the project and EU funding; produce a range of SWELL stickers to be placed on monitoring buoys etc	Start month (07.2016)	End month (09.2016)
	Liaise with AFBI over placement of promotional items.		
<b>Activity 2.5</b>	Organise range of printed workwear for SWELL project including hi vis vests; fleeces; hard hats	Start month (07.2016)	End month (09.2017)
	Liaise with all project partners and SEUPB to ensure correct use of individual logos		
<b>Activity 2.6</b>	Organise training event/workshop for project partner staff to outline the aims of the project; the roles and responsibilities of partner staff and process of approvals for external communications. Agree spokesperson for the SWELL project.	Start month (07.2016)	End month (09.2016)
	Liaise with all project partners and SEUPB to ensure appropriate staff invited to attend.		

<b>Activity 2.7</b>	Organise SWELL project launch event in one of the eligible areas; source suitable venue; issue invites; prepare press release and press packs; prepare speech notes and key lines to take; brief media and strive to secure TV/radio coverage.	Start month (08.2016)	End month (08.2016)
	Liaise with all project partners and SEUPB to ensure appropriate stakeholders are invited to attend; liaise partners and SEUPB on press material including media briefing		
<b>Activity 2.8</b>	Implementation of communications plan and monitoring of activities.	Start month (09.2016)	End month Onwards
	Reference communications plan in Annex 1.		

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
3	Catchment Investigation (refer to PXP for further information)	February 2016	November 2017	5%
Partners' Involvement				
Responsible partner		AFBI		
Involved partners		NIW,IW,LA		
Summary description of the work plan. Specify the Programme result to which it contributes				
Outline key issues, outputs, responsibilities/roles of each partner, risks and risk mitigation approach.				
<p>This work plan covers data collection prevalent to determining the sources of pollution at the catchment scale. It will also gather the necessary information to determine the predominant risk areas for compliance with WFD status and data for insertion into the modelling activities.</p> <p>The work plan will also give information to focus modelling at the sub catchment scale and derive the necessary information to set the baseline for the “Asset Discharge Improvement”.</p> <p>The key issues associated with the work package is logistics in sampling due to various factors such as weather, access, tidal states etc. These are foreseeable risks which the project team will be experienced at encountering and will be mitigated against through effective planning and organization of the catchment studies. Procurement of services/supplies in line with programme rules also represents a major risk to the programme delivery. Risks and risk mitigation strategies will be managed through the project risk register which is a live working document which is updated through regular risk workshops.</p> <p>AFBI are the responsible partner for the catchment investigation and will utilize Loughs Agency resources in order to facilitate the sampling programme. The two respective water companies will also provide information on network configurations and wastewater treatment processes and facilitate access to assets to obtain samples. The planning and implementation will be carried out with support from technical consultants.</p>				
Outputs				
List which programme outputs this work plan delivers or contributes to.		This work plan contributes towards setting the baseline Asset Discharge Improvement to comply with the 10,000 PE. It also contributes towards the results indicator by providing sampling information on the quality within the catchment for insertion into the models which will be used to show necessary improvement to reach WFD ‘good’ status.		



Please describe activities within work plan 3.			
Activity 3.1	AFBI Desktop Analysis	Start month (02.2016)	End month (04.2016)
	Narrow scale and scope of sampling programme and to gain further background information on catchments.		
Activity 3.2	Reconnaissance of Catchment and Sampling Strategy	Start month (05.2016)	End month (07.2016)
	To reduce programme timescale post planned 'letter of offer' by detailing requirements of logistically difficult and time consuming planning of sampling programmes.		
Activity 3.3	Partner Tender Preparation for Consultancy Support	Start month (03.2016)	End month (07.2016)
	To reduce programme timescale post planned 'letter of offer' by ensuring necessary consultants are appointed as soon as possible in order to deliver the work packages.		
Activity 3.4	3rd Party Evaluation of Models	Start month (07.2016)	End month (10.2016)
	To ensure models are 'fit for purpose' and usually a requirement by the regulatory bodies		
Activity 3.5	Baseline Catchment Sampling	Start month (07.2016)	End month (08.2016)
	To obtain direction for further sub catchment calibration of models and to directly inform the business cases and narrow scope of proposed solutions.		
Activity 3.6	Sub-Catchment Survey and Sampling Planning	Start month (09.2016)	End month (10.2016)
	To plan a sampling strategy to inform the delivery of the modelling phase and to inform capital works.		
Activity 3.7	Intensive Targeted Sampling - Pre-Improvements	Start month (11.2016)	End month (11.2017)
	To set a baseline for quality and to calibrate/validate any existing models at a sub catchment level and to further inform the delivery programme through problem area identification.		

<b>Activity 3.8</b>	Source Apportionment Model Component	Start month (07.2016)	End month (11.2017)
	To enable a trend of the polluter from certain watercourses.		
<b>Activity 3.9</b>	Procurement of Catchment Investigation Phase	Start month (07.2016)	End month (11.2017)
	Procure products/services in line with programme rules.		

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
4	Ecosystem Modelling (refer to PXP for further information)	September 2016	December 2020	3%
Partners' Involvement				
Responsible partner		AFBI		
Involved partners		NIW,IW,LA		
Summary description of the work plan. Specify the Programme result to which it contributes				
Outline key issues, outputs, responsibilities/roles of each partner, risks and risk mitigation approach.				
<p>This work plan covers analyzing various data collected during the catchment investigation for insertion into various modelling tools/platforms in order to simulate the effect of the catchment in response to the hydrological cycle. It will aim to link various types of models in a unique and innovative method in order to simulate all catchment pressures.</p> <p>The key issues with this work plan is the linkage of the various models which is a complex and specialist area. Various tools will be used to simulate the linkages of the various sources of pollution and the differences in software used is another risk identified. Procurement of experienced modelling consultants will help to mitigate against this risk. Programme risk is another key issue as the modelling approach is dependant on outputs of other models (in various states) before scenarios can be run in another. This is raised within the project risk register and will be mitigated accordingly through efficient procurement in line with the programme rules.</p> <p>The PMO will be responsible for managing and ensuring that the catchment studies and modelling remain on programme to ensure capital delivery outputs. Risks and risk mitigation strategies will be managed through the project risk register which is a live working document which is updated through regular risk workshops</p> <p>The models will dictate the various measures in order to reach WFD 'Good' Status and the level of investment required in wastewater assets to meet water quality targets.</p> <p>AFBI are the responsible partner for the modelling packages and the linkages of the models. NIW and IW are responsible for ensuring that the outputs of their drainage area models are delivered in time for insertion into the ecosystem model. Statistical loading models will be used to simulate various asset discharges and this will be done in conjunction with the two water companies, AFBI and external technical consultancy.</p>				
Outputs				
List which programme outputs this work plan delivers or contributes to.		The model will simulate the necessary improvements in order to reach WFD 'Good' Status therefore contributing to the results indicator.		

Please describe activities within work plan 4.			
Activity 4.1	Statistical Loading Models	Start month (09.2016)	End month (11.2017)
	To enable GIS Source Apportionment Models and set baseline for improvements and contribution towards output indicator.		
Activity 4.2	Drainage Area Modelling	Start month (10.2016)	End month (06.2016)
	To obtain spill volumes to enter into ecosystem model.		
Activity 4.3	SWAT Catchment Modelling	Start month (10.2016)	End month (06.2018)
	To enable GIS Source Apportionment Models and to set the most sustainable environmental discharge consents for wastewater assets. The model will be the first of its kind to integrate intermittent sewerage network discharges within the eco-system.		
Activity 4.4	ECOWIN 2000 Marine Modelling	Start month (06.2016)	End month (06.2018)
	To enable full coupling and integration of the models taking cognisance of the catchment as an ecosystem where one intervention impacts another and respective legislation e.g. MSFD, Habitats Directive, priority areas under WFD.		
Activity 4.5	Integrated Ecosystem Model – Further Model Calibration and Maintenance	Start month (06.2018)	End month (12.2020)
	Models are to be maintained and equipment used to inform models must undergo regular maintenance to ensure they are fit for purpose.		
Activity 4.6	Procurement of Ecosystem Modelling Phase	Start month (07.2016)	End month (09.2016)
	Demonstrate value for money to SEUPB and that the most optimised wastewater treatment solution is undertaken to include potential innovative R&D Solutions.		

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
5	Capital Delivery (refer to PXP for further information)	July 2016	December 2021	79%
Partners' Involvement				
Responsible partner		NIW		
Involved partners		IW, AFBI		
Summary description of the work plan. Specify the Programme result to which it contributes				
Outline key issues, outputs, responsibilities/roles of each partner, risks and risk mitigation approach.				
<p>This work plan covers capital infrastructure construction. It combines the project life cycle related to feasibility, design and construction and the business cases undertaken at feasibility stage take cognizance of the operational phase. This work package considers the sustainability of the construction proposals and will use innovative techniques and technologies in order to upgrade assets to improve water quality but reduce the carbon and operational expense of running that asset.</p> <p>There are various key issues related to construction that are specific to each site. These will be identified as solutions are validated in a construction risk register and will be mitigated against as part of the two respective water companies' normal capital delivery procedures. There is a programming risk as specific design details are awaiting model outputs, these are mitigated through having float in the construction programme to accommodate delays but allowing site mobilization at an early date.</p> <p>The capital delivery will deliver the output indicators and positively contribute towards the results indicator.</p> <p>NIW are the responsible partner for the capital delivery, however, Irish Water play a significant role in the capital delivery outputs. AFBI may play a role in the scientific elements of delivery and innovative technologies. Technical consultants will assist in the delivery of the capital delivery phase.</p>				
Outputs				
List which programme outputs this work plan delivers or contributes to.		This workplan will deliver the two output indicators – compliance with the 10,000 PE through the Asset Discharge Improvement and the two sewer network and wastewater treatment projects. It will also positively contribute towards the results indicator.		

Please describe activities within work plan 5.			
<b>Activity 5.1</b>	Business Cases	Start month (10.2016)	End month (07.2018)
	Demonstrate Value for Money and the most optimized wastewater treatment solution is undertaken to include potential innovative R&D solutions.		
<b>Activity 5.2</b>	Land & Statutory Approvals	Start month (07.2016)	End month (07.2018)
	To facilitate construction capital works.		
<b>Activity 5.3</b>	Contractor Procurement	Start month (08.2016)	End month (08.2017)
	To facilitate construction capital works.		
<b>Activity 5.4</b>	Design of Deliverables	Start month (07.2016)	End month (01.2018)
	To facilitate construction capital works.		
<b>Activity 5.5</b>	Design & Build Construction Phase	Start month (08.2017)	End month (12.2021)
	To deliver the output indicators.		

No.	Work Plan Title	Start Date	End date	Estimated % of total project budget allocated.
6	Project close out/legacy (refer to PXP for further information)	July 2021	December 2023	2%
Partners' Involvement				
Responsible partner		AFBI		
Involved partners		NIW,IW,LA		
Summary description of the work plan. Specify the Programme result to which it contributes				
Outline key issues, outputs, responsibilities/roles of each partner, risks and risk mitigation approach.				
<p>This work plan covers the project closing period which will involve another period of sampling and modelling to calibrate and validate the existing model post construction to show the status of the catchment in response to the capital upgrade but also due to other external factors mentioned within the business case and PXP. The project will also undertake a period of self-auditing of the model building at the end of the project and an externally compiled post project evaluation will be undertaken.</p> <p>The key issues with this work plan should be mitigated through work packages 3 and 4 as this is essentially a repeat cycle of the sampling and modelling undertaken during these phases. Therefore the risk is minimized. Any risks that are identified during those phases will remain on the project risk register and be mitigated against as the project progresses through the various risk workshops. Overrun of the construction programme is a risk to this work package which will be mitigated through efficient procurement and delivery of the capital construction phase combined with the inbuilt float in the programme.</p> <p>The legacy models will dictate the various measures in order to reach WFD 'Good' Status, if required and also confirm the Asset Discharge Improvement and the level of contribution towards the results indicator.</p> <p>AFBI are the responsible partner for the modelling and sampling activity within this work package with assistance from LA. LA will be the custodians of the model with AFBI maintaining the model post project. NIW and IW will be responsible for updating their drainage area models for insertion into the ecosystem model in the future.</p>				
Outputs				
List which programme outputs this work plan delivers or contributes to.		The model will simulate the necessary improvements in order to reach WFD 'Good' Status therefore contributing to the results indicator. It will also dictate the scale of success of reaching the 10,000 PE output indicator.		

Please describe activities within work plan 6.			
Activity 6.1	Intensive Targeted Sampling - Post-Improvements	Start month (07.2021)	End month (06.2022)
	The intensive targeted sampling will be repeated post improvements and verification of compliance with the output indicator demonstrated.		
Activity 6.2	Validation of Models - Post-Improvements	Start month (07.2021)	End month (09.2022)
	The data from the post improvement sampling will have to be re-run in the eco-system model to further validate and ensure that it is fit for future use.		
Activity 6.3	3rd Party Evaluation of Models	Start month (10.2022)	End month (12.2022)
	Upon validation of the post improvement models it may be a requirement of the statutory bodies to have an independent third party assessment of the models at project close out, similar to the initial audit.		
Activity 6.4	Post Project Evaluation	Start month (10.2022)	End month (12.2022)
	A post project evaluation of the project will have to be undertaken in order to assess whether the project met its original aims and objectives and was managed in the correct manner.		