



Progress Update for the Ballinderry Local Management Area Plan

November 2011



LMA Action	Progress Update
Organise two CSG meetings per year to provide an open forum for discussion on water issues and encourage involvement in developing and implementing the Ballinderry Local Management Area Plan	Spring Meeting held 18th May 2011, Autumn meeting scheduled for the 10 th November 2011. Presentations and a note of the meeting can be found on http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/catchment_stakeholder_groups
Promote and encourage local projects through WATER Environment Community awards	Awards for 2011 where promoted through CSG meetings, NIEA website and e-mail. The winning entries received £1000 for their environmental improvement projects on 26 th May 2011. The winner from the Upper Neagh Bann CSG area, was the Ballinderry Clean Stream Initiative (Ballinderry River Enhancement Association). Applications for the 2012 WATER Environment Community awards will open on the 16 th of November 2011
Highlight external funding opportunities for water management projects to local partners	Water Environment Community Awards were promoted through CSG meetings, the NIEA website and e-mail. NIEA RBP implementation project funding was highlighted to key stakeholders groups and via CSG meetings
Promote NIEA Water Pollution Hotline through advertising, promotion and signage	The official launch of the LMA pollution hotline signage project took place on 18 th April 2011 with NIEA Chief Executive John McMillan. The allocated 15 signs have been located throughout the Ballinderry catchment in agreement with BREA. The pollution hotline number is promoted frequently by NIEA events, publications and relevant websites
Support pollution prevention campaigns such as NIW's Bag it and Bin it Campaign, Local river clean ups etc.	NIEA support relevant water quality enhancing campaigns by distributing promotional material. A local river clean up initiative was funded in the Ballinderry via the NIEA Water Environment Community Awards
Develop leaflets and articles to promote effective farm nutrient and waste management	'Water Quality Plans in Action' article published in Farming Life. A DARD and NIEA poster featuring local farmer contribution to improving water quality within LMA's has been produced and is displayed in relevant venues
Raise awareness and promote the benefits of effective farm nutrient and waste management	All applicants to DARD agri-environment schemes receive a farm waste management advisory visit as part of their application to the scheme. DARD have produced a Code of Good Agricultural Practice which contains practical management advice on how farm wastes such as silage effluent, slurry and manure can be collected, stored and spread with minimum risk to the environment. DARD have developed an agri-environment training course for farmers dealing with farm wastes and nutrient management planning. NIEA delivered a Water Framework Directive awareness talk to CAFRE students in April 2011
Raise awareness of the issue of pesticide use and disposal. Promote best practice in the use of pesticides on farms.	NIEA, UFU, NIW and CAFRE coordinated a workshop on raising awareness on pesticides at Loughry College on 15th March 2011. Attendees including UFU, NIW, DARD, local stakeholders & farmers, Forest Service, Donegal County Council, AFBI, Voluntary Initiative(VI) members. A working group has been established; membership includes NIW, DARD (Forest Service, Rivers Agency, Countryside Management Branch) UFU, NIEA, DRD Roads Service, A webpage to raise public awareness and provide guidance has been produced: http://www.doeni.gov.uk/niea/water-home/wfd/public_partic_3/pesticide_awareness.htm
Encourage riparian zone management with an aim to improve biodiversity and minimise sedimentation through practical management	A measure within the Nitrates Action Programme is that all farms must carry out crop and soil management to minimise soil erosion and nutrient runoff. This is verified during cross-compliance visits.

measures on farms	
Complete the phosphorus nutrient budget work for Northern Ireland	A project is ongoing to identify nitrate, ammonium and phosphorus loadings in all the major river catchments in Northern Ireland. This includes quantification of inputs from point and diffuse sources. Estimates of the contribution from agriculture and wastewater treatment works to the overall N and P loadings in each catchment will be provided. The project is due to complete early 2012.
Conduct LMA investigative surveys to assess benthic invertebrates	Water Management Unit (WMU) freshwater team sampled 69 additional sites as part of an investigative programme for the Ballinderry LMA. Investigations involved site assessments, kick sampling and invertebrate identification. The sampling was conducted during May and June 2011. A series of river walks was then conducted to investigate and where possible address the factors contributing to declines in biotic scores.
Create inventory of physical structures in the river channel and apply the UK Fish Passability tool to identify selected obstacles which are causing a barrier to fish migration.	An inventory has been established and will continue to develop with input from NIEA staff and stakeholders. BREA completed an assessment of barriers to fish migration in the Ballinderry catchment which assisted in this process.
Raise awareness of the impact of misconnections where they have been identified to be causing deterioration in water quality.	NIEA, have produced and distributed leaflets to raise awareness among householders of misconnections. NIEA are investigating the possibility of working with councils to distribute these leaflets.
NIEA to provide support to relevant actions within the Rivers Involving People, Places and Leading by Example (RIPPLE) Action Plan.	RIPPLE actions supported or provided by NIEA have included provision of 15 waterside signs, attendance at the Banks of the Ballinderry Fair on the 28 th of May 2011, continued support for the establishment and implementation of the AMI pilot and collaboration on an obstacles to fish migration project.
Support effective partnership working, between NIEA and Ballinderry River Enhancement Association (BREA) as the local river trust in the Ballinderry LMA, towards common interests in improving river catchments to bring wider environmental, community and social benefits	NIEA continue to support the establishment and operation of River Trusts in NI including a start up grant, mentoring and advice. NIEA work with BREA to develop and deliver actions which improve the water environment via the LMA plan and RIPPLE project.
Raise awareness of catchment management via relevant press articles and web publications and providing support at local community events.	NIEA participated in the annual 'Banks of Ballinderry Fair' and provided examples of 'good bugs' and 'bad bugs' to allow those attending to assess the water quality of their river. NIEA staff participated in various RIPPLE events. NIEA demonstrated the use of the River Basin Planning Web-mapper at the 2011 Balmoral Show. The first issue of the Ballinderry LMA E-zine was mailed to Ballinderry CSG contacts in May 2011.
Collate existing information on location of aquatic and river bank invasive alien species	During the course of river walks undertaken by NIEA any sightings or suspected sightings of invasive alien species are collated and reported to Invasive Species Ireland
Promote the control of invasive alien species on farmland	NIEA Natural Heritage (NH) have liaised with a range of individuals and groups and provided training and advice in relation to invasive species control. NH have supported the implementation of the RIPPLE action plan in the Ballinderry by working with BREA to raise awareness of invasives and advise on appropriate methods of control adjacent to waterways.
The River Involving People Places and leading by Example (RIPPLE) project are carrying out a community led invasives species control programme	The first RIPPLE invasives control project, The Drumard Control Project, started in 2009. It focused on controlling giant hogweed on the Drumard. This partnership project received funding of £3800 which was used to train 6 volunteers in control techniques and for the purchase of equipment and herbicide. The volunteers have treated the hogweed for a 3 year period. The value of the volunteer time

	<p>commitment to this project would equate to around £11600. The work of the volunteers has resulted in ensuring there are now no flowering heads plants in the main Drumard. The volunteers are now in a position to control any emergent seedlings from the seedbank.</p> <p>The second RIPPLE invasives control project, The Upper Ballinderry Invasives Control Project, covers an estimated 30km of main river and 45km of tributaries. It is a 4 year project with £18400 of funding which will be used to train more volunteers and to purchase the necessary equipment and herbicide. The project focuses on Japanese knotweed, giant hogweed and Himalayan balsam. The area of these invasives species are currently being mapped. Control of the manageable sized areas will be completed by volunteers. Phase II of the project will be to cost the control of the more extensive areas of invasives by specialist contractors.</p>
NIEA to provide support to the BREA Anglers Monitoring Initiative (AMI) - A community led water quality monitoring programme.	The AMI pilot was launched on the 14 th of February 2011. BREA in conjunction with the Riverfly Partnership have trained 22 volunteers who are presently monitoring monthly riverfly populations at 28 sites in the Ballinderry LMA. NIEA have supported the AMI via the setting of trigger levels and providing appropriate response in the event of trigger level breaches. A review of the AMI pilot is scheduled for early December 2011.
Carry out a Rapid Hydro morphology Assessment Technique (RHAT) survey to ground truth an original Heavily Modified Water Body (HMWB) designation on one water body within the Ballinderry LMA	RHAT survey completed by NIEA and a case for de-designation has been recommended in relation to the Ballinderry (Cookstown) waterbody
Identify river remedies and possible options to improve Freshwater Pearl Mussel conditions and enhance recruitment	Catchment walkover surveys have been completed and have assisted in identifying pressures along with desktop surveys and collation of existing relevant data. This characterisation process will form the preparation of sub-basin plans.
Develop action plans for designated Freshwater Pearl Mussel Special Areas of Conservation	The process of preparing sub-basin plans has commenced and the policy and legislative context for such plans has been the subject of reviews within the project.
Assessment of river conditions through research and river surveys to locate sources of sediment	Field surveys have now been completed including FPM macrophyte, phytobenthos, macroinvertebrate and host fish at a number of sites within the catchment. The data from these surveys has been prepared for submission to stakeholder agencies.
Consider site restoration and protection methods to reduce sedimentation and improve habitat for the Freshwater Pearl Mussel.	A benchmarking review has been carried out to identify best practise measures both Nationally and Internationally. Specific measures relevant to the Ballinderry catchment will be identified in the plans and tailored to local pressures and conditions.
Continue support for the BREA Freshwater Pearl Mussel breeding programme	NIEA Natural Heritage are currently assessing a Freshwater Pearl Mussel funding proposal submitted by BREA
Monitor fish populations at selected sites. Review other available fish data.	The fish monitoring of the Ballinderry in 2010 showed the status of fish populations to be moderate in the Rock River and Ballinderry River (Corkhill). Further investigation into reasons for this status is required. An update of fish data from DCAL, AFBI and BREA will be sought in 2012
Targeted education, advice and regulatory action to prevent pollution and protect the water environment	As an integral part of the Ballinderry river walks completed by NIEA any domestic, agricultural, commercial or industrial premises that were suspected of impacting on water quality received targeted advice or regulatory action as appropriate.
Investigate Dissolved Oxygen suppressions	Ballymully River (Slieve Gallion) is moderate for dissolved oxygen A 10km river walk investigation was completed in this waterbody. A number of agricultural pollution problems were identified and rectified which may help improve dissolved oxygen levels.

Investigate ammonia elevations	Ballymully River (Lower) is moderate for Ammonia, Ballymully River (Upper) and Lissan are upstream of this waterbody. A 10km river walk investigation was completed in the upstream Ballymully River (Upper) River waterbody and agricultural pollution problems were identified and rectified which may reduce the impact on ammonia levels.
Assess sources of organic pollution at sites of concern.	<p>Drummard - Agricultural pollution investigated and statutory sample taken and prosecution pending under the Nitrates Directive. Report of poor water quality and fungus investigated and statutory sample taken. Prosecution resulted in fine of £2000. Another prosecution pending.</p> <p>Ballinderry River [Cookstown] - Report of suspended solids investigated and statutory sample taken and prosecution resulted in £800 court fine.</p> <p>Lissan water – Report of agricultural effluent from a pig/poultry unit investigated, statutory sample taken and prosecution pending Commercial premises of concern visited and pollution prevention advice given. An IPRI site within the catchment has a Part A Permit under the Pollution Prevention and Control Regulations (Northern Ireland) 2003. The permit is on the public register and is available to view at Cookstown District Council or the IPRI office in Belfast. There are 5 permitted discharges to the Lissan Water from the IPRI site. The operating IPRI company is required to undertake compliance monitoring of the emissions to water and unannounced check monitoring is also carried out by NIEA. Since approx 2002 the site owners have invested significant amounts of money in upgrading the on-site effluent treatment plant. Following a pollution incident in 2011 an investigation is currently proceeding.</p> <p>Kingsmill – this waterbody may be subject to agricultural pressures and a catchment scale investigation is planned for 2012</p> <p>Rock River – agricultural and commercial premises of concern visited and appropriate action taken</p> <p>Claggan Water (Skea Bridge) - this waterbody may be subject to agricultural pressures and a catchment scale investigation is planned for 2012</p> <p>Gortin Water - report of agricultural effluent was investigated, no signs of pollution were found during the visit but poor invertebrate life was noted.</p>
Targeted river walk surveys to investigate cause of biotic score depression. River walk should determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus.	<p>Approximately 36km of river stretches were investigated within the Ballinderry LMA:</p> <p>Lissan water; 2.5km stretch at Little Bridge, Ballyloughan, Coagh</p> <p>Lissan water; 1.8km stretch at Lismoney, Cookstown. No visible signs of pollution</p> <p>Rock River; 3km stretch above and below Loughbracken Road, Pomeroy</p> <p>Drummard; 12km stretch upstream of Tirnaskea Bridge</p> <p>Ballymully River (Upper); 10km stretch upstream of Churchill, Carrydarragh</p> <p>Ballymully (Slieve Gallion); 4.7km stretch above beech hill</p> <p>Ballinderry River (Cookstown); 5.2km stretch up and downstream of the Fairy bridge partially investigated in 2011 and is planned to be completed in 2012</p> <p>Results from the investigations included, 3 Industrial premises visited and given pollution prevention advice, 2 unconsented premises visited and consent applied for, 3 septic tanks problems identified and consents obtained, 3 statutory samples taken with a view to prosecution, 3 agricultural cross compliance visits and 2 Waste Water Treatment Works (WWTWs) targeted for inspection.</p>
Conduct river walk longitudinal survey to investigate possible causes of invertebrate	Water Management Unit (WMU) sampled 69 additional sites as part of an investigative programme for the Ballinderry LMA. The LMA biotic scores investigations, conducted NIEA – WMU showed depressed

suppression including agricultural and urban runoff. River walk should determine and address sources of organic pollution affecting benthic invertebrates and resulting in low biotic scores and/or observed sewage fungus.	biotic scores in the both the Kingsmill River and Claggan River waterbodies. These are planned to be investigated in 2012
Target Pollution Prevention advice to industrial premises and investigate any unconsented industrial discharges. Where required ensure Water Order consent is obtained.	This action applied to the Ballinderry River [Cookstown] waterbody. 2 unconsented premises were identified, visited and consents applied for.
Carry out compliance assessment of Moneymore WWTW to form future upgrades	An inspection has been carried out on Moneymore WWTWs in 2010 and was found to be compliant with the Water Order Consent. The works has since had 2 new Rotating Biological Contactors and an additional final settlement tank added. The Water Order Consent was reviewed in Feb 2011 to take account of these changes.
Investigate downstream impacts of Pomeroy road WWTW and review performance if necessary.	This small works has been upgraded and is compliant.
Visual inspection of Corvanagh and Tulnacross WWTW's to inform future upgrades	Corvanagh and Tulnacross are small WWTWs which are scheduled to be inspected in 2012
Investigate impact of forestry operations within forestry management units within the Ballinderry LMA.	The total area of Forestry land within the Ballinderry is relatively small and its impact on water quality in planned to be investigated next year.
Investigate the impact of quarrying activities	The Ballinderry LMA is a heavily quarried catchment. NIEA regulate, inspect and monitor quarry discharges as appropriate.
Investigate gravel and sand extraction activities to the south of Cookstown and take appropriate regulatory action where appropriate.	This action applies to the Ballinderry River [Cookstown] waterbody. NIEA regulate quarrying activities and take regulatory action where appropriate.
Investigate the impact of Gammarus Pulex on river ecology in affected tributaries	This action applies to the Ballinderry River (Ballinderry/Coagh) waterbody. Research to investigate the impact of Gammarus Pulex on river ecology has been conducted by Queens University, Belfast

If you are running a project or carrying out work that will assist in protecting the water environment let us know by contacting Eileen Mallon, Catchment Management Officer for the Ballinderry by e-mailing eileen.mallon@doeni.gov.uk or by telephone 9263 34442

If you become aware of a water pollution incident please call the Water Pollution Freephone Hotline in confidence with the location of the pollution incident and the nature of the pollution