Conservation, protection and assessment of the fish populations and aquatic habitats are presented for 2011. The series of catchment status reports has been streamlined in 2012 to facilitate quicker reference to contemporary information. Additional information can be found in associated publications and previous status reports available on the Loughs Agency website.
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1.0 INTRODUCTION

The Loughs Agency series of catchment status reports outlining information collected and actions completed during 2011 have been restructured for reporting in 2012. It is anticipated that this will facilitate the same level and diversity of information dissemination provided in previous years while directing interested parties to more detailed sources of information available in other Loughs Agency publications. More detail on any of the topics included in this report can be found in previous status reports available on the Loughs Agency website.

The joint themes for the 2012 series of catchment status reports are wild trout conservation and littering. Both of these contemporary issues are of great significance to the ongoing conservation and protection of our aquatic and riparian habitats and are important issues when attracting and informing responsible users to the local area.

In 2011 the Loughs Agency has continued to participate in innovative ways to tackle the growing problem of littering. The “throw away” society has resulted in rivers acting as major conduits for discarded materials from varied sources. On their journey downstream these discarded items catch on trees and other vegetation resulting in both visual and unseen impacts upon our biodiversity and water quality.

During 2011 the Loughs Agency in Partnership with Causeway Coast Kayak Association, Limavady Borough Council, Strabane District Council and Roe Angling Association conducted canoe and bank based river clean ups at key locations throughout the river corridors of both the River Roe and Glenelly River. Over three tons of mixed rubbish was removed during these two river clean up events. While the Loughs Agency does not have a legislative remit to tackle the issue of littering it is eager to encourage a partnership approach to tackling this key issue.

Within the Foyle and Carlingford areas the conservation of wild trout populations is of ever growing importance. Rod catch returns have shown a marked decline of Sea trout over recent decades. The Loughs Agency has been working with local partners in 2011 to monitor populations of brown trout and sea trout to collect information which can be used to develop conservation and
protection programmes. Targeted monitoring programmes have been ongoing within the Derg catchment, Burndennet catchments, Inishowen and Lough Foyle tributaries. This is in addition to ongoing annual electrofishing surveys which record the abundance and distribution of trout throughout the Foyle and Carlingford areas.

The Loughs Agency promotes responsible use of the valuable aquatic resources of the Foyle and Carlingford areas. The protection of these resources can only be achieved through effective collaborative partnerships. If your organisation is interested in participating in “hands on” action please contact the Loughs Agency to discuss possible partnership development.
2.0 ATLANTIC SALMON STOCKS SUMMARY

- There were no net fisheries pursued for Atlantic salmon in the Foyle area in 2011. This is due to the continued failure of the River Finn to meet its conservation limits as outlined under the Foyle Area (Control of Fishing) Regulations 2010. Angling is permitted in the River Finn and River Foyle on a catch and release basis only.

- Total declared Atlantic salmon rod catch for the Foyle and Carlingford area was 3533. Total declared rod catch for the Camowen catchment was 158. Voluntary catch and release for the Foyle and Carlingford areas was 28% and 44% for the Camowen catchment.

- Returning adult Atlantic salmon counts derived from an electronic fish counter on the River Mourne were 1342 salmon/grilse in 2011. This compares to a 5 year average of 3856.

- Spawning redd counts for the Foyle area were 1313 in 2011 with 48 redds recorded within the Camowen catchment.

- Juvenile electrofishing surveys within the Camowen catchment at 43 standard sites recorded an average of 13 salmon fry (Young of Year).

Loughs Agency
Management Strategy for Atlantic Salmon

The Loughs Agency uses an audit point management system for monitoring the populations of Atlantic salmon within the Foyle and Carlingford areas. Population estimates and indices are derived for various life history stages including adult counts from electronic fish counters situated at key locations, spawning redd counts, juvenile electrofishing indices, rod catch and commercial net catches.

Numbers of Atlantic salmon stocks particularly grilse (1SW fish) from southern populations of north east Atlantic stocks are currently at a low point. International research has highlighted climate change and marine ecosystem change as potential causes for this observed decline. The Loughs Agency is working with colleagues at regional, national and international levels to understand this decline and to implement best practice conservation actions.
2.1 NET FISHERIES

Net fisheries have not been operated in the Foyle area since 2009 (Figure 1). The Foyle Area (Control of Fishing) Regulations 2010 provides various mechanisms for regulating both commercial and rod fisheries for salmon including under Section 3. (1) The Commission shall make a declaration.....if it is satisfied that...... (d) the number of salmon which have migrated upstream of the River Finn fish counter during each of any two of the previous five calendar years has not exceeded 5,410. A declaration under this shall..... (d) in the case of sub-paragraph (d), suspend netting in the River Foyle, Lough Foyle and seaward of Lough Foyle and restrict angling in the River Finn to angling on a catch and release basis only from the date and time specified in the declaration....The Commission can make the relevant declaration ending the suspension of netting and restriction on angling if it is satisfied that the number of salmon migrating upstream of the relevant counter during each of any four of the previous five calendar years has exceeded the number of salmon for that river.

Fig 1. Total commercial catch 1952-2009 and 5 year average total commercial catch.
2.2 ROD CATCH

Total reported rod catch returns were 46% in 2011 (Figure 2). A total of 3533 salmon/grilse were caught in the Foyle and Carlingford areas in 2011 (Figure 2 & 3). 158 salmon and grilse were reported caught in the Camowen catchment (Figure 4). Salmon/Grilse voluntarily caught and released were 28% in the Foyle and Carlingford area and 44% in the Camowen area.

Trends in rod catch have generally increased over recent years. This is largely due to a number of factors including an increased number of rod licenses being issued and a higher % of returns being made (Figure 2). **It is your legal obligation to make an accurate and timely rod catch return.**

There are a number of important reasons for making rod catch returns.

- How many fish were caught in **YOUR RIVER OR LAKE**?
- What % of fish were caught and released in **YOUR RIVER OR LAKE**?
- Is catch and release increasing?
- What species were caught?
- Essential for developing sustainable fishery management policy
- Screening of future developments (roads, hydro etc.) against fishery interests.
- An important tool for assessing strength of runs
- Aids with developing access and infrastructure (stiles etc)
- It is required by law that all rod licence holders make an accurate catch return
- Facilitates long term trend monitoring
- Participate in the management of your river (doing your bit)
- At a time of reduced marine survival for Atlantic salmon accurate information is essential for sustainable management
- Aids in ensuring good decision making so that future generations can enjoy the sport of fishing
- Ensuring that all species caught are sustainably managed now and in the future

**An unreported fish is a wasted opportunity, for economic development, for conservation, for protection of our fishery resources, for education and for future generations.**
Fig 2. Loughs Agency reported and corrected rod catch with % returns made

Fig 3. Reported rod catch for salmon/grilse in the Loughs Agency area and 5 year average.
2.3  **FISH COUNTERS**

The Loughs Agency operates a network of electronic fish counters throughout the Foyle and Carlingford areas to monitor the migration of Atlantic salmon into freshwaters. The counters are used to assess the attainment of conservation limits and management targets for key catchments.

In 2011 the Mourne fish count as recorded by the electronic fish counter was 1342 with a 5 year average of 3856 (Figures 5 & 6). The management target for the Mourne and upstream is 8000 and the conservation limit is 6400.

A fish counter has been installed on the River Strule in Omagh. It is a partial counter installed on a central fish pass on a horse shoe weir. In 2011 a counter was installed on a fish pass at the bottom end of the Camowen catchment in Omagh. This is also a partial counter installed on a section of a weir.
Fig 5. River Mourne annual fish counts. *Note variation in equipment over this period

Fig 6. River Mourne monthly fish counts
2.4 REDD COUNTS

Atlantic salmon redds (spawning nests) are counted on an annual basis and have been shown to be a good indicator of returning population size. Annual redd counts and the 5 year running average are displayed in Figures 7 & 8. In 2011 there was a total count of 1313 redds with a five year running average of 3459. 48 redds were recorded in the Camowen catchment in 2011/12. It should be noted that there was poor redd counting conditions in 2011/12.

Figure 7. Annual redd counts and 5 year running average

Figure 8. Recent redd count data for the total Foyle area and Camowen catchment
2.5 JUVENILE ABUNDANCE/ELECTROFISHING SURVEYS

Juvenile Atlantic salmon abundance is measured on an annual basis by following a standardised procedure (Crozier and Kennedy, 1996). A fixed number of sampling stations are monitored using this semi-quantitative (5 minute timed) electrofishing methodology. Over many years an index has been developed to show trends for individual catchments (Figures 9 & 10). In 2011 the mean number of salmon fry (young of year) recorded at 43 standardised monitoring stations within the Camowen catchment was 13.

Fig 9. Camowen salmon fry electrofishing index

Fig 10. Foyle area salmon fry index comparison chart 2011 *the number of standard monitoring stations varies between catchments
Fig 11. Camowen salmon fry electrofishing classification
2.6 MARINE SURVIVAL

Marine survival continues to be of significant concern throughout the southern range of Atlantic salmon in the North East Atlantic. The nearest monitoring station to the Foyle area which provides robust survival data to the International Council for the Exploration of the Seas Working Group on North Atlantic Salmon is the River Bush in Co Antrim. Marine survival rates for One Sea Winter (1SW) grilse pre the mid 1990’s was around 30%, in recent years this has fallen to extremely low levels with a marine survival rate of only 2.6% for the 2010 cohort returning to the river in 2011, this is the lowest on record. Multi Sea Winter (MSW) Atlantic salmon appear to be doing slightly better. The international SALSEA Merge project investigating the marine portion of the Atlantic salmon’s life cycle reported in 2011. Further information can be found at [http://www.nasco.int/sas/salseamerge_documents.htm](http://www.nasco.int/sas/salseamerge_documents.htm) this will provide a firm platform on which to develop future salmon management strategy at an international level that takes into consideration the complex lifecycle of Atlantic salmon and its place within both freshwater and marine ecosystems.

2.7 DISCUSSION

As outlined above Atlantic salmon have a complex lifecycle which can be impacted upon by many factors. The impacts cannot always be quantified making it difficult to accurately estimate the number of returning adult salmon/grilse to our rivers each year. An analysis of cohort/age class strength throughout its lifecycle from egg to spawning adult is complicated by numerous factors. These include varying egg survival rates, differing age at smolting, marine survival rates, time spent at sea/age at spawning and number of spawning migrations made.

It is extremely difficult to infer from one life history stage or stages what the strength of any returning cohort will be. This is currently exacerbated by extremely low marine survival rates possibly as a result of altered marine food webs and oceanic prey distribution all in the context of climate change.

In the table below a simple example is given to outline this complexity assuming that the dominant life history of Foyle salmon is followed.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>ROD CATCH</th>
<th>REDD COUNT</th>
<th>ELECTROFISHING INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>25</td>
<td>660</td>
<td>N/A</td>
</tr>
<tr>
<td>2003</td>
<td>16</td>
<td>571</td>
<td>N/A</td>
</tr>
<tr>
<td>2004</td>
<td>16</td>
<td>798</td>
<td>N/A</td>
</tr>
<tr>
<td>2005</td>
<td>84</td>
<td>1072</td>
<td>9</td>
</tr>
<tr>
<td>2006</td>
<td>26</td>
<td>303</td>
<td>16</td>
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<td>54</td>
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</tr>
<tr>
<td>2010</td>
<td>135</td>
<td>494</td>
<td>9</td>
</tr>
<tr>
<td>2011</td>
<td>158</td>
<td>48</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 1. Camowen catchment Atlantic salmon/grilse statistics 2002-2011

Cohort analysis on the short time series of data above demonstrates that the strongest returning cohort (as inferred from rod catch) recorded in 2010 produced a below average redd count. When this cohort was followed through to the following summer it produced the second highest number of juvenile salmon contained in the time series.

The weakest returning cohort (as inferred from rod catch) for the short time series from 2004 produces an above average redd count. When this cohort is followed through it produced an above average number of juveniles in the following summer.

In 2011 rod catch was 158. There was a low redd count in 2011 due to poor redd counting conditions with peak spawning time dominated by high water. Juvenile electrofishing surveys in 2012 will provide information on the strength of the next cohort.
3.0 TROUT STOCKS SUMMARY

- In 2011 total declared Sea trout rod catch for the Foyle and Carlingford area was 315. Total declared rod catch for the Camowen catchment was 0.

- In 2011 juvenile electrofishing surveys within the Camowen catchment at 43 standard sites recorded an average of 8 trout fry.

- Sea trout stocks have declined significantly in the Foyle area over recent decades with most recent rod catches being the lowest on record.

- Similar declines in sea trout stocks have been observed in other parts of Ireland and the west coast of Scotland. Diverse reasons for population declines have been proposed and are currently being investigated.

- The Loughs Agency will be implementing a sea trout research project in 2012 which will monitor local sea trout populations.

- Ongoing brown trout monitoring projects will continue in 2012 including a brown trout radio tracking study of the Lough Derg wild brown trout population.

Development of a Loughs Agency Trout Management Strategy

During 2011 the Loughs Agency consulted with stakeholders on the development of a trout strategy. The draft strategy contains 19 policies which relate to six main areas:

- Habitat improvement
- Exploitation
- Stock management
- Barriers to migration
- Culverting
- Water abstraction and impoundment

At present Loughs Agency monitor stocks of trout in a number of ways including analysis of rod catch data, and juvenile electrofishing surveys. During 2011 a sea trout monitoring programme was instigated on a tributary of the Burndennet and the Lough Derg Wild Trout Conservation Project continued with the Loughs Agency working in partnership with Pettigo and District Angling Association.
3.1 ROD CATCH

Sea trout are a prized quarry in both the Foyle and Carlingford areas but display very different life history strategies to both the resident brown trout and Atlantic salmon. Rod catch provides one of the key “audit points” for the management of this species. Declared rod catch has highlighted the significant declines over recent decades. It should be noted that sea trout populations fluctuate greatly and like many wild populations of animals they are prone to boom and bust cycles.

Over the duration of the decline in sea trout populations various reasons for the decline have been suggested including spawning habitat loss, barriers to migration, increased numbers of sea lice due to salmon aquaculture, natural population fluctuations, inshore marine ecosystem change, over fishing, pollution of key spawning streams etc. All of these will have impacted the Sea trout populations to some extent. Within the Foyle area Sea trout average weight tends not to exceed 2-3 lbs with larger specimens being quite rare. In the Carlingford area Sea trout are considerably larger with average weight somewhere between 5-8lbs with larger double figure specimens encountered from time to time. The difference between west and east may be down to the quality and availability of suitable prey species. Irish Sea populations of Sea trout tend to be much larger and may be indicative of less impacted prey species populations. A parallel could be made between documented north coast of Ireland sea bird populations and Irish Sea populations, with Irish Sea populations doing better because of better availability of prey species. North coast of Ireland sea bird populations have been in decline over recent decades, in parallel with the plight of Sea trout.

In the Foyle and Carlingford area the minimum size for retaining a Brown trout or Sea trout is 25.4cm. All Sea trout over 40cm must be tagged and there is a bag limit of 1 Sea trout per day, up to a maximum of 5 during the period from the start of the season to 31st May. A bag limit of 2 Sea trout over 40cm per day applies from the 1st June to the end of the season up to a maximum of 20. There is also a daily bag limit of 4 Brown trout or Sea trout of 40cm or less in length throughout the season. Stricter club/association rules may apply.
Within the Foyle area there is generally a geographic north south divide with sea trout dominant in the northern catchments and brown trout dominant in the southern catchments. Historically the northern catchments and their associated small streams provided excellent spawning and nursery habitat and when associated with high densities of salmon may have been a major reason for seaward migration of juvenile trout in search of prey and less competition. The southern catchments still hold good populations of resident Brown trout with significant angling development potential. These populations however are more susceptible to pollution events. Figures 11, 12 & 13 outline Sea trout rod catch for the Foyle and Carlingford areas and for the Camowen catchment.

Fig 12. Loughs Agency reported and corrected rod catch (Sea trout) with % returns made
Fig 13. Reported rod catch for Sea trout in the Loughs Agency area and 5 year average.

Fig 14. Camowen/Drumragh Reported Sea trout rod catch and 5 year average
3.2 JUVENILE ABUNDANCE/ELECTROFISHING SURVEYS

As for juvenile Atlantic salmon Trout abundance is measured on an annual basis by following the same standardised procedure (Crozier and Kennedy, 1996). A fixed number of sampling stations are monitored using this semi-quantitative (5 minute timed) electrofishing methodology. Over many years an index has been developed to show trends for individual catchments (Figures 14 & 15). In 2011 the mean number of trout fry (young of year) recorded at 43 standardised monitoring stations within the Camowen catchment was 8.

![Graph showing average fry count per 5 minute fishing over years 2005 to 2011]

**Fig 15. Camowen trout fry index**

![Graph comparing trout fry index across different catchments for 2011]

**Fig 16. Foyle area trout fry index comparison chart 2011 *the number of standard monitoring stations varies between catchments**
Fig 17. Camowen Trout fry classifications
3.3 DISCUSSION

At present rod catch and juvenile electrofishing surveys are the two monitoring programmes conducted annually on Trout populations within the Foyle and Carlingford areas. In order to extend the baseline of information future expansion of the monitoring programmes could include the development of a Trout redd index on key tributaries. This would facilitate the analysis of trends over time and the effects of any remedial works. Adult Sea trout electrofishing surveys could also be conducted to gain key biological information which could assist with regulating catch size. The Camowen catchments provides significant habitat for trout. Within the Camowen catchment there is competition with Atlantic salmon for feeding territories. While both species have slightly different habitat requirements at times they do overlap. The general trend in the Camowen is that salmon dominate the main stem and swifter water while trout dominate the smaller tributaries. Where salmon are absent trout dominate throughout. The southern zone including the Camowen catchment is of great significance as major salmon fisheries but equally as important provide wonderful wild trout fishing opportunities throughout.

Ongoing monitoring is essential for the development of appropriate and contemporary regulation of the rod fishery.
4.0 SUMMARY OF OTHER SURVEYS AND FISH STOCK ASSESSMENTS

- Eight Water Framework Directive fish surveillance monitoring stations were surveyed within the Foyle area in 2011. One was within the Camowen catchment.

- The Camowen WFD fish site was classified as good for fish. Further details can be found in the 2011 WFD Fish Surveillance Report on the Loughs Agency website under the publications section www.loughs-agency.org

- A walkover survey (Phase 1 approach) was conducted on the Drumnakilly Burn to identify possible sites for habitat improvement works. The survey highlighted a heavily impacted stretch of the Burn which would benefit greatly from some riparian and in-channel improvements. Trampling of land adjacent to the burn and lack of fencing has resulted in a heavily poached bank which is acting as a locally significant source of sediment. The channel is otherwise in good condition.

- It was proposed that the Drumnakilly Burn would provide a good opportunity for the Strule Rivers Trust to drive forward a habitat improvement project in their own name.

Additional Surveys and Fish Stock Assessments

Fish stock assessments are an extremely important part of fishery management. They provide the information on which to develop policy and to implement appropriate legislation and regulation to ensure future sustainable management.

During 2011 additional fish stock assessments were conducted for Water Framework Directive fish monitoring purposes. A multi method survey approach was used to monitor the main channel of the Camowen River at the lower end of the catchment in Omagh.

Quantitative electrofishing was not possible due to the width and depth of the site so a combination of electrofishing over a defined area, seine netting and fyke netting was conducted. The three survey methods used provided a good indicator of the species abundance and age classes present.
In 2011 the Loughs Agency continued to meet its obligations under a raft of national and international legislation. In addition to meeting its statutory duties the Loughs Agency plans its monitoring works to best inform current and future policy development and to deliver on conservation and protection targets as outlined in the Loughs Agency Corporate and Business Plans. In 2011 in addition to the collection of standard annual audit point fishery management information surveys were conducted on fish populations for WFD monitoring purposes and to monitor the potential for habitat improvement works on the Drumnakilly Burn.

4.1 WATER FRAMEWORK DIRECTIVE FISH MONITORING

The WFD is a key piece of European environmental legislation designed to facilitate improvements in our aquatic environments. The Loughs Agency under the guidance of the Northern Ireland WFD Fish Group is responsible for fish monitoring within the Foyle and Carlingford areas. This involves the monitoring of 24 surveillance monitoring stations on a rolling six year basis. Quantitative electrofishing is the preferred method where possible and the data collected is used to derive a fish classification which is then combined with the results from other monitored parameters to create an overall surface water body classification. This ranges from High Ecological Status through Good Ecological Status, Moderate Ecological Status, Poor Ecological Status to Bad Ecological Status. The target set by the WFD is that all water bodies must reach Good Ecological Status by 2015. In 2011 the Loughs Agency monitored eight surveillance stations within the Foyle area with one in the Camowen catchment. The sample data below is for the Camowen station.
Fig 18. Fish caught at Camowen WFD surveillance station 2011

Salmon 0+ Salmon 1+ Trout 0+ Trout 1+ Eel Lamprey Minnow Gudgeon Stone Loach

0 10 20 30 40 50 60
Number of Fish

Species

Fig 19. Length weight relationship of salmon n = 73 caught using multi method approach

\[ y = 2 \times 10^{-5}x^{2.8907} \]

\[ R^2 = 0.9905 \]
4.2 PHASE 1 HABITAT IMPROVEMENT SURVEY ON THE DRUMNAKILLY BURN

A walkover survey was conducted on the Drumnakilly Burn in July 2011 to identify potential sites for a habitat improvement project to be conducted by the Strule Rivers Trust. The findings and recommendations from the survey were given to the Strule Trust Directors at a Strule Trust meeting held at Loughs Agency HQ in July 2011.

A phase one approach was used to identify potential sites for improvement works. This involved a desk based query of the Loughs Agency GIS overlaying many data sets held by the Loughs Agency including habitat survey data, electrofishing data, redd count data, impacts data and an understanding of the genetic structure of Foyle salmon.

Pro forma documentation was completed onsite to provide the basis for developing a detailed specification for improvement works. Initial discussions with the landowner highlighted an interest in facilitating the scheme pending further information.

The major impacts highlighted at the site was unrestricted access to the watercourse leading to heavy trampling of the bank and introduction of fine sediment to the watercourse including spawning substrate.

This improvement proposal should be classified as of high importance due to the extent and nature of the ongoing issues. The information below highlights the impacts encountered.
4.0 WATER QUALITY SUMMARY

- 94 sites were monitored in the Foyle and Carlingford areas for water quality parameters during the summer of 2011.

- 6 sites were monitored in the Camowen catchment.

- Ammonia results were classified as very good for all sites monitored in the Camowen catchment.

- 4 out of 6 sites on the Camowen were classified as good for BOD, 1 classified as fair and 1 classified as poor.

- Phosphorous results were classified as favourable for all sites.

- Suspended solids were classified as favourable for nursery conditions for 2 sites and Acceptable for migratory passage for the remaining 4 sites.

The Importance of Monitoring Water Quality

The Loughs Agency conducts proactive and reactive pollution investigations within the Foyle and Carlingford areas. As part of this approach the Loughs Agency conducts a seasonal water quality monitoring programme. All results are collected and analysed by Loughs Agency staff at Loughs Agency facilities.

Key chemical and biological parameters including macro invertebrate monitoring, Biological Oxygen Demand (BOD), suspended solids, ammonia and phosphorous are monitored on a monthly basis during summer.

Results are available for all parameters monitored within 5 days and any follow up action can be conducted immediately.

Rivers and lakes are important habitats for varied biodiversity including fish. The Loughs Agency monitors water quality during the sensitive summer period to inform investigations.
Fig 20. 2011 Ammonia classifications
Fig 21. 2011 BOD classifications
Fig 22. 2011 Phosphorous classifications
Fig 23. 2011 suspended solids classifications
6.0 CONSERVATION AND PROTECTION

SUMMARY

- In 2011 within the Camowen catchment there were 86 patrols.

- There were 94 angling license checks within the Camowen catchment in 2011.

- There were 17 joint patrols in the Camowen catchment in 2011 with local angling association personnel.

- There were 66 site/premise visits within the Camowen catchment in 2011.

- In channel and riparian habitat improvements were conducted on the Granagh Burn and the Ballinamullan Burn tributaries of the Camowen River.

- 1 rod was seized in the Camowen catchment in 2011.
6.1 CREW REPORT ON 2011

There were some minor agricultural pollution discharges in the Camowen catchment during 2011. There were also some sewage discharges during the year. There were also a few suspended solids/sand wash discharges into the river; one of these in the Drumnakilly Burn was quite significant and is currently being prepared for court proceedings.

Loughmacrory was designated as an A.S.S.I. during 2011 (or was it 2010?) We are liaising with the newly formed Loughmacrory and Murrins District Angling Association in protecting the wild brown trout stocks in the area.

There was a significant habitat and enhancement scheme carried out on the mid-section of the Ballinamullan Burn during 2011. This included the installation of habitat units to include holding, spawning and nursery. Spawning gravel and nursery stone was imported to the site. This scheme also included bankside revetment to address erosion issues, and fencing off the riparian zone. The total cost of this project was £27,960.

There was also a scheme carried out in the Granagh Burn, which was a continuation of a scheme carried out in that area in 2010. This scheme consisted of bank protection and the installation of nursery habitat units in the lower stretches of the Granagh Burn. This was carried out in conjunction with the riparian landowner, who shared in the cost of the scheme by paying all the machine costs for installation of the work. The total cost of this scheme was £4,305.60.

There are areas within the Camowen catchment which would benefit greatly from habitat enhancement schemes. It is hoped to highlight some of these sites with a view to carrying out work in 2012.

Rivers Agency has proposed drainage works on the Cloghfin River for 2012. The Agency will be working closely with them to ensure any works do not have an adverse effect on fish stocks or habitat.
7.0 CATCHMENT INITIATIVES

Integrated catchment management planning can only be delivered through the development of true partnerships between statutory and non statutory partners. An understanding of desired outcomes and methods of delivery is essential in matching requirements and expectations to actions.

Exemplar catchment management planning is an iterative process developed and refined over time between parties who have fostered and developed productive working relationships.

Environmental legislation in tandem with societal requirements dictates that steps are taken to improve our natural habitats. From an aquatic perspective the Water Framework Directive is the key driver towards integrated management of our aquatic environments. The Loughs Agency acknowledges this and is eager to encourage participatory approaches as a way to effectively and efficiently meet challenging objectives.

In 2012/13 and beyond the Loughs Agency will aim to engage local stakeholders in participating in river corridor litter picks, the development of habitat improvement works and trout monitoring programmes. We will also facilitate wider stakeholder engagement through participation in the CIRB invasive species project aimed at controlling Invasive Non Native Species and in supporting stakeholder events by providing premises for events.

If you are a member of an organisation which may be interested in working on collaborative conservation and protection projects within the Camowen catchment please contact art.niven@loughs-agency.org to discuss potential projects.
8.0  ACTIONS FOR 2012/2013

- Facilitate the swift development of the Strule Rivers Trust in 2012 and the implementation of recommended habitat improvement projects.

- Implement actions from the Trout Strategy once fully adopted

- Conduct annual audit point monitoring programme

- Conduct habitat improvement projects

- Conduct water quality monitoring programme

- Organise a river clean up event and engage stakeholders in collaborative projects

- Continue to screen all planning applications within the Camowen catchment for potential impacts to the fishery and aquatic resources

- Continue to maintain the high standards of conservation and protection within the Camowen catchment

- Target all areas/individuals brought to Loughs Agency attention

- Conduct annual fish population surveys and spawning surveys

- Conduct ongoing pollution monitoring and investigate areas highlighted as being of concern

- Develop potential habitat improvement projects including riparian buffer zone creation, fencing, native species planting and in-channel habitat improvements including spawning bed and nursery habitat improvement
• Monitor forestry operations adjacent to watercourses or areas likely to impact on watercourse

• Assist with Water Framework Directive fish monitoring programme

• Monitor all sand and gravel extraction sites and onsite water management practices

• Ensure all fish passes, dams and mill races meet required standards

• Monitor existing and proposed hydro schemes