



River Basin Management Planning

Highland Advisory Group Update

February 2017

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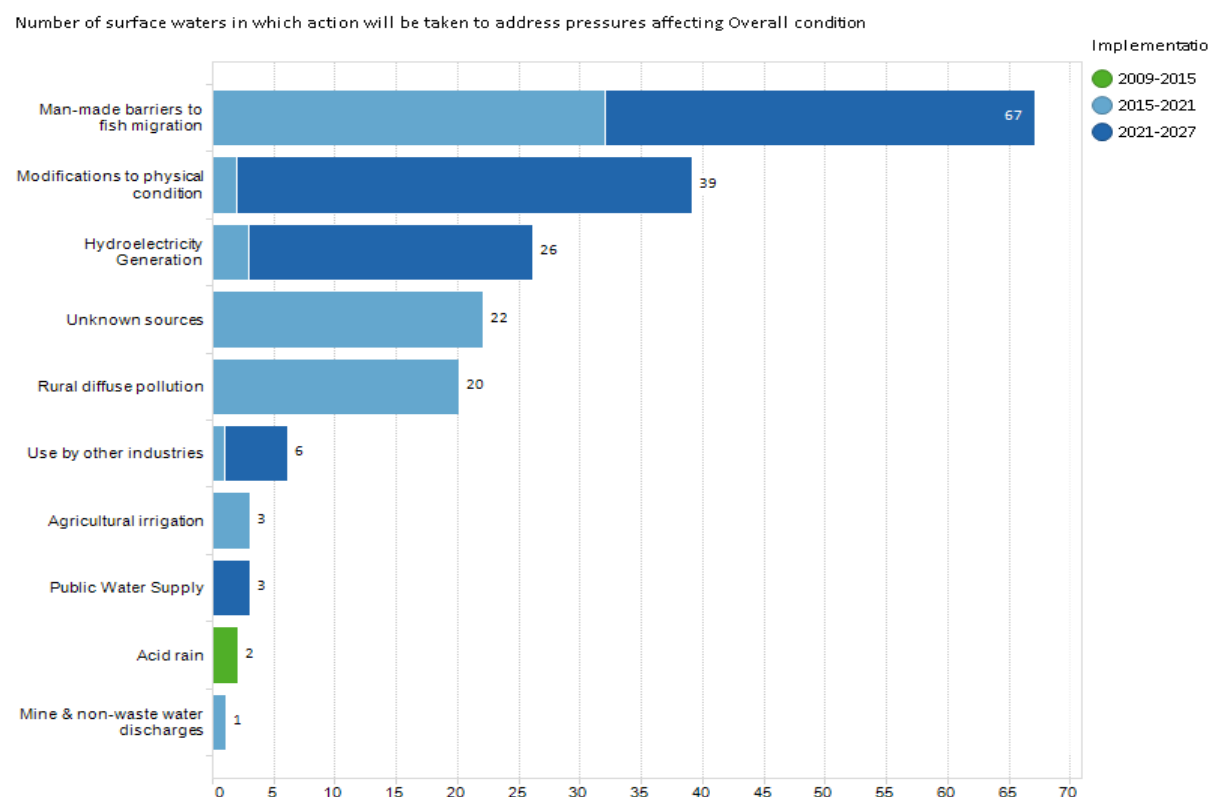
1. Area Update

The main pressures affecting the water environment in Highland are associated with barrier to fish migration. The abundance of barriers means they have had to be prioritised for resource planning, cycle 2 will address the ones having the most severe impact, and cycle 3 will address the rest. These barriers are often associated with activities such as water abstraction for hydro, or associated with assets such as road culverts, more information about how we are tackling barriers can be found in the [delivery updates](#) below.

Modifications to the physical condition are another major pressure within the Highland area but with nearly all the objectives set for cycle 3. The majority of these waterbodies are in rural areas and appear to have been straightened, there are also extensive embankments on low lying land, culverts and bank reinforcements to protect infrastructure such as roads. Our classification, to date, has also used limited data such as aerial footage. During 2015-16 an extensive programme of walkover surveys was undertaken across Scotland to map these pressures. The data has been collated and is currently being processed to better inform the true extent of the changes and impacts on these waterbodies before we develop measures to improve them. The classification of these waterbodies will be updated accordingly.

The graph below shows the types of pressures and when the measure will be tackled (for the Highland Council boundary).

Graph 1: Extract of RBMP2 objectives from the [water environment Hub](#)



Impacts from hydropower, where water abstractions reduce the extent, quality, diversity and connectivity of the water environment, are also an issue in Highland. Most of these objectives are set back to the third cycle, 2021 – 2027. This is because we need to gather more information to provide confidence in the classification. Measuring the ecological effect of changes to flow is still relatively new (compared to the effects of pollution, for example). Work is underway during this cycle to develop tools to improve the confidence in classification and understand the impacts of the altered hydrology and so we understand what measures are needed to bring these waterbodies up to “Good ecological potential”.

The pressure listed as “unknown” cannot be attributed to a single sector and may be impacted by multiple pressures from diffuse and point source pollution, for example sewage discharges and agricultural land use impacts. SEPA are conducting further investigation during the second cycle to determine the reason for the downgrade.

We are keen to maintain a network of stakeholders with an interest in helping to protect and improve the water environment. If you would like to suggest additional members who you think would be interested to be kept informed of RBMP progress please let me know via; NHighlandAAG@sepa.org.uk

2. RBMP data – where to look for what you need?

[The Second River Basin Management Plans](#) were published using 2014 classification data. All of the information for both of the plans, Scotland and Solway Tweed districts, can be found in the [Water environment hub](#). It provides information on each waterbody, pressures, measures and the targets that we have set.

The 2015 classification data has now been published and can be found at the [SEWeb – water body classification page](#).

In summary, for information about the plans and objectives use [Water environment hub](#), for the 2015 classification results use [SEWeb – water body classification page](#).

Please contact us if you have any questions or queries about where to access the data you need, via HighlandAAG@sepa.org.uk

3. RBMP Delivery Priorities

The [second RBMPs](#) set out Scotland's objectives for protecting and improving water bodies up to 2027. In the second cycle (2016 - 21) the plans include objectives to improve the physical condition of 52 water bodies and ease fish passage across 76 historic barriers to fish migration. The plans recognised that this would require a significant increase in funding.

In the current climate of public sector budget constraints, we are now planning for a scenario where funding levels and timing are different from those original assumptions. We therefore need to prioritise projects for delivery based on this level of funding.

In the short term we are focusing efforts on barriers to fish migration and urban morphology projects that deliver multiple benefits. We are still on track to remove 40+ fish barriers opening up over 800km of river to migratory fish and to restore the physical condition of 11 water bodies by 2021.

Current funding levels will not enable a number of ongoing projects to continue through to completion as originally planned. These projects will be paused at an appropriate stage and reviewed in the light of overall RBMP priorities, funding availability and timing. This won't affect existing contracts for individual stages of ongoing projects. The decision on which projects will be affected was very difficult to take. It was based on the amount of environmental improvement they'll each deliver.

In the meantime we'll continue to actively explore other sources of funding. If you have any questions please contact RBMP@sepa.org.uk

4. RBMP Delivery Updates

Barriers to fish migration

In Scotland, man-made barriers to fish migration cut-off access to over 4,000km of rivers. This affects all fish species, but has a particular impact on salmon, sea trout, lampreys and eels. Removing these barriers is a priority for the second river basin management plans.

Types of fish barriers

For the purposes of management, fish barriers such as weirs, dams, culverts and bridge reinforcements fall into three categories:

- **Active barrier** – an impoundment, weir or dam that is a barrier to fish movement and is being operated or maintained (or is planned to be operated or maintained); or, it is a mothballed weir, impoundment or dam (i.e. it is not currently operated or maintained, but the owners operate/maintain similar structures for the purposes of their business).
- **Historic barrier** - an impoundment, weir or dam constructed prior to 1 April 2006 that is a barrier to fish movement and is not operated or maintained. Nor is it owned by a business who operates or maintains similar structures for the purposes of their business.
- **Asset barrier** – a culvert or bridge apron built prior to 1 April 2006 that is a barrier to fish movement.

Fish barrier projects follow a step-wise process. The National Water and Land Unit will work with staff in regional regulatory services and specialists in Evidence and Flooding to scope all fish barriers during the second cycle. This will help us understand what we can do to improve fish passage.



We aim to scope all fish barriers during the second cycle to have a better understanding of the scale of the measure and what we can do to improve passage.

Following scoping the mechanism used to progress fish barrier improvements varies depending on the category of barrier:

- Active barriers – will be dealt with by Controlled Activities Regulations licence review. Where the improvement is deemed to be proportionate from a cost:benefit perspective then the operator will be expected to secure fish passage.
- Historic barriers – will be progressed using the Water Environment Fund, supplemented by additional funding sources wherever possible. Unlicensed barriers will require a licence before any engineering works can take place. The Scottish Government will provide grants of up to 75% of the engineering costs to improve fish passage at redundant weirs owned by local authorities.
- Asset barrier – a remediation notice* will be issued under the Water Environment (Remedial Measures) (Scotland) Regulations 2016. * *The operational framework SEPA requires to start issuing remediation notices is in development.*

Regulatory context

All impoundments, weirs and dams require authorisation under the Controlled Activities (Scotland) Regulations 2011(CAR). All culverts and bridges built after 1 April 2006 require authorisation under CAR. A CAR licence is required before any barrier removal or easement engineering work can take place.

SEPA are aware of 67 barriers to fish migration in the Highland Council area a list of which can be found in [Appendix 1](#) and detailed in the [water environment Hub](#). This information is based on SEPAs current data set. If you are aware of other barriers to fish migration with in the area please send details to NHighlandAAG@sepa.org.uk

Morsgail Culvert – Fish Barrier Removal

A redundant culvert which obstructs migrating fish on Fuarail Burn a tributary of the Abhainn Cleit Duastal, Isle of Lewis, Western Isles has been removed. Removal of this culvert and the river channel restoration now allows salmon, sea trout, eel and lamprey will all be able to access 2km of excellent habitat.

The partnership project between SEPA, the River and Fisheries Trusts of Scotland, the Outer Hebrides fishery Trust and the landowner was partly funded by WEF. The Abhainn Cleit Duastal waterbody has improved from Moderate to High condition, meeting an objective in Scotland's River Basin Management Plan.



Figure 1: Project location



Figure 2: September 2016 – Culvert removed and channel remedial work progressing.

Update on rural diffuse pollution work

The end of the first cycle saw the completion of all of the catchment walks in the 14 priority catchments, 450 awareness raising events, 3191 farm visits (35% compliance rate), revisits to non-compliant farms and the introduction of fixed monetary penalties for farms remaining non-compliant at the third revisit. This huge piece of work has shown great success with 84% of farms compliant or having significantly undertaken remedial work leading towards compliance by the time of their first revisit. Revisits are still programmed for cycle 1 catchments in 2016,17 and 18.

Cycle 2 has expanded this programme of works and some changes have been made to the way in which this work is done. There will be no catchments walking this time round and inspections will be targeted in at risk and downgraded waterbodies instead of catchment wide. Land unit staff will be conducting 2 farm visits per day which will focus more on educating the land manager on the issues rather than spending time walking over all his land and there will only be 1 revisit to a non-compliant farm before initiating enforcement action.

SEPA has invested significantly in additional resource to expand the priority catchment engagement in cycle 2 with 7 additional permanent staff and 1 fixed term post. Work has started in the cycle 2 catchments, 324 farm visits have been completed in the Whiteadder, Tweed, Stonehaven, Nairn, Urr and Ken/Dee catchments.

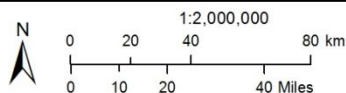
SEPA have also been working in partnership with Scotland's Rural College to launch an awareness raising campaign under the brand of "[Farming and Water Scotland](#)" The brand encompasses both regulatory messages and advice for farming business on diffuse pollution and the General Binding Rules. The FWS attended 34 agricultural shows across Scotland and planned to attend a further 4 winter events.

Priority Catchment	Initial 1:1 visits completed	% of farms compliant at initial 1:1 visit	No. of 1 st revisits completed	% of farms showing positive response at 1 st revisit	No of 2 nd revisits completed	% of farms showing positive response at 2 nd revisit
Totals	3,191	35%	1,490	84 %	218	72%

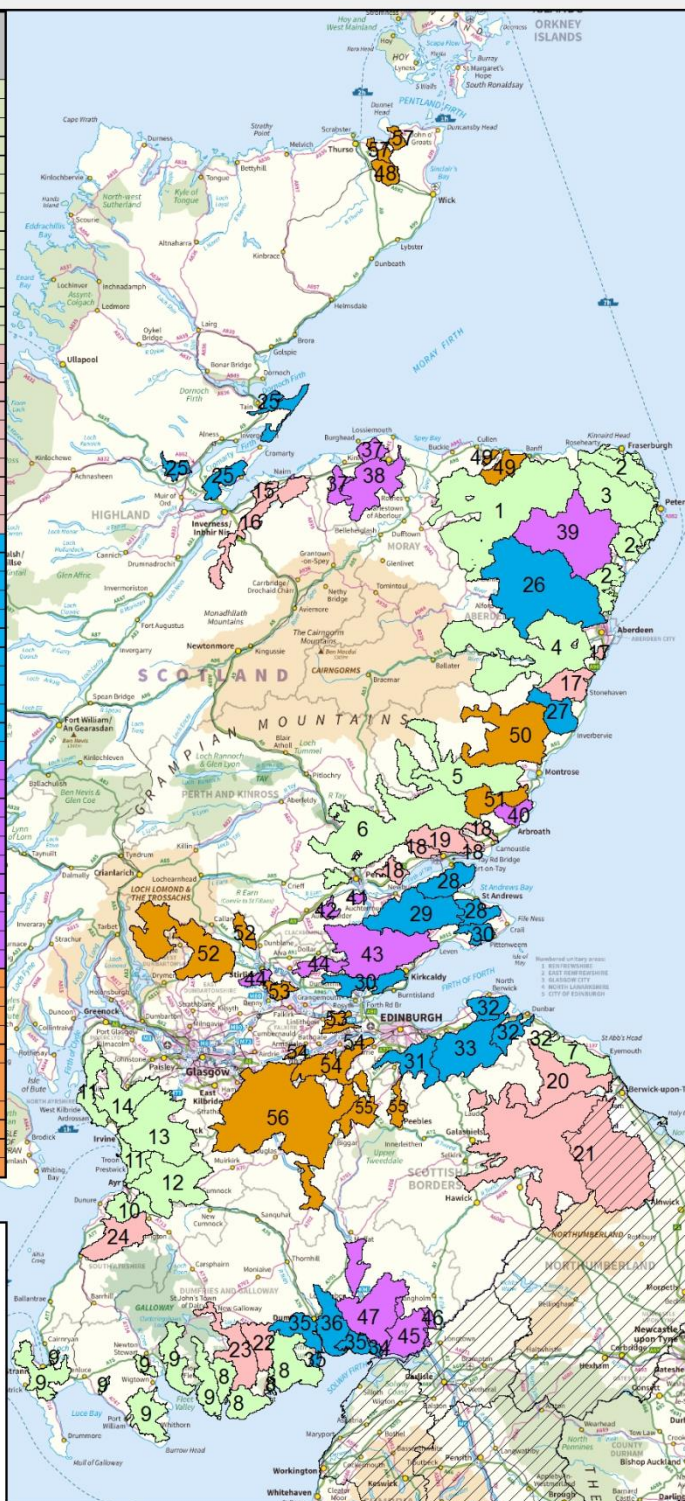
MAP REFERENCE	Catchment Name	Delivery Cycle	Scheduled Year
1	River Deveron	RBMP 1	2015
2	Buchan Coastal	RBMP 1	2015
3	River Ugie	RBMP 1	2015
4	River Dee (Grampian)	RBMP 1	2015
5	River South Esk	RBMP 1	2015
6	River Tay	RBMP 1	2015
7	Eye water	RBMP 1	2015
8	Stewartry Coastal	RBMP 1	2015
9	Galloway Coastal	RBMP 1	2015
10	River Doon	RBMP 1	2015
11	North Ayrshire Coastal	RBMP 1	2015
12	River Ayr	RBMP 1	2015
13	River Irvine	RBMP 1	2015
14	River Garnock	RBMP 1	2015
15	Inverness Coastal	RBMP 2	2016
16	River Nairn	RBMP 2	2016
17	Kincardine Coastal	RBMP 2	2016
18	Dundee Coastal	RBMP 2	2016
19	Dighty Water	RBMP 2	2016
20	Whiteadder Water	RBMP 2	2016
21	River Tweed (lower)	RBMP 2	2016
22	Urr Water	RBMP 2	2016
23	River Dee (Solway)	RBMP 2	2016
24	Water of Girvan	RBMP 2	2016
25	Cromarty Coastal	RBMP 2	2017
26	River Don	RBMP 2	2017
27	Bervie Water	RBMP 2	2017
28	North Fife Coastal	RBMP 2	2017
29	River Eden	RBMP 2	2017
30	South Fife Coastal	RBMP 2	2017
31	River Esk (Lothian)	RBMP 2	2017
32	East Lothian Coastal	RBMP 2	2017
33	River Tyne	RBMP 2	2017
34	Annan Coastal	RBMP 2	2017
35	Dumfries Coastal	RBMP 2	2017
36	Lochar Water	RBMP 2	2017
37	Moray Coastal	RBMP 2	2018
38	River Lossie	RBMP 2	2018
39	River Ythan	RBMP 2	2018
40	Angus Coastal	RBMP 2	2018
41	Earn Coastal	RBMP 2	2018
42	River Earn	RBMP 2	2018
43	River Leven (Fife)	RBMP 2	2018
44	Stirling Coastal	RBMP 2	2018
45	Gretna Coastal	RBMP 2	2018
46	River Esk (Solway)	RBMP 2	2018
47	River Annan	RBMP 2	2018
48	Wick River	RBMP 2	2019
49	Banff Coastal	RBMP 2	2019
50	River North Esk (Tayside)	RBMP 2	2019
51	Lunan Water	RBMP 2	2019
52	River Forth	RBMP 2	2019
53	Forth Estuary (South)	RBMP 2	2019
54	River Almond	RBMP 2	2019
55	River Tweed (Upper)	RBMP 2	2019
56	River Clyde	RBMP 2	2019
57	Thurso Coastal	RBMP 2	2019

Legend

-  GEOMASTER.OS_BOUNDARYLINE_ENGLAND
-  RBMP1_2015_Priority_Catchments
-  RBMP2_2016_Scheduled
-  RBMP2_2017_Scheduled
-  RBMP2_2018_Scheduled
-  RBMP2_2019_Scheduled



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Produced by Brian McCreadie 3/10/2016



PRIORITY CATCHMENTS

Colour coded by scheduled
year of delivery for
workload planning



Update on Bathing Waters

The expected EU water quality classification for 2016 were calculated at end Sept and indicate that we anticipate 26 excellent, 36 good, 10 sufficient and 12 poor classifications. This is 5 less than in 2015, but we need to maintain progress to ensure we maintain their class improvement. The Bathing Waters report 2016 is available;
<http://apps.sepa.org.uk/bathingwaters/>

The Bathing Waters Delivery Group (Chaired by Calum McPhail) are responsible for coordinating the delivery of improvements for this workstream. [Bathing water improvement plans](#) for 19 specific bathing waters has been produced and shared with Scottish Government and Scottish Water. Actions to be delivered include additional investigative monitoring and inspections of relevant rural and urban catchment pollution sources. The plans are now on-going and shall evolve as new actions or issues are identified.

5. Funding News

Community Engagement Fund

The **Green Infrastructure Community Engagement Fund** will launch in early 2017.

If you are interested in being added to our mailing list please contact the Green Infrastructure Team using our email address greeninfrastructure@snh.gov.uk

<http://www.greeninfrastructurescotland.org.uk/guidance/community-engagement-fund>

6. Consultations

Controlled Activities Regulations level of authorisation at construction sites

The construction of new infrastructure, commercial and residential property is important for the continued sustainable economic growth of Scotland.

When construction sites are not managed properly during the construction phase of a development this may lead to pollution of the water environment. The larger construction sites pose increased risks. SEPA receives reports of incidents of pollution to the water environment from construction sites every year. This consultation is about the larger construction sites being required to have a CAR licence in order to manage the water runoff on site and prevent pollution.

SEPA are keen to ensure that the construction industry continues to improve so that pollution to the environment does not occur. Improvement in practice by the construction industry will allow others to continue to use the water environment and to protect our fish and designated species. This will result in a good reputation for the industry, since the public now have expectations that the environment is being protected.

The consultation will close 31 March 2017. Please respond via;
<https://consultation.sepa.org.uk/rbmp/constructionsitnrunoff/>

Proposals for an Integrated Authorisation Framework

This is a Scottish Government consultation that sets out proposals for a new integrated environmental authorisation framework for SEPA. The new framework plans to bring together the authorisation, procedural and enforcement arrangements for existing environmental protection regimes relating to water, waste, radioactive substances and pollution prevention and control.

This consultation sets out the detail of the proposals for a new integrated authorisation framework and the impacts they will have for each environmental regulation regime. The framework is a key component of the joint [Better Environmental Regulation](#) programme run by Scottish Government and SEPA.

The consultation will close 12 April 2017. Please respond via;
<https://consult.scotland.gov.uk/sepa/integrated-authorisation-framework/>

7. Publications

Congratulations to the Spey Catchment Initiative on the publication of the new 2016 Spey Catchment Management Plan and is now available to view or download at;
www.speyfisheryboard.com/spey-catchment-initiative-publication

Appendix 1: Barriers to fish migration within the Highland council area.

Waterbody Name	Implementation Period(s)
Edendon Water	2015-2021
Merkland River - Loch a Ghriama to Loch Merkland	2015-2021
Allt nan Albannach	2015-2021
River Tirry - Loch Shin to Rhian	2015-2021
River Tirry - whole of catchment above Rhian	2015-2021
Allt Chaiseagail	2015-2021
Feith Osdail	2015-2021
Allt a Bhunn	2015-2021
Allt Car Beag	2015-2021
Allt Car	2015-2021
River Fiag	2015-2021
Allt an Tireidh	2015-2021
Allt na Claise Moire	2015-2021
Abhainn a Choire	2015-2021
Abhainn a Ghlinne Mhoir / Bhig and Allt Crom-loch	2015-2021
Water of Glencalvie	2015-2021
Logie Burn - Muir of Ord to source	2015-2021
River Coiltie	2015-2021
Allt a Cham Loin Mhoir	2015-2021
Allt Bad an Luig	2015-2021

Allt an Loch Fhada	2015-2021
Uidh na Tolla Bhaid	2015-2021
River Dulnain - Feith Mhor	2015-2021
Allt na Fearna - u/s Loch Alvie	2015-2021
Allt Bhran	2015-2021
Loch Merkland	2015-2021
Loch Poll	2015-2021
Loch Fiag	2015-2021
Loch a Ghriama	2015-2021
Loch Shin	2015-2021
Loch Beannach	2015-2021
Loch Fada	2015-2021
Caen Burn	2021-2027
Thrumster Burn - u/s Thrumster STW	2021-2027
Migdale Burn	2021-2027
Balnagown River	2021-2027
Pollo Burn	2021-2027
Ussie Burn - sea to Loch Ussie	2021-2027
Ussie Burn - Loch Ussie to source	2021-2027
Newhall Burn	2021-2027
Allt na Seasgaich	2021-2027
Allt Coire nan Gall	2021-2027
Big Burn - Ness confluence to Loch Ashie	2021-2027
River Enrick - Loch Ness to Loch Meiklie	2021-2027
River Cluanie	2021-2027
River Quoich	2021-2027
Abhainn Chosaidh	2021-2027
Cawdor Burn	2021-2027
River Lundy	2021-2027
River Loy	2021-2027
River Vagastie	2021-2027
Calder Water - u/s Loch Calder	2021-2027
River Findhorn - Tomatin to Dorback Burn	2021-2027
River Nethy - u/s Nethy Bridge	2021-2027
Burn out of Loch an Eilein	2021-2027
Burn into Loch an Eilein	2021-2027
Markie Burn	2021-2027
River Spey - Garva to Spey Reservoir	2021-2027
River Spey - source to Garva	2021-2027
Allt Cuaich	2021-2027
Modified channel between Spey Reservoir and Loch Crunachdan	2021-2027
Allt Crunachdain	2021-2027

Loch Calder	2021-2027
Loch Migdale	2021-2027
Loch Ussie	2021-2027
Loch an Eilein	2021-2027
Spey Reservoir	2021-2027