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North Highland Area Management Plan
Catchment Summaries

There is a catchment summary for each catchment in the North Highland advisory group area. These give information on the current situation (classification and pressures) and action . A guide to these catchment summaries and a glossary of terms is available here. Further information on individual water bodies within each catchment can be found on the river basin management planning interactive map – www.sepa.org.uk/water/river_basin_planning.aspx

The North Highland catchment summaries are contained with 5 documents:

- Caithness and Sutherland
- Moray Firth – Dornoch to Inverness
- Ness
- Moray Firth – Nairn to Lossiemouth
- Ground Water Bodies

This document includes catchment summaries for **Moray Firth – Dornoch to Inverness**:-

Catchment	Current situation	Actions for improvement
Dornoch Coastal	The Dornoch coastal catchment contains 15 natural water bodies. Twelve of these water bodies are at good ecological status; River Evelix, Allt Garbh, Spinningdale Burn, Allt Mor, Kilmachalmack, Burn, Culrain Burn, Allt Eiteachan, Wester Fearn Burn, Craigroy Burn – Dornoch Firth to Balblair Distillery, Craigroy Burn – Balblair Distillery to source, Edderton Burn, River Tain. Two water bodies are at poor ecological status; the Migdale Burn due to restricted fish passage, as a result of historical engineering and Easter Fearn Burn due to a barrier to fish passage issues and pollution from aquaculture. Loch Migdale is bad ecological status due to restricted fish passage due to historical engineering, increased phosphorus levels from aquaculture and planting of coniferous planting down to the bank side. Exemptions from the objective of preventing deterioration in status have been allowed on the Wester Fearn Burn. The reason deterioration has been allowed is to enable abstraction and impoundment of water for hydropower, at Fearn Lodge hydro scheme, to benefit sustainable development. All appropriate mitigation in place and there is not a significantly better environmental option. **Protected Areas** The Dornoch Coastal catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Moragie Forest Special Area of Conservation (for breeding Capercaillie) • Drinking Water Protection Zones; Loch Lànnsaidh, Loch a Ghobhair, Invergordon bedrock and localised sand and gravel aquifers, Dornoch bedrock and localised sand and gravel aquifers and Kyle of Sutherland Sand and Gravel. • Easter Fearn Burn urban waste water treatment directive sensitive area • Dornoch Bathing Waters The River Evelix is a designated Special Area of Conservation for fresh water pearl mussels and is currently in unfavourable condition due to abstraction and suspected diffuse pollution.	Migdale Burn is predicted to reach good ecological by 2027 with the removal of the fish barrier /provision of mitigation; management options need to be discussed and funding found. Easter Fearn Burn is predicted to reach good ecological status by 2027 with improved habitat by 2012 and reduction of pollution by 2024. Management options and funding to do this need to be explored. Loch Migdale is predicted to reach good ecological status by 2027; the fish passage issue is scheduled to be removed or mitigation measures provided by 2020. Management options and funding to remove fish passage issue need to be explored. The phosphorus levels will be reduced by 2024 and the felling of coniferous trees in the riparian zone and replanting with non natives by 2026. The River Evelix Special Area of Conservation is predicted to reach favourable/ unfavourable recovering by 2015 following research to design appropriate measures to benefit fresh water pearl mussels. Focused work to address diffuse pollution issues in the Dornoch coastal catchment is scheduled in cycle 3 between 2021-2027. This will contribute to continuing improvement of the Dornoch shellfish water. There may be a need in the first planning cycle (2009-2015) to identify the different sources of diffuse pollution n preparation for the focused diffuse pollution work scheduled for cycle 3.

Catchment	Current situation	Actions for improvement
River Alness	The River Alness catchment contains six natural water bodies. Five of these water bodies are at good ecological status; Loch Morie, Alness River – Cromarty Firth to Strone, Alness River – Strone to Loch More, Abhainn na Glasa – Loch Morie to source and the Black Water. The Allt na Seasgaich is at poor ecological status due to a barrier to fish migration. <u>Protected Areas</u> The River Alness catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Alness Coastal Sand and Gravel Drinking Water Protection zone • River Alness Freshwater Fish designated area	The fish barrier at Allt na Seasgaich is scheduled to be removed by 2014.

Catchment	Current situation	Actions for improvement
River Glass	The River Glass catchment contains five water bodies, four of which are natural and one heavily modified. Two of the four natural water bodies, Abhainn Beinn nan Eun – Loch Glass to source and the River Glass (Redburn to Loch Glass) are at good ecological status. The River Glass – Cromarty Firth to Redburn and Allt nan Caorach are currently at bad ecological status due to abstraction and flow regulation for both water supply at Assynt (Evanton), Newton and Newmore Water Treatment Works and also for the Black Rock and Novar hydro power stations. It has been agreed that for the River Glass - Cromarty Firth to Redburn, deterioration of status will be permitted in the interests of sustainable development. This is to enable abstraction and impoundment for hydro power production at Black Rock power station. Loch Glass is heavily modified, supplying water to the Assynt Water Treatment Works at Evanton. It is at good ecological potential because the pattern and timing of abstraction is controlled. **Protected Areas** The River Glass catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Ben Wyvis Special Area of Conservation, (for clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels) • Loch Glass and River Glass (Cromarty Firth to Redburn) Drinking Water Protection Zones • River Glass Freshwater Fish designated area	The River Glass – Cromarty Firth to Redburn, Redburn to Loch Glass, and Allt nan Caorach should be subject to the test of whether they should be exempt from the objective of preventing deterioration in status and also whether they should be classified as heavily modified water bodies– for water supply and hydro power issues.

Catchment	Current situation	Actions for improvement
Cromarty Coastal	The Cromarty coastal catchment includes eighteen water bodes, 17 of which are natural with one heavily modified. **Natural water bodies** Of the 17 natural water bodies only one, the River Skitheach, is at good ecological status. Eight water bodies are moderate ecological status: Loch Eye, Balnagowan Burn, River Peffery, Rosemarkie Burn, Roskill Burn, Killen Burn, Big Burn (Munlochy), Allanglach Burn. Five water bodies are poor ecological status; Garrick Burn, Pollo Burn, Rosskeen Burn-Cromarty Firth to Tomich, Rosskeen Burn – Tomich to source, Ussie Burn – Loch Ussie to source, Three water bodies are bad ecological status; Fearn Canal, Ussie Burn – sea to Loch Ussie, Newhall Burn. This catchment contains a number of mainly small coastal burns, flowing into the Cromarty Firth. One of the main reasons why many of these are not yet at good ecological status is diffuse pollution from farming which is causing an increase of phosphorus in river water bodies including Rosemarkie burn, Roskill Burn, Killen Burn, Big Burn (Munlochy), Allanglach Burn and the Fearn canal. Some of the burns are impacted by river channel straightening for farming including the River Peffery, Rosemarkie Burn, Roskill Burn, Killen Burn, Allanglach Burn, Fearn canal, Ussie Burn (from the sea to Loch Ussie) and the Newhall Burn which is also impacted by culverting. Some of the burns are impacted by coniferous planting down to the bankside; Killen Burn and Ussie Burn (sea to Loch Ussie), River Peffery and Roskill Burn.	Targeted action on diffuse pollution and morphology issues in this catchment are scheduled to be tackled in cycle 3 (2022-2027). This, plus action to remove, or mitigate fish barriers, remove coniferous planting to the bank side and replace with native planting by Forestry Commission Scotland, improvements to water quality where it is impacted on by sewage mean that the following water bodies are predicted to achieved good status by 2027: Loch Eye, Balnagown River, River Peffery, Rosemarkie Burn, Roskill Burn, Killen Burn , Big Burn (Munlochy), Allanglach Burn, Fearn Canal, Ussie Burn - sea to Loch Ussie, Newhall Burn, Ussie Burn - Loch Ussie to source. . The River Peffery restoration project, led by the Cromarty Firth District Salmon Fishery Board aims to improve the Peffery to good status by carrying out a number of improvements. This project may mean that good status is reached before 2027. Loch Eye will be the subject of a catchment study in the first river basin planning cycle with a view to management of the diffuse pollution issues currently affecting it. Loch Ussie is predicted to reach good ecological potential in 2020 when the fish barrier is removed or mitigation installed.

Catchment	Current situation	Actions for improvement
Cromarty Coastal continued	Barriers to fish migration affect the Balnagaowan river, River Peffery, and Ussie Burn (from the sea to Loch Ussie). Sewage has an impact on the Big Burn (Munlochy), Killen Burn and the Fearn canal. Loch Eye is at moderate ecological status as it is impacted from diffuse pollution from farming. However, it is also an important roosting site for geese (and is a designated Special Protection Area for greylag geese); the high level of bird feaces from the roosting birds is also having some impact on levels of nutrients in the loch. Loch Eye only reached a maximum status of good for the INNS part of the Water Framework Directive classification, due to the presence of alien species Canadian Pondweed. **Heavily modified water bodies** Loch Ussie is the only heavily modified water body in this catchment. It is used to supply water for Dingwall and is impounded with small dam, causing a barrier to the passage of migratory fish. It is currently at poor ecological potential. Loch Ussie only reached a maximum status of good for the INNS part of the Water Framework Directive classification, due to the presence of alien species Canadian Pondweed. **Protected Areas** The Cromarty coastal catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Special Areas of Conservation; Loch Achnacloich (for naturally nutrient-rich lakes or lochs which are often dominated by pondweed and Loch Ussie (for clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels), Monadh Mor (for very wet mires often identified by an unstable 'quaking' surface), Pitmaduthy Moss (for bog woodland), Dam wood (Base-rich fens). • Loch Eye Special Protection Area (for over wintering greylag geese and whooper swans) • Peffery Valley Sand and Gravel, Nigg Bay Coastal Sand and Gravel, Black Isle bedrock and localised sand and gravel aquifers, Dingwall bedrock and localised sand and gravel aquifers Drinking Water Protection Zones.	

Catchment	Current situation	Actions for improvement
Estuarine waters - Dornoch Firth, Cromarty Firth and Beauly/Inverness Firths and Lossie Estuary	North Highland has ten estuarine water bodies which form the three inner firths, plus the Lossie estuary. All these water bodies are natural and, of the ten, four are high ecological status; Moray Firth, Fearn Lodge Lagoon (Dornoch Firth), Lossie Estuary, Dornoch Firth. Six water bodies are at good ecological status; Beauly Firth, Outer Cromarty Firth, inner Cromarty Firth, Muirtown Basin Lagoon – Inverness, South Kessock Lagoon – Inverness, Alness Point lagoon - Cromarty Firth. The Outer Cromarty Firth and Inner Cromarty Firth only reached a maximum status of good for the INNS part of the Water Framework classification, due to the presence of alien species, Common cordgrass **Protected Areas** These estuarine water bodies include the following protected areas which are all meeting their required standards with respect to the Water Framework Directive: • Dornoch Firth and Morrich More Special Area of Conservation (for estuarine and coastal habitats), • Moray Firth Special Area of Conservation (for bottlenose dolphins and subtidal sandbanks) • Dornoch Firth and Loch Fleet Special Protection Area (for over-wintering waterbirds), • Dornoch Firth shellfish water • Dornoch Firth bathing water • River Fleet/Dornoch Firth Freshwater Fish designated area • Cromarty Bay shellfish water	**Protected areas** Rosemarkie Bathing Waters will be subject to studies in order to implement measures to deal with diffuse pollution by 2019. The bathing water is therefore predicted to achieve sufficient status in 2021. Improvements to Dornoch and Tain sewage treatment works have been undertaken and further improvements are scheduled for Dornoch sewage treatment works. These will contribute to improving the confidence in Dornoch Firth and Cromarty Firth shellfish waters reaching their required standards with respect to the Water Framework Directive.

Catchment	Current situation	Actions for improvement
Estuarine waters - Dornoch Firth, Cromarty Firth and Beauly/Inverness Firths and Lossie Estuary continued	The following protected areas are not yet meeting their required standards with respect to the Water Framework Directive: • Rosemarkie bathing waters were poor in 2008 due to a combination of factors which are currently being investigated. • Although both the Dornoch Firth and Cromarty Firth shellfish waters met the guideline values for faecal coliforms in 2008, there is low confidence that they will keep passing as they both have fails in 2006 and/or 2007. • Lossiemouth East bathing water is currently at poor status due to microbial levels, with inputs from both point and diffuse source sewage pollution and diffuse agricultural pollution.	Lossiemouth East Bathing Waters are predicted to be good by 2015. Microbial source tracking surveys may help to provide an indication of the relative contributions of faecal contamination from different sources and help determine appropriate measures

Catchment	Current situation	Actions for improvement
River Conon	The River Conon is a large catchment with 53 water bodies – 27 of which are natural and 26 heavily modified. **Natural water bodies** Five of the 27 natural water bodies are at high ecological status; Loch a Chroisg, Loch Achilty, Loch Beannacharain, Abhainn Loch a Chroisg, River Meig – Loch Meig to Inverchorn. Eighteen of the natural water bodies are at good ecological status; River Bran – Loch Achanalt to Achnasheen, Abhainn Dubh, River Orrin – Orrin Reservoir to Allt Coire Chairbe confluence, River Orrin – upper catchment, Abhainn a Gharbhrain, Allt a Mhuilinn, Allt a Gharbh Bhaid, Allt Toll nam Muc, River Meig – Inverchoran to Loch Beannacharain to source, Allt Bail a Mhuilinn, Allt Gleann Meinich, Allt Gleann Chorainn, Abhainn a chadh Bhuidhe, Allt a Choire Mhoir, Allt Bad an Fhliuchaidh, Allt a Chomair, Abhainn a Chomair, Abhainn an Torrain Duibh. The one natural water body at moderate ecological; status, the Logie Burn - from river Conon Confluence to Muir of Ord, is impacted by abstraction of water for whisky production at the Glen Ord distillery. Three water bodies are at bad ecological status; The Logie Burn (Muir of Ord to source) is also impacted by abstraction for whisky production at the Glen Ord Distillery and a road culvert preventing passage of migratory fish. The Black Water (Loch Garve to Garbat) is impacted by abstraction from Glensgaich hydro scheme, flow regulation by the Conon hydro power schemes and acidification as a result of pollution from acid deposition. The Rogie Burn is also impacted from abstraction of water for the Glensgaich hydro power scheme and acidification as a result of pollution from acid deposition.	**Natural water bodies** Improvements in controlled abstraction at the Glen Ord distillery mean that the Logie Burn - from river Conon Confluence to Muir of Ord and the Logie Burn (Muir of Ord to source) are both predicted to be good status by 2026. The removal of a fish barrier by 2013 will also take place on the Logie Burn (Muir of Ord to source). This is subject to discussion and funding being available. Due to improved regulated flows at Mossford power station and controlled abstraction at Glensgaich hydro power station, the Black Water (Loch Garve to Garbat) is predicted to be at good status for flows by 2026. However, this water body has less stringent objectives and is predicted to not be at good ecological status overall by 2027. This is because water quality is affected by acidification as a result of pollution from acid deposition. The time needed for water bodies affected by acid deposition to recover is difficult to predict and, because of natural conditions, the natural recovery time is likely to be beyond 2027. Controlled abstracton at Glensgaich hydro station on the Rogie Burn is due to be put in place by 2027. However, this water body has less stringent objectives and is predicted to not be at good ecological status overall by 2027. This is because water quality is affected by acidification as a result of pollution from acid deposition. The time needed for water bodies affected by acid deposition to recover is difficult to predict and, because of natural conditions, the natural recovery time is likely to be beyond 2027.

Catchment	Current situation	Actions for improvement
River Conon continued	**Heavily modified water bodies** Twenty six of the water bodies in the River Conon catchment are heavily modified for their use in the production of hydro-power by Scottish and Southern with dams on Lochs Vaich, Glascarnoch, Fannich, Luichart, Meig, Achonachie, and Orrin Reservoir supplying seven power stations. Sixteen of the 26 water bodies used in the Conon scheme are at good ecological potential; Loch Vaich, Loch Glascarnoch, Loch Fannich, Loch Luichart, Loch Garve, Loch Achonachie, Orrin Reservoir, River Bran – Loch Luichart to Loch Achanalt, River Orrin – Conon confluence to Orrin Reservoir, Abhainn Srath Rannoch, Abhainn Srath a Bhathaich, River Meig – Conon confluence to Loch Meig, River Meig – Loch Meig to Inverchoran, Allt a Ghlinne, Allt Dearg, Allt a Choin Idhir. These water bodies are at good ecological potential with the following mitigation measures in place; The operation of some power stations is dependant on using a large reservoir of water. Mitigation is therefore not required for issues with loch levels, temperature, dissolved oxygen, compensation flows and sediment management as these would have a significant impact on the use of the reservoir. This is the case with the following power stations: Vaich, Mossford (Loch Glascarnoch); Grudie Bridge (at Loch Fannich), Luichart power station (at Loch Luichart), Orrin and Torr Achilty (at Loch Achonachie).	**Heavily modified water bodies** The Glascarnoch River - Black Bridge to Loch Glascarnoch is predicted to reach good ecological potential by 2015 through controls in the pattern/timing of abstraction and provision of appropriate baseline flow downstream of impoundment being put in place by 2014. The River Grudie - outflow from Loch Fannich is predicted to be good ecological potential by 2021 due to the provision of appropriate baseline flow regime downstream of impoundment at Grudie Bridge power station. Two heavily modified water bodies will be improved by 2027: The Allt Goibhre will be at good ecological potential by 2027 through the control of the pattern/timing of abstraction at Orrin power station. The Allt Coire Mhuilidh will be at good ecological potential by 2027 through the control of the pattern/timing of abstraction, provision of appropriate baseline flow regime downstream of the impoundment at Mossford power station. River Grudie - Bran confluence to Allt a Choin Idhir will be good ecological potential by 2027 through the provision of appropriate baseline flow by 2020 and fish barrier removal/mitigation by 2026 by SSE, plus improvement to condition of riparian zone by Forestry Commission Scotland by 2024.

Catchment	Current situation	Actions for improvement
River Conon continued	However, the following mitigation is still required; Vaich: provision of appropriate baseline flow downstream of abstraction and controlled patter/timing of abstraction. Mossford power station (Loch Glascarnoch): appropriate management of rate and range of artificial drawdown, controlled patter/timing of abstraction, improved regulated flows. Grudie Bridge (at Loch Fannich): controlled abstraction, provision of appropriate baseline flow downstream of abstraction Luichart power station (at Loch Luichart): controlled patter/timing of abstraction, appropriate management of rate and range of artificial drawdown Orrin reservoir: improved regulated flows, controlled abstraction, improvement of fish passage through the dam (the Borland fish lift is not working properly, therefore SSE and Cromarty Firth Fisheries Board & Trust are currently working towards a mutually acceptable solution. Fish are trucked around the dam in the interim, so the water body is deemed to be at GEP). Torr Achilty (at Loch Achonachie): controlled pattern/timing of abstraction, appropriate management of rate and range of artificial drawdown Five heavily modified water bodies are at moderate ecological potential; River Conon - Cromarty Firth to Orrin confluence, River Conon - Orrin confluence to Loch Achonachie, River Conon - Loch Achonachie to Loch Luichart, Black Water - Garbat to Black Bridge, Black Water - Conon Confluence to Loch Garve. However, all these water bodies are not yet reaching good ecological potential because they have pressures on them unrelated to the reasons for their heavily modified status such as coniferous planting to the bankside and fish barriers.	**Additional measures not related to heavily modified status** Some heavily modified water bodies are not yet reaching good ecological potential because they have pressures on them unrelated to the reasons for their heavily modified status. The following improvements are predicted by 2027: Options to improve water courses that have been morphological alterations need to be explored, balancing the needs of land managers and the water environment. This includes; the River Conon - Cromarty Firth to Orrin confluence, River Conon - Orrin confluence to Loch Achonachie, River Conon - Loch Achonachie to Loch Luichart and The Black Water - Conon Confluence to Loch Garve. A longer term objective of 2027 has been set for improvements on these water bodies to reach good ecological status. The Black Water - Garbat to Black Bridge and The River Grudie - Bran confluence to Allt a Choin Idhir have morphological pressures from forestry. Improvements – the felling of coniferous trees to the bankside and replanting with native trees – will take place by 2020 for Black Water - Garbat to Black Bridge and 2024 for The River Grudie - Bran confluence to Allt a Choin Idhir. The Black Water - Conon Confluence to Loch Garve has an additional abstraction pressure at Loch Croic fish trap which will be improved by 2014.

Catchment	Current situation	Actions for improvement
River Conon continued	Five heavily modified water bodies are at bad ecological potential; Allt Goibhre (Orrin) , Allt Coire Mhuilidh (Mossford) , River Grudie - Bran confluence to Allt a Choin Idhir (Grudie Bridge) , River Grudie - outflow from Loch Fannich (Grudie Bridge), Glascarnoch River - Black Bridge to Loch Glascarnoch due to flow regulation and abstraction pressures for from hydro-power production as part of the Conon hydro-power scheme. **Ground water bodies** One ground water bodies, Conon Valley sand and gravels, is at poor status in terms of quantity (amount of water) due the impact of ground water abstraction on river levels. **Protected Areas** The River Conon catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Special Areas of Conservation; Conon Islands (for Alder woodlands on floodplains) and Beinn Dearg (for clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels) • Achanalt Marshes (for breeding Wood sandpiper) Special Protection Area • Conon Valley Sand and Gravel, Conon, Allt Achadh na Sine Drinking Water Protection Zones • River Conon Freshwater Fish designated area	**Ground water bodies** The Conon Valley sand and gravels ground water body is anticipated to be at good ecological status by 2027 with controlled abstraction of water.

Catchment	Current situation	Actions for improvement
River Beauly	The River Beauly is a large catchment of thirty seven water bodies, of which 23 are natural and 14 are heavily modified. Much of the Beauly catchment provides water for the Affric/Beauly hydro power scheme operated by Scottish and Southern Energy. **Natural water bodies** Of the 23 natural water bodies, 6 are high ecological status; Bruiach Burn – Loch Bruicheach to source, Breakachy Burn, Allt Garbh, Erchless Burn, Culligran Burn, Abhainn a Cholich. Eleven natural water bodies are good ecological status; Loch Bruicheach, Loch Affric, Loch na Beinne Baine, River Affric – Loch Beinn a Mheadhoin to Loch Affric, River Affric – headwaters, Bruiach Burn/Belladrum Burn, Allt an Loin, Abhainn Sithidh, Abhainn Deabhag, Abhainn Gleann nam Fiadh, Allt Garbh. Six water bodies are at poor ecological status; Loch Calavie, Allt Bealach an Sgoltaidh , Allt a Choire Fhionnaraich, Allt Riabhachain as before, Allt Loch Calavie - Loch Monar to Loch Calavie, and Allt Coire Calavie. These are all impacted by barriers to the passage of fish. However, all of these water bodies are upstream of Loch Monar, which is heavily modified HMWB for its use as part of the Affric/Beauly hydropower scheme. The dam at Loch Monar is impassable to fish but was deemed to be at good ecological potential because it was claimed that there was a natural barrier further downstream (the presence of this barrier needs to be confirmed). The good ecological assessment of Loch Monar is correct and if so, this group water bodies will have less stringent objectives. If not, further mitigation will be required. **Heavily modified water bodies** Fourteen of the water bodies in the Beauly catchment are heavily modified for their use as part of the Affric/Beauly hydro power scheme. All these water bodies are at good ecological potential because the appropriate mitigation measures have been put in place. These are described below.	Further consideration of the objectives on the following water bodies is required; Allt Bealach an Sgoltaidh, Allt a Choire Fhionnaraich, Allt Riabhachain, Allt Loch Calavie - Loch Monar to Loch Calavie and Allt Coire Calavie. Felling of coniferous trees down to the bank side and replanting with native tress will contribute to the River Cannich – Cannich to Loch Mallardoch reaching good ecological potential by 2024.

Catchment	Current situation	Actions for improvement
River Beauly continued	The following mitigation is in place for water bodies used by Deanie power station; The operation of Deanie power station is dependant on using a large reservoir of water – Loch Monar. Mitigation is therefore not required for issues with loch levels, temperature, dissolved oxygen, compensation flows and sediment management as these would have a significant impact on the use of the reservoir. Loch Monar - provision of appropriate baseline flow regime and controlled pattern/timing of abstraction, Controlled abstraction at Culligran powerstation also provides mitigation for this water body. River Farrar – Loch Beannacharan to Loch Monar - improved water efficiency and controlled pattern/timing of abstraction. East Deanie Burn - provision of appropriate baseline flow regime and controlled pattern/timing of abstraction Allt Coire Mhuillidh – provision of appropriate baseline flow regime and controlled pattern/timing of abstraction. Uisge Misgeach – provision of appropriate baseline flow regime and controlled pattern/timing of abstraction. The operation of Mullardoch power station is dependant on using a large reservoir of water – Loch Mullardoch. Mitigation is therefore not required for issues with loch levels, temperature, dissolved oxygen, compensation flows and sediment management as these would have a significant impact on the use of the reservoir. The following mitigation is however required for other issues on water bodies used by Mullardoch power station: Loch Beannacharan - provision of appropriate baseline flow regime and control pattern/timing of abstraction Loch Mallardoch - provision of appropriate baseline flow regime, controlled abstraction. River Cannich – Cannich to Loch Mallardoch – appropriate management of rate and range of artificial drawdown and improved water efficiency. This water body is also used for water supply to the Cannich water treatment works where mitigation of in place of improved water efficiency . This water body also has a pressure of coniferous planting down to the bankside.	

Catchment	Current situation	Actions for improvement
River Beauly continued	The operation of Fasnakyle power station is also dependant on using a large reservoir of water – Loch Beinn a Mheadhoin. Mitigation is therefore not required for issues with loch levels, temperature, dissolved oxygen, compensation flows and sediment management as these would have a significant impact on the use of the reservoir. The following mitigation is however required for other issues on water bodies used by Fasnakyle power station: Loch Beinn a Mheadhoin – provision of appropriate baseline flow and control of abstraction. River Affric – Cannich to Loch Beinn a Mheadhoin - control of the pattern/timing of abstraction and provision of appropriate baseline flow. Mitigation is in place for River Beauly – Beauly Firth to Cannich, used by Aigas power station - provision of appropriate baseline flow and control of the pattern/timing of abstraction. Mitigation is in place for the following water bodies used by Culligran Power Station: River Farrar – Beauly confluence to Loch Beannacharan - improved water efficiency. Neaty Burn - control of the pattern/timing of abstraction and provision of appropriate baseline flow regime. Allt Coire nam Brathan - improved water efficiency, and appropriate management of rate and range of artificial drawdown **Protected areas** The River Beauly catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Strathglass Complex Special Area of Conservation (for clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels and otters) • Loch Bruicheach - Affric bedrock and localised sand and gravel aquifers, Beauly Valley Sand and Gravel River Cannich - Cannich to Loch Mullardoch Allt Curracahan Drinking Water Protection Zones • River Beauly Freshwater Fish designated area	

Catchment	Current situation	Actions for improvement
Beauly Coastal	There are two natural water bodies in the Beauly coastal catchment which are both at good ecological status; Moniack Burn – Kirkhill waste water treatment plant to source and Moniack Burn – Beauly Firth to Kirkhill waste water treatment plant. **Protected Areas** The Beauly Coastal catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Kirkhill Coastal Sand and Gravel, Beauly bedrock and localised sand and gravel aquifers, Beauly Coastal Sand and Gravel Drinking Water Protection Zones.	

Catchment	Current situation	Actions for improvement
Inverness Coastal	The Inverness coastal catchment includes eight water bodies of which five are natural, two are heavily modified and one is an artificial water body. **Natural water bodies** Of the five natural water bodies only one, the Rough Burn, is at good ecological status. The Caimlaw Burn and a tributary to the Ardesier Burn (Mid Coul to source) are both moderate ecological status due to the impacts of channelization for farming. The Mill Burn (Hilton to source) is moderate as it is affected by urban diffuse pollution. However, this classification needs to be reviewed. The Balnagowan Burn is at bad ecological status due to the abstraction of water, diffuse pollution and channelization for farming.	**Natural water bodies** Options to restore the Caimlaw Burn need to be explored, balancing the needs of land managers and the water environment. A longer term objective of 2027 has been set for them to reach good ecological status. The tributary to the Ardersier Burn (Mid Coul to source) is predicted to be good ecological status by 2027 with improvement to the condition of the channel by 2026. The Mill Burn (Hilton to source) is predicted to be good ecological status by 2026. However the classification of this water body and therefore any measures and objectives needs to be reviewed. The Balnagowan Burn is predicted to be good ecological status by 2026 with controls on the pattern/timing of abstraction by 2014, improved channel habitat and reduced diffuse pollution by 2026. Improvements to diffuse pollution and morphology issues in this catchment are scheduled to take place in cycle 3 (2022-2027).

Catchment	Current situation	Actions for improvement
Inverness Coastal continued	**Heavily modified water bodies** The Mill Burn (sea to Hilton) and is heavily modified for urban landuse. It is moderate ecological potential due to morphological alterations. However, this classification needs to be reviewed The Tributary of Ardersier Burn - sea to Mid Coul is heavily modified for urban and rural landuse; it runs through the site of Inverness airport. It is moderate ecological potential due to abstraction of water for and diffuse pollution from arable farming, morphological alteration from mixed farming and straightening and culverting of the Burn through the site of Inverness airport. The Caledonian canal, Beauly Firth to Tomnahurich Bridge, is an Artificial Water body and is at good ecological potential because all required mitigation is in place. **Protected Areas** The Inverness coastal catchment includes the following protected areas, which are all meeting their required standards with respect to the Water Framework Directive: • Loch Flemington Special Protection Area (for breeding Slavonian grebes) • Drinking Waters- Cawdor Sand and Gravel, Inverness Coastal Sand and Gravel	**Heavily modified water bodies** The Mill Burn (sea to Hilton) is predicted to be good ecological potential by 2026 with improvement to the condition of the channel. However the classification of this water body and therefore any measures and objectives needs to be reviewed. The Tributary of Ardersier Burn - sea to Mid Coul is predicted to be good ecological potential by 2026 with improvements in water efficiency by 2014 and reduction of diffuse pollution by 2026. Measures to improve the morphology pressure are not required as these would have a significant impact on use of the airport.