

# Water Quality in Ireland 2010 - 2012



## ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

### The work of the EPA can be divided into three main areas:

**Regulation:** *We implement effective regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

**Knowledge:** *We provide high quality, targeted and timely environmental data, information and assessment to inform decision making at all levels.*

**Advocacy:** *We work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour.*

## Our Responsibilities

### Licensing

We regulate the following activities so that they do not endanger human health or harm the environment:

- waste facilities (*e.g. landfills, incinerators, waste transfer stations*);
- large scale industrial activities (*e.g. pharmaceutical, cement manufacturing, power plants*);
- intensive agriculture (*e.g. pigs, poultry*);
- the contained use and controlled release of Genetically Modified Organisms (*GMOs*);
- sources of ionising radiation (*e.g. x-ray and radiotherapy equipment, industrial sources*);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea activities.

### National Environmental Enforcement

- Conducting an annual programme of audits and inspections of EPA licensed facilities.
- Overseeing local authorities' environmental protection responsibilities.
- Supervising the supply of drinking water by public water suppliers.
- Working with local authorities and other agencies to tackle environmental crime by co-ordinating a national enforcement network, targeting offenders and overseeing remediation.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Prosecuting those who flout environmental law and damage the environment.

### Water Management

- Monitoring and reporting on the quality of rivers, lakes, transitional and coastal waters of Ireland and groundwaters; measuring water levels and river flows.
- National coordination and oversight of the Water Framework Directive.
- Monitoring and reporting on Bathing Water Quality.

### Monitoring, Analysing and Reporting on the Environment

- Monitoring air quality and implementing the EU Clean Air for Europe (CAFÉ) Directive.
- Independent reporting to inform decision making by national and local government (*e.g. periodic reporting on the State of Ireland's Environment and Indicator Reports*).

### Regulating Ireland's Greenhouse Gas Emissions

- Preparing Ireland's greenhouse gas inventories and projections.
- Implementing the Emissions Trading Directive, for over 100 of the largest producers of carbon dioxide in Ireland.

### Environmental Research and Development

- Funding environmental research to identify pressures, inform policy and provide solutions in the areas of climate, water and sustainability.

### Strategic Environmental Assessment

- Assessing the impact of proposed plans and programmes on the Irish environment (*e.g. major development plans*).

### Radiological Protection

- Monitoring radiation levels, assessing exposure of people in Ireland to ionising radiation.
- Assisting in developing national plans for emergencies arising from nuclear accidents.
- Monitoring developments abroad relating to nuclear installations and radiological safety.
- Providing, or overseeing the provision of, specialist radiation protection services.

### Guidance, Accessible Information and Education

- Providing advice and guidance to industry and the public on environmental and radiological protection topics.
- Providing timely and easily accessible environmental information to encourage public participation in environmental decision-making (*e.g. My Local Environment, Radon Maps*).
- Advising Government on matters relating to radiological safety and emergency response.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

### Awareness Raising and Behavioural Change


- Generating greater environmental awareness and influencing positive behavioural change by supporting businesses, communities and householders to become more resource efficient.
- Promoting radon testing in homes and workplaces and encouraging remediation where necessary.

### Management and structure of the EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Climate, Licensing and Resource Use
- Office of Environmental Enforcement
- Office of Environmental Assessment
- Office of Radiological Protection
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet regularly to discuss issues of concern and provide advice to the Board.



# CONCLUSIONS AND RECOMMENDATIONS

## 6. CONCLUSIONS AND RECOMMENDATIONS

A comprehensive national environmental water monitoring programme is currently in place for assessing the condition of Ireland's groundwater, rivers, canals, lakes, transitional and coastal waters. The assessments, set out in the preceding chapters, provide a comprehensive picture of the quality of the groundwater and surface water bodies in the State for the period 2010-2012. The assessment is based on representative monitoring networks, including 336 groundwater monitoring sites, 3,051 river monitoring sites (13,300 km of channel length), 42 canal sites, 213 lakes, 193 transitional water bodies and 101 monitored coastal water bodies. These networks are used to assess the quantitative and chemical status of groundwater, and the ecological and chemical status of all surface waters in the State.

### Nutrient enrichment

The most widespread water quality problem in Ireland continues to be elevated nutrient concentrations, arising primarily from human activities, such as agriculture and wastewater discharges to water from human settlements, including towns, villages and rural houses. There are two nutrients of concern, nitrogen and phosphorus. Excessive nutrient concentrations can lead to eutrophication impacts, including accelerated growth of algae and plants, leading to ecological impacts in rivers, lakes and marine waters, such as reduced oxygen levels and loss of sensitive species. Phosphorus tends to drive eutrophication impacts in freshwaters, while nitrogen tends to drive eutrophication impacts in coastal waters.

The water status assessment for 2010-2012 shows that 47% of rivers, 57% of lakes and 53% of estuarine and coastal water assessed were impacted primarily by the effects of nutrient enrichment<sup>33</sup>. These water quality problems tend to be greater in areas of intensive agriculture and where population densities are highest due to wastewater discharges to waters. There are areas of the country where 80% to 90% of the average surface water flow comes from groundwater, particularly during low flow conditions. Consequently, if the phosphorous or nitrogen concentrations in groundwater are elevated in these areas, then groundwater may contribute significantly to eutrophication downstream in rivers and lakes. There are catchment areas of the country, such as the south-east, where intensive agricultural practices have resulted in elevated nitrogen concentrations. These are causing eutrophication in some estuaries at the lower end of the catchments. In vulnerable karst limestone aquifers, in particular in the west, there is more potential for elevated phosphorus concentrations in groundwater due to the land spreading of fertilisers and septic tanks discharges. Therefore, groundwater may contribute to eutrophication in rivers and lakes in these areas.

The two most important suspected sources of pollution were agriculture and municipal wastewater discharges. It has been estimated, using the OSPAR PARCOM source apportionment method, that in 2012, the relative contribution of nitrogen and phosphorus to surface waters were mainly from agriculture (88% of nitrogen and 49% of phosphorus) and wastewater discharges (5% of nitrogen and 30% of phosphorus). These are annualised figures, and further consideration of contributions at times of highest biological activity will be needed, to determine which sources are causing water quality impacts in specific locations.

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<sup>33</sup> It should be noted that these figures represent global trends, and in reality, groups of water bodies in all categories and individual water bodies decline, improve and remain stable between assessment periods. The figures presented provide the net gains/losses between reporting periods.

## Trends

The observed levels of nitrogen and phosphorus in groundwater, rivers, transitional waters and coastal waters have been mostly stable or decreasing since 2007. Both nitrate and phosphorus have shown significant decreases in groundwater, and the level of chemical status failures due to phosphorus had dropped from 13.6% to 1.5% between 2011 and 2014. Total oxidised nitrogen concentrations in rivers are stable or showing some degree of reduction. The greatest reductions in nutrients appear to be in the tillage and intensive agriculture areas in the South-East and Midlands. Phosphorus concentrations in rivers are stable in most parts of the country. The orthophosphate concentrations were less than the EQS for good ecological status (i.e. <math>0.025 \text{ mg/l P}</math>) threshold for approximately two-thirds of the rivers examined. These low levels are challenging to analyse in the laboratory, therefore it is difficult to demonstrate any significant trend between years. The greatest improvements have been observed in rivers where, in general, P values are around the good to moderate boundary (mean of  $0.035 \text{ ug/l P}</math>). Over the same period, rivers have shown a 4% improvement in the high/good category to 73% of total channel length using the macroinvertebrate Q-Value assessment tool which is sensitive to eutrophication. Another welcome development has been the 2% increase in the number of sites at high status between 2009 and 2012 despite a steady decline since 1987. It is too early to determine if this improvement is a developing trend, and it will be important to track the number of high status sites on a continuing basis. This downward trend in nutrient inputs is also reflected in the reduction in nutrient sources, particularly from the agriculture sector, which has seen an 18.7% and 37.7% reduction in nitrogen and phosphorus sources respectively. Monitored loads also support these findings. The results of the Trophic Status Assessment for near-shore marine waters appear to also confirm an overall improvement in water quality, which was evident in the last report (2007-2009). Five fewer transitional water bodies have been classed as eutrophic (or potentially eutrophic) when compared to the previous assessment (2007-2009).$

In relation to lakes, there was an overall 5% reduction (10 lakes) in the high or good status categories, and a corresponding increase in the moderate or worse status category compared to 2007-2009. The changes in status were generally as a result of changes in phosphorus concentrations. However, other factors, such as abstraction pressure, habitat limitations and the presence of alien species, may be impacting on status and requires further investigation.

The general decrease in nitrogen and phosphorus levels observed in groundwater, rivers and marine waters, and the associated reduction in eutrophication impacts, are welcome. However, the rate of improvement has been slow and the improvements are relatively modest. The progress is most likely due to better farming practices and improvements in the provision and management of wastewater infrastructure. Future risks which may threaten the modest improvements seen in recent years include the planned expansion in the agricultural sector under Food Harvest 2020, which may see increased applications of nutrients, as well as increased nutrient loadings to waters from municipal wastewater discharges due to population growth and increased numbers of connections from unsewered populations and industries to municipal wastewater treatment plants.

The future challenge will be to target management measures in such a way that will prevent any increases in nutrient levels in water, and which will accelerate further reductions to levels that will not cause eutrophication impacts. This can be most effectively done by taking an integrated catchment management-based approach, and understanding the connectivity between groundwater, rivers, lakes, transitional and coastal waters, as well as the landscape within the catchment area.

## Hazardous substances

Overall, the level of non-compliances with Environmental Quality Standards for hazardous substances (including national specific pollutant standards and EU-wide priority and priority hazardous substance standards) is low in groundwater, rivers, lakes, transitional and coastal waters. The main exceedances were from metals in known, mineral-rich areas, particularly where mining has been carried out. A number of pesticides, including Mecoprop, MCPA and 2,4-D, were detected at low levels in a significant number of rivers (26%-56%) during routine monitoring. These require further investigation. Apart from two ubiquitous PBTs (mercury and PAHs), the amount of non-compliance with the Environmental Quality Standards for priority substances and priority hazardous substances is very low and not of significant concern. Further candidate priority substances / priority hazardous substances are currently being considered in a review at EU level. A number of pharmaceuticals are included for consideration. The likely presence and level of these substances in Irish waters needs to be investigated.

## Other water quality indicators

### Microbiological contamination of groundwater

With regard to other indicators of water quality, faecal contamination of groundwater continues to be a challenge, particularly in areas where groundwater is more vulnerable to pollution (particularly at spring monitoring locations) because they have little natural protection from organic inputs. Some monitoring points in karst limestone areas had faecal coliform counts greater than 100 cfu/100ml. Additional protection measures may be required for some drinking water sources in these areas.

### Quality of designated shellfish waters

In relation to shellfish waters, an assessment of physico-chemical parameters (i.e. salinity, temperature, dissolved oxygen, pH and suspended solids) by the Marine Institute did not indicate any significant disturbance to the physico-chemical environment and their ability to support shellfish populations. In the case of faecal contamination, nearly two-thirds (65.1%) of the designated shellfish areas monitored over the four-year period were compliant with the guide value for *Escherichia coli*. However, of the remainder, there were a number of non-compliant areas where more than 50% of the samples exceeded the guide value. The worst performing were Bannow Bay, Bantry, Dunmanus Inner, Kinsale, Tralee Bay, and Wexford Harbour Inner. It is likely that additional measures may be required to achieve the quality objectives for shellfish waters in these areas.

### Serious pollution of rivers

Serious pollution resulting from urban wastewater and industrial pollution was reduced to 17 km of river channel length. This was down from 53 km in the 2007-2009 period. There has also been a further decline in the number of fish kills to 70 reported in freshwaters (rivers and lakes) in the period under review (2010-2012) compared to 72 in the previous period (2007-2009). This is the lowest recorded to date, from a high of 235 in the 1980s.

### Radioactivity in marine waters

Radioactive substances from the nuclear reprocessing plant at Sellafield in England continue to be discharged to the Irish Sea, though exposure to these substances is not considered to pose a significant health risk to the Irish public. In general, the levels of radioactive contamination present in the Irish marine environment are low.

## Distance to target

47% of rivers, 57% of lakes, 55% of transitional waters and 7% of coastal waters require improvement to achieve satisfactory condition. This will require significant additional targeted action to achieve the objectives set out in the Water Framework Directive. In addition to achieving ecological health of aquatic ecosystems, focus will be required on ensuring that the public health requirements are also met. The contamination of groundwater with faecal coliforms in 51% of samples highlights the significant challenge facing the country to protect both public and private drinking sources. When taken together with the 35% of designated shellfish waters with elevated faecal contamination, it is clear that additional measures may be required to ensure that Ireland's waters are both healthy and safe.

## Strengthening science

### Ecological monitoring tools

As a result of the Water Framework Directive, ecological monitoring has required the development of assessment tools for assessing all biological elements in surface waters where relevant. These elements include phytoplankton, macrophytes and phytobenthos, macroalgae, angiosperms, benthic invertebrate fauna, and fish fauna. These elements often respond differently to a range of environmental pressures (e.g. organic pollution, chemical pollution, water abstraction and physical modification to surface waters), some being more sensitive to certain pressures than others. While a number of these elements have been used as indicators of environmental health for a long period of time, over 10 new ecological monitoring tools have had to be developed to date. Ecological monitoring tools also need to be benchmarked against other similar tools used across Europe through the formal intercalibration process. This means that far more comprehensive environmental assessments are now being carried out than in the past. There are still a number of tools which are under development (e.g. assessment tools for macrophytes and phytobenthos in rivers) but will be applied once finalised. Some tools (e.g. fish assessment tools) are new and may require further refinements as experience is gained in their use. It is not always clear what environmental pressures the new tools are responding to. For example, fish assessments downgraded the ecological status in 18% of rivers surveillance sites and also in the case of 20 monitored lakes. Similarly, a small number of marine water bodies were assigned poor status on the basis of the fish status assessments. These assessments did not appear to be responding to the impacts of pollution enrichment and may be caused by other environmental pressures, such as physical habitat modifications, barriers to migration, or abstraction pressures. These need to be evaluated further.

### Hydromorphological and water abstraction pressures

Many surface waters (rivers, lakes, transitional and coastal waters) are regulated or have been modified to support flood protection, navigation, freshwater supply, or hydropower production. While the extent of these pressures is significantly less than in the rest of Europe (from 1% to 25% depending on the pressure concerned)<sup>34</sup>, the ecological impacts of these physical modifications are poorly understood, and the extent to which these impacts can be effectively reversed or mitigated needs to be evaluated<sup>35</sup>. A number of hydromorphological assessment tools have been developed in collaboration with environmental agencies in the UK, for the purpose of WFD ecological status assessments. These include the River Hydromorphological Assessment Technique, the Lake Morphological Impact Assessment System tool and the TraC - Morphological Impact Assessment System tool for transitional and coastal waters. These are new tools which will require refinement following experience in their application. There

34 EU Commission (2012). Assessment of Ireland's River Basin Management Plans. SWD (2012) 379 Final.

35 <http://www.reformrivers.eu/>

is a need to review available scientific evidence regarding the relationship between pressures, such as physical habitat modifications and water abstraction/impoundment pressures, and their ecological impacts, using available environmental assessments information and reviewing available scientific evidence, both nationally and internationally.

### **Modelling the sensitivity of transitional and coastal waters to elevated nutrients**

The improvement in the trophic status of estuarine waters, as evidenced by the improvements seen in the Blackwater Estuary in recent years, is due to the reduction in nutrient inputs. A number of estuaries, mainly in the south-east and south of the country, continue to display symptoms of nutrient enrichment and have been classed as eutrophic. The relative sensitivity of transitional and coastal waters to elevated nutrients will need to be assessed, to ensure that the right measures are put in place to improve their status. The response of systems to these measures depends not only on the direct relationships between nutrient loadings and primary productivity (benthic and pelagic) but also on a number of physiochemical and hydromorphological factors, such as the availability of light, residence time and nutrient cycling processes.

Bio-physical models, which incorporate these factors, have been tested successfully on a number of Irish transitional and coastal water bodies. These models can help identify the required nutrient reduction necessary to ensure a water body reaches its WFD objectives. Further modelling is needed.

### **Hazardous substances – emerging issues**

As the review of priority substances and priority hazardous substances happens at EU level, the likely presence and level of these substances in Irish waters needs to be investigated. Pharmaceuticals in waters are likely to be an emerging environmental issue which needs to be addressed. A number of pesticides, including Mecoprop, MCPA and 2,4-D, were detected at low levels in a significant number of rivers (26%-56%) during routine monitoring. A more comprehensive review of the data and other evidence is required. Depending on the concentrations found, it may be necessary to consider regulating some of these substances during the next river basin planning cycle.

### **General recommendations**

On the basis of the findings of this assessment of water quality in Ireland for the period 2010 to 2012, the following recommendations are made below. More specific recommendations are made in the earlier individual chapters of this report.

### **Implementing an integrated catchment management approach**

The assessment of the quality of groundwater and surface waters in Ireland during the period 2010-2012 represents an important baseline for the preparation of the next (second) cycle river basin management plans. It provides an interim check on progress in achieving the objectives for water established in river basin management plans in 2010. At this stage, while the quality of waters is generally improving, the improvements are modest, and at the current rate of change, the targets set in the first river basin management plans are unlikely to be met. The target in the first cycle river basin management plans for surface waters was a 13.6% improvement in ecological status by 2015 from the 2009 baseline. This is unlikely to be achieved. For example, there was a 1% improvement in the number of river water bodies in satisfactory ecological status by 2012 (4% in terms of river channel length). However, the target for 2015 was an 18% improvement from the 2009 baseline.



While it may be necessary to adjust the objectives set in the first cycle river basin management plans for the second cycle, there are steps which can be taken to try and accelerate the rate of water quality improvements. This requires a more targeted approach to ensure that measures are focussed towards areas that will yield the greatest environmental improvements for the effort invested. An Integrated Catchment Management approach to assessing and managing the risks to water quality and condition from environmental pressures is the most appropriate approach. The catchment management approach ultimately seeks to identify the significant sources and critical source areas for nutrients in catchment areas where control measures can be targeted and implemented with maximum effect. The process is outlined in **Figure 6-1**. In this context, monitoring will be focussed to confirm and quantify environmental impacts and to track the effectiveness of programmes of measures implemented to bring about environmental improvements.

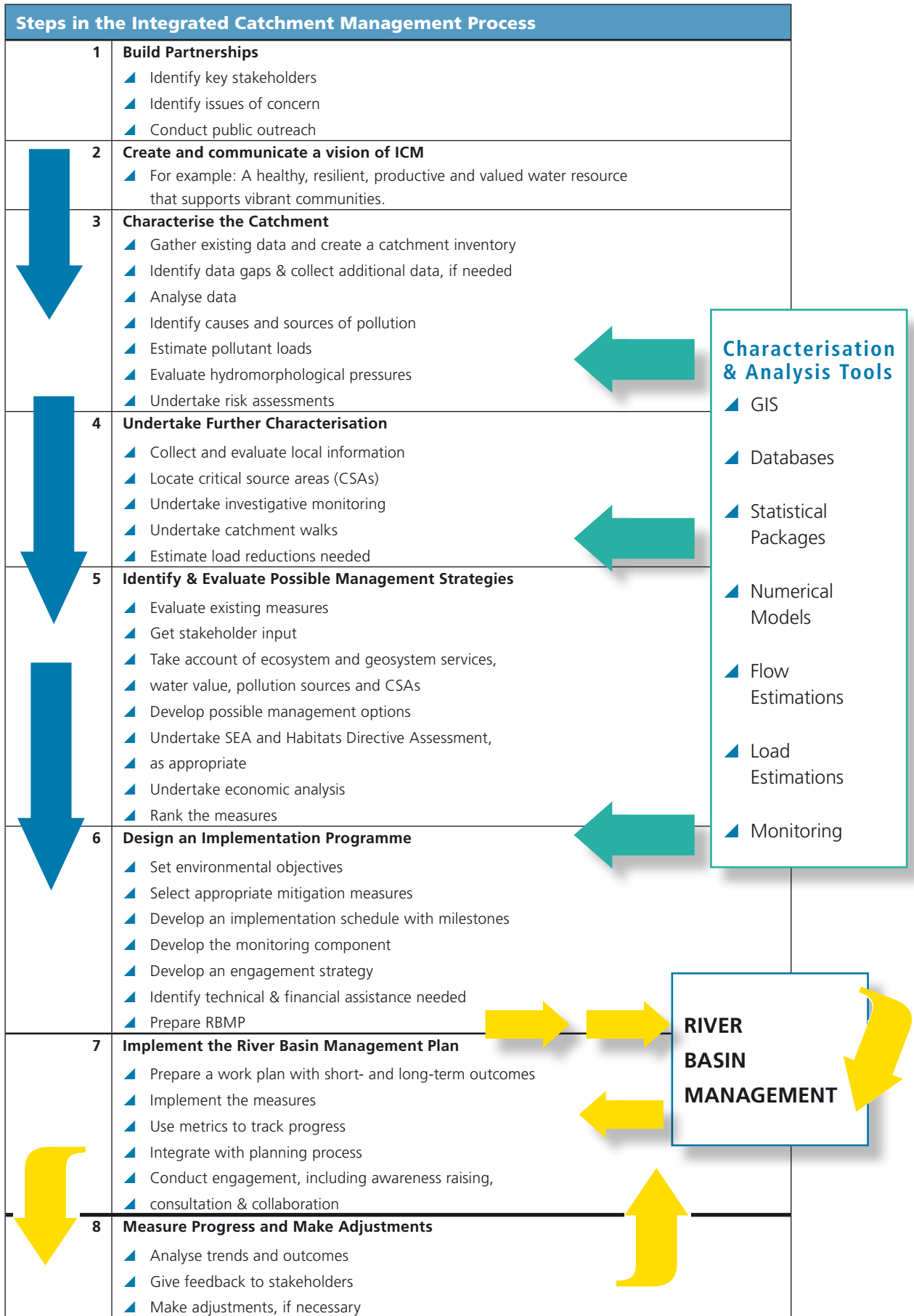


Figure 6-1. Integrated Catchment Management process. Daly et al (2014).

## Integrated assessments

The monitoring and assessment of the condition of groundwater and surface waters has become more comprehensive, and continues to change as new monitoring tools are developed and refined. When taken together with the catchment-based risk assessments, they provide for the undertaking of more integrated environmental assessments. The move towards more integrated assessment is a welcome one, as it should facilitate the identification of more targeted management measures for the second cycle of river basin management planning and implementation.

## Collaboration and co-ordination

A new governance framework has been put in place<sup>36</sup>. The framework is intended to provide far better clarity on who is responsible for undertaking the tasks involved in preparing and leading the implementation of river basin management plans. However, there are many other organisations involved in activities that have the potential to impact positively and negatively on the water environment, and it is important to include them in any broader approach to integrated catchment management. They include government departments, state agencies, local authorities, public and private organisations, NGOs, homes, and communities. The ability and capacity of public bodies to perform their statutory water protection and management duties creates the need for mechanisms to co-ordinate their activities, so that positive impacts can be promoted and negative ones mitigated. The establishment of the new governance framework has included the following;

- ▲ The Minister of the Environment, Community and Local Government has established a new Water Policy Advisory Committee to assist in the making of plans, and to provide for a co-ordinated approach to implementation across government departments and Agencies.
- ▲ The Minister of the Environment, Community and Local Government has decided that a national approach will be taken to river basin planning.
- ▲ The EPA has established a National Implementation Group and a Catchment Management Network to foster information sharing and collaboration across public bodies and agencies in the development of the new plans.
- ▲ The Catchment Management Network is establishing working groups on a variety of topics, including characterisation, monitoring, and measures (actions to deal with issues), to ensure consistent action across organisations.
- ▲ Local Authorities have been given responsibility for regional co-ordination and engagement to progress the development and implementation of plans.

Collaboration and co-ordination of activities between government departments and state agencies will be critical to ensuring that the new governance arrangements are effective and ultimately support the achievement of water quality improvements.

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36 2014 European Water Policy (Amendment) Regulations (SI 350 of 2014)

## Reporting

The purpose of reporting on the condition of waters is firstly to inform on the progress or otherwise towards achieving good water status, and secondly, to inform action to address issues with water quality. In this context, the format of future reporting on the quality and condition of groundwater and aquatic ecosystems is likely to change significantly over the coming years. This is due to a number of drivers, including:

1. monitoring and assessment has become more comprehensive and continues to change as new monitoring tools are developed and refined,
2. the governance and the administrative structures for river basin planning, including the river basin districts, are being revised, and
3. a more integrated approach to assessment is needed to effectively protect and improve the status of waters.

The EPA is currently reviewing its reporting outputs on the aquatic environment so that future reporting on assessment provides information on both status and future action. The EPA intends to report more frequently on water status, as well as developing key indicators to support water management activities. Monitoring and assessment results for the period 2013-2015 will be published in 2016.

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# AN GHNÍOMHAIREACTH UM CHAOMHNÚ COMHSHAOIL

Tá an Gníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaoil a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaoil a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

## Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

**Rialú:** Déanaimid córais éifeachtacha rialaithe agus comhlíonta comhshaoil a chur i bhfeidhm chun torthaí maithe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.

**Eolas:** Soláthraimid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírthe agus tráthúil chun bonn eolais a chur faoin gcinnteoireacht ar gach leibhéal.

**Tacaíocht:** Bímid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaoil atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaoil inbhuanaithe.

## Ár bhFreagrachtaí

### Ceadúnú

- Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaoil:
- saoráidí dramhaíola (m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistrithe dramhaíola);
- gníomhaíochtaí tionsclaíoch ar scála mór (m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta);
- an diantalmhaíocht (m.sh. muca, éanlaith);
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaíthe (OGM);
- foinsí radaíochta ianúcháin (m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíoch);
- áiseanna móra stórála peitрил;
- scardadh dramhuisce;
- gníomhaíochtaí dumpála ar farraige.

### Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdaráis áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhírú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídionn an ciseal ózóin.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

### Bainistíocht Uisce

- Monatóireacht agus tuairisciú a dhéanamh ar cháilíocht aibhneacha, lochanna, uisce idirchriosacha agus cósta na hÉireann, agus screamhuiscí; leibhéal uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairisciú a dhéanamh ar Cháilíocht an Uisce Snámha.

## Monatóireacht, Anailís agus Tuairisciú ar an gComhshaoil

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairisciú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (m.sh. tuairisciú tréimhsiúil ar staid Chomhshaoil na hÉireann agus Tuarascálacha ar Tháscairí).

## Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gáis cheaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhair breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn

## Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainaithint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, an uisce agus na hinbhuanaitheachta.

## Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaoil in Éirinn (m.sh. mórfheananna forbartha).

## Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéal radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as tairmí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

## Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d'earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaoil ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnteoireacht i ndáil leis an gcomhshaoil (m.sh. Timpeall an Tí, léarscáileanna radóin).
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chosc agus a bhainistiú.

## Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht chomhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlacha a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

## Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an gníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig Aeráide, Ceadúnaithe agus Úsáide Acmhainní
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Measúnú Comhshaoil
- An Oifig um Cosaint Raideolaíoch
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltaí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair imní agus le comhairle a chur ar an mBord.



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