



Water quality monitoring report on nitrogen and phosphorus concentrations in Irish waters 2019

ENVIRONMENTAL PROTECTION AGENCY

The 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: *Implementing regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

Knowledge: *Providing high quality, targeted and timely environmental data, information and assessment to inform decision making.*

Advocacy: *Working with others to advocate for a clean, productive and well protected environment and for sustainable environmental practices.*

Our responsibilities include:

Licensing

- Large-scale industrial, waste and petrol storage activities;
- Urban waste water discharges;
- The contained use and controlled release of Genetically Modified Organisms;
- Sources of ionising radiation;
- Greenhouse gas emissions from industry and aviation through the EU Emissions Trading Scheme.

National Environmental Enforcement

- Audit and inspection of EPA licensed facilities;
- Drive the implementation of best practice in regulated activities and facilities;
- Oversee local authority responsibilities for environmental protection;
- Regulate the quality of public drinking water and enforce urban waste water discharge authorisations;
- Assess and report on public and private drinking water quality;
- Coordinate a network of public service organisations to support action against environmental crime;
- Prosecute those who flout environmental law and damage the environment.

Waste Management and Chemicals in the Environment

- Implement and enforce waste regulations including national enforcement issues;
- Prepare and publish national waste statistics and the National Hazardous Waste Management Plan;
- Develop and implement the National Waste Prevention Programme;
- Implement and report on legislation on the control of chemicals in the environment.

Water Management

- Engage with national and regional governance and operational structures to implement the Water Framework Directive;
- Monitor, assess and report on the quality of rivers, lakes, transitional and coastal waters, bathing waters and groundwaters, and measurement of water levels and river flows.

Climate Science & Climate Change

- Publish Ireland's greenhouse gas emission inventories and projections;
- Provide the Secretariat to the Climate Change Advisory Council and support to the National Dialogue on Climate Action;
- Support National, EU and UN Climate Science and Policy development activities.

Environmental Monitoring & Assessment

- Design and implement national environmental monitoring systems: technology, data management, analysis and forecasting;
- Produce the State of Ireland's Environment and Indicator Reports;
- Monitor air quality and implement the EU Clean Air for Europe Directive, the Convention on Long Range Transboundary Air Pollution, and the National Emissions Ceiling Directive;
- Oversee the implementation of the Environmental Noise Directive;
- Assess the impact of proposed plans and programmes on the Irish environment.
- Environmental Research and Development
- Coordinate and fund national environmental research activity to identify pressures, inform policy and provide solutions;
- Collaborate with national and EU environmental research activity.

Radiological Protection

- Monitoring radiation levels and assess public exposure to ionising radiation and electromagnetic fields;
- Assist in developing national plans for emergencies arising from nuclear accidents;
- Monitor developments abroad relating to nuclear installations and radiological safety;
- Provide, or oversee the provision of, specialist radiation protection services.

Guidance, Awareness Raising, and Accessible Information

- Provide independent evidence-based reporting, advice and guidance to Government, industry and the public on environmental and radiological protection topics;
- Promote the link between health and wellbeing, the economy and a clean environment;
- Promote environmental awareness including supporting behaviours for resource efficiency and climate transition;
- Promote radon testing in homes and workplaces and encourage remediation where necessary.

Partnership and networking

- Work with international and national agencies, regional and local authorities, non-governmental organisations, representative bodies and government departments to deliver environmental and radiological protection, research coordination and science-based decision making.

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 Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by advisory committees who meet regularly to discuss issues of concern and provide advice to the Board.



Report on Nitrogen and Phosphorus in Irish waters (2019)

Prepared by the EPA

ENVIRONMENTAL PROTECTION AGENCY

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Background to this Report

The European Union (Good Agricultural Practices for the Protection of Waters) Regulations, 2017 (S.I. 605 of 2017) as amended in 2018 (S.I. 65 of 2018) and (S.I. 40 of 2020) require the EPA to prepare an annual report of the results of water quality monitoring. The aim of this water quality assessment is to provide information water quality, to support the assessment of the impact of the nitrate's derogation, as established under the Good Agricultural Practice Regulations.

In preparing this report, the EPA has used data from its own monitoring activities and monitoring activities undertaken by local authorities. The report summarises phosphorus and nitrate data, taking account of the water quality reporting guidance used for Council Directive 91/676/EEC (the Nitrates Directive).

Nitrogen and phosphorus data are presented for groundwater, rivers, lakes, estuarine and coastal waters. Nitrogen results are expressed as nitrate and phosphorus results are measured as molybdate reactive phosphate or total phosphorus. The results are expressed as annual means in the case of rivers, lakes and groundwater or as winter medians for estuarine and coastal waters. The figures and tables in this report summarise the mean or median annual concentrations from 2007 to 2019 and mean or median annual concentration changes since 2013.

While both nitrate and phosphorus are important drivers of nutrient enrichment and pollution (eutrophication) their impact should be considered in conjunction with the overall ecological condition of our waters. The EPA's [Water Quality in Ireland report](#), covering the period 2013-2018, provides a full assessment of the chemical and ecological water quality and WFD status of Irish waters.

Public access to the nutrient data for the sites in the WFD monitoring programme is available on www.catchments.ie.

Key Water Quality Findings

- Nitrate concentrations in rivers, groundwaters and estuaries have been increasing since 2013, following a period of improvement since 2007.
 - In 2019, 41.7% of rivers had mean nitrate concentrations greater than 10 mg/l NO₃; a 15% increase since 2013.
 - Over half (54.8%) of all river sites have seen an increase of more than 1 mg/l NO₃ in their annual mean concentrations since 2013.
 - Almost a quarter (22%) of groundwater sites had mean nitrate concentrations greater than 25 mg/l NO₃ in 2019; with 27.7% of sites increasing by more than 5 mg/l NO₃ since 2013.
 - Nearly a fifth (17.7%) of estuarine and coastal water bodies had winter median nitrate concentrations greater than 10 mg/l NO₃.
- The greatest increases in riverine and groundwater nitrate have been in the south and south east of the country, with increased nitrate concentrations also recorded in estuarine and coastal waters in these regions. These are the regions with the largest share of derogation farms.
- River and lake phosphorus concentrations are highest, and have increased most, in areas with poorly draining soils. These areas are not always correlated with those with the greatest proportion of derogation farms.
 - Just over a quarter (27.8%) of river sites have mean phosphorus concentrations greater than the good status EQS (0.035 mg/l P) in 2019.
 - In 2019, 27.6% of lakes have mean phosphorus concentrations greater than the good status EQS (0.025 mg/l P).

Summary assessment

The 2013-2018 assessment of water quality in Ireland (EPA, 2019) found that only just over half of our rivers and lakes were in satisfactory ecological health and overall water quality was in decline. The picture for our estuaries was even more stark with just over one third in satisfactory condition. The assessment indicated the main problem damaging our waters was the presence of too much phosphorus and nitrogen.

Over half (54.8%) of all river sites have seen an increase of more than 1 mg/l NO₃ in the annual mean concentration since 2013. Almost a quarter of groundwater sites are also showing an increase of more than 5 mg/l NO₃. The greatest increases in nitrate have been in the south east and south west, with increased nitrate concentrations also recorded in estuarine and coastal waters in this region.

Just over a quarter (27.8%) of river sites have mean phosphorus concentrations greater than the good status EQS (0.035 mg/l P). The highest river and lake phosphorus concentrations are found in areas

with poorly draining soils and it is in these areas that concentrations have increased the most since 2013.

The increase in nutrient concentrations in water since 2013 represents a worrying development in the context of the status objectives of the Water Framework Directive (WFD).

As part of the development of the next River Basin Management Plan work is underway to quantify the nutrient loss reductions needed to achieve water quality outcomes and to identify the actions that are needed to achieve those aims. This work will support the development of future policy and measures under the Nitrates Directive and the Water Framework Directive.

Overall, to achieve the WFD objectives, mitigation measures need to be targeted to the water quality issues and physical settings where they occur, i.e. the critical source areas. Within a catchment, the critical source areas for phosphorus and nitrate are likely to occur in different locations. Therefore, any mitigation measures introduced should be tailored and targeted to the critical source area that is relevant to the pollutant of concern.

Assessment of the Impacts of Agriculture on Water Quality

The data presented in this report provides a national overview of nitrate and phosphorus concentrations.

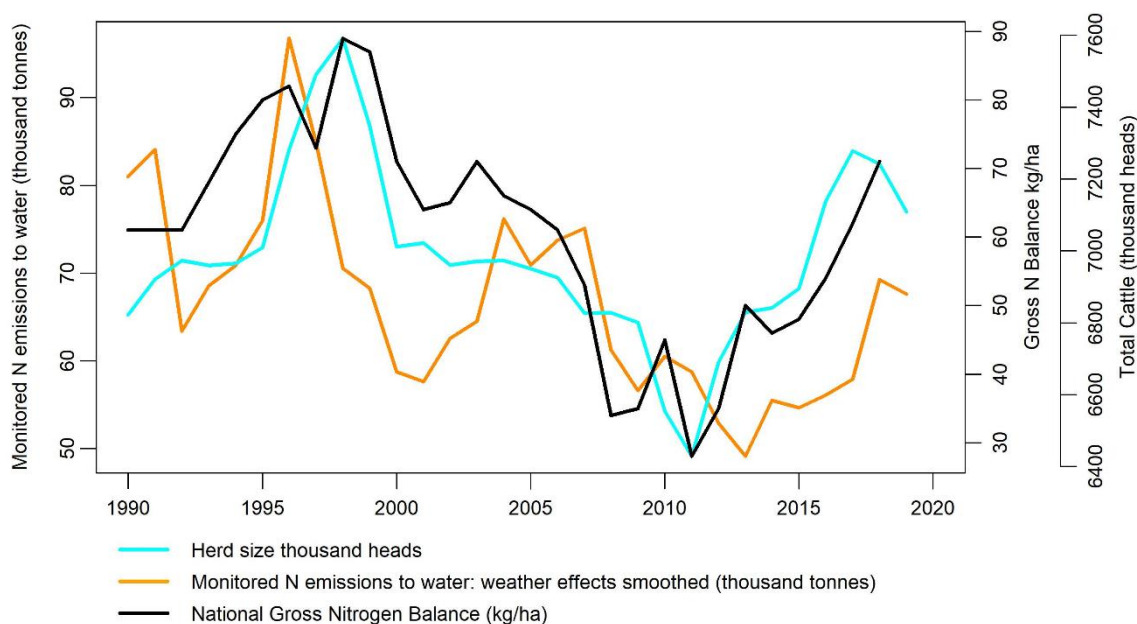
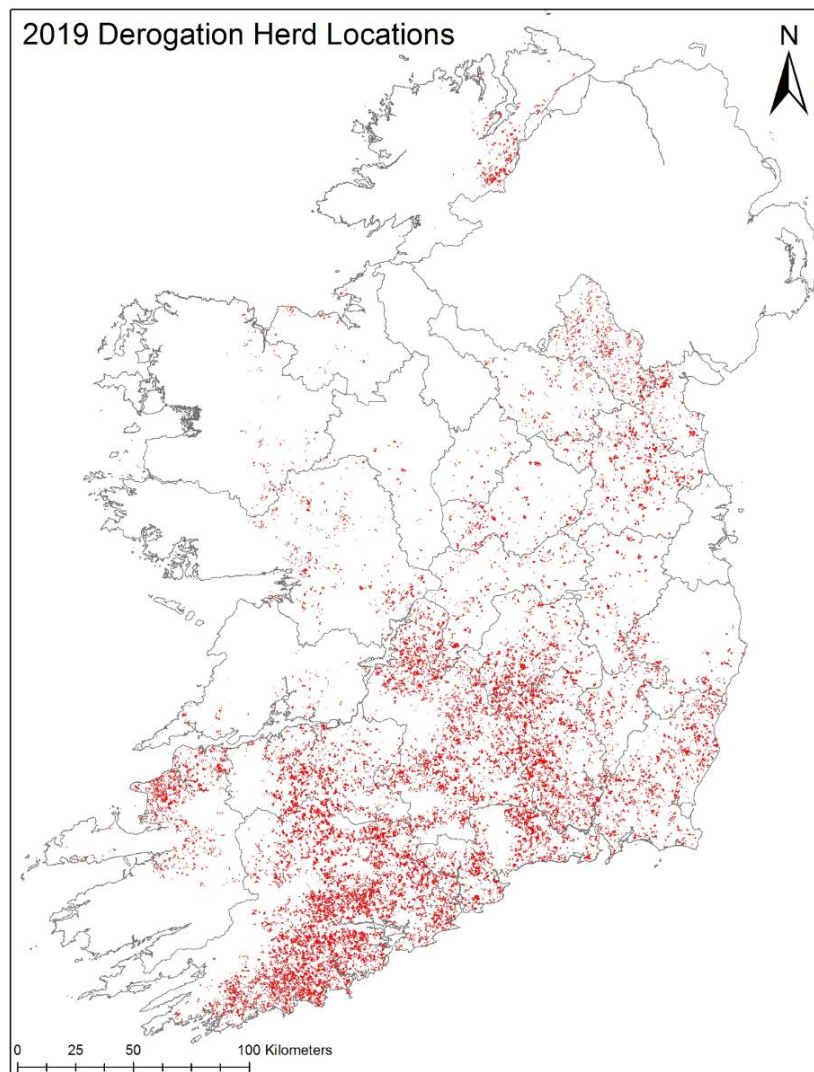


Figure 1: Relationship of herd numbers, nitrogen balance and total nitrogen emissions to water for the period 1990 to 2019 in Ireland. Note this is based on national data and all bovines.

Figure 1 shows that nationally in Ireland, there is a clear nitrogen response in water to changes in herd numbers and gross nitrogen balance. The increase in animal numbers since 2013 has resulted in increased nitrogen being lost to the water environment from agricultural sources; and an associated decline in our overall water quality.

Map 1 shows the location of derogation farm holdings in 2019. Derogation farms are those which have been granted a derogation from the standard limit of 170 kg nitrogen per hectare of livestock manure from grazing livestock which can be applied to the land each year on grassland farms. Farms granted derogations may apply manure up to a limit of 250 kg nitrogen per hectare (including by the animals themselves).



Map 1: National distribution of derogation herds in 2019 (Source: Department of Agriculture, Food and the Marine)

Nitrate

Nitrate is highly mobile in the landscape. In freely draining soils, it leaches readily to groundwater, and ultimately into rivers and on to estuaries where the associated nutrient enrichment causes water quality problems.

Increased losses of nitrogen to water have been observed since 2013. Key drivers of the nitrogen increase in water include increased national herd and related increased fertiliser usage. Climatic factors and soil heterogeneity also result in spatial and temporal differences in water quality.

Figure 2 shows that nitrate losses to rivers are strongly correlated¹ with farming intensity at this scale: the higher the average stocking rate across the sub-catchment (as represented by kg Nitrogen per hectare), the higher the nitrate concentrations in the rivers that drain the sub-catchment. This correlation is based on an assessment of national water quality for 1,300 river waterbody sub-catchments. These river waterbody sub-catchments are, on average, 24 km² and cumulatively cover 31,000 km² (45%) of the country. It is important to note however, that there is a significant spread in the range of water quality outcomes for given stocking rate, particularly in the more intensively farmed sub-catchments. This spread is due to the influences of the soils, farming practices, weather and other factors that exist within the sub-catchment. This emphasises the need for measures to be tailored and targeted at the farm scale.

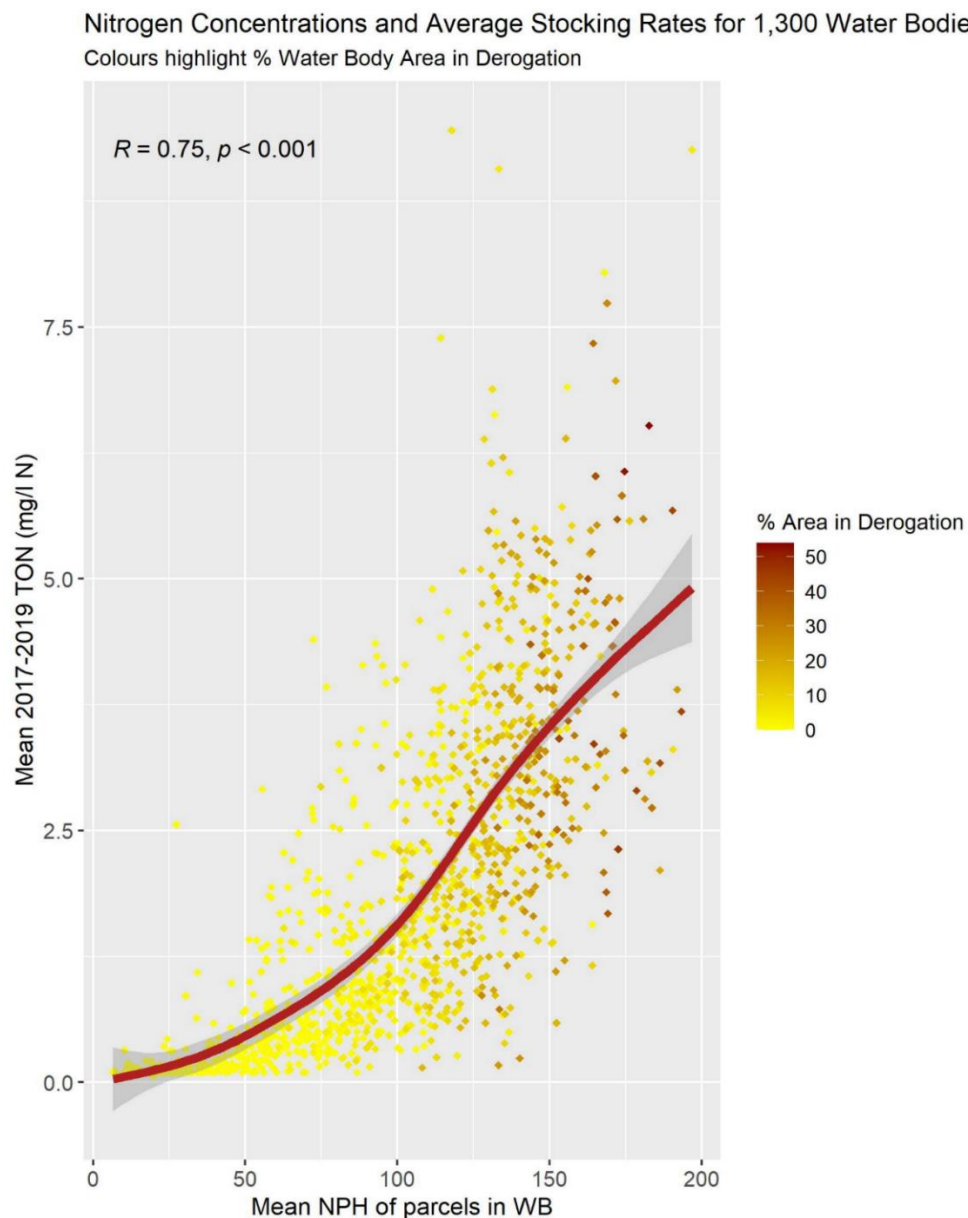


Figure 2: Average agricultural nitrate loading (kg Nitrogen per hectare) and the corresponding nitrate river concentrations 2017-2019 in 1,300 Irish river waterbody sub-catchments²

¹ Using a standard Pearson's R correlation coefficient

² Average size 24 km²

Phosphorus

In contrast to nitrate, phosphorus is much more readily lost from poorly draining soils where overland flow carries it to the nearest watercourse following rain. Excess phosphorus causes eutrophication in rivers and lakes and it takes a very small amount to cause a water quality problem. The environmental quality standard for phosphorus is 0.035 mg/l P. For an average Irish stream catchment, average losses of only 200 g/ha from land are enough to cause a water quality issue. Agriculture and wastewater discharges are the main sources of phosphorus in surface water.

Nationally, phosphorus concentrations in water are lower than 2006, but over a quarter of rivers have mean phosphorus concentrations higher than the good status environmental quality standard (0.035 mg/l P) and will require additional measures.

Outlook

As part of the development of the next River Basin Management Plan, work is underway to identify the reductions in losses to water that will be required in each river sub-catchment in order to meet the WFD environmental objectives, and the types of actions on the farms in those sub-catchments that will be most beneficial. This information will inform the decision making on the actions and the policies needed to achieve the environmental outcomes.

Evolution of Water Quality in Ireland

The nitrate and phosphorus water quality data presented hereafter, uses a common, comparable set of water quality ranges across all water types to allow for consistent analysis and do not necessarily align with an environmental limit of concern.

Groundwater

Nitrate in Groundwater

Figure 3 summarises the mean nitrate concentrations from 2007 to 2019 for the national groundwater monitoring programme. 195 groundwater sites were monitored in 2019.

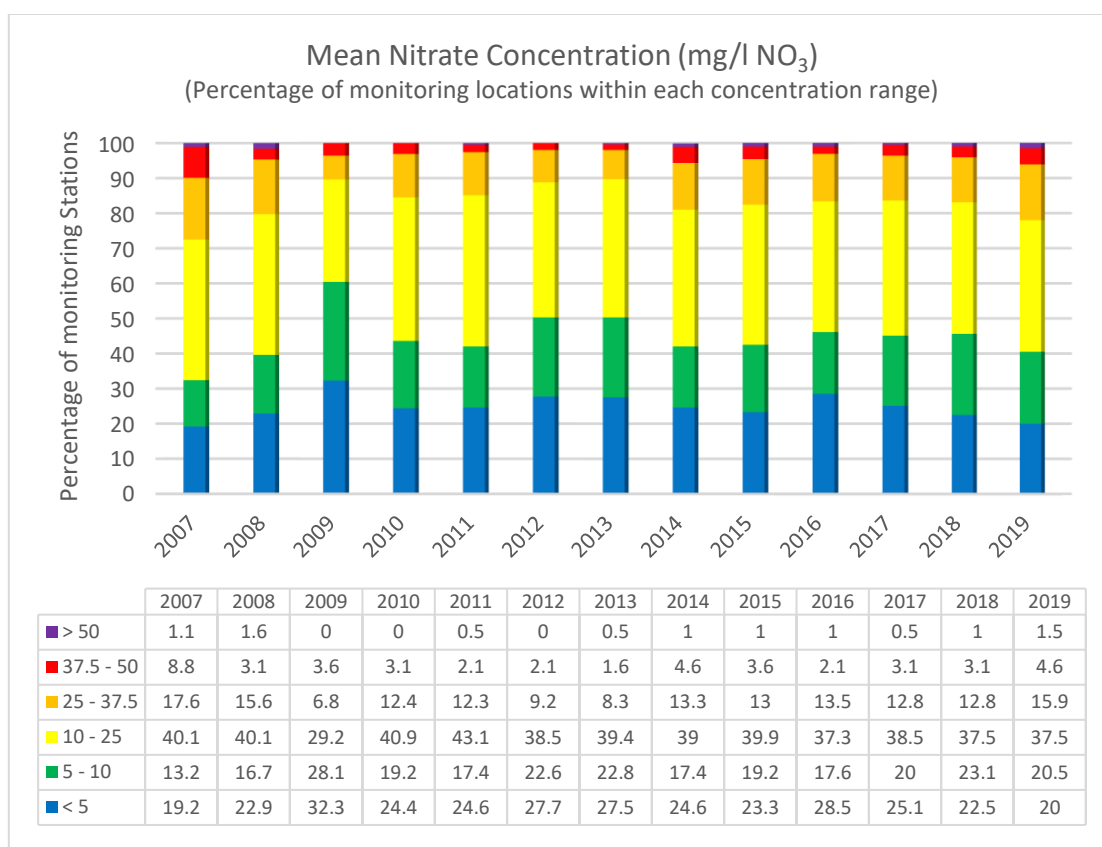


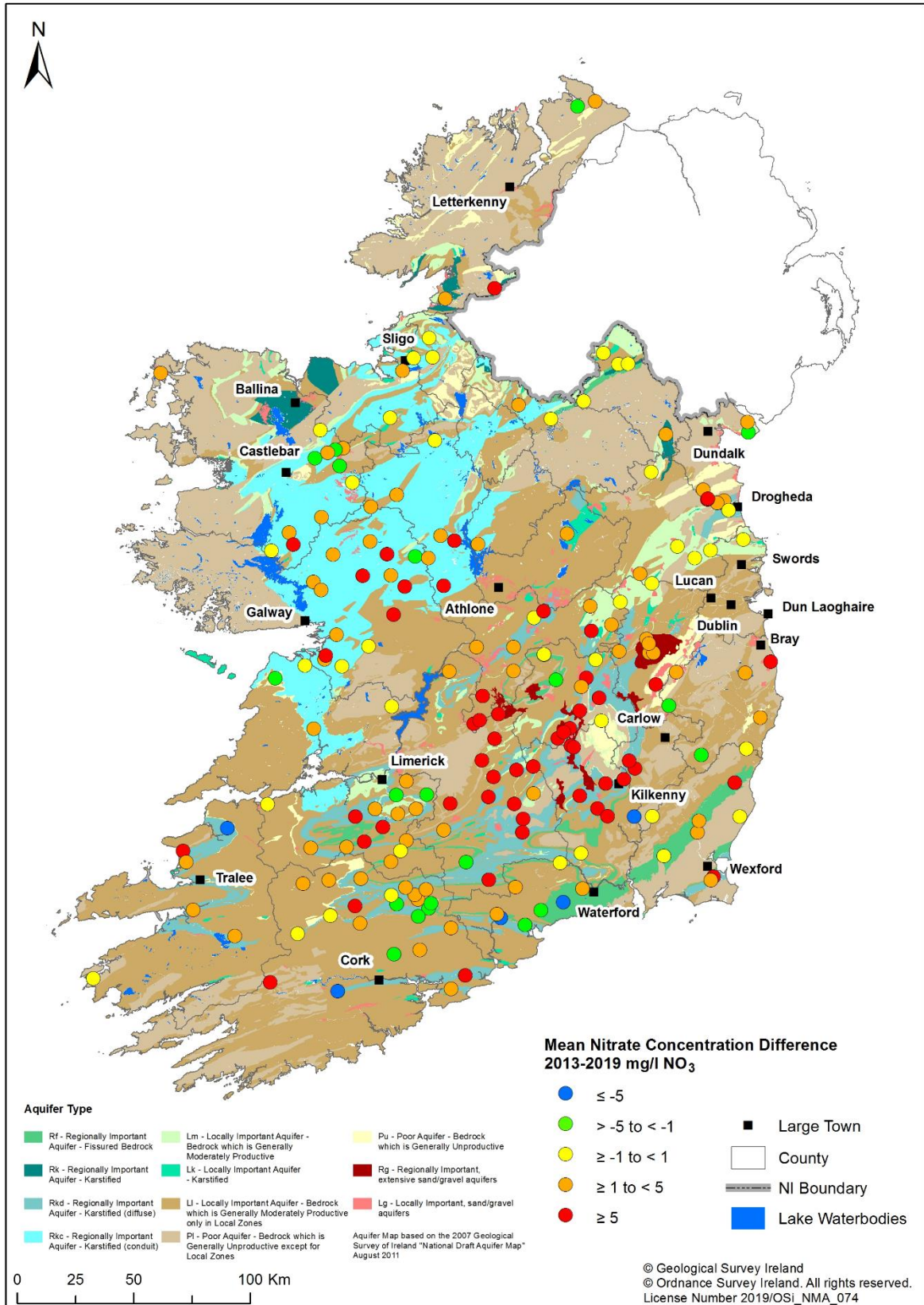
Figure 3: Mean nitrate concentrations at groundwater quality monitoring sites, 2007 to 2019

In 2019, 22% of groundwater monitoring sites had a mean nitrate concentrations greater than 25 mg/l NO₃ compared with 10.4% of sites in 2013. Twelve monitoring locations exceeded the Irish WFD Threshold Value concentration of 37.5 mg/l NO₃. Three of these sites have a mean nitrate concentration greater than the drinking water standard of 50 mg/l NO₃. The number of drinking water supplies being affected by rising nitrate concentrations is increasing. Sixteen drinking water supplies did not meet the nitrate drinking water standard in 2019.

Table 1 shows that nitrate concentrations are increasing and increases of more than 5 mg/l NO₃ have been observed in over a quarter of monitoring sites since 2013. Map 2 highlights that since 2013, the greatest increases in groundwater nitrate concentrations occurred in the south-east.

Table 1: Comparative change in groundwater nitrate concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >5 mg/l NO₃</i>	54	<i>27.7</i>
<i>increase 1 to 5 mg/l NO₃</i>	74	<i>37.9</i>
<i>static +/- 1mg/l NO₃</i>	42	<i>21.5</i>
<i>decrease 1 to 5 mg/l NO₃</i>	20	<i>10.3</i>
<i>decrease >5 mg/l NO₃</i>	5	<i>2.6</i>
Total	195	100.0



Map 2: Change in groundwater nitrate concentrations since 2013

Phosphorus in Groundwater

Figure 4 summarises the mean phosphorus concentrations (measured as molybdate reactive phosphorus (MRP)) from 2007 to 2019 for the national groundwater monitoring programme. 195 groundwater sites were monitored in 2019.

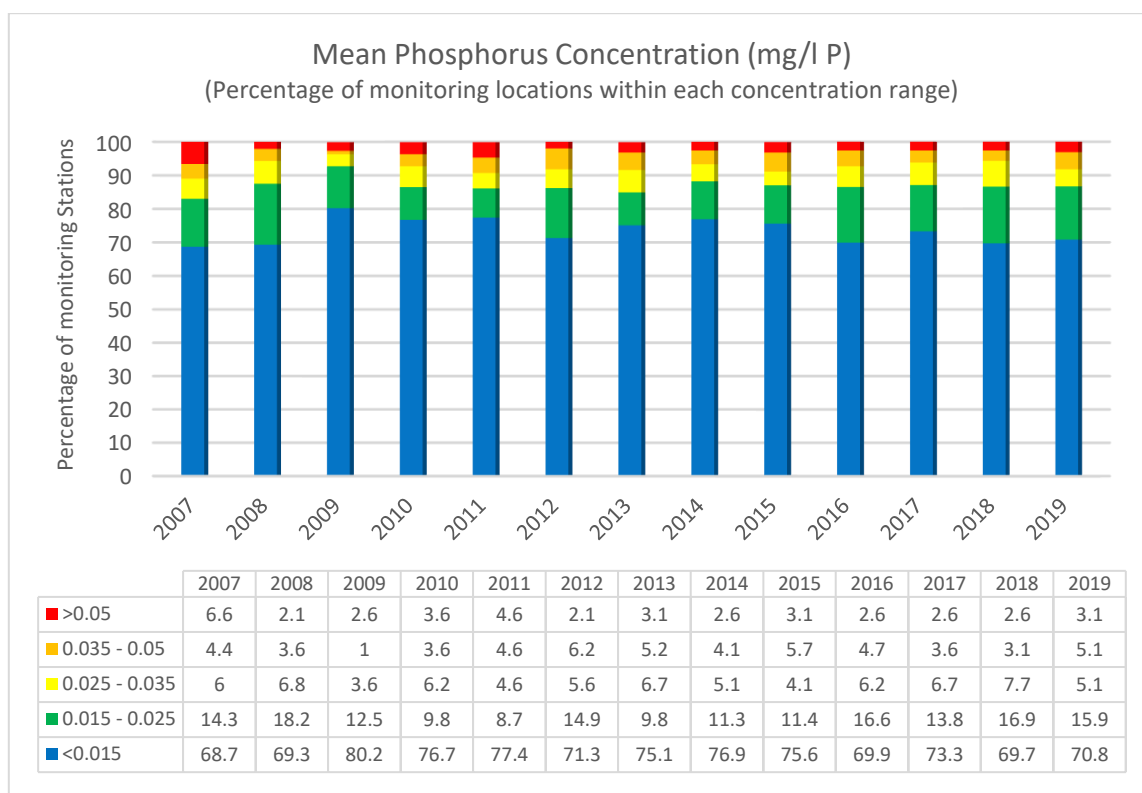
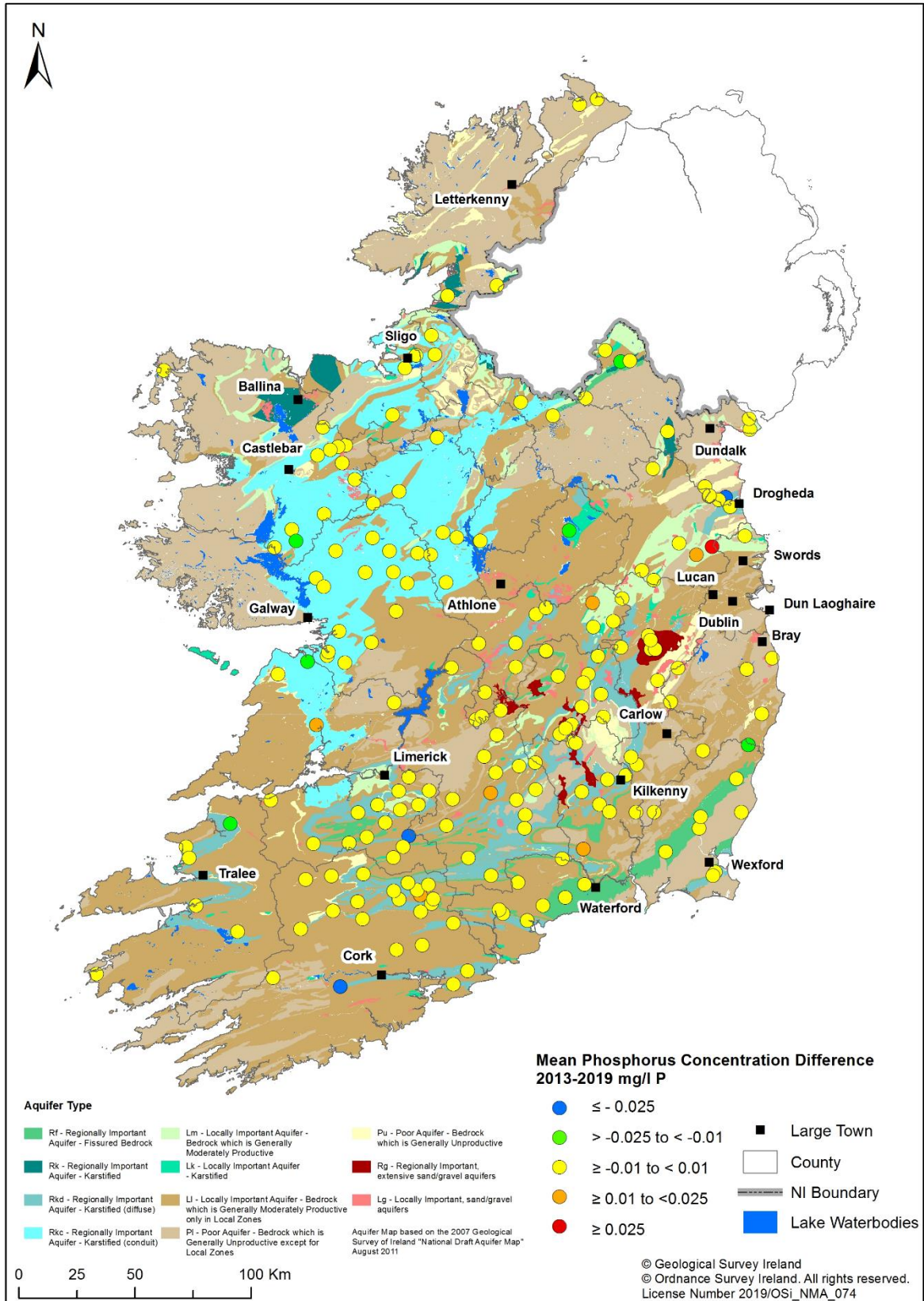


Figure 4: Mean phosphorus concentrations at groundwater quality monitoring sites, 2007 to 2019

8.2% of monitoring locations had mean phosphorus concentrations greater than the Irish WFD threshold value concentration of 0.035 mg/l P. Table 2 indicates that since 2013, groundwater phosphorus concentrations have remained stable and Map 3 confirms that there is no regional pattern to the increases or decreases that could be correlated with regional agricultural intensification or presence of derogation farms. This validates the conceptual understanding that groundwater only provides a pathway to surface waters in areas with extreme groundwater vulnerability i.e. where there is little or no soil available. Areas of extreme groundwater vulnerability in the west of Ireland do not typically correspond to intensively farmed land.

Table 2: Comparative change in groundwater phosphorus concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >0.025 mg/l P</i>	1	0.5
<i>increase 0.01 to 0.025 mg/l P</i>	5	2.6
<i>static +/- 0.01 mg/l P</i>	180	92.3
<i>decrease 0.01 to 0.025 mg/l P</i>	6	3.1
<i>decrease >0.025 mg/l P</i>	3	1.5
Total	195	100.0



Map 3: Change in groundwater phosphorus concentrations since 2013

Rivers

Nitrate in Rivers

Figure 5 summarises the mean nitrate concentrations at 1,230³ river monitoring sites from the national river monitoring programme between 2007 to 2019.

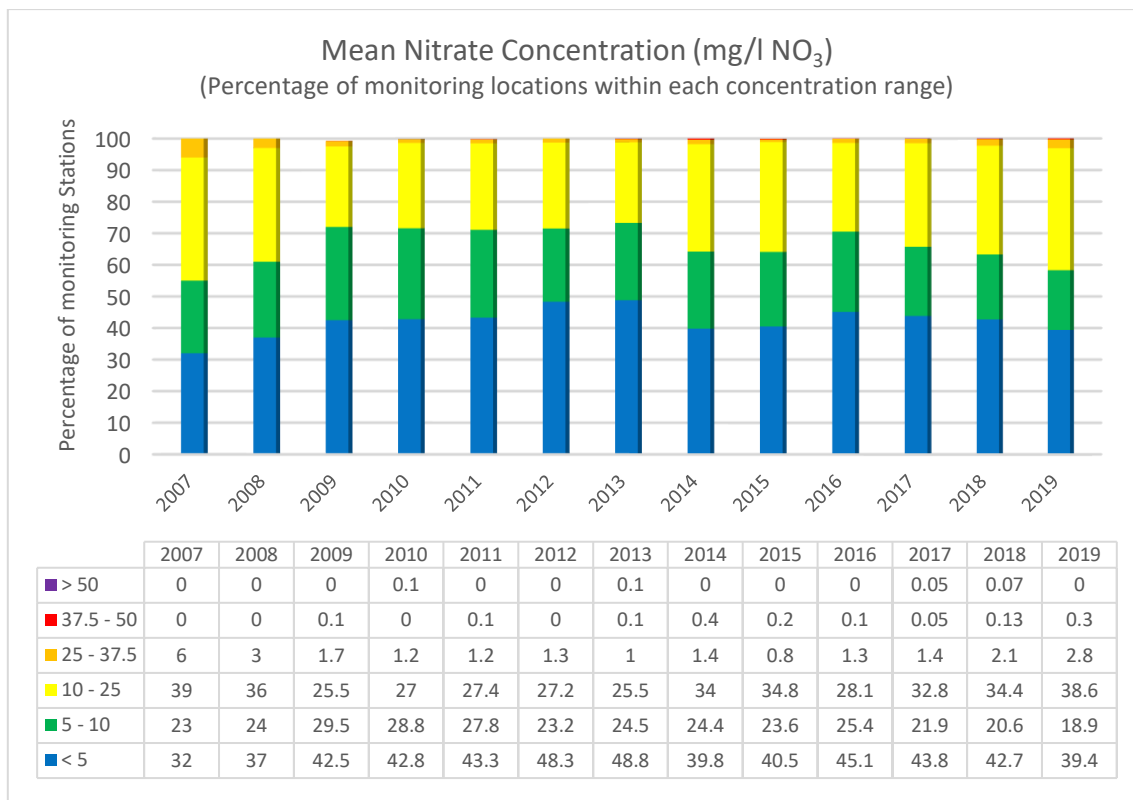


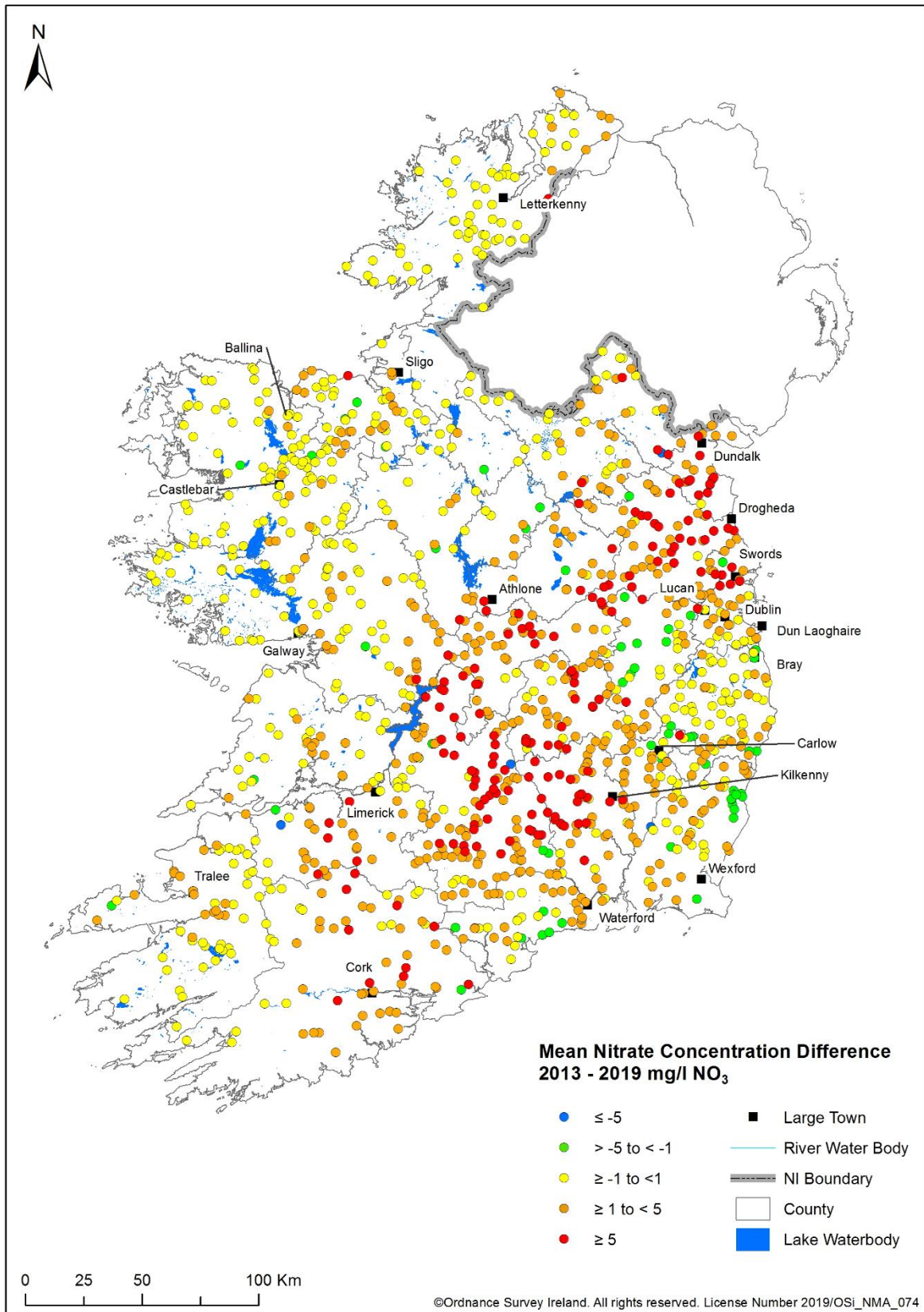
Figure 5: Mean nitrate concentrations at river monitoring sites, 2007 to 2019

Nitrate concentrations in rivers are increasing with 15% more sites having concentrations above 10 mg/l NO₃ than in 2013. Table 3 highlights that there have been increases of more than 1 mg/l NO₃ at over half of all river sites. Map 4 indicates that the greatest increases have been in the south, south-east and east of the country.

Table 3: Comparative change in river nitrate concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >5 mg/l NO₃</i>	169	13.7
<i>increase 1 to 5 mg/l NO₃</i>	506	41.1
<i>static +/- 1mg/l NO₃</i>	492	40.0
<i>decrease 1 to 5 mg/l NO₃</i>	59	4.8
<i>decrease >5 mg/l NO₃</i>	4	0.3
Total	1,230	100.0

³ Only those monitoring sites that have been consistently monitored since 2007 and that have at least four samples each year have been included in the assessment.



Map 4: Change in river nitrate concentrations since 2013

Phosphorus in Rivers

Figure 6 summarises the mean phosphorous concentrations at 1,274⁴ river monitoring sites from the national river monitoring programme between 2007 to 2019.

In 2019, mean river concentrations were greater than the good status EQS (0.035 mg/l P) at just over a quarter (27.8%) of sites. The highest phosphorus concentrations i.e. greater than 0.05 mg/l P, are found in Limerick, the south east and the area north west of Dublin. These areas are known to have poorly draining soils.

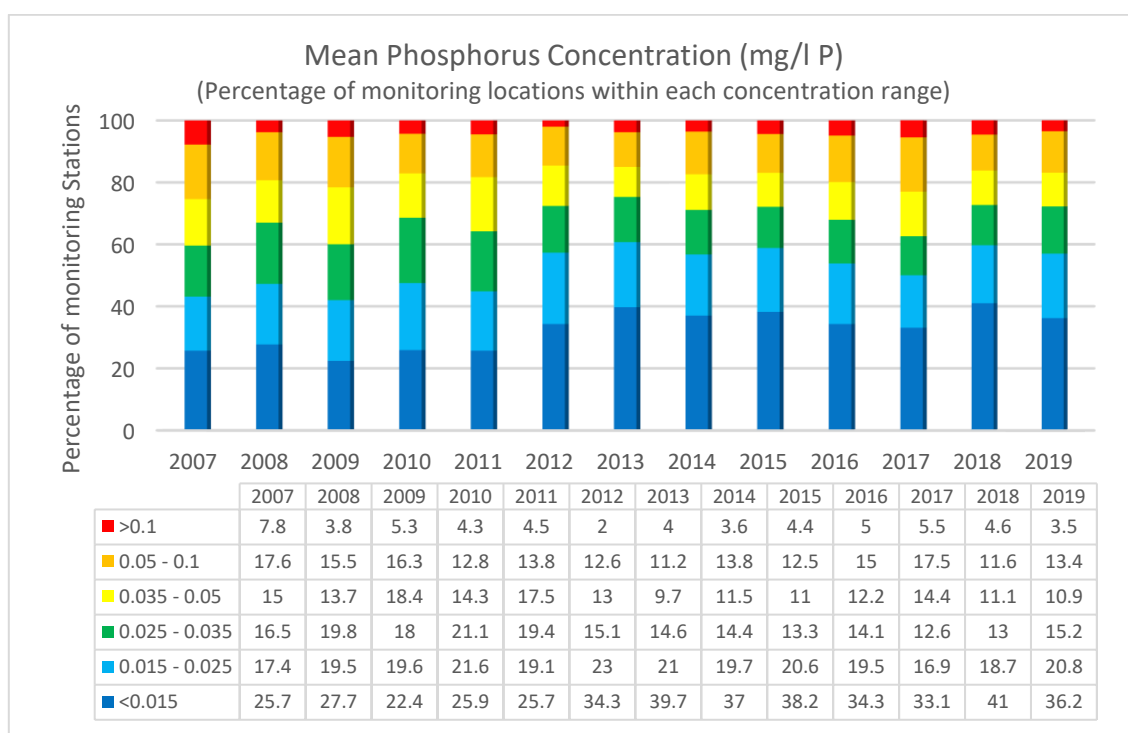


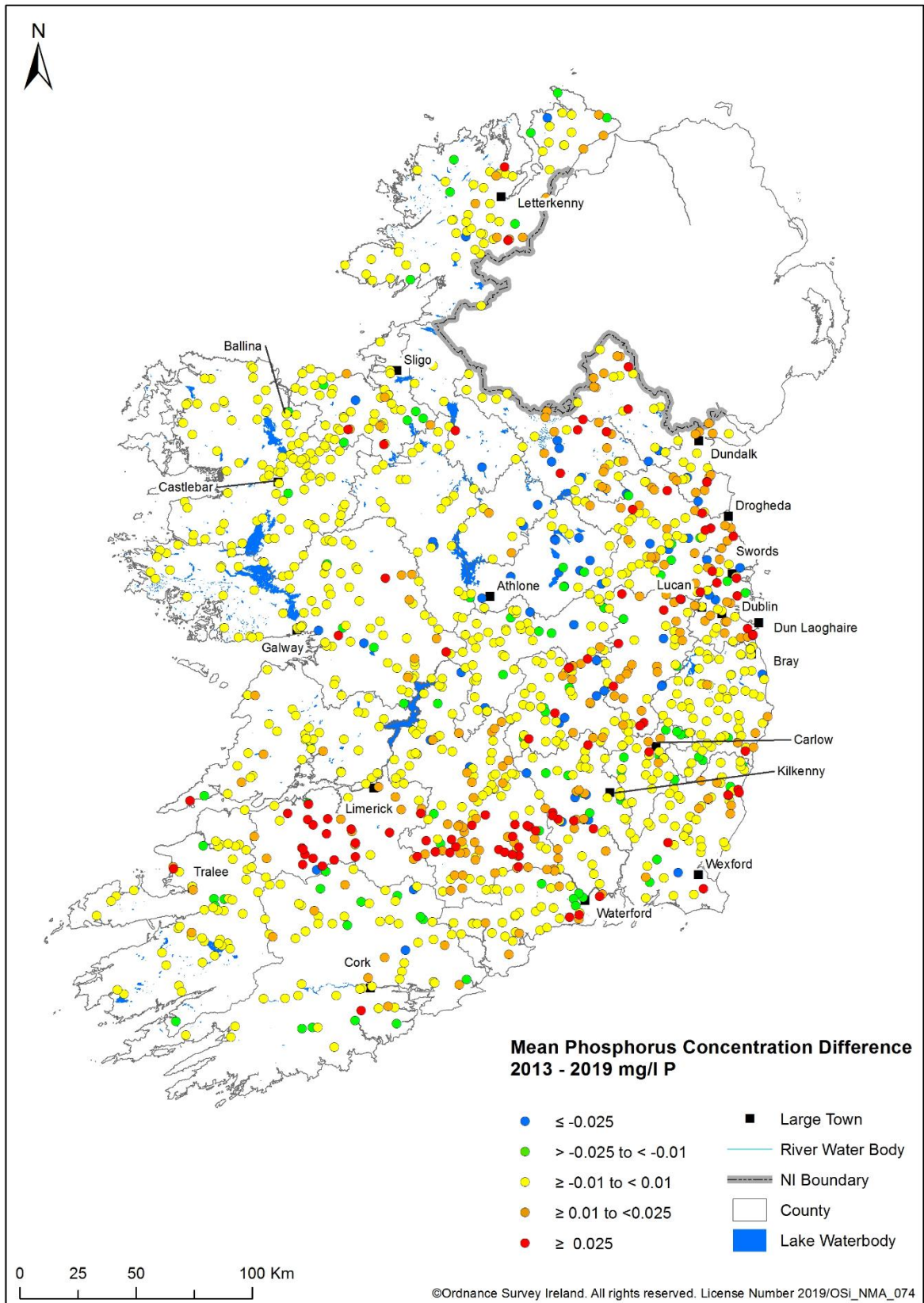
Figure 6: Mean phosphorus concentrations at WFD river monitoring sites, 2007 to 2019

Table 4 highlights that phosphorus concentrations at individual river sites since have increased by more than 0.01 mg/l P at 23.6% of sites. Map 5 indicates that the highest proportion of increases have been observed in the south east, Limerick and north-east of the country.

Table 4: Comparative change in river phosphorus concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >0.025 mg/l P</i>	100	7.8
<i>increase 0.01 to 0.025 mg/l P</i>	202	15.8
<i>static +/- 0.01 mg/l P</i>	815	64.0
<i>decrease 0.01 to 0.025 mg/l P</i>	95	7.5
<i>decrease >0.025 mg/l P</i>	62	4.9
Total	1,274	100.0

⁴ Only those monitoring sites that have been consistently monitored since 2007 and that have at least four samples each year have been included in the assessment.



Map 5: Change in river phosphorus concentrations since 2013

Lakes

Nitrate in Lakes

Figure 7 summarises the mean nitrate concentrations from the national lake monitoring programme between 2007 to 2019. Data were available for a total of 219 lakes. In summary, mean nitrate concentrations in lakes remain low but increases have been observed in several lakes. Nitrate is not thought to be a significant driver of nutrient enrichment in Irish lakes.

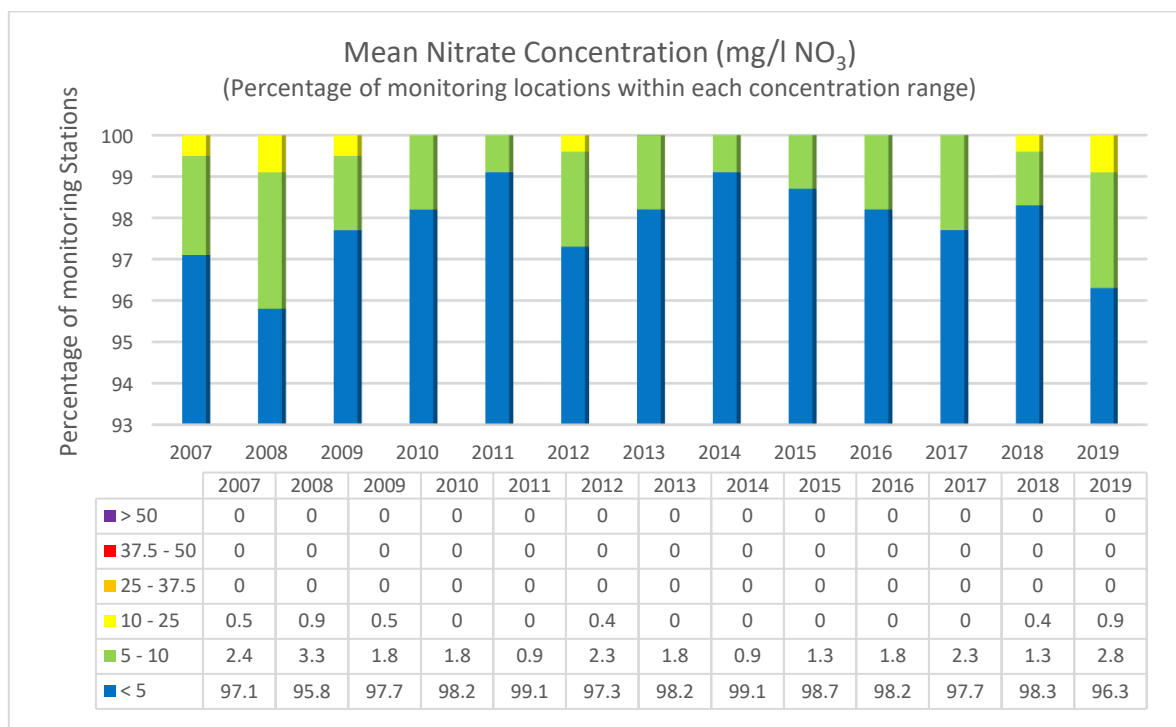
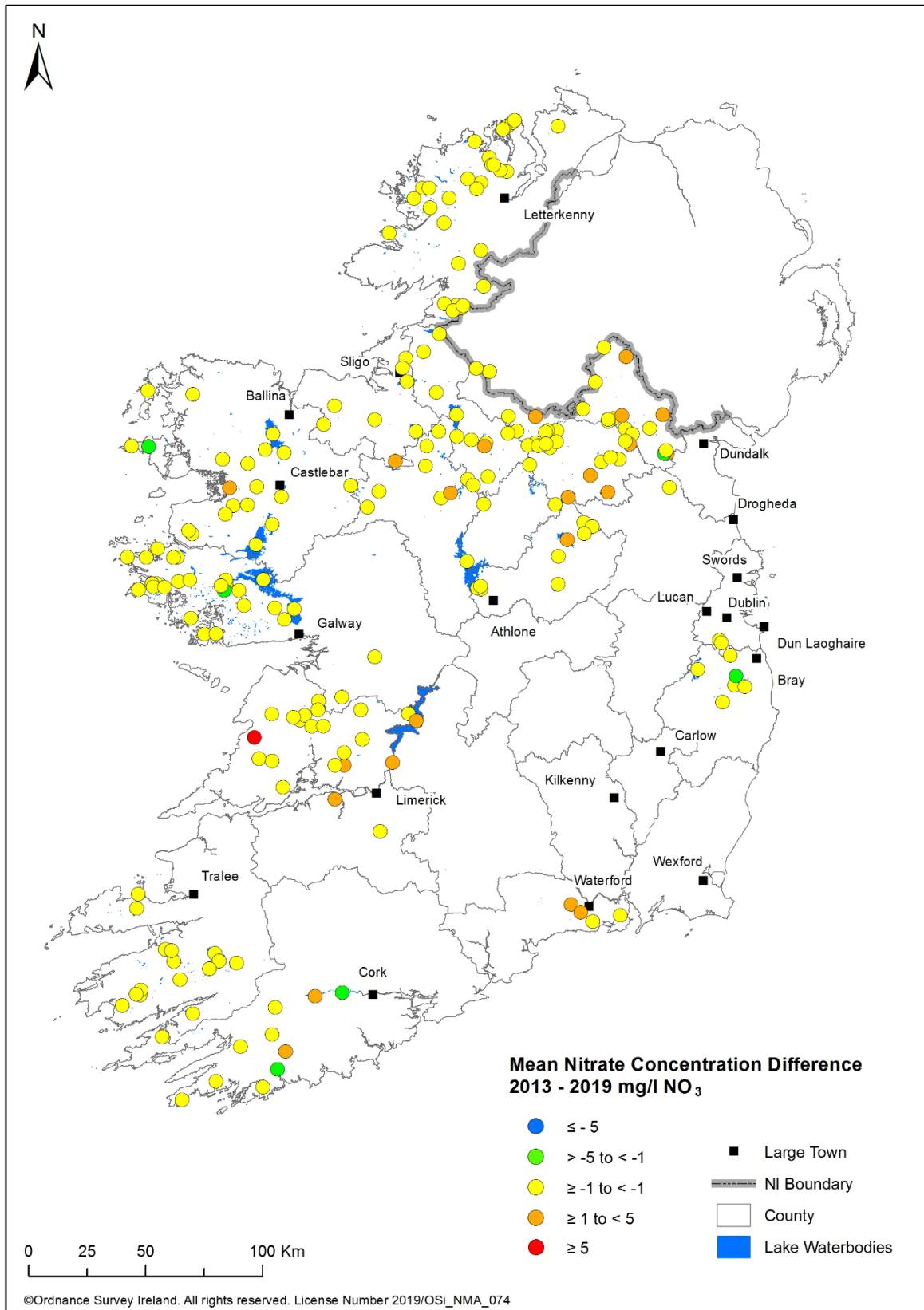


Figure 7: Mean nitrate concentrations in WFD monitored lakes, 2007 to 2019

Table 5 and Map 6 indicate that lake nitrate concentrations have been relatively stable for most lakes since 2013.

Table 5: Comparative change in lake nitrate concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >5 mg/l NO₃</i>	1	0.5
<i>increase 1 to 5 mg/l NO₃</i>	22	10.0
<i>static +/- 1mg/l NO₃</i>	190	86.8
<i>decrease 1 to 5 mg/l NO₃</i>	6	2.7
<i>decrease >5 mg/l NO₃</i>	0	0.0
Total	219	100.0



Map 6: Change in lake nitrate concentrations since 2013

Phosphorus in Lakes

Figure 8 summarises the mean total phosphorus concentrations from the national lake monitoring programme between 2007 to 2019. There has been an overall increase in mean total phosphorus concentrations observed in lakes since 2014. In 2019, 5% fewer lakes met the good status EQS of 0.025 mg/l P than in 2014.

Historically, the highest mean total phosphorus lake concentrations are recorded in the northern counties of Cavan and Monaghan. These counties are known to have a high proportion of poorly draining soils.

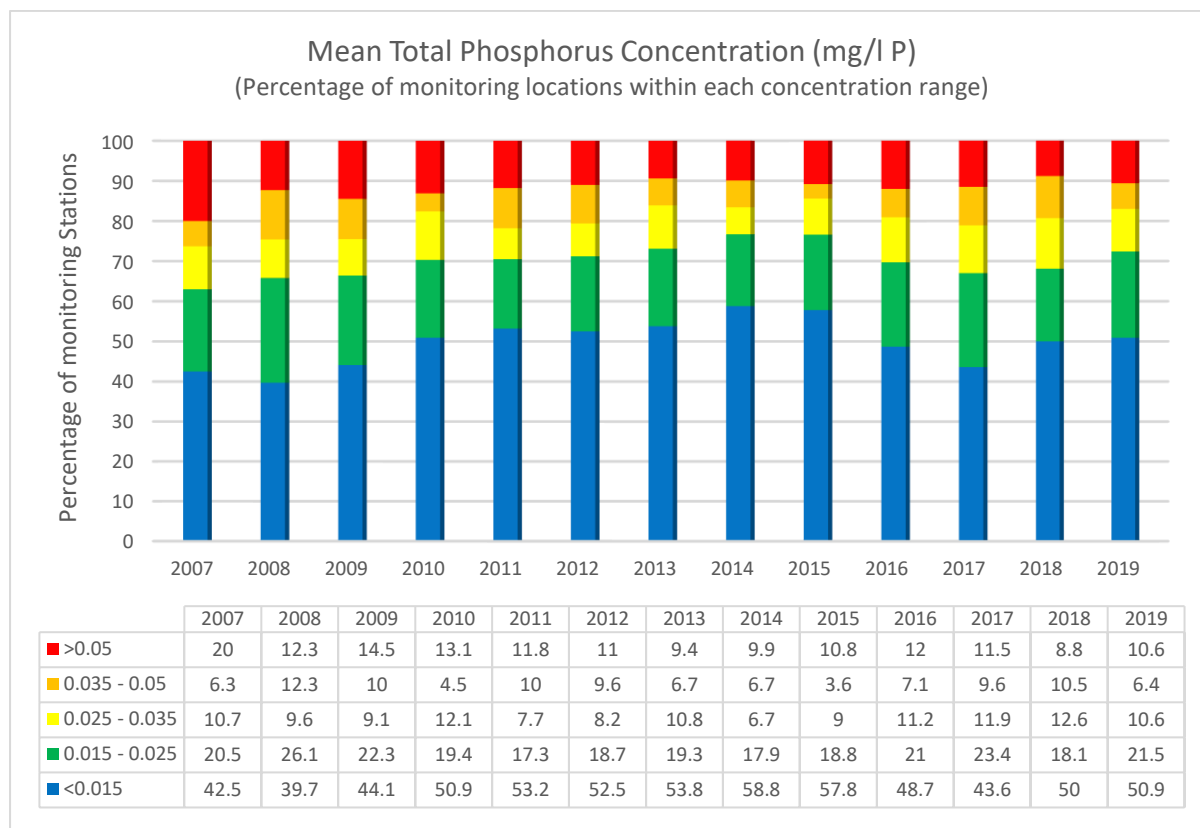
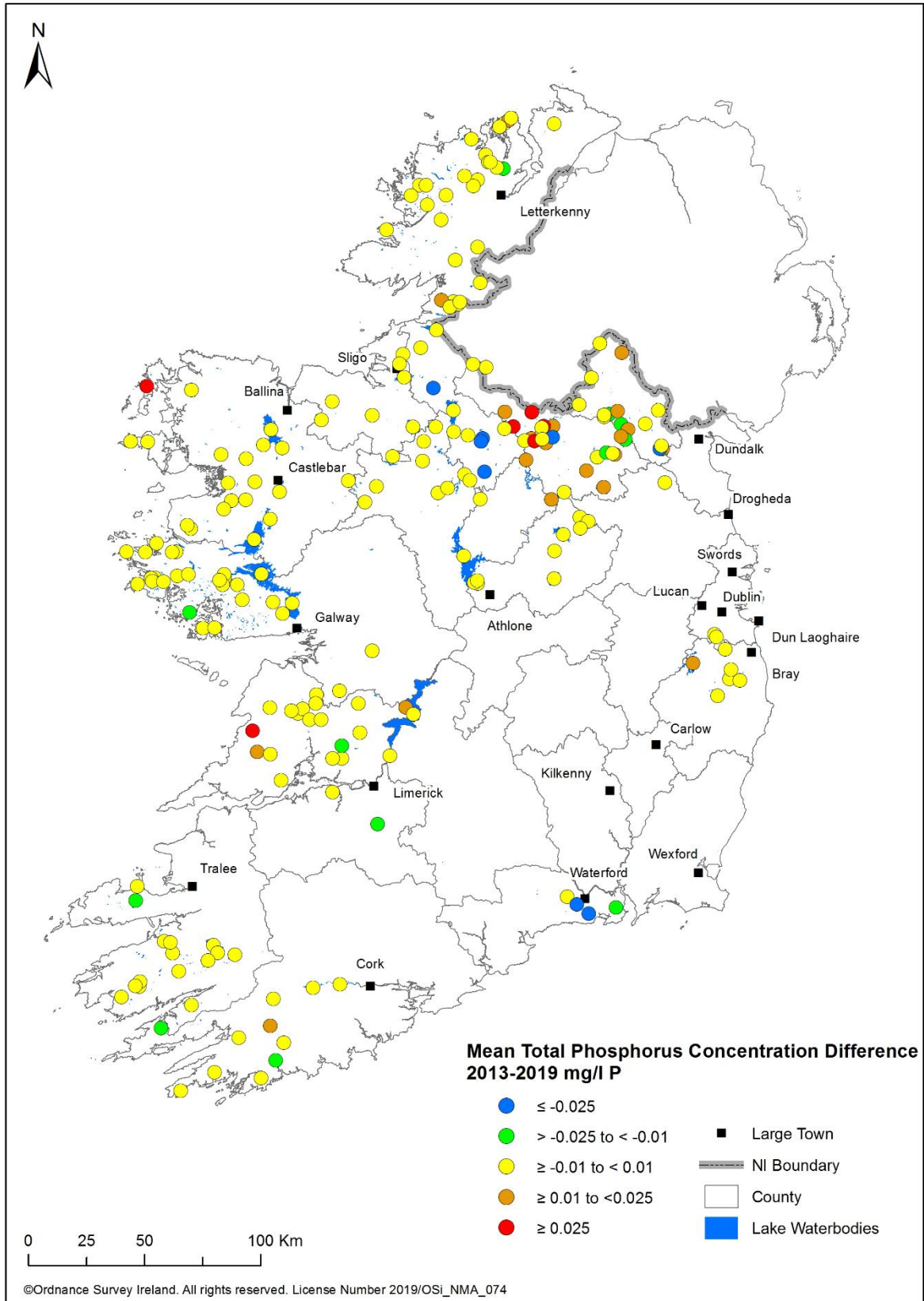


Figure 8: Mean total phosphorus concentrations in WFD monitored lakes, 2007 to 2019

Table 6 indicates that mean total phosphorus concentrations have been stable for most lakes. Map 7 showing that most of the significant increases since 2013 have occurred in the lakes of Cavan and Monaghan.

Table 6: Comparative change in lake total phosphorus concentrations since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >0.025 mg/l P</i>	5	2.3
<i>increase 0.01 to 0.025 mg/l P</i>	20	9.2
<i>static +/- 0.01 mg/l P</i>	173	79.3
<i>decrease 0.01 to 0.025 mg/l P</i>	12	5.5
<i>decrease >0.025 mg/l P</i>	8	3.7
Total	218	100.0



Map 7: Change in lake total phosphorus concentrations since 2013

Estuarine and Coastal Waters

Nitrate in Estuarine and Coastal Waters

Figure 9 summarises the median winter nitrate concentrations from the national monitoring programme between 2007 to 2019. The median winter nitrate concentration in estuarine and coastal waters is measured as dissolved inorganic nitrogen (DIN) and it is assumed that all measured nitrogen is present as nitrate⁵. The most recent assessment for 2017-2019 was carried out on 79 transitional and coastal water bodies.

Nationally, there have been gradually reducing median nitrate concentrations since 2007, but the improvement has plateaued and since 2012-2014 nitrate concentrations have increased in the south east. Higher nitrate concentrations in the south east are a consequence of the losses of nitrate in the upstream catchment.

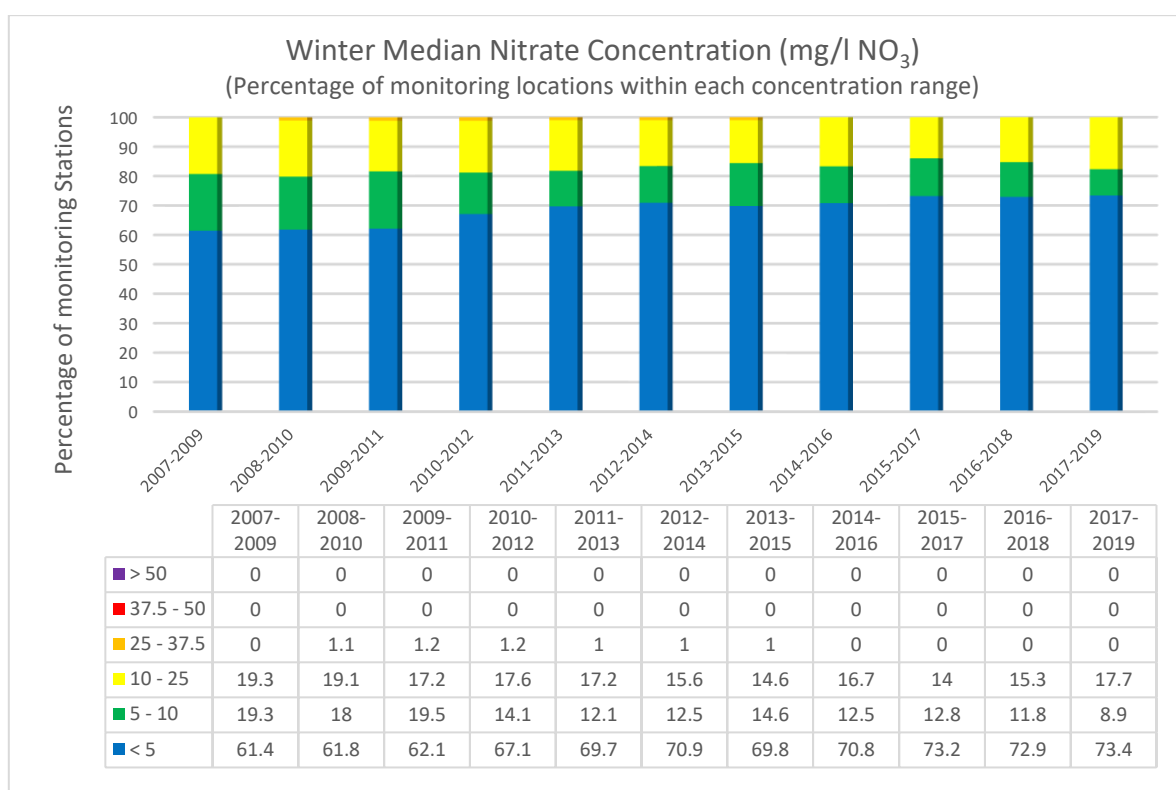


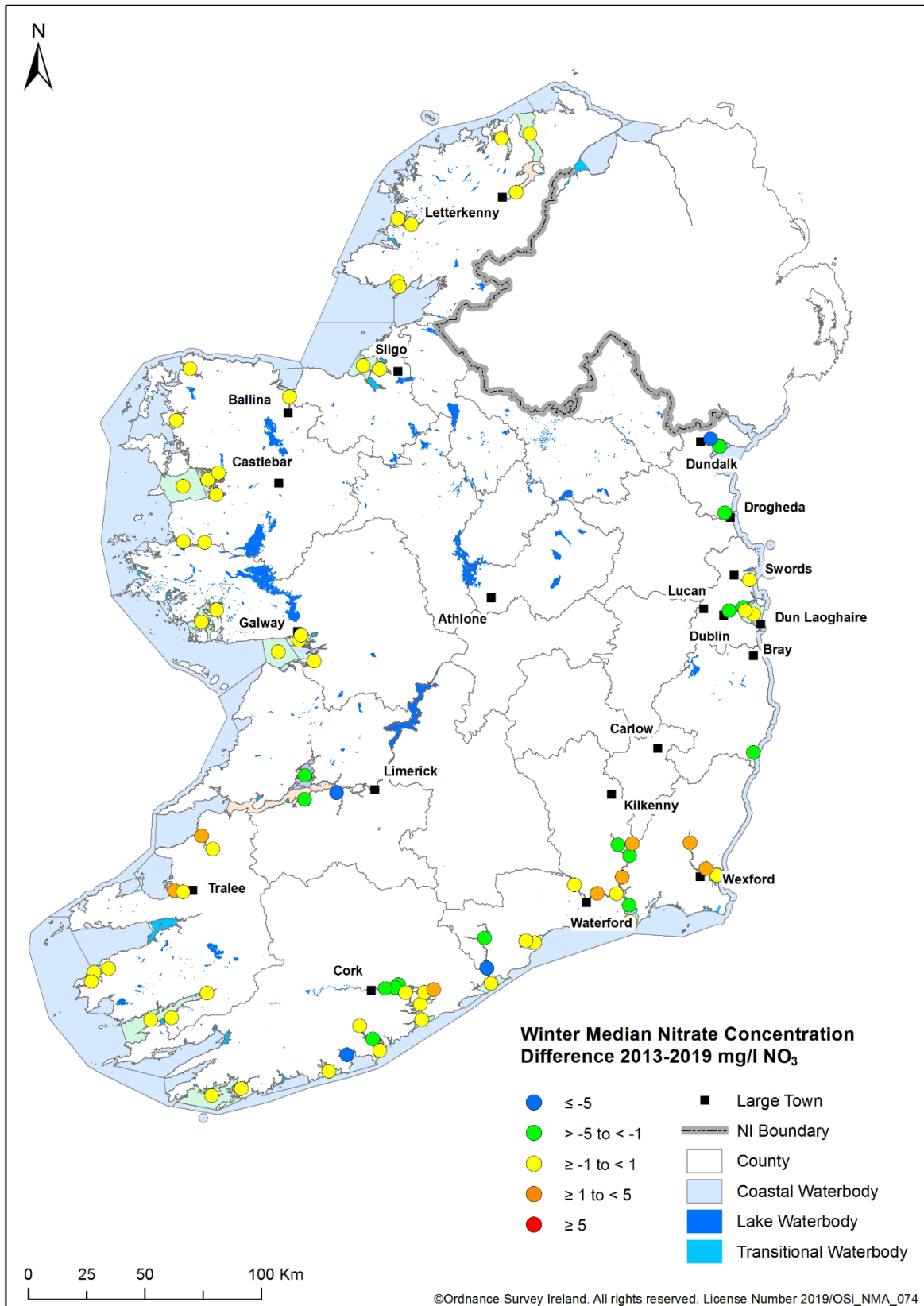
Figure 9: Median winter nitrate concentrations (mg/l NO₃) in estuarine and coastal waters, 2007 to 2019

Table 7 highlights that a quarter of estuarine and coastal waters have seen a reduction of more than 1 mg/l NO₃ since 2013. Map 8 highlights that regionally the greatest increases in concentration have been in the south-east.

⁵ The analysis in this report does not correct for salinity or the natural dilution and mixing properties of saline waters.

Table 7: Comparative change in the median winter nitrate concentrations of estuarine and coastal waters since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >5 mg/l NO₃</i>	0	0.0
<i>increase 1 to 5 mg/l NO₃</i>	8	10.1
<i>static +/- 1mg/l NO₃</i>	52	65.8
<i>decrease 1 to 5 mg/l NO₃</i>	15	19.0
<i>decrease >5 mg/l NO₃</i>	4	5.1
Total	79	100.0



Map 8: Change in the median winter nitrate concentrations for Estuarine and Coastal waterbodies since 2013

Phosphorus in Estuarine and Coastal Waters

Figure 10 summarises the median winter phosphorus (measured as molybdate reactive phosphorus (MRP)) concentrations from the national monitoring programme between 2007 to 2019⁶. The most recent assessment for 2017-2019 was carried out on 79 transitional and coastal water bodies.

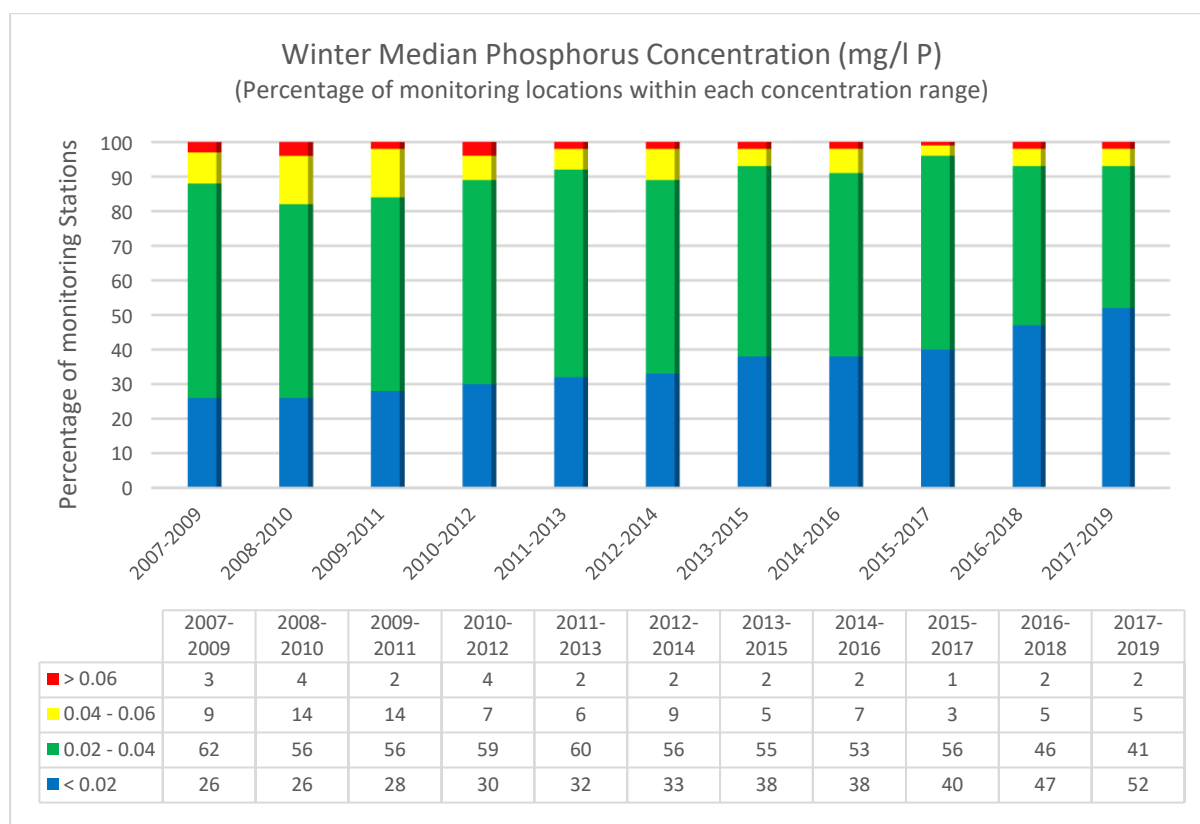


Figure 10: Median winter phosphorus concentrations in estuarine and coastal waters, 2007 to 2019

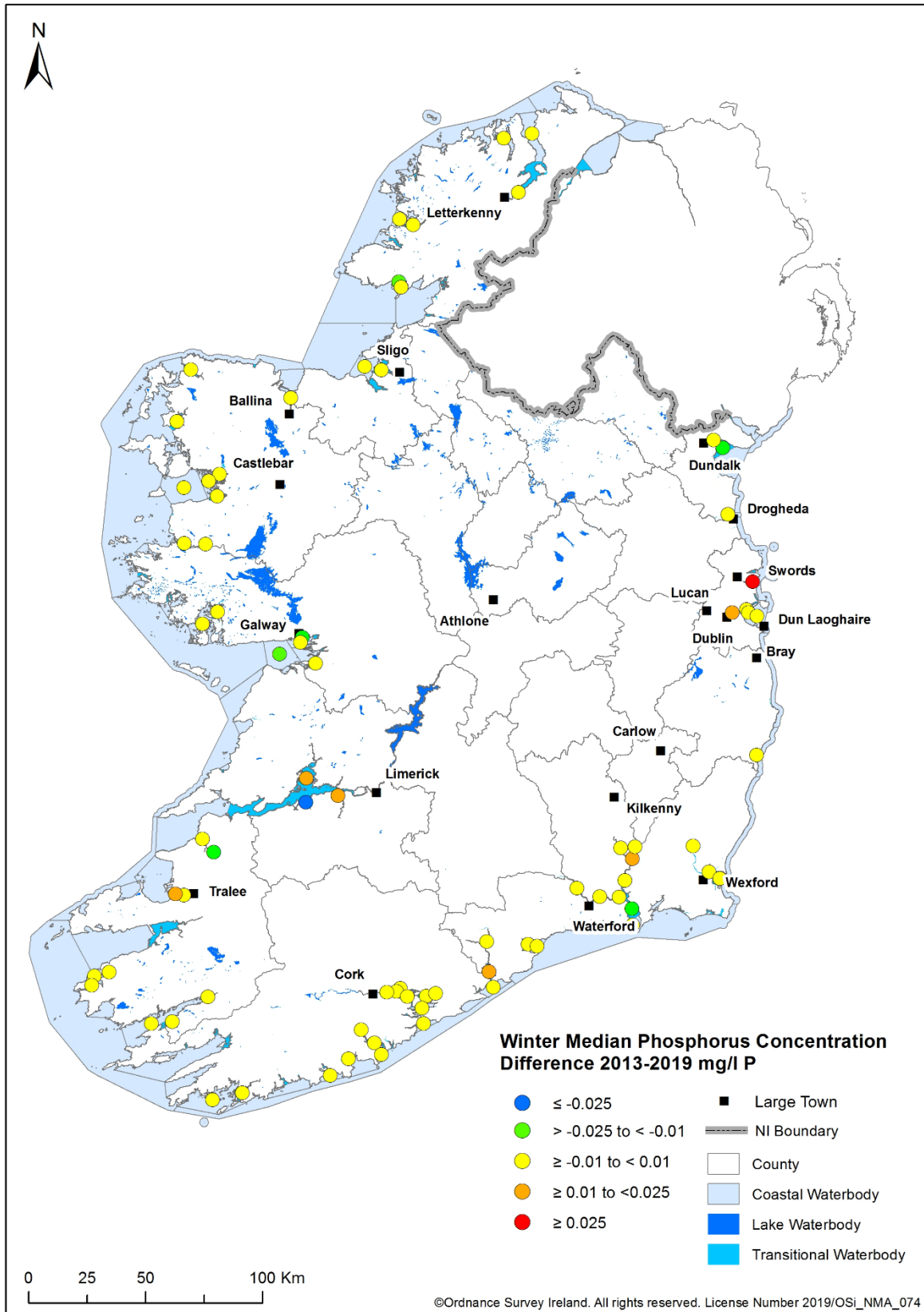
Median phosphorus concentrations in most estuaries and coastal waters are low with Table 8 showing that median phosphorus concentrations have been relatively stable since 2013.

Map 9 highlights that there have been increased phosphorus concentrations in greater Dublin Bay and the Shannon estuary.

Table 8: Comparative change in the median winter phosphorus concentrations of estuarine and coastal waters since 2013

Concentration Change	Number of Sites	% Sites
<i>increase >0.025 mg/l P</i>	1	1.3
<i>increase 0.01 to 0.025 mg/l P</i>	6	7.6
<i>static +/- 0.01 mg/l P</i>	61	77.2
<i>decrease 0.01 to 0.025 mg/l P</i>	10	12.6
<i>decrease >0.025 mg/l P</i>	1	1.3
Total	79	100.0

⁶ The analysis in this report does not correct for salinity or the natural dilution and mixing properties of saline waters.



Map 9: Change in the median winter phosphorus concentrations for Estuarine and Coastal waterbodies since 2013

References

Environmental Protection Agency (2019) Water Quality in Ireland 2013-18. Environmental Protection Agency, Wexford, Ireland.

AN GHNÍOMHAIREACTH UM CHAOMHNÚ COMHSHAOL

Tá an GCC freagrach as an gcomhshaol a chosaint agus a fheabhsú, mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaol a chosaint ar thionchar díobhálach na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialáil: *Rialáil agus córais chomhlíonta comhshaoil éifeachtacha a chur i bhfeidhm, chun dea-thorthaí comhshaoil a bhaint amach agus díriú orthu siúd nach mbíonn ag cloí leo.*

Eolas: *Sonraí, eolas agus measúnú ardchaighdeán, spríochdhírthe agus tráthúil a chur ar fáil i leith an chomhshaoil chun bonn eolais a chur faoin gcinnteoireacht.*

Abhcióideacht: *Ag obair le daoine eile ar son timpeallachta glaine, táirgiúla agus dea-chosanta agus ar son cleachtas inbhuanaithe i dtaobh an chomhshaoil.*

I measc ár gcuid freagrachtaí tá:

Ceadúnú

- Gníomhaíochtaí tionscail, dramhaíola agus stórála peitрил ar scála mór;
- Sceitheadh fuíolluisce uirbhig;
- Úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe;
- Foinsí radaíochta ianúcháin;
- Astaíochtaí gás ceaptha teasa ó thionscal agus ón eitlíocht trí Scéim an AE um Thrádáil Astaíochtaí.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Iníúchadh agus cigireacht ar shaoráidí a bhfuil ceadúnas acu ón GCC;
- Cur i bhfeidhm an dea-chleachtas a stiúradh i ngníomhaíochtaí agus i saoráidí rialáilte;
- Maoirseacht a dhéanamh ar fhreagrachtaí an údarais áitiúil as cosaint an chomhshaoil;
- Caighdeán an uisce óil phoiblí a rialáil agus údaruithe um sceitheadh fuíolluisce uirbhig a fhorfheidhmiú;
- Caighdeán an uisce óil phoiblí agus phríobháidigh a mheasúnú agus tuairisciú air;
- Comhordú a dhéanamh ar líonra d'eagraíochtaí seirbhíse poiblí chun tacú le gníomhú i gcoinne coireachta comhshaoil;
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaol.

Bainistíocht Dramhaíola agus Ceimiceáin sa Chomhshaol

- Rialacháin dramhaíola a chur i bhfeidhm agus a fhorfheidhmiú lena n-áirítear saincheisteanna forfheidhmithe náisiúnta;
- Staitisticí dramhaíola náisiúnta a ullmhú agus a fhoilsiú chomh maith leis an bPlean Náisiúnta um Bainistíocht

Dramhaíola Guaisí;

- An Clár Náisiúnta um Chosc Dramhaíola a fhorbairt agus a chur i bhfeidhm;
- Reachtaíocht ar rialú ceimiceán sa timpeallacht a chur i bhfeidhm agus tuairisciú ar an reachtaíocht sin.

Bainistíocht Uisce

- Plé le struchtúir náisiúnta agus réigiúnacha rialachais agus oibríocháin chun an Chreat-treoir Uisce a chur i bhfeidhm;
- Monatóireacht, measúnú agus tuairisciú a dhéanamh ar chaighdeán aibhneacha, lochanna, uisce idirchreasa agus cósta, uisce snámha agus screamhuisce chomh maith le tomhas ar leibhéil uisce agus sreabhadh abhann.

Eolaíocht Aeráide & Athrú Aeráide

- Fardail agus réamh-mheastacháin a fhoilsiú um astaíochtaí gás ceaptha teasa na hÉireann;
- Rúnaíocht a chur ar fáil don Chomhairle Chomhairleach ar Athrú Aeráide agus tacaíocht a thabhairt don Idirphlé Náisiúnta ar Gníomhú ar son na hAeráide;
- Tacú le gníomhaíochtaí forbartha Náisiúnta, AE agus NA um Eolaíocht agus Beartas Aeráide.

Monatóireacht & Measúnú ar an gComhshaol

- Córais náisiúnta um monatóireacht an chomhshaoil a cheapadh agus a chur i bhfeidhm: teicneolaíocht, bainistíocht sonraí, anailís agus réamhaisnéisiú;
- Tuairiscí ar Staid Thimpeallacht na hÉireann agus ar Tháscairí a chur ar fáil;
- Monatóireacht a dhéanamh ar chaighdeán an aeir agus Treoir an AE i leith Aeir Ghlain don Eoraip a chur i bhfeidhm chomh maith leis an gCoinbhinsiún ar Aerthruaillí Fadraoín Trasteorann, agus an Treoir i leith na Teorann Náisiúnta Astaíochtaí;
- Maoirseacht a dhéanamh ar chur i bhfeidhm na Treorach i leith Torainn Timpeallachta;
- Measúnú a dhéanamh ar thionchar pleananna agus clár beartaithe ar chomhshaol na hÉireann.
- Taighde agus Forbairt Comhshaoil
- Comhordú a dhéanamh ar ghníomhaíochtaí taighde comhshaoil agus iad a mhaoiniú chun brú a aithint, bonn eolais a chur faoin mbeartas agus réitigh a chur ar fáil;
- Comhoibriú le gníomhaíocht náisiúnta agus AE um thaighde comhshaoil.

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéil radaíochta agus nochtadh an phobail do radaíocht ianúcháin agus do réimsí leictreamaighnéadacha a mheas;
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taismí núicléacha;

- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta;
- Sainseirbhísí um chosaint ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Ardú Feasachta agus Faisnéis Inrochtana

- Tuairisciú, comhairle agus treoir neamhspleách, fianaise-bhunaithe a chur ar fáil don Rialtas, don tionscal agus don phobal ar ábhair maidir le cosaint comhshaoil agus raideolaíoch;
- An nasc idir sláinte agus folláine, an geilleagar agus timpeallacht ghlan a chur chun cinn;
- Feasacht comhshaoil a chur chun cinn lena n-áirítear tacú le hiompraíocht um éifeachtúlacht acmhainní agus aistriú aeráide;
- Tástáil radóin a chur chun cinn i dtithe agus in ionaid oibre agus feabhsúchán a mholadh áit is gá.

Comhpháirtíocht agus Líonrú

- Oibriú le gníomhaireachtaí idirnáisiúnta agus náisiúnta, údarais réigiúnacha agus áitiúla, eagraíochtaí neamhrialtais, comhlachtaí ionadaíochta agus ranna rialtais chun cosaint comhshaoil agus raideolaíoch a chur ar fáil, chomh maith le taighde, comhordú agus cinnteoireacht bunaithe ar an eolaíocht.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an GCC á bhainistiú ag Bord Lánaimeartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóir. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inbhuanaitheacht i leith Cúrsaí Comhshaoil
- An Oifig Forfheidhmithe i leith Cúrsaí Comhshaoil
- An Oifig um Fhianaise agus Measúnú
- An Oifig um Chosaint ar Radaíocht agus Monatóireacht Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tugann coistí comhairleacha cabhair don Gníomhaireacht agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inmí agus le comhairle a chur ar an mBord.



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An Ghníomhaireacht um Chaomhnú Comhshaoil

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