

Deborah Byrne  
46 Ayrfield Drive  
Ayrfield  
Dublin 13

Date: 20th July 2018

Re: Greater Dublin Drainage Project consisting of a new wastewater treatment plant, sludge hub centre, orbital sewer, outfall pipeline and regional biosolids storage facility  
Townlands of Clonshagh, Dubber and Newtown, County Fingal and Dublin City

Dear Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned proposed development and will take it into consideration in its determination of the matter. A receipt for the fee lodged is enclosed.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions / observations received in relation to the application will be made available for public inspection at the offices of Fingal County Council and Dublin City Council and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: [www.pleanala.ie](http://www.pleanala.ie).

If you have any queries in the meantime please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

  
Kieran Somers  
Executive Officer  
Direct Line: 01-873 7107

Encls. PA04



To: An Bord Pleanála (The Secretary)  
64 Marlborough Street, Dublin 1

From: Deborah Byrne  
46 Ayrfield Drive, Ayrfield, Dublin 13

5<sup>th</sup> July 2018

Your Ref: 06F.PC0152 (Greater Dublin Drainage Project)

Dear Secretary,

I wish to object on environmental grounds to the application by the Greater Dublin Drainage Project for a wastewater treatment plant at Clonsaugh and outfall pipeline at Maynetown.

I am particularly concerned about the potential impact of this project on the marine environment of North Dublin and I believe the proposed location for the plant and outfall pipeline is completely inappropriate in light of its expected detrimental impact on the UNESCO-designated Dublin Bay Biosphere. From an ecological viewpoint Dublin Bay Biosphere Reserve is internationally important in terms of its conservation value.

Please see Appendix 1 which makes reference to the following articles:

<http://www.dublinbaybiosphere.ie/about>

<http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/ireland/dublin-bay/>

Among the many pollutants which have the potential to enter the marine environment as a result of this project under normal functioning conditions are pharmaceutical residues. I have an honours degree in pharmacology from UCD and this aspect of marine pollution particularly concerns me. Pollution by pharmaceuticals and other sources will only worsen over time as the population of the Dublin area increases and people live longer.

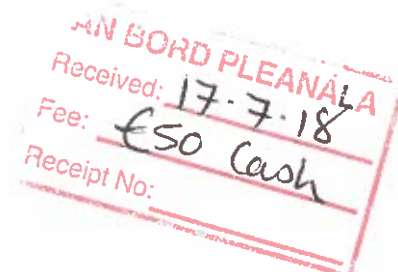
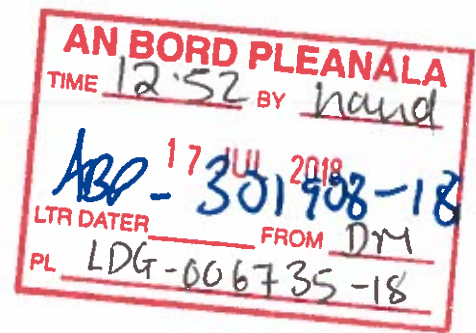
Please see Appendix 2 which makes reference to the following articles:

<http://fingalppn.ie/wp-content/uploads/2016/08/2016-May-16-Submission-on-Ringsend-Waste-Water-Treatment-Plant-Upgrade.pdf>

<https://www.journals.elsevier.com/environmental-pollution/news/56-active-pharmaceuticals-in-wastewater-treatment>

<https://www.ncbi.nlm.nih.gov/pubmed/27480162>

<https://www.irishexaminer.com/breakingnews/business/firms-warned-on-eu-emissions-clampdown-853115.html>



The potential for marine pollution is not limited to the contents of the discharge at the outfall site under average daily flow conditions, but also encompasses terrestrial events, such as surface water and river pollution, which pollution will be significantly amplified and potentially irreversible in the event of a process failure. This project will have an adverse impact on the UNESCO-designated Dublin Bay Biosphere, despite the recurring references in the Project's Environmental Impact Assessment and Natura Impact Statement report to mitigating this impact. Furthermore, Irish Water does not have a good track record in terms of fulfilling its responsibilities at existing water treatment plants as this article demonstrates:

Please see Appendix 3 which makes reference to the following article:

<https://www.independent.ie/irish-news/courts/irish-water-guilty-of-sewage-pollution-at-four-plants-across-the-country-35513650.html>

We already have an intermittent water quality issue at several of Dublin city's beaches as highlighted in the below article, which was published last month. It was necessary to impose a temporary ban on swimming at Dollymount because of a power outage at a pumping station which appears to have resulted in a discharge to the River Liffey.

Please see Appendix 4 which makes reference to the following article:

<https://www.rte.ie/news/enviroment/2018/0607/968917-five-beaches-closed/>

There were eight other sites initially identified as being suitable for this project which were further north than the chosen site, and as such further removed from the UNESCO-designated Dublin Bay Biosphere. It is my opinion that the decision to build a single massive plant at Clonsaugh was made for reasons of cost and public relations with lesser consideration to the environment.

If new wastewater plants are required to serve the greater Dublin area then the negative environmental impact of these plants should be mitigated by building several smaller plants, or, failing this, locating the plant and outfall site at a location further north of the UNESCO-designated Dublin Bay Biosphere.

Please see Appendix 5 which makes reference to the following document:

[http://www.greaterdublindrainage.com/wpcontent/uploads/2012/05/ASA\\_Phase2\\_Main\\_Report.pdf](http://www.greaterdublindrainage.com/wpcontent/uploads/2012/05/ASA_Phase2_Main_Report.pdf)

The ecological heritage of the beautiful, unique coastline of Dublin Bay should be preserved for future generations, and your decision on this project will have a significant impact on this legacy.

Mise le meas,  
Deborah Byrne

## APPENDIX

### 1. UNESCO-DESIGNATED DUBLIN BAY BIOSPHERE

#### 1.1. <http://www.dublinbaybiosphere.ie/about>

① [www.dublinbaybiosphere.ie/about](http://www.dublinbaybiosphere.ie/about)



In 1981, UNESCO recognised the importance of Dublin Bay by designating North Bull Island as a Biosphere because of its rare and internationally important habitats and species of wildlife. To support sustainable development, UNESCO's concept of a Biosphere has evolved to include not just areas of ecological value but also the areas around them and the communities that live and work within these areas. There have since been additional international and national designations, covering much of Dublin Bay, to ensure the protection of its water quality and biodiversity.

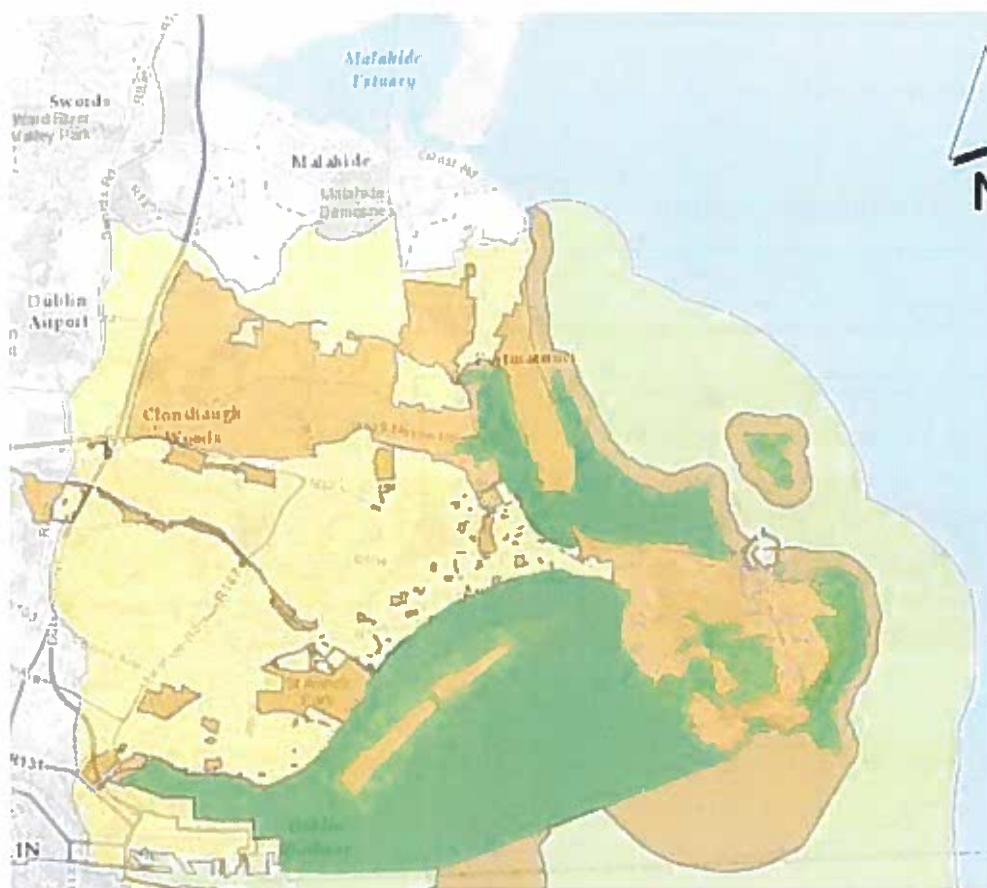
To fulfil these broader management aims for the ecosystem, the Biosphere was expanded in 2015. The Biosphere now covers Dublin Bay, reflecting its significant environmental, economic, cultural and tourism importance, and extends to over 300 km<sup>2</sup>. Over 300,000 people live within the newly enlarged Biosphere.

Dublin Bay Biosphere contains three different zones, which are managed in different ways:

- The core zone of Dublin Bay Biosphere comprises 50 km<sup>2</sup> of areas of high natural value. Key areas include the Tolka and Baldoyle Estuaries, Booterstown Marsh, Howth Head, North Bull Island, Dalkey Island and Ireland's Eye.
- The buffer zone comprises 82 km<sup>2</sup> of public and private green spaces such as parks, greenbelts and golf courses, which surround and adjoin the core zones.
- The transition zone comprises 173 km<sup>2</sup> and forms the outer part of the Biosphere. It includes residential areas, harbours, ports and industrial and commercial areas.

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Map of Northern half of UNESCO-designated Dublin Bay Biosphere





1.2. <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/ireland/dublin-bay/>

① [www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/ireland/dublin-bay/](http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/europe-north-america/ireland/dublin-bay/)

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## Ecological Sciences for Sustainable Development

UNESCO » Natural Sciences » Environment » Ecological Sciences » Biosphere Reserves » Ireland » Dublin Bay

### Ecological Sciences

Man and Biosphere Programme

#### Biosphere Reserves

- Main Characteristics
- World Network (WNBR)
- Advisory Committee
- Designation Process
- Periodic Review Process
- Withdrawal of biosphere reserves
- Regional and Subregional Collaboration
- Biosphere Reserves in Practice
- BiosphereSmart Initiative

Capacity Building and Partnerships

Climate Change

### Dublin Bay

The Dublin Bay Biosphere Reserve (former North Bull Island) comprises Dublin Bay North Bull Island and adjacent land including parts of Dublin, the capital city of Ireland. It is one of the finest sand dune systems in Ireland and is internationally important in terms of its conservation value. There are high quality examples of several rare and threatened coastal habitats present on the island.



Declaration date: 1981 extended and renamed in 2015  
Administrative authorities: Parks and Landscape Services Division Dublin City Council

Total surface area (terrestrial and marine): 30,536.81 ha  
Core area(s): 5,029.40 ha (terrestrial: 3,148.73 ha; marine: 1,880.67 ha)  
Buffer Zone(s): 8,241.05 ha (terrestrial: 5,161.94 ha; marine: 3,079.11 ha)  
Transition area(s): 17,266.36 ha (terrestrial: 9,989.17 ha; marine: 7,277.19 ha)

Location  
Latitude: 53°13'10"N - 53°26'34"N  
Longitude: 06°00'52"W - 06°16'15"W  
Midpoint: 53°20'05"N - 06°08'23"W

#### RELATED INFORMATION

- Map
- Website

#### Contacts

Leslie Moore  
City Parks Superintendent, Dublin City Council  
Culture, Recreation and Amenity Dept.  
Civic Offices, Block 4  
Dublin 8  
REPUBLIC OF IRELAND  
Tel: 353 1 22 6004  
E-mail: [parks\(at\)dublincity.ie](mailto:parks(at)dublincity.ie)  
Website: [www.dublincity.ie](http://www.dublincity.ie)

#### Networks

Regional:

- EuroMAS

Ecosystem-based:

- Coastal, Marine & island areas

### Ecological characteristics:



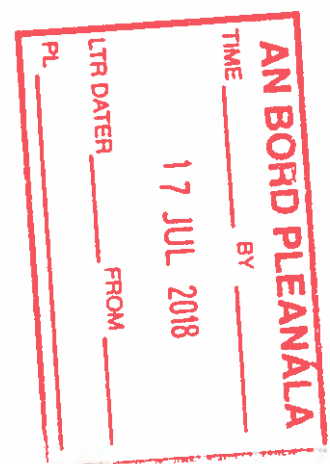
The biosphere reserve is significant from a conservation perspective since it supports well-developed salt marshes and dune systems displaying all stages of development from the earliest phase of colonization to stable and full maturity. The area is also important for nesting and wintering waterfowl.

The major habitats and land cover types are saltmarsh with glasswort (*Salicornia dolichostachya* and *S. europaea*), *Puccinellia maritima* and sea lavender (*Limonium humile*), sand dune complex with saltwort (*Salsola kali*), sea rocket (*Cakile maritima*), sea couchgrass

(*Agropyron junceaiforme*) etc., beaches, lagoonal sand flat; lagoonal mud flats with algae such as *Enteromorpha intestinalis*, *E. compressa* and *Ulva lactuca*.

It also qualifies for international importance as the numbers of three species exceed the international threshold – Light-bellied Brent Goose (*Branta bernicla hrota*), Black-tailed Godwit (*Limosa limosa*) and Bar-tailed Godwit (*Limosa lapponica*). Species such as Grey Heron (*Ardea cinerea*), Goldeneye (*Bucephala*), Red-breasted Merganser (*Mergus serrator*) and Greenshank (*Tringa nebularia*) are regular in winter in numbers of regional or local importance. The North Bull Island and parts of the buffer zone in north Dublin include populations of Irish Mountain Hare (*Lepus timidus hibernicus*), a uniquely Irish sub-species of a species of national and international importance, but under severe pressure from recreational disturbance and illegal poaching.

Dublin Bay Biosphere Reserve also has 3 RAMSAR sites – Sandymount Strand, North Bull Island and Baldoyle Bay.



## Socio-Economic Characteristics



The beaches and amenities of the reserve serve the population of the capital of Ireland. Dublin City is the most populated area of the country. It has a resident population of 525 833, based on the 2011 national census.

Dublin Bay is the only Biosphere Reserve worldwide which includes within its area a national capital city. Therefore, its impact on society is higher than for just the immediate resident population.

In addition to its ecological value, the island has an important educational and recreation function valued by

school classes and day visitors from Dublin. Two golf courses are situated on the island and there are some boating activities in the adjacent waters. In applying the biosphere reserve concept, the ambition is to reconcile the multiple uses in this small area.



## 2. POLLUTANTS

2.1. <http://fingalppn.ie/wp-content/uploads/2016/08/2016-May-16-Submission-on-Ringsend-Waste-Water-Treatment-Plant-Upgrade.pdf>

Ringsend WwTP Upgrade Project  
PO Box 11561  
Dublin 8



16<sup>th</sup> May 2016

Submission on Ringsend Wastewater Treatment Plant Upgrade Project

### Fingal Public Participation Network - Background:

In 2014, in accordance with the Local Government Reform/Citizen engagement policies of the Department of the Environment, Community and Local Government, Fingal Co. Council established its new framework for public engagement and participation, now called “The Fingal Public Participation Network (FPPN)”. This enables groups and organisations working on a community and voluntary basis to take an active formal role in the policy making and oversight activities of the Local Authority’s areas of responsibility. The FPPN is the main link through which the local authority connects with the community, voluntary and environmental sectors without prejudice to other consultation processes.

The functions of the FPPN are spread across decision making and strategic policy bodies of the Council, including Strategic Policy Committees (SPCs) to advise and to assist the Council in the formulation and development of policy. This unites groups with common interests in “Linkage Groups”, to give relevant sectoral interests an opportunity for full involvement in the policy-making process from early stages. Community groups and organisations registered with the FPPN, through Electoral Colleges / Linkage Groups, have elected representatives to represent the FPPN and are accountable to the FPPN membership - they are not representing their own organisations. Specifically, the role of each representative is to:

- Bring issues of relevance from the College/Linkage that chose them to the decision-making committees
- Give feedback to the College/Linkage and/or Plenary as appropriate on the outcome of the policy meetings and the issue being raised

### Fingal PPN Water and Environmental Services SPC

The main policy issues of interest to the Water and Environmental Services SPC of the Fingal PPN include:

- Regional Waste Management Plan
- Water Framework Directive and River Basin Management Plan
- Recommended Minimum Criteria for Environmental Inspections (RMCEI) Plans (annual)
- Litter Management Plan
- Report on the Annual Service Plan and Service Level Agreement with Irish Water
- Irish Water’s Capital Investment Plan and the delivery of Water Services Infrastructure in Fingal.
- Dublin Waste to Energy Project
- Landfill Remediation

### Fingal PPN and the Ringsend Wastewater Treatment Plant Upgrade Project

The Fingal PPN Water and Environment Linkage Group met on Tuesday 15<sup>th</sup> March 2016 to consider what issues should be a priority at this time. The Irish Water proposal to use an advanced, nutrient-reduction treatment technology known as Aerobic Granular Sludge (AGS) in the Ringsend waste water treatment plant

was discussed. While welcoming any improvement in waste water treatment which also delivers significant savings on this project, concern was expressed at possible impact on sea water quality and marine life which may result. This proposal means that not only will treated wastewater continue to be discharged from its current location in the heart of Dublin Bay, from where it is distributed throughout the Bay and along the Fingal shoreline by natural tidal processes, but the discharge volume will significantly increase.

Discharging increased volumes of treated wastewater at the existing location must not result in any adverse impact on sea water quality and marine life within the Dublin Bay Biosphere. This is not just an engineering issue - marine biologists and environmental experts must be involved to ensure that the potential for irreversible environmental impact is minimized. In its EIS NIS Scoping Document, Irish Water states that the water quality parameters proposed to be assessed are based on a mixture of the parameters set out in the current Wastewater Discharge Authorisation issued by the EPA, together with those parameters relevant to the receiving water legislation, and consisting of:

- Biochemical Oxygen Demand (BOD);
- Suspended Solids (SS);
- Ammonia (NH<sub>3</sub>/NH<sub>4</sub><sup>+</sup>);
- Dissolved Inorganic Nitrogen (DIN);
- Molybdate Reactive Phosphate (MRP); and
- E.Coli-forms

The Linkage Group meeting agreed that a written submission should be made to Irish Water on issues which we believe should be considered in the Environmental and Natura Impact Statements for Ringsend Wastewater Treatment Plant Upgrade. Since that meeting, four specific areas of concern have been identified for addressing as part of this project:

**(a) Pharmaceutical Products**

Pharmaceuticals have recently become the object of considerable attention and concern due to their possible toxicity and potential to cause adverse effects in aquatic organisms and the potential for direct human exposure via ingestion of contaminated seafood. Pharmaceuticals primarily enter the aquatic environment via treated municipal wastewater released by wastewater treatment plants. Human actions, termed as 'involuntary' (pharmaceutical excretion through the body or washing of topical medicines down the drain) and 'purposeful' (disposal of unused or out of date medicines) are primarily responsible for the release of pharmaceuticals into the environment. Human pharmaceuticals are excreted into the sewage system as a mixture of the parent compound and its metabolites.

**(b) Priority Hazardous Substances**

Priority hazardous substances include certain pesticides (atrazine, simazine, tributyltin), solvents (dichloromethane, toluene, xylene), metals (arsenic, chromium, copper, lead, nickel, zinc) and certain other ions (cyanide and fluoride). Wastewater treatment plants are major potential point sources of hazard substances, because they combine direct inputs from domestic, industrial and commercial effluent with diffuse inputs from surface runoff of land-deposited substances.

**(c) Pathogenic Viruses**

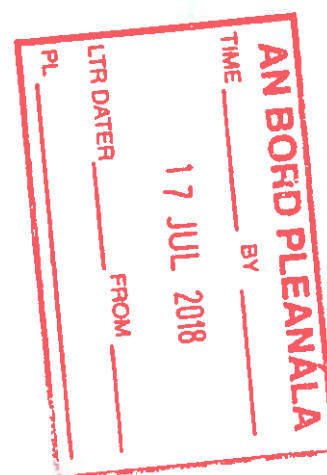
Norovirus is a leading cause of gastroenteritis in the community and is found in high concentrations in municipal wastewater. Bivalve molluscan shellfish such as oysters are filter-feeders and can become contaminated with human pathogens including Norovirus when grown in areas impacted by municipal wastewater discharges. Wastewater treatment is a critical control point which must be used to reduce the extent of pathogen discharge into the aquatic environment of Dublin Bay.

**(d) Net Acidity**

There is a requirement to monitor and control the net acidity of the outfall, especially with the future possibility of Shannon water being transported as a supply to the Dublin system – there may be differences in the relative pH levels between the waters of these two geographic areas. Acidic waters pose hazards that extend beyond having low pH - these include the capacity to acidify environments and the toxicity associated with dissolved metals, mostly iron and aluminium. Lowering the pH of flowing water can directly and immediately affect organisms (including algae, macro-invertebrates and aquatic plants) living in the water and on the seabed.


Reference documents:

- Pharmaceuticals in the Irish Aquatic Environment: The Assessment and Potential Human Impact of Exposure to Pharmaceuticals on Marine and Freshwater Bivalves - EPA Research Programme 2014–2020  
<https://www.epa.ie/pubs/reports/research/water/Research%20Report%20143%20web.pdf>
- Pharmaceuticals in the Aquatic Environment: A Short Summary of Current Knowledge and the Potential Impacts on Aquatic Biota and Humans - EPA Research Programme 2014-2020  
<http://www.epa.ie/pubs/reports/research/water/Research%20142%20Report%20FINAL.pdf>
- Monitoring of Priority Substances in Waste Water Effluents - EPA STRIVE Programme 2007–2013  
<http://www.epa.ie/pubs/reports/research/water/strive117monitoringofprioritysubstancesinwastewatereffluents.html>
- Norovirus in wastewater and shellfisheries: EPA Science, Technology, Research and Innovation for the Environment (STRIVE) Programme 2007–2013.  
<http://www.epa.ie/pubs/reports/research/water/strive109-norovirusinwastewaterandshellfish.html>
- Acidic water discharge criteria for saline aquatic ecosystems in the WA Wheatbelt (2013) - Western Australia Department of Water  
[https://water.wa.gov.au/\\_data/assets/pdf\\_file/0004/3991/104449-Acid-water-discharge-criteria-for-salineecosystems-WA.pdf](https://water.wa.gov.au/_data/assets/pdf_file/0004/3991/104449-Acid-water-discharge-criteria-for-salineecosystems-WA.pdf)



2.2. <https://www.journals.elsevier.com/environmental-pollution/news/56-active-pharmaceuticals-in-wastewater-treatment>

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CiteScore: 5.00

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Impact Factor: 4.158

5-Year Impact Factor: 5.393

Source Normalized Impact per Paper (SNIP): 1.480

SCImago Journal Rank (SJR): 3.415

## Scientists Discover 56 Active Pharmaceuticals in Wastewater Treatment Plants

Scientists have identified 56 active pharmaceutical ingredients in effluent samples from 50 large wastewater treatment plants across the USA, according to a report published in *Environmental Pollution*. The study is as well covered in a recent article in the *Daily Mail*.

Commonly used pharmaceutical products such as antihypertensive and anti-psychotic drugs are ending up in water from sewage treatment plants across the USA. There are long-standing public concerns about the potential risks to public health and to aquatic wildlife due to contamination of waters that receive effluents from treatment plants.

"Our research is the first systematic country-wide examination of pharmaceuticals in effluent waters and the risk that this might pose," said Mitchell Kostich, one of the authors of the paper from the Environmental Protection Agency.

"People are concerned about all the products that they use routinely ending up in streams and lakes how this might affect them and aquatic life, such as fish," added Kostich.

2.3. <https://www.ncbi.nlm.nih.gov/pubmed/27480162>

Secure <https://www.ncbi.nlm.nih.gov/pubmed/27480162>

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*Arch Environ Contam Toxicol*. 2016 Oct;71(3):423-36. doi: 10.1007/s00244-016-0303-7. Epub 2016 Aug 1.

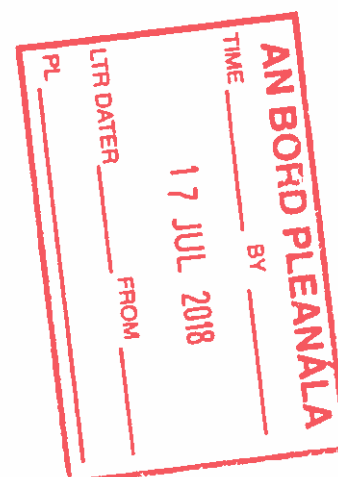
**Pharmaceutical Residues Affecting the UNESCO Biosphere Reserve Kristianstads Vattenrike Wetlands: Sources and Sinks.**

Björklund E<sup>1</sup>, Svahn Q<sup>2</sup>, Bek S<sup>3</sup>, Bekoe SO<sup>4</sup>, Hansen M<sup>1,6</sup>.

Author Information

**Abstract**

This study is the first to investigate the pharmaceutical burden from point sources affecting the UNESCO Biosphere Reserve Kristianstads Vattenrike, Sweden. The investigated Biosphere Reserve is a >1000 km<sup>2</sup> wetland system with inflows from lakes, rivers, leachate from landfill, and wastewater-treatment plants (WWTPs). We analysed influent and treated wastewater, leachate water, lake, river, and wetland water alongside sediment for six model pharmaceuticals. The two WWTPs investigated released pharmaceutical residues at levels close to those previously observed in Swedish monitoring exercises. Compound-dependent WWTP removal efficiencies ranging from 12 to 100 % for bendroflumethiazide, oxazepam, atenolol, carbamazepine, and diclofenac were observed. Surface-water concentrations in the most affected lake were ≥100 ng/L for the various pharmaceuticals with atenolol showing the highest levels (>300 ng/L). A small risk assessment showed that adverse single-substance toxicity on aquatic organisms within the UNESCO Biosphere Reserve is unlikely. However, the effects of combinations of a large number of known and unknown pharmaceuticals, metals, and nutrients are still unknown.



2.4. <https://www.irishexaminer.com/breakingnews/business/firms-warned-on-eu-emissions-clampdown-853115.html>

Secure | <https://www.irishexaminer.com/breakingnews/business/firms-warned-on-eu-emissions-clampdown-853115.html>

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## Firms warned on EU emissions clampdown

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Thursday, July 05, 2018 - 08:00 AM

By Pádraig Hoare

The strengthening of an EU directive on industrial emissions, with penalties of up to €15m, could catch thousands of Irish companies unawares and lead to site closures, according to a water management expert.

Thousands of firms across pharmaceuticals, food, and manufacturing have been warned to prepare for the beefing up of the EU's industrial emissions directive (IED), which came into being in 2013.

Declan Maguire, an expert in waste management, said many Irish companies are simply unaware of the extent of the new obligations of the IED, and that many firms could face site closure if they were caught unawares.

An interim managing director of Celtic Anglian Water, which operates Ringsend wastewater treatment works in Dublin, Mr Maguire said rules under the IED are set to become more stringent this year.

The IED compels companies to reduce harmful industrial emissions, including wastewater and generation of waste.

Mr Maguire said EU regulators are currently drafting stricter obligations on wastewater and generation of waste for the decade ahead, but that few in the industry are aware of it.

Companies in water-intensive industries such as food and beverage, electronics, leisure, manufacturing, and pharmaceuticals will be most affected, he said.

"Despite the fact that this legislation is in place since 2013, the extent of the new obligations are only now becoming apparent. Companies that were previously IED-compliant will suddenly become non-compliant as they fail to achieve the new standards," said Mr Maguire.



### 3. IRISH WATER: MANAGEMENT OF EXISTING PLANTS

3.1. <https://www.independent.ie/irish-news/courts/irish-water-guilty-of-sewage-pollution-at-four-plants-across-the-country-35513650.html>



Tom Tuile

March 8 2017 6:08 PM

IRISH Water has pleaded guilty to breaking environmental laws following the discovery of sewage pollution at treatment plants in Dublin, Limerick, Galway and Cork.

The company, which is being prosecuted by the Environmental Protection Agency (EPA), pleaded guilty at Dublin District Court on Wednesday to 11 charges under Waste Water Discharge (Authorisation) regulations. Irish Water had been prosecuted twice previously by the EPA and the court could hand down fines of up to €5,000 per offence, Judge John Brennan noted.

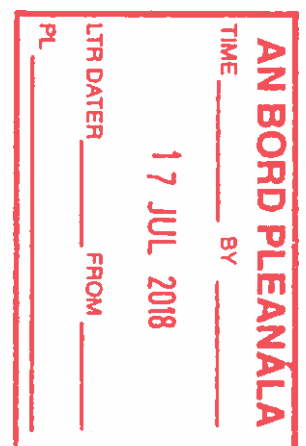
He adjourned the case for two weeks to consider what sanction he will impose.

Prosecuting solicitor Maeve Larkin said the EPA was proceeding with three charges in connection with a waste water treatment plant in Athenry, Co. Galway. This facility takes in waste water for treatment and then discharges clean water into the Clarinbridge River.

It failed to complete required upgrades by the end of 2015 and had released water with excessive pollutants into the river and failed to report an incident. EPA inspector Una O'Callaghan said Irish Water had indicated to Irish Water that the required work to reduce ammonia and phosphorus in water had to be done by the third quarter of 2015. Irish Water told the EPA it would comply by April 2016, then moved the date back to the second half of 2017 and Irish Water now says the upgrading work will not start until 2018 and is not expected to be completed until the following year.

Tests of the discharge showed excessive emissions of ammonia, which can kill fish, as well as phosphorus, which can be a risk to the aquatic environment, the court was told.

The EPA inspector agreed with Ms Larkin that from July 20, 2015 until August 2016 there were 11 occasions when pollutant levels breached regulation limits. Judge John Brennan heard that ammonia levels varied between 10 and 73 times the limit. During the same period phosphorus levels were between four and 23 times the limit.



Irish Water failed to notify the EPA about a mechanical failure led to a breakdown at the plant on May 4 last year when 40 per cent of the waste water taken in court not be treated.

The EPA inspector agreed with defence counsel Eoghan Cole that there was no risk to public health, fish kill at this site or need to carry out an acute clean up. Due to lack of procedures in place staff did not notify the EPA, he said, adding that a training programme has been rolled out for them.

Mr Cole asked the court to note that Irish Water intend carry to out a €5m upgrade at the Athenry plant.

The next case involving four charges related to sewage overflowing at three waste water pump stations in Balbriggan, in north Co. Dublin last year. These led to a minor fish kill in a local river last May and Skerries beach being closed for the June bank holiday weekend last year.

The EPA learned about the beach closure from media reports and it had not been reported to them by Irish Water as required, said EPA inspector Brendan Kissane.

"Do not swim notices had to be put up", he told the court.

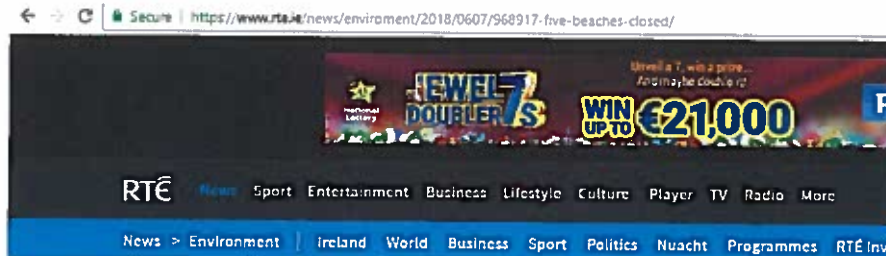
On May 17 last, the Dublin Road pump station also overflowed onto the road and into the Bracken river resulting in five dead fish. Irish Water had taken over two of the pump stations from local authorities in 2014 but the third only became operational in 2015 when they were in control.

The EPA official agreed with Mr Cole that Irish Water was co-operative.

Judge Brennan was told the next case related to two offences at a waste water treatment plant in Botherbue, in Co. Cork. EPA inspector Patrick Chang said upgrade work was required by EPA to be completed by the end of 2014 but it is not going to happen until 2019. Discharges to the Brogeen River, which leads to a tributary of the Blackwater, contained pollutants which were a toxic to fish and could affect salmon reproduction. However, he agreed with defence counsel that there was not danger to public health and significant upgrades are planned.

#### 4. ISSUES WITH WATER QUALITY IN BAY AT PRESENT

##### 4.1. <https://www.rte.ie/news/environment/2018/0607/968917-five-beaches-closed/>



## Beach bathing bans imposed over water quality concerns

Updated / Friday, 8 Jun 2018 15:20



Dublin City Council has said it hopes it will be able to lift the temporary precautionary bathing water notices placed at Dollymount, Sandymount and Merrion beaches by tomorrow.

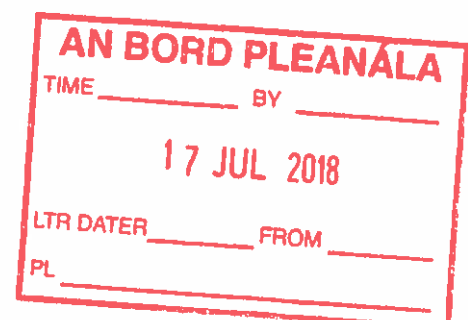
The temporary restrictions were required in recent days because of a breakdown at a Waste Water Pumping Station that resulted in a discharge to the River Liffey.

Following consultations with the HSE, Dublin City Council placed Precautionary Bathing Water notices in Dollymount, Sandymount and Merrion beaches over the past two days.

Bathing water samples have been taken and the council said that when definitive results are available tomorrow, it will be possible to state whether there has been any impact on the water.

It said it is hoped at that point the precautionary notices can then be lifted.

Nationwide seven beaches had season long bathing restrictions imposed on them last month by the Environmental Protection Agency due to their failure to satisfy stringent minimum EU water quality standards.



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## 5. ALTERNATIVE SITES

### 5.1.

[http://www.greaterdublindrainage.com/wpcontent/uploads/2012/05/ASA\\_Phase2\\_Main\\_Report.pdf](http://www.greaterdublindrainage.com/wpcontent/uploads/2012/05/ASA_Phase2_Main_Report.pdf)

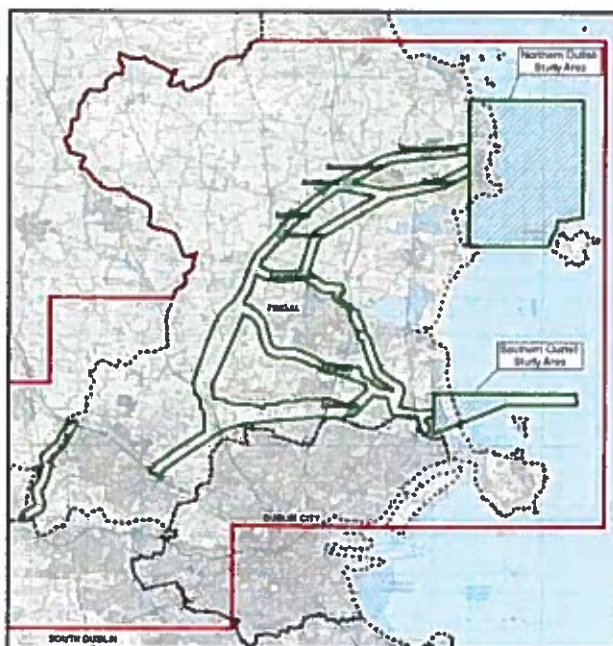
necessary pumping stations.

The ASA is a four phase qualitative process which has regard to the recommendations of the Strategic Environmental Assessment (SEA) on the Greater Dublin Strategic Drainage Study (GSDS).

#### ASA Phase 1

During Phase 1 of the ASA a preliminary screening of the study area was undertaken to identify a short list of potential alternative land parcels of suitable size to accommodate the proposed Regional WWTP and also to identify marine outfall locations and potential transfer pipeline corridors. On completion of Phase 1 nine land parcels with associated pipeline corridors and marine outfall locations (Fig. 1) were shortlisted to be brought forward to Phase 2 of the assessment, as follows:

- Annsbrook
- Baldurgan
- Clonsagh
- Cookstown
- Cloghran
- Newtowncorduff
- Rathartan



Greater Dublin Drainage  
Alternative Sites Assessment and Route Selection Report (Phase 2)

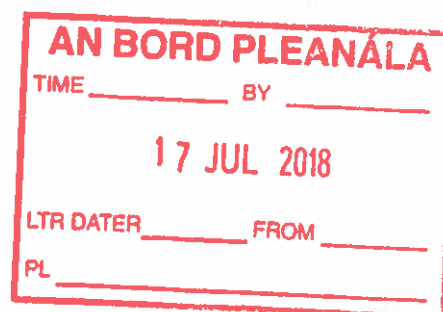


- Saucerstown
- Tyrrelstown Little

Full details of Phase 1 of the ASA is available in the ASA Phase One – Preliminary Outcomes Report (October 2011).

#### ASA Phase 2

In Phase 2 each of the nine shortlisted land parcels and associated pipeline corridors and marine outfall locations (henceforth called land parcel options) identified in Phase 1 were taken through an eight week period of public consultation during which a significant number of submissions were received. The key issues and concerns raised were considered by the environmental and technical specialists during the assessment process.



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