

Acclimatize



www.acclimatize.eu



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What is Acclimatize?

Acclimatize is a project being carried out by researchers in Ireland (University College Dublin) and Wales (Aberystwyth University). Our aim is to work out how bathing waters at the seaside become polluted in a way that can impact on public health, and how climate change may affect the quality of these waters in the future. The Acclimatize project is part-funded by the European Regional Development Fund through the Ireland Wales Programme 2014 - 2020.



Why are we interested in bathing water quality?

The seawater close to the coast is important. Not only does it provide us with an amenity to enjoy for swimming and water sports, it can also supply foods such as fish and shellfish. If this coastal seawater becomes polluted with faecal matter from human sewage or animal faeces (this might be from livestock that are close to a river that meets the sea, or from seagulls or dogs on the beach itself), the levels of harmful bacteria can rise in the seawater and pose a threat to human health. When threshold levels of faecal bacteria are detected in the bathing waters, beaches can be closed, affecting tourism and local economies.

The Acclimatize project is identifying the sources of pollution and determining how much each of these sources contributes to overall pollution levels. This helps us to better understand where and how the pollution happens in the first place and figure out how it can be reduced or stopped.

In the longer term, we expect that climate change will affect rainfall in and around the Irish Sea, altering run-off into the sea and potentially changing pollution risks.

The Acclimatize project will look at ways to 'climate-proof' coastal waters in urban and rural areas to minimise the risk and impact of pollution and thereby protect tourism and the marine economy.

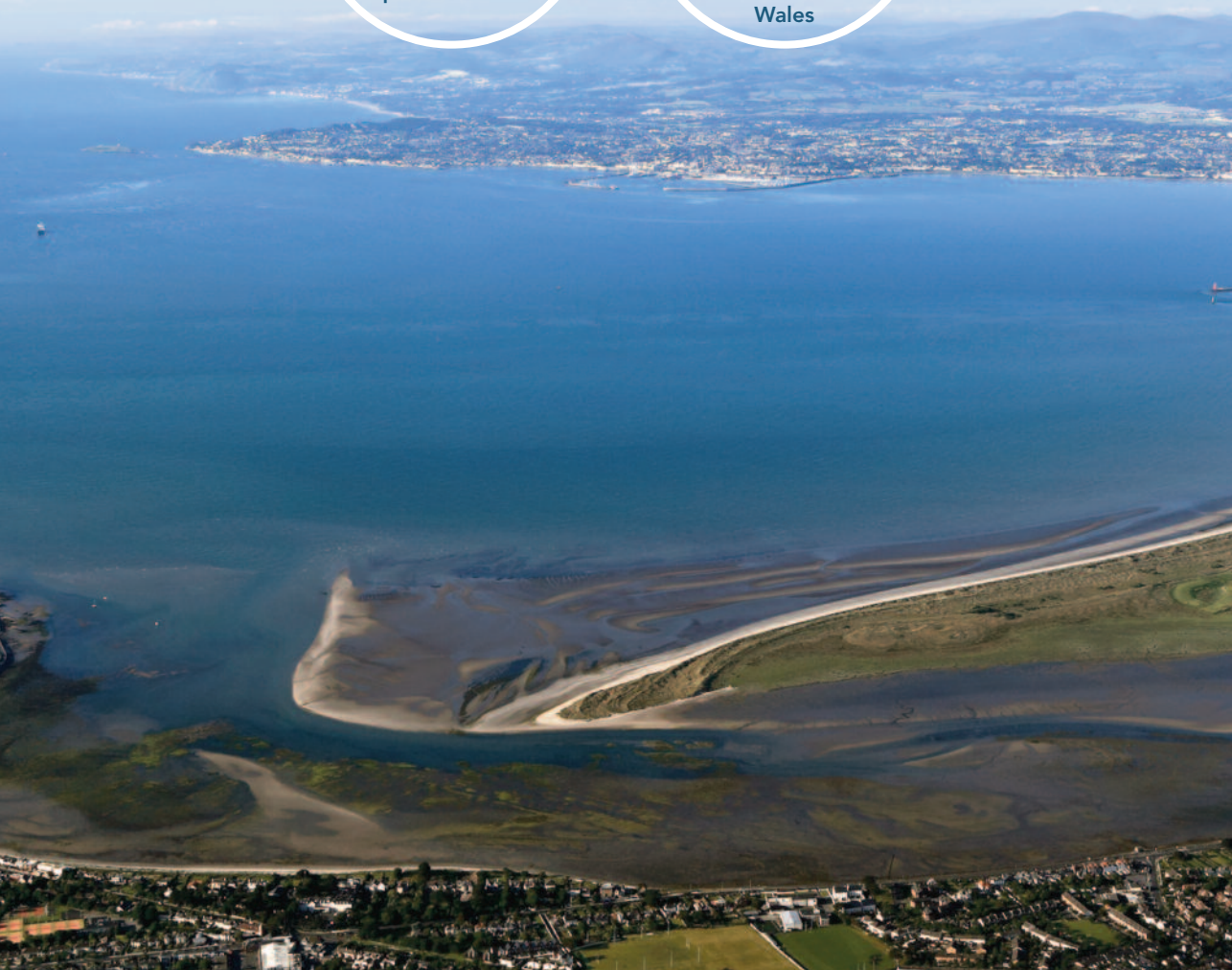
THROUGH ACCLIMATIZE WE HOPE TO:

Identify the main pollution pressures on bathing waters in urban and rural settings

Determine whether and how climate change will alter these pressures

Provide practical tools and methods to monitor the risk of pollution and predict events that could harm public health

Act as a platform for sharing knowledge about the impact of climate change on coastal communities in Ireland and Wales



Where are we carrying out the study?

Acclimatize is focusing on 'at-risk' designated bathing waters in two complementary environments: a large-scale urban environment and a rural agricultural environment. The large-scale urban environment is represented by 'at-risk' bathing waters in Dublin Bay UNESCO Biosphere (Sandymount, Merrion and Dollymount strands). The rural agricultural environment in Wales will focus on the main 'at-risk' bathing waters commencing with Cemaes Bay in Anglesey. The bathing waters in these contrasting environments are impaired by different factors and will likely experience different effects from climate change.

How are we carrying out the study?

We are using a combination of extensive fieldwork, laboratory analysis and hydrology. We are gathering information in this way and combining it with existing knowledge about river courses, weather and climate predictions to build computer models.

In the short term, we can use these models to figure out the risk to the bathing waters. We are also building longer-term predictions up to the end of the century that take climate change into account. This information will help policy-makers and local authorities to protect the valuable amenities and resources provided by bathing waters.

Who are we working with?

In Ireland, we are working with Dublin City Council, Dún Laoghaire-Rathdown County Council, Fingal County Council, the Environmental Protection Agency, Irish Water and the Dublin Bay Biosphere Partnership.

In Wales, we are working with Dŵr Cymru Welsh Water, Natural Resources Wales and representatives of Welsh Local Government, the Welsh Government and relevant Non-governmental organisations (through the Wales, Water and Health Partnership: Bathing Waters subgroup).



When is this happening?

The project began in February 2017 and will finish in 2021.



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Comhairle Cathrach
Bhaile Átha Cliath
Dublin City Council



Comhairle Contae
Fhine Gall
Fingal County Council

Comhairle Contae
Fhine Gall
Fingal County Council



BITSFÉIR
Chúairt Bhaile Átha Cliath
Dublin Bay
BIOSPHERE



Cyfoeth
Naturiol
Cymru
Natural
Resources
Wales



Dŵr Cymru
Welsh Water



CYNGOR SIR
YNYS MON
ISLE OF ANGLESEY
COUNTY COUNCIL



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Ireland Wales
Programme
2014-2020



Tionól Réigiúnach an Deiscirt
Southern Regional Assembly



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UNDEB EWROPEAID
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Uywodraeth Cymru
Welsh Government

Cronfa Datblygu
Rhanbarthol Ewrop
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