Case Study

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Waterford City and County Council Use Bluesky National Tree Map™ Data to Support Carbon Neutral Plans

Client:

Waterford City and County Council is the authority responsible for local government in the City & County of Waterford, Ireland. The organisation came into operation on 1st June 2014 and is a merger of Waterford City Council and Waterford County Council.

Comhairle Cathrach & Contae Phort Láirge
Waterford City & County Council

Industry:

Local Government

Product:

National Tree Map™

> *The Bluesky National Tree Map™ has enabled and assisted conversations about current and future tree cover. It allows us to visualise the urban environment to include the urban forest from the desktop and make data driven decisions that will inform future policies and budgets. It also allows us to measure and report on progress over the next few years.*

Eoin Dullea, Horticulturist at Waterford City and County Council

Summary:

Waterford City and County Council is using Bluesky's National Tree Map™ (NTM™) to help benchmark current tree cover across the city and to look at suitable tree planting sites to inform decisions as it progresses towards its target to become Ireland's first decarbonised city. NTM™ data is also being applied to inform Council policy and budgets as well as actionable climate change and green initiatives, which are an integral part of the Draft Waterford City and County Development Plan for 2020-2028.

Challenge:

Waterford announced its ambitious plan to make the entire city a decarbonised zone under Ireland's Climate Action Plan, which will radically transform Waterford to a carbon neutral city by 2030. In order to implement sustainable energy measures, climate change adaptation, and mitigation measures, the Waterford City and County Council require a thorough understanding of current green infrastructure and needed a starting point in terms of existing tree coverage. As local authorities look to implement such projects, it is key that it is done in a cost effective and resource efficient manner.

Solution:

Bluesky's National Tree Map™ (NTM™) provides a unique, comprehensive database that includes the height, canopy coverage, and location for trees 3m and over across the whole of the Republic of Ireland. It proved to be an ideal solution for Waterford City and County Council as it drafted plans for the city's green infrastructure and carbon neutrality status. The NTM™ helped them to assess their starting point and find suitable and available sites for tree planting, ensuring proper provision is made for their future protection and management.

Results:

In 2020, Bluesky's aerial survey captured over 7 and a half million trees within Waterford City and County Council's administrative boundary (1,857 sq km). The data was interrogated to calculate the percentage of tree cover for each of the 38 electoral divisions in the city area. Initial results showed current cover of between 2 and 21 percent, averaging at 12 percent. Waterford plan to increase this to a target canopy cover of 20 percent and has used the NTM™ to assess suitable and available sites for planting. The NTM™ is updated every three years so it will also allow them to measure and report on progress over the next few years.

Specification	
Layers	1. Canopy Polygons (Vector Polygon) - Representing individual trees or closely-grouped tree crowns 2. Idealised Crowns (Vector Polygon) - Crown polygons visualised as circles for ease of use 3. Height points (Vector Point) - Detailing the centre point and height of each canopy feature
Coverage	Republic of Ireland
Accuracy Z	± 1m rmse
Classification Criteria	Trees over 3m in height
Formats	Include: ESRI Shape & MapInfo, Geodatabase, DWG, KMZ
Standard Projection	Irish Transverse Mercator (ITM95)

Get in touch today at **info@bluesky-world.com**