Case Study



Managing tree assets safely with the National Tree Map™



Client:

Wessex Water serves 2.9 million customers across the south-west of England in a varied landscape ranging from the Mendip Hills and the levels of Somerset to the cliffs of Dorset and Wiltshire's Salisbury Plain. It is recognised by its regulators as one of the leading water and sewerage companies in England and Wales.



Industry:

Product:

Utilities

National Tree Map™

The NTM™ data has proved to be visually brilliant for us and has enabled us to apply the tree data to high-use zones. The point and canopy cover data supplied as part of the NTM™ has been integral to the project. The data has been more comprehensive than other datasets we have previously tried, proving to be the best option for us.

With a vast number of trees identified on our land, we have a responsibility to effectively and efficiently manage these trees accordingly. The dashboard splits our landholdings into three varying use zones; within these zones we have applied the tree data to assess where 'high-risk' trees may be located on our landholding.

Sophie Minett, Environmental Scientist at Wessex Water

Summary:

Applying point data and canopy data from Bluesky's National Tree Map™ (NTM™), Wessex Water has developed a comprehensive dashboard to help responsibly manage tree assets across their landholdings to align with their tree safety policy.











Challenge:

Following the 2024 National Tree Safety Guidance regarding risk management for trees and public safety, Wessex Water set-out to create a tree safety policy to offer detailed guidance on how to safely manage trees on their land, within or near high-use zones.

Within its wide-varied region, Wessex Water owns and manages operations at sites including woodlands, reservoirs and water source sites, as well as other locations classed as being within or near an identified high-use zone. This includes land encompassing or near to railways, motorways, facilities for education and other public areas, such as public footpaths or public parks.

To understand how many trees are sited across their landholdings and which ones could pose a threat, access to accurate tree data was a must. Wessex Water explored applying some pre-existing data they had access to but found it wasn't objective enough to meet the stringent health and safety requirement.

Solution:

Utilising accurate tree data from Bluesky's NTM™, Wessex Water produced a comprehensive dashboard to aid the management of their trees. The dashboard splits their landholdings into three zones, detailing the lowest to the highest use zones. NTM™ means they can easily apply tree data to their high-use zones, allowing them to quickly and accurately identify high priority assets and effectively manage 'high-risk' trees.

Results:

As NTM™ captures height, location and canopy cover/ extent of trees, Wessex Water were able to cross reference this with their zone use levels, giving them a complete understanding of trees on their sites that could pose a risk. This approach will significantly optimise their resources, saving them time and money,

as survey locations can be strategically chosen focusing on areas with the highest risk first.

With the dashboard created, Wessex Water now plans to enhance it to improve operational efficiencies and incorporate new sites seamlessly.

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

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

