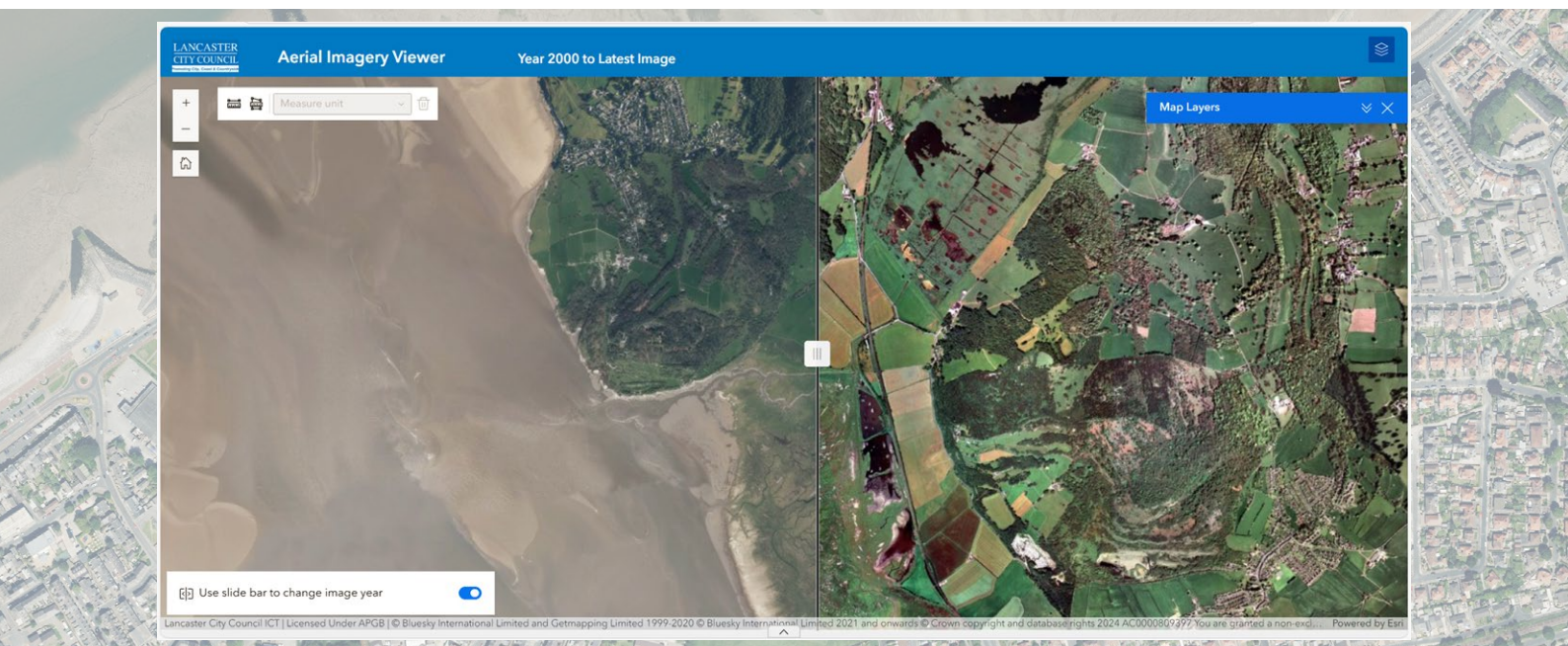


Case Study

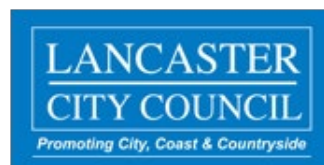


Lancaster City Council



Client:

Lancaster City Council is a district council, providing services to around 140,000 people living in the Lancaster district, which includes the towns of Morecambe, Heysham, and Carnforth, as well as outlying villages, farms, rural hinterland and a section of the Yorkshire Dales National Park.



Industry:

Local Authority

Product:

Aerial Photography

“These key visuals helped inform the development of the public facing aerial photography viewer, which has enhanced community engagement and can support future planning initiatives, demonstrating how the availability of accurate imagery through the APGB contract is a key asset for local authorities.”

Martin Chapple

FRGS MBCS, LLPG and GIS Officer at Lancaster City Council

Summary:

The 'Our Future Coast' project utilises Bluesky's historic and current aerial photography available through the Aerial Photography Great Britain (APGB) contract to highlight the long-term decline of salt marshes through the creation of a public facing aerial photograph viewer. The viewer supports efforts to address coastal erosion and heritage protection at key sites like Jenny Brown's Point and Hest Bank, managed by Lancaster City Council through the Our Future Coast Project. The project is one of 25 initiatives funded through DEFRA's £150 million Flood and Coastal Resilience Innovation Fund (FCRIP), launched in 2021.

Challenge:

Around England’s coastline there’s an underappreciated ecosystem that provides a home for many native flora and fauna, it might not look pretty, but salt marshes store carbon and crucially also act as a valuable natural flood defence.

One of the salt marsh sites managed by Lancaster City Council is sited at Jenny Brown’s Point, a small headland that has seen significant erosion and depletion over the past two decades. The river channel is a dynamic environment and it has, as part of its natural process, changed its path. This has exposed the salt marsh underneath, undermining its stability and leaving it vulnerable to further erosion during daily coastal processes.

Additionally, on the site there is a Grade II listed chimney, sometimes described as a tower, and believed to be the remains of a short-loved copper mining and smelting project dating back to the 1780’s, as well as archaeological remains which were excavated in July 2021, and a footpath.

Solution:

Using both Bluesky’s historic and current aerial photography, project leaders were able to create a public facing online aerial photograph viewer. The viewer visually communicates environmental changes to the public, making the data more accessible and easier to understand. By presenting changes in the landscape through a timeline of aerial photography, the tool allows users to compare photographs and see the progression of erosion and habitat loss over time, which can be far more impactful than written reports or data tables alone and has led to increased community engagement.

Results:

Bluesky’s detailed aerial photography has been instrumental in enabling Lancaster City Council to better understand and respond to the environmental challenges at salt marsh sites like Jenny Brown’s Point and Hest Bank. Through the APGB contract, members benefit from access to a comprehensive aerial

photography archive dating back to 2000, offering a rich visual record of landscape change. This historical photography, when combined with current aerial photography updated on a two-year cycle, allows for precise visual comparisons that reveal long-term trends in salt marsh erosion.

	Imagery Specification	
Resolution	12.5cm	25cm
Coverage	Great Britain	Great Britain
Accuracy XY	± 30cm rmse	± 60cm rmse
Formats	Include: JPG, TIFF, ECW	Include: JPG, TIFF, ECW
Standard Projection	British National Grid	British National Grid
Tile Size	1km x 1km (8,000 x 8,000 pixels)	1km x 1km (4,000 x 4,000 pixels)
Metadata	Gemini 2.3	Gemini 2.3

Get in touch today at support@apgb.co.uk