



“Royal HaskoningDHV has played a vital role in the management of our shoreline. The team has shown great commitment to serving the numerous local communities based on each area’s individual needs, and their expertise has been invaluable throughout the various stages of the process.”

Emyr Williams, Pembrokeshire County Council


Strategic shoreline planning for one of the UK’s longest coastlines

The risk of flooding and erosion is a significant threat affecting Wales’ coastline and communities, which requires integrated decisions for sustainable management of the coast into the future. At 1,100km, the West of Wales coastline forms one of the longest Shoreline Management Plans in the UK, impacting numerous local communities each with their own concerns over coastal protection. Royal HaskoningDHV has been extensively involved in the development of SMPs throughout the UK since the mid-1990s, and recently developed 10 of the 22 ‘second generation’ plans.

The West of Wales SMP runs from St Ann’s Head in Pembrokeshire through to the Great Orme in Conwy, and includes Ynys Mon (the Isle of Anglesey). Led by Pembrokeshire County Council, Royal HaskoningDHV was brought into the project in 2008, with final sign-off from all parties achieved in 2012.

Shoreline Management Plans (SMPs) contribute to our greater understanding of the UK shoreline so as to develop a long-term policy framework underpinning coastal management and management of coastal defences in a sustainable manner. Initially introduced to manage risk, SMPs were reviewed in 2006 to adopt a more holistic view and set out a vision for the next 100 years. The Welsh Government promotes Integrated Coastal Zone Management which encourages all organisations with an interest in the coastline of Wales to work together to formulate policies and plans – SMPs are a vital component of this process.

At the start of the SMP process, Royal HaskoningDHV, building on their long term association with the Welsh coastline, gathered all existing data for the area. The team then conducted in-depth analysis of coastal processes, examining existing defences, the surrounding environment and land use issues – all essential elements to develop the required level of understanding.



Royal HaskoningDHV compiled a list of 'features' along the coastline which were important to the local communities – whether a local amenity or residential property, or other aspects as communities defined their core values.

“Neighbouring coastal areas can differ vastly and it was essential that the individual character and needs of any area were recognised”, commented Greg Guthrie, Royal HaskoningDHV’s Associate Director for Rivers, Deltas and Coasts.

The West of Wales coastline was divided into twenty policy development zones, each reflecting the core values. Characterisations were developed for each of these zones, and Royal HaskoningDHV then examined all of this data together with information about climate change and rising sea levels in order to explore how these factors could impact the area in question and examine the best option for managing each section of the coast.

Based on these characteristics and key values, Royal HaskoningDHV then recommended an 'Intent of Management' for each section of coastline.

Once Royal HaskoningDHV had developed a draft plan, the company carried out an extensive three-month consultation, undertaken in partnership with the Local Authorities to ensure all stakeholders had the opportunity to comment.

“For the West of Wales, the policies outlined in the SMP had to find the right balance,” commented Emyr Williams, Pembrokeshire County Council. “There is of course a significant amount of scientific analysis behind the compilation of a SMP, but it is discussion with the local community and understanding of their issues which greatly influences the recommended action plan. Royal HaskoningDHV developed strong relationships with the local communities defining the need for action in taking forward the SMP policies.”

Although a non-statutory document, SMPs provide the framework underpinning the development of the coastal zone.

“We are already seeing areas where the SMP is influencing coastal management and coastal engineering,” said Greg Guthrie. “Borth is a good example of this. Built on a shingle ridge in Cardigan Bay, and susceptible to coastal erosion, the village is home to around 1,500 people. It is also an important holiday destination, attracting many thousands of visitors. An adaptive approach has been taken to the defence of the village, building on the thinking of the SMP.”

The West of Wales SMP offers large-scale assessments of the risks associated with coastal processes and presents a policy framework to manage these risks to people and the environment over the next 100 years. By identifying where problem areas lie, Pembrokeshire County Council and all local authorities involved can continue to work towards implementing true Integrated Coastal Zone Management in order to achieve sustainability across the West coast of Wales.

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