SOUTH EAST

The agriculture and horticulture sectors in South East England are extremely diverse, combining nationally significant fruit production with significant arable, livestock and ornamentals sectors. The water management needs from these sectors are equally diverse, although there are notable hotspots of water resource demand and flood impact across the region.

In particular, the River Medway system in Kent, and the Arun and Western Streams catchment in West Sussex both experience high levels of water demand and severe impacts from flooding. However, nearly all catchments in the region experience both extremes. Many of the rivers in the area are also designated for their internationally important nature conservation value, which adds complexity to management decisions.

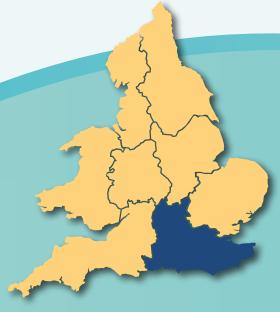
From a water resources position, nearly all catchments in the region are identified as either over licensed or over abstracted, so there is often no new water available to enhance production outputs. For example, in the River Medway, abstraction licences are placed under restriction in approximately four out of every five years, due to constraints on available resources. At a national level this has been referred to as an emerging "critical irrigation geography" where around two thirds of all agricultural holdings are located in catchments where no additional water is available and competition for water is increasing.

The lack of available water in the environment means that many farmers in the region often rely on the public water supply network to supplement their water use during prolonged dry periods. This was recently estimated to account for approximately 10-15% of total water used in the irrigation sector in the region. However, this could be as high as between 40% and 60% in some areas. The peak of this demand usually occurs during May to September, coinciding with the peak demand from other users. This indicates there is scope to improve catchment resilience through developing better out of season water capture in the form of rainwater harvesting and winter storage reservoirs.

In terms of flooding the last major event to impact on the region was the winter storms of 2013/14, which affected the South East more than any other region. According to the Environment Agency (EA), peak flows of the River Medway at Teston in Kent were at their highest since 1968 – enough to fill Wembley Stadium 25 times in a 24-hour period.

One of the main areas of concern for farmers in the region is the conveyance maintenance on main rivers. This type of management was historically provided by predecessors of the EA as a public service but is now much less prevalent in rural areas.

Channel maintenance activity can reduce agricultural and urban damages by approximately two thirds for a design flood event in a small lowland catchment (the Oxfordshire Ray). This is in contrast to approximately 30% damage reductions from enhancing pond storage and alleviating soil compaction. More active management using a combination of interventions can reduce flood risk for all and improve farmland productivity, urban flood risk and environmental sustainability all at the same time.



Finally, it is also important to note the risk of sea level rise affecting very large proportions of the regional coastline. With estimates that sea level rise could be as much as 1.5 metres over the coming decades, this is a significant issue when so many sea walls are significantly under maintained and, in many places, already being over-topped. With nearly all of the regional Grade 1 and 2 prime agricultural land located in low lying coastal locations in North Kent, Romney Marsh and the Chichester plain, there are very real risks that this nationally significant asset could be irreversibly impacted by sea level rise.

Regional priorities:

- Securing access to reliable quantities of water, to allow multi-year farm production planning.
- Minimal complexity in administration processes, allowing farmers to secure water for business need, when they need it.
- Certainty that productive farmland is recognised as valuable and deserving of protection against sea level rise and extreme weather.
- Partnerships working across the region, to deliver maintenance, repair and enhancement of critical infrastructure.
- Confidence to take on debt and invest in the future of their business. Farmers need to be able to make their businesses sustainable and fit for the future. This means they need a safe environment to work in.
- Reassurance that rural livelihoods are considered a policy priority, and that the health, safety and welfare of the rural workforce and their livestock is taken seriously during crisis events.
- Involvement within decision-making processes so that farmers have confidence in the decisions affecting their lives and livelihoods.