THE TAMAR WATER STEWARDSHIP BUSINESS BOARD FOR CORNWALL & DEVON

TACKLING WATER QUALITY AND SUPPLY FOR A RESILIENT CATCHMENT:
TAMAR (SOUTH WEST) CASE STUDY

Tamar – a key sourcing area for meat, dairy & drinking water supply

THE CATCHMENT

The Tamar is an iconic and relatively large river catchment which spans the Devon/Cornwall border, covering an area of approximately 1,800 square km, including all its tributaries and streams.

The catchment is strategically important for its drinking water supply for the region's communities, plus the businesses which operate here: Agriculture and Tourism are two of the largest Industries and economically important – both fundamentally rely on the natural landscape.

The region is predominantly based on grassland systems which support traditional livestock, dairy and mixed farming. Advanced productivity and technology have led to increased stocking rates or growth in herd sizes; as a result the wider South West area represents 1/3 of the UK's cattle herd. There has also been more recent expansion into cereals, including maize in the more productive areas between the eastern and western moorland fringes.

We aim to support sustainable production through collaboration from producers to consumers.

Interreg France (Channel Manche) England
Channel Payments for Ecosystem Services
European Regional Development Fund
CPES

Resilient catchments for water quality & supply

WATER-RELATED ISSUES MAY IMPACT INDIVIDUAL PRODUCERS AND THE AGRICULTURAL INDUSTRY THROUGH A NEED TO UPGRADE SYSTEMS AND MANAGEMENT TO REMAIN COMPLIANT.

THIS IS LIKELY TO REQUIRE EVEN GREATER RESILIENCE IN THE FACE OF CLIMATE CHANGE TO REMAIN SUSTAINABLE.

A PROACTIVE AND COLLABORATIVE APPROACH AIMS TO REDUCE ISSUES THROUGHOUT OUR SUPPLY CHAIN NETWORKS TO MITIGATE THESE. THE MULTIPLE BENEFITS FROM THIS SUPPORT PEOPLE & WILDLIFE AS WELL AS THE ECONOMY.

abp Arla KEPAK PREMIER FOODS Saputo Dairy UK South West Water WESTCOUNTRY RIVERS TRUST

Problems with water quality

Increased intensity or production can lead to degraded land and natural resources; in the Tamar which is very livestock-based, this tends to result in a number of key issues which are relatively easy to identify and manage to improve conditions long term.

MANURE & NUTRIENT MANAGEMENT

- Reduce the risk of manures being washed off yards, tracks or fields into watercourse and impacting aquatic life or drinking water supplies.
- Ensure yards and major infrastructure is compliant with regulations (e.g. slurry or silage stores), and simple actions to separate rainwater into clean drains rather than increasing dirty yard water or slurries.
- Ensure organic manures are used for field application, reducing costs of bought fertiliser and risk of excess application being lost to the environment.

SOIL MANAGEMENT

- Compacted soils can result from high stocking rates, poor location or untimely crop cultivation - especially in wetter months.
- Impacted soils lose their ability to fully absorb rainfall resulting in them being washed off onto roads, into drains or rivers along with any attached nutrients.
- This is a loss to farm assets and may contribute to localised flooding as well as sediment accumulating in watercourses and smothering aquatic life.
- Continued decline in soil health will ultimately impact productivity as soils are unable to recover sufficiently quickly.

DEGRADED OR FRAGMENTED HABITATS & SPECIES

- Habitats and species can suffer from diffuse (broad, low-level) pollution leading to loss or decline. Marginal areas such as marshes or field corners play a role in buffering and filtering nutrients or storing water. If degraded, they also cease to function effectively.
-Trees and hedges act to intercept & absorb surface run-off, limiting nutrients or soils reaching watercourses as well as providing valuable habitat.
- Farmland supports a complex hierarchy of useful species that help reduce pests, supports pollination and food webs from insects to predators.
- Wildlife populations can become fragmented into smaller areas, limiting population growth and gene pools.

All of these impacts are likely to increase as a result of climate change, compounding the problems and placing greater pressure on our freshwater systems and biodiversity.

Problems with water availability

The South West peninsula receives the Atlantic jet stream bringing with it moist, warm air and seasonal rainfall which supports lush grassland. However, Climate Change is already starting to influence weather patterns.

THE UK'S WETTEST FEBRUARY & HOTTEST SPRING WERE BOTH RECORDED IN 2020

The South West is rarely at risk of a drought order and fares better than other regions of the UK. To bolster catchment resilience and protect our water supplies to cope with our demands throughout the year, it is better to proactively build in actions to meet this goal. The region experiences increased demand on water supplies due to significant seasonal fluctuation from Tourism, as well as our own growing development and domestic needs. Agriculture and the Food & Drink industry both rely heavily on clean and abundant water supplies to support their daily business and what this means to our local economy and communities.

The South West is mainly reliant on its surface water (rivers, lakes and streams) for drinking water supply rather than groundwater. To manage this sustainably we should ensure that the catchment overall is best able to receive, store and release water from moorland headwaters through to estuaries and coastal waters as part of a fully functioning water cycle.

Companies seek to strengthen their resilience to climate change to ensure they continue to operate & adapt efficiently and competitively.
Water is fundamentally important to the Food & Drink sector as part of their sourcing and production.

A more sustainable approach to land management can influence this by protecting or enhancing natural habitats such as wetlands or marshes, allowing them to hold onto water for longer and release it slowly into our rivers and streams to maintain a reliable base flow for ourselves and for wildlife.

Wetlands also act to naturally filter sediment or nutrients, and teem with biodiversity. There is greater recognition and drive to incorporate Nature Based Solutions into land management, to work with these natural processes for broader benefit – building healthy, diverse ecosystems with greater resilience. Society gains from these in various forms; mitigation from flood risk, improvements in air and water quality etc., and hence government policy is beginning to focus more on incorporating these into future land management schemes as a result.

What's the solution?

As part of the Courtauld 2025 Water Ambition, Westcountry Rivers Trust (WRT) has been working with a dedicated group of companies with interests in the river Tamar, as an initial focus area for the South West under our CPES (Channel Payments for Ecosystem Services) project. Operating as the Tamar Water Stewardship Business Board, those involved are collaborating on an initiative to communicate key messages throughout supply chain networks, to build greater resilience in our catchments long term.

This project is actively supporting and communicating best farming practice to benefit the farm business and the environment – with a key focus on water protection; to improve soil, nutrient and manure management while enhancing natural habitats.

The Business Board members have identified key areas that offer the greatest opportunity for improvement based on existing data - to direct potential investment for maximum results and benefits.

Collectively the network of supply chains and contacts represent a good proportion of local producers and ensures a consistent approach through joint working.

The Board's purpose is to enable and demonstrate the effective contribution of the private sector in delivering this vision through collaborative action.

The approach provides information and support for producers, with signposting to potential funding - building long-term robustness on farm and our natural environment. It is a pilot for the national Courtauld 2025 Water Ambition but aligns locally with the ambitions and strategies of the Tamar Catchment Partnership (CaBA).

"Its our aim to provide consistent and supportive engagement with our farming communities to illustrate our joint ambitions; sustainable farming enterprises for the long term which recognise the importance and reliance on water – and the wider environment. Collectively we are more effective and efficient; better placed to reach more farmers and illustrate the benefits as a result.

Our key issues on the Tamar are soil, nutrient and manure management due to the predominant livestock and grassland based systems here. We support and promote best practice that also invests in our environment – so that Agriculture remains a core industry for the benefit of all society. Our Business Board members are from meat, dairy and water companies but we are aiming to broaden our networks to achieve the best possible outcomes. It's a great opportunity to demonstrate the connections from farmer to consumer and all the positive benefits farming and food production bring to our landscapes and rural communities, now and for future generations."

HAZEL KENDALL
HEAD OF LAND MANAGEMENT AT WESTCOUNTRY RIVERS TRUST

Outcomes to date

Through running a detailed mapping exercise with environmental data, WRT presented findings to the Business Board to help visualise opportunities and risk – providing a starting point for actions from mutual understanding in the Lyd subcatchment as an initial focus area. This led to linkage via farm advisory support initiatives that WRT could offer, providing tailored one-to-one advice and potential grant funding for interventions delivering water quality and environmental gains.

In 2019/20, by aligning WRT's CPES (EU funded) project on the Lyd with the Business Board ambitions, £95,000 of funding was mobilised for grant funding here through their support which was offered via an online auction tool to invite bids. The options addressed soil and water management, whilst boosting biodiversity and will require financial support by the farmers also – ensuring long term commitment and ownership.

Woodland planting was proposed due to its ability to contribute to water quality, water storage, soil health and biodiversity – leading Premier Foods as one Board member to re-divert their existing Carbon offsetting plans directly for local application – resulting in 16,000 new broadleaved trees being planted in one season.

Business Board members regularly share best farming practice and seasonal tips for land and water management via their e-newletters, with others commissioning direct one-to-one Farm Health Checks for their producers. Overall it will provide an updated understanding of the Lyd catchment as a trial area, representative of the wider catchment and its future potential.

Plans included an on-farm promotional event in summer 2020. This has had to be postponed due to COVID-19, however, it is hoped to run this later when appropriate & practical to include farmers, local farming industry representatives, Business Board members and other cross-sector contacts to showcase the work so far and encourage further development.

WRT will be pressing ahead with the wider delivery of the CPES project, to capture a catchment-scale assessment of the farmed landscape, working confidentially with farmers to evaluate natural assets as well as farmed and built assets. Overall this should help illustrate the potential value (as Natural Capital) and where this could generate investment opportunity as a result for alternative markets to supplement incomes. Part of this will be quantifying Soil Organic Carbon (SOC) which is one such emerging element – per farm, but also at a larger catchment scale made possible via collaboration.

The Business Board meet regularly to share updates and develop further ideas, with the long term aim being to offer similar opportunities across the whole of the Tamar catchment and ultimately roll out across the region. This would replicate the approach and combine interests for maximum efficiency, impact of benefits and use of available investment. The Business Board itself is a small number of companies which are of a sufficient scale to influence change through their supply chains, but it is hoped that broader support can be generated in part through an awareness campaign which encourages the pledged support of other SMEs towards shared ambition.

Why get involved?

POSITIVE MULTIPLE BENEFITS

- Improve awareness of reliance on water quality and resource within operations
- Increases resilience of supply chains at a catchment or landscape scale, improving productivity in balance with the environment and adapting to Climate Change
- Improve producer awareness and providing a support network for land and water management advice, aligned with company objectives or initiatives
- Illustrates and seeks to quantify biodiversity net gains and environmental goods
- Demonstrable positive outcomes for producers to support farm enterprise while reducing risk from operations, ensuring compliance, and protecting reputation
- Supports a long-term view of commitment to local sourcing and investment
- Promotes development of innovation throughout supply chains from new initiatives
- Proactively seeks to encourage investment into primary producers via efficiently blending finance from cross-sector working (achieving mutual objectives)
- Contributes to meeting Sustainable Development Goals or Corporate Social Responsibility objectives including local community engagement / awareness
- Delivers positive messages about Food & Farming to wider consumer audiences

WHAT DOES GETTING INVOLVED MEAN IN PRACTICE?

- Regular attendance of Business Board meetings (min. 3 per year)
- Represent the broad interests of your own organisation at the Board
- Be committed to developing and delivering actionable projects that align to the Tamar Catchment Partnership (Catchment Based Approach, CaBA)
- Be an advocate of the Business Board & Tamar CaBA, its vision and strategy
- Share and promote activities through joint communications and campaigns to raise awareness of the collective activities of the Business Board

Catchment Based Approach
Partnerships for Action

FARMER & PRODUCER QUOTES

“Complements what we are trying to achieve on farm & what we already have, our Environmental Assets”

“Made sense to the farm”

“Aligned with the improvements we wanted to make”

BUSINESS BOARD QUOTE

"The Courtauld 2025 target to reduce water stress by working collaboratively is seen as the most difficult to achieve and is daunting to many companies.

By coming together as a working group, we have been able to find a common issue and achievable solutions that benefit us all and many aspects of the environment.

For example, Premier Foods is planting 16,000 trees in 2020 due to the working group – almost doubling its total tree planting from the last four years – all through working collaboratively."

For more information about the **Tamar Water Stewardship Business Board** please contact Hazel Kendall, Westcountry Rivers Trust – hazel@wrt.org.uk

For more information on the wider framework of collective action projects being coordinated through the Courtauld 2025 Water Ambition and The Rivers Trust, see: wrap.org.uk/content/courtauld-2025-water-ambition

THE PRINCE OF WALES'S CHARITABLE FUND

Interreg France (Channel Manche) England
Channel Payments for Ecosystem Services
European Regional Development Fund
CPES