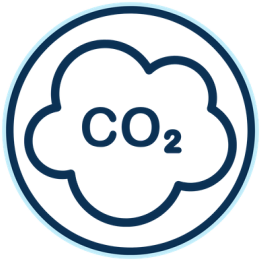
CATCHMENT PLAN

To achieve our vision of a healthy, functional ecosystem that provides a healthy and productive landscape now and in the future, we have developed the following goals for the Tamar:

High water quality is available for drinking water, safe sports & leisure, and the health of the wider environment

Natural infiltration and retention of water in the landscape is supported so that there's enough water during dry weather, avoiding droughts, and not too much during wet weather, avoiding floods.

A network of healthy habitats supports thriving wildlife populations and biodiversity across the landscape.



There is an improved balance between the removal and addition of carbon dioxide and other greenhouse gases.

The public is engaged with the work of the Partnership and values and protects the natural environment, including sourcing food locally from producers who work sustainably.

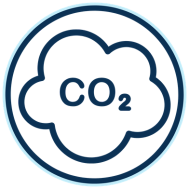
There are safe and accessible spaces for everyone to undertake sports, leisure and cultural activities, and increase their well-being by spending time near water.

The Tamar Catchment Partnership works across the 6 key themes highlighted in our vision:

WATER QUALITY

WATER QUANTITY

SPACE FOR WILDLIFE



GREENHOUSE GASES

ENGAGEMENT

RECREATION, LEISURE & CULTURE

Under each of these themes there are several key issues, each of which is split into actions.

THEMES  **ISSUES**  **ACTIONS**
ACTIONS
ACTIONS

The target area for these action has been identified by the catchment evidence review, these can also viewed via the opportunity maps available on the catchment partnership website.

SUMMARY

WATER QUALITY

ISSUES

POINT SOURCE POLLUTION
DIFFUSE POLLUTION
PLASTIC POLLUTION
RESILIENCE TO DROUGHTS

TARGET AREAS

- Existing woodlands or wetlands
- Agricultural land – arable & rotational grassland
- Agricultural fields - direct connectivity to a watercourse
- Fields with moderate or steep slopes within or across
- Soils with high run-off potential- clay or peat
- Soils with high leaching potential - sandy- or loam-based
- Land with a propensity to accumulate water (naturally wet)

WATER QUANTITY

ISSUES

HIGH FLOWS
LOW FLOWS

TARGET AREAS

- Land with a propensity to accumulate water (naturally wet) seasonally or permanently through groundwater efflux or surface water inundation.
- Areas suitable for the restoration or creation of wetlands
- Properties or groups of properties at risk of flooding where the upstream contributing catchment is small enough for significant and detectable mitigation of flood risk being achieved.
- Exclusion areas: Important historical features or highly productive land.

SPACE FOR WILDLIFE

ISSUES

HABITAT LOSS
HABITAT FRAGMENTATION
BIODIVERSITY LOSS

TARGET AREAS

- Existing woodlands or wetlands
- Marginal and low grade agricultural land
- Land with a propensity to accumulate water (naturally wet)
- River corridors & buffer zones
- Nature Recovery Network areas
- Barriers to migratory species

SUMMARY

GREENHOUSE GASES

ISSUES

CARBON LOSS
GREENHOUSE GAS EMISSIONS

TARGET AREAS

- Areas with higher carbon sequestration potential- determined by soil type, current landuse and cost-effectiveness of measures (i.e. hydrological modelling and Agricultural Land Grade identify lower productivity land where landuse change, re-wetting and/or intensification would have the least economic impact on the farm business).

ENGAGEMENT

ISSUES

HIGH FLOWS
LOW FLOWS

TARGET AREAS

- Online
- Existing community groups
- Citizen science programs
- Urban areas

RECREATION, LEISURE & CULTURE

ISSUES

HABITAT LOSS
HABITAT FRAGMENTATION
BIODIVERSITY LOSS

TARGET AREAS

- Urban areas and surrounding zones
- Tourist hot spots
- Isolated communities and opposite ends of the catchment
- Online

ISSUE: POINT SOURCE POLLUTION

ACTIONS

- **Reduce septic tank discharge into watercourse / improve quality of discharges**
  - → Provide grant assistance for improved septic tank infrastructure
  - → Written septic tank guidance for householders
  - → Septic tank best practice/awareness campaign
  - → Encouraging best practice management of private/domestic wastewater sources
- **Reduce domestic and industrial use of phosphorous high products**
  - → Reduce phosphorus usage through trials of low-P products
  - → Target producers to change behaviours / products
  - → Train community/business resources to provide free guidance
- **Reduce domestic and industrial use of phosphorous high products**
  - → Regulate and enforce permit holder limits
  - → Identify failing STWs & develop facilities in future investment - consider also descriptive consents and monitoring during low river flow
  - → Identify CSO's in freshwater areas and minimise connection of clean water to foul
  - → Provide planners with data and information about environment risk
- **Install mine adit wetland buffering where appropriate**
  - → Investigate existing / new research on mine inputs in the Tamar Valley for potential solutions
- **Develop better link between South West Water / Environment Agency and stakeholders to report problems**
  - → Citizen science response to highlighting South West Water & Environment Agency business risk

ACTIONS

- **Maintain miss-connections initiative around coastal urban areas**
  - → Continue large scale assessment of miss-connections
  - → Develop smaller scale development of retrofitting SuDS
  - → Provide developers with SUDS and miss-connections information
  - → Promote public awareness campaigns; 'Love your River' 'Connect Right' etc.
  - → Encouraging best practice management and resolving miss-connections
- **Reduce disposal of chemicals down drains through 'yellow fish' campaign; develop trial**
  - → Provide written guidance to householders on chemicals issues
  - → Engage public through retail outlets & paint/chemical amnesties

ISSUE: DIFFUSE SOURCE POLLUTION

- **Increase management advice on high risk soils**
  - → Give best practice (win-win) advice through bespoke plan
  - → Agri-chemical management
  - → Soil management (to inc. managing peatland carbon storage
  - → Livestock management - to reduce enrichment or bacterial loading and soil erosion
- **Provide Infrastructure audits and grants**
  - → Fencing small ditches and 1st order streams
  - → Develop better livestock access tracks
  - → Farm infrastructure (yard works)
- **Promote development of sustainable drainage solutions on farms**
  - → A-road run-off & detention ponds; investigate inputs and opportunities to intercept
  - → Run off polishing through reedbeds and constructed wetlands / land

ACTIONS

- **Increase promotion of water & nature friendly farming methods**
  - → Provide agricultural advice for soil management and conservation tillage regimes
  - → Provide support for farmers access agricultural subsidy schemes that benefit nature and hydrological processes

ISSUE: PLASTIC POLLUTION

- **Encourage reduce reuse and recycle principles**
  - → Engage with communities on how to prevent plastic pollution
  - → Engage with local businesses on how to prevent plastic pollution
  - → Organise volunteer clean ups within the catchment
  - → Research the effects of plastic pollution on the water environment

ISSUE: RESILIENCE TO DROUGHTS *see water quantity actions*

ACTIONS

ISSUE: LOW FLOWS

- **Increase wetland management, restoration and creation**
  - → Wetland creation/restoration in multi benefit areas
  - → Re-wetting and restoration of Culm Measures and Peatlands
- **Increase management advice on high risk soils**
  - → Give best practice (win-win) advice through bespoke plans
  - → Promote soil management measures to reduce compaction and improve infiltration
- **Promote development of sustainable drainage solutions on farms / land**
  - → On farm rainwater harvesting and water storage solutions for irrigation

ISSUE: HIGH FLOWS

- **Working with natural processes/ Natural flood management**
  - → Small catchment Natural Flood Management
  - → Inter-tidal habitat creation / restoration
  - → Further mitigate heavily modified waters and create catchment resilience in estuarine and urban environments
- **Water sensitive urban design / SuDS / Blue infrastructure**
  - → Promote development of sustainable drainage solutions on farms / land
  - → Creation of flood detention ponds, attenuation ponds, swales etc.

ISSUE: HABITAT LOSS AND FRAGMENTATION & BIODIVERSITY LOSS

ACTIONS

- **Increase woodland management, restoration, and creation**
  - → Woodland creation in multi benefit areas
  - → Woodland management, inc. best practice for wider resource protection e.g. soil loss
- **Increase wetland management, restoration, and creation**
  - → Wetland creation / restoration in multi benefit areas
  - → Re-wetting and restoration of Culm Measures and peatlands
  - → Provide targeted advice and signposting for agricultural incentive schems
  - → Manage riverine buffers for habitat conservation & connectivity
- **Increase grassland / heath management, restoration, and creation**
  - → Increase biodiversity in upland areas
- **Increase coastal / saline habitat management, restoration and creation**
  - → Habitat restoration of transitional saline areas
  - → Support Environment Agency managed realignment schemes
  - → Protect maritime heath habitats
- **Improve river and in-stream habitat management & connectivity**
  - → Improve upstream and downstream fish migration (inc. barrier removal, flow management, riverbank management)
  - → Support the development and linkage of fishery conservation & enhancement measures
  - → Map and control river corridor invasive species at a whole catchment level
  - → Develop a collaborative approach to tackle invasive non-native species in the catchment

THEME: SPACE FOR WILDLIFE

ACTIONS

- **Nature Recovery Networks**
  - → Use nature recovery network maps and strategies to restore and reconnect habitats through strategic corridors to support movement of species through the terrestrial and aquatic habitats of the catchment and ensure greater resilience to local populations
- **Beavers in the Tamar**
  - → Support the Tamar Beaver Management Group in its aim to provide coordinated advice, support, education and monitoring in the catchment

THEME: GREENHOUSE GASES

ISSUE: CARBON LOSS & GREENHOUSE GAS EMISSIONS

- **Increase woodland management, restoration and creation**
  - → Develop timber market by business incentivisation
  - → Invest in Tamar catchment carbon off-setting scheme
- **Increase wetland management, restoration and creation**
  - → Wetland creation / restoration in multi benefit areas
  - → Re-wetting and restoration of Culm Measures and Peatlands
- **Increase management advice on high risk soils**
  - → Provide best practice (win-win) advice through bespoke plans
  - → Provide soil management advice for measures to minimise loss of carbon through erosion
- **Support farm business to reduce their greenhous gas emissions**
  - → Provide advice and signpost funding opportunities to support sustainable business changes

ACTIONS

ISSUE: HABITAT LOSS AND FRAGMENTATION & BIODIVERSITY LOSS

- **Improve water demand management through education**
  - → Reduce water usage by free/subsided water savings devices
  - → Promote simple, clear message on water/cost savings
  - → Provide information on the public water resources of the catchment and its vulnerability to climate change
- **Improve educational awareness raising activities on catchment issues**
  - → Schools visits & information packs themed around sustainable catchments
  - → Develop schools packages using outdoor education facilities
  - → Develop teaching hubs for horizontal teacher-led learning
  - → Develop information platforms to signpost resources for best practice to protect water quality; (industrial / domestic / recreational) and highlight linkage of current projects
- **Develop Local Food Brand**
  - → Develop food accreditation scheme
  - → Develop short supply chain through a Land Trust
  - → Create demand through convenience: delivery & hubs
  - → Develop local food wholesale market
  - → Promotion of local food production and links to environment and economy
- **Improve feedback of Monitoring data**
  - → Support a greater recognition of non-Environment Agency monitoring data
  - → Establish a partnership approach to collecting and sharing information and data across all stakeholders

ISSUE: PLASTIC POLLUTION *see water quanlity actions*

THEME: RECREATION, LEISURE & CULTURE

ACTIONS

ISSUE: RECREATIONAL ACCESS

- **Improve recreational access to the river**
  - → Increase river access for walkers / cyclists, enhance slipways & access to them - with info / interpretation boards how to support sustainable use / making a difference / conservation
  - → Create more recreational/cultural usage of catchment and recognition of heritage by:
    - → Tourism opportunities and ticket / travel reduction offers for residents
    - → Develop agreements with riparian owners for better access to rivers for kayaks/boats/walkers and other recreation through projects
    - → Develop angling passport scheme into wider paid access scheme
  - → Establish designated freshwater bathing areas to encourage further improvement of water quality and recreational value

ISSUE: CULTURAL DISCONNECT

- **Improve cultural links across the catchment**
  - → Facilitate community connections such as Plymouth - Upper catchment through Food, cultural and activity attractions promoting a greater sense of place and support for local business and access to nature
  - → Create interactive maps of the catchment – food, small business etc.