



Tamar Valley Area of Outstanding Natural Beauty

Tamar Valley Landscape Character Assessment For the Tamara Landscape Partnership

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		Isabelle King			
		Sally Marshall			
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		Sally Marshall			

GIS & Visualisation







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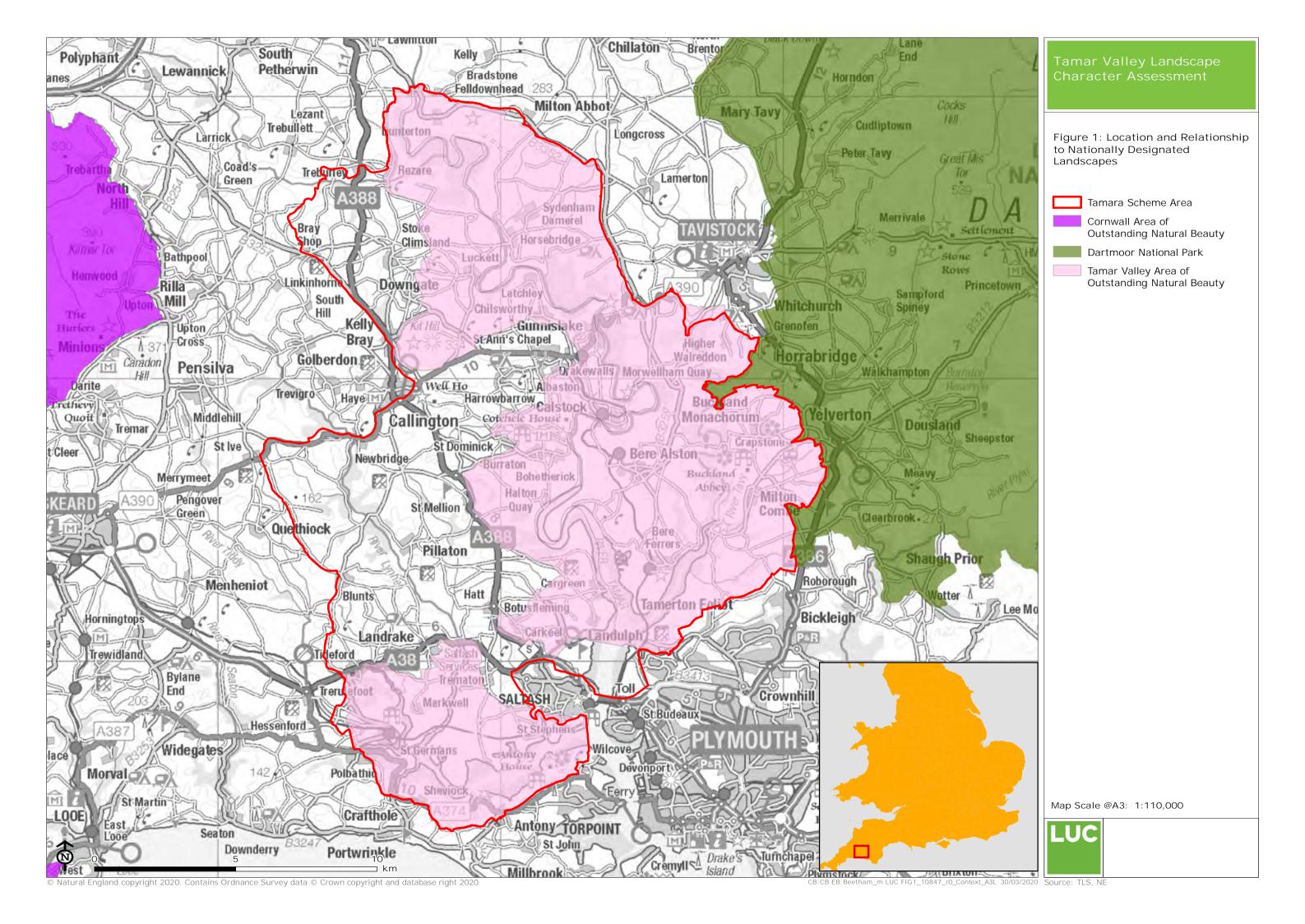
Introduction

Overview of this study

- 1.1 The purpose of this study is to review and update landscape character information for the Tamar Valley, creating a single, unified assessment. It will play a key role in supporting the Tamara Landscape Partnership's second-round submission to the National Lottery Heritage Fund (NLHF) see further below. In addition, it will provide a framework for future partnership working and landscape evidence for local development and land management decisions.
- **1.2** Figure 1 shows the extent of the Tamara Scheme Area, including the area covered by the Tamar Valley AONB. It also shows the local authorities within the Tamara Scheme Area and the boundaries of the nearby nationally protected landscapes of Cornwall AONB and Dartmoor National Park.

The Tamara Landscape Partnership

- 1.3 Straddling the border between Devon and Cornwall, the Tamar Valley AONB has a distinctive steeply sloping wooded landscape and strong cultural legacy of industrial heritage and market gardening. This landscape is under threat from development pressure to the south and fragmentation of the landholdings and loss of key habitats and species within the Tamara Scheme Area. Post-Brexit uncertainty has made this a pressing challenge to address as a matter of urgency.
- 1.4 The Tamara Landscape Partnership is a National Lottery Heritage Funded scheme focusing on enhancing and sustaining connections in the landscape, ecosystems and heritage. It also about addressing the disconnect of communities from their landscape and cultural heritage roots. Everything in the valley ultimate connects with the rivers and it is the rivers that are at the heart of the scheme.
- **1.5** The partnership will be delivering a fully integrated scheme where outcomes for landscape, heritage, communities and people are connected and will provide a resilient valley with a positive future.



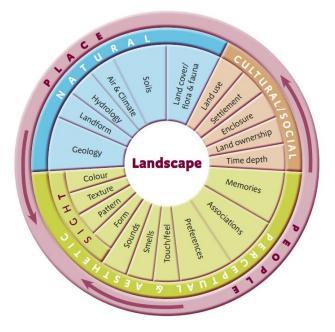
What is the Tamar Valley Landscape Character Assessment?

What is 'landscape character' and 'landscape character assessment'?

Landscape character can be defined as the distinct and recognisable pattern of elements, or characteristics, in the landscape that make one landscape different from another. Landscape character assessment is the process of identifying and describing such variations in character across a landscape – in this case the Tamar Valley. It also seeks to identify and explain the unique combination of features and attributes (characteristics) that make different landscapes

distinctive¹. The 'landscape wheel' at **Figure 2** illustrates how the different natural, cultural and perceptual attributes of a landscape combine to produce character.

Figure 2: The 'Landscape Wheel' (Natural England, 2014)



Existing Landscape Character Assessments covering the Tamara Scheme Area

1.6 At the national level, England is divided into 159 distinct **National Character Areas (NCAs)**. Each is defined by a unique combination of landscape, biodiversity, geodiversity, history, and cultural and economic activity. There are descriptive profiles available for each NCA (published in 2014²), setting out information on landscape character, changes happening in the landscape and an assessment of

- ecosystem services delivered. The Tamara Scheme Area is covered by two NCAs 152: Cornish Killas for the Cornwall side, and 151: South Devon for the Devon side.
- 1.7 At a county level, different approaches have been taken (at different times) for Devon and Cornwall. In 2007, a county-wide assessment was completed for Cornwall based on a spatial framework of geographically unique Landscape Character Areas (LCAs). Seven Cornwall LCAs include land within the Tamara Scheme Area.
- 1.8 Devon's landscape character assessment describes the variations in character between different areas and types of landscape in the county. In 2010, work was completed to divide the county into 68 Devon Character Areas (DCAs), each representing areas with a unique and distinct identity recognisable on a county scale. The Devon side of the Tamara Scheme Area is covered by four DCAs.
- 1.9 Feeding up to the DCAs is a framework of Landscape Character Types (LCTs), each sharing similar characteristics. Some types of landscape occur throughout the county, for example, 'Sparsely settled farmed valley floors' while others may occur in only one part of Devon, for example, 'Upland moorland with tors' which is only found in Dartmoor. Each authority in Devon has completed its own assessment based on the LCT framework, with the Tamara Scheme Area included within the published assessments for South Hams and West Devon Districts (2018) and Plymouth (2016). These assessments include nine LCTs with land in the Tamara Scheme Area.
- 1.10 Looking further back in time, even before the designation of the Tamar Valley AONB in 1995, a landscape character assessment was published by the Countryside Commission in 1992 for the Tamar Valley. This identified four broad landscape types found across the area. To-date, this is the only assessment available that considers the landscape as a whole regardless of the county boundary but this is now significantly out of date.
- **1.11** This new Landscape Character Assessment for the Tamar Valley is based on the most recent characterisation work covering the area the Devon approach but seeks to provide a unified classification across the whole Tamara Scheme Area. The detailed methodology developed for this study is set out in Chapter 2.

¹ Definitions taken from Natural England (2014) *An approach to Landscape Character Assessment.* https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types

² Available to view here: https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles#ncas-in-south-west-england

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Policy context

The European Landscape Convention

- **1.12** The European Landscape Convention (ELC) came into force in the UK in March 2007. It establishes the need to recognise landscape in law; to develop landscape policies dedicated to the protection, management and planning of landscapes; and to establish procedures for the participation of the general public and other stakeholders in the creation and implementation of landscape policies.
- **1.13** The ELC definition of 'landscape' recognises that all landscapes matter, be they ordinary, degraded or outstanding:
- "Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors"
- **1.14** The Convention puts emphasis on the whole landscape and all its values and is forward looking in its approach, recognising the dynamic and changing character of landscape. Specific measures promoted by the Convention, of direct relevance to this study include:
 - the identification and assessment of landscape; and
 - improved consideration of landscape in existing and future sectoral and spatial policy and regulation.
- **1.15** The ELC will remain in place following the UK's departure from the EU in 2020.

National Planning Policy Framework (NPPF)

1.16 The revised NPPF, published in June 2019, states in paragraph 170 that:

'Planning policies and decisions should contribute to and enhance the natural and local environment by:

- ...protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality)' (para 170.a)
- ...recognising the intrinsic character and beauty of the countryside and the wider benefits from natural capital and ecosystem services...' (para 170.b).
- **1.17** The NPPF is supported by Planning Practice Guidance which recognises the role that Landscape Character Assessment plays in helping to understand the character and local distinctiveness of the landscape.

Local Plans

- 1.18 The Cornwall Local Plan³ was formally adopted in November 2016. One of the Plan's overall objectives is to 'Enhance and reinforce local natural, landscape and historic character and distinctiveness...'. Other policies of relevance to this study include Policy 23: Natural environment which aims to: '...sustain local distinctiveness and character and protect and where possible enhance Cornwall's natural environment and assets according to their international, national and local significance.'
- **1.19** The Plymouth and South West Devon Joint Local Plan⁴ was formally adopted by the respective councils in March 2019.

Policies relevant to landscape include;

- Policy SPT12: Strategic approach to the natural environment, which states that 'The distinctive characteristics, special qualities and important features of the natural environment of the Plan Area will be protected, conserved and enhanced.'
- Policy DEV23: Landscape Character, which states that 'Development will conserve and enhance landscape, townscape and seascape character and scenic and visual quality, avoiding significant and adverse landscape or visual impacts.'
- Policy DEV24: Undeveloped Coast which states that 'Development which would have a detrimental effect on the undeveloped and unspoilt character, appearance or tranquillity of the Undeveloped Coast, estuaries, and the Heritage Coast will not be permitted except under exceptional circumstances'. The Undeveloped Coast policy includes the Tavy River and the Devon side of the Tamar.
- Policy DEV25: Nationally Protected Landscapes, which states that 'Development will conserve and enhance landscape, townscape and seascape character and scenic and visual quality, avoiding significant and adverse landscape or visual impacts.'

Tamar Valley Area of Outstanding Natural Beauty

1.20 Just over 66% of the Tamara Scheme Area is within the Tamar Valley AONB, as shown in **Figure 1**. The Tamar Valley was designated in 1995, covering an area of 190 square kilometres (75 square miles). The statutory purpose of the AONB designation is 'conserving and enhancing the natural beauty of the area of outstanding natural beauty.' The AONB also has a statutory duty to prepare Management Plans on a

^{1). &}lt;sup>3</sup> Cornwall Local Plan. Strategic Policies 2010-2030. Cornwall Council

⁴ Plymouth & South West Devon Joint Local Plan 2016. West Devon Borough Council, South Hams District Council and Plymouth City Council

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five-yearly basis. The latest Management Plan was published in 2019 and covers the period to 2024⁵. This work directly responds to the following policies:

- Policy 3.5.2: 'Ensure Landscape Character Assessments and other evidence that support AONB policies are fit for purpose, up to date and consistent across the AONB'
- Policy 3.5.3: 'Identify and promote opportunities to strengthen landscape and seascape character of the area'
- **1.21** This assessment also considers the important relationships between the Tamar Valley and Dartmoor National Park to the east and Cornwall AONB (Bodmin Moor) to the west, as shown in **Figure 1**.

Cornwall and West Mining World Heritage Site

- **1.22** Nearly 14% of the Tamara Scheme Area is within the Cornwall and West Devon Mining World Heritage Site (WHS), as shown in **Figure 5** (next chapter).
- 1.23 The UNESCO World Heritage Site was designated in 2006 and is comprised of ten component areas, which include parts of the Tamar Valley. The statement of Outstanding Universal Value states that "The landscapes of Cornwall and west Devon were radically reshaped during the eighteenth and nineteenth centuries by deep mining for predominantly copper and tin. The remains of mines, engines houses, smallholdings, ports, harbours, canals, railways, tramroads, and industries allied to mining, along with new towns and villages reflect an extended period of industrial expansion and prolific innovation".
- **1.24** The WHS Management Plan 2013-2018 summarises how the elements of the landscape which contribute to the Outstanding Universal Value of the site will be protected and conserved. It also sets out how the management of the WHS will balance the need for conservation and regeneration within the Site while promoting access and educational use⁶.
- **1.25** A Supplementary Planning Document has been prepared for the WHS and was adopted by Cornwall Council, Devon County Council and West Devon Borough Council in May 2017. This document sets out how the planning system will fulfil the requirements of the UK to protect, conserve, present and transmit to future generations its World Heritage Sites, in line with the obligations set out in the UNESCO Convention for the Protection of World Cultural and Natural Heritage (1972).
- **1.26** The WHS is also referred to in the relevant Local Plans as summarised below:

- Policy 24: Historic environment, within the Cornwall Local Plan states that 'Development within the Cornwall and West Devon Mining Landscape World Heritage Site (WHS) and its setting should accord with the WHS Management Plan'.
- Policy DEV22: Cornwall and West Devon Mining Landscape World Heritage Site in the Plymouth and South West Devon Joint Local Plan states that 'Development proposals within the Cornwall and West Devon Mining Landscape World Heritage Site or its setting will conserve or where appropriate enhance the Outstanding Universal Value of the site.'
- **1.27** This assessment recognises the importance of the World Heritage Site in contributing to the distinctive cultural landscape of the Tamar Valley.

Plymouth Sound National Marine Park

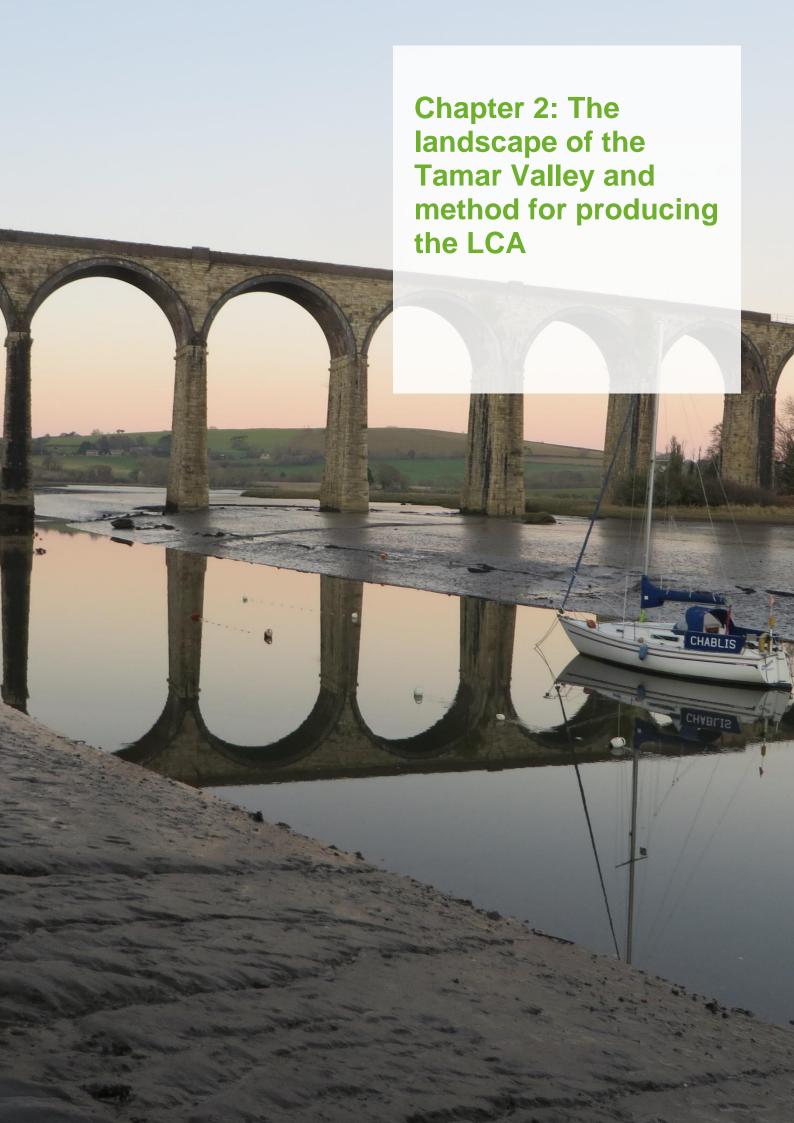
1.28 A 'Declaration of Intent' was signed in September 2019 to take aspirations forward to establish a National Marine Park for Plymouth Sound, which will include parts of the estuaries extending into the study area. This will be the UK's first such designation, recognising the unique and internationally important natural, cultural, social and economic values of the Sound. The creation of the Marine Park is already embedded in local policy, including the Plymouth Plan (2014-2034) and Plymouth Visitor Plan (2020-2030).

Structure of this report

- 1.29 The remainder of this report is structured as follows
 - Chapter 2 provides an overview of the Tamar Valley landscape and details the methodology developed and followed to produce this LCA.
- Chapter 3 contains the descriptive profiles for the Landscape Character Types found in the Tamara Scheme Area.
- Appendix A is a table documenting the key decisions made in classifying the Tamar Valley into Landscape Character Types (based on the underlying Cornwall and Devon Assessments).
- Appendix B is a report of the workshop held on 25 February 2020 to inform this study, along with a list of attendees.

⁵ Tamar Valley Areas of Outstanding Natural Beauty Management Plan 2019-2024. Tamar Valley AONB Partnership

⁶ It is understood that an updated Management Plan has been prepared for the World Heritage Site, but this was not publicly available at the time of writing.

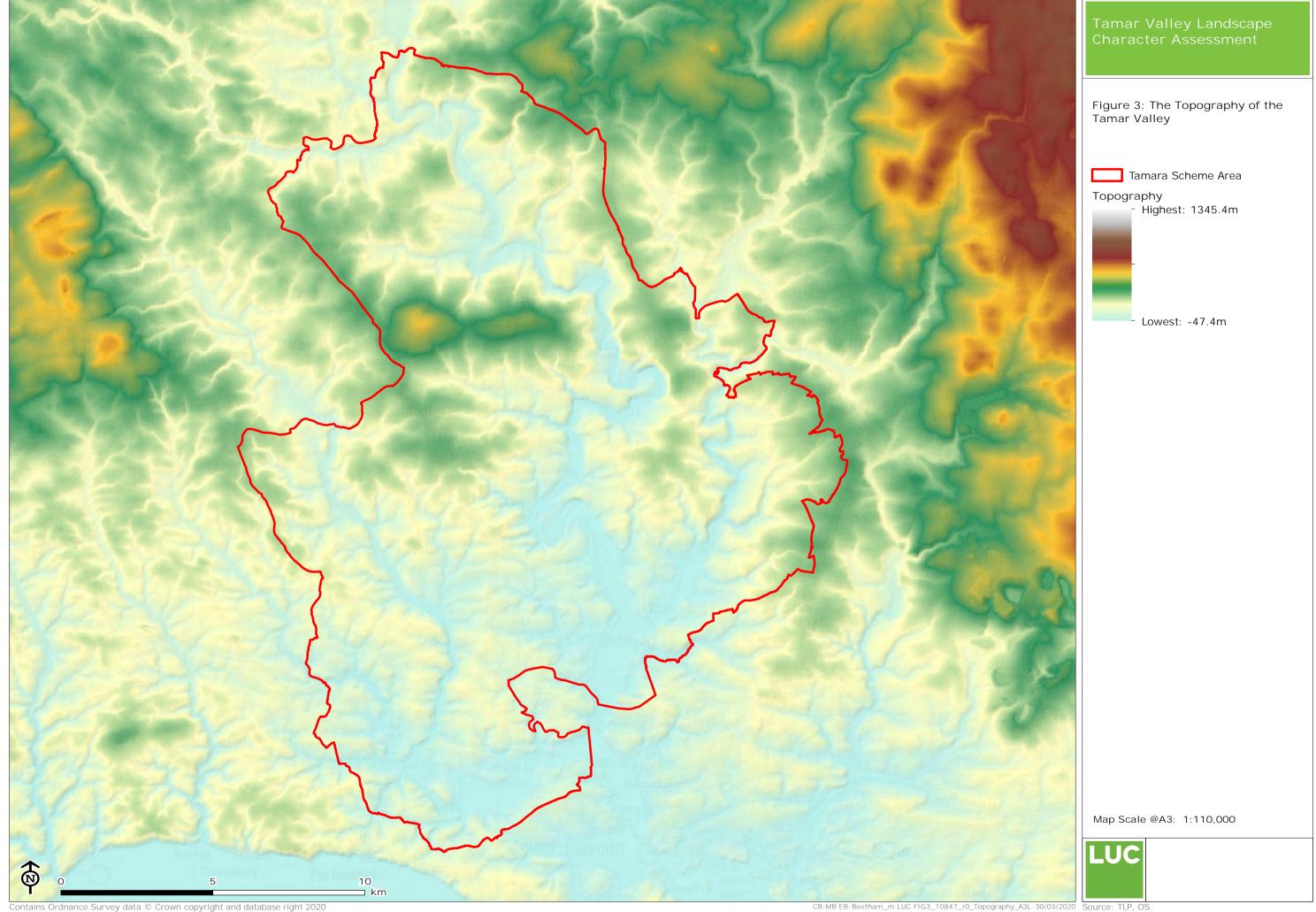


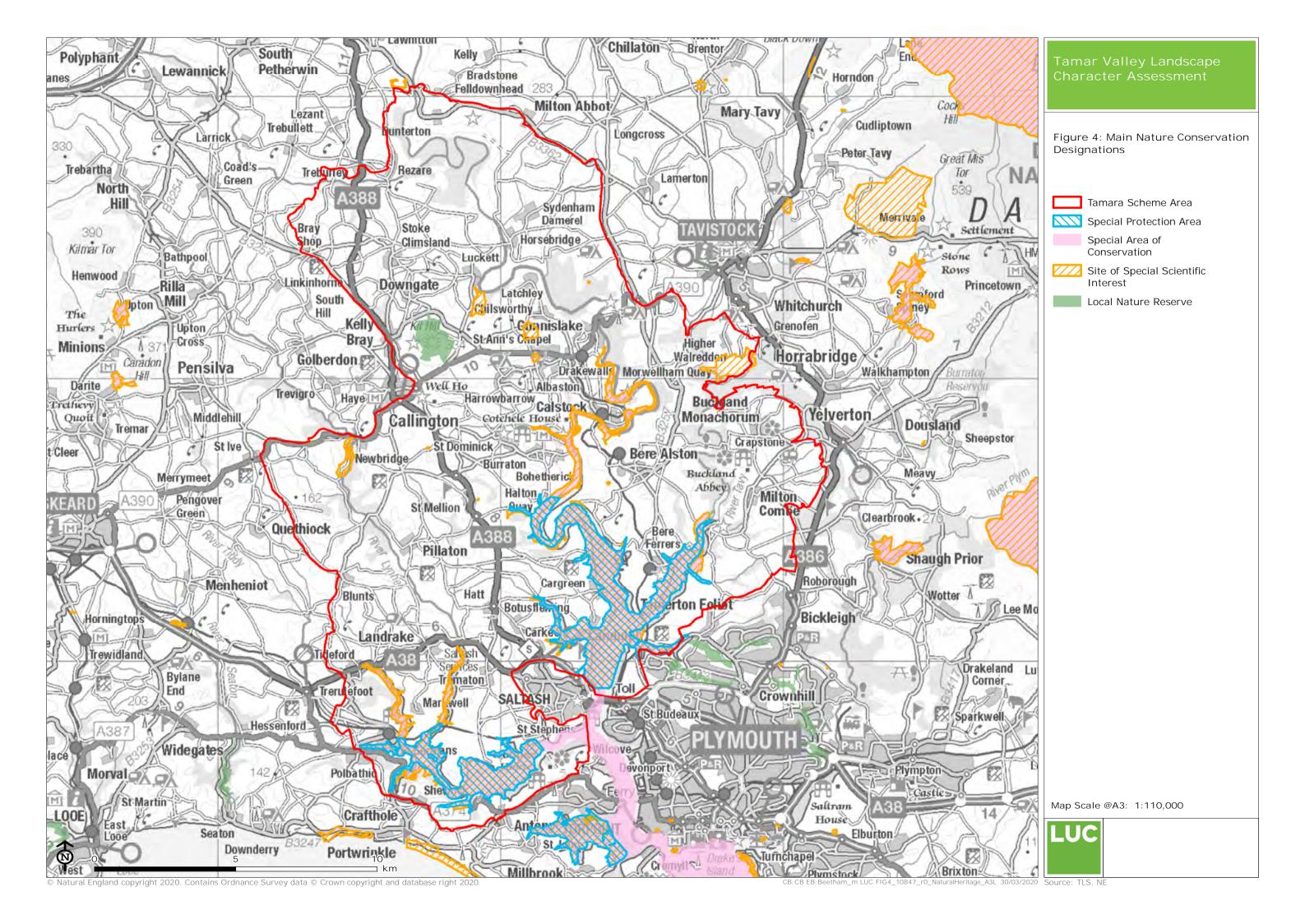
The landscape of the Tamar Valley and method for producing the LCA

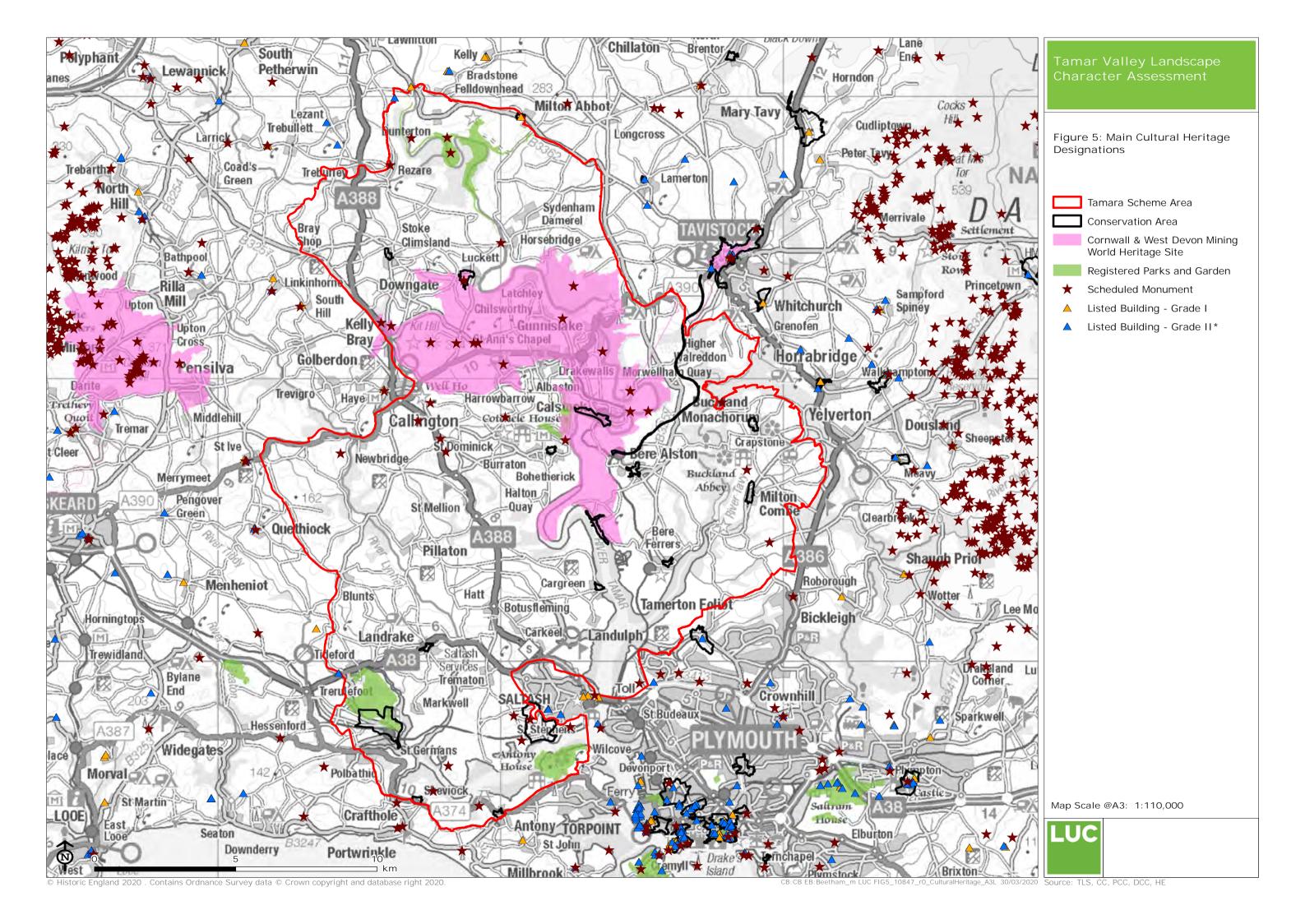
This chapter provides an overview of the landscape of the Tamara Scheme Area, and details the method followed to produce the Landscape Character Assessment

The Tamar Valley landscape

- 2.1 Previous Figure 1 shows the boundary of the Tamara Scheme Area in relation to the Tamar Valley Area of Outstanding Natural Beauty (designated in 1995), showing that the Tamara Scheme Area extends to include a large area to the south-west of the AONB as well as a small area between the AONB and Tavistock. The map also shows the close proximity of the nearby protected landscapes of the Cornwall AONB (to the west) and Dartmoor National Park (east) key to the setting of the Valley and emphasising the wider landscape's combined national significance.
- 2.2 The Tamar Valley is a complex and intricate mosaic of meandering estuaries and creeks, rolling pastureland, secluded wooded valleys, and a prominent granite ridge displaying internationally important mining history (part of the Cornwall and West Devon Mining Landscape World Heritage Site). This includes the natural and cultural landmark of Kit Hill a domed granite outcrop reaching over 300m AOD topped by a Grade II listed ornate mining chimney. From Kit Hill panoramic views span across the Tamara Scheme Area to Dartmoor and Bodmin Moor and along the Tamar to Plymouth Sound. Figure 3 illustrates the varied topography of the landscape.
- 2.3 The Tamar Valley is situated on the boundary between the counties of Cornwall and Devon (the Celtic borderline) and centred on the lower valleys of the River Tamar and its tributaries the River Tavy and River Lynher. Diverse, well-preserved habitats include tidal mudflats, salt marsh, fen, ancient woodland, lowland heath and lush expanses of pasture. In turn, these are home to rare and iconic wildlife species including otter, scarce fish species, nightjar and the heath fritillary butterfly. Figure 4 shows the main suite of nature conservation designations that cover the area.

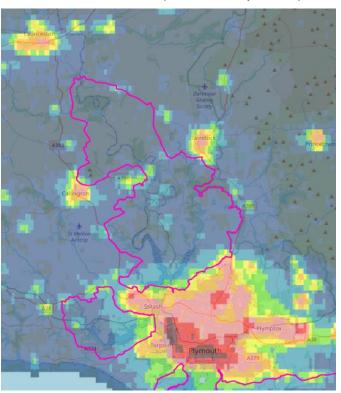






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- **2.4** The Valley possesses a sense of timelessness and has largely escaped the effects of human development. This is illustrated by the high number of historic relics it possesses dating through the centuries from Neolithic ritual sites through to characteristic medieval field patterns enclosed by high hedge banks. Deep narrow lanes plunge over 15th century stone bridges to link small farmsteads, historic villages and parkland estates. The parts of the World Heritage Site within the Tamar Valley are acknowledged by UNESCO as being the "most authentic and historically important components of the Cornwall and West Devon mining landscape". **Figure 5** above provides an overview of the key cultural heritage designations within and surrounding the Tamara Scheme Area.
- **2.5** As an oasis of tranquillity on the doorstep of Plymouth, the Tamar Valley has long attracted recreational users who make use of its extensive public rights of way network. The area has been an inspiration for art and literature through time, with the artist J.W.M. Turner noting in the early 19th century "I have never seen so many natural beauties in such a limited spot as I have seen here". Traditional celebrations such as strawberry and cherry fairs and daffodil and apple days serve as a reminder of the deep-rooted connections between communities and the productive valley landscape.



The map extract above shows CPRE's 2016 light pollution mapping as it relates to the Tamar Valley. It clearly shows how the AONB creates a sanctuary of largely undisturbed landscape on the doorstep of the built-up areas of Plymouth, Tavistock, Callington and Launceston. It is ranked the 16th 'darkest' AONB in England.

Method for producing this Landscape Character Assessment

2.6 The method for creating a new, unified Landscape Character Assessment for the Tamar Valley followed four main stages, in line with published Natural England guidance (2014). These are summarised below.

Stage 1: Desk-based classification

- **2.7** It was agreed to align the new assessment with the Devon-wide approach, focusing on the definition and description of Landscape Character Types, as summarised in Chapter 1⁹. It is important to note that the published assessments for the three Devon authorities covered by the Tamar Valley (see previous para 1.9) have not been superseded by this study; they remain part of the landscape evidence base available for the area.
- **2.8** For the Cornwall side, the existing Landscape Character Areas (LCAs) were used as the spatial framework for defining new LCTs. This also ensures that the Cornwall assessment remains part of the 'nested' suite of landscape character information available for the Tamar Valley.
- 2.9 Appendix A summarises the decisions made in creating a unified classification of LCTs for the Tamara Scheme Area. For the Devon side, the existing classification of nine LCTs has been retained, with some minor amendments to the boundaries of 4A: Estuaries and 4B: Marine Levels and Coastal Plains as explained in Appendix A. For the Cornwall side, each of the seven LCAs with land in the Tamara Scheme Area considered against the key characteristics of the Devon LCTs, to decide on an appropriate classification. This involved a review of the descriptive profiles available for each LCA¹⁰ along with the interrogation of available spatial data held in GIS.
- **2.10** Our recommended classification of LCTs across the Tamar Valley was discussed with the Steering Group before verifying in the field. This included one new LCT, not currently represented in Devon, for Kit Hill ('Moorland Fringe'). Draft

⁷ UNESCO: Cornwall and west Devon Mining Landscape. [Online] available at: http://whc.unesco.org/en/list/1215

⁸ Tamar Valley Area of Outstanding Natural Beauty Management Plan 2019-2024

For further information see: https://www.devon.gov.uk/planning-policies/landscape/devons-landscape-character-assessment

The landscape of the Tamar Valley and method for producing the LCA

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profiles for each of the LCTs were also prepared prior to fieldwork, using a format agreed with the Steering Group.

Stage 2: Field verification

- **2.11** A field survey was undertaken on clear days in December 2019 and January 2020 to verify the desk-based classification. The fieldwork mainly concentrated on the Cornwall side of the Tamara Scheme Area, as the Devon side had already been field verified (also by LUC) for the published local authority assessments. The fieldwork exercise was used to:
- verify and fine-tune the spatial classification of LCTs;
- check key characteristics and note local variations in character across the LCTs;
- gather information on perceptual qualities and views (including visual relationships with adjacent areas);
- identify valued attributes;
- assess landscape condition and any available forces for change.
- **2.12** Following fieldwork, the spatial classification and descriptive profiles were updated, ready for consultation under the next stage.

Stage 3: Consultation

- **2.13** A consultation workshop was held on the 25th February 2020 to present the work undertaken to date to gather local views and knowledge about the Tamar landscape.
- **2.14** The workshop consisted of two main exercises:
 - Exercise 1: What do you think is important about the different Landscape Character Types?
 - Exercise 2: What issues are affecting the landscape (both current issues and potential future issues)?
- **2.15** Delegates were asked to provide responses to the two exercises for each of the eight LCTs which occur on the Cornwall side. Those LCTs which only occur on the Devon side of the study area were not considered as these have already been consulted upon as part of the component local authority assessments.
- **2.16** A list of workshop attendees and comments from the workshop are included within **Appendix B** of this report.

Stage 4: Reporting

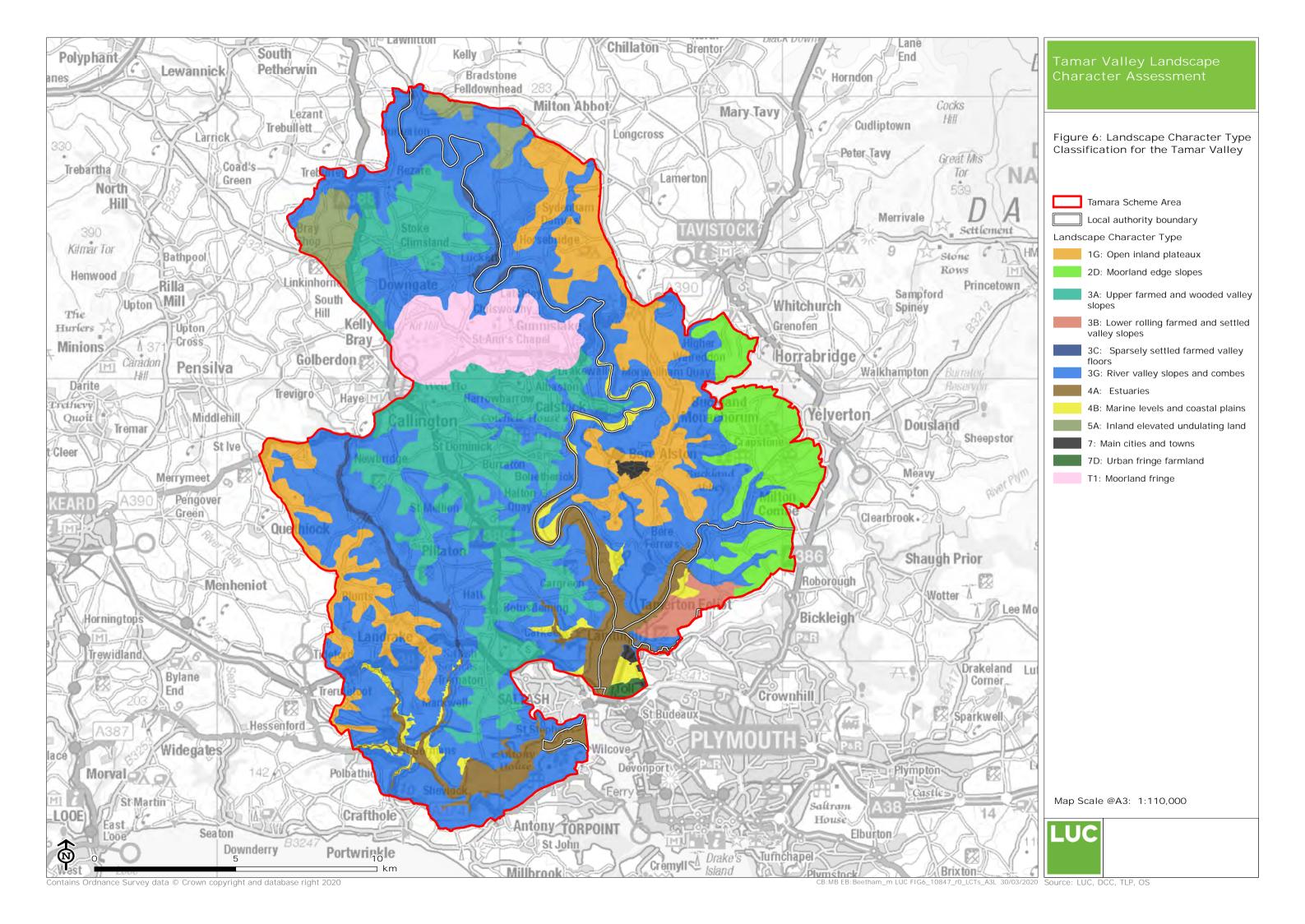
2.17 Comments received at the workshop were accounted for in an updated set of descriptive profiles for each of the LCTs (included in the next Chapter). The spatial classification of eleven LCTs was also finalised, see **Figure 6** on the next

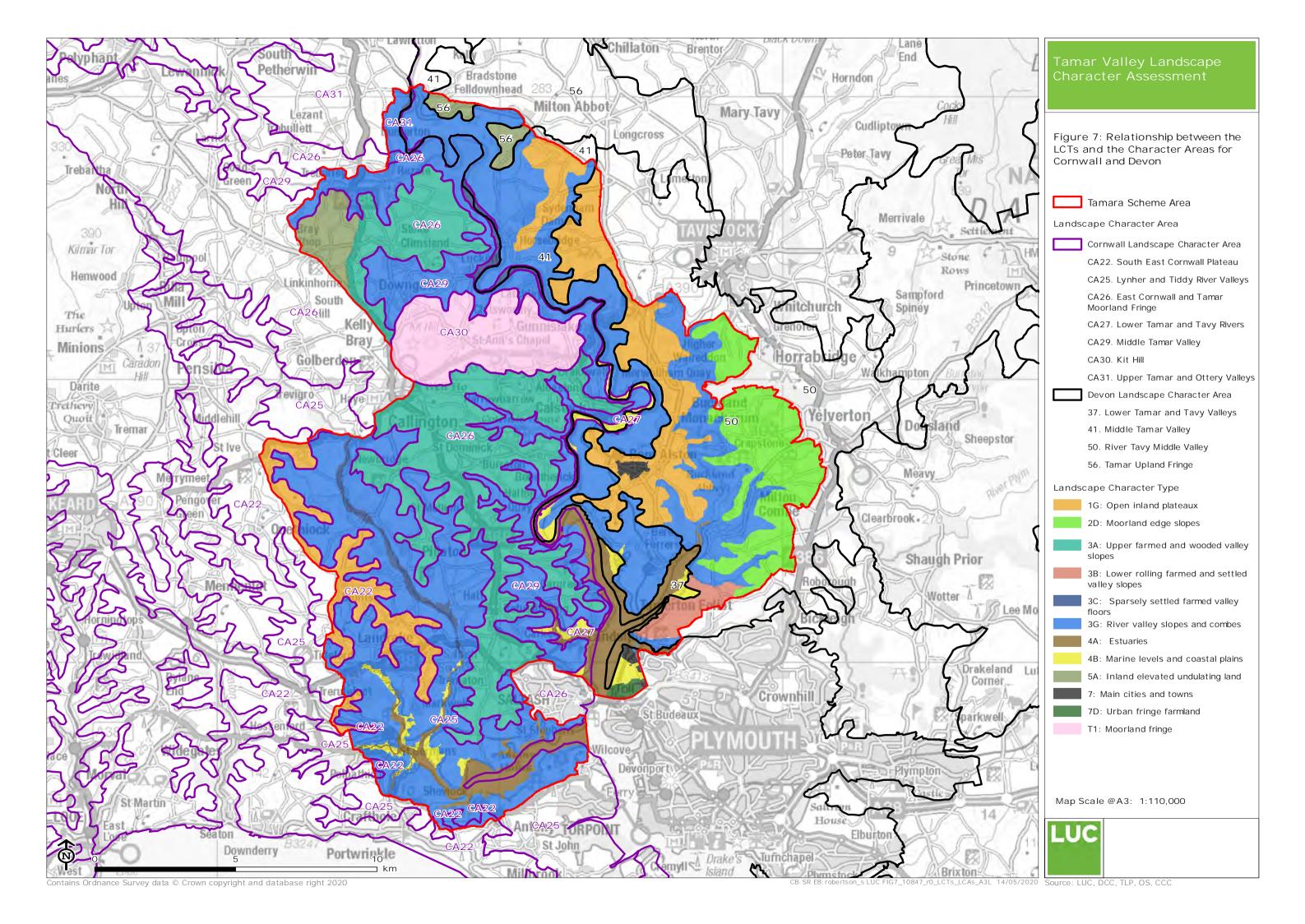
page. **Figure 7** shows how the LCTs relate to the current framework of Cornwall Landscape Character Areas and Devon Character Areas.

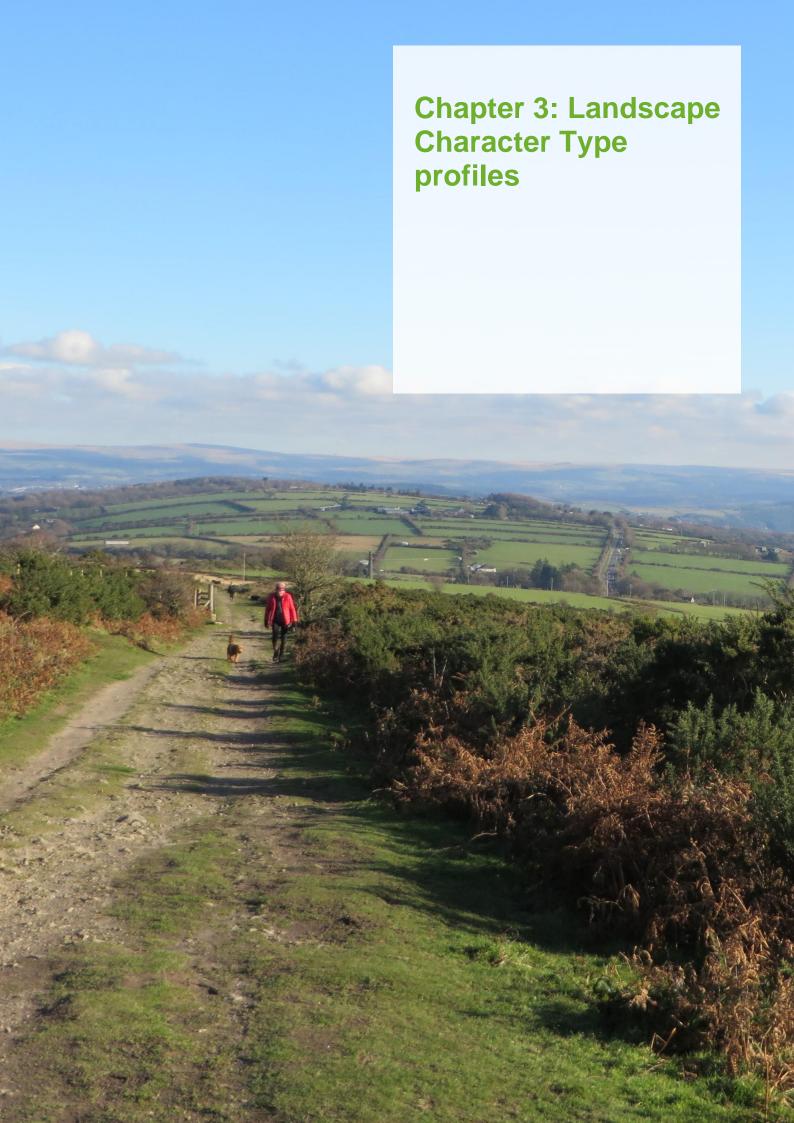
2.18 Table 2.1 below provides a list of the LCTs and summarises their coverage across the Tamara Scheme Area.

Table 2.1: The LCT classification for the Tamar Valley

LCT code/name	Coverage		
1G: Open Inland Plateau	Cornwall and Devon		
2D: Moorland Edge Slopes	Devon only		
3A: Upper Farmed and Wooded Valley Slopes	Cornwall only		
3B: Lower Rolling Farmed and Settled Valley Slopes	Devon only		
3C: Sparsely Settled Farmed Valley Floors	Cornwall and Devon		
3G: River Valley Slopes and Combes	Cornwall and Devon		
4A: Estuaries	Cornwall and Devon		
4B: Marine Levels and Coastal Plains	Cornwall and Devon		
5A: Inland Elevated Undulating Land	Cornwall and Devon		
7D: Urban Fringe Farmland	Devon only (Plymouth authority area)		
T1: Moorland Fringe	New LCT identified for Kit Hill and surrounding landscape (based on Cornwall LCA)		





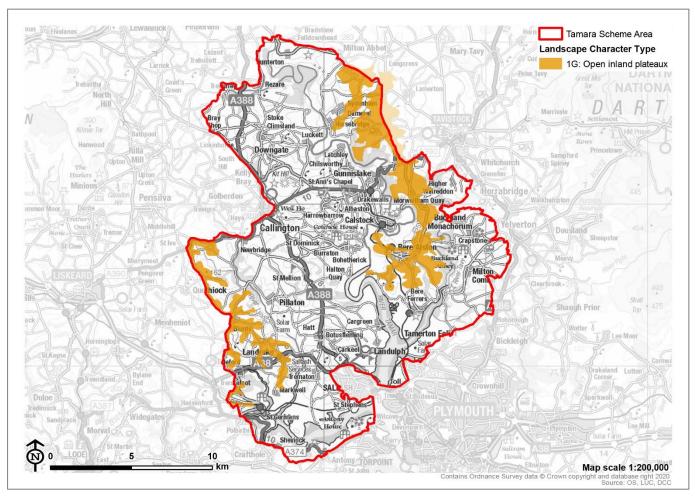


Landscape Character Type profiles

This chapter contains the descriptive profiles for the LCTs found in the Tamar Valley.

3.1 This chapter contains the descriptive profiles for the eleven LCTs found within the Tamar Valley. Please note that the information contained within the profiles only relates to land within the Tamara Scheme Area, even if (on the Devon side) the LCTs extend beyond the boundary. For complementary information on the landscape character of the same LCTs beyond the Tamara Scheme Area, readers are encouraged to refer to the published assessments for the Devon authorities (see previous explanation in Chapter 1).

LCT 1G: Open Inland Plateaux







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT is located on either side of the Tamar Valley and comprises elevated rolling land which occurs between the incised river valleys. The plateaux form narrow 'fingers' between the network of valleys. The LCT is an agricultural landscape with scattered farms and cottages and most of the land is pastoral farmland. Disused shafts and quarries provide an indication of the area's important mining heritage, with parts falling into the World Heritage Site. The villages of Landrake and Bere Alston are located on elevated parts of the plateaux. Long views enabled where hedgerows are low. On the high plateau tops there is a sense of exposure and remoteness and an open character which contrasts with the enclosure experienced in the valleys.

Key characteristics

Topography, geology and drainage

- Gently rolling open plateaux, sloping gradually towards neighbouring river valleys where the landform becomes notably steeper. Elevation ranges widely, from 50 metres AOD to the west of Antony to 211 metres AOD near Milton Green.
- There are many springs originating on higher ground, resulting in numerous streams, ponds and ditches.
- Underlain by Devonian mudstone, siltstone and sandstone, with some localised exposed granite. Legacy of mining activity associated with some areas, including Wheal Anna Maria (partially within LCT 3G), a former copper mine now designated as a County Geological Site.

Woodland cover

- There are few large woodlands and most woodland comprises small scattered deciduous farm woods and copses (with some defined as ancient woodland). Linear woodland occurs along roads, railways and streams. In localised areas, 'tunnels' are created along roads by dense avenues of trees. Trees on higher ground are often wind sculpted.
- Occasional conifer plantations and mixed woodland are found on upper slopes of the river valleys near the LCT boundaries, including Blanchdown Wood, Morewelldown Plantation and at Crendle Down.
- Orchards were historically associated with farmsteads or settlements, although many have declined or been lost. There are some young orchards which have been planted in recent years.

Land use and field patterns

- The primary land use is pastoral farming with occasional arable farming. Land use tends to be more varied on the edges of settlements and includes allotments, horse paddocks and sports pitches. Camping sites are also located in this LCT. Orchards are often associated with farms, particularly on the Devon side of the valley.
- Fields are laid out in a regular, rectilinear pattern and are enclosed by low hedges with mature trees. There are some more irregular fields where the landform is steeper or complex. These include fields of medieval origin enclosed by hedgebanks.

Semi-natural habitats

- Semi-natural habitats are limited compared to the adjacent valleys. The small deciduous woodlands and orchards are of wildlife interest. Areas of ancient woodland and priority habitat deciduous woodland are also found within the LCT as it slopes towards the river valleys.
- Some gorse and bracken in hedges give an upland character to parts of the landscape. Roadside verges are diverse and add texture to the landscape.

Archaeology and cultural heritage

- Mining legacy of the landscape, with remains often obscured by woodland but also visible in settlements. Some parts of the landscape fall within the Cornwall and West Devon Mining Landscape World Heritage Site.
- The historic houses of Collacombe Manor and Morwell Barton are both Grade I listed buildings. The landscape also provides a setting to Conservation Areas at Bere Alston, Landrake and the Tavistock to Bere Alston Railway Conservation Area.
- An undesignated earthwork is located to the south of St Ive Cross.

Settlement, road pattern and rights of way

- Most settlement is dispersed hamlets and isolated farms, with a few historic settlements and several crossroads settlements. The larger villages and Bere Alston and Landrake (both containing Conservation Areas) are also located within the LCT. Buildings are typically of a stone or render, with slate roofs.
- The highway network comprises a network of narrow lanes. Roads along the plateau tops tend to be straighter than those crossing the adjacent valley slopes. The B3257 runs along the plateau top. A railway line in cutting carves through the plateau to the west of Bere Alston while another briefly crosses the LCT west of St Germans.
- Parts of the Tamar Valley Discovery Trail are located on the Devon side of the LCT. On the Cornwall side, there are occasional footpaths, bridleways and lanes.

Views and perceptual qualities

- Long views are enabled by the elevation of the land and low hedgerows. This also contributes to the open character with a sense of exposure to the elements. Dartmoor is visible to the north east.
- Some lanes are sunken with mature woodland on either side which create a sense of enclosure as the LCT transitions to the adjacent valleys (e.g. to the east of St Ive Cross). This contrasts with the sense of expansiveness experienced on the plateau tops.
- The plateau tops have high levels of remoteness and tranquillity. The presence of major roads, electricity infrastructure and masts are detracting features. Pylons and overhead lines cross the LCT to the north of Landrake.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- The sparse settlement pattern with characteristic stone and render vernacular and slate roofs.
- The small-medium scale field pattern, often of medieval origin or with medieval elements which is enclosed by a network of traditional hedgebanks that provide wildlife corridors through the farmed landscape.
- Nationally important historic buildings including Collacombe Manor and Morwell Barton.
- Important mining heritage, with parts of the LCT included within the Cornwall and West Devon Mining Landscape World Heritage Site.
- Valued areas of ancient woodland located on slopes down to adjacent river valleys.
- Importance of the landscape for recreation, with several camping/caravan sites and the Tamar Valley Discovery Trail crossing the LCT near Bere Alston.
- An open and exposed character, with long views from higher elevations which include the picturesque valley of the River Tamar and the dramatic landform of Dartmoor.

Forces for change

Forces for change currently visible in the landscape

- A change from traditional pasture to alternate land uses, including arable farming and hobby farming on the edges of settlements.
- Pressure for new development on the edge of existing settlements, including Bere Alston and Landrake.
- Dereliction of old, vernacular farm buildings which have fallen out of use.
- Diversification of land uses, particularly relating to recreation. These include a scramble track to the west of Landrake and camping/caravan sites.
- Seasonal recreation pressures on the landscape including increased amounts of traffic on rural roads.
- Intensification of agriculture leading to the construction of large, modern farm buildings which are sometimes in prominent locations and damage to verges and gateways from heavy farm machinery.
- Past loss of hedgerows, resulting in larger fields and the dilution of historic field patterns.

Potential future forces for change

- Conversion of vernacular agricultural buildings to residential use, and an increase in associated residential paraphernalia.
- Further change from pastoral farming to anable cultivation and diversification to other land uses, including equestrian/hobby farming.
- The absorption of smaller farms into larger landholdings, along with an increased industrialisation of farming (and associated large scale farm buildings and machinery). An abandonment of more marginal land could become more common.
- Uncertainty surrounding the future of the agricultural sector (e.g. post-Brexit, market forces and climate change), including regarding agri-environment scheme support. This may lead to changes in cropping patterns and crop choice.
- Climate change may also lead to the proliferation or emergence of new pests and diseases which may affect landscape features including trees.
- Increased demand for additional recreational facilities including holiday parks/camping and associated infrastructure.
- Continued development pressure and demand for affordable housing, particularly on the edges of settlements.
- Demand for renewable energy generation leading to pressure for wind turbines or solar farms within the LCT.

Overall landscape strategy

The intrinsic rural qualities and traditional land uses of the landscape are retained. The important mining heritage of the area is protected and promoted. The distinct regular field pattern is enclosed by an intact network of well-managed hedgerows. Any new development is of an appropriate scale and utilises traditional building materials. Responsible recreational activity is promoted, including sensitive road improvements to accommodate traffic needs. The open visual character of the landscape and long views from the elevated ridgelines are protected.

Landscape guidelines

Protect

- Protect the important archaeological heritage including parts of Wheal Anna Maria. Provide sensitive interpretation relating to the designation of the area as part of the Cornwall and West Devon World Heritage Site.
- Protect the historic setting and integrity of Grade I listed historic houses and Conservation Areas.
- Protect the open ridgelines with long views and a sense of expansiveness. Any new development should utilise the landform and existing vegetation to integrate new structures into the landscape. In the event of new development on the edges of existing settlements in visually prominent locations, ensure that it relates well to the existing dwellings.
- Protect and maintain the distinct regular field patterns and restore hedgerows where past losses have occurred, diluting the field pattern.

Manage

- Manage and enhance the wildlife interest of the farmed landscape, including through the creation of species-rich grass buffers around arable fields (also serving to reduce agricultural run-off) and a strengthened hedge network. A reduction in the frequency and intensity of flailing should be encouraged to increase canopy cover.
- Reinstate traditional management techniques to the landscape's semi-natural and ancient woodlands, particularly coppicing, to promote a diverse age and species structure and provide a low carbon fuel source to local communities.
- Manage the landscape for the benefit of water quality in the nearby rivers, utilising good farming practice to prevent agricultural run-off and water pollution.

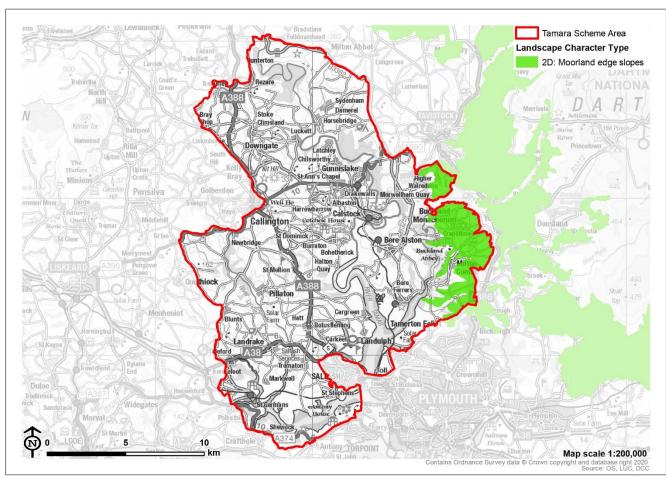
Plan

- Aim for a long-term restructuring of the landscape's woodlands towards a greater balance of climate-resilient, native broadleaf species. Avoid tree planting on the open tops of the plateaux where limited trees is characteristic.
- Ensure that any renewable energy development is sensitively sited and screened. High wind speeds on plateau tops may result in pressure for wind turbines.
- Enhance the robust settlement pattern by providing design guidance on new developments, respecting settlement form, character and local vernacular.
- Plan for the reinstatement of characteristic orchards where they have declined or been lost from the landscape, including community orchards (with livestock grazing wherever possible) to promote local food and drink production.
- Plan for the introduction of semi-natural habitats within the farmed landscape, including buffer-strips around arable fields to increase wildlife value, connectivity with adjacent landscapes and to prevent agricultural run-off.





LCT 2D: Moorland Edge Slopes







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT is located on the eastern extent of the Tamara Project Area, adjacent to Dartmoor National Park. The moorland edge slopes comprise undulating and sloping land which forms a transitional area between the elevated moorlands within the National Park to the north and east and the low-lying river valleys to the west and south. The moorland edge slopes are a settled landscape which are mostly used for pasture. Tree cover is sparse, particularly when compared to the adjacent river valleys, although there are some areas of mixed woodland. The LCT has high levels of intervisibility with Dartmoor. An area of open access land at West Down is representative of the continuation of character beyond the National Park boundary.

Key characteristics

Topography, geology and drainage

- Elevated land with a height of approximately 75m and 200m AOD. The landscape has a rolling topography with shallow stream valleys, in parts steeply sloping down from the fringes of Dartmoor.
- Underlain by Upper Devonian bedrock geology of mudstone, sandstone and limestone creating a gentler topography than the adjacent basalt and granite of Dartmoor.
- The landscape is crossed by streams rising from springs on the higher ground and draining towards the Tavy and Tamar rivers. The River Walkham is located to the south of West Down.

Woodland cover

- There is mixed woodland at Great North Wood and Birch Wood on the edges of the LCT which extends into the adjacent river valleys. These include some areas of ancient woodland. Commonlane Plantation is a mixed area of plantation woodland located in the southern part of the LCT.
- Some field boundaries and roads are often lined by trees although there are also areas where trees within boundaries are infrequent.
- Remnant orchards are associated with the edges of some farms and settlements.

Land use and field patterns

- Mainly sheep-grazed pastoral farmland with areas of unenclosed rough pasture on the edges of Dartmoor. The field pattern is generally small-scale and regular, with field boundaries based on medieval or post-medieval enclosures. There are some stone walls, which provide a continuation of character from Dartmoor National Park.
- Fields are enclosed by clipped beech hedges with some grown out sections forming characteristic mature beech tree lines on lower slopes and along roadsides.

Semi-natural habitats

- Areas close to Dartmoor reflect the character of the National Park with a rich mosaic of habitats including lowland heathland, semi-improved grassland, lowland acid grassland, rush pasture, mire, and patches of gorse scrub and silver birch.
- Deciduous woodlands are found along the stream valleys with Grenofen Wood and West Down SSSI designated for its lichen flora found on the trees, and sessile oaks with some birch, rowan and hazel. There are stunted trees on West Down.
- There is an area of wood pasture habitat at Bickham.

Archaeology and cultural heritage

- Ancient features include a prehistoric settlement near Berra Tor and the enclosure south of Common Lane, which are both designated as Scheduled Monuments.
- Disused mines, tips and quarries are scattered throughout the landscape and provide evidence of the area's industrial past.
- Buckland Monachorum has a Conservation Area. Listed buildings are concentrated within the settlements and numerous farms are also listed buildings.
- There is a distinct parkland estate character at Bickham with an expansive area of wood pasture which contributes to the sense of time-depth experienced in the landscape. Bickham House is a Grade II listed building.
- Many fields are of medieval or post-medieval origin, although some have been modified in modern times.

Settlement, road pattern and rights of way

- Buckland Monachorum, Crapstone and Axstone are located close together in the central parts of the LCT. Settlement in other parts of the LCT is sparse and limited to isolated farms and houses. The local building vernacular is primarily stone and slate houses and farm buildings.
- An extensive network of interconnected narrow rural lanes which are mostly concentrated around the settlements. Some sections of road become steep as they cross incised stream valleys.
- West Down contains an area of open access land. The LCT is accessible from a good network of public rights of way including the West Devon Way and Tamar Valley Discovery Trail.

Views and perceptual qualities

- An open and often exposed landscape, particularly on West Down, with long views from higher ground across the adjacent rolling countryside. There are spectacular views to views to Dartmoor National Park to the east of the LCT and across the valleys to Kit Hill and Bodmin Moor to the north-west. A prominent mast is located near Little Highertown.
- The open and expansive areas contrast with the sense of enclosure experiences on the narrow lanes flanked by high hedgerows.
- The moorland edge slopes are a traditional worked, rural landscape. There are high levels of tranquillity despite the settled character of some parts of the LCT.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- A tranquil upland pastoral landscape with small hamlets and farms linked by narrow rural lanes.
- The role of this landscape in providing a rural setting to the nationally protected landscape of Dartmoor National Park and the Tamar Valley AONB (which forms part of the LCT).
- The historic small-scale field pattern with beech Devon hedges with mature tree lines.
- Some areas have a strong moorland character with a rich mosaic of habitats and vegetation, including the nationally designated habitats at Grenofen Wood and West Down SSSI.
- A strong local vernacular of historic stone rubble and slate farmhouses.
- Areas of open access land (West Down) and strategic recreational routes (West Devon Way/Tamar Valley Discovery Trail) which make this a popular area for recreation.
- Spectacular views across undeveloped rolling farmland, up to the high moorland on Dartmoor in the east of the LCT and down to the wooded river valleys of the Tavy and Tamar towards Kit Hill in the north-west.

Forces for change

Forces for change currently visible in the landscape

- The past planting of coniferous plantations on higher ground which form conspicuous landscape features.
- The past loss of field boundaries has diluted the medieval field patterns in some areas.
- Continuing decline in traditional rural skills such as hedge laying and active woodland management.
- Past construction of large-scale modern agricultural sheds which can form locally prominent features.
- Recreational facilities including Dartmoor Caravan Park adjacent to Crapstone.
- Intensification of farming in places and the conversion of pastoral land to arable.
- Diversification of agricultural land to alternative land uses, including horse paddocks on the edges of settlements. There is also the diversification of farms to other businesses including kennels.
- Domestic scale renewable energy installations including ground mounted solar panels near Bickham.

Potential future forces for change

- Uncertainty surrounding the future of the agricultural sector (e.g. post-Brexit, market forces), including with regard to agrienvironment scheme support.
- Increase in the area of coniferous plantation and woodland; planted to enhance the landscape's roles in filtering water, minimising downstream flooding, storing and sequestering carbon dioxide.
- Potential demand for renewable energy installations including wind turbines (particularly on elevated ground with higher wind speeds) and solar panels.
- Potential pressure for development on the fringes of existing settlements.
- Conversion of agricultural buildings to residential and other uses resulting in a loss of agricultural character.
- Change in tree species composition as new pests/diseases spread and the climate changes.
- Climate change impacts leading to a decrease in upland habitats on West Down due to enhanced growth rates of vegetation (bracken, gorse etc.).
- Continued growth in tourism and the proximity to Dartmoor National Park and location within the Tamar Valley AONB, contributing to an increase in traffic and demand for tourism facilities (e.g. camping and caravan sites, car parking areas).

Overall landscape strategy

To protect the role of the landscape as part of the setting to the adjacent Dartmoor National Park and retain areas of tranquillity and remoteness. Traditional farming activity is supported and historic field patterns are retained and restored, with a strong regular pattern of enclosures bound by thick hedgerows. The integrity of archaeological sites is respected and retained. Areas of semi-natural habitat including acid grassland and woodland are managed and enhanced to build resilience to climate change.

Landscape guidelines

Protect

- Protect the setting provided to Dartmoor National Park and Tamar Valley AONB. Ensure any development or land use change does not detract from the special qualities of these protected landscapes.
- Protect the areas of open access land at West Down, including the nationally important acid grassland and woodland habitats with the Grenofen Wood and West Down SSSI.
- Protect the network of winding rural lanes. Ensure any required road improvements are sympathetic to the landscape and avoid excessive signage, signals and road markings.
- Protect the landscape's sparsely settled character and control new development outside the existing footprints of the landscape's small settlements.
- Protect the integrity and setting of valued heritage features within the landscape including prehistoric remains. Improve access and interpretation where this would not negatively impact on heritage conservation.
- Protect the remaining medieval field patterns and areas of wood pasture which contribute to the sense of time-depth in the landscape.
- Protect open views including to Dartmoor National Park and across the valleys of the Tamar and Tavy to higher ground including Kit Hill and Bodmin Moor.
- Protect the local vernacular of stone and slate. New development should utilise traditional materials and building styles wherever possible.

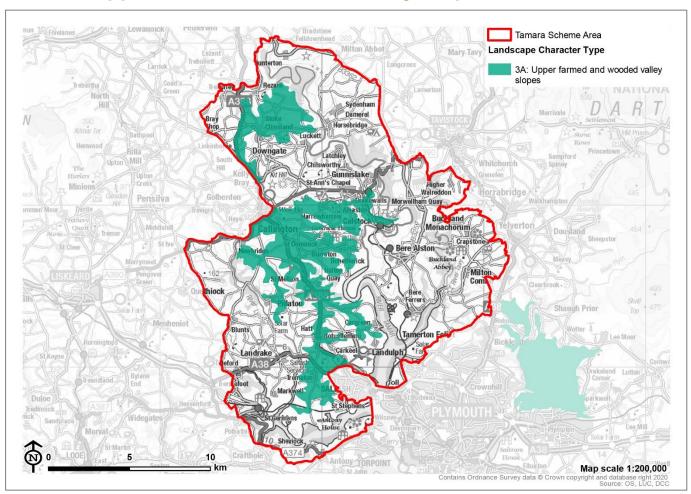
Manage

- Support traditional farming activity to retain the pastoral character of the landscape and restore field boundaries which have been lost. Manage and enhance the wildlife interest within the farmed landscape.
- Manage the recreational uses of the landscape, ensuring damage to wildlife habitats and archaeology is reduced.
 Improve on-site interpretation to further the understanding of its special landscape, heritage and biodiversity assets.

Plan

- Pursue opportunities to extend and link woodland and semi-natural habitats, utilising native, climate-resistant species.
- Ensure development respects the current small-scale of the landscape, its underlying landform, historic field patterns and existing landscape features including trees and vernacular buildings.
- Restore and manage areas of relict traditional orchards and explore opportunities for the creation of new ones, including community orchards (with livestock grazing wherever possible) to promote local food and drink production.
- Encourage the retention and appropriate management of areas of rough ground and pasture through livestock grazing at appropriate levels to enhance biodiversity.
- Seek to ensure opportunities for access and enjoyment of the countryside including links to the strategic recreational routes such as the West Devon Way and Tamar Valley Discovery Trail. Manage recreational pressure on areas close to the National Park.

LCT 3A: Upper Farmed & Wooded Valley Slopes







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT covers the domesticated and enclosed landscape of the middle Tamar Valley, covering the western parts in Cornwall. High ground can be exposed, contrasting with sheltered valley sides with more luxurious hedge and woodland growth. The area has a long-established transport network, with several busy roads and sunken lanes linking distinctive medieval churchtowns. Important mining remains survive in the landscape including disused chimneys, mines and shafts. The elevated character of the landscape creates a sense of openness with long views often possible. The LCT has strong visual relationships with other parts of the valley, particularly Kit Hill.

Key characteristics

Topography, geology and drainage

- Strongly undulating landscape forming the eastern foothills of Bodmin Moor, with elevation dropping from over 200m AOD to the north of Kelly Bray to less than 30m on the lower valley slopes of the Tamar.
- Bedrock geology comprising Late Devonian mudstones, siltstones and sandstones. Viverdon Quarry SSSI includes nationally important stratigraphy.
- Landscape carved by many springs and streams draining into the river systems of the Lynher to the south and west, and
 Tamar to the north and east.

Woodland cover

- Bands of broadleaved and mixed woodland associated with the steep valley sides, including some areas of ancient woodland.
- Blocks of mixed plantation are also found on some hill summits, including large areas of forestry and ancient re-planted woodland associated with the upper Tamar.

Land use and field patterns

- A patchwork of largely pastoral farmland, with some arable fields on flatter areas and hill summits. Some traditional market gardening remains although this has declined significantly.
- Some industrial-scale horticulture with glasshouse complexes around St Dominick and at Kernock, both with adjoining solar farms. Another solar farm occupies prominent south-facing slopes at Amy Down, west of St Mellion.
- The small-scale, irregular fields are mainly of medieval origin, with some larger, rectilinear post-medieval fields on higher ground throughout (e.g. Viverdon Down).
- Fields are tightly enclosed by Cornish hedges topped by hedgerows and frequent trees. Daffodils are a distinct feature along hedges in spring. An upland feel is associated with Viverdon Down, where hedges are banks with grass and gorse.

Semi-natural habitats

- A predominantly agricultural landscape, with biodiversity interest largely limited to stream-side wetlands and the bands of woodland, including several County Wildlife Sites (e.g. Broadmoor & Ball Woods in the south of the LCT).
- Ancient species-rich Cornish hedges with many mature trees create valued habitat networks within the farmland, connecting to the woodlands and semi-natural habitats in adjacent landscapes.

Archaeology and cultural heritage

- Nationally designated prehistoric relics include a defended farmstead (round) at Berry Farm, a henge near Westcott and two round barrows on Viverdon Down.
- The southern slopes of Kit Hill and landscape around Calstock are within the Cornish Mining World Heritage Site, with disused chimneys, mines and shafts visible. Holmbush Mine, with its three engine houses, is a Scheduled Monument.
- On the banks of the River Tamar, the National Trust's Grade I Cotehele House is set within Grade II* Registered Parkland. It is thought to be the finest medieval house in Cornwall.
- The Grade I listed Dupath Well (also a Scheduled Monument) is one example of a number of holy wells found across the landscape. Holy crosses and other ecclastical monuments are associated with the settled medieval landscape.

Settlement, road pattern and rights of way

- This is predominantly a well-preserved medieval landscape, focused around a scatter of medieval churchtowns, hamlets and small farms. Slate and granite are the predominant traditional buildings materials. There are Conservation Areas at Stoke Climsland and Botherick.
- Settlement is linked by a network of narrow lanes, gently winding, with the main A38 and A388 crossing through the LCT.
- The landscape forms an immediate backdrop to the larger towns of Saltash and Callington (both just outside the Project Area). Holiday parks and more modern developments can feature on some settlement edges.
- The Tamar Valley Discovery Trail skirts through the landscape around Calstock; elsewhere, access beyond the road network is limited to occasional footpaths and farm tracks.

Views and perceptual qualities

- An intimate and ancient landscape especially away from main transport corridors. Sunken lanes and small fields create a feeling of timelessness.
- Higher ground and slopes are open in character, affording expansive views across landscape to Bodmin Moor and Dartmoor, and beyond the winding course of the Tamar towards Plymouth and the Sound beyond. The distinctive forms of the 'Three Towers' at Devonport are recognisable on the skyline.
- Kit Hill (LCT T1), with its distinctive monument, forms a landmark feature in many views.
- Contrast of bustling major roads and nearby towns with the intimacy and tranquillity of rural villages and stream valleys.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- The intimate landscape with its anciently enclosed field pattern, sunken lanes and lush hedge network linking to valley woodlands.
- Visible relics of mining history within the Cornwall Mining World Heritage Site, especially around Calstock and at Holmbush Mine.
- Other assets reflecting the landscape's rich cultural heritage such as prehistoric rounds and monuments, Cotehele House and Gardens, holy wells and churches with prominent towers.
- A working agricultural landscape with strong rural qualities and a sense of timelessness. Valued features include medieval fields, fruiting hedgerow trees, market gardening heritage (including packing sheds/houses) and daffodils in hedgerows.
- Open views and strong visual connections to adjacent landscapes, including Bodmin Moor, Dartmoor, Kit Hill and Plymouth.
- Role as a rural backdrop to adjacent urban development at Saltash and Callington.
- Sparsely settled character with small medieval churchtowns, old smallholdings (sometimes relating to the mining history of the area) and isolated small groups of cottages.









Forces for change

Forces for change currently visible in the landscape

- Change from traditional pasture and small-scale market gardening to intensive arable and other land uses, e.g. solar farms and horticulture within extensive glasshouse developments.
- Agricultural intensification leading to the loss or fragmentation of semi-natural habitats now largely limited to the Cornish hedge network and stream-side woodlands. The use of heavy farm machinery can damage verges and hedges.
- Intensification on upper slopes/flatter areas has also led to the loss or fragmentation of the Cornish hedge network, with sections supplemented or replaced by post-and-wire fencing.
- Continued trend in hobby farming, leading to a further dilution of traditional farming practices in the landscape and impacts on landscape character (e.g. replacement of Cornish hedges with other boundaries to support pony keeping and inappropriate alterations to traditional buildings).
- Large road junctions impacting on local levels of tranquillity, especially at night with excessive lighting. Road improvements in general, particularly the A388, contrast with the surrounding medieval landscape.
- Past and ongoing demand for new development and housing, especially along the A388 corridor between Callington and Saltash. The impact of non-vernacular rural housing is localised but widespread. Development on the edges of settlements threatens the medieval field patterns.
- Lack of management in some locations leading to scrubbing up of mining remains in the landscape.
- Tourism-related developments, including holiday parks, introducing development into the open countryside including at St Mellion.
- Views north out of the Project Area frequently marked by wind turbines, with the television station mast on Caradon Hill (Bodmin Moor) punctuating the western skyline.

Potential future forces for change

- Uncertain future for the agricultural economy levels of future funding support and market prices for farmed products unknown. This may lead to the amalgamation of smaller farms.
- A continuing decline in traditional rural skills, such as hedge laying.
- Changes in cropping and land uses due to the effects of and responses to climate change (e.g. bioenergy crops, more tree/woodland farming), further impacting on the traditional pastoral character of farmland.
- More frequent drought conditions leading to crop failures and reduced productivity of the farmed landscape.
- Potential drying out of wet woodlands and stream-side meadows due to an increased frequency of drought conditions –
 affecting their functions in sequestering carbon and storing water (to prevent downstream flooding).
- Improved management of existing woodlands to increase productivity (e.g. for wood fuel production).
- Change in woodland / tree species composition as new pests/diseases spread (particularly phytopthora pathogens and ash die-back) and species intolerant of water level extremes die back. This could also impact on the Cornish hedges.
- Increased demand for UK food production leading to an expansion in areas of arable / horticultural production potentially leading to field enlargement, loss of Cornish hedges and development of glasshouses/polytunnels. It may also have an impact on water supply and quality.
- Drive for more renewable energy generation leading to demand for wind turbines and further solar farms either within or visible from the LCT.
- Continued development pressure and demand for affordable housing, particularly on the edges of settlements.
- Increase in domestic tourism with associated demands for new facilities and infrastructure, as well as an increase in traffic levels, recreational pressure and farm conversions.

Overall landscape strategy

Protect and reinforce the strong medieval field patterns of the landscape, divided by a rich network of well-managed Cornish hedges, helping to protect watercourses from diffuse pollution. Woodlands are traditionally managed and expanded to improve their biodiversity value and functions in sequestering carbon and preventing flooding; with coppice used as a sustainable fuel source. Farming practices are supported, including diversification in the face of a changing climate, with opportunities to build a resilient landscape framework pursued (in sympathy with landscape character). Visual connections with the surrounding uplands, and the role the landscape plays as a rural backdrop to urban areas, are recognised and preserved.

Landscape guidelines

Protect

- Protect and appropriately manage the landscape's archaeological heritage, including the nationally designated round at Berry Farm, henge near Westcott and round barrows on Viverdon Down. Provide sensitive interpretation to explain the significance of the area's mining heritage as part of the wider World Heritage Site.
- Protect views to and the setting of the landscape's medieval churches; their towers/spires forming important landmark features. These include the Grade I churches at St Mellion and St Dominick and Grade II* example at Stoke Climsland. Holy wells and crosses should also be protected as important cultural features of the medieval settlements.
- Protect and maintain the strong irregular field patterns of the landscape, restoring lost and gappy Cornish hedges (particularly on intensively farmed slopes where they can help reduce agricultural run-off into watercourses). Respect any local variations in bank construction and topping hedgerow/ tree species.
- Protect the dispersed pattern of churchtowns, hamlets and farms nestled into the folded landform or screened by woodland. Resist the further spread of new development (including chalets/caravans) outside settlement limits, including along roads. Utilise slate and granite as traditional building materials, locally sourced wherever possible.
- Avoid locating any new development on prominent slopes and ridgelines. Any new development should capitalise upon the screening effects of the landscape's woodlands (as well as appropriate new planting) and undulating topography.

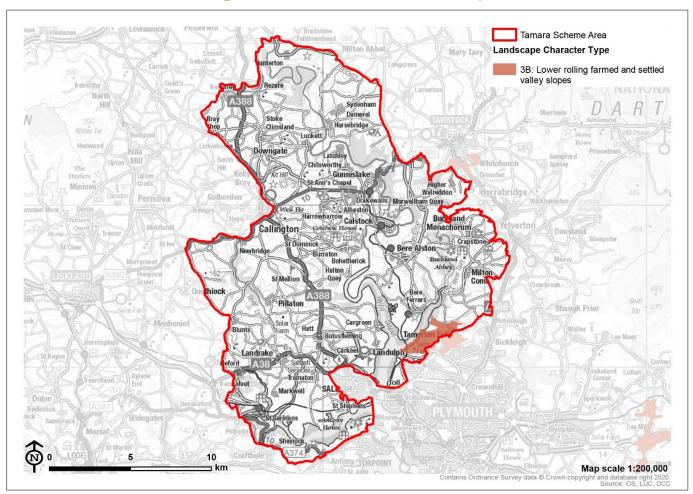
Manage

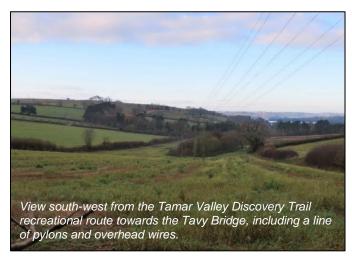
- Manage and enhance the wildlife interest of the farmed landscape, including through the creation of species-rich grass buffers around arable fields (also serving to reduce agricultural run-off), a strengthened Cornish hedge network and new woodland planting on farms/at the heads of valleys – using climate-resilient, locally prevalent species.
- Reinstate traditional management techniques to the landscape's semi-natural and ancient woodlands, particularly coppicing, to promote a diverse age and species structure and provide a low carbon fuel source to local communities.

Plan

- Restore and manage areas of relict traditional orchards and explore opportunities for the creation of new ones, including community orchards (with livestock grazing wherever possible) to promote local food and drink production.
- Aim for a long-term restructuring of the landscape's mixed and conifer plantations towards a greater balance of climate-resilient, native broadleaf species.
- Restore and expand wetland habitats along streams and at the heads of valleys, to increase water storage capacity and enhance biodiversity interest within the farmed landscape.
- Consider the introduction of noise attenuation and reduced lighting/signage on major road corridors (including the A388) to reduce impacts on levels of tranquillity and dark night skies within this LCT.
- Enhance the robust settlement pattern by providing design guidance on new developments, respecting settlement form, character and local vernacular.

LCT 3B: Lower Rolling Farmed and Settled Slopes







Summary description of the Landscape Character Type (within the Tamara Project Area)

The majority of this LCT occupies the lower slopes to the south-east of the River Tavy. The LCT lies directly north of the small village of Tamerton Foliot, with the village's manor house (the Grade II* listed Warleigh House) situated within the LCT. The sloping topography of the LCT is largely occupied by agricultural land, interspaced with blocks of woodland which often follow watercourses. The area is sparsely settled, with settlement limited to the Warleigh Estate, small hamlets and scattered farms. The perceptual qualities of the LCT are primarily rural and remote, although features including pylons and views of modern development to the south can detract from these qualities.

Key characteristics

Topography, geology and drainage

- Gently rolling landform, sloping up from the flat valley floors to between 10m and 115m AOD in the southern section (north of Tamerton Foliot). The landscape is incised by numerous small streams rising from springs on the higher slopes and draining west into the River Tavy.
- Underlain by mudstone, siltstone and sandstone, with a strip of sandstone and interbedded conglomerate running west to east from near Warren Plantations.

Woodland cover

- Mixed woodland and coniferous plantations are located along the river and stream valleys, with frequent hedgerow trees (often oaks), and small copses resulting in a well-wooded appearance. A young avenue of trees has been planted along the approach to Warleigh House.
- Warleigh Wood is a larger area of broadleaved woodland adjacent to Tamerton Lake in the south-west of the LCT. Most
 of Warleigh Wood is defined as ancient woodland.

Land use and field patterns

- A mix of improved pasture and arable fields, with arable being more common in the west and pasture more frequent in the east near Ashleigh Barton. There are some localised areas of estate parkland associated with Warleigh House. There is evidence of localised areas of horse keeping. Reedwell Plantation Solar Farm lies on elevated land in the south east of the LCT.
- A pattern of small to medium irregular fields, with some straight boundaries suggest they are based on medieval field patterns with substantial re-organisation in the post medieval period. Field patterns are largely intact, although there has been localised boundary loss near Warren Plantations in the north.
- Fields and lanes are bound by locally distinctive tall hedge banks with low, wide and mature hedges. There is some use of post and wire fencing.

Semi-natural habitats

- Most semi-natural habitats are deciduous, coniferous or mixed woodlands. A significant proportion of woodland is defined as ancient woodland. Historic maps document the loss of traditional orchards from this area, once commonplace, particularly around farms.
- The LCT has a strong species-rich hedgerow network with thick hedgerows lining rural lanes and defining field boundaries. These provide corridors for wildlife between woodland blocks.
- The LCT is directly adjacent to the River Tavy, which is nationally and internationally designated as a SSSI, SPA, SAC and Important Bird Area.

Archaeology and cultural heritage

- The LCT provides a setting to the historic farms of Warleigh Barton, Ashleigh Barton and Horsham, which contain a high concentration of listed buildings including numerous Grade II listed buildings and one Grade II* listed building.
- The Grade II* Warleigh House is the historic manor house of Tamerton Foliot, a village situated to the south-east of the LCT. The manor house is connected to Tamerton Foliot by a long drive lined with an avenue of young trees.

Settlement, road pattern and rights of way

- A sparsely settled area, with dispersed settlement including Warleigh Estate, small farms and hamlets. Buildings are constructed in a traditional vernacular of local limestone rubble, sometimes with brick corner detailing or rendered at the front, or slate hung and with slate roofs. Some of the buildings using these traditional materials have fallen into disrepair.
- The road network is sparse and comprises narrow sinuous lanes with tall regionally distinctive hedge banks and some private access roads.
- Public rights of way are limited, although the Tamar Valley Discovery Trail long distance recreational route crosses through the LCT from north to south. The Tamar Valley Discovery Trail is enclosed by tall hedge banks of mature trees.

Views and perceptual qualities

- Dense tree cover, tall Devon hedges, miscanthus crops and topography can limit views in some places. Elsewhere, particularly at elevated locations, there are dramatic views across the surrounding countryside and over the estuaries and to distinctive features including glimpsed views of Warleigh House (Grade II* listed) and the Tavy Bridge (Grade II listed).
- Parts of the area are overlooked by the northern settlement edge of Tamerton Foliot, with non-vernacular buildings marking the southern skyline.
- High levels of tranquillity due to the area's remote location, situated far from any large settlements or major roads. The railway line has intermittent impacts on tranquillity, although its route is largely screened by mature woodland.
- Due to the open rolling character of the landscape, several pylons are visible on skylines and are visually intrusive. Several fields in the southwest of the LCT are part of the Reedwell Plantation Solar Farm, however this is screened by mature surrounding vegetation.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- The incised streams and ditches, creating areas of contrast within the farmed landscape.
- The well-wooded character of the landscape with many ancient woodlands and a strong hedgerow network.
- A patterned mosaic of small to medium irregular fields, bounded by locally distinctive hedge banks topped with low, wide species-rich hedges.
- The Grade II* listed Warleigh House, with other surrounding listed buildings of historic interest, riverside estate parklands and tree lined drive.
- Hamlets and farms with a traditional vernacular of local stone rubble and slate as a building material.
- Dramatic views over the River Tavy and beyond, particularly from the elevated land. The landscape's role as a strong rural backdrop to the river, emphasising high levels of tranquillity.
- The role the landscape plays as a visual buffer between the Bere Peninsula and urban development at Plymouth.
- Characterful hedge and woodland-lined rural lanes, contributing to a peaceful and unhurried landscape.

Forces for change

Forces for change currently visible in the landscape

- Diversification in cropping, including an introduction of taller crops such as miscanthus which can inhibit views.
- An emergence of renewable energy use in the landscape, in the form of the Reedwell Plantation Solar Farm.
- Variable management of regional hedgebanks, particularly in the more intensively farmed locations.
- Medieval field patterns are vulnerable and can be lost with changes in land ownership and cropping.
- Continuing decline in rural skills such as woodland management and hedge laying. This can threaten the age and species diversity of semi-natural woodlands and lead to a variable quality of Devon hedges in some areas.
- Shortage of suitable skills and labour to maintain the traditional buildings and landscape features. The coherent character of some farm complexes has been weakened by recent developments and renovations, as well as buildings falling into dis-repair.
- Complete loss of traditional farm orchards.

Potential future forces for change

- Continuing pressure for development, particularly housing expansion, due to the LCT's proximity to the village of Tamerton Foliot and Plymouth. Development has the potential to affect the rural character of the LCT and sense of tranquillity.
- Pressure from recreation and tourism development, leading to pressure on public rights of way such as the Tamar Valley Discovery Trail long distance recreational route and diminishing levels of tranquillity.
- Change in woodland/tree species composition as new pests/diseases spread (particularly phytopthora pathogens and ash die-back). Loss of trees within hedgerows would be particularly noticeable.
- Changes in cropping and land uses due to the effects of and responses to climate change (e.g. bioenergy crops, more tree/woodland farming), further impacting on the traditional pastoral character of farmland.
- Uncertain future for the agricultural economy levels of future funding support and market prices for farmed products unknown.
- Continued trend towards hobby farming and equine enterprises leading to a dilution of traditional farming practices in the landscape.
- Construction of larger industrial buildings which are not reflective of traditional building styles.
- Spread of non-native and invasive species in response to a changing climate.
- More frequent drought conditions leading to crop failures and reduced productivity of the farmed landscape.

Protect the rural character of this area, with limited settlement and retain the landscape's function as a setting for the river valleys. Any new development should reflect the small scale, historic settlement pattern and vernacular character. The landscape pattern of mixed pasture and arable fields with hedgerows, narrow lanes and woodland should be a conservation priority and enhanced where possible. Explore new opportunities for recreation within the landscape.

Landscape guidelines

Protect

- Protect the settlement pattern of scattered houses and farms, resisting development which is uncharacteristic and visually intrusive, results in linear spread of development along river valleys and roads or is a result of expansion of suburban influences from larger adjacent settlements.
- Protect traditional building styles and materials, particularly the use of local stone such as limestone rubble, reflecting these in any new development or extensions wherever possible.
- Protect the landscape's network of quiet lanes, resisting unsympathetic highways improvements, signage and lighting schemes.
- Protect and conserve the setting of the Grade II* listed Warleigh House.
- Protect important views to and from the hills across the surrounding landscapes, including dramatic views over the estuaries.

Manage

- Manage and enhance the semi-natural woodlands through traditional woodland management, including coppicing.
 Control access by livestock to promote natural regeneration. Plan the natural regeneration of woodland and new planting to link fragmented sites.
- Manage species-rich locally distinctive hedges through regular coppicing and re-laying of gappy sections, strengthening medieval field patterns. Replace lost lengths and lines of fencing and hedging, respecting traditional bank styles and species composition, particularly where at right angles to slopes, to help reduce soil erosion and run-off into watercourses.
- Manage the landscape sympathetically for the neighbouring areas of nationally and internationally designated land and the River Tavy for nature conservation.

- Ensure any development respects the scale of the underlying landform, well-managed woodlands and historic field patterns and existing landscape features and safeguard the area as a valued recreational resource.
- Utilise woodland cover and topography to screen views of any new development.
- Plan for appropriate uses of rural buildings or their sympathetic conversion where appropriate, including all associated works such as drives, local hedges, visibility splays and entrance detailing.
- Restore areas of lost traditional orchards and explore opportunities for the creation of new ones, including community orchards to promote local food and drink production.
- Ensure any road improvements follow local guidance for management of roadside verges and ditches to maximise their biodiversity potential.
- Pursue opportunities for access and enjoyment of the landscape, including links to the estuaries and rivers and the enhancement of existing public rights of way such as the Tamar Valley Discovery Trail.

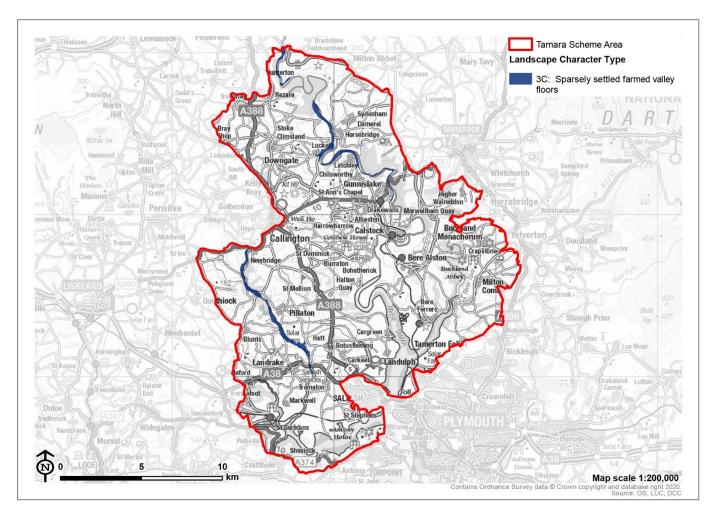








LCT 3C: Sparsely Settled Farmed Valley Floors







Summary description of the Landscape Character Type (within the Tamara Project Area)

This LCT follows the winding path of the uppermost reaches of the River Tamar and River Lynher. In their mid/lower reaches the landscape transitions to the Estuaries LCT (4A) at the point in which the water becomes tidal. The valley floors are enclosed by the steep-sided River Valley Slopes and Combes LCT (3G) and often contain open, pastoral floodplains and wetlands. The course of this LCT is largely undeveloped, with narrow stone bridges, often from the medieval period, being the main built features.

Key characteristics

Topography, geology and drainage

- Flat valley floors associated with the River Lynher and River Tamar before they become estuarine. Much of the LCT is prone to flooding with the majority being within Flood Zone 3.
- Elevation ranges from 20m-40m AOD along the Tamar River and 5m to 40m AOD along the River Lynher.
- Bedrock geology consists of mixed sandstone slate, mudstone and siltstone from the Devonian Period.

Woodland cover

- The area contains frequent areas of species rich deciduous woodlands containing beech, hazel, oak and sweet chestnut.
- Many areas of ancient woodland extend into the valley floors from the intersecting valley sides. Some large conifer plantations are also found within the landscape, most notably along the upper reaches of the River Lynher.

Land use and field patterns

- The valley floors are mostly improved grassland and pasture, with watermeadows and grazing marsh. Floodplain grazing marsh exists on river bends, much originating from 19th century reclamation.
- Pockets of traditional horticulture producing seasonal produce.
- Where it exists along the edge of the floodplain, the field pattern is often irregular and of medieval enclosure. The Devon HLC identifies many of these fields to be historic watermeadows.

Semi-natural habitats

- The southernmost extent of the River Tamar is part of the Tamar and Tavy Estuary SSSI and the Plymouth Sound and Estuaries SAC. These provide important wetland habitats for wintering wildfowl and waders.
- Park Wood SSSI is situated in the northern extent of the River Lynher, whilst its southern stretches are within the Lynher Estuary SSSI.
- These designations reflect an important network of habitats with good levels of connectivity including areas of floodplain and grazing marsh, semi-improved pasture, ponds, wet woodlands and pockets of traditional orchards. Areas of wood pasture trace the northern reaches of the Tamar.

Archaeology and cultural heritage

- Historic crossing points are marked by distinctive stone bridges, often dating from the medieval period, with New Bridge being approximately 500 years old. Most bridges are Listed Buildings, with the significance of Horse Bridge reflected in its additional designation as a Scheduled Monument. A historic fording point is found near Latchley.
- Parts of the northern course of the River Tamar are within the Endsleigh Grade I Registered Park and Garden, with sloping pasture fields and important areas of wood pasture and parkland.
- Part of the village of Luckett Conservation Area extends into the landscape.
- The southern parts of the Tamar are within the World Heritage Site, with mining relics at the water's edge such as the scheduled Gunnislake Clitters Mine and engine house with prominent chimney.
- Along the course of the rivers are disused quarries, weirs and mills also as evidence of an industrial past.

Settlement, road pattern and rights of way

- The LCT is generally unsettled limited to occasional small farms, although there are some small settlements situated directly outside the area, often associated with the historic crossing points.
- The area is largely inaccessible with very narrow, winding lanes plunging down from the adjoining steep valleys to cross the distinctive medieval bridges.
- Public rights of way are limited with some sections of footpath crossing the area, including part of the Tamar Valley Discovery Trail.
 - An area of National Trust-owned open access land at Cadson Bury Fort overlooks the northern reaches of the Lynher valley.

Views and perceptual qualities

- An enclosed and secluded flat floodplain floor situated away from major development and concealed by the adjoining landform, mature deciduous woodland and tall hedgebanks.
- The strong sense of enclosure often results in funnelled views along the watercourses and valleys.
- Areas along the Tamar River are within the Tamar Valley AONB, whilst the River Lynher expresses many of the AONB's distinctive characteristics including tranquillity and dramatic valleys with steep fringing woodlands.
- A dynamic river valley landscape with high levels of remoteness and tranquillity and minimal disturbances from human activity.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- The traditional pastoral landscape of unimproved grassland, watermeadows and wood pasture.
- The continued importance of the area in supporting traditional food production and seasonal horticulture.
- Its rich diversity of woodland cover, with valued tracts of semi-natural and ancient woodlands linking to the valley sides, including Park Wood SSSI.
- An area of high biodiversity value with well-connected habitats which are part of a wider network, including wetlands which link to the adjacent nationally and internationally designated estuaries.
- The distinctive stone, hump-backed bridges, many of medieval origin.
- Relics of an industrial past, including weirs, mills and mining features within the World Heritage Site.
- An unsettled and rural landscape, with high levels of tranquillity and remoteness emphasised by enclosure.

Forces for change

Forces for change currently visible in the landscape

- Decline in farming, horticulture and river-based industries (including due to an ageing population) with consequent effects on landscape patterns and features.
- Division of former estates resulting in changes in farm and woodland management including a decline in traditional woodland management, leading to a reduction in the species and age diversity.
- Widening of gateways and inappropriate hedge management associated with mechanised agricultural processes.
- Invasive water-borne weeds such as Himalayan balsam, Japanese knotweed and Giant hogweed changing the species composition of river margin habitats and woodlands. Land being turned into ornamental gardens is an issue within the landscape.
- Scrub growth impacting on mining heritage, and lack of repair of abandoned mine buildings leading to collapse of chimneys and other structures (often immediately adjacent to this LCT).
- Development of holiday parks on the riverbanks at Notter which introduce an urbanising effect on this otherwise relatively undeveloped landscape.
- Significant traffic on the narrow Grade I listed bridge crossing of Newbridge at Gunnislake, resulting in disruptions to tranquillity and diluting the character of the historic bridge. Nitrogen oxide air pollution at Gunnislake as a result of high traffic levels.
- A loss in traditional settlement character with some locally distinctive details such as traditional render unsensitively replaced.

Potential future forces for change

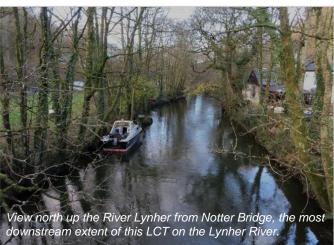
- Heritage assets at risk clapper bridges and small historic river crossings could be at risk from climate change (e.g. storms washing away/weakening foundations), with like-for-like replacement expensive.
- Expansion and unsympathetic buildings in Luckett or other settlements directly outside the LCT may dilute the feelings of remoteness and traditional vernacular character of the landscape's built heritage. Development may have an urbanising effect and introduce light pollution.
- Increased levels of traffic on narrow lanes and bridges, particularly in the summer months as a result of increases in domestic tourism. There is also the potential for increased tourism and recreational uses of the rivers themselves.
- Uncertainly over future levels of agricultural funding potentially affecting traditional grazing patterns on marginal land, watermeadows and grazing marsh.
- Potential threats to important valley bottom habitats including floodplain grazing marsh due to water abstraction and nutrient enrichment from agriculture.
- A further diversification of agricultural practices which could bring opportunities in terms of re-connecting people with agriculture (particularly local food growing).
- Future re-introduction projects for species such as beavers, which could substantially alter local landscapes (both negative and positive).
- Increased likelihood of flooding associated with climate change, which may reduce the viability of agriculture in this area and change to habitat and species composition. Rewetting projects could deliver a range of ecosystem services including biodiversity, access, flood protection, soil quality and water quality.
- Possibility of a loss or reduction in surrounding woodland cover as a result of tree pathogens and diseases, heightened by the impacts of climate change, with impacts both on biodiversity and landscape character.

Drive for new tree planting (e.g. Forest of Cornwall) provides opportunities to strengthen and connect woodland habitats and strengthen flood storage capacity but needs to respect the special ecological conditions of the landscape.









To protect the landscape's scenic and tranquil qualities, with a strong sense of place and important natural and cultural heritage features, including distinctive medieval stone bridges and relics within the Cornish & West Devon Mining World Heritage Site. The rich landscape and natural diversity of the river channels, floodplains and adjacent valley side woodlands is resilient, with habitats connected, extended and well-managed to adapt to the dynamic environment of the valley floors. Manage and enhance floodplain pastures and wetland habitats to enhance their flood storage capacity and encourage sustainable uses of the landscape for recreation while protecting its special qualities.

Landscape guidelines

Protect

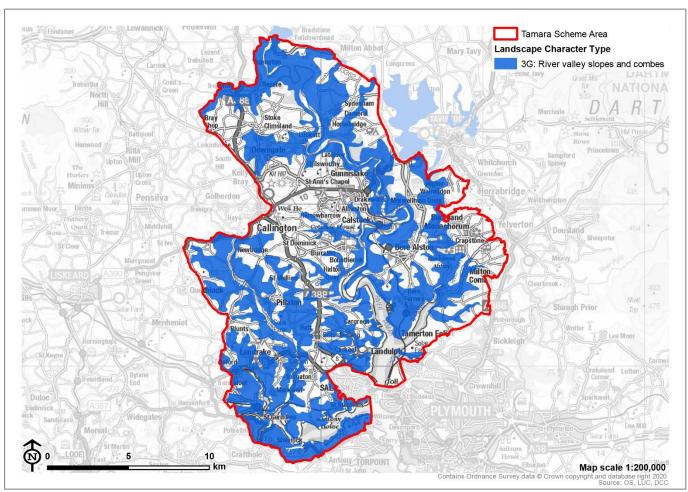
- Protect intact and well-managed ecological corridors and the balanced mix and age structure of woodlands coupled with low intensity land use.
- Protect the distinctive character of Luckett and ensure that any new development is small in scale and reflects local vernacular styles and materials within the village's Conservation Area.
- Protect and maintain the industrial heritage of the river valleys including weirs, mills and important mining relics as part of the World Heritage Site. Promote understanding of the landscape's industrial heritage to ensure public access and recreation respects the presence of valued features.
- Protect and maintain the historic stone bridges which are characteristics features of the valleys, resisting highways improvements (including lighting) that could detract from the characteristic network of narrow and often sunken lanes.
- Protect high levels of tranquillity and dark night skies, resisting development (including highways lighting) which could erode these qualities.

Manage

- Manage semi-natural woodland and riverside trees through traditional woodland management techniques including coppicing and pollarding, particularly along the shoreline. Where opportunities arise, encourage woodland planting to link fragmented sites.
- Manage valuable riparian and valley floor semi-natural habitats by encouraging retention of wetland habitats and controlling invasive plants.
- Manage the valleys' use for recreation whilst ensuring they retain their inherent levels of tranquillity, peacefulness and absence of built development and protecting the rural views along the valleys and to the adjoining valley sides. Public footpaths are important green corridors which require sensitive management while providing opportunities for access and enjoyment.
- Manage grazing land, especially by the rivers, to prevent invasion by scrub and invasive plants.
- Manage parks and gardens in private ownership to retain their scenic quality, biodiversity value and historic importance.

- Plan to re-establish traditional orchards within the area, possibly through community projects; new orchards should fit with the historic landscape character of the area, re-using the earthwork ridges of former orchards where possible.
- Plan for a long-term programme of structural repairs to built features associated with the area's mining heritage and traditional river crossings.
- Plan to create new habitats where possible including floodplain grazing marsh and riparian habitat as part of a wider network of connected wetland habitats (including linking to the estuaries).
- Plan for the reversion of coniferous plantation to deciduous woodland at maturity or felling. Ensure any new woodland planting is respectful of local character and ecological conditions and maximises opportunities to link with other woodland and hedges both within and outside the LCT.
- Consider the potential of wetland restoration and re-wetting projects for the provision of ecosystem services to improve habitat, flood protection, access opportunities and water quality.
- Strengthen the landscape's resilience to climate change, including through willow/alder planting along the rivers to enhance water storage capacity in times of drought, and flood prevention during episodes of high rainfall.
- Ensure new development is sensitively sited away from rural views along the valleys and is sited to avoid the need for visually intrusive ground engineering.

LCT 3G: River Valley Slopes and Combes







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT is located extensively throughout the Tamara Project Area and comprises a complex network of narrow river valleys associated with watercourses and rivers which ultimately drain into the estuaries. The landscape is well-wooded with a mixture of ancient broadleaved woods and plantation. Woodland is most frequent on the lower valley slopes. A number of designed historic estates add time-depth to the landscape and are often adjacent to watercourses. Evidence of past mining activity is evident from the disused quarries and mines scattered throughout the landscape. The valleys are generally sparsely settled, although there are some larger settlements which tend to be located adjacent to the estuaries. Most roads are narrow rural lanes, which are influenced by the incised landform. The landform and woodland cover create an enclosed character in the valleys and the landscape becomes more open on the upper slopes as it transitions to the adjacent plateaux LCT (1G).

Key characteristics

Topography, geology and drainage

- A complex series of steeply sloping valleys. A branching network of streams and small watercourses are located at the bottom of valleys and ultimately drain into the estuaries.
- Dominant geology of Devonian rocks (mudstone, silt stone and sandstone), with superficial alluvial deposits associated with watercourses. There are exposed rocky cliff faces in the middle reaches of the Tamar, which are often a relic of past mining activity.

Woodland cover

- A well-wooded landscape with deciduous woodland fringing the streams and larger mixed and coniferous plantations cloaking the river valley sides. There are large swathes of ancient semi-natural oak woodland.
- Within the agricultural landscape, mature trees within field boundaries contribute to the wooded character. Estate woodlands are characteristic within the designed parkland landscapes.

Land use and field patterns

- A farmed landscape with pasture fields grazed by cattle and sheep with occasional arable fields and some rough grazing. Field boundaries are generally species-rich hedgebanks with low hedges and mature hedgerow trees on lower slopes with stone gateposts and facings to banks at field entrances. Horse paddocks are common on settlement edges.
- Numerous traditional sheep-grazed orchards around settlements and hedgerow fruit trees which are a legacy of the soft fruit industry in the area.
- An intricate patterned mosaic of predominantly small to medium irregular fields of medieval or post-medieval origins. The field patterns are influenced by the underlying landform. There has been some localised boundary loss leading to the enlargement of fields.
- Other land uses include a golf course at China Fleet Country Club to the north of Saltash and a solar farm near Pillaton.

Semi-natural habitats

- Semi-natural habitats include extensive areas of deciduous woodland, much of which is ancient oak woodland noted for its lichen, particularly on the slopes of the River Tamar and Tavy. Park Wood and Greenscoombe Wood are nationally designated as SSSIs while numerous others are designated as County Wildlife Sites.
- Watercourses lined with pockets of unimproved neutral or acid grassland, lowland heath, marshy grassland, mire rush pasture, scrub and wet woodland.

Archaeology and cultural heritage

- The landscape along the Tamar is designated as part of the Cornwall and West Devon Mining Landscape World Heritage Site. The valley contains remnant mines and structures such as shafts, chimneys, dismantled railway lines and buildings relating to the mining of copper, silver, lead and arsenic. This includes the Devon Great Consols complex.
 - The LCT contains several historic parkland estates, often in a waterside setting. These include Endsleigh and Port Eliot, which are both Grade I Registered Parks and Gardens. Buckland Abbey is a 13th century Cistercian abbey (a Scheduled Monument), with extensive grounds running down to the Tavy.
- The remains of nationally designated forts and earthworks are also found at prominent locations in the valleys.

Settlement, road pattern and rights of way

- A scattered settlement pattern of historic villages (some with Conservation Areas) often focused on the river crossings and quays, and dispersed farmhouses nestled in dips in the landscape. Larger settlements include Gunnislake, Calstock, St German's, Tideford and Bere Ferrers. Local vernacular is varied, including a mix of stone, granite and render.
- Narrow sunken lanes bounded by hedgebanks and hedgerow trees traverse the landscape, with some steep lengths where they dip down into the valleys. There are some A-roads which cross through the landscape including the A38 and A388. Railway lines cross the landscape to the south of Saltash and between Plymouth and Gunnislake.
- The area is popular for recreation with long distance paths such as the Tamar Valley Discovery Trail and an extensive network of footpaths and bridleways (some of which are associated with past mining activity). The Tamar Valley Line is a valued transport route for both local communities and visitors. Other parts of the landscape have limited public access.

Views and perceptual qualities

- The network of deeply incised lanes, woodland, and high Devon hedges provide a sense of enclosure and seclusion, which contrasts with expansive vistas of the river valleys, fields and hedges from vantage points.
- A strong sense of tranquillity and experience of dark skies, except where light pollution from the larger nearby towns (Tavistock and Saltash) or from Plymouth affects the dark night skies.
- Pylons and overhead lines cross the LCT in various places and are a detracting feature within views. The overhead lines converge at an electricity substation location approximately two kilometres to the west of Cargreen.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- Extensive woodland cover, including much of ancient origin retained on the steep valley sides.
- The diverse and well-connected habitat network including neutral or acid grasslands, areas of wet woodland, wet grassland and lowland heath supporting rich assemblages of wildlife.
- The legacy of the local soft fruit and horticultural industries, with apple/cherry orchards around farms/villages, historic (but living) daffodil plots often mixed within areas of woodland, and traditional packing sheds.
- Extensive network of public footpaths which provide opportunities to experience the peaceful landscape.
- Internationally significant cultural landscape, with extensive areas forming part of the Cornwall and West Devon Mining Landscape World Heritage Site.
- Historic designed parkland estates including the Grade I registered parklands of Port Eliot and Antony House.
- Sparsely populated character, with historic settlements linked by narrow, sunken lanes. Dark skies are an important feature of the area.
- Secluded and tranquil valley landscape, largely free from modern or large-scale development. The landscape forms an important link (ecologically and culturally) between the valley floors and uplands.
- Expansive and spectacular views across the estuaries and river valleys contrasting with the sense of seclusion along the lower valleys. These contrasting views are a distinctive characteristic of the Tamar Valley AONB.









Forces for change

Forces for change currently visible in the landscape

- The presence of non-native invasive species within some woodlands, including rhododendron.
- Renewable energy installations including a solar farm near Pillaton.
- Loss or lack of management of traditional orchards on the edges of farmsteads and villages.
- Past loss of field boundaries in places creating a larger-scale field pattern and diluting historic field patterns. Current over-management of hedgebanks leading to their susceptibility to collapse need for coppicing and laying.
- Distinctive mosaic of woodland and historic daffodil plots encroached by plantations and impacted upon by fly tipping (e.g. Gunnislake Clitters).
- Pressure for recreational facilities including camping and caravan sites, as well as parking provision at certain sites.
- Changes from pastoral farming to arable cultivation. Horse grazing close to larger settlements is common with fields subdivided into paddocks by fences.
- Increased traffic and parking on the distinctive narrow lanes as a result of tourism and pressure from nearby housing developments.

Potential future forces for change

- Continuing decline in rural skills such as woodland management and hedge laying threatening the age and species diversity of semi-natural woodland and leading to variable quality of hedges.
- Uncertain future for the agricultural economy levels of future funding support and market prices for farmed products unknown.
- Homogenisation of the landscape, risking a dilution of local distinctiveness and rare ecological / heritage features (e.g. the living heritage collection of daffodils found in the LCT).
- Conversely a resurgence of interest in local food (e.g. market gardens) as well as different foods. A longer growing season could lead to the cultivation of new or novel crops.
- Impacts of gamekeeping on tranquillity and the ecology of the area.
- Important wetland habitats may suffer from nutrient enrichment from agriculture or increasing drought conditions due to climate change, and demand for irrigation thus lowering groundwater levels, and reducing ecological value.
- Change in woodland / tree species composition as new pests/diseases spread (particularly phytopthora pathogens and ash die-back) and invasive species such as giant hogweed and laurel spread. Loss of trees within hedgerows, including due to wind-throw, would be particularly noticeable in this LCT.
- Potential future flood defence works / SUDS introducing built structures into the landscape close to watercourses.
- Pressure for development on the edges of existing settlements, including Saltash, Gunnislake and St Germans, which may affect the rural character and sense of tranquillity within the landscape. Future development in Plymouth, Saltash and Tavistock may also introduce light pollution.
- Recreational pressure, including demand for new facilities and infrastructure and increases in traffic levels on narrow winding lanes which are likely to diminish levels of tranquillity.

To protect and enhance the peaceful character of the valley slopes, with fields enclosed by an intact network of species-rich hedges fringed by well-managed woodlands. Woodlands are traditionally managed and expanded to improve their biodiversity value and functions in sequestering carbon and preventing flooding; with coppice used as a sustainable fuel source. Opportunities are sought to restore conifer plantations to broadleaf woodland and other semi-natural habitats, creating a climate-resilient green network. The designed historic estates and archaeological features are protected and appropriately managed. Traditional farming activity is supported to retain the distinct pastoral character of the valleys.

Landscape guidelines

Protect

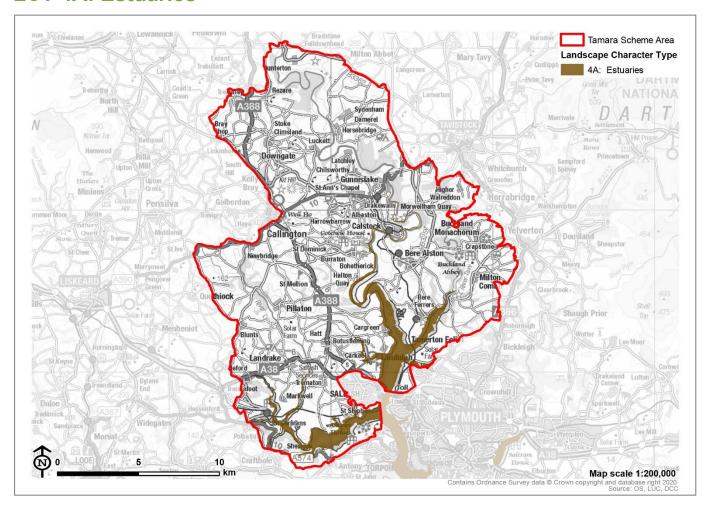
- Protect the strong perceptions of tranquillity, remoteness and seclusion in the landscape, with its well managed woodlands and pastoral fields enclosed by an intact network of species-rich hedges.
- Conserve dark night skies by limiting unnecessary lighting along distinctive narrow lanes/ road junctions and associated within any new development (including on the fringes of the LCT.
- Conserve the integrity of the historic estate landscapes and ensure that the individual character of the parklands is respected.
- Protect and appropriately manage important archaeological features including the forts and Buckland Abbey.
- Protect the dispersed pattern of village, hamlets and farms nestled into the folded landform or screened by woodland.
 Utilise traditional building materials, locally sourced wherever possible.
- Protect the smaller vernacular details such as packing houses that are part of the character of the landscape and link to market gardening heritage.

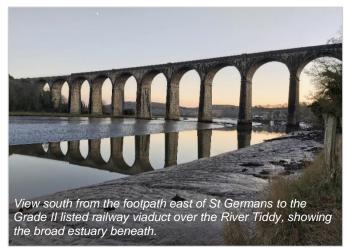
Manage

- Manage and extend areas of wet woodland and floodplain grassland, through appropriate grazing and traditional land management regimes both to enhance their wildlife value and functions in flood prevention.
- Manage and enhance the valleys' semi-natural woodlands through traditional woodland management. Control access by livestock, promoting natural regeneration to enhance longevity whilst using extensive grazing to promote the species diversity of ground flora.
- Manage the area's existing plantations for sustainable timber production and wildlife interest, creating new green links to surrounding semi-natural habitats and revealing historic daffodil plots.

- Aim for a long-term restructuring of the landscape's mixed and conifer plantations towards a greater balance of climate-resilient, native broadleaf species.
- Create, extend and link woodland and wetland habitats to enhance the water storage capacity of the landscape (reducing incidences of downstream flooding) and improve water quality through reducing soil erosion and agricultural run-off.
- Plan for the natural regeneration of woodland and new planting (using climate-hardy species) to link fragmented sites.
- Work with farmers and land owners both within and in adjoining LCTs to link 'islands' of habitat to create a resilient network.
- Plan for the long-term restoration of the more prominent conifer plantations to open habitats and broadleaved woodlands (where their role in timber production has ceased). Explore the retention of other plantations as recreational spaces (e.g. for mountain biking trails).
- Restore and expand wetland habitats along streams to increase water storage capacity and enhance biodiversity interest within the farmed landscape. A re-wetting project at Cotehele includes land within this LCT.
- Restore and manage areas of relict traditional orchards and explore opportunities for the creation of new ones, including community orchards (with livestock grazing wherever possible) to promote local food and drink production.
- Plan for the reinstatement of lost field boundaries to improve wildlife corridors and restore the historic field patterns.

LCT 4A: Estuaries







Summary description of the Landscape Character Type (within the Tamara Project Area)

This LCT comprises the lower intertidal reaches of the Tamar, Tavy and St Germans/Lynher rivers. The area encompasses the pristine estuary waters and some intertidal mudflats, with the majority internationally or nationally designated for nature conservation. The character type spans from the more developed south with associated urban influence from nearby Plymouth and Saltash, to the undeveloped and tranquil upstream extent of the estuaries. The wide estuaries have limited crossing points with settlement often concentrated around historic quays. Few bridges cross this LCT, and where present they are often in the form of dramatic railway viaducts.

Key characteristics

Topography, geology and drainage

- Flat, broad estuaries dominated by the tidal cycle, with extensive mudflats often revealed at low tide. The lower parts of main rivers and estuary mouths where rivers enter the sea have brackish water. The channel up the Tamar is very shallow (<5 metres).</p>
- Marine levels with sandy raw soils and rock outcrops. The underlying geology is slates and thin limestones of the upper Devonian covered by alluvium of silt, fine and coarse sands.

Woodland cover

There is no woodland within the LCT itself, although woodland in adjacent landscapes (particularly on valley slopes) forms a backdrop in views from the estuaries.

Land use and field patterns

- The LCT encompasses the estuaries of the River Tamar, River Tavy and the St Germans/Lynher River with their associated intertidal extent. A line of hedgerow trees marks the division between the intertidal zone and farmland above.
- There is a significant military presence around the estuary mouths in south of the LCT and some amenity/recreation/ tourism consisting of mostly kayaking and canoeing. Fishing activity is heavily licenced and regulated. The shallow, tidal waters of the River Tamar make it unsuitable for large vessels.

Semi-natural habitats

- The LCT is extensively covered by multiple international and national natural heritage designations. These recognise habitat assemblages including pristine waters, intertidal mudflats and mixed muddy sediment which support a variety of species including breeding birds, wintering wildfowl and waders. Iconic species include otter, little egret, osprey and porpoise.
- Important habitats such as saltmarsh, deciduous woodlands, reedbeds, good quality semi-improved grasslands and lowland heathland fringe the estuary and contribute to the naturalistic character and setting of the landscape

Archaeology and cultural heritage

- Historic industries included mining /processing, quarrying, tide mills, bone mills and manure works, and limekilns, the remnants of which are often still present and designated as listed structures or Scheduled Monuments.
- Part of the LCT on the River Tamar upstream of Cotehele Quay is within the Cornwall and West Devon Mining Landscape World Heritage Site.
- This wealth of industry was supported by a well-developed transport network. Consequently, there are numerous quays and a series of historic bridges including distinctive viaducts (some of which are listed structures) and bridge toll houses.
- The Tamar River was partly canalised downstream from Gunnislake, with remains of a weir, canal channel, docks or winding points and a riverside towpath. There are also areas where embankments to defend agricultural land remain downstream of Cotehele.
- The estuaries often form a key part of the setting to adjacent historic features including Registered Parks and Gardens, historic villages, Scheduled Monuments and listed buildings.

Settlement, road pattern and rights of way

- The estuaries are unsettled. Occasional small farms are situated on the banks outside the LCT, whilst settlements are situated above the floodplain. These settlements are often associated with historic quays or crossing points and frequently contain Conservation Areas. Examples include St Germans, Bere Ferrers, Cargreen and Calstock.
- Dramatic railway viaducts are the main crossing feature of the wide estuaries. The A38 is the only road to cross the LCT (on the Tamar Bridge).
- The area remains well used for water-based recreation with clustered areas of moorings, marinas and boating infrastructure. Seasonal foot and vehicle ferries cross the estuaries.
- Public rights of way along Kingsmill Lake and St Germans/Lynher River are limited. The Plymouth Cross-City link long distance recreational route follows the banks of Tamerton Lake. The banks of the River Tavy and River Tamar are accessible from the Tamar Valley Discovery Trail long distance recreational route and a Regional Cycle Network route.

Views and perceptual qualities

- Most of the LCT is within the nationally designated Tamar Valley AONB in recognition of the unspoiled valley and water landscape, representing a classic English lowland river system.
- Estuary views are dynamic and influenced by the tidal cycle, weather conditions and seasons. Low tide exposes expanses of sand and mudflats, contrasting the rippling waves lapping the shore at high water. The play of light on water and mud contributes to the sense of place.
- Throughout much of the LCT there is minimal human intrusion allowing the gentle movement and sounds of water combined with the calling of birds to create a serene and highly tranquil environment. The downstream portions of the estuaries have anthropogenic influences from the surrounding urban areas and a greater amount of water-based traffic.
- Enclosed and sheltered by surrounding woodland in the upstream areas, with longer, more expansive views out to sea near the mouths of the estuaries. The estuaries are overlooked by the surrounding valley slopes.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- Flat, broad estuaries strongly influenced by tidal cycles, creating a dynamic character and distinct sense of place.
- Extensive ecological designation coverage, with the majority of this LCT designated for internationally and nationally significant habitats which are important for numerous species including birds, fish and marine mammals.
- A rich assemblage of archaeological features with many bridges, viaducts, quays and lime kilns designated as either listed structures or scheduled monuments. Part of the LCT is within the Cornwall and West Devon Mining Landscape World Heritage Site.
- The unsettled character of the landscape, with limited accessibility from the land.
- The range of ecosystem services provided flood protection, carbon sequestration, water quality, access/recreation and biodiversity.
- The calm open water provides a distinctive setting to adjacent landscapes and settlements.
- Tranquil and undisturbed upper reaches of the estuaries with limited access from the land and sound often limited to the water and calling birds.

Forces for change

Forces for change currently visible in the landscape

- Recreational pressures on the water of the estuary including sailing and associated marinas and quays. The use of speedboats and jet skis create larger waves which can erode banks and cause wildlife disturbance. Public use of areas adjacent to the estuaries can disrupt tranquillity and introduce related issues such as litter.
- The degradation of built features including Scheduled Monuments associated with the mining history of the estuaries, with scrub growth and erosion being leading causes of their decline.
- Pylons forming dominant skyline features throughout much of the LCT.
- Light and noise pollution, as well as visual intrusion, from nearby Plymouth and Saltash.
- Estuary crossed by the A38 major road corridor along the Tamar Bridge, impacting on the landscape's peace and tranquillity.

Potential future forces for change

- Potential for visually intrusive and ecologically damaging developments such as waterside marinas and launch points.
- Changes in sea level and more frequent flooding events and storms as a result of climate change, is likely to affect channel depths and widths as well as semi-natural habitats along the margins of the LCT. This may also result in demand for flood defences which would impact on the character of the estuaries.
- Changes in water temperature and/or salinity as a result of climate change affecting the diversity of habitats and species present.
- Potential demand for hydro-electric power generation schemes. Domestic-scale renewables on adjacent land could also have a cumulative impact on views from the estuaries.
- An increased demand for recreation and tourism, impacting on the levels of tranquillity and leading to increased pressure for facilities, infrastructure (including car parks and signage) and higher traffic levels.
- Post-Brexit, Plymouth may gain more economical importance as a harbour which could lead to increases in navigational demand, associated traffic and deeper channels.
- The potential designation of Plymouth Sound National Marine Park extending into this LCT could bring opportunities to strengthen habitat resilience and ecosystem service delivery.

To protect the landscape's unique estuarine character and scenic quality as part of the Tamar Valley AONB, as well as its distinctive character, rich biodiversity, cultural heritage features and strong sense of place. It should be ensured that the range of semi-natural habitats (mudflats, pristine waters etc) along the estuary are retained and managed to maximise their landscape and biodiversity interest. Sensitive interpretation of the LCT's river-transport and internationally significant mining heritage should be provided. The undeveloped, remote character of the estuaries should be retained, with historic buildings, settlements and structures remaining attractive focal points in the open, water-dominated landscape.

Landscape guidelines

Protect

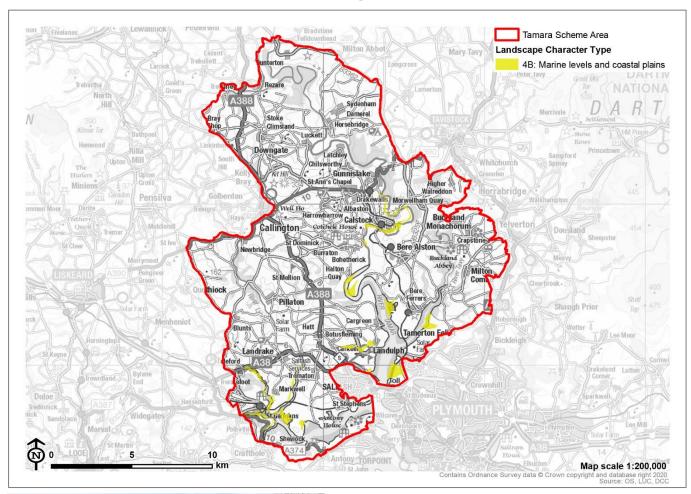
- Protect the open character of the estuaries and the important views to the water's edge and historic built structures that characterise this landscape.
- Protect the integrity of historic quays and other buildings and structures which contribute to the area's strong sense of place.
- Protect the unsettled and strongly naturalistic character of the landscape which contributes to the setting and sense of place of features within the surrounding landscape.
- Protect the estuary shores from damage through the restriction of high-speed vessels if necessary.
- Protect high levels of tranquillity, sense of wilderness and dark night skies, particularly in the northern part of the LCT, resisting development or land use changes which would adversely affect these characteristics.

Manage

- Manage the estuary's internationally important habitats, including estuarine waters and mudflats to maximise their landscape and biodiversity value. The potential impact of engineered flood defences on habitats should be carefully considered.
- Manage the popularity of the landscape along the estuaries for recreational activity to ensure it is of an appropriate scale and does not detract from the tranquil perceptual qualities of the area. Ensure higher tourist footfall does not have a negative effect on features such as historic crossing points.
- Maximise the carbon sequestration functions of habitats such as eelgrass through careful management and potential expansion.
- Increase understanding of the connections (past, present and future) between urban areas and the Tamar Valley landscape e.g. past timber and market gardening supply to Plymouth, limestone for the lime kilns transported from Plymouth.

- Conserve the distinctive character of the water's edge and resist plans for waterside developments (including marinas) in the area.
- Plan for opportunities to expand estuarine habitats to build resilience to future climate change, including sea level rise and more frequent storm events (e.g. through the creation of natural flood defences such as reedbeds). The National Trust's re-wetting project at Cotehele includes land within this LCT.
- Flood defences should be sensitively placed within the landscape, with 'soft engineering' favoured.
- Increase awareness of the natural environment with locals to re-connect people and nature within the area and help accumulate support for habitat enhancement projects.
- Investigate the undergrounding or rerouting of visually-intrusive power lines to reduce or eliminate their landscape impacts.
- Plan for future expansion of nearby settlements adjacent to the estuaries and ensure that new development is incorporated into the existing landscape setting.
- Develop a resilient landscape to recreational use and tourism, which is likely to rise with increasing local development.
- Capitalise on the future opportunities presented by potential National Marine Park designation for Plymouth Sound.

LCT 4B: Marine levels and coastal plains¹







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT occurs at numerous locations along the fringes of the estuaries and tidal reaches of the rivers. The landscape has a naturalistic character due to the presence of extensive saltmarsh and grazing marsh. Large parts of the LCT are internationally or nationally designated for their nature conservation importance. Quays are a frequent feature within the LCT, and some are significant due to their connection with the historic mining industry. The LCT is unsettled, although some parts are adjacent to settlements and therefore contribute to their setting. This landscape is dynamic and is strongly influenced by the tides and weather conditions.

¹ The name of LCT 4B: "Marine levels and coastal plains" originates from the Devon menu. There are some areas within the Tamara Project Area which are not marine or coastal, but share characteristics such as saltmarsh habitat (e.g. the area around Tideford).

Key characteristics

Topography, geology and drainage

- Low-lying intertidal areas fringing the tidal stretches of the Tamar, Tavy, Lynher and Tiddy Rivers and their tributaries. Adjacent land is inundated with brackish water from the estuary during high spring tides.
- The majority of the LCT is underlain by Upper or Middle Devonian mudstone, siltstone and sandstone bedrock. Alluvial and river terrace deposits overlay the bedrock.

Woodland cover

- Tree cover is infrequent but often features as a backdrop when present in adjacent field boundaries or on nearby river valley slopes.
- Woodland becomes more frequent in the upper parts of the valleys, including upstream from Calstock.

Land use and field patterns

- Most of the LCT is not cultivated due to marine inundation. An organic landscape pattern is created by the mix of creeks, saltmarsh and grazing marsh.
- Where fields are present, they are enclosed by low hedgerows and/or ditches. Erth Island is a distinctive single field surrounded by saltmarsh adjacent to the Lynher River.
- An MOD defence munitions site is located at Ernesettle to the north-west of Plymouth.
- Embankments occur within the LCT, often providing flood defences to nearby settlements (e.g. south of Calstock).
- A hydroelectric power station is located near Morwellham, dating from 1934.

Semi-natural habitats

- Saline incursion has created marine-influenced semi-natural habitats, such as reedbed and saltmarsh.
- Much of the LCT is internationally or nationally designated for its nature conservation importance with large parts falling
 within the Tamar Estuaries Complex Special Protection Area (SPA) and Plymouth Sound & Estuaries Special Area of
 Conservation (SAC).
- There are also several County Wildlife Sites, including Ernesettle Complex, Morwellham and parts of the Lower Tiddy, Lower Lynher Valley and Notter Bridge.

Archaeology and cultural heritage

- Important industrial heritage; the LCT is partially within the Cornwall and West Devon Mining Landscape World Heritage Site. Mining products were transported by boat from the many quays located along the rivers.
- Some evidence of historic land reclamation from the post-medieval period.
- Morwellham Quay is a Scheduled Monument. This includes the distinct large water wheel, which once powered a mill for crushing locally mined manganese. The distinctive Grade II* Calstock viaduct crosses over this LCT.
- The landscape provides part of the riverside setting to Conservation Areas including Weir Quay, Calstock and St Germans.

Settlement, road pattern and rights of way

- Unsettled and unenclosed without roads, although small settlements and minor roads can be found in adjacent areas.
- The LCT is briefly crossed by railway lines across the Tiddy and Lynher Rivers. A rail route also crosses the LCT at Ernesettle
- The Tamar Valley Discovery Trail long distance footpath runs adjacent to this LCT in places, providing an opportunity for appreciation of the natural landscape and its views.

Views and perceptual qualities

- Strong sensory characteristics resulting from the colour and texture of habitats, smell of mudflats, birdcalls and sunlight reflecting off water. The LCT is dynamic and changes frequently depending on the tides and weather conditions.
- There are attractive, naturalistic views across the open water over the rivers. The pylon line crossing the river at Weir Quay can detract from views. Other detractors include a sewage works close to Calstock.
- The LCT is partially within the Tamar Valley AONB, with the river and its associated habitats forming a focal point of the protected landscape.
- Open and exposed character and highly influenced by weather conditions with views funnelled along the valley system, which may contain a juxtaposition of urban and rural elements, such as the long views towards Plymouth.
- The landscape is often overlooked by the adjacent steep wooded slopes of the valleys, providing an attractive setting and contrasting sense of enclosure.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- Extensive internationally and nationally designated habitats including grazing saltmarsh and mudflats important for many species include breeding waders, eels and flounders.
- The value of the landscape for recreation and experience of naturalistic landscape, including via the Tamar Valley Discovery Trail.
- The dynamic, meandering landscape, strongly influenced by the tides and weather conditions. Deciduous woodland down to the shoreline creates a distinctive sense of place.
- Cultural heritage features and associations, including historic quays and lime kilns, areas of historic land reclamation and the landmark Calstock Viaduct. Parts fall within the World Heritage Site in recognition of the wider cultural importance of the Tamar Valley.
- The important waterside/estuarine setting the landscape provides to historic riverside settlements.
- The range of ecosystem services provided flood protection, carbon sequestration, water quality, access/recreation and biodiversity.
- The LCT, in conjunction with the adjacent estuaries, provides a strong sense of place to adjacent landscapes.
- Unsettled character with distinct picturesque and highly tranquil perceptual qualities.

Forces for change

Forces for change currently visible in the landscape

Invasive species including rhododendron have been noted along the shoreline of the River Lynher.

Occasional features such as pylons (e.g. a prominent line at Warleigh Marsh) and sewage works which have a detrimental impact on the otherwise unsettled and naturalistic character of the tidal flats and levels.

Metal fencing associated with the MOD defence munitions site at Ernesettle, detracting from the naturalistic character.

Some past loss of field boundaries (e.g. to the south of Calstock).

Lack of management of some areas of grazing marsh, resulting in scrub encroachment.

Seasonal recreational pressure at accessible locations, including Morwellham Quay, with associated issues such as litter.

Increasing recreational use of the adjacent water (speed boats and jet skis), impacting on important levels of tranquillity.

Removal of the levees from 19th century reclamation – has ecological/ecosystem service benefits (through wetland recreation) but has led to the loss of productive land in some locations.

Potential future forces for change

Increased recreation and tourism pressure impacting on levels of tranquillity, creating demand for developments such as waterside marinas and launch points and increased traffic levels threatening historic river crossings.

More sediment flowing into the adjacent estuaries due to changes in land use (shift away from stocking and cropping).

Changes in sea levels could result in the more frequent inundation of the tidal levels or drying out, altering the composition of soils and plant communities.

Future growth of settlements adjacent to the tidal flats resulting in increased recreational pressure and potential changes in views and perceptual qualities.

Increased severity of flooding events could result in the need for larger flood defences which may impact on the naturalistic character of the LCT.

Further demand for renewable energy generation such as hydroelectric power stations or tidal schemes.

Growth of the economic importance of Plymouth as a port/harbour could increase navigational demand, resulting in more traffic and deeper channels.

The potential designation of Plymouth Sound National Marine Park – extending into this LCT - could bring opportunities to strengthen habitat resilience and ecosystem service delivery.

To protect the open character of the marine levels and coastal plain landscape and their relationships with the adjacent estuaries. The semi-natural habitats which characterise the landscape are carefully and sensitively managed and are extended where possible, linking to/from the estuaries, river valleys and into the uplands as one connected system. Recreation pressure is sensitively managed to retain the open and naturalistic character of the landscape and new associated development is carefully located and integrated into the landscape. Opportunities are sought to promote sustainable access and recreation, including through new areas of wetland re-creation. The landscape is prepared for the future effects of a changing climate, with wildlife habitats strengthened and expanded to build resilience to the changes that may lie ahead.

Landscape guidelines

Protect

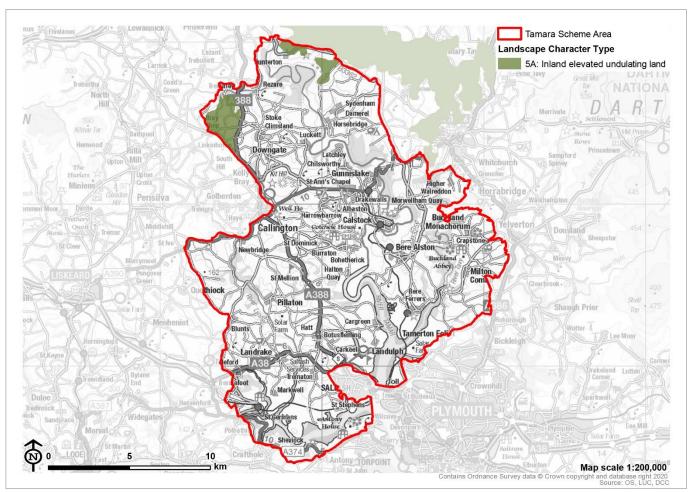
- Protect the unsettled and strongly naturalistic character of the landscape which contributes to the setting and sense of place of features within the surrounding landscape.
- Protect the internationally important mining heritage including the remains at Morewellham Quay. Sensitive interpretation and sympathetic access to mining remains should be provided.
- Protect the high levels of tranquillity and 'wilderness' qualities experienced within the landscape.
- Protect the expansive views across the adjacent estuaries and to the surrounding uplands, characteristically fringed by woodland.
- The potential impact of engineered flood defences on habitats and landscape should be carefully considered.

Manage

- Manage the internationally important habitats within the LCT (including grazed saltmarshes) to maximise their landscape and biodiversity value.
- Maximise the carbon sequestration functions of saltmarsh and eelgrass through careful management and potential expansion of these habitats.
- Manage recreational uses, seeking a balance between encouraging access and reconnection with the landscape (e.g. to restored wetland sites) and retaining the special remote qualities associated with it.
- Increase understanding of the connections (past, present and future) between urban areas and the Tamar Valley landscape e.g. past timber and market gardening supply to Plymouth, limestone for the lime kilns transported from Plymouth.

- Strengthen habitat linkages with the adjacent estuaries and tidal rivers as well as the upstream catchments taking a whole-catchment approach to build resilience to climate change and maximise ecosystem service delivery.
- Create managed 'retreats' to make rewilding visible and understood by local people, helping reconnect communities with the landscape and understand its value.
- Plan for required improvements to flood defences and ensure that these are sympathetic to the landscape. Create natural flood defences (e.g. reedbeds) where possible, which will also enhance the biodiversity value of the landscape.
- Plan for the future expansion of settlements adjacent to the LCT including Calstock and St Germans. Ensure that new development is incorporated into the existing landscape setting and maximises enhancements through the planning process.
- Capitalise on the future opportunities presented by potential National Marine Park designation for Plymouth Sound.

LCT 5A: Inland Elevated Undulating Land







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT is located in the northern parts of the Project Area, on either side of the Tamar Valley. It is characterised by elevated land rising above the adjacent river valleys. Tremollet Down is former open downland which has been enclosed in the past century. Pasture is the predominant land use. The LCT has a sparsely settled character with development limited to occasional farms. Woodland is limited to occasional hedgerow trees and rows of trees along roads, which create a localised sense of enclosure. The unsettled and remote character of the elevated land results in high levels of tranquillity and dark night skies. Long views are enabled by the elevation of the land and the low field boundaries and include Dartmoor and Bodmin Moor.

Key characteristics

Topography, geology and drainage

- Elevated land associated with the river valleys, rising to over 190 metres at Tremollet Down and to the south of Milton Abbot. Small streams, rising from springs on the higher slopes, cut folds in the gently rolling landform.
- Complex underlying geology of mudstone, siltstone and sandstone.

Woodland cover

- Woodland is generally sparse, although there are small areas of deciduous woodland which line the narrow stream valleys. These include areas of ancient woodland. Mixed plantation woodland is located at Tailor's Shop Plantation, south of Tremollet Down.
- Mature trees are often located along roads and within field boundaries. There are often wind-sculpted by the exposed conditions.

Land use and field patterns

- Land use is mostly pasture used for grazing sheep or dairy cattle.
- Fields are of mixed size and origin, with both regular and irregular enclosure. Tremollet Down is characterised by a regular field pattern with straight field boundaries, indicative of its relatively recent enclosure in the last century.
- Field boundaries are primarily hedgerows with occasional mature deciduous trees. Trees within boundaries on Tremollet Down tend to be less mature.

Semi-natural habitats

- Deciduous woodland (associated with the heads of stream valleys) including priority habitat and ancient woodland at Watergate Wood and Westhill Wood. Watergate and Westhill Woods also form part of Country Wildlife Sites.
- Roadside verges are species-rich and create wildlife corridors within the farmed landscape.

Archaeology and cultural heritage

- Several of the farms within the LCT are Grade II listed buildings. A disused quarry to the south of Milton Abbot is a remnant of the industrial past of the LCT.
- Small parts of estate woodland within the Endsleigh Grade I Registered Park and Garden extend into the LCT to the south of Milton Abbot.
- The remains of an early field enclosure are visible to the east of Tremollet Down. This is likely to be of Iron Age or Roman origin.

Settlement, road pattern and rights of way

- The LCT is sparsely settled, with scattered farms and cottages, often constructed of stone. The small village of Bray Shop is located on the edge of the Tamara Valley Project Area to the south of Tremollet Down. Most buildings within Bray Shop are modern with no distinct vernacular.
- Roads tend to be relatively straight and narrow. They are often lined by hedgerows which vary in height through the LCT. The A388 and B3257 are located on the edges of Tremollet Down.
- There are no public footpaths or open access areas in the section of the LCT around Tremollet Down. Several narrow roads and tracks cross this part of the LCT and are influenced by the underlying topography with some steep sections as the land slopes down into the adjacent river valley slopes and combes LCT.
- The Tamar Valley Discovery Trail crosses the LCT to the south of Milton Abbot.

Views and perceptual qualities

- The low hedges and limited hedgerow trees result in open skylines with some far-reaching views over the countryside including to Kit Hill, Bodmin Moor and Dartmoor. Roads are often lined by mature trees which can limit views in some locations. Long views are possible where there are breaks in the vegetation e.g. field gates.
- A traditional agricultural landscape with dark night skies and a strong sense of remoteness and exposure.
- There are views of features outside of the LCT including a large abattoir building in Treburley, wind turbines to the north and a telecommunications mast on Caradon Hill (Bodmin Moor).

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- Sparsely settled character with narrow rural lanes which contributes to the perception of a traditional agricultural landscape.
- Historic farm buildings which are often constructed of stone and have a traditional vernacular style.
- The Tamar Valley Discovery Trail long distance footpath which provides access to the traditional rural landscape.
- Small areas of semi-natural woodland which are valued semi-natural habitats and add texture to the landscape. Individual, wind sculpted trees within field boundaries are prominent within the open landscape.
- Hedgerows within the farmed landscape provide useful habitat for farmland birds (e.g. yellowhammer) and also help to prevent agricultural runoff and soil erosion.
- Long, wide views and big skies, enabled by the elevated landform, large fields and low hedgerows with limited trees. Intervisibility with the distinct landforms of Kit Hill, Dartmoor and Bodmin Moor creating a sense of place and orientation.
- The elevation and windy conditions of the landscape create a sense of exposure and remoteness, particularly when compared with the strong sense of enclosure in the adjacent river valleys.
- Dark night skies resulting from the limited development and road infrastructure within the LCT.

Forces for change

Forces for change currently visible in the landscape

- Farm diversification, for example the climbing centre at Eastacott Barn. Farm diversification or intensification is sometimes associated with the development of new, larger structures which contrast with traditional agricultural buildings.
- Renewable energy installations including small-scale solar arrays at farms. A larger scale solar farm is located adjacent to this LCT outside of the Tamara Project Area (near Bray Shop).
- Seasonal increases in traffic levels on narrow rural lanes which diminishes levels of tranquillity and may result in pressure to upgrade and widen roads, eroding the rural character of roads. Fast moving traffic on the A30 detracts from tranquillity. Traffic associated with Greystone Quarry can also impact on the LCT.
- Development of recreational and tourism facilities, including Sherill Farm Holiday Cottages.
- Damage to verges and gateways and soil compaction resulting from heavy farm machinery.

Potential future forces for change

- Uncertain future for the agricultural economy levels of future funding support and market prices for farmed products unknown.
- Woodland planting could lead to a change in the perceptual qualities of the landscape such as sense of exposure and long views.
- Changes in crop and land use due to the effects of climate change and response to changing markets (e.g. bioenergy crops), impacting on the traditional pastoral character of farmland.
- Change in woodland / tree species composition as new pests/diseases spread and species intolerant of water level extremes die back.
- Potential demand for commercial wind farms, as well as solar PV installations and domestic scale turbines taking advantage of the wind resource on the high open ridges.
- Development pressure, particularly close to existing settlement (e.g. Bray Shop).
- Individual hedgerow trees may become more susceptible to damage from the increasing frequency and magnitude of storm events
- Further growth in the popularity of the wider area for recreation and tourism, eroding the landscape's high levels of tranquillity and leading to increased demand for facilities (including conversion of farm buildings and more camping/caravan sites), related infrastructure and increased traffic levels.
- The former downland could be considered a good candidate area for habitat restoration.
- Tremollet Down could be used as a recreation site, to help relieve recreational pressure on Kit Hill.

Manage hedgerows, paying particular regard to their height, in order to maintain the distinct open character and extensive views from the LCT. Hedgerows are linked with woodlands in the adjacent river valleys to create resilient habitat networks. Farm diversification is undertaken in a sensitive manner to preserve the overriding traditional agricultural character with few modern intrusions. Pressure on rural roads is managed sympathetically and opportunities are sought to promote sustainable access.

Landscape guidelines

Protect

- Protect the LCT's far-reaching views and the open character of the undeveloped skylines, avoiding insensitively sited development on prominent ridgelines, where it would be prominent within the wider landscape.
- Conserve the character of the rural lanes and ensure any highway improvements are sympathetic, resisting intrusive signage and other highways infrastructure and following local guidance for management of roadside verges. Screen visually intrusive sections of the main roads which run along the ridgelines.
- Protect the character of historic buildings and ensure that any alterations or conversions are undertaken in a sensitive manner which preserves the distinctiveness of these structures.
- Conserve important heritage features which contribute to the sense of time-depth within the landscape, including the visible remains of an early field enclosure on Tremollet Down and the setting provided to the Grade I Registered Park and Garden at Endsleigh.
- Protect the valued dark night skies, avoiding the introduction of artificial lighting along roads or in new developments.

Manage

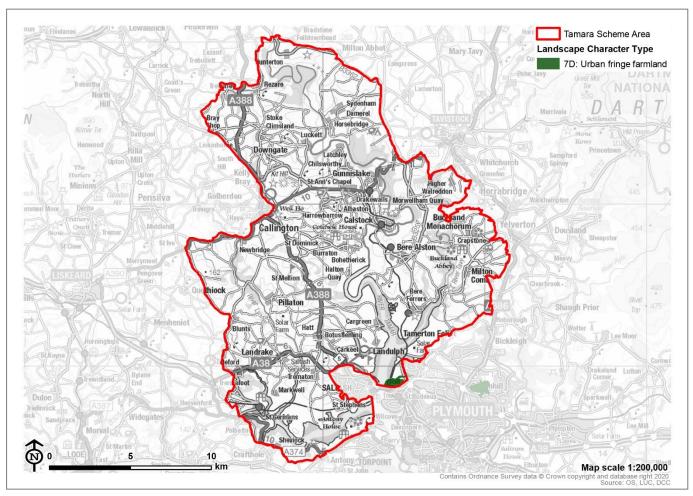
- Manage and enhance the wildlife interest of the farmed landscape, including through the creation and management of species rich roadside verges which form valued wildlife corridors within the farmed landscape (also serving to reduce agricultural run-off and prevent soil erosion).
- Manage the area's plantations and woodlands for sustainable timber production and to enhance their wildlife interest, undertaking appropriate new planting to create green links to surrounding semi-natural habitats.

- Aim for a long-term restructuring of the landscape's mixed and conifer plantations towards a greater balance of climate-resilient, native broadleaf species. Avoid planting trees on the open landscape of Tremollet Down.
- Plan for the potential expansion of nearby settlements, ensuring that any new development is integrated into the landscape. Avoid locating any new development on prominent slopes and ridgelines. Any new development should capitalise upon the screening effects of existing woodlands (as well as appropriate new planting) and undulating topography.





LCT 7D: Urban Fringe Farmland







Summary description of the Landscape Character Type (within the Tamara Project Area)

This LCT covers the north west corner of Plymouth, between Ernesettle and St Budeaux. The area extends west to the Tamar Estuary and its southern extent is bound by the route of the A38, whilst the eastern boundary is marked by the edge of the Tamara Project Area and the northern edge marked by RNAD Ernesettle. The area is steeply sloping with elevated locations offering extensive views, particularly over the estuary to the south-west and towards Cornwall. The elevated land provides an undeveloped backdrop to the northern outskirts of Plymouth and development at Saltash and Torpoint from across the Tamar. Access is limited throughout much of the LCT due to the presence of military buildings and land to the north.

Key characteristics

Topography, geology and drainage

- Sloping land immediately adjacent to the River Tamar, which rises gently inland to the east. Elevation ranges from 5m AOD where it meets the Tamar estuary to 90m AOD directly northeast of Ernesettle Farm.
- The south of the LCT is strongly undulating and elevated land drained by several springs.
- Bedrock from the Upper Devonian period is overlain by alluvial deposits originating from the Tamar.

Woodland cover

- Ernesettle Wood is a tract of ancient semi-natural deciduous woodland. There is also a pocket of deciduous woodland in the southwestern corner of the LCT.
- Elsewhere there are frequent hedgerow trees along field boundaries and patches of scrub providing locally valued habitats and naturalistic texture.

Land use and field patterns

- A former Royal Navy Armaments Depot borders the northern extent of the area exerting its character onto the LCT.
- Farmland mostly consists of rough pasture in irregular fields of various sizes, with fencing and pony paddocks resulting in an urban fringe character.
- Many field boundaries have been replaced with fencing, whilst other boundaries are still marked by mature hedgerows and woodland

Semi-natural habitats

- In addition to the landscape's ancient and semi-natural woodland, scrub and rough grassland habitats are located within the LCT.
- Ernesettle Complex is designated as a County Wildlife Site for notable plant species including grey club-rush, broad-leaved everlasting pea and autumn lady's-tresses. The site is also home to great-green bush-crickets.
- The LCT lies directly adjacent to the Tamar Estuary; a designated SSSI, SPA, SAC and Important Bird Area.

Archaeology and cultural heritage

- Historically important as a defensive vantage point due to the extensive views over the Tamar. This history is evidenced today by the presence of the Ernesettle Battery dating from 1868 (a Scheduled Monument).
- The LCT has a high level of intervisibility with the Grade I listed Royal Albert Bridge, situated directly to the south-west.
- The landscape is also intervisible with a nationally designated D-Day landing craft maintenance site, on the opposite side of the Tamar.

Settlement, road pattern and rights of way

- Settlement is limited to Ernesettle Farm (including the Grade II Ernesettle House) and scattered small-holdings on the edge of Ernesettle Battery.
- The LCT abuts a small development of 20th century bungalows in the east (Ernesettle Crescent), with gardens backing directly onto the landscape.
- There is limited public access into the landscape due to military uses and an absence of rights of way.
- The A38 dual carriageway runs along the southern boundary, with associated noise and movement. The only vehicular access into the landscape is a private track to the farm and road linking to industrial developments at Lower Ernesettle.
- The Tamar Valley Line runs adjacent to the Tamar along the western edge of the LCT an important transport route for local communities and visitors.

Views and perceptual qualities

- There are open, long views over the Tamar to Saltash and Torpoint from higher elevations. These settlements also overlook the LCT from the west and are backed by rising countryside (including within the Cornwall AONB).
- The adjacent River Tamar exerts an estuarine influence on the perceptual qualities of the landscape.
- The LCT forms part of the wider seascape setting to western Plymouth, and a rural gateway into the city when travelling across the Tamar Bridges from Cornwall or along the estuary by boat.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- The visual prominence of the area from the River Tamar and Cornwall (including the AONB), including people arriving into the city by road or rail via the iconic Tamar bridges.
- Valued ancient woodland habitats at Ernesettle Wood.
- Ernesettle Complex County Wildlife Site is valued for its notable plant species and invertebrates.
- Nationally important historic defences at Ernesettle Battery, a Scheduled Monument.

Forces for change

Forces for change currently visible in the landscape

- Light and noise pollution, as well as visual intrusion, from the nearby settlements of Ernesettle and St Budeaux.
- Noise and air pollution from the major road infrastructure of the A38 and the Tamar Bridge crossing.
- Development bordering the LCT including infrastructure associated with the Tamar Bridge Toll, the RNAD Ernesettle MOD land and residential settlement at Ernesettle Crescent – diluting its rural characteristics.
- Some fields are suffering from a lack of grazing, with a spread of brambles and scrub giving an impression of neglect. Conversely, overgrazed pony paddocks have reduced landscape diversity in other locations.
- Lack of hedgerow management also resulting in gappy and overgrown sections, with some lengths replaced by fencing.
- Areas around Ernesettle Fort appear overgrown and neglected, potentially impacting on the condition of the nationally important historic asset and its legibility in the landscape.
- An urban fringe character and some perceptions of neglect associated with the small-holdings surrounding Ernesettle Fort including the abandonment of farm machinery and materials.

Potential future forces for change

- Future expansion of surrounding settlement or MOD owned land encroaching into the countryside diluting its importance as a 'green gateway' into Plymouth and setting to the Tamar.
- Spread of hobby farming as traditional agricultural land uses become less viable in a marginal location resulting in a further erosion of landscape character and loss/decline of traditional landscape features (e.g. hedgerows).
- Sea level rise as a result of climate change, potentially resulting in a significant rise in the estuary's water levels, potentially threatening the longevity of the Tamar Valley Line.

To protect and manage the low-intensity grazing and rough pasture fields, creating an intact habitat network of grassland, scrub, hedgerows and woodland. The steeply undulating landform with commanding viewpoints is protected, as well as the landscape's important function as a 'green gateway' into Plymouth and setting to adjacent development. If compatible with military and agricultural uses, low-key access is facilitated for local communities to enjoy the open countryside on their doorstep. Ernesettle Battery is protected and sensitively managed as an important cultural heritage asset.

Landscape guidelines

Protect

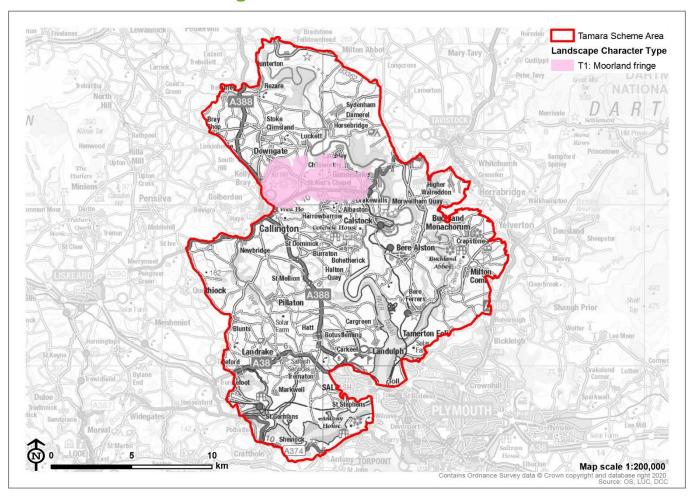
- Protect the role the landscape plays as part of the landscape setting to the River Tamar and 'green gateway' into Plymouth.
- Protect the setting of valued historical monuments such as Ernesettle Battery, the Tamar bridges and the D-Day landing craft maintenance facility (on the opposite bank of the Tamar).
- Ensure development does not result in the loss or fragmentation of valued semi-natural habitats, particularly those within the Ernesettle Complex CWS, areas of ancient woodland and hedgerows.

Manage

- Support a continuation of traditional farming practices within the agricultural land; with appropriate grazing levels to maintain landscape diversity.
- Carefully manage the nationally important Ernesettle Fort, with sensitive grazing to protect its integrity and legibility in the landscape.
- Reinforce field patterns and strengthen wildlife corridors through hedgerow management and re-planting lengths lost (including to fencing).

- Avoid locating development in locations which are visually prominent and/or provide a key part of the setting to the River Tamar and the Tamar Bridges.
- Utilise existing tree cover and topography to screen any future development.
- Pursue opportunities to extend and reconnect habitats within the LCT, including as part of a Green Infrastructure network, utilising native, climate-resilient species wherever possible.
- Promote opportunities to increase access and enjoyment of the landscape, including links to surrounding urban communities (including as part of any new developments).

LCT T1: Moorland Fringe







Summary description of the Landscape Character Type within the Tamara Project Area

This LCT covers Kit Hill, with its prominent chimney, linking to a lower granite ridge extending to the east, including Hingston Down. The edges of the landscape slope steeply down towards the meandering Tamar valley. Kit Hill comprises a summit of unsettled wildland largely covered in lowland heathland, scrub and bracken, with widespread evidence of its mining heritage (all within the World Heritage Site). The lower granite ridge extending to the east comprises improved grassland and arable farmland and scattered settlement. Around the hill on sloping but less steep land the pastoral farmland has a planned pattern enclosed by Cornish hedges. Kit Hill forms a dominant local landmark visible from Bodmin Moor and across the Tamar Valley.

Key characteristics

Topography, geology and drainage

- Dominant, striking granite ridge and domed summit of Kit Hill (334m AOD). The ridge extends eastwards to include Hingston Down (260m).
- The edges of the ridge drop steeply down to the meandering Tamar valley below.
- The metamorphic hard rock gives rise to gleyed wet soils, with important ore deposits supporting past mining activity. Mineral veins and exposed quarry faces at Hingston Down are SSSI-designated.
- Small ponds and springs drain from this upland area into the Tamar and its tributaries.

Woodland cover

- Generally sparse woodland cover owing to exposure, with small bands of broadleaved woodland associated with stream valleys (including small areas of ancient woodland).
- Blocks of mixed and broadleaved plantations are found on the edges of Hingston Down quarries.

Land use and field patterns

- Land use is primarily pastoral farmland, with unenclosed heathland used for open common land grazing on Kit Hill, including by ponies. Some arable fields are found in places.
- The working quarry at Hingston is a significant land use in the centre of the ridge, although it is well screened by woodland.
- A relict prehistoric field system lies on the east side of Kit Hill, with the remainder characterised by recently enclosed medium-sized strongly rectilinear fields. More irregular, medieval fields remain on valley slopes.
- The Cornish hedge boundaries are straight with stunted gorse-dominated hedgerows on the slopes of Kit Hill. Bracken in the hedges across the ridge also conveys an upland feel to the landscape.

Semi-natural habitats

- Small areas of lowland heathland with scrub and bracken are scattered along the ridge, with the largest area on Kit Hill which is a Local Nature Reserve and County Wildlife Site.
- Patches of lowland heathland and grassland are also associated with former mining sites.
- Sylvia's Meadow SSSI, at St Anne's Chapel, is a rare and very important example of species-rich neutral grassland. Nearby, Roundabrrow Cottage Meadow is a County Wildlife Site.

Archaeology and cultural heritage

- The topographical distinctiveness of Kit Hill and Hingston Down made them a focus for Bronze Age ceremonial activity, with a chain of barrows extending along the ridge (Scheduled Monuments).
- A Neolithic long mound lies on the south-eastern slope of Kit Hill and remains of a Middle Bronze Age field system have also been identified on the eastern side.
- Hingston Down was the site of battle between Anglo-Saxon forces and a mixed Cornish-Danish army in 838AD, commemorated by a large 'Saxon' fort (18th century folly) on the summit of Kit Hill.
- All of the landscape is within the Cornwall and West Devon Mining World Heritage Site, with extensive evidence of quarrying and mining activity. Prince of Wales Mine and Gunninslake Clitters are both Scheduled Monuments.
- Ruined engine houses and stacks are scattered throughout, the most prominent being the ornamental 19th century
 example on Kit Hill itself a distinctive local landmark (Grade II listed).

Settlement, road pattern and rights of way

- Settlement is a mix of dispersed post-medieval small farmsteads and unplanned roadside mining settlements (Chilworthy, Drakewalls, St Ann's Chapel, Coxpark).
- The industrial settlements include substantial 20th century mixed developments coalescing along roads, with holiday parks featuring on the edges of development south of the A390.
- The A390 crosses the length of the LCT to the south of Kit Hill, and the B3257 completes a circuit of the Hill to the north.
- Elsewhere there are typical narrow winding lanes tightly enclosed by Cornish hedges. Some notable mature beech tree-lined roads characterise the slopes of the hill.
- Kit Hill is a popular Country Park with car parking and open access land. The Tamar Valley Discovery Trail links the hill with the valley below. Elsewhere, a dispersed network of footpaths links settlements and farms.

Views and perceptual qualities

- Kit Hill is an inspiring and uplifting location with a true moorland feel. It affords far-reaching wide views over the Project Area and beyond, including to Bodmin Moor, Plymouth Sound and Dartmoor National Park.
- This is a landscape of contrasts from the remote, 'wild' expanse of Kit Hill in the west to the dense ribbon development and busy roads to the east.
- Sounds and movements associated with Hingston Down quarry, including heavy vehicles on the B3257, impact locally.
- Run-down smallholdings and agricultural plant depots tend to occur on the ridge, resulting in a sense of neglect.

Valued landscape attributes and features

The most valued landscape attributes and features associated with this LCT in the Tamar Valley include:

- Ornate decorative mining chimney (Grade II listed) on top of the distinctive rounded summit of Kit Hill; collectively forming a major landmark over a wide area.
- Valued areas of remnant heathland, providing habitats for rare species.
- Important recreation destination which provides opportunities for access to the countryside and attracts visitors to the Tamar Valley.
- Internationally and nationally important mining remains through the landscape, along the ridge and especially on the skyline.
- Open landscape across the ridge with few trees and stunted hedges, emphasising an upland character.
- Role as a distinctive backdrop to the lower-lying landscapes and settlements of the Tamar Valley.
- The expansive views across the Tamar Valley and strong visual and character connections with Bodmin Moor to the west (within the Cornwall AONB) and Dartmoor National Park to the east.

Forces for change

Forces for change currently visible in the landscape

- Gappy or lost Cornish hedges, supplemented by post-and-wire fencing or other uncharacteristic boundary treatments, including pony tape and equestrian fencing.
- Noise and movements associated with the busy A390, reverberating across the open landscape.
- Telephone/telegraph poles introducing visual clutter in open, undeveloped skylines.
- Some land and smallholdings appearing neglected, with overgrazed pony paddocks and untidy farmyards (including redundant materials and machinery).
- Fly tipping in evidence along roadsides, further emphasising a sense of neglect in parts.
- Unrestricted ribbon developments and creeping urbanisation along main roads and on the edge of Hingston Down, including 20th century housing and bungalows with mixed vernacular styles.
- Ongoing demand for new housing, which could exacerbate settlement coalescence in the east of the LCT.
- Amenity developments on the southern slopes further detracting from tranquillity, including chalet/static caravan developments.
- Increased use of the Country Park for recreation, including dog walking, with some negative impacts from erosion, litter and traffic. Some interpretation signs are out-of-date and illegible due to age/vandalism.
- Although well screened by trees and woodland, Hingston Down Quarry is a major land use in the centre of the LCT, with associated heavy traffic and noise.
- The Monument on the hill is 'defaced' with telephone masts.

Potential future forces for change

- Uncertain agricultural viability of common land grazing which the heathland habitats on Kit Hill depends on. Reduced grazing levels could lead to the loss and 'scrubbing up' of heathland.
- More intense periods of drought as a result of climate change leading to the 'drying out' of heathland habitats and increased vulnerability to fires.
- Longer growing season and enhanced growth rates of vegetation including bracken, gorse and secondary woodland also impacting on biodiversity, archaeological assets and the landscape's open character.
- Changes in crop and land use due to the effects of climate change and response to changing markets (e.g. bioenergy crops), impacting on the traditional pastoral character of farmland off the hill.
- Increased demand for UK food production leading to an expansion in areas of arable / horticultural production potentially leading to field enlargement, loss of Cornish hedges and development of glasshouses/polytunnels.
- Drive for more renewable energy generation leading to demand for wind turbines and solar farms either within or visible from the LCT (several wind turbines are already highly visible in views to the north).
- Expansion of quarrying operations in response to increased development pressures within and beyond the area.
- Increase in domestic tourism with associated demands for new facilities and infrastructure, as well as an increase in traffic levels, recreational pressure and farm conversions.

Protect the rich cultural and natural heritage of the landscape, retaining its strong sense of tranquillity. Manage and plan the landscape to strengthen resilience to the impacts of climate change, managing sustainable recreational opportunities and promoting greater habitat linkages for a range of public benefits. Protect and promote Kit Hill's significance as a distinctive and dramatic landmark in views from across the Tamar Valley and its local communities.

Landscape guidelines

Protect

- Protect the landscape's open character and the integrity of cultural heritage features by maintaining grazing levels to keep scrub / secondary woodland at bay.
- Conserve the strong field patterns, including medieval fields on slopes. Strengthen the network of Cornish hedges, repairing and reinstating lost lengths in keeping with local character (hedges often sparsely topped by bracken/gorse).
- Conserve the mining settlement and smallholding landscapes around Kit Hill, resisting further development spread along roads.
- Protect the role the landscape, and its monument, plays as a striking and recognisable backdrop to much of the Tamar Valley, with uninterrupted visual connections to Bodmin Moor, Dartmoor National Pak and across the Tamar to Plymouth Sound.

Manage

- Manage and enhance the open heathland habitats through continued livestock grazing at appropriate levels to reduce levels of scrub and bracken. Support the use of local livestock breeds, including cattle and ponies.
- Support a continuation of traditional farming practices in the enclosed landscapes surrounding the hill, with any new agricultural land uses (e.g. food production) incorporated in sympathy with local landscape character.
- Manage the recreational uses of the landscape, ensuring damage to wildlife habitats and archaeology is reduced.
 Improve on-site interpretation to further the understanding of its special landscape, heritage and biodiversity assets.

- Consider the introduction of noise attenuation and reduced lighting on the A390, to reduce impacts on the tranquillity of this LCT.
- Ensure any expansion to quarrying activity does not intrude beyond the ridge summit onto highly visible upper slopes. Any planned expansion should be well screened through new or existing tree cover.
- Enhance biodiversity and landscape resilience by re-establishing heathland and scrub habitats on marginal or redundant land on the slopes of Kit Hill and at Hingston Down and seek to provide better connectivity between habitats.
- Use planning guidelines to encourage the use of sustainable designs and local materials in new developments, and to restrict further creeping urbanisation of area.
- Develop and promote low-key and sustainable recreation opportunities e.g. footpath, cycle and bridleway links to Kit Hill from surrounding settlements.





Appendix A

Table of decisions made for the LCT classification

The table on the following page sets out the key decisions made in creating a new LCT classification across the Tamara Scheme Area

Tamar Valley Landscape Character Assessment May 2020

Table A.1: Decision table for the LCT classification

LCT	Rationale
	Devon – Derived from the West Devon LCT.
1G: Open Inland Plateau	Cornwall – Most of Cornwall CA 22: South East Cornwall Plateau is classified as 1G: Open Inland Plateau. The areas of CA22 to the west of Antony and west of Sconner Down have both been classified as LCT 3G (as they do not have plateau characteristics).
2D: Moorland	Devon – Derived from the West Devon and South Hams LCTs.
Edge Slopes	Cornwall – N/A – this LCT only occurs on the Devon side.
3A: Upper	Devon – N/A – this LCT only occurs on the Cornwall side
Farmed and Wooded Valley Slopes	Cornwall – Cornwall CA 26: East Cornwall and Tamar Moorland Fringe (excepting higher ground to the west of A388 [5A] and small part in the north of the Tamara Scheme Area near Rezare [3G]).
3B: Lower Rolling	Devon – Derived from the South Hams LCT.
Farmed and Settled Valley Slopes	Cornwall – N/A – this LCT only occurs on the Devon side.
2C: Sparocky	Devon – Derived from the West Devon LCT.
3C: Sparsely Settled Farmed Valley Floors	Cornwall – Parts of Cornwall CA 25: Lynher and Tiddy River Valleys, CA 27: Lower Tamar & Tavy Rivers and CA 31: Upper Tamar and Ottery Valleys which are characterised by flat valley floor where the tidal influence has ended.
3G: River Valley	Devon – Derived from the West Devon and South Hams LCTs.
Slopes and Combes	Cornwall – Majority of Cornwall CA 25: Lynher and Tiddy River Valley, CA 27: Lower Tamar & Tavy Rivers, CA 29: Middle Tamar Valley 31 Upper Tamar and Ottery Valleys. Small parts of CA22 and CA26 are also within this LCT.
4A: Estuaries	Devon – Derived from West Devon and South Hams LCTs. Some small amendments have been made to the original classification where areas of land beyond the Mean High Water Mark were classified as 'Estuaries'. This is to ensure that a consistent approach is applied across the whole Tamara Scheme Area. Incidences where the 'Estuaries' LCT extended beyond the Mean High Water Mark have been re-classified as 4B.
	Cornwall – Areas within Cornwall CA 25: Lynher and Tiddy River Valley and CA 27: Lower Tamar & Tavy Rivers which are below the Mean High Water mark.
45.44	Devon – Derived from the West Devon LCT. As per 4A above, some minor changes have been made where boundaries did not align with the Mean High Water mark.
4B: Marine Levels and Coastal Plains	Cornwall – Parts of CA 25: Lynher and Tiddy River Valleys and CA 27: Lower Tamar & Tavy Rivers which are above the Mean High Water mark but are still characterised by estuarine habitats including saltmarsh. It should be noted that the name of the LCT is derived from the Devon Menu and some areas are not 'marine' or 'coastal' e.g. the area around Tideford which is a long way inland but is still tidal. However, the name was retained for consistency across the Tamara Scheme Area.
5A: Inland	Devon – Derived from the West Devon LCT.
Elevated Undulating Land	Cornwall – Part of Cornwall CA 26: East Cornwall And Tamar Moorland Fringe at Tremollet Down which has a distinct character from 3A.
7D: Urban Fringe	Devon - Derived from the Plymouth LCT.
Farmland	Cornwall – N/A – this LCT only occurs on the Devon side.
	Devon – N/A – this LCT only occurs on the Cornwall side and is unique to the Tamar Valley.
T1: Moorland Fringe	Cornwall - Coincides with Cornwall CA 30: Kit Hill. Although it has some similar characteristics to LCT 2D, Kit Hill has a distinct character and does not form the edge of a moorland (as per the application of the LCT around Dartmoor). This is therefore a new LCT defined for this study.

Appendix B

Workshop report

This appendix contains the comments made by attendees on the two main workshop exercises, as well as a list of attendees

Tamar Valley Stakeholder Workshop

Table B.1: List of attendees

Organisation Represented	Name
Tamar Grow Local (TGL)	Simon Platten
Cornwall and West Devon Mining World Heritage Site	Ainsley Cocks
Cornwall Wildlife Trust/Environmental Records Centre for Cornwall and the Isles of Scilly (ERCCIS)	Nic Harrison-White
National Trust	George Holmes
Historic England	Dave Hooley
Environment Agency	Rob Price
Cornwall Council Historic Environment Service	Ann Reynolds
South Hams/West Devon	Katherine Jones
Calstock Parish Council	John Wells
Cornwall Archeological Unit	Cathy Parkes
Devon County Council	Melanie Croll
Eden Project Learning/Cornwall College	Rachel Kaleta
Tamar Valley AONB	Coralie Barrow, Lesley Strong
Farming and Wildlife Advisory group (FWAG)	Luke Dale-Harris
Tamara Landscape Partnership	James Luxton
Tamara Landscape Partnership	Gary Lewis

Tamar Valley Stakeholder Workshop

Table B.2: Exercise 1: What is important/valuable about the different Landscape Character Types?

Landscape Character Type	Consultee responses
1G: Open Inland Plateaux	 Some prominent ridge copses of trees – deliberate planting? Need to keep these distinct Preservation of Cornish hedges and Devon Hedge banks High sense of exposure, close cut and windswept hedges Extensive views; big sky/dark skies (nocturnal living landscape for wildlife and stargazing). Important corridors for a permeable wildlife landscape Quiet lanes with lovely views through gateways Wide open views across elevated landscape Big wide-open feeling, rolling landscape; few trees and very exposed Ridges typically threaded by roads of ten on early routeways, where barrows may give a great sense of time depth Preservation of historic footpaths (Govt. right to roam access law 2026) Useful grazing ground. Fertile enough for pasture-fed finishing of stock bred on uplands. Mineworkers smallholdings – assess extent, location and form; will aid World Heritage Site protection (3A?) Open grassland, beneficial (if in appropriate condition) for certain wildlife including breeding skylarks, meadow pipits, overwintering waders, hares etc. Potential grassland restoration under CS/ELMS for habitat improvement and water/soil protection Wide straight main roads and narrower but straight side lanes fringed with hedgerows
3A: Upper Farmed and Wooded Valley Slopes	Rich Atlantic woodlands/temperate rainforests Rich agricultural heritage, some areas of consolidated medieval fields around villages. Prehistoric landscape survival, roman forts Local industry – quarrying Much recently enclosed former downland, larger field size on Devon side than Cornwall. Mineworkers smallholdings – assess extent, location and form; will aid world heritage site protection (also in 1G) Traditional rural agricultural pattern of fields, hedges, copses, rural buildings, villages Better mosaic of woodland/grassland than some other areas, though poor connectivity. Open views over valleys Relic field system around Bere Alston Fruiting hedgerow trees The pattern of settlement and its relationship with the area, including the location of villages along the river promontories which is so significant historically and today Narrow winding lanes Cotehele House and Gardens including Prospect Tower Daffodil heritage -variety unique. Daffodils in hedgerows from previous land management – cultural importance. Sparse housing, old smallholdings, isolated small groups of cottages Market gardening heritage; Cherry, apple, local varieties of fruit – important cherry culture Small field systems Barrow cemeteries Well preserved medieval strip fields, especially around Harrowbarrow Attractive aesthetic Hidden mining remains and other industrial heritage Historic features e.g. fingerposts, milestones, small features hidden. Hedgerows and field boundaries linking habitats – hedgerow trees very important in landscape High ridgeway main roads with extensive views Small medieval church towns Extends onto areas of former downland
3C: Sparsely Settled Farmed Valley floors	 Lack of development here due to important floodplains Pasture fringing river edges Newbridge is 500 years old this year

Landscape Character Type	Consultee responses
	 Important medieval bridges, historic routes and river crossing points Organic, seasonal farming and local produce ELMS trials Habitat creation High sense of remoteness and tranquillity with little human activity/influence. Few roads and narrow lanes River views Floodplain grazing, much is 19th Century reclaimed land Some large estate ownership Important heritage features – bridges, quays and tin streaming Tranquil river landscape with riparian trees, wildlife and historic bridges – natural beauty A dynamic river system with important riparian habitats (largely distinct from other LCAs) e.g. Water meadows, riverbanks, ponded water, good foraging habitat Mosaic of trees and extensive grassland with better connectivity than other areas High biodiversity value
3G: River Valley Slopes and Combes	Trees, woodland, wildlife and birdsong Rich deciduous woodland with ancient trees and plantations Plantations, historic and modern, often over former market garden/mining sites Market gardening heritage – historic and still existent on Cornwall side. Packing sheds and horticultural buildings, traditional apple/cherry orchards Some mammal habitats. Nature corridors, some of which are connected. Provision of some ecosystem services e.g. flood attenuation Four centuries of solid history written on the landscape Stone walls and steep wildflower banks High sense of enclosure, views often limited in lanes Steep/narrow winding lanes Spectacular scenery where available - wide views over the river valleys. Very attractive landscape. Parts feel remote, isolated and away from it all – tranquil e.g. South of Bere Alston Peaceful with no traffic noise, only the sound of water and trees Good access opportunities - Walking is all year round now Babbling streams, energy and clean. Sparsely populated Moderately managed – riverbanks undisturbed, great for wildlife and river processes Transition from upland to lowland – important link with valley floors Mosaic woodland and grassland, with better connectivity than most other areas A people's landscape – mining, market gardening, the river Useful for pasture-fed livestock breeding Steep woodland, broadleaved and conifer e.g. Tavistock woodland (Bradford-Hutt management technique) Rich landscape, full of natural beauty Very important mining sites
4A: Estuaries	 Natural beauty and quality of water and wildlife, serene, tranquil district Historic landmarks, crossing points and quays e.g. Cotehele. Historically important for local trading in south east Cornwall High quality historic built features, iconic views e.g. viaducts, bridge toll houses Meandering road networks Mudflats Internationally important habitat for birds, fisheries and marine ecosystems. Important for wading birds roosting and breeding, and overwintering species Biodiversity valueimportant for a range of species e.g. otter, little egret, osprey, porpoise etc. Mostly designated SAC/SPA Wide expanses of water with wide open, seascape views (urban skyline on horizon) Sense of place with the mudflats and the cultural Devon/Cornwall border

Landscape Character Type	Consultee responses		
	 Important for leisure and recreation – fishing sailing, canoeing etc Changing water in the landscape creates distinctive perceptual qualities. Constant change of tides creates very powerful diverse sensory experiences e.g. sounds, smells, light on water 		
4B: Marine Levels and Coastal Plains	 Floodplains and salt marshes – important habitat for breeding waders, eels and flounders Deciduous woodland down to high water level Meandering river loops Confluence of three rivers Some historic land reclamation Useful land for sheep grazing Provision of ecosystem services – Flood alleviation, carbon sequestration, pollution management, recreation, habitat Internationally protected for saltmarsh and intertidal resources which are key for carbon sequestration and sense of place as well as geographically restricted rare habitats. Isolated by definition Plymouth Sound National Marine Park Moorland views Reedbeds important for crab potting Changing patterns of mudflats and estuaries Tranquil with good perceptual qualities e.g. Quality of light Important heritage – quays, viaducts and lime kilns Some large areas of estate land e.g. Pentillie Estate 		
5A: Inland Elevated Undulating Land	 Contour-hugging features (scrub, ponds, hedges) for flood protection and safeguarding soils and water supply Few very scattered settlements and farmsteads Generally wide views from the ridgetop roads Wide straight main roads, leading off to small hamlets Most distinctive difference to rest of Cornwall. Open undulated land. Arable/farmed. Large fields with few hedgerows Clean air and the wind Open elevated and exposed farmland Lack of tree canopy Wide open views across the elevated landscape, with big skies Barren, remote feeling Useful arable land with lighter soil. Generally flatter so less risk of runoff/erosion from arable fields. Managed hedgerows – useful habitat for certain breeding birds e.g. yellowhammer 		
T1: Moorland Fringe (Kit Hill)	 Good access, health and wellbeing benefits. You can see the whole valley from here. Best site for visual access to valley and its setting Feeling of openness and freedom. Has wow factor. Heavily used for dog walking Extensive mining landscape with Bronze-Age barrows on ridge. Turnpike road over former downs with extensive views towards Plymouth/Tamar Estuary Important habitat for rare species e.g. cuckoo, linnets, grass snakes Useful ground for breeding cows One of the key attractions for visitors to Tamar Valley Mining settlements heading into Gunnislake Distinctive late enclosure on Hingston Down – very stark against strip fields further south (in LCT 3A) but overlooks this landscape – great to show time depth Treeless landscape, defined by downland heath Country Park, quite a busy place Relatively recent enclosure, few trees and large open vistas. Straight edged large fields. Very important prehistoric archaeological features and landscapes. Ecologically rich heathland Battle of Hingston Down site Very important recreational area for local district. 		

Appendix B Workshop report

Tamar Valley Landscape Character Assessment May 2020

Landscape Character Type	Consultee responses		
	 Views of and from Kit Hill Hingston Down - Important ridge in landscape a dominant feature in views across the valley. Often overshadowed by the more prominent Kit Hill but equally as important historically, culturally and ecologically. time depth history undervalued Kit Hill – Incredible historic legacy – ancient landscape with numerous intricate remains of industry. Open distinct landmark with panoramic views Granite working, pre-industrial and industrial history Remnant downland – important habitat and cultural An isolated area of high ground, formerly extensive open downs 		

Tamar Valley Stakeholder Workshop

Table B.3: Exercise 2 – Current and future forces for change

Landscape Character Type	Current forces for change	Future forces for change / opportunities
1G: Open Inland Plateaux 3A: Upper Farmed and	 Soil erosion and compaction Overstocking – poor hedgerow management Maize - arable Damage to verges from heavy machinery Slurry pits related to intensive cattle farming – also a future pressure Change in market pressures – reduction in beef demand – diversification – renewables Lack of trees in hedgerows – distinct clumps and copses Agroforestry – positive change? (not on plateaux top – lack of trees is characteristic of landscape) Horse paddocks Over-intensification of farming Lack of agricultural infrastructure and grazing advice – linking farming and conservation. Lack of habitat connectivity with other LCTs – opportunity for new links Lack of evidence on heritage assets Conversion of community buildings Land abandonment – decline in market gardening 	 Forest for Cornwall to expand tree cover in the right place (Forest for Devon?) Upstream thinking – improve farming practice ELMS – opportunity to address soil erosion Agricultural diversification as stewardship schemes end e.g. camping/caravans – opportunity to use crops to stabilise soil, sequester carbon etc. Climate change - pests and diseases
3A: Upper Farmed and Wooded Valley Slopes	 Land abandonment – decline in market gardening due to lack of infrastructure – change to horse livery yards and scrubland Mining remains – scrubbing up. Wooded valley slopes act as protection – daffodils Soil erosion/compaction Overuse of chemicals/herbicides Lack of management of hedgerows/trees Intensification and growing maize (on visible slopes) Loss of tree cover Loss of time depth including Repton designed landscapes e.g. Cotehele, Deer Park Farm Solar panels and associated infrastructure (Kingsmill Lake) Lack of accessibility (pressure on other landscapes) Increased traffic on narrow lanes, particularly around visitor hubs Development pressure damaging traditional hamlets e.g. Loss of render on houses such as Metherell Risk to medieval strip fields – development, hedgerow removal Lack of traditional hedge laying – opportunity for ELMS to address Loss of lowland meadows – poor condition Lack of heritage evidence – farmstead architecture 	 Invasive species, particularly in woodlands Hedgerow loss – dilapidation Opportunity for more market gardening (in the right places) Processing of local produce in the landscape e.g. apples, cherries, plums Opportunity to make hedgerows productive e.g. woodfuel, fruit Bring existing woodland into management TB – impact on farms and farmers Knock on effects of gamekeeping e.g. tranquillity, ecological impacts Road improvements – St Mellion bypass Farm amalgamation – small farms struggle to be profitable – opportunity for more innovation here? Less productive areas used for wildlife. Ageing farmers – what will happen next/who will take over? Next generation may not be familiar with local area/character – leading to poor/insensitive/ineffective management
3C: Sparsely settled valley floors	Limited river crossings e.g. Devon-Cornwall (opportunity for Calstock viaduct?) Loss of footpaths – 2026 cut off for definitive map updates Footpaths are important green corridors – need careful management. Strong desire to walk along rivers – e.g. Tamar Valley Discovery Trail. Can	 Improve understanding of historic crossing points Forest of Cornwall tree planting – needs to respect unique ecology of the valleys. Ageing population – who will be the next generation of farmers and market gardeners? (A general issue across TV) Increased mechanisation

Landscape Character Type	Current forces for change	Future forces for change / opportunities		
	we learn from open access elsewhere e.g. Scotland? NO ₂ air pollution particularly around Gunnislake/St Ann's Chapel/ Tideford Currently not wildlife rich – rye grass dominated and intensively grazed Heritage assets at risk – clapper bridges and small historic river crossings characteristic of the regional landscape – at risk from climate change, storms washing away/weakening foundations. Like for like replacement expensive. Ecologically distinct wet woodland habitat (important due to being marginal habitat where ecological processes dominate). Residential/industrial development, including light pollution Risk of over-management in relation to public access/infrastructure e.g. lit car parks, dog bins – loss of wilderness qualities/tranquillity Lack of respect for local detail in historic character e.g. removal of traditional render due to ignorance of local character Village design statements Cornwall local distinctiveness project – design guide. Widening gateways, inappropriate hedge management / restoration (applies to all LCTs)	 Diversification Consolidation or change of land use - acquisition by large landowners Ways to help people reconnect? Land being turned into ornamental gardens Climate change - Land will be underwater for longer. Further marginalisation Opportunities (if farmers compensated?) e.g. wetland habitats, green tourismneed to be aware of past mining waste/contaminated land being exposed Potential for more beavers? Opportunity for water storage due to future droughts (also in 3G): valuable commodity. If more water stored that will allow the cooling of the river to counter impacts of climate change e.g. willow/alder planting along river. 		
3G River Valley Slopes and Combes	 Over management and over trimming of woody vegetation in hedges – need for coppicing and laying Hedgebank collapses after heavy rain Vehicles/farm machinery encroaching into and weakening hedgebanks commercial plantations often obscuring former mining remnants and market gardening plots – opportunity to reuse these? Mosaic of Secondary woodland growing alongside former daffodil plots – great time depth associated with these two especially at Danescombe. Has cultural connections, but also, prone to fly tipping e.g. at Gunnislake Clitters Pressure from camping/caravan sites Increased traffic as a result of increased tourism and pressure from housing development growth. Big issue on narrow lanes. Parking provision also a problem. (Applies to all LCTs) Public transport – buses not used. Railway is a single track with 2 carriages (Bere Alston) upgrading would be costly and impact on heritage 	 'Shifting baseline syndrome' – baseline habitat mapping Ecosystem services – opportunity to leverage funding to reflect cost savings e.g., wellbeing, carbon sequestration Rewetting projects to widen floodplain e.g. Cotehele – ecosystem service provision including habitat, access, flood protection, soil quality, water quality Farmed environment/ELMS – opportunity to reconnect 'islands' of habitat Proactive response to target linkages between County Wildlife Sites by working with farmers Cornwall Environmental Growth Strategy Need to take holistic and informal approach to benefit natural and historic environment, encouraging communication between different specialists (Recognised gap in geology). Natural +historic = landscape – often it is historic land management processes that formed the things we're currently aiming to protect/manage WHS = align with the sustainable development goals. Future development pressure and light pollution from Plymouth, Saltash and Tavistock. Need for active management of trees and hedges to allow regeneration – no need for new planting Invasive species/pests are an increasing threat e.g. giant hogweed, laurel, squirrels. 		

Landscape Character Type	Current forces for change	Future forces for change / opportunities
		 Ash dieback, hedgerow trees at risk. Big impact if lost. Also in storms due to highway safety. Strongly linked with climate change Homogenisation of landscape – need to preserve local distinctiveness e.g. hotspot of rare ecology – heritage collection of daffodils in the landscape. Link to market gardening (growing conditions) Resurgence of interest in local food (e.g. market gardens), different foods, longer growing seasons but different crops, which may not be appropriate for the local conditions or landscape. Uncertainties due to Brexit – agriculture and ELMS Need to think about climate resilience – habitats and species (e.g. sessile oak) spreading north, and new habitats coming in – increase in diversity? Need to take 'think global, act local' approach Knock on effects of gamekeeping e.g.
		tranquillity, ecological impacts.
4A: Estuaries and 4B: Marine Levels and Coastal Plains	 (4A) Use of speedboats and jet skis creating more and bigger waves, resulting in erosion of banks as far upstream as Cotehele Quay. Also causing wildlife disturbance (4B) Removal of the levees from 19th Century 	 Degradation (ongoing) and litter Areas of large populations (e.g. Plymouth) disconnected from the river/estuaries landscape Need to take more account of local people in
	reclamation – has ecological benefits but has led to loss of active market gardening – need tailored management prescriptions for different locations	decision making e.g. where to locate housing, where jobs are, where infrastructure already exists.
	 Saltmarsh and eelgrass beds provide ecosystem service of high carbon sequestration, greater than that of woodland Potential for (exposure of or existence of?) deep peat remains and buried paleo-archaeological remains Public access on river threatening sense of 	Look at connections (past, present and future) between urban areas and rural e.g. timber supply to Plymouth, market gardening supply to Plymouth, limestone from lime kilns from Plymouth. The estuary is an international highway for mining products – potential to reinvigorate this
	wilderness. It is important to retain this sense of	Renewable energy potential – tidal?
	wilderness and tranquillity when considering access enhancements. Public access to the river is heavily designated and needs and balance of users	Managed 'retreats' to make rewilding seen by local people who may be disconnected form their local natural environment – help to reconnect and see value, would have multiple benefits. E.g. Wadebridge
		Climate change – increased flooding and storms. Flood defences unsympathetic. Need to consider CC more during new housing development location. Potential for restoration of reed marsh?
		 Rewetting projects to widen floodplain e.g. Cotehele – ecosystem service provision including habitat, access, flood protection, soil quality, water quality
		 Need to consider upstream impacts when managing downstream – try to hit different ES benefits
		Increasing tourism across the area has financial benefits but there are added pressures e.g. on limited and often historic river crossing points, and potential development of marinas.
		NPPF 'exceptional housing' (architecturally, eco-friendly etc) non-vernacular – quality vs quotas of housing?

Landscape Character Type	Current forces for change	Future forces for change / opportunities
		More sediment in estuaries due to changes in land use (shift away from stocking and cropping. Has knock on effects due to sea level rise
		 Growth of economic importance of Plymouth post Brexit as a harbour could increase navigational demand, resulting in more traffic and deeper channels
		 Wetland habitats are absorbing dissolved organic carbon from the moorlands – transported by the rivers
		 Potential Plymouth Marine Park which could extend into the estuaries and beyond
		Role as a fishery (salmon, sea trout, eels, allis shad – at its northern extent in Europe. The River Tamar is an index river for health of fish stocks. This could be impacted upon by growth of Plymouth as a port (post-Brexit).
5A: Inland Elevated Undulating Land	 Verges & gateways - damage from heavy machinery 	 Worsening traffic - pressure for road upgrades/improvement
-	Soil compaction/erosion Few trees	 Opportunities for public transport improvement (applies to all LCTs)
	Fast moving traffic - shortcut to A30 through	■ ELMS - soil erosion
	villages	Quarry traffic could increase - expanding
	Quarry traffic - large vehicles	Opportunity for re-wilding - former downland
	 Views of renewables in adjacent landscapes Lack of heritage evidence 	Potential for recreation site - take pressure off Kit Hill
T1: Moorland Fringe (Kit Hill)	 Development – housing and static caravans (lack of infrastructure) along A390 Mineworkers small holdings – at risk of development (lack of evidence for this) Lack of evidence of time/depth heritage assets – at risk from inappropriate land management Hingston Down – popular dog walking location, prone to fly tipping – negative impact on heathland habitat Anti-social behaviour including use of drones – difficult to manage as on open access land Power lines – Western Power Impact of active quarrying operations – potential future mineral exploitation which may conflict with residential development Gorse and bracken encroachment – damage to heritage, particularly in relation to visibility and views Lack of connectivity between areas of heathland e.g. Hingston Down 	 Traffic – will get worse when new development completed. Possibly manage with speed cameras. Opportunity here for green space development. May also bring increased recreation pressure and increased air pollution Opportunities to gain more heritage, particularly in relation to heritage Lack of community cohesion – due to an ageing population and high rate of second home ownership Lack of water resources Risk of nitrate pollution from increased recreation ELMS – improved connectivity (to an extent) – Heritage Capital? Industrial ribbon development – quarry road Invasive species Plant diseases Heather moorland and upland grassland at risk form summer fires – MOD land with secret tunnels

Table B.4: Other comments

Landscape Character Type	Comments	
1G: Open Inland Plateaux		ineworkers smallholding – assess extent, location and form as proposed; will aid World Heritage Site otection
	So	pil run off issue
	■ Po	porly managed hedges, over intensive farming, soils need restoring

Landscape Character Type	Comments
	 "Open inland plateaux" isn't capturing the character of areas like Bere Alston – being on the Bere Peninsula with river boundaries almost all around it feels like a place shaped by rivers, rather than inland Soil erosion/protection issues Overmanaged hedgerows and intensive permanent pastures – hostile to wildlife but could be brilliant for wildlife. Seems highly industrialised Very heavily cut hedgerows, poor management Difficult to distinguish this landscape form the surrounding areas
3A: Upper Farmed and Wooded Valley Slopes	 Rewilding following market gardening/mining boom Smaller fields have potential for important farmed habitat if managed appropriately Wooded slopes poorly interconnected and isolated Isolated settlements "farming to the very edge" of semi natural habitats with unprofitable habitats enclosed by fencing – no soft edges Inappropriate hedgerow management Lack of habitat connectivity Not enough farmland trees Opportunity to connect fragmented landscape
3C: Sparsely settled valley floors	 Should be wetlands for flood mitigation Potential for nature recovery network, and beavers! Water meadows need restoring Use modelling to assess bottlenecks for wildlife Nocturnal species becoming more affected by lighting in the countryside here – urbanisation and cultural behaviours and LED lighting High potential for Forest of Cornwall opportunity mapping here
3G River Valley Slopes and Combes	No other comments
4A: Estuaries and 4B: Marine Levels and Coastal Plains	 Recreation access of foot poor More planning consideration to preserving areas around significant cultural and heritage sites e.g. Calstock Viaduct Noise, movement and smells associated with estuary use Electricity infrastructure More restoration of wetlands needed to restore river processes
	 More restoration of wetlands needed for biodiversity and flooding Management Plans of surrounding designated landscapes e.g. Tamar Valley AONB South Downs National Park, Dartmoor National Park Attempt to provide connectivity across a living landscape of terrestrial habitats that are more permeable to allow flow of species and connect metapopulations Rewetting projects in surrounds?
5A: Inland Elevated Undulating Land	 Relatively recently enclosed land has little public access Soil runoff, damage to road verges Bray Shop area – could these areas be better defined by looking at historic layers of landscape here and at Old Tremollet Down? Over-intensive barren farming – soils and hedges need restoring This area relatively less valued? Lacks features, texture and landmarks?

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Landscape Character Type	Comments
	 Avoid tree planting projects (Forest for Cornwall etc) Upland Grassland potential restoration projects
T1: Moorland Fringe (Kit Hill)	 An isolated area of high ground, formerly extensive open downs, rather than moorland fringe – suggest redefining this classification Hingston Down – fragmented ownership and threat of development Quarrying on Hingston Down and Kit Hill Scope for mineworkers' smallholdings on Kit Hill? Settlement creep from St Anns Chapel towards Kit Hill, including prominent caravan park Area needs to be extended, not covered in houses Mining settlements heading into Gunnislake Fast paced main road and road round Kit Hill compared to small lanes leading off these Potential for softening edges of moorland for expanding habitat