

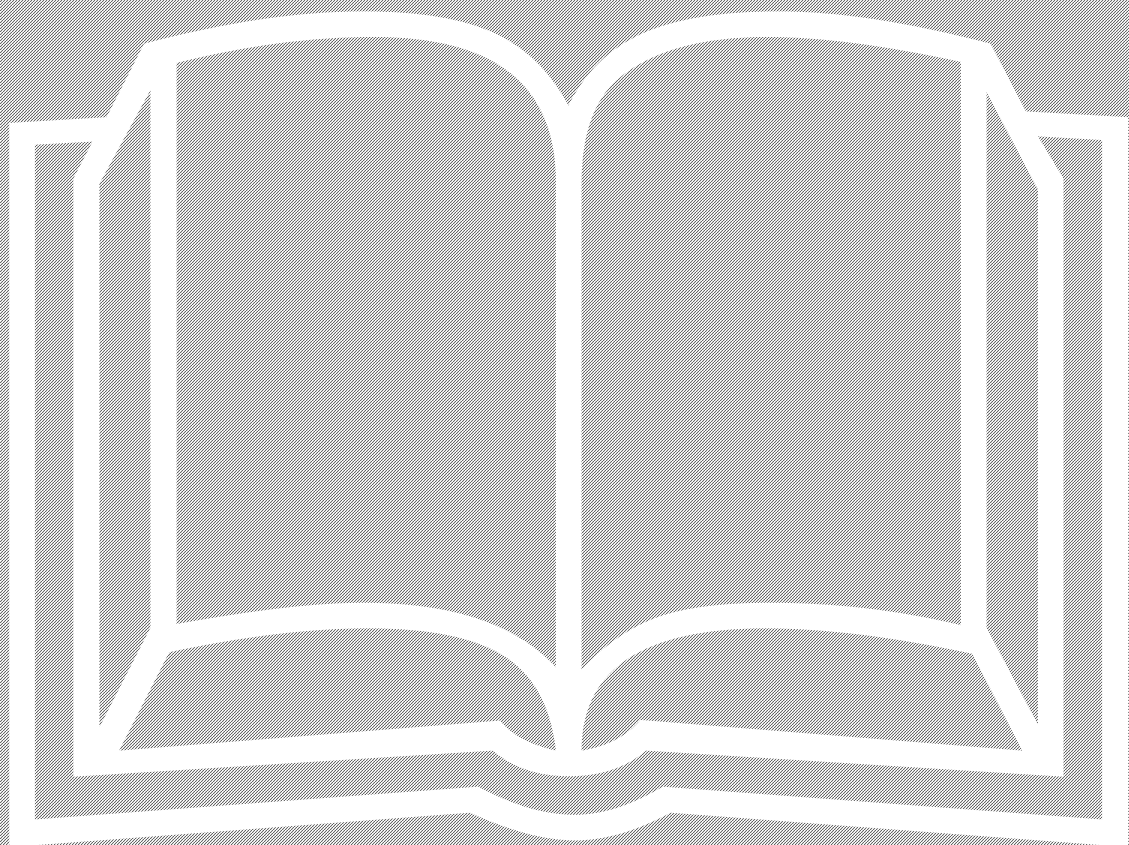


South Hams
District Council

South Hams District Council

Policy Statement on Flood and Coastal Defence

2006



2.2 Section 3 below sets out our plans for reducing or managing the risk of flooding and coastal erosion risk in the Council's area.

Objective (a): *To encourage the provision of adequate and cost effective flood warning systems.*

2.3 Provision of flood warning systems is the responsibility of the Environment Agency. However, South Hams DC recognises its related and important role in emergency planning and response. We will therefore:

- ensure that our emergency response plans include appropriate arrangements for flooding emergencies and that such plans are reviewed, in consultation with the Environment Agency, at least every two years;
- maintain an awareness of the Environment Agency's flood warning dissemination plan for our area and contribute to its implementation as necessary; and
- play an agreed role in any flood warning emergency exercises organised by the Environment Agency covering our area.

Objective (b): *To encourage the provision of adequate, economically, technically and environmentally sound and sustainable flood and coastal defence measures.*

2.4 South Hams DC will: provide an adequate, economically, technically and environmentally sound approach to matters relating to flood and coastal defence. We will:

- adopt a strategic approach to provision of flood and coastal defences, particularly by assessing any potentially wider effects of proposed defences. To this end we will continue to play a full role in Shoreline Management Plans, and Local Environment Agency Plans, for our area;
- when carrying out any works we will aim to provide sustainable flood and coastal defences which provide social and/or economic benefits to people whilst taking account of natural processes and which avoid committing future generations to inappropriate defence options;
- ensure work is carried out in accordance with best practice and to deliver best value for money including (a) keeping up-to-date with policy and technical developments in flood and coastal defence, in particular by reference to Defra guidance, other Government publications and relevant technical manuals; (b) consulting the Environment Agency on flood defence options to ensure that best practice is adopted and shared; and (c) using appropriately qualified experts to advise on analysis and design of works or programmes of management;
- consider alternative approaches to funding, such as Public Private Partnerships;
- where appropriate seek contributions from developers or other direct beneficiaries of works, in accordance with the Office of the Deputy Prime Minister's *Planning Policy Guidance Note 25*;
- ensure that appropriate maintenance regimes are in place for flood and coastal defences for which the Council takes responsibility;
- inform landowners of what responsibilities for maintenance rest with them (see paragraph 3.1 below);

- make publicly available the Council's expenditure plans for flood and coastal defence maintenance and capital works by the production of annual spending reports.

2.5 In addition, South Hams DC will play a positive role in fulfilling our statutory and other responsibilities for furthering nature conservation, including achievement of the Government's environmental obligations and targets. In particular we will:

- fulfil our responsibilities in relation to nationally and internationally important conservation areas, under the Wildlife and Countryside Act 1981 and as a competent authority under the terms of the Conservation (Natural Habitats &c.) Regulations 1994;
- co-operate with English Nature and the Environment Agency in completing and implementing Coastal Habitat Management Plans (CHaMPs) covering our area, drawing on English Nature/Environment Agency guidance for plan production;
- have due consideration for the aims, objectives and policies appertaining to the South Devon Area of Outstanding Natural Beauty and the South Devon Heritage Coast;
- when carrying out flood and coastal defence works, seek opportunities for environmental enhancement, and aim to avoid damage to environmental interest and to ensure no net loss to habitats covered by Biodiversity Action Plans. We will monitor all losses and gains of such habitats as a result of these operations and report on them annually to the Environment Agency; and
- ensure that, for those Water Level Management Plans where we are the lead operating authority, we work in partnership with English Nature to complete, implement and review Plans in accordance with Defra guidance on plan completion and the timetables set out in Defra High Level Targets.

Objective (c): To discourage inappropriate development in areas at risk from flooding and coastal erosion.

2.6 As the local planning authority for our area, South Hams DC will take account of flooding and coastal erosion risks in the preparation of evolving Local Development Framework documents and in all matters relating to development control, including development plans and individual planning applications, in accordance with Planning Policy Guidance Notes 20 and 25.

3. OUR ASSESSMENT OF THE RISK OF FLOODING AND COASTAL EROSION IN OUR AREA AND WHAT WE WILL DO TO REDUCE OR MANAGE THAT RISK

Flood and coastal defence responsibilities

3.1 Apart from certain obligations to protect internationally important habitats under the EC Habitats Directive, all flood and coastal defence works are undertaken under **permissive powers**. This means that operating authorities, such as South Hams District Council, are **not obliged** to carry out flood and coastal defence works. It is also important to note that the Council does not normally accept responsibility for maintenance of flood defences on private land; this is the responsibility of the landowner.

- 3.2 South Hams District Council is the relevant operating authority for:
- flood defences on ordinary watercourses which are not within the area of an internal drainage board; and
 - coast protection (i.e. measures against coastal erosion) on all frontages in the authority's area.
- 3.3 The flood and coastal defences that are owned or managed by the Council are to be detailed in our return for the National Flood and Coastal Defence Database which is maintained by the Environment Agency.
- 3.4 The Environment Agency is the relevant operating authority for flood defences on designated main rivers (including those which, up until transfer in March 2006, were designated critical ordinary watercourses (COWs). See Appendix A for a plan showing Main Rivers and Critical Ordinary Watercourses.
- 3.5 Culverts under adopted roads will generally be the responsibility of the relevant Highway Authority (Devon County Council or Highways Agency).
- 3.6 There is an extensive network of ordinary watercourses within South Hams DC area, for which the Council is the relevant operating authority and, therefore, has discretionary powers for the exercise of maintenance. The Council is responsible for a number of flood alleviation schemes on these ordinary watercourses which it or predecessor authorities have promoted under land drainage legislation. See Appendix B for a plan showing the location of these flood alleviation schemes.

Assessment of flood risk

- 3.7 There are in excess of 700 km of ordinary watercourses for which South Hams DC is the relevant operating authority. These comprise all the watercourses in the Council's area except for lengths of the rivers Plym, Yealm, Erme, Avon, Dart and Harbourne which are designated as main rivers and thus the responsibility of the Environment Agency. There is no internal drainage board operating in the Council's area.
- 3.8 We have agreed with the Environment Agency that within the Council's area there are 4 km of "critical ordinary watercourses" (i.e. watercourses which are not classified as "main river" but which the Council has agreed with the Environment Agency to be critical because they have the potential to put at risk from flooding large numbers of people and property). The watercourses concerned are:
- Kingsbridge West from the hospital to the head of the estuary
 - Kingsbridge East (Dodbrooke) from Springhill to the head of the estuary
 - Dartmouth from Ford to the Boatfloat
 - Totnes, Malt Mill Lake from the embankment dam at Copeland Meadow to the Mill Tail.

These watercourses were transferred to the Environment Agency on 31 March 2006 to be "enmained". Officers of the Council are having further discussions with the Environment Agency to designate the Kingsbridge Redford Stream and pressure pipe from the former railway embankment to the head of the estuary as a further critical ordinary watercourse.

3.9 Based on historical flooding information, coupled with the Environment Agency's indicative flood plain maps, the Council has carried out an assessment of the risk of flooding from the ordinary watercourses in our area. The main areas considered to be at risk of flooding from ordinary water courses are parts of the towns or villages of Dartmouth (Ford Valley), Harberton, Hope Cove, Ivybridge (Woodlands), Littlehempston, Modbury, Torcross and Totnes (Warlands/Victoria Road). See Appendix C for full details of these risk assessments. In addition, the Environment Agency with responsibility for sea defence, are investigating the risk of tidal flooding in the low lying parts of Kingsbridge and Salcombe. The Council is satisfied that there are minimal risks to human life created by these flood risks from ordinary watercourses, but emphasises the need for the Environment Agency's flood warnings to be heeded, where these are provided (see below).

Action to reduce or manage flood risks

- 3.10 The main means by which flood risks will be managed is through the Environment Agency's flood warning dissemination plan. This makes arrangements for warnings to be provided within this Council's area, including individual warnings to high-risk properties. South Hams DC will include plans for responding to both major and minor flooding in its emergency planning procedures and will make arrangements for cascading warnings received from the Environment Agency to relevant Council services.
- 3.11 The Council will put in place an initial programme to inspect and establish the state of flood defences (whether or not owned by the Council) on all ordinary watercourses. See Appendix D for details.
- 3.12 The Council will ensure that regular maintenance is carried out on the flood defences and channels which we own, or for which the Council takes responsibility, so that they operate at optimum efficiency. Where the responsibility for maintenance rests with a landowner, we will aim to secure co-operation in ensuring appropriate maintenance takes place, drawing on enforcement powers if necessary.
- 3.13 The Council's approved Capital Programme includes the schemes at Harberton and Torcross and the catchment study at Hope Cove. The risk assessments detailed in Appendix C identify the following additional actions to be considered for funding through the capital programme:
- catchment study for Dartmouth – Ford Valley,
 - catchment study for Totnes – Victoria Road/Warlands.
- 3.14 The Council will carry out a detailed condition survey of structures, grills, screens, culverts etc for all Council owned or maintained ordinary watercourses and establish a priority list for works of repair and maintenance to be funded from the annual revenue budget.
- 3.15 By following Government guidance in Planning Policy Guidance Note 25 on development in flood risk areas, the Council, acting as a local planning authority, will ensure that risks are further minimised. This includes measures for ensuring sustainable urban drainage systems are provided to control surface water run off, and that Flood Risk Assessments are required for all significant developments.

Assessment of coastal erosion risks

- 3.16 As identified in the 1998 Shoreline Management Plan, of the 90 km of coastline in the Council's area, 6 km is defended against erosion. The remaining frontage consists of natural cliff (74 km) and shingle bank/beach head (10 km). As identified in the Plan, 8 km of the coast has a policy of "Hold the Line" and 82 km has a policy of "Do Nothing".
- 3.17 Risks of erosion of the defended frontages at Kingswear, Dartmouth and Salcombe are low as these defences are primarily masonry/concrete walls. There is, however, an ongoing risk of local instability for those defences located on the Start Bay barrier beaches (Blackpool, Slapton, Beesands, Hallsands) because of the dynamic nature of this system. There is also a risk of local instability at South Milton Sands where the existing temporary defences are reaching the end of their useful working life and at Leasfoot, Thurlestone where re-established soft dune defences have again been destroyed by storm events. Elsewhere on the undefended coast erosion rates for the cliff line are very low.
- 3.18 The Council, as a member of the Lyme Bay and South Devon Coastal Group (now redesignated Durlleston Head to Rame Head Coastal Group) will participate in and benefit from the South West Regional Coastal Monitoring Programme due to commence in Spring 2006 (subject to final confirmation of Defra funding). This 5 year programme to be carried out by external contractors will include annual/biannual topographical beach surveys at specified locations together with LIDAR surveys and aerial photography. In addition, the Council will put in place a programme for regular beach surveys at specific areas at risk supplemented by further surveys after significant storm events.

Action to reduce or manage coastal erosion risks

- 3.19 The Council will put in place a programme to inspect the state of all coastal defences, as required by Defra as one of the High Level Target returns. The Council will ensure that regular maintenance is carried out on the coastal defences that we own or for which the Council takes responsibility, so that they operate efficiently. The Council jointly with Devon County Council will monitor the Slapton Line frontage to the A379 coast road and respond to storm events in accordance with the agreed Contingency Plan. The Council has accepted the findings of the recent Slapton Line Coastal Management Study and, as a member of the Slapton Line Partnership, is actively taking forward the recommendations of the study. The Council, as a member of the Coastal Group, will participate fully with the review of the Shoreline Management Plan.

4. PARTNERSHIPS AND REVIEW OF THIS POLICY STATEMENT

- 4.1 The Council has set out its policy and approach to flood and coastal defence. We recognise the need to work in partnership with central Government and other operating authorities. Our local population also has an important part to play, in recognising the vital importance of watercourses in controlling flood risk and the need to avoid blockages, whether by dumping rubbish or obstructing flows in other ways. We ask members of the public to let us know of any problems which might increase the risk of flooding or coastal erosion.
- 4.2 South Hams DC intends to review this policy statement in three years' time, when it will be revised and reissued as necessary. Meanwhile, the Council welcomes any comments on the approach and policies set out in this statement.

References

¹ Strategy for Flood and Coastal Defence in England and Wales
MAFF and Welsh Office, September 1993

² High Level Targets for Flood and Coastal Defence Operating Authorities and Elaboration of the Environment Agency's Flood Defence Supervisory Duty
MAFF (former Defra), November 1999

³ High Level Targets for Flood and Coastal Erosion Risk Management
Defra March 2005

⁴ Lyme Bay & South Devon Shoreline Management Plan 1998

⁵ Lyme Bay & South Devon Monitoring Action Plan 1999

APPENDICES

APPENDIX A

Plan showing Main Rivers including critical ordinary watercourses.

APPENDIX B

Plan showing locations of flood alleviation schemes and coastal defences owned/maintained by the Council.

APPENDIX C

Areas at risk from flooding from ordinary watercourses.

APPENDIX D

List of flood defences and ordinary watercourses for which the Council has (will have) an inspection programme.

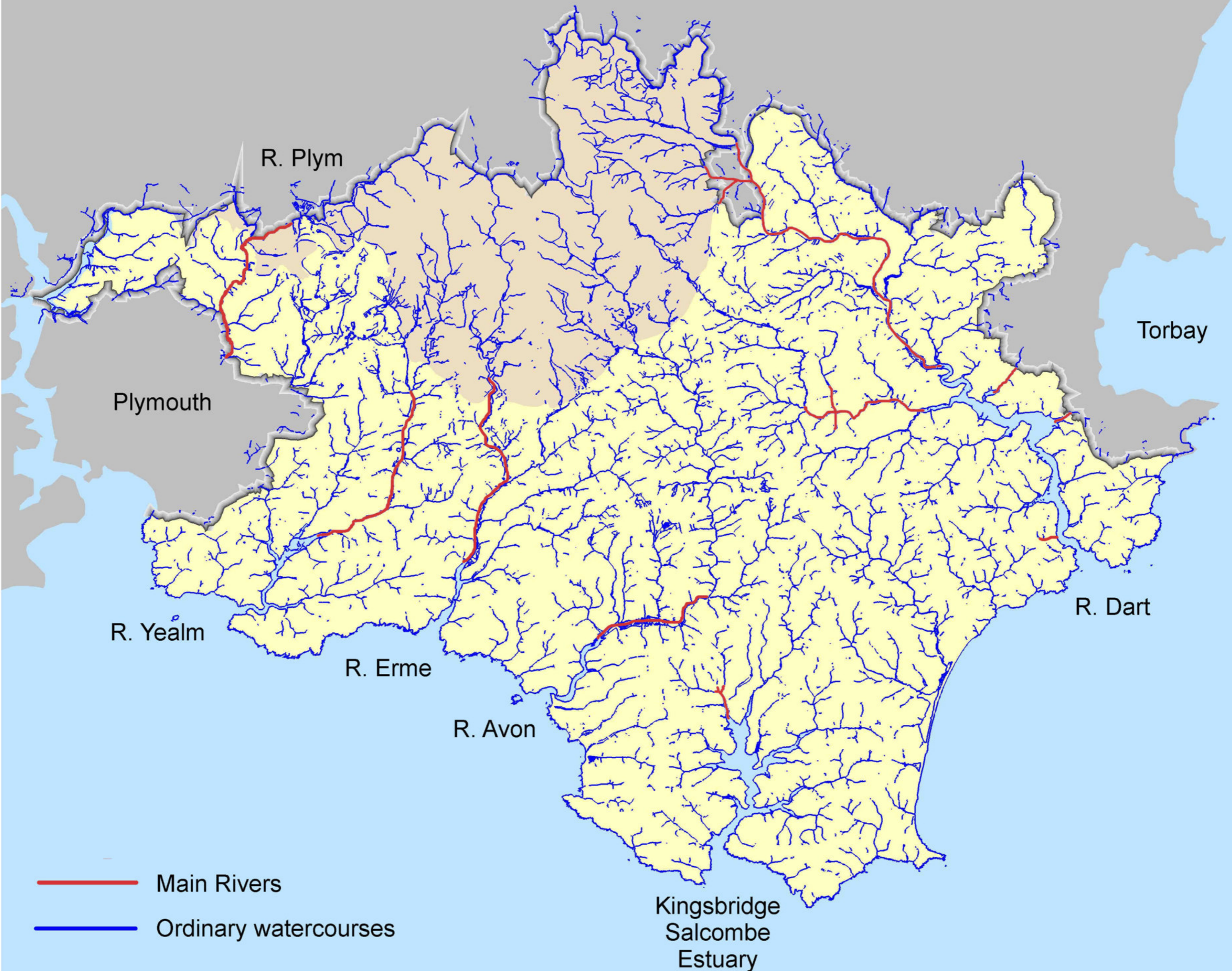
APPENDIX E

List of coastal defences for which the Council has (will have) an inspection programme.

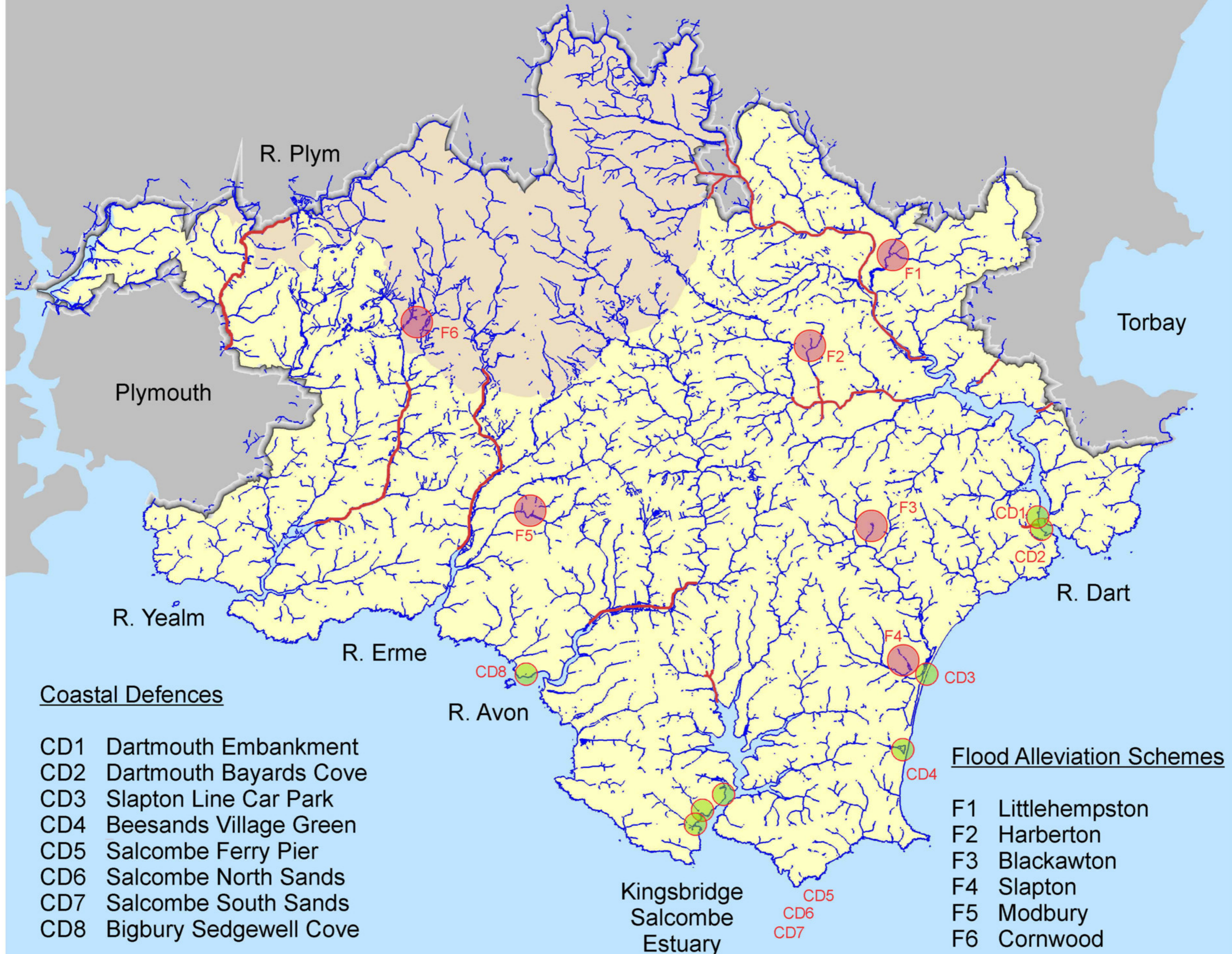
APPENDIX F

Plan extracts from South West Regional Coastal Monitoring Programme (applicable to South Hams). Comprising 12 pages in full colour available from Bill Lawrence.

MAIN RIVERS INCLUDING CRITICAL ORDINARY WATERCOURSES



FLOOD ALLEVIATION SCHEMES AND COASTAL DEFENCES OWNED / MAINTAINED BY THE COUNCIL



Areas at risk from flooding from ordinary water courses

Location	Risk/history	Responsibility	Options
Dartmouth – Ford Valley	<ul style="list-style-type: none"> • Regular flooding in 2002/4/5 of Ford/Victoria Road/Market Square from apparent lack of capacity further up the system • A number of properties/businesses reported to be flooded • Regular overtopping of headwall adjacent 185 Victoria Road with debris deposited on the highway 	<ul style="list-style-type: none"> • In part EA – COW • In part SHDC – surface water drain • In part riparian owners (numerous) • Plus highway culverts 	<ul style="list-style-type: none"> • Catchment study to determine flows and capacity or lack of capacity in existing system • Short term improvements to headwall
Harberton	<ul style="list-style-type: none"> • Flooding of up to 10 properties in village centre on several occasions 	<ul style="list-style-type: none"> • Riparian owners • Highway culverts • Surface water drains under highway 	<ul style="list-style-type: none"> • Flood management scheme for village centre under construction • Possible further improvements to highway drainage by highway authority for properties outside the area benefiting from the current scheme
Hope Cove – Meadowside	<ul style="list-style-type: none"> • Repeated flooding in 1999/2000/2001 from high level leat affecting approximately 10 properties 	<ul style="list-style-type: none"> • Numerous riparian owners in the absence of knowledge of original constructor of leat 	<ul style="list-style-type: none"> • Catchment study required to determine flows and capacity of system
Ivybridge – Woodlands	<ul style="list-style-type: none"> • Regular flooding resulting from blockage of trash screen in Woodlands Park • Overland flow through residential properties 	<ul style="list-style-type: none"> • Land owned by SHDC • Head of adopted surface water sewer the responsibility of SWW 	<ul style="list-style-type: none"> • Ensure SWW clear screen of debris

Areas of risk from flooding from ordinary water courses (cont)

Location	Risk/history	Responsibility	Options
Littlehempston	<ul style="list-style-type: none"> • Flood alleviation scheme carried out in 1995 designed for 1 in 10 year storms • Risk to four properties for flows in excess of design scheme 	<ul style="list-style-type: none"> • Flood alleviation scheme the responsibility of SHDC 	<ul style="list-style-type: none"> • Flood alleviation scheme included on inspection regime
Modbury – Town Centre	<ul style="list-style-type: none"> • Problems experienced from existing surface water culverts (Exeter Inn and Red Lion) of limited capacity • Risk from additional upstream developments 	<ul style="list-style-type: none"> • Part historic surface water drains (riparian owners ?) • Existing flood alleviation scheme – SHDC 	<ul style="list-style-type: none"> • Watching brief
Torcross Chapel	<ul style="list-style-type: none"> • Repeated flooding in 1997/9 due to inadequate (100mm diameter) outfall pipe 	<ul style="list-style-type: none"> • Council approval to progress scheme – minute ref E82/01 	<ul style="list-style-type: none"> • Finalise agreement with Whitley Trust re outfall and progress scheme
Totnes – Warlands/Victoria Road	<ul style="list-style-type: none"> • Repeated flooding due to inadequate surface water ditches/blocked screens/lack of capacity in outfall • Additional development within the catchment (Totnes Southern Area) 	<ul style="list-style-type: none"> • Riparian owners • Highway drains and culverts • Surface water drains (possibly adopted by water authority) • Connection with River Dart – Environment Agency main river 	<ul style="list-style-type: none"> • Catchment study to determine flows and capacity of system

Council owned/maintained flood alleviation schemes

Scheme	Land Ownership	Inspection Regime	Risk/Comments
Blackawton Priory Cottage	Private	twice a year and after storm events	<ul style="list-style-type: none"> • new scheme • inlet structure
Cornwood	Private	annual	<ul style="list-style-type: none"> • surface water drain
Dartmouth Ford Leat structure	Council owned	monthly de-silting and after storms	<ul style="list-style-type: none"> • high risk • has overtopped and flooded adjacent properties • structure in poor condition • asset not the responsibility of the EA even though a COW
Harberton	<ul style="list-style-type: none"> • Private • Highway 	quarterly	<ul style="list-style-type: none"> • under construction • grills and screens
Ivybridge Woodlands Pond and surface water channel	Council owned	monthly and after storms	<ul style="list-style-type: none"> • history of flooding incidences with adjacent screen to SW sewer (responsibility of SWW)
Kingsbridge Recreation Ground	Council owned	monthly	<ul style="list-style-type: none"> • screen to surface water culvert • tidal influence
Kingsbridge Redford Meadow Pressure Pipe and inlet structure	<ul style="list-style-type: none"> • Private • Council owned 	quarterly and after storms	<ul style="list-style-type: none"> • potential COW
Littlehempston flood alleviation scheme	Private	quarterly	<ul style="list-style-type: none"> • flood channels to River Hems and Gatcombe Brook
Modbury town centre flood alleviation scheme	<ul style="list-style-type: none"> • Private • Council owned • Highway 	annual	<ul style="list-style-type: none"> • surface water pipe and culvert
Salcombe North Sands	<ul style="list-style-type: none"> • Council owned • Highway 	quarterly	<ul style="list-style-type: none"> • surface water culvert • history of blockage by seaweed from tidal outlet

Scheme	Land Ownership	Inspection Regime	Risk/Comments
Slapton flood alleviation scheme	Private	twice a year	<ul style="list-style-type: none"> • surface water culvert • inlet grill
Totnes Bridgetown/Westonfields	<ul style="list-style-type: none"> • Private • Council owned 	monthly	<ul style="list-style-type: none"> • grills and screens
Totnes Follaton House	Council owned	monthly	<ul style="list-style-type: none"> • grills and screens
Totnes Southern Area	Council owned	monthly	<ul style="list-style-type: none"> • grills and screens
Totnes Steamer Quay outfalls	Council owned	quarterly	<ul style="list-style-type: none"> • tidal flaps

Ordinary watercourses

Scheme	Land Ownership	Inspection Regime	Risk/Comments
Aveton Gifford	<ul style="list-style-type: none"> • Private • Council owned 	twice a year	<ul style="list-style-type: none"> • previous flooding by village hall
Compton (National Trust)	Private	twice a year	<ul style="list-style-type: none"> • previous flooding history
Dartmouth Ford Valley	Private	quarterly and after storms	<ul style="list-style-type: none"> • chamber by 185 Victoria Road • regular flooding incidences
Goveton	Private	annual	<ul style="list-style-type: none"> • previous history of flooding
Hope Cove man made leat discharging to Mouthwell beach	Private	quarterly	<ul style="list-style-type: none"> • history of flooding
Noss Mayo The Hard	Private	annual	<ul style="list-style-type: none"> • inlet chamber
Stokenham Holbrooke	Private	twice a year	<ul style="list-style-type: none"> • high level leat • previous history of flooding
Torcross Chapel	Private	quarterly	<ul style="list-style-type: none"> • substandard pipe under chapel • previous flooding history

Scheme	Land Ownership	Inspection Regime	Risk/Comments
Yealmpton Church Park	Council owned	twice a year	<ul style="list-style-type: none">• erosion of banks risking adjacent private property• inlet structure

Council owned/maintained coastal defences

Asset	Land Ownership	Inspection Regime	Comments
Beesands Village Green	Council	quarterly and after storm events	<ul style="list-style-type: none"> placed rock armour on derelict gabions at moderate risk of storm damage
Bigbury Sedgewell Cove	Council	quarterly and after storm events	<ul style="list-style-type: none"> rock armour defence
Dartmouth Embankment	Council	quarterly	<ul style="list-style-type: none"> sheet piled wall and capping beam steps by others check for ALWC on sheet piles
Dartmouth Bayards Cove	Council	quarterly	<ul style="list-style-type: none"> masonry quay wall below defence level of embankment
Kingsbridge Quay walls (strictly flood defence)	Council	quarterly	<ul style="list-style-type: none"> masonry quay walls some subsidence of footway above very open free draining structure
Salcombe South Sands Quay	Council	quarterly	<ul style="list-style-type: none"> masonry quay walls require annual pointing history of collapse/failure
Salcombe North Sands Wall	<ul style="list-style-type: none"> Council Highway 	quarterly	<ul style="list-style-type: none"> Council own beach and inland car park/open space County Council responsible for highway walls and rock armour contested
Salcombe Ferry Pier	Council	quarterly	<ul style="list-style-type: none"> coastal defence function subject of feasibility for reconstruction
Salcombe Cliff House Gardens	Council	quarterly	<ul style="list-style-type: none"> masonry sea wall
Salcombe Victoria Quay	Private	quarterly	<ul style="list-style-type: none"> masonry sea wall support DCC maintained PROW responsibility for wall in contention

Asset	Land Ownership	Inspection Regime	Comments
Salcombe Whitestrاند	Council	quarterly	<ul style="list-style-type: none"> • masonry/concrete sea wall • crack movement being investigated
Slapton Line Car Park	<ul style="list-style-type: none"> • Council • Leased 	quarterly and after storm events	<ul style="list-style-type: none"> • concrete revetment blocks severely damaged • temporary shingle bastions
Slapton Line	<ul style="list-style-type: none"> • Council • Leased 	annual and after storm events	<ul style="list-style-type: none"> • as lessee and to monitor shingle movements

Other defences (not Council owned) – SMP monitoring requirement

Asset	Inspection Regime	Comments
Beesands The Cellars	annual and after storm events	<ul style="list-style-type: none"> • privately constructed gabion defences • subject to drastic beach level changes • adjacent access road at threat from erosion
Blackpool Sands	annual	<ul style="list-style-type: none"> • concrete sea wall • revetments • rock armour
Bovisand	annual	<ul style="list-style-type: none"> • sprayed concrete sea wall
Challaborough	annual	<ul style="list-style-type: none"> • rock armour
Hallsands North	twice year	<ul style="list-style-type: none"> • rock armour defence at risk • questionable viability of defence being maintained
Hope Cove	twice a year	<ul style="list-style-type: none"> • harbour wall responsibility of harbour commissioner • masonry walls at back of Inner Hope beach and Mouthwell – responsibility not confirmed
Long Sands/Scabbacombe Sands	annual	<ul style="list-style-type: none"> • former gabion removed • natural realignment?
Mothecombe	annual	<ul style="list-style-type: none"> • gabion defences

Asset	Inspection Regime	Comments
South Milton Sands	annual and after storm events	<ul style="list-style-type: none">• monitoring of erosion• potential retreat the line scheme
Thurlestone Leasfoot	annual and after storm events	<ul style="list-style-type: none">• soft defences now destroyed• erosion risk to PROW