

Cornwall Council

Preliminary Flood Risk Assessment
ANNEX 5 – Chronology of Major Flood Events in Cornwall

June 2011



1800 – 1899

A storm caused coastal flooding affecting a number of communities along the south coast on 19-20 January **1817**. Polperro harbour was destroyed by this storm and Looe was badly damaged.

Truro suffered from numerous flooding events during the **1800s** (1811, 1815, 1818, 1838, 1841, 1844, 1846, 1848 (twice), 1869, 1875, 1880, 1882 (twice), 1885, 1894 and 1899). These were usually associated with high river flows coinciding with high tides.

Known as the Great Flood of 16 July **1847**, due to an intense rainstorm event on Davidstow Moor water collected in the valley and forced a passage of water down the Camel and Inney. Bodmin - Dunmere Valley and the whole area below Dunmere Hill was flooded by the River Camel. Dunmere Bridge was washed away as was the new 40 feet (12 m) high railway bridge. At St. Breward, bridges from Gam Bridge to Dunmere were washed away by a wall of water 12 to 18 feet (3.5-5.5 m) above normal along the River Camel. The devastating floods that swept down from Davidstow Moor washed away all but two of the bridges along the River Camel - Wadebridge and Helland being the only survivors.

Serious flooding occurred in Par and St Blazey in November **1852**.

November **1875** saw heavy rain resulting in serious flooding in Bude, Camelford, Polmorla, Hayle, St Just, Penzance and Truro.

Extreme rainfall in October **1880** resulted in serious flooding in both Bodmin and Truro.

High tides at the end of September and early October **1882** resulted in flooding in Boscastle, Truro, Wadebridge and Padstow.

High tides combined with strong winds and heavy rainfall led to flooding within Truro and Falmouth in February **1885**.

Sustained heavy rainfall in November **1894** led to widespread flooding across Cornwall. There are reports of many bridges and small buildings being swept away by the floodwaters.

In February **1899** a localised cloudburst over Truro led to severe surface water flooding, affecting many houses in the lower part of the city.



1900 – 1959

In October **1903**, flooding due to heavy rainfall affected Bude, Launceston and Boscastle.

River flooding affected Truro and Perranporth in October **1924**.

There is a photographic record of flooding in Par and St Blazey in the **1930s**, but the exact date is not known.

In August **1950** there was flooding in Bude, Boscastle and Camelford.

December **1952** saw river flooding in West Cornwall affecting St Erth, St Just, Penzance, Helston and the Lizard.

On 26 November **1954** heavy rainfall combined with high tides and strong winds resulted in flooding right across Cornwall. More than 150 properties are thought to have flooded: 80 in Lostwithiel, 38 in Gunnilsake and 12 in Truro. In Mevagissey sea water from 40 foot (12 m) high waves was reported to have cascaded down chimneys. The Council Depot in Perranporth was reported to be 6 feet (1.8 m) deep in water.

A severe thunderstorm and heavy rainfall on 8 June **1957** caused flooding in Boscastle, Camelford and Wenford (on the River Camel). A thunderstorm led to 203 mm of rain falling, with 140 mm of it in two and a half hours and about 70mm in one hour. Around 50 properties were flooded at Camelford. This was perhaps the most similar of those documented here to the recent Boscastle event. Evidently there were hail drifts reported of up to 2 feet (0.6 m) deep and although some bridges were destroyed there was no loss of life.

The following June, **1958**, both Boscastle and Camelford were struck again by flash flooding. There was one fatality in Boscastle.

In August **1958** flash flooding occurred in the area around Bude, Stratton and Flexbury. Possibly 64 properties were flooded at Stratton.

The following year, in August **1959**, Perranporth, Truro and St Blazey were flooded.

1960 – 1969

In September **1960**, a combination of rain, high tides and strong winds affected a number of communities along the course of the St Austell River (White River).

In February **1963**, heavy rain led to flooding in Boscastle, Launceston and Treburley (River Inny).

November **1963** saw flooding around Falmouth and The Lizard due to heavy rainfall.

On the 14 July **1965** at Wadebridge, 140mm of rain fell in 220 minutes. Polmorla and Wadebridge suffered from fluvial flooding, with numerous properties flooded.

In February **1966**, flooding occurred around Barrripper, Camborne and Tuckingmill due to blocked drains.

November **1967**, heavy rainfall coinciding with high tides resulted in flooding at Bude, Grogley (River Camel), Polmorla, Perranporth, Lostwithiel and Par.

1970 – 1979

Helston flooded three times in **1970**.

Intense rainfall in October **1973** led to flooding across West Cornwall.

Throughout February **1974** there were numerous reports of flooding across Cornwall caused by a combination of heavy rain and high spring tides. In Millbrook 37 properties were flooded plus 40 in Par and a further 10 in St Blazey.

Christmas Day **1974** saw flooding in Angarrack and Hayle.

In January **1975** there was severe flooding involving 30 properties at Mevagissey and 3 at Pentewan due to a tide-locked channel.

In July **1975** there was flooding due to sewer overload in Pool, flooding 20 properties, and also due to breaching of a leat in St Austell.

In August **1975** further flooding occurred in Pool and Truro also suffered flooding on the same day.

In September **1975** there was flooding at Polgooth, where the stream burst its banks and also at Lanjeth, Sticker and Nanpean, in the St Austell area. Properties also flooded in Truro on the same day.

Later in September **1975**, Penzance and Marazion suffered from flooding due to the sewerage system becoming overloaded in heavy rainfall.

The sewerage system became overloaded again in December **1975** in Penzance, Newlyn and Gulval.

A further eight incidences of flooding were recorded in the Penzance area at the end of January **1976**, mainly due to sewer overload and surface water runoff.

In March **1976** there was extensive flooding around Par and St Blazey and also flooding reported around Morgan Porth and Polmorla and additionally at Porthallow on the same day.

The river breached at Camelford in mid-September **1976**.

Flooding was widespread across Cornwall at the end on September **1976** due to severe storms. The main communities affected included Bude, Wadebridge, Camborne, Pool, Redruth area, St Ives, Penzance, Helston, Falmouth, Truro, St Austell, Par and St Blazey, Lostwithiel and Bodmin. In Polperro there was one fatality and 83 properties flooded.

In July **1977**, tide-locking of sewers resulted in major flooding at Mevagissey with 25 properties flooded.

In August **1977**, heavy rainfall led to surface runoff flooding in St Austell and in the Camborne and Redruth area.

Later in August **1977** similar flooding was recorded around Penzance, St Ives and Hayle, in St Austell, Par, St Blazey and Mevagissey and in Truro.

In October **1977**, river flooding occurred in Truro, Perranporth, Camborne, Hayle and Helston.

December **1977** saw flooding in Penzance and St Ives and also in Lostwithiel, Luxulyan and Seaton.

At the end of December **1977** there was further flooding at Par and St Austell.

Flooding occurred in the area around St Columb Major in March **1978**.

During March **1978** there were numerous reports of surface water runoff problems associated with the roundabout at Long Rock, Penzance.

Penzance and St Just suffered from flooding due to inadequate drainage in December **1978**.

During February **1979** flooding was reported due to both fluvial and surface water sources in Camborne, Hayle, St Just, Penzance, Helston, Mevagissey and Par.

Par flooded again in October **1979**. Tidal flooding also occurred in Wadebridge and Padstow.

At the end of November **1979** Par and Portreath both flooded due to combined high fluvial flows and high tides.

In mid-December **1979** fluvial flooding occurred around Portreath, Porthleven and Helston. 15 properties were flooded at Helston and 60 at Portreath.

At the end of December **1979** and early January 1980 widespread flooding occurred across Cornwall, affecting most of the communities that are vulnerable to fluvial flooding. At Portreath a further 12 properties were flooded and 60 properties flood in Lostwithiel. In Bolingey 11 properties flooded, 8 properties flooded at Helebridge, 20 in Launceston and 14 at Ladock.

1980 – 1989

At the end of January **1980**, severe storms caused disruption in Truro, Porthleven, St Austell and Looe,

In September **1980**, heavy rains caused flooding in Launceston, Altarnun, Bude and St Dennis.

November **1980** saw surface water flooding around Nanpean, Treviscoe and St Austell.

In March **1981** there was fluvial flooding around the River Tamar and its tributaries and also heavy rainfall combined with high spring tides affected Sladesbridge and Fowey.

Fowey was impacted again in October **1981** due to combined storms and high tides, along with Wadebridge and Truro.

In mid-December **1981**, combined fluvial and tidal flooding affected Padstow, Perranporth, Hayle, Falmouth, Truro, Fowey and Looe. In Padstow 38 properties were flooded.

At the end of December **1981** and early January **1982** fluvial and surface water flooding affected the area around St Austell, Par and St Blazey, where 9 properties were affected by surface water flooding.

Padstow was affected by surface water, fluvial and tidal flooding in June **1982**.

In August **1982** inadequate drainage resulted in flooding in Launceston, Bude, Camelford and Bodmin.

Surface water flooding caused problems in Penzance and St Just in July **1983** with 29 properties affected in St Just and 14 in Penzance, as an area of low pressure brought thundery rain as it moved north from Biscay into very warm air over the UK.

Fluvial flooding affected Hayle, Lelant and St Ives in December **1983**.

Also in December **1983**, a combination of storms, gales and high tides caused flooding in Penzance, Fowey and Looe.

Five separate flooding incidents are recorded at St Austell in June, July and August **1984**.

In October **1984**, high tides caused flooding in Polmorla, Wadebridge and Padstow and the tidal defences were overtopped at Chapel Amble.

In November **1984** high tides and heavy rain resulted in major flooding of Fowey with 12 properties flooded and Padstow with 35 properties flooded, with lesser flooding at Wadebridge, Sladesbridge and Perranporth.

The end of December **1984** and early January **1985** saw surface water flooding at Par and Tywardreath.

At the end of January **1985** high tides, severe gales and torrential rain caused flooding in Falmouth and Penryn. Further problems occurred at Penryn and Flushing at the end of March.

Widespread flooding occurred in April **1985** due to heavy rain and high spring tides, affecting Wadebridge and Padstow, Newquay, Hayle, Mousehole, Flushing, Mevagissey, St Blazey,

Fowey, Lostwithiel, Looe, Torpoint and Calstock. In Hayle 25 properties flooded, 11 flooded in Fowey, 9 in Looe, 33 in Wadebridge and 35 in Padstow.

Flooding of the A390 occurred at Par in August and again in October **1985**.

Over Christmas **1985** flooding occurred at Helebridge, Connor Downs and St Just.

In June **1986** Newlyn and Penzance were flooded due to surcharging of the surface water systems. Over the following week, further heavy rainfall led to surface water flooding at Wadebridge, Newquay and Crantock, Grampound, Mevagissey, Bugle, St Austell, St Blazey and Tywardreath, Fowey, Lostwithiel and East Looe.

Heavy downpours in November **1986** resulted in flooding across Mid and East Cornwall, at Egloskerry, Boscastle, Tintagel, Camelford, Blisland and Wenford, Bodmin and Lanivet, Mitchell, Pentewan, Par, Lostwithiel, A38 in the Glyn Valley and at Notter Bridge, and tidal flooding at Lerryn. Probably around 40 properties flooded in Lostwithiel.

In October **1987**, high river levels associated with high spring tides resulted in flooding at Boscastle, Chapel Amble and Polmorla, and high river flows flooded Yeolmbridge, Draynes Valley and the Glyn Valley.

In January **1988** combined storms and high tides caused flooding at Lerryn, Lostwithiel and Looe. On 27 January, a severe thunderstorm over West Cornwall on already saturated ground caused flooding at Perranporth, Redruth and nearby villages, Helston, Constantine, Budock Water, Penryn, Ponsanooth and Perranarworthal, Porth Kea and Calenick, Truro (with significant damage), St Austell and St Blazey. 15 properties flooded in Helston, 15 in Redruth, 12 in Perranporth and 65 in Truro.

A number of flooding incidents occurred at Par throughout the summer of **1988**.

On 11 October **1988** another severe thunderstorm hit Mid-Cornwall. This affected St Newlyn East, Bolingey, Perranporth and St Agnes, Chacewater, Calenick and Truro, Pentewan and St Austell. In Perranporth 16 homes were flooded, but Truro was most affected with many homes and businesses under floodwater.

In December **1989** a high spring tide with storm surge caused flooding at Newlyn and at Lerryn.

Also in December **1989**, high tides combined with storms resulted in flooding at Porthleven and Truro and along the coast at Gorran Haven, Portmellon, Mevagissey and Pentewan, Par and Pontsmill and at Looe.



Victoria Square, Truro, 11 October 1988

1990 – 1999

In February **1990** high tides coupled with gales caused wave overtopping problems along the seafronts at Newquay and St Ives.

In March **1991** surface water runoff from fields caused flooding on to the A30 at Cockwells and Whitecross, near Penzance, and on the same day severe flooding occurred at Lostwithiel.

In June **1991** torrential rain caused flooding at Newquay, Falmouth, the Glyn Valley and Looe.

In May **1992** a short cloudburst resulted in major surface water flooding at Carbis Bay and St Ives, with 60 properties flooded.

Over one week at the end of August **1992** severe storms coinciding with high tides led to flooding across Cornwall. Affected communities include Wadebridge, Hayle and Lelant, Newlyn, Penzance and Long Rock, Helston, Falmouth and Penryn, Perranarworthal, Truro, Pentewan, Bugle, St Blazey and Tywardreath, the Glyn Valley and East Taphouse.

The end of November and beginning of December **1992** were marked by heavy rain causing widespread flooding and exacerbated by high tides in coastal areas. Affected areas included Wadebridge, Crofthandy, Camborne, Crowlas, Penryn, Perranarworthal, Mevagissey, St Austell, St Blazey, Luxulyan, Nanstallon and Lanivet, the Glyn Valley, Middle Taphouse and Dobwalls, Lostwithiel and Lerryn and Menheniot, Hessenford, Tideford and St Germans.

In December **1992** fluvial flooding occurred at Blisland, Newquay, Tregony and at six locations along the course of the River Lynher.

In May **1993** severe storms caused fluvial and surface water flooding affecting Altarnun, Rumford and Mawgan Porth, Fraddon, Roche, Polmassick, Goran Haven and Mevagissey, Polgooth, Trewoon, St Austell and Par, Pantersbridge and Trewidland near Liskeard and Hessenford. In Mevagissey 13 properties were flooded.

On 9 June **1993** torrential rainfall caused major flooding in Helston. The intensity of rainfall measured at RNAS Culdrose recorded 125mm of rain in the 9 hours to 0900 as a thundery low moved north from Biscay, 92mm of this in the 2 hours to 0800. Flooding on this day also hit Penzance, Porthleven, St Just and Yeolmbridge.

On 12 June **1993** there was major damage caused by fluvial and surface water flooding due to severe storms across north east Cornwall. Areas affected included Bude and Helebridge, Boyton, North Petherwin, Yeolmbridge and Werrington, Tremail and Tresparrett near Davidstow, Slaughterbridge, Camelford and eight other locations on the Camel between Camelford and Blisland, St Tudy, Helland, Bodmin and area, Sladesbridge and Wadebridge, and eight locations along the River Allen



between Delabole and Wadebridge. A few days later flooding affected Newquay, Porthleven, Helston and Porkellis, and Goran Haven and Mevagissey. In Helston 50 properties were flooded, 60 were flooded in Porthleven and 19 in Sladesbridge. A few days later, 71 properties were flooded in Bude, 7 in Camelford, 20 in Sladesbridge and 8 in Helebridge.

At the end of November, beginning of December **1993**, there was fluvial and surface water flooding affecting the St Austell area, including Portloe, Porthmellon, Lanjeth and Penwithick, St Austell, Par and St Blazey and Hessenford. 8 properties flooded in Par and 13 in Hessenford.

Over 30 December **1993** and 1 January **1994** very heavy rainfall resulted in serious fluvial and surface water flooding of some 200 properties in a swathe across Cornwall. Areas

affected included Newquay, Perranporth and St Agnes, Blackwater and Crofthandy, Hayle, Penzance, Constantine, Devoran, Calenick and Truro, Tresillian, Ladock and Grampound, St Stephen, Mevagissey and Pentewan, St Austell and surrounding villages, Penwithick and Bugle, Par and Tywardreath and Polperro. In Perranporth 45 properties were flooded, 50 in Polperro, 50 at Tresillian and 20 in Ladock.

In February **1994** an estimated 15 properties flooded in Perranporth from the Perrancoombe Stream.

At the end of December **1994** and beginning of January **1995**, heavy rainfall caused fluvial and surface water flooding in St Columb Major, Gilberts Coombe and Portreath, Hayle, Ladock, St Veep, Gunnislake and Altarnun. In Portreath 20 properties were flooded.

On 28 February **1995** there were 24 flood incidents all within a radius of about 10 km from St Austell, including Lanivet, Luxulyan, Lostwithiel, Roche and Bugle, Stenalees and Penwithick, Par and St Blazey, St Austell and Mevagissey. In Mevagissey 25 properties were flooded and 16 in Par.

In December **1995** 12 riverside properties were flooded in Lerryn.

In January **1996** a combination of high river flows and high tides affected Sladesbridge, Gillan Harbour on the Lizard, Lerryn and Polperro. An estimated 10 properties flooded in each of Polperro and Lerryn

An event on 1 February **1996** resulted in flooding of more than 100 properties in the area to the east of Looe, including Menheniot, Hessenford and Seaton, Tideford, Polbathic and St Germans. 5 properties flooded in Polbathic, 66 in Seaton and 24 in St Germans.

Heavy rain in the first two weeks of March **1996** resulted in flood problems in many parts of Cornwall including the Tintagel area, Port Isaac, St Issey, Lelant and Nancledra area, St Just, Marazion, Chasewater, Cusgarne and Bissoe on the River Carnon, Veryan and Tresillian, Lerryn, Pelynt and Sandplace, Menheniot, Altarnun and North Petherwin. In Tintagel 12 properties were flooded by surface water, 6 in Trebarwith and 12 at Tresillian.

In April **1996** high spring tides resulted in flooding of 20 properties in Wadebridge. In May **1996** and an estimated 15 properties were flooded from the River Fowey in Lostwithiel.

On 7 November **1997** heavy rain resulted in flash flooding at Mousehole, Newlyn, Penzance and Crowlas.

At the end of November **1997** severe thunderstorms caused flooding in the St Austell area. It was estimated 40-85mm of rainfall fell on saturated ground in 15 minutes. Communities affected included Goran Haven, Pentewan, Coombe, Lanjeth and Nanpean, Sticker, Polgooth and London Apprentice, St Austell and Par Moor. 40 properties were flooded by surface water at Pentewan and 15 by river flooding at Polgooth.

In late January **1999** heavy rainfall caused fluvial and surface water runoff problems around South East Cornwall affecting East Taphouse, Looe, Seaton and Menheniot, St Germans and Tideford, Stoke Climsland and Gunnislake.

Substantial fluvial flooding occurred between 17 and 25 December **1999** due to sustained heavy rainfall. The main problem areas were around Bude, Boscastle, Camelford, around Wadebridge, Bodmin area (where Bodmin Fire Station flooded), Mitchell and Zelah, Mousehole and Heamoor, Budock Water, Perranarworthal, Calenick and Truro, Ladock and Grampound, Pentewan, Par and St Blazey, Lostwithiel, Lerryn and Golant, Herodsfoot, Looe, Seaton, Menheniot, Minions, Newbridge and St Mellion, Tideford and St Germans, Millbrook, Calstock and Gunnislake, Launceston and Yeolmbridge. In Bude 29 properties were flooded by surcharging sewers and 25 by ordinary watercourses. 8 properties flooded at Helebridge, 10 at Marhanchurch and 7 at Lostwithiel.

2000 – 2010

At the end of October and into November **2000** sustained rainfall led to fluvial flooding in the eastern parts of the county. Affected areas include Bude and Stratton, Boscastle, St Tudy, Sladesbridge and Polmorla, Bodmin, St Just, Ladock, Luxulyan, Lostwithiel, Middle Taphouse, East Looe, Dobwalls, Menheniot and Liskeard, Cremyll, Calstock, Gunnislake and Chillsworthy, Stoke Climsland and Polson Bridge at Launceston.

On 7 and 8 December **2000** more fluvial and surface water flooding occurred, mainly in Sladesbridge and Pormorla, Bodmin, Perranporth, Praze-an-Beeble, Truro, Veryan, Ladock, Polperro and Pelynt, villages along the East Looe River and Seaton River around Liskeard, Tideford and Saltash and at Gunnislake.

The following week further flooding occurred in the Portreath Valley, Stithians, Grampound, Bugle, Lanreath, St Neot, Sheviock, St Mellion, Gunnislake, Launceston and Tamarstone. The A3058 between St Stephen and St Austell and the A391 at bugle were both closed with vehicles abandoned in the floods.

The last week in January **2001** saw flooding in the south east of the county due to surface water runoff at Sandplace, Upton Cross and Rilla Mill, St Mellion and villages around Gunnislake.

Flash flooding in July and August **2001** saw roads and properties flooded in Bodmin and businesses flooded in Falmouth and in Looe.

At the end of January **2002** an estimated 10 properties flooded at Gilberts Coombe, by the Portreath Stream.

On 1 February **2002**, high spring tides resulted in tidal flooding at Sladebridge on the north coast and on the south coast at Mevagissey, Polkerris, Fowey, Golant, Lerryn and Lostwithiel, Cremyll and Calstock.

On 13 November **2002** heavy rainfall resulted in fluvial flooding in West Cornwall at Gwithian, St Erth, Lelant, Carbis Bay and St Ives, Nancledra, Newlyn, Penzance and Heamoor and at Marazion, Ludgvan and Crowlas. At Crowlas 20 properties flooded and 6 at Chyandour. 39 properties flooded at St Ives and 9 at St Erth.

Two weeks later, on 27 November **2002**, more heavy rain led to further fluvial and surface water flooding at Boscastle, Bodmin, Polmorla, a caravan park near St Eval, St Columb Minor and Newquay, Scorrier, Lanner, Redruth and the Portreath Valley, Troon and Camborne, Leedstown, Crowlas, Gunwallow, Gweek, Porkellis and Burras on the River Cober, Ponsanooth and Perranaworthal, Calenick and Truro, and Laddock

Heavy rainfall on New Year's Eve/Day **2002-2003** resulted in fluvial and surface water flooding, mainly centred on West Cornwall. Affected locations include Fexbury/Bude, Redruth, Lanner and the Portreath Valley, Carnkie, Carn Brea, Illogan and Camborne, Angarrack and Hayle, Relubbus and St Erth, Sennen Cove, Lamorna and Mousehole, Marazion, Praa Sands, Breage and Porthleven, Helston, Gweek, Constantine, Porkellis, Burras and Wendron on the Cober, Budock Water and Falmouth, Tresillian, Goran Haven, St Austell, Par and Luxulyan, Herodsfoot, Pilaton and Lowley Bridge near Launceston. In Helston 20 properties flooded and 8 flooded at Gweek. 7 flooded in Redruth and 10 in Lanner.

At the end of July **2003** heavy rainfall caused fluvial and surface water flooding in Bodmin and Lanivet, Lanner, Redruth, Pool, Carn Brea and the Portreath Valley, Newlyn and Mousehole, Crowlas and Whitecross, Breage and Helston, Tywardreath and Common Moor on the River Fowey.

On 12 August **2004**, surface water problems following heavy rainfall affected Pelynt, Liskeard, Common Moor and Minions in the south east of Cornwall and also tidal flooding impacted on Saltash.

A few days later, on 16 August **2004** the well known Boscastle event occurred. Though less well documented than for Boscastle, flash floods also hit Crackington Haven at the same time. From 16 to 18 August, flooding impacted on Bude, Canworthy Water and Ottersham, Slaughterbridge, Camelford and Tintagel, in North East Cornwall, and also Perranporth, Redruth and Portreath, Camborne and Praze-an-Beeble, Hayle, St Erth, Carbis Bay and St Ives, Crowlas, Marazion, Relubbus and Goldsithney, Helston, Mullion, and Penryn in the west of Cornwall. In Boscastle 60 properties flooded, 5 in Helebridge and many also flooded in Crackington Haven. At Praze-an-Beeble 9 properties flooded.

On 27 October **2004** a combination of high tides and severe storms caused extensive damage along the south coast, particularly in Looe (road closures and people evacuated from their homes into the church hall), Fowey and Penzance, but also affected Lamorna, Mousehole and Newlyn, Porthleven, Falmouth, Flushing (40 homes under water), Penryn, Mylor Bridge, Peranarworthal, Devoran and Point, St Mawes, Truro and Tresillian, Goran Haven, Portmellon, Mevagissey and Pentewan, Par, Lostwithiel, Polperro, Seaton and at Kingsand, Torpoint and Saltash. In Fowey 32 properties flooded, 50 flooded in Looe and 25 in Penzance.



In October **2005** heavy rains led to flooding at Camborne, Bodmin and Lanivet, Launceston, St Austell, Par and St Blazey, Penryn, Marazion, Millbrook, Torpoint, Callington, Davidstow and Wadebridge.

At the end of March **2006** high spring tides affected both north and south coasts with flooding reported at Bude, Boscastle, Wadebridge, Perranporth, Portreath, Hayle, St Erth and Lelant, Newlyn and Penzance, Gweek, Flushing, Pentewan, Par, Fowey, Looe and Saltash. An estimated 15 properties flooded at Looe, with 0.6 m of floodwater in front of the fire station after the quay overtopped in three places.

Between 6 and 8 October **2006** exceptionally high spring tides combined with a storm surge to cause tidal flooding at Widemouth Bay, Trebarwith Strand, Port Isaac, Polzeath, Mawgan Porth, Porth and Newquay, Perranporth, Portreath, St Ives, Penzance, Flushing, Penryn, Perranarworthal, Mevagissey, Fowey and Looe. In East and West Looe an estimated 80 properties were flooded.

At the end of November **2006** severe rainfall caused flooding close to the Devon border affecting Callington, Saltash, Halton Quay, Harrowbarrow, Gunnislake and Polson Bridge at Launceston. In Gunnislake 20 properties flooded due to blocked gullies and culverts.

On 9 February **2007** a number of surface water problems reported. In Penryn one commercial property and a residential property were flooded to a depth of 0.7 m and the Truro to Falmouth railway line was closed due to flooding.

In March **2008**, high spring tides combined with strong winds and a storm surge resulted in flooding at both north and south coasts affecting Bude, Boscastle, Port Gaverne, Port Isaac and Port Quin, Polzeath, Padstow and Trevone, Sladesbridge and Wadebridge, Porth (Newquay), Perranporth, Portreath, Hayle and St Ives, Gweek, Swanpool, Penryn and Mylor

Bridge, Tresillian, Fowey, Golant, Lerryn and Lostwithiel, Looe and Saltash. In Fowey 8 properties flooded and 6 flooded in Perranporth, where the sea front had to be closed by emergency services. In Polzeath 3 properties flooded, 3 properties flooded and a road was badly damaged in Port Gaverne and in Port Isaac at least 7 properties flooded including the life boat station.

In July **2008**, heavy rainfall caused flooding at Minions, Canworthy Water, Polson Bridge, Otterham and Yeolmbridge in East Cornwall.

In August **2008** heavy rain led to flooding of roads and properties in St Austell, Falmouth, Penryn, Polbathic, St Germans, Herodsfoot and Canworthy Water. In Lostwithiel the Tanhouse Stream broke its banks flooding 4 properties.

In mid-December **2008** heavy rainfall led to road and property flooding in North Cornwall. Fire crews had to rescue people from vehicles in Boscastle and in Launceston.

On 24 April **2009** a severe storm affected West Cornwall. The worst hit areas were Zennor and St Ives, with many streets and properties under water. At Poniou near Zennor there were 3 fatalities when a car was washed off a small bridge. On the Coastal Path 7 footbridges were washed away.

On 2 July **2009** Truro was affected by localised heavy rainfall. The railway station was closed after torrential rain caused the roof to cave in above the ticket office. Part of an isolation ward at Royal Cornwall Hospital Treliske was also closed after water seeped through the roof. Two shops on Victoria Square were forced to close after 0.3 m of water washed into their premises.

On 17 November **2010** severe flooding occurred in Mid-Cornwall and especially St Austell Bay area following an overnight storm. In excess of 400 properties were flooded including the St Austell Market and the Eden Project. Flooding affected St Austell, Par and St Blazey (more than 50 properties), Altarnun, Lostwithiel (40 properties), Mevagissey (100 properties) and Pentewan (15 properties). Many properties were flooded to a depth of 1.5 m. There were major concerns over the stability of the historic bridge at Lostwithiel and the A38 and mainline railway in the Glynn Valley had to be closed following a landslide.