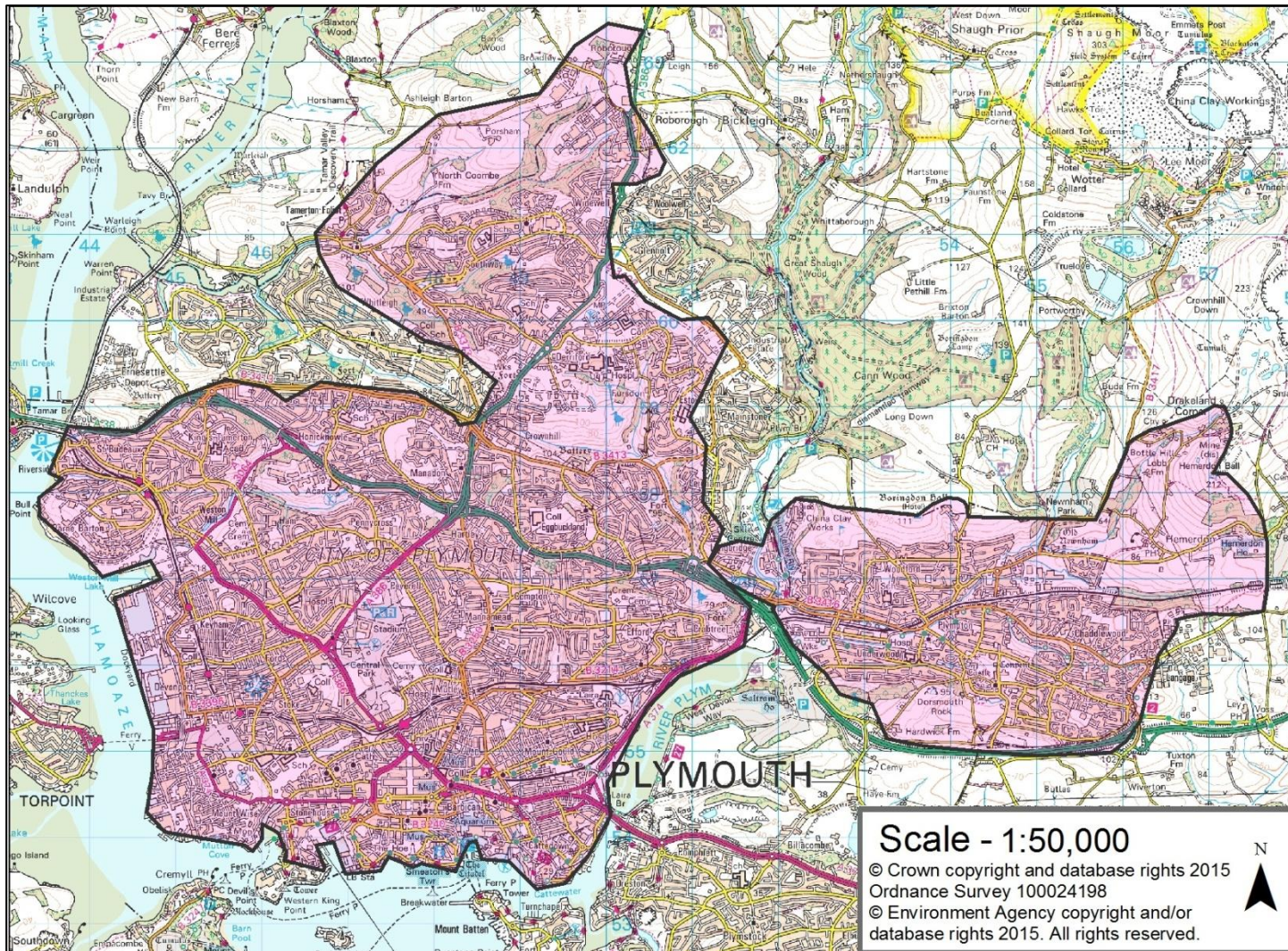


Critical Drainage Area (CDA)

DEVON – Plymouth

May 2015



Catchment Drainage / Flooding Issues

Many catchments within the City of Plymouth are small, steep and heavily urbanised making them prone to 'flash' flooding during heavy rainfall events. Other critical drainage problems include flooding and water quality problems resulting from the reliance on combined drainage systems (where surface water uses the same pipes as foul water) in many areas of the City and flooding associated with high tides restricting the discharge of surface water from low lying land.

Climate change predictions, which indicate that the frequency and intensity of short, heavy rain storms will increase, will mean these problems are likely to be exacerbated.

These critical drainage problems necessitate additional measures to manage surface water flood risk and the management of water quality, particularly in relation to Plymouth's designated bathing waters and Water Framework Directive objectives. New surface water drainage connections should not be made to the combined drainage system and we are working together with Plymouth City Council and South West Water to deliver new surface water networks in order to provide appropriate connection points for new developments.

Minimum Drainage Standards Required

All new developments will have to play their part in reducing current rainfall runoff rates. This requirement also applies to brownfield sites that will have to match the same standards. The surface water drainage hierarchy should be followed by using infiltration as far as is practicable. Further guidance on such systems can be found in the CIRIA SuDS Manual and in Lead Local Flood Authority guidance.

All off-site surface water discharges from developments should mimic greenfield performance up to a maximum 1 in 10 year discharge rate. On site all surface water should be safely managed up to the 1 in 100 plus climate change conditions. This will require additional water storage areas to be created thereby contributing to a reduction in flooding downstream.

