



the River Restoration Centre

Working to restore and enhance our rivers

Technical Advice

Upper River Darent Catchment, Kent Identification of options for improvement

KEY INFO

Date: February 2022

Client: South East Water

Type: Catchment Assessment

Themes: Hydromorphological assessment



RRC were commissioned to assess the hydromorphological condition (habitat and morphological quality) of the upper River Darent and Honeypot Stream and suggest options for improvement. A catchment and reach scale field and desk-based assessment were completed to identify the pressures and impacts on the hydromorphological condition of the upper River Darent, tributaries and Honeypot Stream.

The field survey involved completing River Habitat Surveys on 6 reaches on the upper River Darent, 6 tributaries and 3 reaches on Honeypot Stream, a 360° photo survey and assessment of catchment and reach scale pressures and impacts.

The results of the field survey showed that the rivers surveyed have been historically modified (through mills, realignment, bank protection, damming, weirs, riparian zone modifications) resulting in poor habitat and riparian quality.

As a result, most of the rivers within the catchment show a departure from semi-natural condition.

The top hydromorphological impacts (the responses to pressures) were identified being:



(1) lack of diversity of channel bed and bank forms resulting in a lack of natural processes and poor river habitat quality;

(2) poor longitudinal connectivity restricting sediment and species movement through the catchment,

(3) unnatural flow regime due to abstraction; and

(4) poor diversity riparian vegetation quality.

The report outlines a list of options which are prioritised for tackling these catchment wide impacts and outlines next steps for improvement.