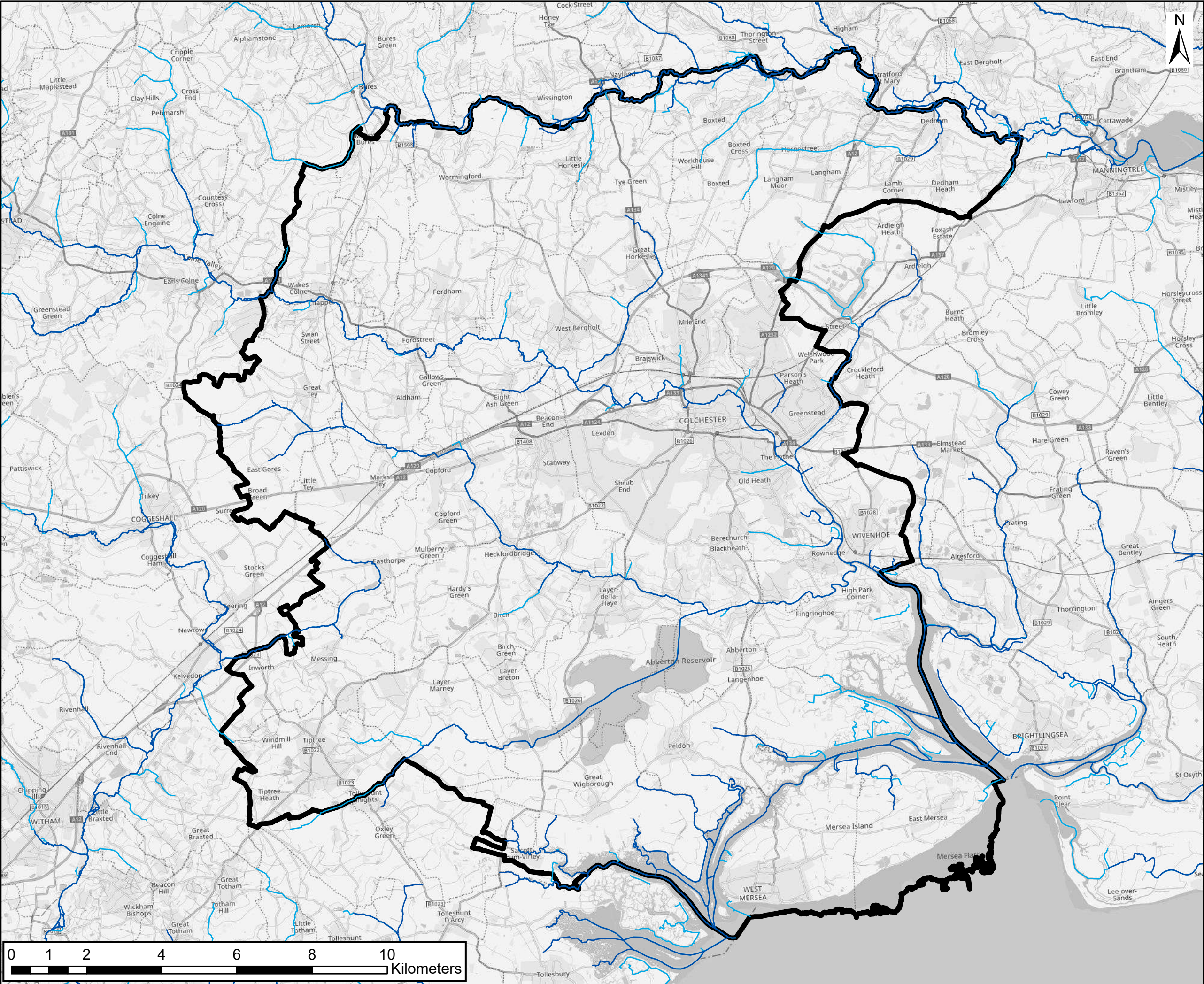




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PROJECT

Colchester City Council
WATER CYCLE STUDY

CLIENT

Colchester City Council

CONSULTANT

AECOM Limited
3rd Floor Portwall Place
Portwall Lane
Bristol, United Kingdom
T +44 (0)117 315 0700

LEGEND

- Colchester District Boundary
- Main River
- Ordinary Watercourse

NOTES

This map shows the study area
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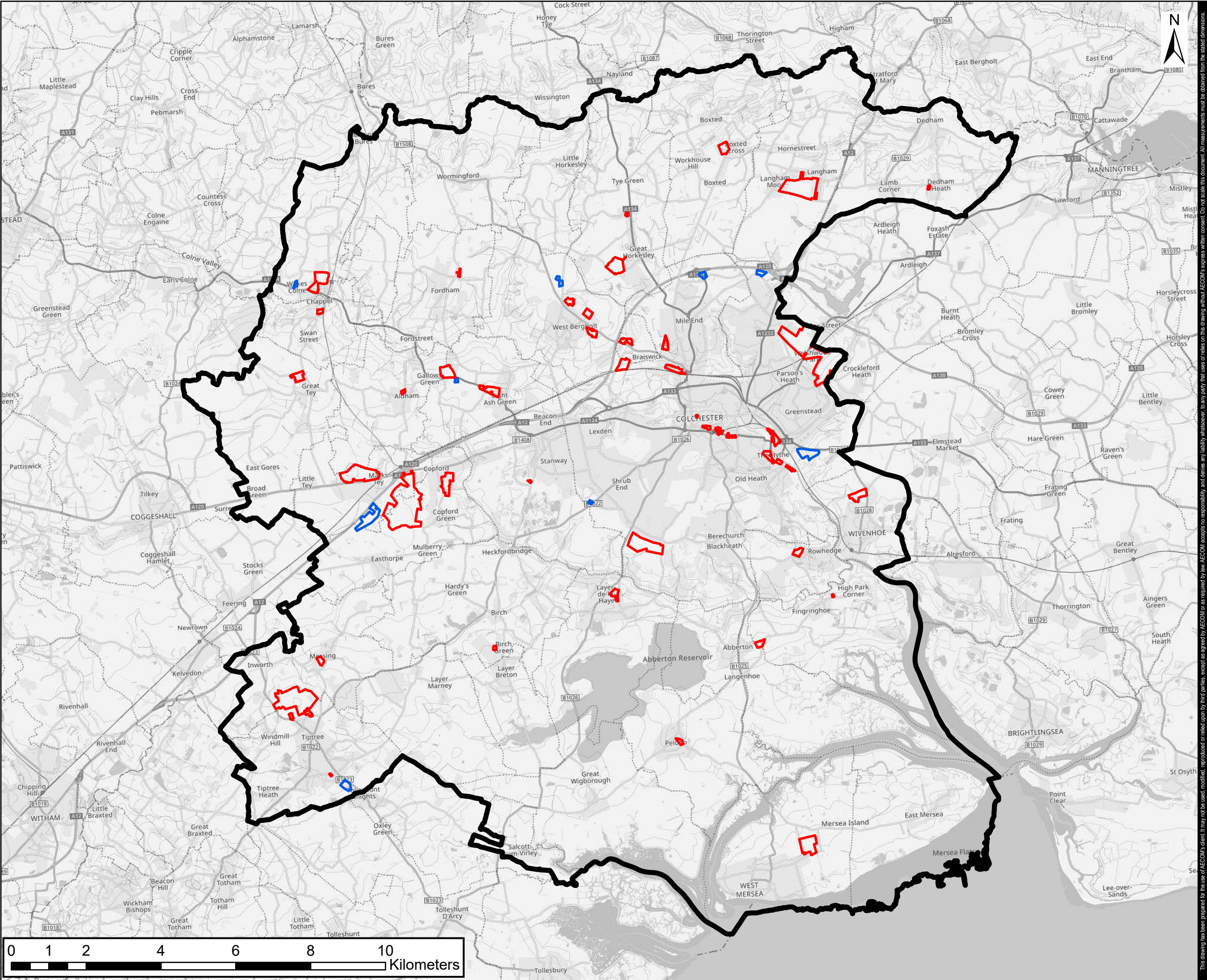
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FIGURE TITLE

Study Area

FIGURE NUMBER

Figure 1



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LEGEND

- Colchester District Boundary
- Residential Allocations
- Employment Allocations

NOTES

This figure shows the preferred options provided by Colchester City Council. Residential sites are shown in red, and Employment sites in blue.

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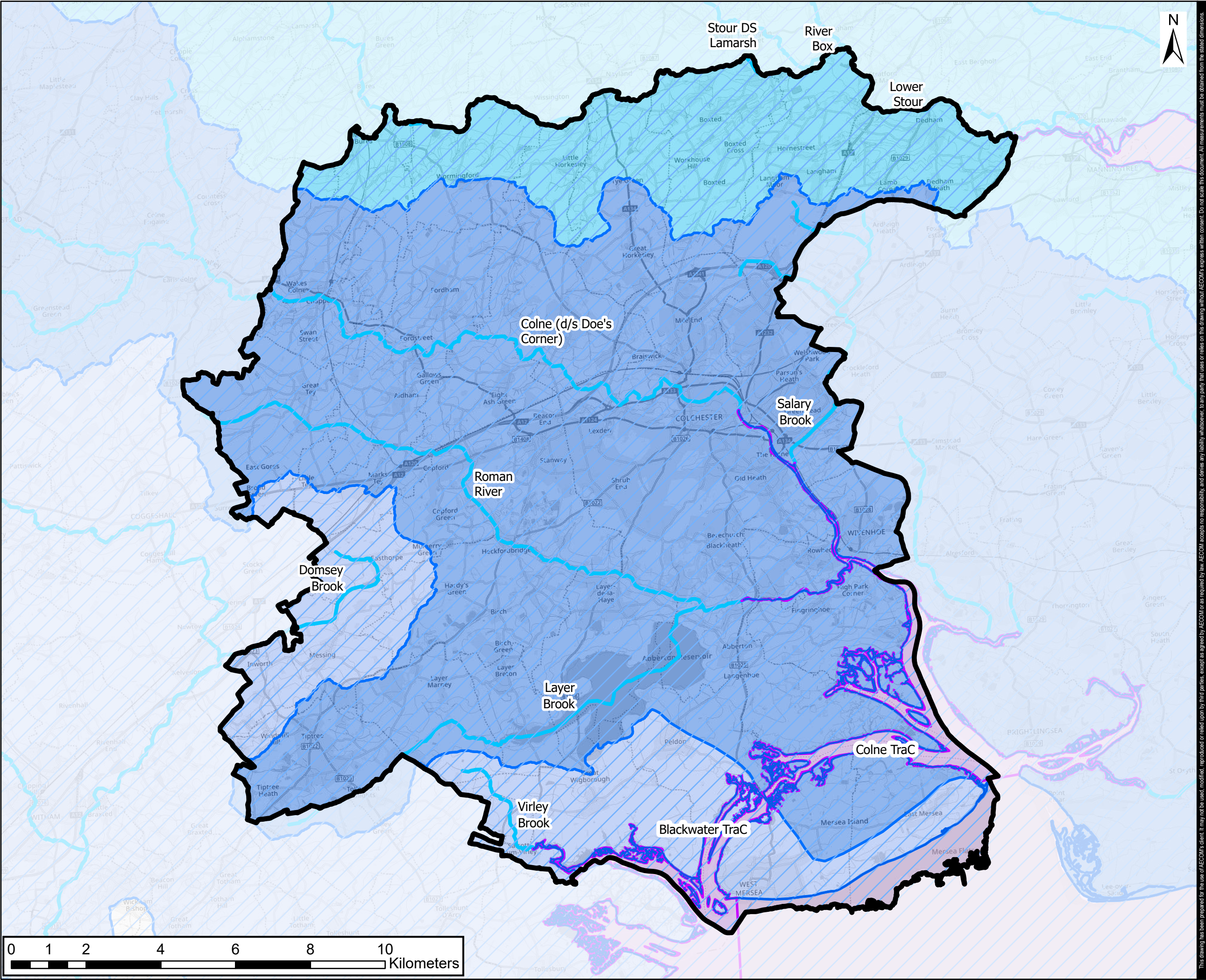
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FIGURE TITLE

Allocated Sites

FIGURE NUMBER

Figure 2



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LEGEND

- Colchester District Boundary
- River Water Bodies
- Essex Combined Management Catchment
- Essex Transitional Water Body
- Operational Catchments
 - Blackwater
 - Colne Essex
 - Stour OC

NOTES

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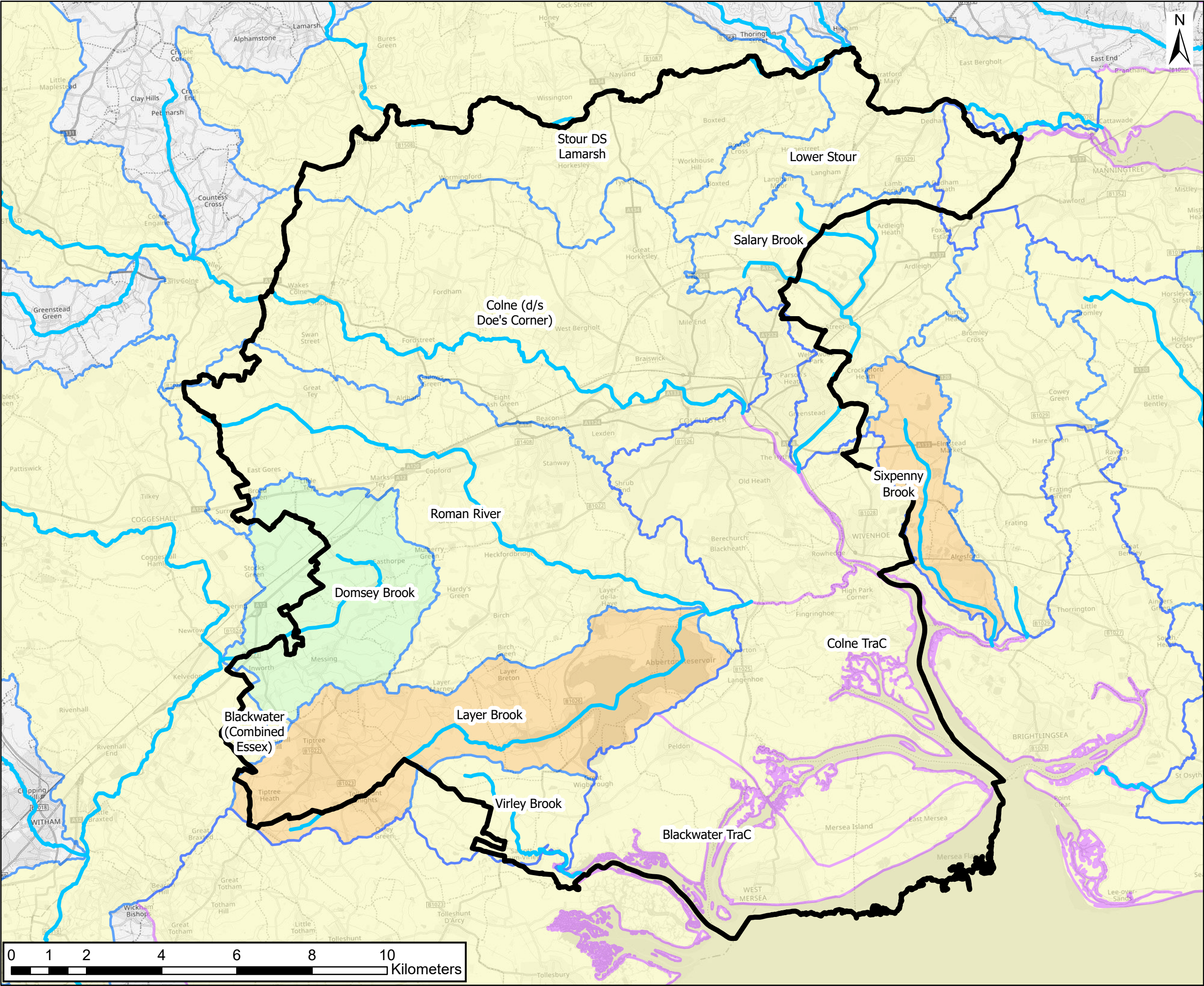
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FIGURE TITLE

WFD Catchments and Waterbodies

FIGURE NUMBER

Figure 3



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LEGEND

- Colchester District Boundary
- Surface Water Catchments
- River Water Bodies

Ecological Status

- High
- Good
- Moderate
- Poor
- Bad

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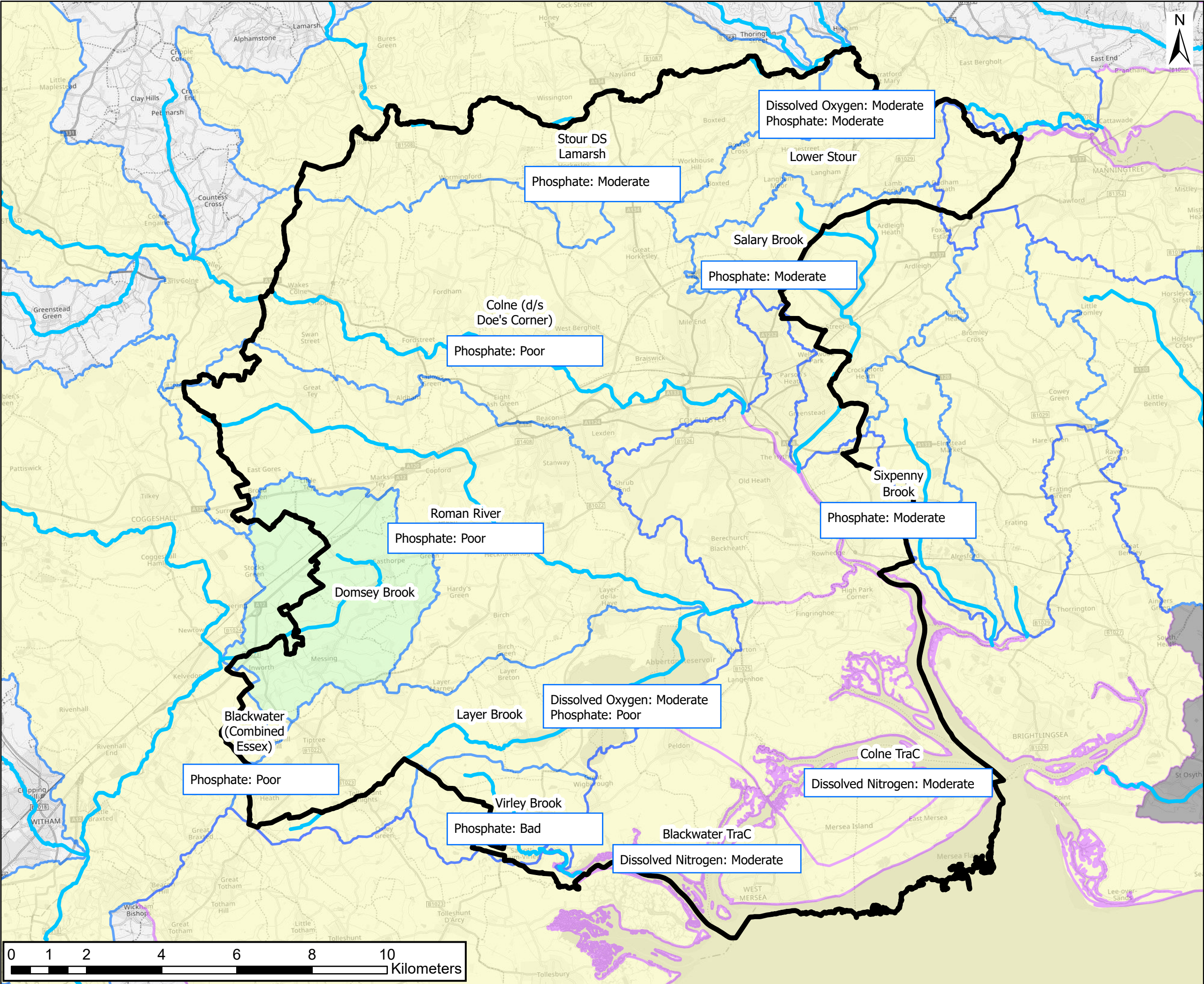
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FIGURE TITLE

WFD Surface Waterbodies – Ecological Status

FIGURE NUMBER

Figure 4



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LEGEND

- Colchester District Boundary
- Surface Water Catchments
- Transitional Catchments
- River Water Bodies
- Physico-Chemical Status
 - High
 - Good
 - Moderate
 - Poor
 - Bad

NOTES

Where a waterbody has less than good physico-chemical status, the parameter(s) resulting in less than good status have been identified

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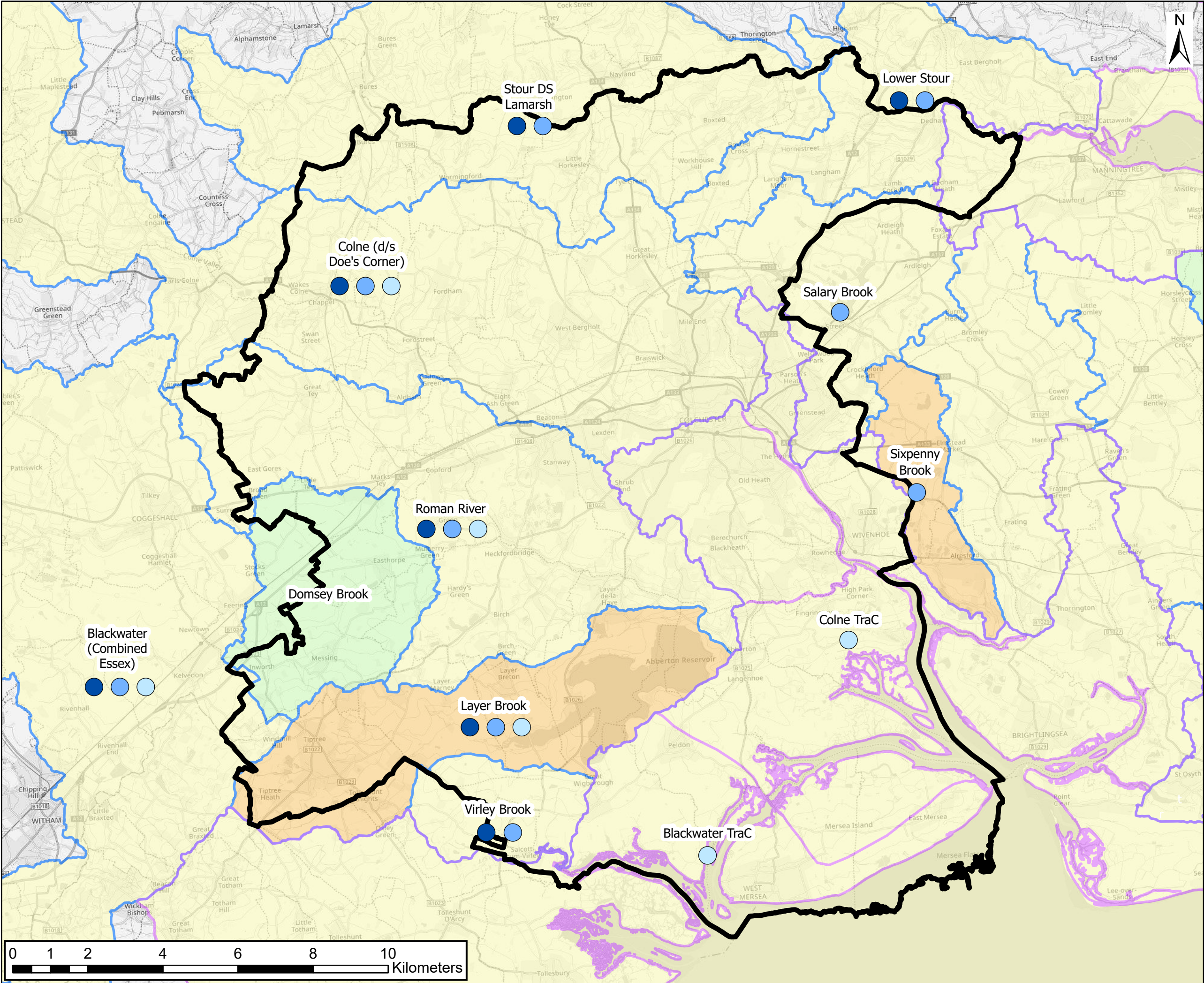
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FIGURE TITLE

WFD Surface Waterbodies – Physico-Chemical Status

FIGURE NUMBER

Figure 5



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WATER CYCLE STUDY

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LEGEND

Colchester District Boundary

Ecological Status

- High
- Good
- Moderate
- Poor
- Bad

Cause

- Water Industry Sewage Discharge
- Poor Nutrient management
- Physical Modification

NOTES

* No confirmed or probable RNAGs identified

Refer to the report for detail on the elements affected

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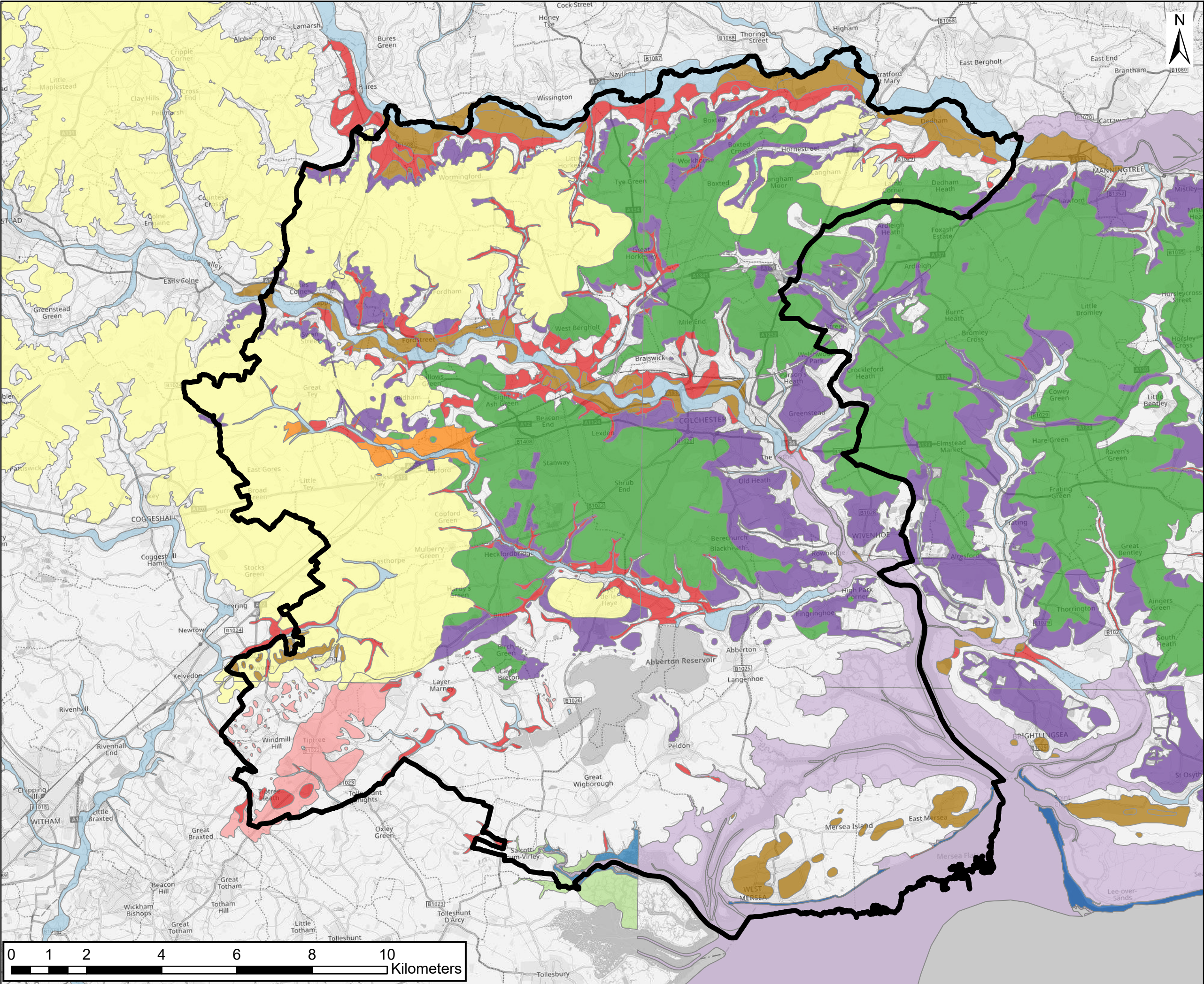
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FIGURE TITLE

WFD Surface and Transitional
Waterbodies RNAG

FIGURE NUMBER

Figure 6



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LEGEND

Colchester District Boundary

Superficial Deposits

- ALLUVIUM
- BEACH AND TIDAL FLAT DEPOSITS (UNDIFFERENTIATED)
- COVER SAND
- GLACIOFLUVIAL DEPOSITS, MID PLEISTOCENE
- HEAD
- INTERGLACIAL DEPOSITS
- INTERGLACIAL LACUSTRINE DEPOSITS
- INTERTIDAL DEPOSITS (UNDIFFERENTIATED)
- KESGRAVE CATCHMENT SUBGROUP
- LOWESTOFT FORMATION
- PEAT
- RIVER TERRACE DEPOSITS
- STORM BEACH DEPOSITS
- TIDAL FLAT DEPOSITS

NOTES

This map shows the bands of Superficial Deposits as provided by Essex County Council.

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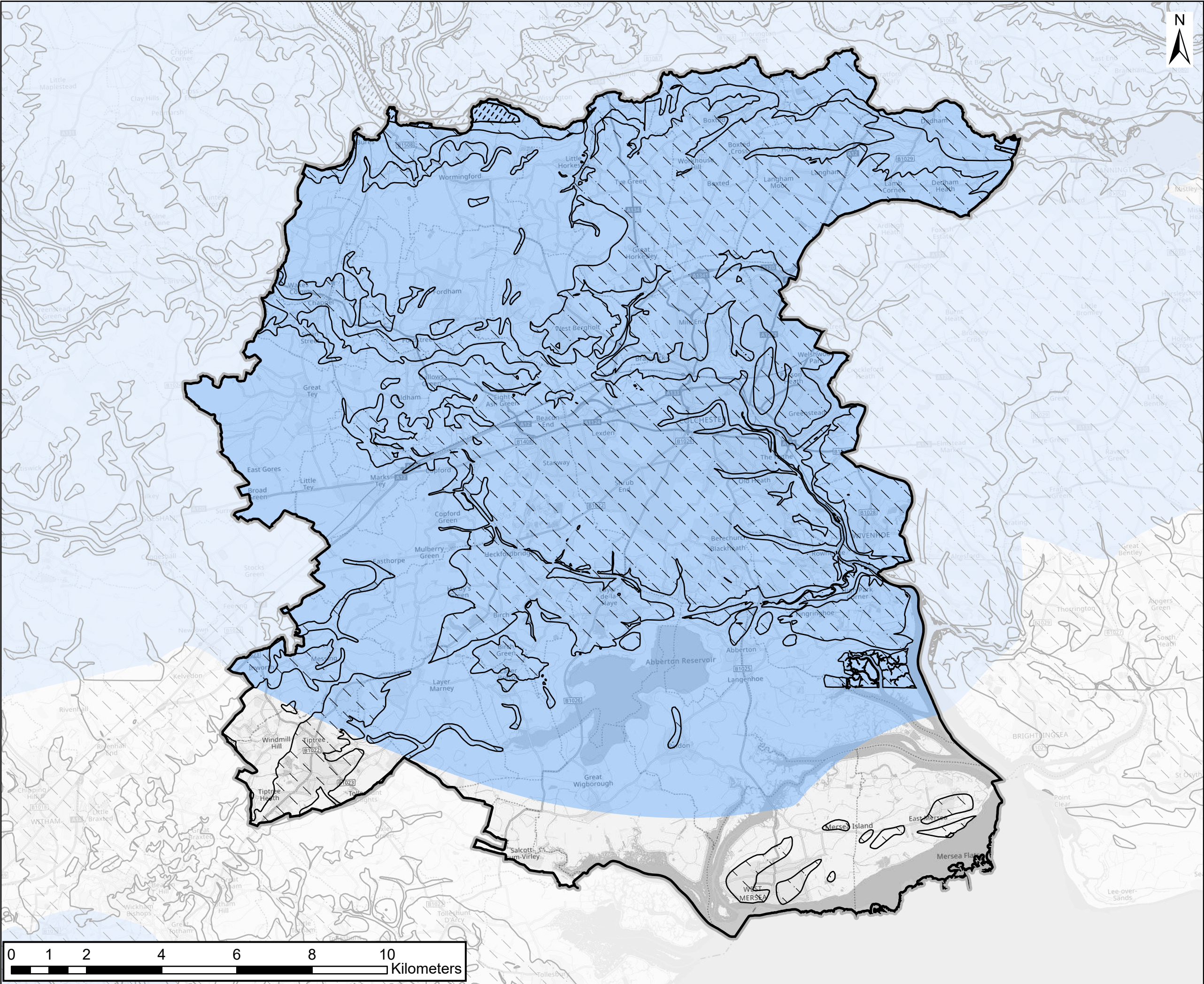
FIGURE TITLE

Superficial Geology

FIGURE NUMBER

Figure 7

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LEGEND

Colchester District Boundary

Groundwater Bodies

North Essex Chalk

North Essex Lower London Tertiaries

Essex Gravels

Source Protection Zone

Zone I - Inner Protection Zone

Zone II - Outer Protection Zone

Zone III - Total Catchment

NOTES

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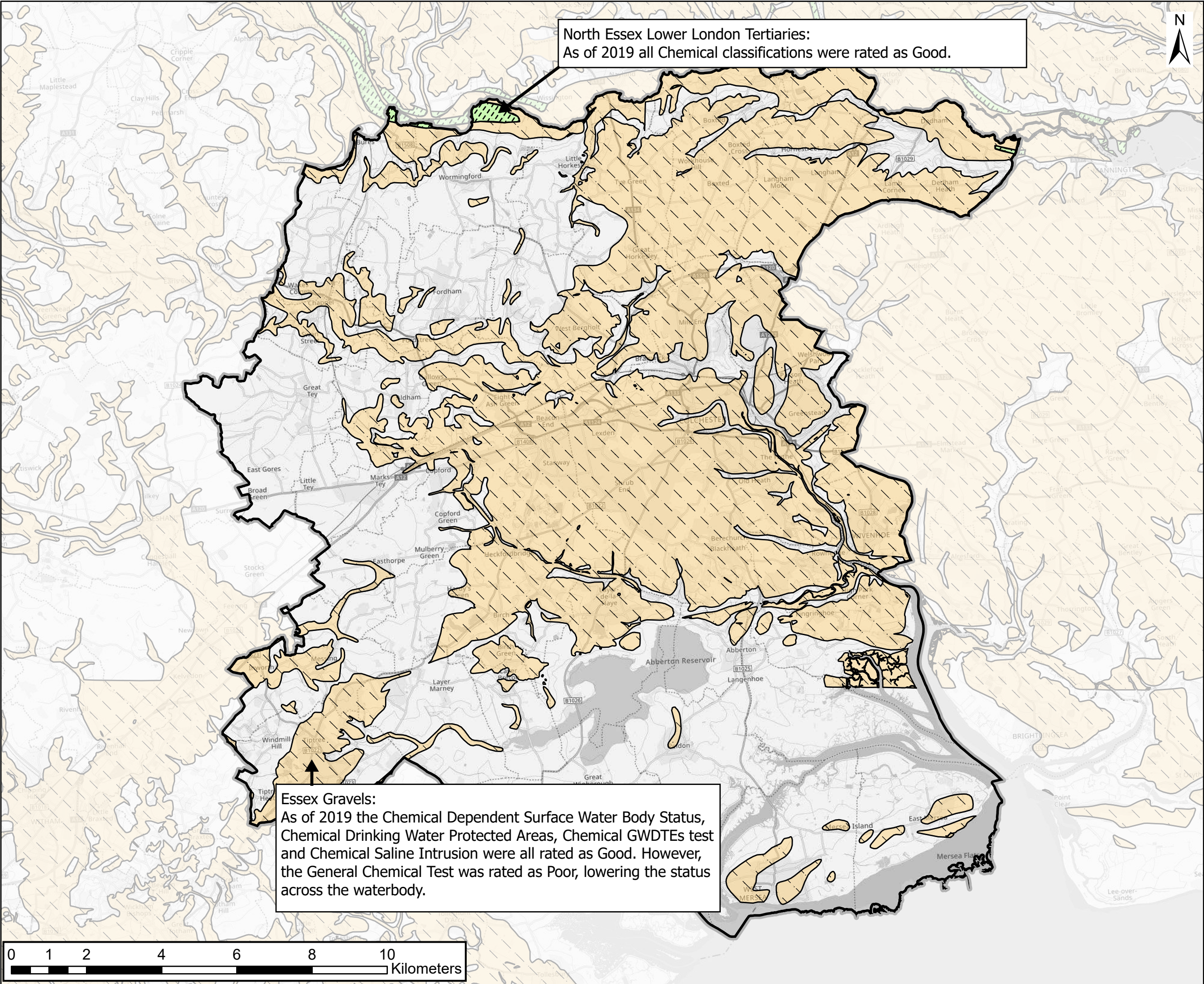
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FIGURE TITLE

WFD Groundwater Bodies and Source Protection Zones

FIGURE NUMBER

Figure 8



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LEGEND

Colchester District Boundary

Groundwater Bodies

North Essex Lower London Tertiaries

Essex Gravels

Chemical Status

Good

Poor

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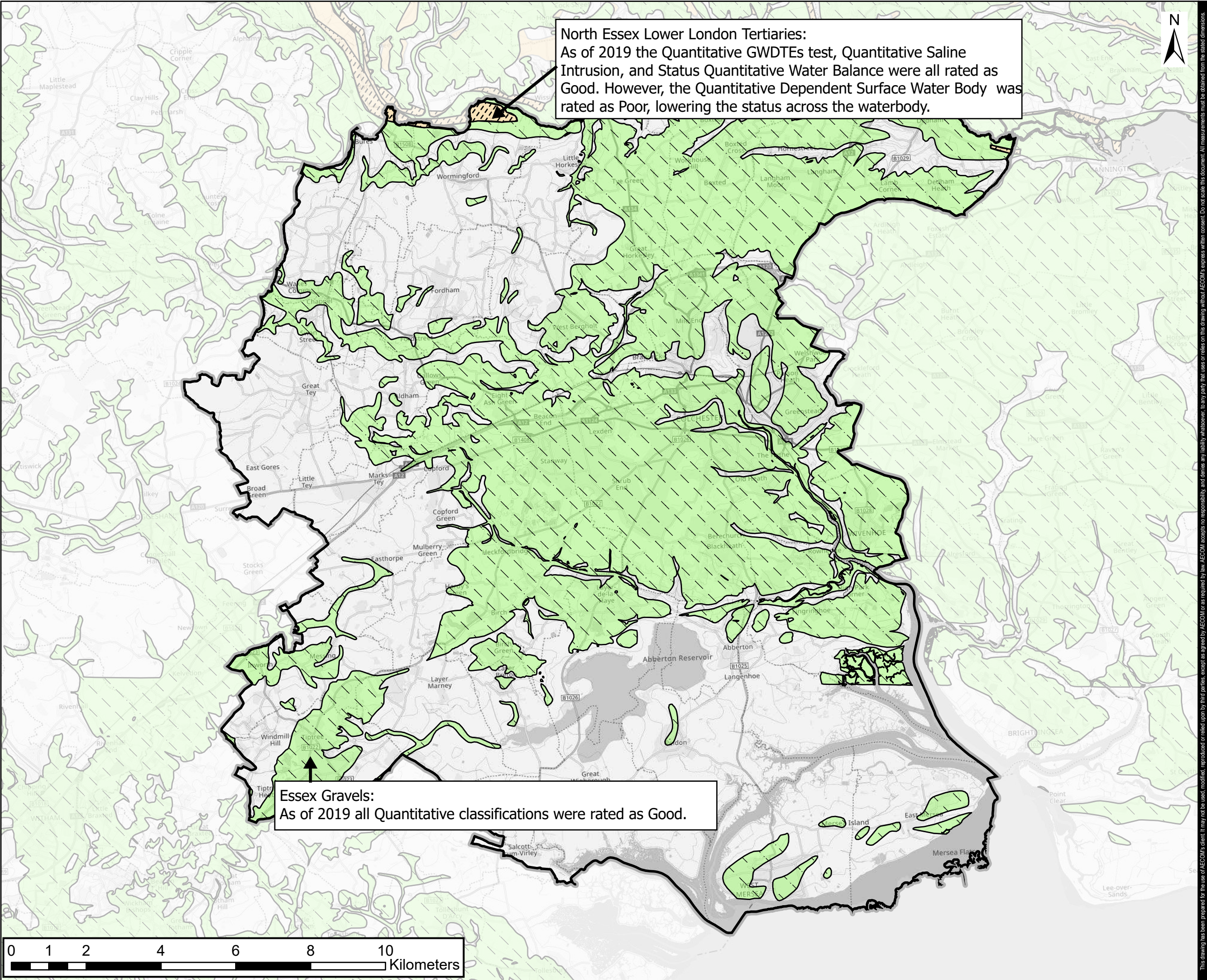
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FIGURE TITLE

WFD Groundwater Body Chemical Status

FIGURE NUMBER

Figure 9



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LEGEND

Colchester District Boundary

Groundwater Bodies

North Essex Lower London Tertiaries

Essex Gravels

Quantitative Status

Good

Poor

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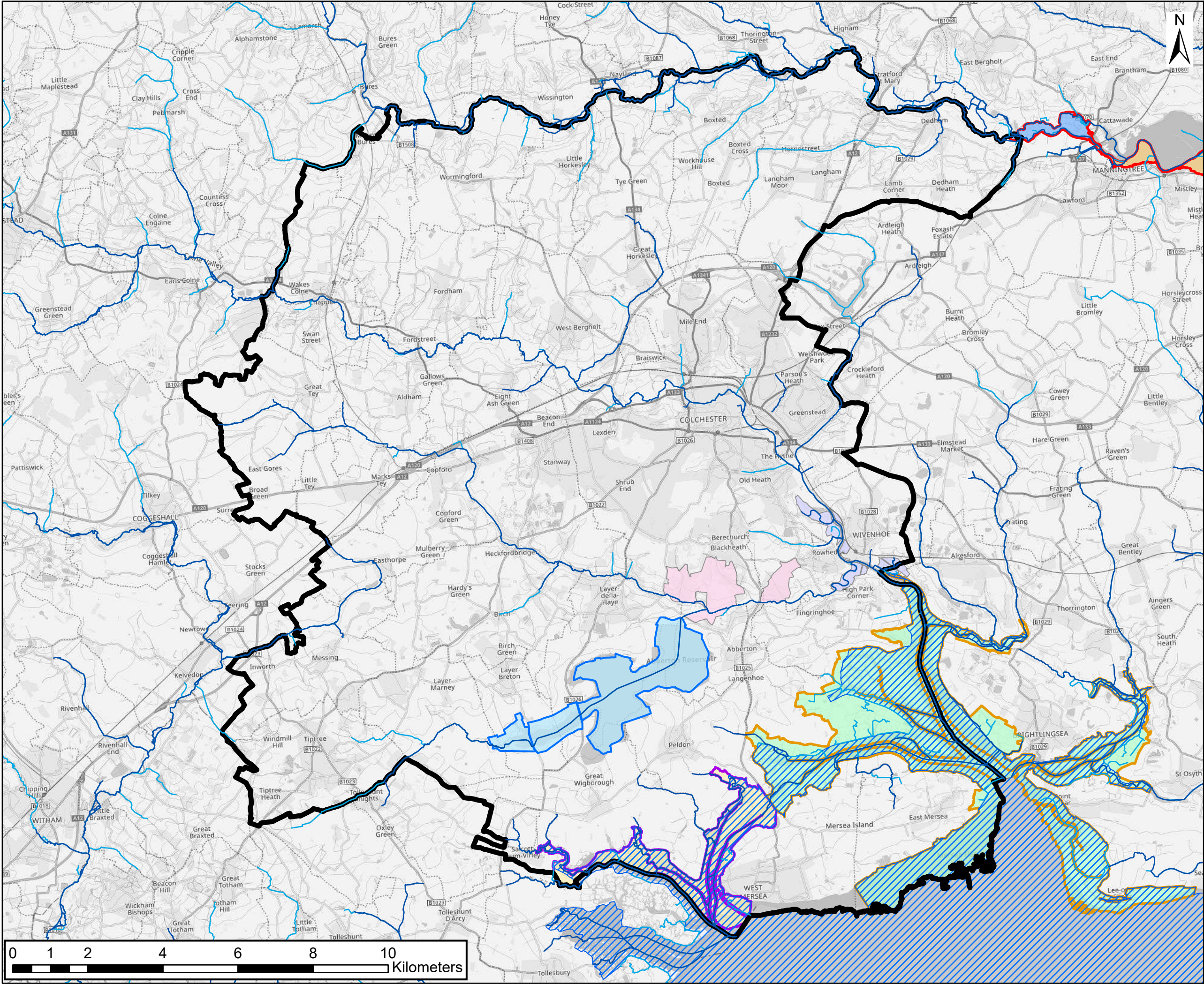
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FIGURE TITLE

WFD Groundwater Body Quantitative Status

FIGURE NUMBER

Figure 10



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LEGEND

- Colchester District Boundary
- Main River
- Ordinary Watercourse
- Special Areas of Conservation
 - Essex Estuaries
 - Site of Special Scientific Interest
 - Abborton Reservoir
 - Blackwater Estuary
 - Cattawade Marshes
 - Colne Estuary
 - Roman River
 - Stour Estuary
 - Upper Colne Marshes
- Special Protection Areas
 - Abborton Reservoir
 - Blackwater Estuary (Mid-Essex Coast Phase 4)
 - Colne Estuary (Mid-Essex Coast Phase 2)
 - Stour and Orwell Estuaries

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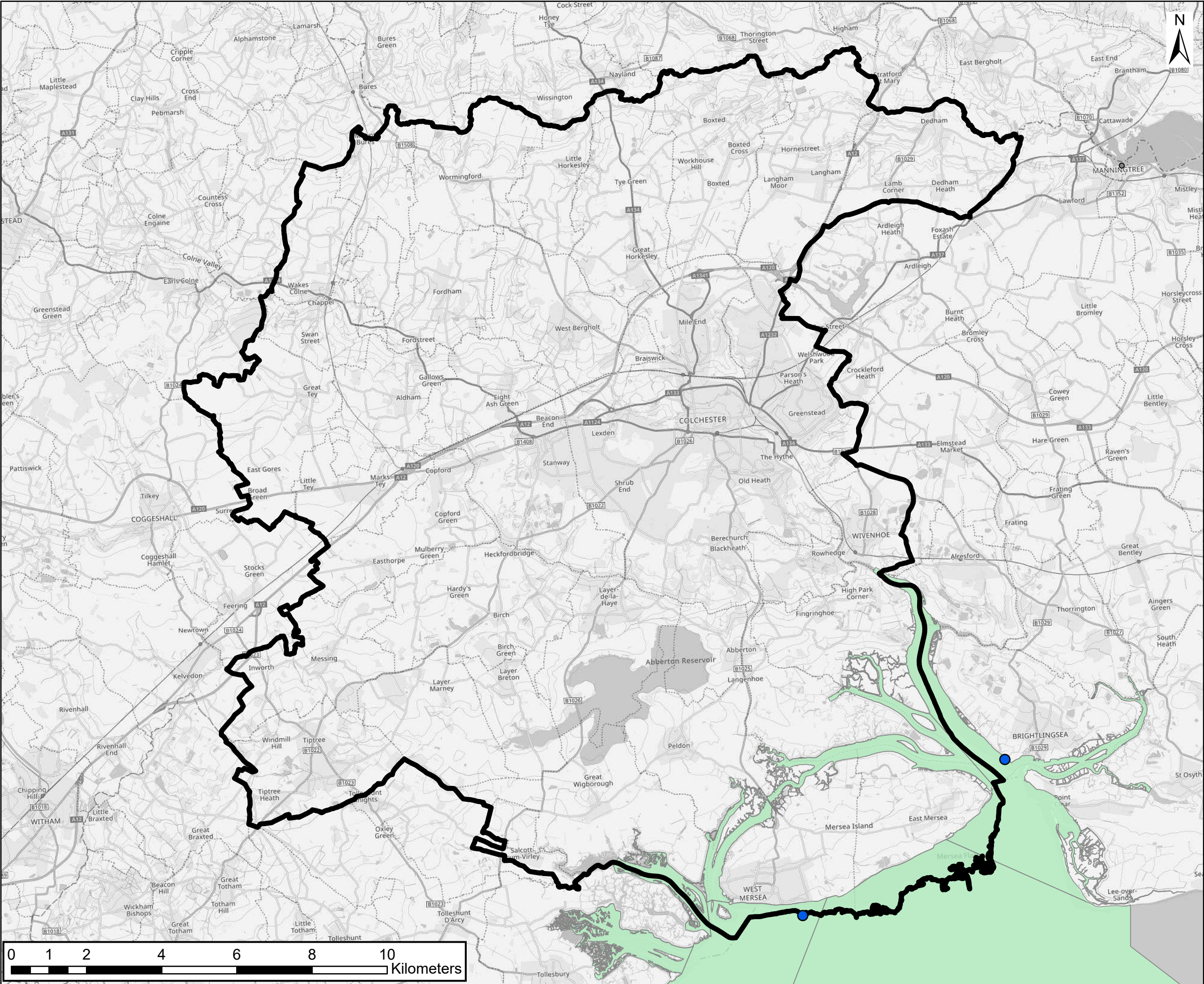
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FIGURE TITLE

Water Dependent Habitats

FIGURE NUMBER

Figure 11



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WATER CYCLE STUDY

CLIENT

Colchester City Council

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LEGEND

- Colchester District Boundary
- Bathing Waters Monitoring Location
- WFD Shellfish Water Protected Area

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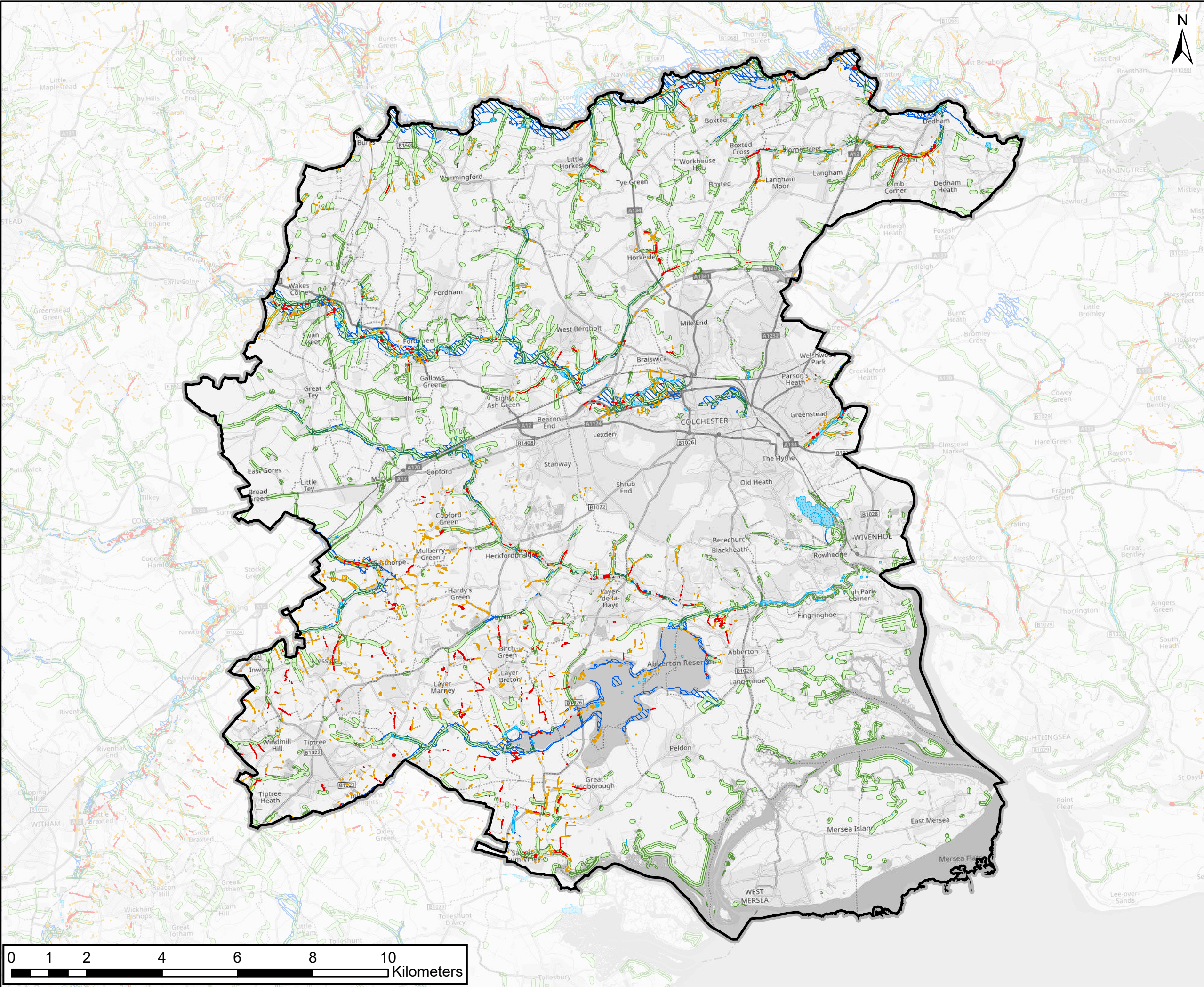
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FIGURE TITLE

Bathing Waters and Shellfish Waters

FIGURE NUMBER

Figure 12



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WATER CYCLE STUDY

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Colchester City Council

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- LEGEND**
- Colchester District Boundary
 - Floodplain Woodland Potential
 - Riparian Woodland Potential
 - Runoff Attenuation Features 3.3% AEP
 - Runoff Attenuation Features 1% AEP
 - Floodplain Reconnection Potential

NOTES

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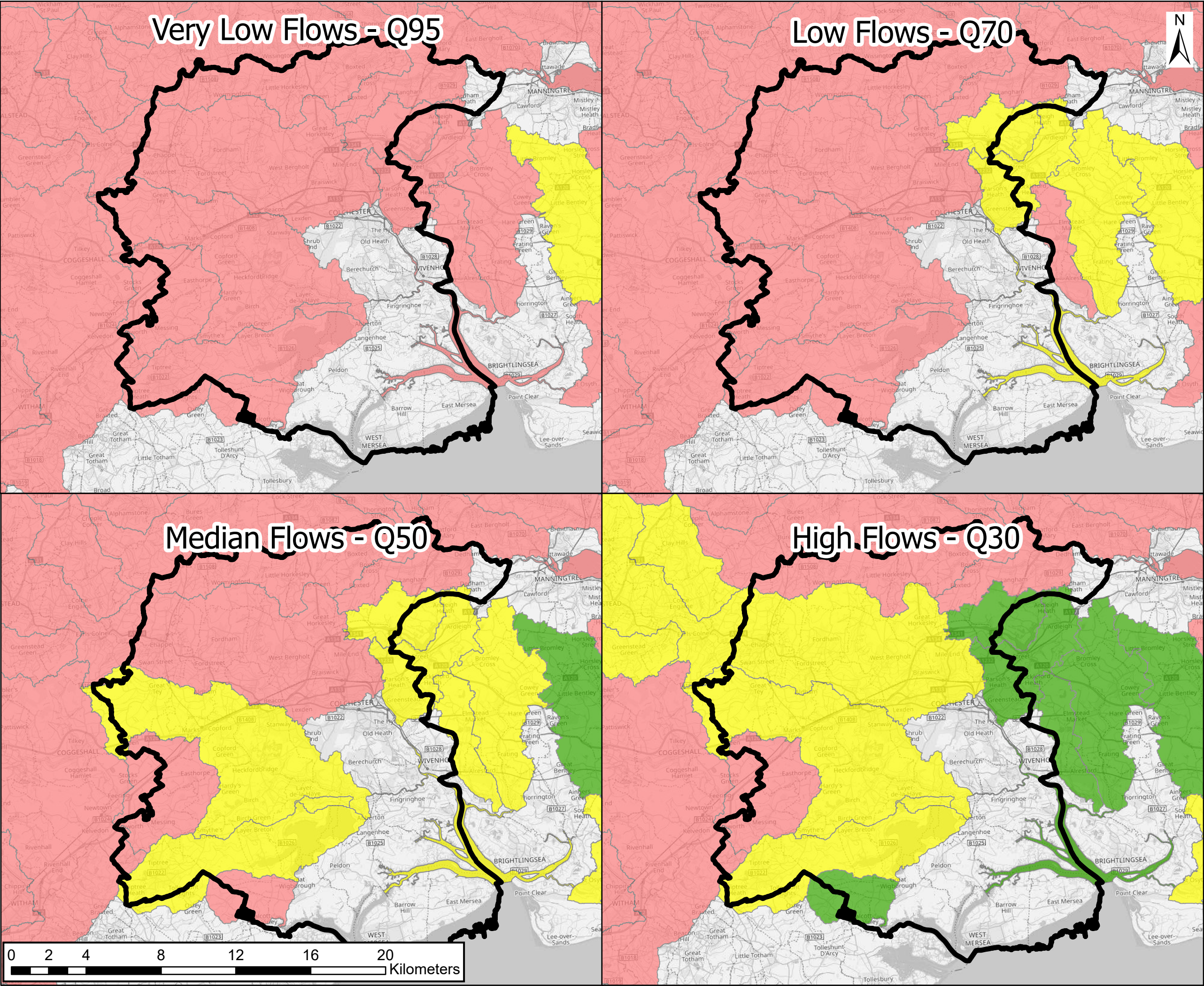
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FIGURE TITLE
Nature Based Solutions Opportunities

FIGURE NUMBER
Figure 13



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LEGEND

- Colchester District Boundary
- CAMS Water Availability
- Water Available for Licensing
- Water Not Available for Licensing
- Restricted Water Available for Licensing

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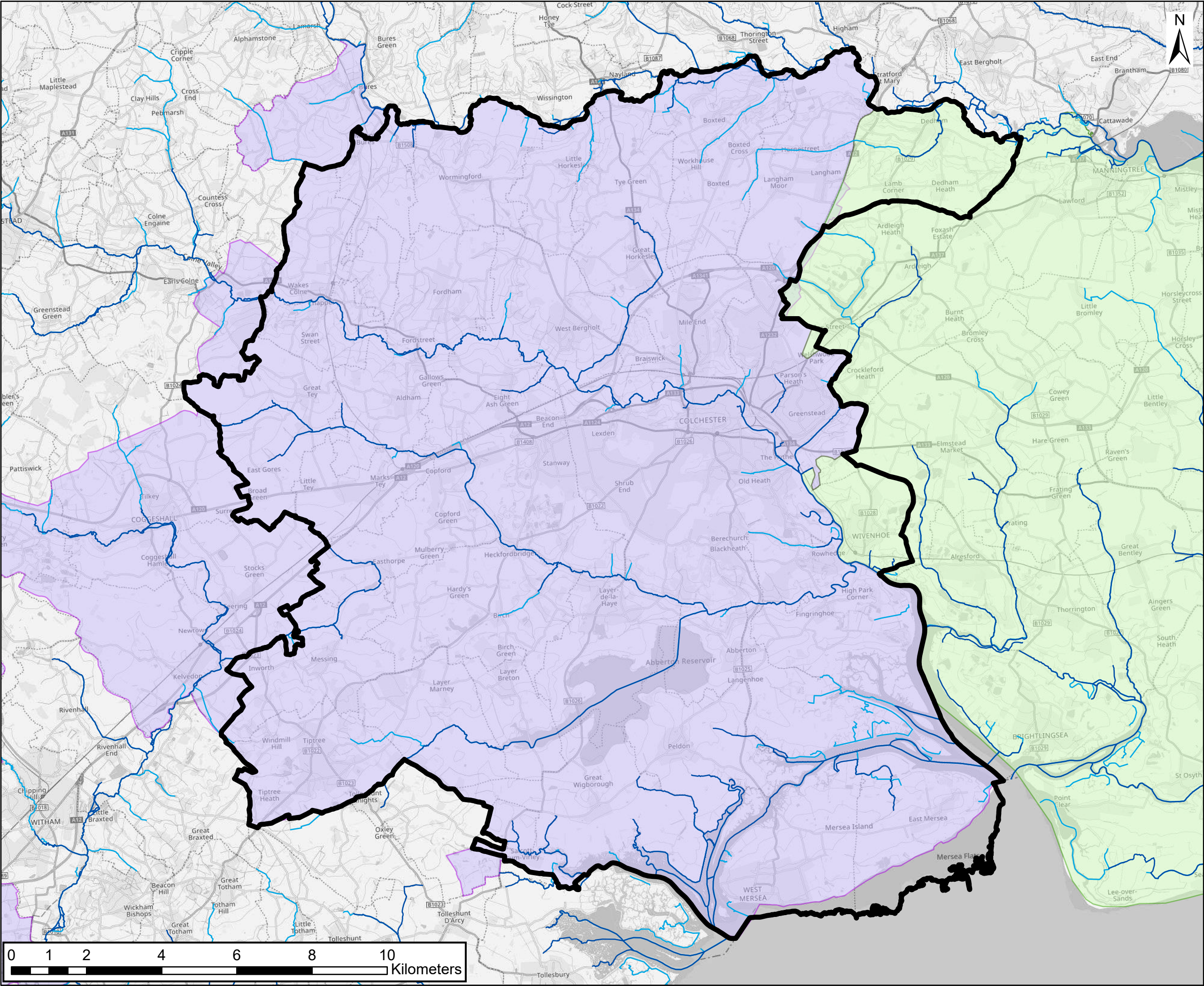
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FIGURE TITLE

CAMS Surface Water Availability

FIGURE NUMBER

Figure 14



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LEGEND

-  Colchester District Boundary
-  Main River
-  Ordinary Watercourse
-  South Essex WRZ (Anglian Water)
-  Brett WRZ (Affinity Water)

NOTES

This map shows the water resource zones within the Colchester area.

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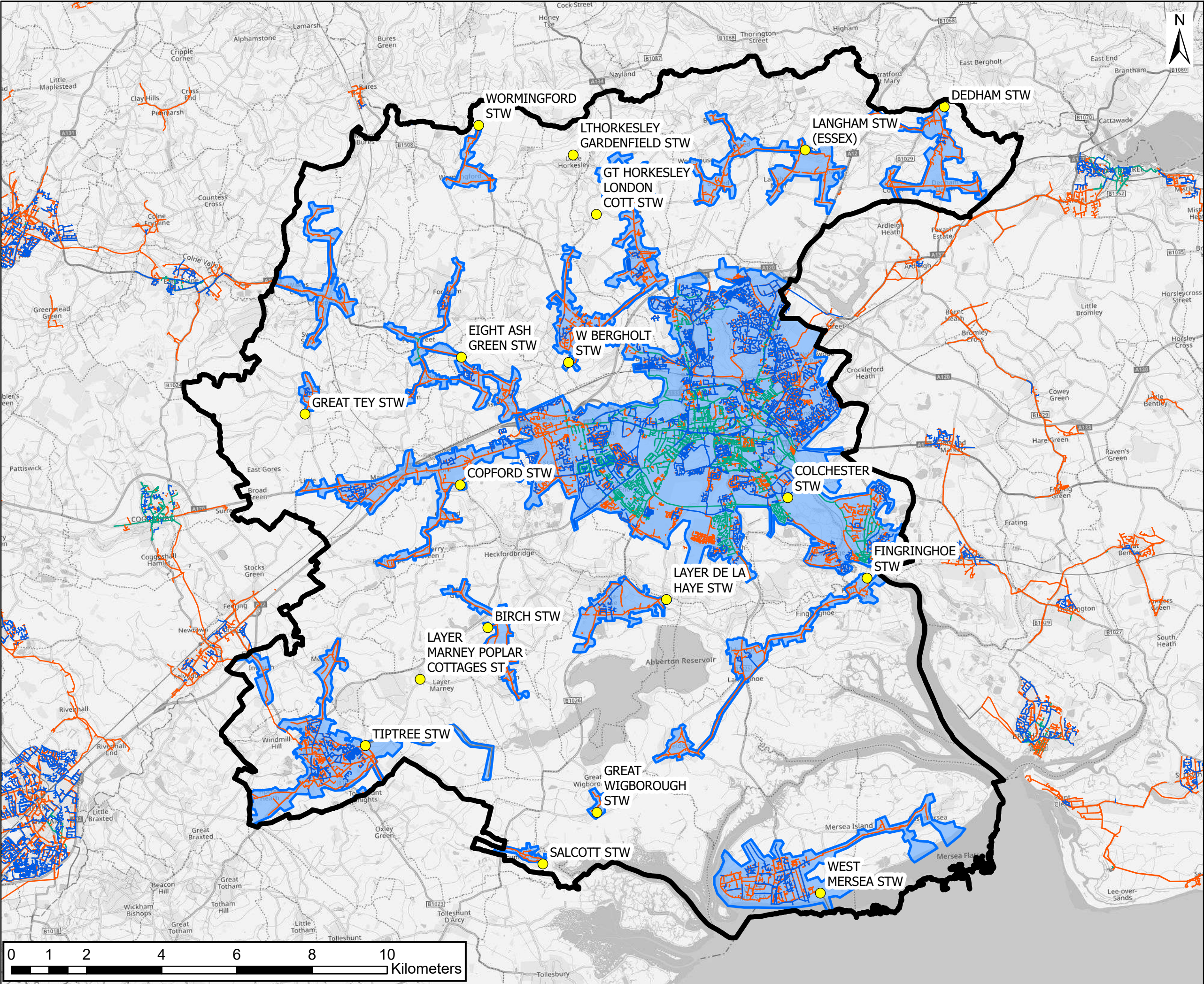
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FIGURE TITLE

Water Resource Zones

FIGURE NUMBER

Figure 15



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WATER CYCLE STUDY

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LEGEND

- Colchester District Boundary
- Colchester Sewer Catchments
- WRC
- Sewer by Purpose
 - Combined
 - Foul
 - Surface Water
 - Other

NOTES

This map shows the sewer assets provided by Anglian Water, differentiated by use.

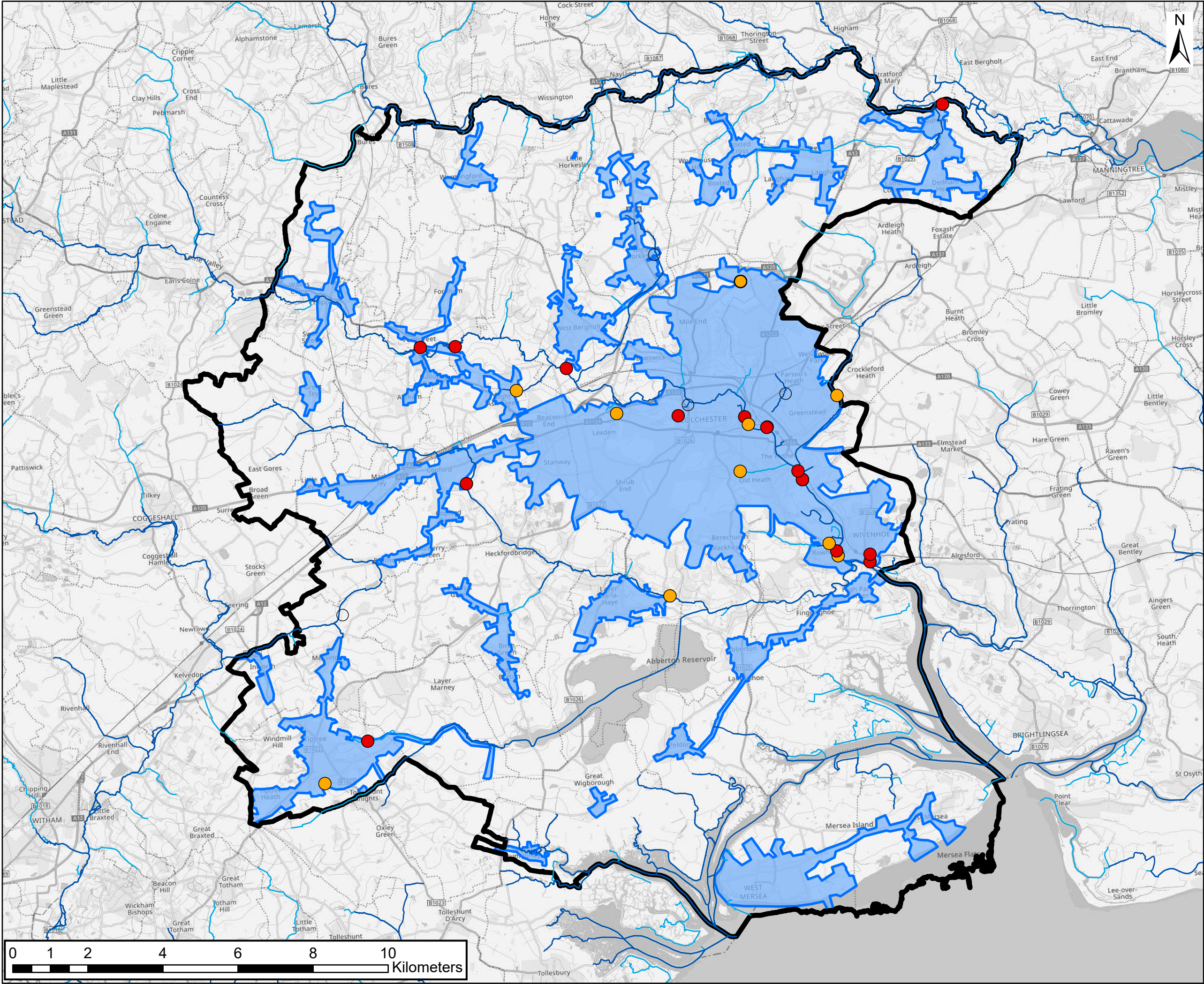
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FIGURE TITLE
Wastewater Assets

FIGURE NUMBER
Figure 16



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LEGEND

- Colchester District Boundary
- Main River
- Ordinary Watercourse
- Colchester Sewer Catchments
- Average Annual Spills
 - 0
 - 1-9
 - ≥10

NOTES

This map shows the average number of annual spills at each CSO location throughout the period 2021-2023

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FIGURE TITLE

CSO Locations and Spill Frequency

FIGURE NUMBER

Figure 17