

South East Strategic Reservoir Option Preliminary Environmental Information Report

Appendix 5.1 - WFD screening and scoping report: part 2 - annexes

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Annex 1 Water body status classification – background information

A1.1 Introduction

- A1.1.1 As described in Section 2, surface water bodies and groundwater bodies are defined within WFD and a status classification is derived for each via the river basin management plan cycles.
- A1.1.2 The status classification method for both surface water and ground water bodies is described in the following sections.

A1.2 Surface water bodies

Overview

- A1.2.1 Surface water bodies are categorised on the basis of the following three hydromorphological designations, which in turn dictate the status classification process applied for each:
 - Natural (non heavily modified or artificial) water bodies
 - Heavily modified water bodies (HMWBs)
 - Artificial water bodies (AWBs)
- A1.2.2 The Overall Status of natural surface water bodies is determined on the basis of their Ecological Status and Chemical Status. Whilst the Overall Status of A/HMWBs is classified based on their Ecological Potential and Chemical Status.

Ecological status

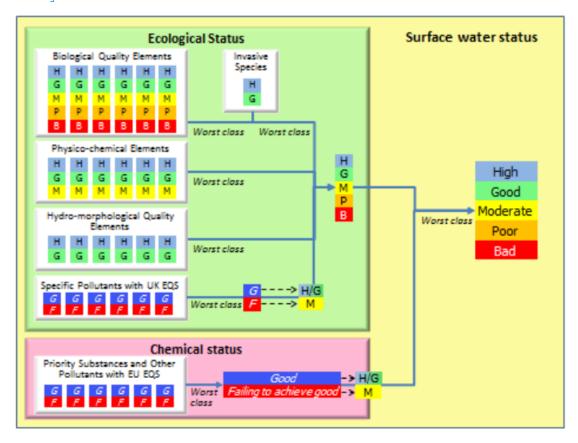
- A1.2.3 Ecological Status is assigned to surface water bodies that are natural and considered by the Environment Agency not to have been significantly modified for anthropogenic purposes.
- A1.2.4 Ecological Status of water bodies is classified on a five-point scale as either High, Good, Moderate, Poor or Bad status. The definitions of the five status classes are provided in Table 23.

Table 1 Definition of status classes used to define surface water body status [source: Environment Agency, 2022a]

| Status | Definition | | | |
|----------|--|--|--|--|
| High | Near natural conditions. No restrictions on the beneficial uses of the water body. No impacts on amenity, wildlife or fisheries. | | | |
| Good | Slight change from natural conditions as a result of human activity. No restriction on the beneficial user of the water body. No impact on fisheries. Protects all but the most sensitive wildlife. | | | |
| Moderate | Moderate change from natural conditions as a result of human activity. Some restriction on the beneficial uses of the water body. No impact on amenity. Some impact on wildlife and fisheries. | | | |
| Poor | Major change from natural conditions as a result of human activity. Some restrictions on the beneficial uses of the water body. Some impact on amenity. Moderate impact on wildlife and fisheries. | | | |
| Bad | Severe change from natural conditions as a result of human activity. Significant restriction on the beneficial uses of the water body. Major impact on amenity. Major impact on wildlife and fisheries with many species not present. | | | |

- A1.2.5 Ecological Status is defined by the overall quality of the structure and functioning of aquatic ecosystems associated with surface waters, i.e. the condition of the watercourse. This is assigned on the basis of four sub-classification elements or 'tests' (Environment Agency 2022a), as follows:
 - Biological this test is designed to assess the status indicated by a biological quality element such as fish, invertebrates, macrophytes or phytobenthos (diatoms). The biological quality elements can influence an overall water body status from Bad through to High. It is also important to note that the presence of invasive species prevents a water body from achieving High status when all other elements attain High.
 - Physicochemical this test is designed to assess the status indicated by physicochemical quality elements such as dissolved oxygen, phosphorus and ammonia, against environmental standards. The physicochemical quality elements can only influence an overall water body status from Moderate through to High.
 - Hydromorphology for natural surface water bodies this test is undertaken when the biological and physicochemical tests indicate that a water body may be of High Overall Status. It specifically assesses hydromorphological quality elements such as flow, substrate composition, longitudinal continuity, lateral connectivity with the floodplain, and the structure of the riparian habitat, against reference or 'largely undisturbed' conditions. This hydromorphological assessment is used to determine between Good and High Overall Status only. If the hydromorphological quality elements are deemed to not support High Ecological Status, then the Overall Status of the water body is limited to Good. The hydromorphological assessment is not used to drive a water body status class below Good. The 'does not support good' classification is reported for the purposes of identifying water bodies which fail the flow test.
- A1.2.6 The worst-case classification is assigned as the overall surface water body status, in a 'one-out all-out' system. This system is summarised in Plate 1.

Plate 1 Ecological status classification process for surface water bodies [Source: Environment Agency, 2022a]



Ecological potential (for heavily modified and artificial water bodies)

- A1.2.7 Ecological Potential is assigned to AWB (such as reservoirs and canals), or natural water bodies which, as a result of physical alterations by human activity that provide significant socio-economic benefits, are substantially changed in character. The latter are termed HMWB. If HMWB's physical modification were restored to natural conditions, the significant socio-economic benefits would be lost. The term 'Ecological Potential' is used to classify AWBs and HMWBs as it may be impossible for these water bodies to achieve Good Ecological Status (GES) because of their creation or modification for a specific use, such as navigation, water supply or flood protection. The Ecological Potential of an AWB or HMWB represents the degree to which the quality of the water body approaches the optimum condition it could achieve given its artificial or heavily modified state.
- A1.2.8 AWB and HMWB are subject to an additional set of rules that need to be implemented prior to running the one-out-all-out process (Environment Agency 2022a). These rules determine which biological quality elements should be used in the water body Ecological Potential classification. Under normal circumstances, AWB and HMWB are classified according to an assessment of Mitigation Measures, which defines Good Ecological Potential (GEP) in water bodies where all applicable mitigation is in place, and Moderate ecological potential in water bodies where some or all relevant mitigation is missing. However, to prevent AWB and HMWB being incorrectly classified as GEP in situations where all mitigation is in place, but other pressures are causing an impact (e.g. nutrient enrichment or pollution from toxic substances), the methodology adopted in the UK

- (Environment Agency 2022a) additionally considers biological indicators providing they are not sensitive to the heavily modified nature of the water body.
- A1.2.9 AWB and HMWB hydromorphological elements are assessed using a three-stage process, firstly looking at flow, then Mitigation Measures and biological quality elements. Flow conditions are assessed initially on a fail or pass basis to determine which of the biological and physicochemical quality elements should be used in the classification of Ecological Potential.
- A1.2.10 Where the flow conditions are unaffected by the physical modification (flow conditions pass), the water body Ecological Potential is determined by the worst of either the Mitigation Measures Assessment, or any element that is not sensitive to the modified nature of the water body.
- A1.2.11 Where the flow conditions are significantly impacted by the physical modification (flow conditions fail), the water body Ecological Potential is determined by the worst of any of the Mitigation Measures Assessments or the assessment of biological quality elements, physicochemical quality elements or specific pollutants.
- A1.2.12 Some lake A/HMWB water bodies are considered to have conditions sufficient to sustain natural macrophyte populations, despite their physical modification usage. In these cases, macrophyte data is used to classify the water body under all circumstances; they should not be excluded as a sensitive element.
- A1.2.13 Where a water body is designated as artificial or heavily modified for water resources usage, either solely or jointly with other uses, the flow condition is assumed to be Good (pass).

Chemical status

- A1.2.14 Chemical Status is defined by compliance with environmental standards for chemicals that are priority substances and/or priority hazardous substances, in accordance with the Environmental Quality Standards Directive (2013/39/EU of the European Parliament and of the Council of 23 October 2000). This is assigned on a scale of Good or Failing to achieve Good.
- A1.2.15 Surface water bodies are monitored and assessed for priority substances where there are known discharges or inputs of these pollutants.

Summary of status classification elements for surface water bodies

A1.2.16 A summary of the status elements and associated quality elements that are assessed for surface bodies is presented in Table 24 (Environment Agency 2025a).

Table 2 Summary of status classification elements for surface water bodies

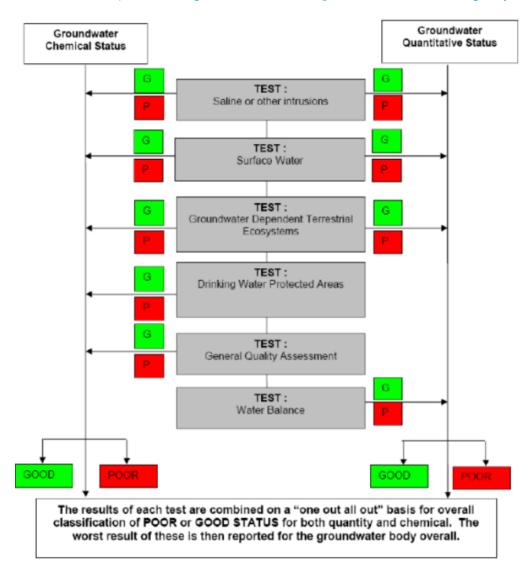
| Status | Status element | Specific Quality Elements (Rivers) | Specific Quality Elements (Lakes) |
|-------------------|-------------------------------|---|---|
| Ecological Status | Biological | Macrophytes and phytobenthos - Macrophytes | Phytoplankton |
| | | Macrophytes and phytobenthos - Diatoms | Macrophytes and phytobenthos |
| | | Macroinvertebrates | Macroinvertebrates |
| | | Fish | Fish |
| - | Physicochemical | Thermal conditions (Water Temperature) | Thermal conditions (Water Temperature) |
| | | Oxygenation conditions (Dissolved Oxygen) | Oxygenation conditions (Dissolved Oxygen) |
| | | Acidification status (pH) | Acidification status (Acid Neutralising Capacity) |
| | | Nutrient conditions (Phosphate, Ammonia) | Nutrient conditions (Total Phosphorus, Ammonia) |
| | | Salinity | Salinity |
| | | | Transparency |
| | Specific pollutants | Various | Various |
| | Hydromorphology | Quantity and dynamics of water flow | Quantity and dynamics of water flow |
| | | Connection to groundwater bodies | Residence Time |
| | | River continuity | Connection to groundwater bodies |
| | | River depth and width variation | Lake depth variation |
| | | Structure and substrate of the riverbed | Quantity, structure and substrate of the lake bed |
| | | Structure of the riparian zone | Structure of the lake shore |
| Chemical Status | Priority hazardous substances | Various | Various |
| | Priority substances | Various | Various |
| | Other pollutants | Various | Various |

A1.3 Groundwater bodies

Overview

- A1.3.1 Under the WER, groundwater body Overall Status is classified on the basis of Quantitative Status and Chemical Status. Quantitative status is defined by the quantity of groundwater available as base flow for different resources. Chemical status is a function of several components indicative of groundwater quality. Status is assessed primarily using data collected from the Environment Agency monitoring network; therefore, the scale of assessment means that groundwater status is mainly influenced by larger scale effects such as significant abstraction or widespread/ diffuse pollution.
- A1.3.2 The worst-case classification dictates the Overall Status, via a 'one-out all-out' system. This system is summarised in Plate 2.

Plate 2 Status classification process for groundwater bodies [Source: Environment Agency, 2022b]



Quantitative status

- A1.3.3 Quantitative Status is defined by the quantity of groundwater available as base flow to watercourses and water-dependent ecosystems and as 'resource' available for use as drinking water and other consumptive purposes. It is assigned on a scale of Good or Poor, and on the basis of four classification elements or 'tests (Environment Agency 2022b), as follows:
 - Saline or other intrusions this test is designed to identify groundwater bodies where
 the intrusion of poor quality water, such as saline water or water of different chemical
 composition, as a result of groundwater abstraction is leading to sustained upward
 trends in pollutant concentrations or significant impact on one or more groundwater
 abstractions.
 - Surface water this test is designed to identify groundwater bodies where groundwater abstraction is leading to a significant diminution of the Ecological Status of associated surface water bodies.
 - Groundwater Dependent Terrestrial Ecosystems (GWDTE) this test is designed to identify groundwater bodies where groundwater abstraction is leading to significant damage to associated GWDTE.
 - Water balance this test is designed to identify groundwater bodies where groundwater abstraction exceeds the 'available groundwater resource', defined as the rate of overall recharge to the groundwater body itself less the rate of flow required to meet the ecological needs of associated surface water bodies and GWDTE.

Chemical status

- A1.3.4 Chemical Status is defined by the concentrations of a range of key pollutants, by the quality of groundwater feeding into watercourses and water-dependent ecosystems and by the quality of groundwater available for drinking water purposes. This is assigned on a scale of good or poor, and on the basis of five classifications elements or 'tests' (Environment Agency 2022b), as follows:
 - Saline or other intrusions this test is designed to identify groundwater bodies where
 the intrusion of poor quality water, such as saline water or water of different chemical
 composition, as a result of groundwater abstraction is leading to sustained upward
 trends in pollutant concentrations or significant impact on one or more groundwater
 abstractions.
 - Surface water this test is designed to identify groundwater bodies where groundwater is leading to a significant diminution of the Chemical Status of associated surface water bodies.
 - GWDTE this test is designed to identify groundwater bodies where groundwater is leading to significant damage to associated GWDTE.
 - Drinking Water Protected Areas (DrWPA) this test is designed to identify groundwater bodies failing to meet the DrWPA objectives defined in Article 7 of the WFD or at risk of failing in the future. The aim is no deterioration in quality of waters for human consumption.
 - General quality assessment this test is designed to identify groundwater bodies where widespread deterioration in quality has, or will, compromise the strategic use of groundwater. The aim is no significant impairment of human use of groundwater and no significant environmental risk from pollutants across a groundwater body. Status is

assessed primarily using data collected from the Environment Agency monitoring network; therefore, the scale of assessment means that groundwater status is mainly influenced by larger scale effects such as significant abstraction or widespread diffuse pollution.

Summary of status elements for ground water bodies

A1.3.5 A summary of the status elements and associated quality elements that are assessed for groundwater bodies is presented in Table 25 (Environment Agency, 2025a).

Table 3 Summary of WFD classification elements for groundwater bodies

| Status | Specific Quality Elements | | |
|---------------------|--|--|--|
| Quantitative Status | Saline or other intrusions | | |
| | Quantitative Dependent Surface Water Body Status | | |
| | Groundwater-dependent terrestrial ecosystems | | |
| | Water balance | | |
| Chemical Status | Saline or other intrusion | | |
| | Chemical Dependent Surface Water Body Status | | |
| | Groundwater-dependent terrestrial ecosystems | | |
| | Drinking Water Protected Areas | | |
| | General quality assessment | | |

Annex 2 Water body baseline data

A2.1 Surface water bodies

Table 4 Latest (Cycle 3) status classification data for the 'Ock (to Cherbury Brook) (GB106039023400)' river water body

| Status element | Cycle 3 2019 Status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|------------------------|-----------------------------|--------------------------------|
| Overall status | Moderate | Moderate | Good by 2063 |
| Ecological | Moderate | Moderate | Good by 2027 - Low confidence |
| Biological quality elements | Good | Good | Good by 2015 |
| Invertebrates | Good | Good | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Good | Good | Good by 2015 |
| Macrophytes Sub Element | Good | Good | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Acid Neutralising Capacity | High | High | Good by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Biochemical Oxygen Demand (BOD) | - | High | N/a |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Good by 2027 - Low confidence |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 Status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|---|-----------------------------|---|
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015Form |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) WFD Protected Areas | Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Phosphate - Water Industry (Other (not in list)), Phosphate - Agriculture and rural land management (Agriculture - Livestock), Phosphate - Agriculture and rural land management (Agriculture - Arable), Mercury and Its Compounds - No sector responsible (Not applicable) Safeguard Zone (Lower Thames (Cookham Egham Teddington) | | |
| 777 D 7 10100 (10 7 10 10 10 10 10 10 10 10 10 10 10 10 10 | - SWSGZ4016), Nitrates Directive (Berkshire Downs - G87), Safeguard Zone (Upper Thames (Leach to Evenlode) - SWSGZ4012), Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Nitrates Directive (Shrivenham Lower Greensand - G86) | | |

Table 5 Latest (Cycle 3) status classification data for the 'Ock and tributaries (Land Brook confluence to Thames) (GB106039023430)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|-----------------------------|------------------------|------------------------|--------------------------------|
| Overall status | Poor | Poor | Moderate by 2015 |
| Ecological | Poor | Poor | Moderate by 2015 |
| Biological quality elements | Poor | Poor | Good by 2039 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|------------------------|--------------------------------|-----------------------------------|
| Fish | Poor | Poor | Good by 2039 |
| Invertebrates | High | High | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Good | Moderate | Good by 2015 |
| Macrophytes Sub Element | Good | Moderate | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | Good | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Poor | Poor | Moderate by 2027 - Low confidence |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Triclosan | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis- Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|--|---|---|
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Industry (Other (not management (Agri rural land manager diphenyl ethers (PE Perfluorooctane su (Not applicable) responsible (Not management (Not | in list)), Phosphate - Aculture - Arable), Phosphate - Live nent (Agriculture - Live BDE) - No sector responding the Acute alphonate (PFOS) - Seen, Mercury and Its Corpapplicable), Fish - Agricalle applicable), Fish - Agricalement (Agriculture) | iculture and rural land priculture and rural land - Arable) |
| WFD Protected Areas | SWSGZ4012), Safe Teddington) - SWSG (Land Brook conflue | SZ4016), Nitrates Dire | names (Cookham Egham ctive (Ock and tributaries S681), Nitrates Directive |

Table 6 Latest (Cycle 3) status classification data for the 'Stutfield Brook (source to Ock) (GB106039023340)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---------------------------------------|---------------------|------------------------|----------------------------------|
| Overall status | Moderate | Moderate | Good by 2063 |
| Ecological | Moderate | Moderate | Good by 2027 - Low confidence |
| Biological quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Invertebrates | Good | Good | Good by 2021 |
| Macrophytes and Phytobenthos Combined | Moderate | Moderate | Good by 2027 - Low confidence |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|---------------------|-----------------------------|----------------------------------|
| Macrophytes Sub Element | Moderate | Moderate | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Poor | Good by 2027 - Low confidence |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Not high by 2015 |
| Hydrological Regime | High | High | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | - | - | Not assessed by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis- Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|---|-----------------------------|-------------------------------------|
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Dissolved oxygen - No sector responsible (Not applicable), Phosphate - Agriculture and rural land management (Agriculture - Livestock), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Macrophytes and Phytobenthos Combined - No sector responsible (Not applicable), Mercury and Its Compounds - No sector responsible (Not applicable) | | |
| WFD Protected Areas | Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016) | | |

Table 7 Latest (Cycle 3) status classification data for the 'Childrey and Woodhill Brooks (GB106039023370)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|---------------------|------------------------|----------------------------------|
| Overall status | Moderate | Moderate | Good by 2063 |
| Ecological | Moderate | Moderate | Good by 2027 - Low confidence |
| Biological quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Invertebrates | Moderate | Moderate | Good by 2027 - Low confidence |
| Macrophytes and Phytobenthos Combined | Moderate | Moderate | Good by 2027 - Low confidence |
| Macrophytes Sub Element | Moderate | Moderate | |
| Physico-chemical quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Ammonia (Phys-Chem) | High | Good | Good by 2015 |
| Dissolved oxygen | Good | Good | Good by 2021 |
| рН | High | High | Good by 2015 |
| Phosphate | Poor | Poor | Good by 2027 - Low confidence |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|---|---|-----------------------------|-------------------------------------|--|
| Hydrological Regime | High | High | Supports good by 2015 | |
| Morphology | Supports Good | Supports Good | | |
| Specific pollutants | | | Not assessed by 2015 | |
| Other Substances | | | | |
| Supporting elements (Surface Water) | | | Not assessed by 2015 | |
| Chemical | Fail | Does not require assessment | Good by 2063 | |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 | |
| Benzo(a)pyrene | Good | | Good by 2015 | |
| Dioxins and dioxin-like compounds | Good | | Good by 2015 | |
| Heptachlor and cis- Heptachlor epoxide | Good | | Good by 2015 | |
| Hexabromocyclododecane (HBCDD) | Good | | Good by 2015 | |
| Hexachlorobenzene | Good | | Good by 2015 | |
| Hexachlorobutadiene | Good | | Good by 2015 | |
| Mercury and Its Compounds | Fail | | Good by 2040 | |
| Perfluorooctane sulphonate (PFOS) | Fail | | Good by 2039 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | | Good by 2063 | |
| Priority substances | Good | Does not require assessment | Good by 2015 | |
| Cypermethrin (Priority) | Good | | Good by 2015 | |
| Fluoranthene | Good | | Good by 2015 | |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Mercury and Its Compounds - No sector responsible (Not applicable), Invertebrates - Industry (Other industry, manufacturing and Business), Invertebrates - Industry (Other industry, manufacturing and Business), Macrophytes and Phytobenthos Combined - No sector responsible (Not applicable), Macrophytes and Phytobenthos Combined - Industry (Not applicable), Macrophytes and Phytobenthos Combined - Agriculture and rural land management (Agriculture - Arable), Phosphate - Agriculture and rural land management (Agriculture - Arable), Phosphate - Industry (Other industry, manufacturing and Business), Invertebrates - Agriculture and rural land management | | | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---------------------|---|------------------------|--------------------------------|
| | (Agriculture - Arable), Ammonia (Phys-Chem) - No sector responsible (Not applicable), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable) | | |
| WFD Protected Areas | Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016) | | |

Table 8 Latest (Cycle 3) status classification data for the 'Childrey Brook and Norbrook at Common Barn (GB106039023380)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|------------------------|-----------------------------------|----------------------------------|
| Overall status | Poor | Poor | Good by 2063 |
| Ecological | Poor | Poor | Good by 2027 - Low confidence |
| Biological quality elements | Poor | Poor | Good by 2027 - Low confidence |
| Invertebrates | High | High | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Poor | Poor | Good by 2027 - Low confidence |
| Macrophytes Sub Element | Poor | Poor | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Ammonia (Phys-Chem) | High | Good | Good by 2015 |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Poor | Good by 2027 - Low confidence |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | - | - | Not assessed by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|---|---|-----------------------------------|-------------------------------------|--|
| Benzo(a)pyrene | Good | - | Good by 2015 | |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 | |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 | |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 | |
| Hexachlorobenzene | Good | - | Good by 2015 | |
| Hexachlorobutadiene | Good | - | Good by 2015 | |
| Mercury and Its Compounds | Fail | - | Good by 2040 | |
| Perfluorooctane sulphonate (PFOS) | Good | - | Good by 2015 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 | |
| Priority substances | Fail | Does not require assessment | Good by 2039 | |
| Cypermethrin (Priority) | Fail | - | Good by 2039 | |
| Fluoranthene | Good | - | Good by 2015 | |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Phosphate - Water Industry (Other (not in list)), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Phosphate - Water Industry (Other (not in list)), Phosphate - Agriculture and rural land management (Agriculture - Livestock), Macrophytes and Phytobenthos Combined - Water Industry (Not applicable), Macrophytes and Phytobenthos Combined - Water Industry (Not applicable), Macrophytes and Phytobenthos Combined - Agriculture and rural land management (Agriculture - Livestock), Macrophytes and Phytobenthos Combined - Agriculture and rural land management (Agriculture - Arable), Dissolved oxygen - No sector responsible (Not applicable) | | | |
| WFD Protected Areas | Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016) | | | |

Table 9 Latest (Cycle 3) status classification data for the 'Letcombe Brook (GB106039023350)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|---------------------|-----------------------------|--------------------------------|
| Ecological | Poor | Poor | Good by 2063 |
| Biological quality elements | Poor | Poor | Good by 2039 |
| Fish | Poor | Poor | |
| Invertebrates | High | Moderate | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Moderate | Moderate | Good by 2039 |
| Macrophytes Sub Element | Moderate | Moderate | |
| Physico-chemical quality elements | Good | Good | Good by 2015 |
| Acid Neutralising Capacity | High | High | |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Biochemical Oxygen Demand (BOD) | | High | |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Good | Good | Good by 2015 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | |
| Specific pollutants | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Other Substances | | | |
| Supporting elements (Surface Water) | | | Not assessed by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|--|-----------------------------|-------------------------------------|
| Benzo(b)fluoranthene | Good | | Good by 2015 |
| Benzo(g-h-i)perylene | Fail | | Good by 2015 |
| Benzo(k)fluoranthene | Good | | Good by 2015 |
| Cadmium and Its Compounds | Good | | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | | Good by 2015 |
| Heptachlor and cis- Heptachlor epoxide | Good | | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | | Good by 2015 |
| Hexachlorobenzene | Good | | Good by 2015 |
| Hexachlorobutadiene | Good | | Good by 2015 |
| Mercury and Its Compounds | Fail | | Good by 2015 |
| Perfluorooctane sulphonate (PFOS) | Good | | Good by 2015 |
| Polybrominated diphenyl ethers (PBDE) | Fail | | Good by 2063 |
| Tributyltin Compounds | Good | | |
| Priority substances | Fail | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Fail | | Good by 2015 |
| Fluoranthene | Good | | Good by 2015 |
| Lead and Its Compounds | Good | | Good by 2015 |
| Nickel and Its Compounds | Good | | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) WFD Protected Areas | Fish - Agriculture and rural land management (Agriculture - Arable), Fish - Other (Not applicable), Fish - Urban and transport (Urban), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Mercury and Its Compounds - No sector responsible (Not applicable), Benzo(g-h-i)perylene - Sector under investigation (Not applicable) Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Nitrates Directive (Berkshire Downs - G87), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - | | |

Table 10 Latest (Cycle 3) status classification data for the 'Cow Common and Portobello Ditch (GB106039023360)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status* | Cycle 3 RBMP status objectives |
|---|------------------------|--------------------------------|----------------------------------|
| Overall status | Poor | - | Good by 2063 |
| Ecological | Poor | - | Good by 2027 - Low confidence |
| Biological quality elements | Poor | - | Good by 2027 - Low confidence |
| Invertebrates | Moderate | - | Good by 2027 - Low confidence |
| Macrophytes and Phytobenthos Combined | Poor | - | Good by 2027 - Low confidence |
| Macrophytes Sub Element | Poor | - | N/a |
| Physico-chemical quality elements | Moderate | - | Good by 2027 - Low confidence |
| Ammonia (Phys-Chem) | High | - | Good by 2015 |
| Dissolved oxygen | Bad | - | Good by 2027 - Low confidence |
| рН | High | - | Good by 2015 |
| Phosphate | Poor | - | Good by 2027 - Low confidence |
| Temperature | High | - | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | - | Supports good by 2015 |
| Hydrological Regime | High | - | Supports good by 2015 |
| Morphology | Supports Good | - | |
| Specific pollutants | - | - | Not assessed by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis- Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Fail | - | Good by 2040 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status* | Cycle 3 RBMP status objectives | |
|---|---|-----------------------------|--|--|
| Perfluorooctane sulphonate (PFOS) | Good | - | Good by 2015 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 | |
| Priority substances | Good | Does not require assessment | Good by 2015 | |
| Cypermethrin (Priority) | Good | - | Good by 2015 | |
| Fluoranthene | Good | - | Good by 2015 | |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | | | | |
| WFD Protected Areas | Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016), Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681) | | | |

^{*} Water body status not assessed in 2022

Table 11 Latest (Cycle 3) status classification data for the 'Frilford and Marcham Brook (GB106039023420)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|-----------------------------|------------------------|------------------------|--------------------------------|
| Overall status | Moderate | Moderate | Moderate by 2015 |
| Ecological | Moderate | Moderate | Moderate by 2015 |
| Biological quality elements | Moderate | Good | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|------------------------|-----------------------------|--------------------------------|
| Invertebrates | Good | Good | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Moderate | Good | Good by 2015 |
| Macrophytes Sub Element | Moderate | Good | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | Good | Good | Good by 2021 |
| рН | High | High | Good by 2015 |
| Phosphate | Bad | Poor | Poor by 2027 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Permethrin | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Good | - | Good by 2015 |
| Benzo(g-h-i)perylene | Good | - | Good by 2015 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|--|-----------------------------|--|
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Perfluorooctane sulphonate (PFOS) | Good | - | Good by 2015 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Tributyltin Compounds | Good | - | Good by 2015 |
| Priority substances | Fail | Does not require assessment | Good by 2039 |
| Cypermethrin (Priority) | Fail | - | Good by 2039 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Macrophytes and Phytobenthos Combined - Water Industry (Waste water treatment), Macrophytes and Phytobenthos Combined - No sector responsible (Not applicable), Macrophytes and Phytobenthos Combined - Agriculture and rural land management (Agriculture - Arable), Mercury and Its Compounds - No sector responsible (Not applicable), Phosphate - Water Industry (Not applicable), Phosphate - Water Industry (Not applicable), Phosphate - Water Industry (Other (not in list)), Phosphate - Water Industry (Waste water treatment), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable) | | |
| WFD Protected Areas | | | s (Land Brook confluence |

Table 12 Latest (Cycle 3) status classification data for the 'Sandford Brook (Source to Ock) (GB106039023410)' river water body

| Classification element | Cycle 3 2019 status | Cycle 3 2022 status* | Cycle 3 RBMP status objectives |
|--|------------------------|-------------------------|----------------------------------|
| Overall status | Poor | - | Good by 2063 |
| Ecological | Poor | - | Good by 2027 - Low confidence |
| Biological quality elements | Poor | - | Good by 2027 - Low confidence |
| Invertebrates | Good | - | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Poor | - | Good by 2027 - Low confidence |

| Classification element | Cycle 3 2019 status | Cycle 3 2022 status* | Cycle 3 RBMP status objectives |
|---|------------------------|-----------------------------------|--------------------------------|
| Macrophytes Sub Element | Poor | - | - |
| Physico-chemical quality elements | High | - | Good by 2015 |
| Ammonia (Phys-Chem) | High | - | Good by 2015 |
| Dissolved oxygen | High | - | Good by 2015 |
| рН | High | - | Good by 2015 |
| Phosphate | High | - | Good by 2015 |
| Temperature | High | - | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | - | Supports good by 2015 |
| Hydrological Regime | High | - | Supports good by 2015 |
| Specific pollutants | - | - | Not assessed by 2015 |
| Other Substances | - | - | |
| Supporting elements (Surface Water) | - | - | Not assessed by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Perfluorooctane sulphonate (PFOS) | Good | - | Good by 2015 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |

| Classification element | Cycle 3 2019 status | Cycle 3 2022 status* | Cycle 3 RBMP status objectives |
|--|--|-----------------------------------|--|
| Fluoranthene | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Mercury and Its Compounds - No sector responsible (Not applicable), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable) | | |
| WFD Protected Areas | Nitrates Directive (Ock and tributaries (Land Brook confluence to Thames) NVZ - S681), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016), Special Area of Conservation (Cothill Fen - UK0012889), Safeguard Zone (Upper Thames (Leach to Evenlode) - SWSGZ4012) | | |

^{*} Water body status not assessed in 2022

Table 13 Latest (Cycle 3) status classification data for the 'Ginge Brook and Mill Brook (GB106039023660)' water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|------------------------|------------------------|----------------------------------|
| Overall status | Moderate | Moderate | Moderate by 2015 |
| Ecological | Moderate | Moderate | Moderate by 2015 |
| Biological quality elements | Moderate | Moderate | Good by 2027 - Low confidence |
| Invertebrates | High | High | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Moderate | Moderate | Good by 2027 - Low confidence |
| Macrophytes Sub Element | Moderate | Moderate | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Poor | Moderate by 2015 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|--|---|--------------------------------|-------------------------------------|--|
| Specific pollutants | - | - | Not assessed by 2015 | |
| Chemical | Fail | Does not require assessment | Good by 2063 | |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 | |
| Benzo(a)pyrene | Good | - | Good by 2015 | |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 | |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 | |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 | |
| Hexachlorobenzene | Good | - | Good by 2015 | |
| Hexachlorobutadiene | Good | - | Good by 2015 | |
| Mercury and Its Compounds | Fail | - | Good by 2040 | |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 | |
| Priority substances | Good | Does not require assessment | Good by 2015 | |
| Cypermethrin (Priority) | Good | - | Good by 2015 | |
| Fluoranthene | Good | - | Good by 2015 | |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) WFD Protected Areas | Macrophytes and Phytobenthos Combined - Water Industry (Waste water treatment), Mercury and Its Compounds - No sector responsible (Not applicable), Phosphate - Water Industry (Waste water treatment), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Macrophytes and Phytobenthos Combined - No sector responsible () Nitrates Directive (Berkshire Downs - G87), Nitrates Directive (Ginge Brook and Mill Brook NVZ - S469), Nitrates Directive (THAMES (LEACH TO EVENLODE) NVZ - S482), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016) | | | |

Table 14 Latest (Cycle 3) status classification data for the 'Moor Ditch and Ladygrove Ditch (GB106039023630)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|------------------------|--------------------------------|--------------------------------|
| Overall status | Poor | Poor | Moderate by 2015 |
| Ecological | Poor | Poor | Moderate by 2015 |
| Biological quality elements | Poor | Poor | Moderate by 2015 |
| Invertebrates | Poor | Poor | Good by 2027 - Low confidence |
| Macrophytes and Phytobenthos Combined | Moderate | Moderate | Moderate by 2015 |
| Macrophytes Sub Element | Moderate | Moderate | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Acid Neutralising Capacity | High | High | Good by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | Good | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Poor | Moderate by 2015 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | High | High | High by 2015 |
| Arsenic | High | High | High by 2015 |
| Chromium (VI) | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Triclosan | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|---|---|-----------------------------|--|--|
| Benzo(g-h-i)perylene | Good | - | Good by 2015 | |
| Benzo(k)fluoranthene | Good | - | Good by 2015 | |
| Cadmium and Its Compounds | Good | - | Good by 2015 | |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 | |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 | |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 | |
| Hexachlorobenzene | Good | - | Good by 2015 | |
| Hexachlorobutadiene | Good | - | Good by 2015 | |
| Mercury and Its Compounds | Fail | - | Good by 2040 | |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 | |
| Priority substances | Good | Does not require assessment | Good by 2015 | |
| Cypermethrin (Priority) | Good | - | Good by 2015 | |
| Fluoranthene | Good | - | Good by 2015 | |
| Lead and Its Compounds | Good | - | Good by 2015 | |
| Nickel and Its Compounds | Good | - | Good by 2015 | |
| Other Pollutants | Does not require assessment | | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Invertebrates - Water Industry (Waste water treatment), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Macrophytes and Phytobenthos Combined - Industry (Other industry, manufacturing and Business), Macrophytes and Phytobenthos Combined - Water Industry (Not applicable), Phosphate - Water Industry (Waste water treatment), Phosphate - Water Industry (Not applicable), Phosphate - Industry (Other industry, manufacturing and Business), Phosphate - Water Industry (Other (not in list)), Mercury and Its Compounds - No sector responsible (Not applicable), Invertebrates - No sector responsible (Not applicable), Invertebrates - Urban and transport (Not applicable), Invertebrates - Agriculture and rural land management (Agriculture - Arable) | | | |
| WFD Protected Areas | S482), Nitrates Dir | (THAMES (LEACH T | O EVENLODE) NVZ - wns - G87), Safeguard | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|----------------|--|------------------------|--------------------------------|--|
| | SWSGZ4016), Nitrates Directive (Moor Ditch and Ladygrove Ditch NVZ - S468) | | | |

Table 15 Latest (Cycle 3) status classification data for the 'Thames (Evenlode to Thame) (GB106039030334)' water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|------------------------|------------------------|--------------------------------|
| Overall status | Moderate | Poor | Moderate by 2015 |
| Ecological | Moderate | Poor | Moderate by 2015 |
| Biological quality elements | Moderate | Poor | Good by 2027 - Low confidence |
| Fish | Good | Poor | Good by 2021 |
| Invertebrates | Moderate | High | Good by 2027 - Low confidence |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Moderate by 2015 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Morphology | Supports Good | Supports Good | N/a |
| Specific pollutants | High | High | High by 2015 |
| Arsenic | High | High | High by 2015 |
| Chlorothalonil | High | High | High by 2015 |
| Chromium (VI) | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Diazinon | High | High | High by 2015 |
| Dimethoate | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Pendimethalin | High | High | High by 2015 |
| Permethrin | High | High | High by 2015 |
| Triclosan | High | High | High by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|------------------------|--------------------------------|--------------------------------|
| Zinc | High | High | High by 2015 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Good | - | Good by 2015 |
| Benzo(g-h-i)perylene | Good | - | Good by 2015 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Di(2-ethylhexyl)phthalate (Priority hazardous) | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Hexachlorocyclohexane | Good | - | Good by 2015 |
| Mercury and Its Compounds | Fail | - | Good by 2040 |
| Nonylphenol | Good | - | Good by 2015 |
| Pentachlorobenzene | Good | - | Good by 2015 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Quinoxyfen | Good | - | Good by 2015 |
| Tributyltin Compounds | Good | - | Good by 2021 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Aclonifen | Good | - | Good by 2015 |
| Alachlor | Good | - | Good by 2015 |
| Bifenox | Good | - | Good by 2015 |
| Cybutryne | Good | - | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Dichlorvos (Priority) | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|--|---|-----------------------------|-------------------------------------|--|
| Fluoranthene | Good | - | Good by 2015 | |
| Lead and Its Compounds | Good | - | Good by 2015 | |
| Nickel and Its Compounds | Good | - | Good by 2015 | |
| Terbutryn | Good | - | Good by 2015 | |
| Trichloromethane | Good | - | Good by 2015 | |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Macrophytes and Phytobenthos Combined - Water Industry (Waste water treatment), Mercury and Its Compounds - No sector responsible (Not applicable), Phosphate - Water Industry (Waste water treatment), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Macrophytes and Phytobenthos Combined - No sector responsible (Not applicable) | | | |
| WFD Protected Areas | Urban Waste Water Treatment Directive (River Thames – UKENRI17), Special Area of Conservation (Oxford Meadows – UK0012845), Bathing water Directive (Wolvercote Mill Stream – UK11946), Nitrates Directive (Ginge Brook and Mill Brook NVZ - S469), Nitrates Directive (THAMES (LEACH TO EVENLODE) NVZ - S482), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016), Special Area of Conservation (Little Wittenham – UK0030184), Nitrates Directive (Thames Wallingford to Caversham NVZ – S481), Nitrates Directive (Northfield Brook (Source to Thames) at Sandford NVZ – S477) | | | |

Table 16 Latest (Cycle 3) status classification data for the 'Thames Wallingford to Caversham (GB106039030331)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---------------------------------------|------------------------|------------------------|--------------------------------|
| Overall status | Moderate | Moderate | Moderate by 2015 |
| Ecological | Moderate | Moderate | Moderate by 2015 |
| Biological quality elements | High | High | Good by 2021 |
| Invertebrates | High | High | Good by 2021 |
| Macrophytes and Phytobenthos Combined | - | - | Not assessed by 2021 |
| Macrophytes Sub Element | High | High | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Acid Neutralising Capacity | High | High | Good by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|------------------------|-----------------------------------|--------------------------------|
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Moderate by 2015 |
| Temperature | High | High | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2021 |
| Specific pollutants | High | High | High by 2021 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Triclosan | High | High | High by 2021 |
| Zinc | High | High | High by 2015 |
| Supporting elements (Surface Water) | Moderate | Moderate | Good by 2027 - Low confidence |
| Mitigation Measures Assessment | Moderate or less | Moderate or less | Good by 2027 - Low confidence |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Anthracene | Good | - | Good by 2015 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Fail | - | Good by 2033 |
| Benzo(g-h-i)perylene | Fail | - | Good by 2033 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Hexachlorocyclohexane | Good | - | Good by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|--|---|-----------------------------------|--------------------------------|--|
| Mercury and Its Compounds | Fail | - | Good by 2040 | |
| Nonylphenol | Good | - | Good by 2015 | |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 | |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 | |
| Tributyltin Compounds | Good | - | Good by 2015 | |
| Priority substances | Fail | Does not require assessment | Good by 2039 | |
| 1,2-dichloroethane | Good | - | Good by 2015 | |
| Cypermethrin (Priority) | Fail | - | Good by 2039 | |
| Fluoranthene | Good | - | Good by 2015 | |
| Lead and Its Compounds | Good | - | Good by 2015 | |
| Nickel and Its Compounds | Good | - | Good by 2015 | |
| Pentachlorophenol | Good | - | Good by 2015 | |
| Trichlorobenzenes | Good | - | Good by 2015 | |
| Trichloromethane | Good | - | Good by 2015 | |
| Other Pollutants | Good | Does not require assessment | Good by 2015 | |
| Aldrin, Dieldrin, Endrin & Isodrin | Good | - | Good by 2015 | |
| Carbon Tetrachloride | Good | - | Good by 2015 | |
| DDT Total | Good | - | Good by 2015 | |
| para - para DDT | Good | - | Good by 2015 | |
| Tetrachloroethylene | Good | - | Good by 2015 | |
| Trichloroethylene | Good | - | Good by 2015 | |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Mercury and Its Compounds - No sector responsible (Not applicable), Mitigation Measures Assessment - Recreation (Recreation), Mitigation Measures Assessment - Local and Central Government (Not applicable), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Benzo(b)fluoranthene - Sector under investigation (Not applicable), Benzo(g-h-i)perylene - Sector under investigation (Not applicable), Mitigation Measures Assessment - Navigation (Inland Waterways), Phosphate - Water Industry (Waste water treatment), Phosphate - Agriculture and rural land management (Not applicable), Phosphate - Water Industry (Other (not in list)) | | | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---------------------|---|---|--|
| WFD Protected Areas | S481), Nitrates I Area of Conse Safeguard Z Teddington) - SW | Directive (Berkshirervation (Little Witte one (Lower Thame | ford to Caversham NVZ - e Downs - G87), Special enham - UK0030184), es (Cookham Egham n Waste Water Treatment s - UKENRI17) |

Table 17 Latest (Cycle 3) status classification data for the 'Thames (Reading to Cookham) (GB106039023233)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP objectives |
|---|------------------------|------------------------|----------------------------------|
| Overall status | Moderate | Moderate | Moderate by 2015 |
| Ecological | Moderate | Moderate | Moderate by 2015 |
| Biological quality elements | Good | Good | Good by 2015 |
| Invertebrates | Good | Good | Good by 2015 |
| Macrophytes Sub Element | High | High | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | Good | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Moderate by 2015 |
| Temperature | Good | Moderate | Good by 2015 |
| Hydromorphological Supporting Elements | Supports Good | Supports Good | Supports good by 2015 |
| Hydrological Regime | Supports Good | Supports Good | Supports good by 2015 |
| Specific pollutants | High | High | High by 2015 |
| Chromium (VI) | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Permethrin | High | High | High by 2015 |
| Triclosan | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Supporting elements (Surface Water) | Moderate | Moderate | Good by 2027 - Low confidence |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP objectives |
|---|---|-----------------------------------|--|
| Mitigation Measures Assessment | Moderate or less | Moderate or | Good by 2027 - Low |
| Chemical | Fail | less Does not require assessment | confidence Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Fail | - | Good by 2033 |
| Benzo(g-h-i)perylene | Fail | - | Good by 2033 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Good | - | Good by 2015 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Tributyltin Compounds | Good | - | Good by 2015 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Does not require assessment by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) | Benzo(g-h-i)perylene - Sector under investigation (Not applicable), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Phosphate - Water Industry (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under | | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP objectives |
|---|--|------------------------|-------------------------|
| (Classification element, category and activity) | investigation (Not applicable), Benzo(b)fluoranthene - Sector under investigation (Not applicable), Mitigation Measures Assessment - Recreation (Recreation), Mitigation Measures Assessment - Navigation (Inland Waterways) | | |
| WFD Protected Areas | Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016), Nitrates Directive (Sheeplands - G88), Urban Waste Water Treatment Directive (River Thames - UKENRI17) | | |

Table 18 Latest (Cycle 3) status classification data for the 'Thames (Cookham to Egham) (GB106039023231)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|-------------------------------------|------------------------|--------------------------------|--------------------------------|
| Overall status | Moderate | Moderate | Moderate by 2015 |
| Ecological | Moderate | Moderate | Moderate by 2015 |
| Biological quality elements | Good | Good | Good by 2015 |
| Invertebrates | Good | Good | Good by 2015 |
| Macrophytes Sub Element | High | High | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Acid Neutralising Capacity | High | High | Good by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Dissolved oxygen | High | High | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Moderate by 2015 |
| Temperature | High | High | Good by 2015 |
| Specific pollutants | High | High | High by 2015 |
| Arsenic | High | High | High by 2015 |
| Copper | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Toluene | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Supporting elements (Surface Water) | Moderate | Moderate | Good by 2033 |
| Mitigation Measures Assessment | Moderate or less | Moderate or less | Good by 2033 |
| Chemical | Fail | Does not require assessment | Good by 2063 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|--|-----------------------------|--------------------------------|
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Good | - | Good by 2015 |
| Benzo(g-h-i)perylene | Good | - | Good by 2015 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Mercury and Its Compounds | Good | - | Good by 2015 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |
| Tributyltin Compounds | Good | - | Good by 2015 |
| Trifluralin (Priority hazardous) | Good | - | Good by 2015 |
| Priority substances | Good | Does not require assessment | Good by 2015 |
| Atrazine | Good | - | Good by 2015 |
| Benzene | Good | - | Good by 2015 |
| Cypermethrin (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Simazine | Good | - | Good by 2015 |
| Other Pollutants | Good | Does not require assessment | Good by 2015 |
| Aldrin, Dieldrin, Endrin & Isodrin | Good | - | Good by 2015 |
| para - para DDT | Good | - | Good by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For Deterioration (RFD) (Classification element, category and activity) | Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Mitigation Measures Assessment - Water Industry (Not applicable), Mitigation Measures Assessment - Navigation | | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives | |
|---------------------|--|------------------------|--------------------------------|--|
| | (Inland Waterways), Mitigation Measures Assessment - Local and Central Government (Not applicable), Phosphate - Agriculture and rural land management (Agriculture - Arable), Phosphate - Water Industry (Not applicable), Phosphate - Water Industry (Waste water treatment), Phosphate - Urban and transport (Roads) | | | |
| WFD Protected Areas | Urban Waste Water Treatment Directive (River Thames - UKENRI17), Ramsar Site (South West London Waterbodies - UK11065), Drinking Water Protected Area (Thames (Cookham to Egham) - UKGB106039023231), Special Protection Area (South West London Waterbodies - UK9012171), Safeguard Zone (Lower Thames (Cookham Egham Teddington) - SWSGZ4016), Nitrates Directive (Roundmoor Ditch and Boveney Ditch NVZ - S466) | | | |

Table 19 Latest (Cycle 3) status classification data for the 'Thames (Egham to Teddington) (GB106039023232)' river water body

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|--|---------------------|------------------------|--------------------------------|
| Overall status | Poor | Poor | Poor by 2015 |
| Ecological | Poor | Poor | Poor by 2015 |
| Biological quality elements | Poor | Poor | Poor by 2015 |
| Invertebrates | Poor | High | Good by 2015 |
| Macrophytes and Phytobenthos Combined | Poor | Poor | Poor by 2015 |
| Phytobenthos Sub Element | Poor | Poor | N/a |
| Macrophytes Sub Element | High | High | N/a |
| Physico-chemical quality elements | Moderate | Moderate | Moderate by 2015 |
| Acid Neutralising Capacity | High | High | Good by 2015 |
| Ammonia (Phys-Chem) | High | High | Good by 2015 |
| Biochemical Oxygen Demand (BOD) | - | Good | N/a |
| Dissolved oxygen | Good | Good | Good by 2015 |
| рН | High | High | Good by 2015 |
| Phosphate | Moderate | Moderate | Moderate by 2015 |
| Temperature | Moderate | Moderate | Good by 2015 |
| Specific pollutants | High | High | High by 2015 |
| Arsenic | High | High | High by 2015 |
| Chlorothalonil | High | High | High by 2015 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---------------------------------------|---------------------|-----------------------------|--------------------------------|
| Copper | High | High | High by 2015 |
| Diazinon | High | High | High by 2015 |
| Dimethoate | High | High | High by 2015 |
| Iron | High | High | High by 2015 |
| Manganese | High | High | High by 2015 |
| Pendimethalin | High | High | High by 2015 |
| Permethrin | High | High | High by 2015 |
| Zinc | High | High | High by 2015 |
| Supporting elements (Surface Water) | Moderate | Moderate | Good by 2033 |
| Mitigation Measures Assessment | Moderate or less | Moderate or less | Good by 2033 |
| Chemical | Fail | Does not require assessment | Good by 2063 |
| Priority hazardous substances | Fail | Does not require assessment | Good by 2063 |
| Benzo(a)pyrene | Good | - | Good by 2015 |
| Benzo(b)fluoranthene | Good | - | Good by 2015 |
| Benzo(g-h-i)perylene | Good | - | Good by 2015 |
| Benzo(k)fluoranthene | Good | - | Good by 2015 |
| Cadmium and Its Compounds | Good | - | Good by 2015 |
| Dioxins and dioxin-like compounds | Good | - | Good by 2015 |
| Endosulfan | - | - | Good by 2015 |
| Heptachlor and cis-Heptachlor epoxide | Good | - | Good by 2015 |
| Hexabromocyclododecane (HBCDD) | Good | - | Good by 2015 |
| Hexachlorobenzene | Good | - | Good by 2015 |
| Hexachlorobutadiene | Good | - | Good by 2015 |
| Hexachlorocyclohexane | Good | - | Good by 2015 |
| Mercury and Its Compounds | Good | - | Good by 2015 |
| Nonylphenol | Good | - | Good by 2015 |
| Pentachlorobenzene | Good | - | Good by 2015 |
| Perfluorooctane sulphonate (PFOS) | Fail | - | Good by 2039 |
| Polybrominated diphenyl ethers (PBDE) | Fail | - | Good by 2063 |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|---|-----------------------------|--------------------------------|
| Quinoxyfen | Good | - | Good by 2015 |
| Tributyltin Compounds | Fail | - | Good by 2039 |
| Trifluralin (Priority hazardous) | - | - | Good by 2015 |
| Priority substances | Fail | Does not require assessment | Good by 2039 |
| 1,2-dichloroethane | - | - | Good by 2015 |
| Aclonifen | Good | - | Good by 2015 |
| Alachlor | Good | - | Good by 2015 |
| Atrazine | - | | Good by 2015 |
| Benzene | Good | - | Good by 2015 |
| Bifenox | Good | - | Good by 2015 |
| Cybutryne | Good | - | Good by 2015 |
| Cypermethrin (Priority) | Fail | - | Good by 2039 |
| Dichloromethane | - | - | Good by 2015 |
| Dichlorvos (Priority) | Good | - | Good by 2015 |
| Fluoranthene | Good | - | Good by 2015 |
| Lead and Its Compounds | Good | - | Good by 2015 |
| Nickel and Its Compounds | Good | - | Good by 2015 |
| Octylphenol | Good | - | Good by 2015 |
| Pentachlorophenol | - | - | Good by 2015 |
| Simazine | - | - | Good by 2015 |
| Terbutryn | Good | | Good by 2015 |
| Trichlorobenzenes | - | - | Good by 2015 |
| Trichloromethane | - | - | Good by 2015 |
| Other Pollutants | Does not require assessment | Does not require assessment | Good by 2015 |
| Aldrin, Dieldrin, Endrin & Isodrin | - | - | Good by 2015 |
| Carbon Tetrachloride | - | - | Good by 2015 |
| DDT Total | - | - | Good by 2015 |
| para - para DDT | - | - | Good by 2015 |
| Tetrachloroethylene | - | - | Good by 2015 |
| Trichloroethylene | - | - | Good by 2015 |
| Reasons for Not Achieving Good (RNAG) and Reasons For | Perfluorooctane sulphonate (PFOS) - Sector under investigation (Not applicable), Macrophytes and Phytobenthos Combined - Agriculture and rural land management (Agriculture - Arable), Macrophytes and Phytobenthos | | |

| Status element | Cycle 3 2019 status | Cycle 3 2022 status | Cycle 3 RBMP status objectives |
|---|--|--|--|
| Deterioration (RFD) (Classification element, category and activity) | Combined - Water Industry (Waste water treatment), Temperature - No sector responsible (Not applicable), Temperature - Other (Not applicable), Temperature - Water Industry (Waste water treatment), Phosphate - Water Industry (Waste water treatment), Phosphate - Agriculture and rural land management (Not applicable), Phosphate - Urban and transport (Urban), Polybrominated diphenyl ethers (PBDE) - No sector responsible (Not applicable), Mitigation Measures Assessment - Water Industry (Not applicable), Mitigation Measures Assessment - Local and Central Government (Not applicable), Phosphate - Agriculture and rural land management (Agriculture - Arable), Phosphate - Water Industry (Other (not in list)), Mitigation Measures Assessment | | |
| WFD Protected Areas | Teddington) - UKGB Treatment Directive Protection Area (UK9012171), Ramsar UK11065), Safegua | (River Thames - Uk South West London Site (South West Lo | rban Waste Water KENRI17), Special Waterbodies - ondon Waterbodies - ames (Cookham |

A2.2 Groundwater bodies

Table 20 Latest Cycle 3 (2019) status classification for the Shrivenham Corallian (GB40602G600600) groundwater body

| Status element | Cyle 3 2019 status | Cycle 3 RBMP status objectives |
|---|--------------------|--------------------------------|
| Overall Status | Good | Good by 2015 |
| Quantitative Status | Good | Good by 2015 |
| Quantitative GWDTEs test | Good | Good by 2015 |
| Quantitative Dependent Surface Water Body Status | Good | Good by 2015 |
| Quantitative Saline Intrusion | Good | Good by 2015 |
| Quantitative Water Balance | Good | Good by 2015 |
| Chemical Status | Good | Good by 2015 |
| Chemical Dependent Surface Water Body Status | Good | Good by 2015 |
| Chemical Drinking Water Protected Area | Good | Good by 2015 |

| Status element | Cyle 3 2019 status | Cycle 3 RBMP status objectives | | |
|---|---|--------------------------------|--|--|
| Chemical GWDTEs test | Good | Good by 2015 | | |
| Chemical Saline Intrusion | Good | Good by 2015 | | |
| General Chemical Test | Good | Good by 2015 | | |
| Supporting elements (Groundwater) | - | N/a | | |
| Prevent and Limit Objective | it Objective Active | | | |
| Trend Assessment | Upward trend | N/a | | |
| RNAGs & RFD (Classification element, category and activity) | N/a (water body at Good Overall Status) | | | |
| WFD Protected Areas | Nitrates Directive (Thames (Churn to Coln) NVZ - S457), Nitrates Directive (Shrivenham Lower Greensand - G86), Nitrates Directive (Cole (Acorn Bridge to South Marston Brook) NVZ - S680), Nitrates Directive (Thames (Leach to Evenlode) NVZ - S482), Nitrates Directive (Ock and tributarie (Land Brook confluence to Thames) NVZ - S681), Nitrates Directive (Tuckmill Brook and tributaries NVZ - S456), Nitrate Directive (Highworth Corallian - G85), Nitrates Directive (Filchhampstead Brook at Farmoor NVZ - S478), Special Area of Conservation (Cothill Fen - UK0012889), Nitrates Directive (Wadley Stream (Source to Thames at Duxford) NVZ - S470) Drinking Water Protected Area (Shrivenham Corallian - UKGB40602G600600). | | | |

Table 21 Latest Cycle 3 (2019) status classification for the Vale of White Horse Chalk (GB40601G601000) groundwater body

| Water Body Name | Cycle 3 2019 status | Cycle 3 RBMP status objectives |
|---|---------------------|--------------------------------|
| Overall water body | Poor | Good by 2027 - Low confidence |
| Quantitative Status element | Good | Good by 2015 |
| Quantitative GWDTEs test | Good | Good by 2015 |
| Quantitative Dependent Surface Water Body Status | Good | Good by 2015 |
| Quantitative Saline Intrusion | Good | Good by 2015 |

| Water Body Name | Cycle 3 2019 status | Cycle 3 RBMP status objectives | | | |
|--|--|--|--|--|--|
| Quantitative Water Balance | Good | Good by 2015 | | | |
| Chemical Status element | Poor | Good by 2027 - Low confidence | | | |
| Chemical Dependent Surface Water Body Status | Good | Good by 2015 | | | |
| Chemical Drinking Water Protected Area | Poor | Good by 2027 - Low confidence | | | |
| Chemical GWDTEs test | Good | Good by 2015 | | | |
| Chemical Saline Intrusion | Good | Good by 2015 | | | |
| General Chemical Test | Poor | Good by 2027 - Low confidence | | | |
| Supporting elements (Groundwater) | - | N/a | | | |
| Prevent and Limit Objective | Active | N/a | | | |
| Trend Assessment | Upward trend | N/a | | | |
| RNAG and RFD (Classification element, category and activity) | General Chemical Test - Agriculture and rural land management (Poor nutrient management), General Chemical Test -Industry (Landfill Leaching), Trend Assessment - Agriculture and rural land management (Poor nutrient management) | | | | |
| WFD Protected Areas | (Cholsey Brook and tributarie (Berkshire Downs - G87), Nit Coln) NVZ - S457), Nitrates Distr to conf Semington Bk Conservation (Little Wittenham (Thames Wallingford to Caversi (Thames (Leach to Evenlode) Nand tributaries (Land Brook considerative (Tuckmill Brook and Directive (Tuckmill Brook and Directive (R Marden - source Nitrates Directive (Willow Brook NVZ - S819), Nitrates Directive conf R Marden NVZ - S571), Hancocks Wtr to conf R Avon (EMANOR ROAD (WANTAGE) | essex - G151), Nitrates Directive es NVZ - S467), Nitrates Directive rates Directive (Thames (Churn to irective (Summerham Bk - Poulshot in NVZ - S565), Special Area of in - UK0030184), Nitrates Directive ham NVZ - S481), Nitrates Directive NVZ - S482), Nitrates Directive (Ock onfluence to Thames) NVZ - S681), and Mill Brook NVZ - S469), Nitrates of tributaries NVZ - S456), Nitrates Directive of tributaries Directive (Brinkworth Bk - ONITRATES DIRECTIVE of tributaries Directive of tri | | | |

| Water Body Name | Cycle 3 2019 status | Cycle 3 RBMP status objectives |
|-----------------|---------------------------------|---|
| | Protected Area (Vale of White H | ore - GWSGZ0254), Drinking Water orse Chalk - UKGB40601G601000), Cherhill - GWSGZ0297). |

| Annex 3 | Screening assessment results |
|---------|------------------------------|
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A3.1 Screening of Project activities and components

Table 22 Screening of Project activities and components – Construction Phase (temporary works)

| Project activity / component type | Project activity / component | Impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|--|--|--|---|-------------------|---|
| Construction of reservoir and reservoir infrastructure | Construction of reservoir (borrow pit excavation), embankments and toe drain | Loss / degradation of existing watercourses and associated riparian and aquatic habitats. Temporary below ground works (such as excavations, cuttings, piling), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works, as well as indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. Groundwater modelling to be undertaken at ES stage to verify drawdown extent / Zol. | In | Direct impact pathways to surface water bodies, as well as potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |
| | Construction of Reservoir tunnel and River tunnel (Tunnelling) | Temporary below ground works (such as excavations, cuttings, piling), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. | Surface water bodies (watercourses) potentially indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. Groundwater modelling to be undertaken at ES stage to verify drawdown extent / Zol. | In | Potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |
| | Construction of intake/outfall shaft (below ground works) | Loss / degradation of existing watercourses and associated riparian and aquatic habitats. Temporary below ground works (such as excavations, cuttings, piling), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. | Surface water bodies (watercourses) directly impacted within footprint of works, as well as indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. Groundwater modelling to be undertaken at ES stage to verify drawdown extent / Zol. | In | Direct impact pathways to surface water bodies, as well as potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |
| | Construction of pumping station structures/shaft (above ground works) | Loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. It is assumed that any downstream impacts are a likely to be sufficiently dissipated so as to not effect WFD quality element status of downstream water bodies taking into account embedded construction measures. | In | Direct impact pathways to surface water bodies. |
| | Construction of pumping station structures/shaft (below ground works) | Loss / degradation of existing watercourses and associated riparian and aquatic habitats. Temporary below ground works (such as excavations, cuttings, piling), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and | Surface water bodies (watercourses) directly impacted within footprint of works, as well as indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. Groundwater modelling to | In | Direct impact pathways to surface water bodies, as well as potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |

| Project activity / component type | Project activity / component | Impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|--------------------------------------|--|--|---|-------------------|---|
| | | downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. | be undertaken at ES stage to verify drawdown extent / Zol. | | |
| | Construction of intake/outfall structures (above ground and in-channel works) | Temporary bankside and in-channel works resulting in direct impacts on local channel morphology and habitats, and leading to potential indirect impacts on hydromorphological conditions, water quality and/or habitats and biota immediately downstream. Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. It is assumed that any downstream impacts are a likely to be sufficiently dissipated so as to not effect WFD quality element status of downstream water bodies (given the dilution / dispersal effect of the River Thames and taking into account embedded construction measures also). | In | Direct impact pathways to surface water bodies |
| Construction of new buildings | Construction of recreational buildings | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. | In | Direct impact pathways to surface water bodies |
| | Construction of T2TS Water Treatment Works (WTW) buildings | The site of the new WTW is located adjacent to Mere dyke. The construction therefore has the potential to cause temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats. However, activity screened out as the Mere Dyke will be diverted away from the proposed location of the WTW (as part of the construction of the eastern watercourse diversion), prior to the construction of the WTWs. | N/a – no impact anticipated | Out | No impact pathway to surface water bodies or groundwater bodies. |
| Construction of other infrastructure | Construction and decommissioning of railway sidings and material handling facility | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. | In | Direct impact pathways to surface water bodies |
| | Construction of noise bunds | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. | In | Direct impact pathways to surface water bodies |
| | Construction of recreational lakes | Loss / degradation of existing watercourses and associated riparian and aquatic habitats. Temporary below ground works (such as excavations, cuttings, piling), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works, as well as indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. Groundwater modelling to be undertaken at ES stage to verify drawdown extent / Zol. | In | Direct impact pathways to surface water bodies, as well as potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |
| | Construction of Integrated Constructed Wetland (ICW). | Loss / degradation of existing watercourses and associated riparian and aquatic habitats. Temporary below ground works (such as excavations), including potential dewatering activities, leading to changes in groundwater water levels and/or flows and/or the potential mobilisation of contaminants to groundwater and/or dependent surface water bodies. Such activities have potential to temporarily alter hydraulic gradients, which could also lead to temporary changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. Discharge of dewatered groundwater back to ground or nearby watercourses also has the potential to release any constituent contaminants. | Surface water bodies (watercourses) directly impacted within footprint of works, as well as indirectly impacted by the drawdown of groundwater within the local Secondary A superficial aquifer and Unproductive bedrock aquifer. No groundwater bodies are present at the location of activity and the groundwater drawdown extent not anticipated to extent to adjacent groundwater bodies. | In | Direct impact pathways to surface water bodies, as well as potential indirect impact pathways to nearby / downstream surface water bodies. No groundwater bodies directly impacted or within anticipated groundwater drawdown extent. |
| | | Potential spread of aquatic invasive nonnative species. | | | |

| Project activity / component type | Project activity / component | Impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|---|---|--|---|-------------------|---|
| | | Potential for temporary changes in water quality of downstream watercourses, leading to potential indirect impacts on, water quality and/or habitats and biota, as a result of phasing of construction and PABs becoming 'live' during the construction phase. | (watercourses) immediately downstream up to River Thames confluence (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames). | | additional potential indirect impact pathways to nearby/downstream surface water bodies. |
| | Construction of River Thames flood mitigation 'berm' | Loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. It is assumed that any downstream impacts are a likely to be sufficiently dissipated so as to not effect WFD quality element status of downstream water bodies taking into account embedded construction measures. | In | Direct impact pathways to surface water bodies |
| | Construction of ground- mounted solar | Temporary impacts on existing watercourses and associated riparian and aquatic habitats Potential for temporary changes in water quality of downstream watercourses and connected groundwater bodies, leading to potential indirect impacts on, water quality and/or habitats and biota, as a result of phasing of construction and ground-mounted solar becoming 'live' during the construction phase. | Surface water bodies (watercourses) and groundwater bodies directly impacted, as well as surface water bodies (watercourses) immediately downstream up to River Thames confluence (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames). | In | Direct impact pathways to surface and groundwater water bodies |
| Construction of new watercourses/ ditches | Construction of watercourse realignments and diversions | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential for temporary changes in flow volumes and water quality of downstream watercourses, leading to potential indirect impacts on hydromorphological conditions, water quality and/or habitats and biota, as a result of phasing of construction and release of water into new diversion channels. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted, as well as surface water bodies (watercourses) immediately downstream up to River Thames confluence (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames). | In | Direct impact pathways to surface water bodies, as well as additional potential indirect impact pathways to nearby/downstream surface water bodies. |
| | Construction of Wilts & Berks Canal | Loss / degradation of existing watercourses/ditches and associated riparian and aquatic habitats. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted. | In | Direct impact pathways to surface water bodies |
| Construction access / haul roads | Temporary watercourse crossings | Temporary in-channel works resulting in direct impacts on local channel morphology and habitats, and leading to potential indirect impacts on hydromorphological conditions, water quality and/or habitats and biota upstream and downstream; Potential for temporary reduction in river continuity (over construction phase), including fish passage and sediment transfer, leading to potential impacts on hydromorphology and aquatic habitats/biota upstream and downstream. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted by works, as well as any surface water bodies (watercourses) upstream. It is assumed that any downstream impacts are likely to be sufficiently dissipated beyond confluences with other surface water bodies (watercourses) so as to not effect WFD quality element status (taking into account embedded construction measures also). | In | Direct impact pathways to surface water bodies (crossings) as well as potential indirect impacts on surface water bodies upstream (fish passage). |
| Construction of new permanent highways/ roads/ access tracks/ PRoW | Construction of permanent watercourse crossings | Temporary in-channel works resulting in direct impacts on local channel morphology and habitats, and leading to potential indirect impacts on hydromorphological conditions, water quality and/or habitats and biota upstream and downstream. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted by works, as well as any surface water bodies (watercourses) upstream. It is assumed that any downstream impacts are likely to be sufficiently dissipated beyond confluences with other surface water bodies (watercourses/ditches) so as to not effect quality element status (taking into account embedded construction measures also). | In | Direct impact pathways to surface water bodies. |
| | Diversions for National Cycle Route 5, the Thames Path and other PRoW | Temporary loss / degradation of existing riparian habitats. Construction of associated watercourse crossings covered separately above. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted within footprint of works. | In | Direct impact pathways to surface water bodies |
| Construction compounds | Construction compounds | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted. | In | Direct impact pathways to surface water bodies. |

| Project activity / component type | Project activity / component | Impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|---|--|---|-------------------|--|
| Construction material storage | Stockpiling areas | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats Temporary mobilisation of fine sediments to surface water bodies, leading to potential temporary changes in downstream watercourse water quality. Sediment runoff to downstream watercourses also has the potential to release any constituent contaminants. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted, and any surface water bodies (watercourses) immediately downstream up to confluence with River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames). | In | Potential direct and indirect impact pathways to surface water bodies. |
| Construction utilities | Temporary utilities connections | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats (associated with watercourse crossings) | Surface water bodies (watercourses) directly impacted, and any surface water bodies (watercourses) immediately downstream (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Ock and River Thames). Shallow excavations only, no impacts anticipated on any bedrock aquifers / groundwater bodies. | In | Direct impact pathways to surface water bodies, as well as potential indirect impacts on surface water bodies downstream. |
| | Construction of new utilities connections, gas diversions, water mains diversions and pipelines | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats (associated with watercourse crossings) Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses/ditches) directly impacted, and any surface water bodies (watercourses/ditches) immediately downstream. (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Ock and River Thames). Shallow excavations only, no impacts anticipated on any bedrock aquifers / groundwater bodies. | In | Direct impact pathways to surface water bodies, as well as potential indirect impacts on surface water bodies downstream |
| Construction site drainage | Construction surface water drainage | Temporary changes to site surface water runoff / drainage, and the mobilisation of fine sediments to surface water bodies, leading to potential temporary changes in downstream watercourse flows/levels and water quality. The discharge of surface water and sediment runoff to downstream watercourses also has the potential to release any constituent contaminants. Potential for spread of aquatic invasive nonnative species. | Surface water bodies (watercourses) directly impacted, and any surface water bodies (watercourses/ditches) immediately downstream. | In | Indirect impact pathway to surface water bodies. |
| | Construction foul drainage | Construction foul drainage may cause temporary impacts on downstream watercourse flows and water quality. However, activity screened out due to embedded design measures to direct foul effluent to local sewer network and treatment works. No on-site treatment and discharges to watercourses and/or groundwater anticipated at this stage and so no impact pathway anticipated. | N/a - no impact anticipated | Out | No impact pathway to surface water bodies or groundwater bodies. |
| | Construction highway/road drainage/runoff | Temporary changes to highway/road traffic volumes and surface water drainage/runoff, leading to potential temporary changes downstream watercourses flows/levels and/or water quality, and/or groundwater quality and potential indirect impacts on aquatic habitats and/or biota of receiving watercourses. | Surface water bodies (watercourses) directly impacted by highway discharges and/or groundwater bodies within footprint of works potentially indirectly impacted It is assumed that any indirect impacts are a likely to be sufficiently dissipated so as to not effect WFD quality element status of downstream water bodies (given dilution / dispersal effects and consideration of embedded mitigation measures). | In | Potential direct impact pathways to surface water bodies and indirect pathway to groundwater bodies |
| Construction lighting | Construction lighting | Lighting may cause a temporary impact on aquatic biota (including fish behavior and movements). However, activity is screened out due to embedded construction and lighting strategy measures to minimise any impacts on watercourse habitats. | N/a - no impact anticipated when taking into account embedded mitigation within Code of Construction Practice | Out | No impact pathway to surface water bodies or groundwater bodies. |
| Demolition | Demolition of existing properties/infrastructure | Temporary loss / degradation of existing watercourses and associated riparian and aquatic habitats | Surface water bodies (watercourses) directly impacted within footprint of works. | In | Direct impact pathways to surface water bodies |

| Project activity / component type | Project activity / component | Impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|--|---|---|-------------------|---|
| | | Potential for spread of aquatic invasive nonnative species. | | | |
| Construction (general) | Accidental spillages/release of pollutants | Accidental spillages/release of chemical pollutants (such as fuels, solvents, detergents, cement, concrete material, alkaline wash waters, etc.) to surface water bodies and/or groundwater during construction, resulting in temporary reductions in water quality and potential impacts on aquatic biota. | All surface water bodies (watercourses) and groundwater bodies within the Site boundary, as well as any surface water bodies (watercourses) that are hydraulically downstream within a 1km Zol (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames) | In | Potential direct and indirect impact pathways surface water bodies and/or groundwater bodies. |

^{*} Note: Potential impacts on watercourse flow volumes and water quality from surface water and fine sediment runoff is covered collectively under the 'Construction surface water drainage' activity

Table 23 Screening of Project activities and components – Operational Phase (permanent scheme)

| Project activity / component type | Project activity / component | Potential impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|--|---|--|---|-------------------|--|
| Reservoir and reservoir infrastructure | Reservoir (footprint) | Permanent loss of catchment area resulting in reductions in flows in downstream watercourses, leading to potential indirect impacts on hydromorphology and/or aquatic habitats and biota. Potential changes in regional groundwater flow direction and cross-aquifer leakage due to altered stress/pressures from the presence of the newly created reservoir. | Surface water body catchment directly impacted and all surface water bodies (watercourses) hydraulically downstream up to confluence with the River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the size of the River Thames and its wider catchment area). No groundwater bodies are present at the location of reservoir, however there is a potential for impacts on adjacent / nearby groundwater bodies. Groundwater modelling to be undertaken at ES stage to verify Zol and preliminary screening assessment | In | Indirect impact pathway to surface water bodies (due to changes in catchment hydrology) and potential indirect impact pathway to groundwater bodies. |
| | Tunnels (River tunnel and Reservoir tunnel) | Permanent below ground infrastructure has the potential to cause changes in local groundwater water levels and/or flows, lead to potential changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. However, this Project component has been screened out due to embedded design drainage measures, the depth of the structure and the nature of the local bedrock geology; with negligible impacts on groundwater levels/flows/ and no indirect impact on watercourse baseflow anticipated. | No groundwater bodies are present at the location of the project component and any changes in groundwater levels/flows are anticipated to be negligible and not extend to any adjacent groundwater bodies or surface water bodies (watercourses). Groundwater modelling to be undertaken at ES stage to verify ZoI and preliminary screening assessment. | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| | Intake/outfall structures (above ground) | Permanent physical modifications to watercourse morphology and riparian/marginal aquatic habitats, leading to potential changes in local hydromorphological conditions/processes. | Surface water body (River Thames) directly impacted within footprint of intake/outfall structures (beyond this any potential hydrodynamic/hydromorphological impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status) | In | Direct impact pathway to surface water bodies. |
| | Intake/outfall shaft (below ground) | Permanent below ground infrastructure, leading to changes in local groundwater water levels and/or flows, with potential to also lead to changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. | Surface water body (watercourses) immediately adjacent to and downstream of structure (beyond this any potential localised impacts on groundwater-surface water interactions and watercourse baseflows are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the size of the River Thames and its catchment area). No groundwater bodies are present at the location of project component, so no impacts on groundwater bodies anticipated. | In | Potential indirect impact pathway to surface water bodies. |
| | Pumping station structures (above ground) | The proposed above ground pumping station structures have the potential to have a physical footprint impact on watercourses present at the site. | N/a – no permanent impacts anticipated. | Out | No impact pathway to surface water bodies |

| Project activity / component type | Project activity / component | Potential impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|---|---|--|-------------------|--|
| | | However, this Project component has been screened out as the ordinary watercourses present at this location will be diverted during the construction phase as part of the eastern watercourse diversions. Temporary loss impacts are therefore covered under construction phase activities and any residual permanent impacts are covered separately under the 'watercourse diversions' Project component. Permanent surface water drainage aspects are also covered separately under 'site surface water drainage'. No other residual permanent impacts anticipated. | | | and groundwater bodies during operation. |
| | Pumping station structures/shaft (below ground) | Permanent below ground infrastructure has the potential to cause changes in local groundwater water levels and/or flows, lead to potential changes in groundwater/surface water interactions and reductions in baseflows in adjacent and downstream watercourses. However, this Project component has been screened out due to embedded design drainage measures and the nature of the local bedrock geology; with negligible impacts on groundwater levels/flows and no indirect impact on watercourse baseflow anticipated. | No groundwater bodies are present at the location of the project component and any changes in groundwater levels/flows are anticipated to be negligible and not extend to any adjacent groundwater bodies or surface water bodies (watercourses). Groundwater modelling to be undertaken at ES stage to verify Zol and preliminary screening assessment | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| | Recreational Lakes (east and west) | Permanent loss of catchment area and provision of feeder flows resulting in reductions in flows in downstream watercourses, leading to potential indirect impacts on hydromorphology and/or aquatic habitats and biota. | Surface water body catchment directly impacted and all surface water bodies (watercourses) hydraulically downstream up to confluence with the River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the size of the River Thames and its wider catchment area). No groundwater bodies are present at the location of recreational lakes, so no impacts on groundwater bodies anticipated. | In | Indirect impact pathway to surface water bodies (due to changes in catchment hydrology). |
| Reservoir operation | Abstraction regime | Intermittent abstraction of water from the River Thames to the reservoir resulting in intermittent reductions in river flows downstream and leading to potential indirect impacts on water quality, hydromorphology and aquatic habitats and/or biota. Potential for entrainment of fish and eels and/or spread of aquatic invasive non-native species. | All surface water bodies (watercourses) hydraulically downstream of reservoir, down to the Teddington Weir/Lock | In | Direct impact pathway to surface water bodies. |
| | Discharge regime | Intermittent discharge of water from the reservoir to the River Thames resulting in increased river flows downstream and leading to potential indirect impacts on water quality, hydromorphology and aquatic habitats and/or biota; Potential for spread of aquatic invasive non native species. | All surface water bodies (watercourses) hydraulically downstream of reservoir, down to the Teddington Weir/Lock | In | Direct impact pathway to surface water bodies. |
| | Emergency drawdown test releases | Periodic (regular) release of water from the reservoir to the River Thames resulting in increased river flows downstream and leading to potential indirect impacts on water quality, hydromorphology and aquatic habitats and/or biota. Potential for spread of aquatic invasive non native species. | All surface water bodies (watercourses) hydraulically downstream of reservoir, down to the Teddington Weir/Lock | In | Direct impact pathway to surface water bodies. |
| Watercourse modifications | Watercourse diversions | Creation of new sections of watercourse and/or ditch habitats resulting in a permanent change in hydromorphology conditions and riparian and aquatic habitats. Permanent indirect changes to flow conditions within watercourses immediately downstream of diverted channels. | Surface water bodies (watercourses) directly impacted as well as any surface water bodies (watercourses) immediately downstream up to confluence with River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames) | In | Direct and indirect impact pathways to surface water bodies. |
| | Watercourse realignments | Creation of new sections of watercourse and/or ditch habitats resulting in a permanent change in local hydromorphological conditions and riparian and aquatic habitats. | Surface water bodies (watercourses) directly impacted as well as any surface water bodies (watercourses) immediately downstream up to confluence with River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality | In | Direct impact pathway to surface water bodies. |

| Project activity / component type | Project activity / component | Potential impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|---|--|--|-------------------|---|
| | | | element status, given the dilution and dispersion potential of the River Thames) | | |
| | Watercourse crossings - Bridges | Permanent localised physical modification and shading of existing watercourse/ditch morphology and associated riparian and aquatic habitats | Surface water bodies (watercourses) directly impacted. It is assumed that there will be no widespread impacts on any upstream or downstream surface water bodies (watercourses) (taking into account embedded design measures to avoid any impacts on flow, sediment and biological continuity. | In | Direct impact pathway to surface water bodies |
| | Watercourse crossings - Culverts | Permanent localised physical modification and shading of existing watercourse/ditch morphology and associated riparian and aquatic habitats; Potential for reduction in river continuity, including fish passage and sediment transfer, leading to potential impacts on hydromorphology and aquatic habitats/biota upstream and downstream. | Surface water bodies (watercourses) directly impacted. It is assumed at this stage that there will be no widespread impacts on any upstream or downstream surface water bodies (watercourses) (taking into account embedded design measures to maintain flow, sediment and biological continuity). However, culvert locations and designs reviewed on case-by-case basis at scoping. | In | Direct impact pathway to surface water bodies |
| | River Thames flood mitigation 'berm' | Permanent localised changes to watercourse lateral connectivity with floodplain. Creation of new permanent marginal and floodplain habitats. Permanent changes to high flow dynamics locally, leading to potential impacts on hydromorphology locally and downstream. | Surface water body (River Thames) directly impacted within footprint of flood mitigation 'berm' (beyond this any potential impacts are likely to be sufficiently dissipated so as to not effect WFD quality element status, given the size of the River Thames and the presence of existing assets along the watercourse that regulate water levels/velocities). | In | Direct impact pathway to surface water bodies. |
| | Provision of Wilts & Berks Canal | Permanent loss of catchment area and provision of feeder flows, resulting in reductions in flows in downstream watercourses, leading to potential indirect impacts on hydromorphology and/or aquatic habitats and biota. | Surface water bodies (watercourses) directly impacted as well as any surface water bodies (watercourses) immediately downstream up to confluence with River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames) | In | Direct and indirect impact pathway to surface water bodies (due to changes in catchment hydrology and outfall). |
| Buildings / facilities | Recreational buildings | The proposed new recreational buildings have the potential to cause permanent loss / degradation of existing watercourses/ditches and associated riparian and aquatic habitats present at the site. However, this Project component has been screened out as this impact is covered separately under construction phase activities. Permanent surface water drainage aspects are also covered separately under 'surface water drainage'. Not other residual permanent impacts anticipated. | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| | WTW building | The proposed new WTW buildings have the potential to cause permanent loss / degradation of existing watercourses/ditches and associated riparian and aquatic habitats. However, this Project component is screened out as this impact is covered separately under construction phase activities. Permanent surface water drainage aspects also covered separately under "surface water drainage". No other residual permanent impacts anticipated within the operational phase. | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| Utilities | New utilities connections, diversions and pipelines (including T2ST pipeline) | The proposed new utilities connections, diversions and pipelines (including the T2ST pipeline) have the potential to cause loss / degradation of existing watercourses and associated riparian and aquatic habitats (associated with watercourse crossings). However, this is covered separately under construction phase activities, and this Project component has been screened out of the operational phase due to embedded design drainage measures to avoid any permanent impacts on watercourse hydromorphology and habitats. No other residual permanent impacts anticipated with the operational phase. | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| Renewable energy | Floating Solar | Permanent localised shading of reservoir water column, leading to potential impacts on physicochemical water quality and aquatic biota. | Surface water body (new reservoir) directly impacted. | In | Direct impact pathway to newly created |

| Project activity / component type | Project activity / component | Potential impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|---|--|--|-------------------|--|
| | | Potential permanent changes to wider water quality of reservoir, leading to potential impacts on aquatic biota | | | reservoir surface water body |
| | Ground-mounted Solar (Solar Farm Reprovision) | Potential permanent physical footprint on riparian zone, leading to potential impacts on aquatic biota and hydromorphology of adjacent watercourses. Change in land use, leading to potential changes in groundwater quality. | Surface water bodies (watercourses) and groundwater bodies directly impacted at site of project component | In | Potential impact pathway to surface water bodies and groundwater bodies |
| | Hydropower | The proposed integration of hydropower infrastructure (hydro-electric turbines) within the reservoir pumping station has the potential to cause fish morality for any fish entrained and passing through the infrastructure between the reservoir and the River Thames. However, this Project component has been screened out due to embedded design measures to avoid fish and eel entrainment. No other residual permanent impacts anticipated with the operational phase. | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies or groundwater bodies during operation. |
| Operational site drainage | Surface water drainage | Permanent changes to site surface water runoff / drainage, leading to potential changes in flows/levels and water quality of receiving downstream watercourses and/or groundwater and potential indirect impacts on aquatic habitats and/or biota of receiving watercourses. | Surface water bodies (watercourses) directly impacted and surface water bodies (watercourses) immediately downstream up to confluence with River Thames (beyond this any potential impacts are likely to be sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames) | In | Direct and indirect impact pathways to surface water bodies |
| | Groundwater drainage (Groundwater drain) | Permanent changes to site groundwater drainage and discharges to downstream watercourses, leading to potential changes in flows/levels and potential indirect impacts on water quality, hydromorphology and aquatic habitats and/or biota of receiving watercourse. | Surface water bodies directly impacted on site as well receiving surface water bodies (watercourses) indirectly impacted immediately downstream, up to the confluence with the River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames). No groundwater bodies are present at the location of the project component | In | Direct and indirect impact pathways to surface water bodies |
| | Foul drainage (including ICW) | Permanent foul drainage from site buildings and facilities resulting in changes to flows and water quality of receiving and downstream watercourses, leading to potential indirect impacts on aquatic biota. | Surface water bodies (watercourses) directly impacted and surface water bodies (watercourses) that are hydraulically downstream up to the confluence with the River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as to not effect WFD quality element status, given the dilution and dispersion potential of the River Thames - and factoring in the embedded design measures also) | In | Direct and indirect impact pathway to surface water bodies |
| | Operational highway/road drainage/runoff | Permanent changes to highway/road traffic volumes and surface water drainage/runoff, leading to potential temporary changes downstream watercourses flows/levels and/or water quality, and/or groundwater quality, and potential indirect impacts on aquatic habitats and/or biota of receiving watercourses | Surface water bodies (watercourses) directly impacted by highway discharges and any groundwater bodies within footprint potentially indirectly impacted. It is assumed that any impacts are a likely to be sufficiently dissipated so as to not effect WFD quality element status of downstream water bodies (given dilution / dispersal effects and consideration of embedded mitigation measures). | In | Potential direct impact pathway to surface water bodies and indirect pathway to groundwater bodies |
| Highways / roads | New highway realignments/ diversions/ widening | Permanent localised physical modification and shading of existing watercourse/ditch morphology and associated riparian and aquatic habitats. | Surface water bodies (watercourses) directly impacted. It is assumed that there will be no widespread impacts on any upstream or downstream surface water bodies (watercourses/ditches) (taking into account embedded design measures to avoid any impacts on flow, sediment and biological continuity. | In | Potential direct impact pathway to surface water bodies |
| Active Travel | New Public Rights of Way | Permanent physical footprint resulting in impacted riparian zone, leading to potential impacts on aquatic biota and hydromorphology of adjacent watercourses. | Surface water bodies (watercourses) directly impacted. | In | Potential direct impact pathway to surface water bodies. |

| Project activity / component type | Project activity / component | Potential impact sources/pathways* | Anticipated zone of influence / impact | Screening outcome | Screening justification |
|-----------------------------------|---------------------------------------|--|--|-------------------|---|
| Landscaping | Noise Bunds | The proposed new noise bunds have the potential to cause permanent loss / degradation of existing watercourses/ditches and associated riparian and aquatic habitats present at the site. However, this Project component has been screened out as this impact is covered separately under construction phase activities. Permanent surface water drainage aspects are also covered separately under 'surface water drainage'. No other residual permanent impacts anticipated | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies and groundwater bodies during operation. |
| Lighting | Operational lighting | The operational lighting associated with the proposed new buildings and infrastructure have the potential to cause impacts on aquatic biota (including fish behaviour and movements). However, this project component is screened out due to embedded construction and lighting strategy measures to minimise any impacts on watercourse habitats. | N/a - no permanent impacts anticipated | Out | No impact pathway to surface water bodies or groundwater bodies due to embedded mitigation. |
| Habitat creation | Priority Areas for Biodiversity (PAB) | Creation of new habitats (resulting in changes to existing land use / cover), leading to potential benefits for water quality, hydromorphology and aquatic habitats and biota of adjacent and downstream watercourses (including a potential reduction in fine sediment and/or nutrient runoff from areas of existing agricultural land) Creation of new habitats (resulting in changes in land use), leading to potential benefits for water quality of underlying groundwater bodies (including a potential reduction in nutrient leaching from areas of existing agricultural land). | Surface water bodies (watercourses) directly impacted as well receiving surface water bodies (watercourses) indirectly impacted immediately downstream, up to the confluence with the River Thames (beyond this any potential impacts are likely to have sufficiently dissipated so as not to effect WFD quality element status, given the dilution and dispersion potential of the River Thames). Groundwater bodies directly within the footprint of PAB location. | In | Direct and indirect impact pathway to surface water bodies and potential indirect impact pathway to groundwater bodies. |
| | Floating Islands | Provision of permanent localised areas of marginal habitat, leading to potential benefits for aquatic biota Permanent localised shading of reservoir water column, leading to potential impacts on physicochemical water quality and aquatic biota | Surface water body (new reservoir) directly impacted. | In | Direct impact pathway to newly created reservoir surface water body |

^{*} Note: Potential impacts on watercourse flow volumes and water quality from surface water and fine sediment runoff is covered collectively under the 'surface water drainage' component

A3.2 Screening of WFD water bodies

Table 24 Screening of Surface Water Bodies

| Water body name & ID | Water body location relative to Project | Summary of Construction Phase Project activities / components with potential to impact water body | Summary of Operational Phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|---|---|---|--|-------------------|---|
| Ock (to Cherbury Brook) (GB106039023400) | Catchment crossed by Project draft Order Limits (rail improvements) | Construction compounds; Construction of new utilities connections, gas diversions, water mains diversions and pipelines; Construction surface water drainage; Accidental spillages / release of pollutants | None | In | Multiple construction phase activities with potential to impact on water body. |
| Ock and tributaries (Land Brook confluence to Thames) (GB106039023430) | Lies directly within the Project draft Order Limits | Construction of reservoir (borrow pit excavation), embankments and toe drain; Construction of noise bunds; Priority Areas for Biodiversity (PAB) creation; Construction of ground-mounted solar; Construction of watercourse realignments / diversions; Temporary watercourse crossings; Construction of permanent watercourse crossings; Diversions for National Cycle Route 5, the Thames Path and other PRoW; Temporary utilities connections; Construction of new utilities connections, gas diversions, water mains diversions and pipelines; Construction surface water drainage; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Reservoir (footprint); Watercourse realignments; Watercourse crossings - Culverts; Ground-mounted Solar (Solar Farm Reprovision); Surface water drainage; Foul drainage (including ICW); Operational highway/road drainage/runoff; New highway realignments/diversions/widening; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |

| Water body name & ID | Water body location relative to Project | Summary of Construction Phase Project activities / components with potential to impact water body | Summary of Operational Phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|--|---|--|---|-------------------|---|
| Stutfield Brook (source to Ock) (GB106039023340) | Catchment crossed by Project draft Order Limits (rail improvements) | Construction compounds; Construction of new utilities connections, gas diversions, water mains diversions and pipelines; Construction surface water drainage; Accidental spillages / release of pollutants | None | In | Multiple construction phase activities with potential to impact on water body |
| Childrey and Woodhill Brooks (GB106039023370) | Catchment crossed by Project draft Order Limits (rail improvements) | Priority Areas for Biodiversity (PAB) creation; Construction of ground-mounted solar; Construction compounds; Construction of new utilities connections, gas diversions, water mains diversions and pipelines; Construction surface water drainage; Accidental spillages / release of pollutants | Ground-mounted Solar (Solar Farm Reprovision); Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body |
| Childrey Brook and Norbrook at Common Barn (GB106039023380) | Lies directly within the Project draft Order Limits | Construction of reservoir (borrow pit excavation), embankments and toe drain; Construction of recreational buildings; Construction and decommissioning of Railway Sidings and Material Handling Facility; Construction of noise bunds; Construction of Integrated Constructed Wetland; Priority Areas for Biodiversity (PAB) creation; Construction of watercourse realignments / diversions; Construction of W&B Canal; Temporary watercourse crossings; Construction of permanent watercourse crossings; Diversions for National Cycle Route 5, the Thames Path and other PRoW; Construction compounds; Stockpiling areas; Temporary utilities connections; Construction of new utilities connections, gas diversions, water mains diversions and pipeline; Construction surface water drainage; Construction highway/road drainage/runoff; Demolition of existing properties/infrastructure; Accidental spillages / release of pollutants | Reservoir (footprint); Watercourse crossings - Bridges; Watercourse crossings - Culverts; Provision of Wilts & Berks Canal; Surface water drainage; Groundwater drainage; Foul drainage (including ICW); Operational highway/road drainage/runoff; New highway realignments/diversions/widening; New PRoW; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Letcombe Brook (GB106039023350) | Lies directly within the Project draft Order Limits | Priority Areas for Biodiversity (PAB) creation; Construction surface water drainage; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Priority Areas for Biodiversity (PAB) | In | Multiple construction phase activities with potential to impact on water body. Operational phase habitat creation / enhancements. |
| Cow Common Brook and Portobello Ditch (GB106039023360) | Lies directly within the Project draft Order Limits | Construction of reservoir (borrow pit excavation), embankments and toe drain; Construction of reservoir tunnel and River tunnel (tunnelling); Construction of pumping station structure/shaft (below ground works); Construction of pumping station structures (above ground works); Construction of recreational buildings; Construction and decommissioning of Railway Sidings and Material Handling Facility; Construction of noise bunds; Construction of recreational lakes; Priority Areas for Biodiversity (PAB) creation; Construction of watercourse realignments / diversions; Construction of W&B Canal; Temporary watercourse crossings; Construction of permanent watercourse crossings; Diversions for National Cycle Route 5, the Thames Path and other PRoW; Construction compounds; Stockpiling areas; Temporary utilities connections; Construction of new utilities connections, gas diversions, water mains diversions and pipelines; Construction surface water drainage; Construction highway/road drainage/runoff; Demolition of existing properties/infrastructure; Accidental spillages / release of pollutants | Reservoir (footprint); Recreational Lakes (east and west) (catchment loss); Watercourse diversions; Watercourse realignments; Watercourse crossings - Bridges; Watercourse crossings - Culverts; Provision of Wilts & Berks Canal; Floating Solar; Surface water drainage; Groundwater drainage; Foul drainage (including ICW); Operational highway/road drainage/runoff; New highway realignments/diversions/widening; New PRoW; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Frilford and Marcham Brook (GB106039023420) | Lies directly within the Project draft Order Limits | Priority Areas for Biodiversity (PAB) creation; Accidental spillages / release of pollutants | New highway realignments/diversions/widening; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |

| Water body name & ID | Water body location relative to Project | Summary of Construction Phase Project activities / components with potential to impact water body | Summary of Operational Phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|--|---|--|---|-------------------|--|
| Sandford Brook (source to Ock) (GB106039023410) | Lies directly within the Project draft Order Limits | Construction of noise bunds; Priority Areas for Biodiversity (PAB) creation; Temporary watercourse crossings; Construction of permanent watercourse crossings; Construction compounds; Stockpiling areas; Construction surface water drainage; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Watercourse crossings - Culverts; Surface water drainage; Operational highway/road drainage/runoff; New highway realignments/diversions/widening; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Ginge Brook and Mill Brook (GB106039023660) | Lies directly within the Project draft Order Limits | Priority Areas for Biodiversity (PAB) creation; Construction compounds; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Priority Areas for Biodiversity (PAB) | In | Multiple construction phase activities with potential to impact on water body. Operational phase habitat creation / enhancements. |
| Moor Ditch and Ladygrove Ditch (GB106039023630) | Lies directly within the Project draft Order Limits | Construction surface water drainage; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Watercourse crossings - Bridges; Watercourse crossings - Culverts; Surface water drainage; New highway realignments/diversions/widening | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Mill Brook and Bradfords Brook system, Wallingford (GB106039023600) | Outside the Project draft Order Limits | None | None | Out | Water body not directly impacted or hydrologically connected to any construction or operational activities and components (no impacts anticipated). |
| Thames (Evenlode to Thame) (GB106039030334) | Lies directly within the Project draft Order Limits. Proposed reservoir abstraction and discharge directly from/to this water body | Construction of reservoir tunnel and River tunnel (tunnelling); Construction of intake/outfall shaft (below ground works); Construction of intake/outfall structures (above ground and inchannel works); Construction of River Thames flood mitigation 'berm'; Temporary watercourse crossings; Construction of permanent watercourse crossings; Diversions for National Cycle Route 5, the Thames Path and other PRoW; Construction compounds; Construction surface water drainage; Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Intake/outfall structures (above ground); Intake/outfall shaft (below ground); Abstraction regime; Discharge regime; Emergency Drawdown Test releases; Watercourse crossings - Bridges; Watercourse crossings - Culverts; River Thames flood mitigation 'berm'; Surface water drainage; Foul drainage (including ICW); New highway realignments/diversions/widening | In | Multiple construction phase and operational phase activities and components with potential to impact on water body |
| Thames Wallingford to Caversham (GB106039030331) | Outside the Project draft Order Limits. Lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | Abstraction regime; Discharge regime; Emergency Drawdown Test releases | In | Multiple operational phase activities with potential to impact on water body. Water body lies within the zone of influence of reservoir operational abstractions and discharges. |
| Thames (Reading to Cookham) (GB106039023233) | Outside the Project draft Order Limits. Lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | Abstraction regime; Discharge regime; Emergency Drawdown Test releases | In | Multiple operational phase activities with potential to impact on water body. Water body lies within the zone of influence of reservoir operational abstractions and discharges. |
| Thames (Cookham to Egham) (GB106039023231) | Outside the Project draft Order Limits. Lies within the hydrological zone of influence of | None | Abstraction regime; Discharge regime; Emergency Drawdown Test releases | In | Multiple operational phase activities with potential to impact on water body. Water body lies within the |

| Water body name & ID | Water body location relative to Project | Summary of Construction Phase Project activities / components with potential to impact water body | Summary of Operational Phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|---|--|---|--|-------------------|--|
| | altered abstractions and discharges. | | | | zone of influence of reservoir operational abstractions and discharges. |
| Thames (Egham to Teddington) (GB106039023232) | Outside the Project draft Order Limits. Lies within the hydrological zone of influence of proposed reservoir abstractions and discharges | None | Abstraction regime; Discharge regime; Emergency Drawdown Test releases | In | Multiple operational phase activities with potential to impact on water body. Water body lies within the zone of influence of reservoir operational abstractions and discharges. |
| Newly created reservoir (anticipated to be designated as a Lake AWB) | Lies directly within the Project draft Order Limits | None (water body does not yet existing and will be created by Project). | Abstraction regime; Discharge regime; Floating solar; Floating islands | In | Multiple operational phase activities and components with potential to impact on water body. |

Table 25 Screening of WFD Groundwater Bodies

| Water body name & ID | Water body location relative to Project | Summary of construction phase Project activities / components with potential to impact water body | Summary of operational phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|---|---|--|---|-------------------|--|
| Vale of White Horse Chalk (GB40601G601000) | Lies directly within the Project draft Order Limits | Construction highway/road drainage/runoff; Accidental spillages / release of pollutants | Reservoir (footprint); New highway realignments/diversions/widening; Operational highway/road drainage/runoff | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Shrivenham Corallina (GB40602G600600) | Lies directly within the Project draft Order Limits | Construction compounds; Accidental spillages / release of pollutants; Construction of ground-mounted solar. Priority Areas for Biodiversity (PAB) creation | Reservoir (footprint); Ground-mounted Solar (Solar Farm Reprovision); New highway realignments/diversions/widening; Operational highway/road drainage/runoff; Priority Areas for Biodiversity (PAB) | In | Multiple construction phase and operational phase activities and components with potential to impact on water body. |
| Berkshire Downs Chalk (GB40601G600900) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |
| Chiltern Chalk Scarp (GB40601G604100) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |
| South-West Chilterns Chalk (GB40601G601100) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |

| Water body name & ID | Water body location relative to Project | Summary of construction phase Project activities / components with potential to impact water body | Summary of operational phase Project activities / components with potential to impact water body | Screening outcome | Screening justification |
|---|---|---|--|-------------------|--|
| Maidenhead Chalk (GB40601G602600) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |
| Twyford Tertiaries (GB40602G602700) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |
| Lower Thames Gravels (GB40603G000300) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |
| Chobham Bagshot Beds (GB40602G601400) | Outside the Project draft Order Limits. Groundwater body is connected to reach of the River Thames that lies within the hydrological zone of influence of proposed reservoir abstractions and discharges. | None | None | Out | No construction phase and operational phase activities and components within water body extent. No impact pathway to water body due to embedded design mitigation for proposed abstraction regime to avoid impacts on low flows within River Thames. |



A4.1 Scoping of construction phase Project activities/components and WFD quality elements potential effected

Table 26 Construction phase - Ock (to Cherbury Brook)

| | | | | | | ٧ | VFD S | Status | Elen | nents and Q | uality | Element | s poter | itially | affec | ted | | | | | |
|----------------------------|------------------------------------|------------|--------------------|----------------------------|-------------------|----|------------------|---------|---------------------|-------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|--|
| | | Biological | | | | | | | Specific Pollutants | | Н | ydromo | rpho | logica | al | | Cl | nemic | cal | | |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants | |
| Construction compounds | Ordinary watercourse network | √ | √ | √ | X | X | X | X | X | X | X | X | X | √ | √ | √ | √ | X | X | X | |

Table 27 Construction phase - Ock and tributaries (Land Brook confluence to Thames)

| | | | | | | , | WFD : | Status | Elem | nents and Qua | ality El | ements | poten | tially | affec | ted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|----|------------------|---------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | iologic | cal | Physico-chemical | | | | | Specific Pollutants | | F | lydrom | orph | ologic | cal | | Chemical | | |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of reservoir (borrow pit excavation), embankments and toe drain | River Ock (lower | ✓ | ✓ | ✓ | ✓ | X | ✓ | X | X | X | X | √ | √ | X | X | X | X | X | X | X |
| Construction of noise bunds | River Ock (lower) | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | √ | √ | √ | √ | X | X | X |
| Priority Areas for Biodiversity (PAB) creation | River Ock (lower) | ✓ | √ | ✓ | X | X | √ | X | X | √ | X | √ | X | √ | √ | √ | ✓ | X | X | X |
| | Nor Brook | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | √ | √ | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | √ | √ | √ | √ | X | X | X |

| | | | | | | 1 | WFD S | Status | Elen | nents and Qua | ality El | ements | poten | tially | affec | ted | | | | |
|---|----------------------|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-che | emical | | Specific Pollutants | | F | lydrom | orph | ologic | cal | | Cł | nemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of ground-mounted solar | River Ock (lower) | √ | ✓ | ✓ | Х | X | √ | √ | √ | √ | Х | X | X | X | Х | X | √ | X | X | Х |
| Construction of watercourse realignments and diversions | River Ock (lower) | √ | ✓ | ✓ | X | X | ✓ | X | X | √ | √ | √ | X | √ | ✓ | √ | ✓ | X | X | X |
| Temporary watercourse crossings | River Ock (lower) | √ | √ | √ | Х | X | √ | X | X | Х | X | ✓ | X | ✓ | Х | √ | √ | X | X | Х |
| Construction of permanent watercourse crossings | River Ock (lower) | ✓ | ✓ | √ | X | X | ✓ | X | X | X | X | √ | X | √ | X | √ | ✓ | X | X | X |
| Construction surface water drainage | River Ock (lower) | √ | √ | √ | √ | X | √ | X | X | √ | √ | √ | Х | X | Х | X | X | X | X | X |

| | | | | | | 1 | WFD : | Status | Elen | nents and Qua | ality El | ements | poten | tially | affec | ted | | | | |
|---|----------------------|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Ві | iologic | al | F | hysio | co-ch | emical | | Specific Pollutants | | Н | lydrom | orph | ologi | cal | | C | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction highway/road drainage/runoff | River Ock (lower) | √ | ✓ | √ | Х | X | √ | X | X | √ | X | √ | X | X | X | X | X | √ | ✓ | √ |
| Accidental spillages/releas e of pollutants | River Ock (lower) | √ | √ | √ | X | √ | √ | X | X | √ | X | X | X | X | X | X | X | √ | √ | ✓ |

Table 28 Construction phase - Stutfield Brook (source to Ock)

| | | | | | | | WF | D St | tatus | Elements and | d Qua | ality Eler | ments po | tenti | ally aff | ected | | | | |
|---|------------------------------------|----------|--------------------|----------------------------|-------------------|-------|------------------|---------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | Pł | nysic | o-ch | emic | al | Specific Pollutants | | | Hydror | norph | nologi | cal | | CI | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction compounds | Ordinary watercourse network | √ | √ | √ | X | X | X | X | X | X | X | X | Х | √ | √ | ✓ | √ | X | X | X |
| Construction of new utility connections, gas diversions, water mains diversions and pipelines | Ordinary watercourse network | √ | √ | J | X | X | √ | X | X | X | X | ✓ | Х | √ | X | ✓ | ✓ | X | X | X |

Table 29 Construction phase - Childrey and Woodhill Brooks

| | | | | | | ٧ | VFD S | Status | Ele | ments and Qu | uality | Elemer | nts pote | ntiall | y affe | cted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|-------|------------------|----------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | ologio | cal | Р | hysic | o-che | mica | I | Specific Pollutants | | F | lydromo | orpho | ologica | al | | Cl | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) creation | Childrey Brook (upper) | ✓ | ✓ | √ | X | X | ✓ | X | X | √ | X | √ | Х | √ | √ | √ | ✓ | X | X | X |
| Priority Areas for Biodiversity (PAB) creation | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | ✓ | √ | ✓ | √ | Х | X | X |
| Construction ofground-mounted solar | Childrey Brook (upper) | √ | √ | √ | X | X | √ | √ | ✓ | ✓ | X | X | X | X | X | X | √ | Х | X | X |
| Construction compounds | Childrey Brook (upper) | ✓ | √ | ✓ | X | X | X | X | X | Х | X | X | X | ✓ | √ | √ | ✓ | X | X | X |

| | | | | | | V | /FD S | status | Ele | ments and Q | uality | Elemer | nts pote | ntially | y affe | cted | | | | |
|---|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | Р | hysico | o-che | mical | | Specific Pollutants | | F | lydromo | orpho | ologica | al | | Cl | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction compounds | Ordinary watercourse / ditch network | 1 | ✓ | ✓ | X | X | X | X | X | Х | X | X | Х | ✓ | ✓ | √ | ✓ | X | X | X |
| Construction of new utilities connections, gas diversions, water mains diversions and pipelines | Ordinary watercourse / ditch network | √ | √ | √ | X | X | ✓ | X | X | Х | X | √ | X | √ | X | √ | √ | X | X | X |

Table 30 Construction phase - Childrey Brook and Norbrook at Common Barn

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Element | s poten | tially a | ıffecte | ed | | | | |
|---|--|------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | iologid | cal | | Physic | co-ch | emica | l | Specific Pollutan ts | | H | ydromoi | rpholo | gical | | | Cl | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of reservoir (borrow | Childrey Brook (lower) | ✓ | √ | √ | ✓ | X | ✓ | X | X | ✓ | X | √ | √ | √ | √ | √ | ✓ | X | X | X |
| pit excavation), embankments and toe drain | Ordinary watercourse / ditch network | ✓ | √ | √ | ✓ | X | ✓ | X | X | ✓ | X | √ | √ | ✓ | ✓ | √ | ✓ | X | X | X |
| Construction of noise bunds | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | ✓ | X | X | ✓ | X | √ | X | ✓ | ✓ | √ | ✓ | X | X | X |
| Construction of Integrated Constructed Wetland | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | X | X | √ | X | ✓ | ✓ | ✓ | ✓ | √ | ✓ | X | X | X |
| | Childrey Brook (lower) | ✓ | 1 | ✓ | X | X | ✓ | X | X | ✓ | X | ✓ | X | √ | √ | √ | √ | X | X | X |

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Elemen | ts poten | tially a | affecte | ed | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | В | iologid | cal | | Physic | co-ch | emica | I | Specific Pollutan ts | | H | ydromo | rpholo | gical | | | С | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | East Hanney Ditch | ✓ | 1 | √ | X | X | √ | X | X | √ | X | √ | X | √ | √ | ✓ | ✓ | X | X | X |
| creation | Ordinary watercourse / ditch network | ✓ | 1 | √ | X | X | √ | X | X | ✓ | X | √ | X | √ | √ | ✓ | ✓ | X | X | X |
| Construction of watercourse realignments and | Childrey Brook (lower) | ✓ | 1 | √ | X | X | √ | X | X | Х | √ | ✓ | X | X | X | X | X | X | X | X |
| diversions | East Hanney Ditch | ✓ | 1 | ✓ | X | X | ✓ | X | X | ✓ | √ | ✓ | X | √ | ✓ | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | ✓ | X | X | ✓ | √ | √ | X | √ | √ | ✓ | ✓ | X | X | X |
| Construction of W&B Canal | East Hanney Ditch | √ | √ | √ | X | X | √ | X | X | ✓ | X | ✓ | X | √ | √ | ✓ | √ | X | X | X |

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Elemen | ts poten | tially a | affecte | ed | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | В | iologid | cal | | Physic | co-ch | emica | ıl | Specific Pollutan ts | | Н | ydromo | rpholo | gical | | | Cl | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | ✓ | 1 | √ | X | X | √ | X | X | ✓ | X | √ | X | ✓ | √ | ✓ | ✓ | X | X | X |
| Temporary watercourse | East Hanney Ditch | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | ✓ | ✓ | X | X | X |
| crossings | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | ✓ | X | X | X | X | √ | X | ✓ | X | ✓ | √ | X | X | X |
| Construction of permanent | East Hanney Ditch | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | ✓ | ✓ | X | X | X |
| watercourse crossings | Ordinary watercourse / ditch network | ✓ | 1 | √ | X | X | ✓ | X | X | X | X | √ | X | ✓ | X | ✓ | √ | X | X | X |
| Diversions for National Cycle Route 5, the | Childrey Brook (lower) | ✓ | ✓ | ✓ | X | X | X | X | X | X | X | Х | X | X | X | X | ✓ | X | X | X |

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Elemen | ts poten | tially a | affecte | ed | | | | |
|---------------------------------|--|------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | | Physic | co-ch | emica | I | Specific Pollutan ts | | Н | ydromo | rpholo | gical | | | Cl | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Thames Path and other PRoW | | | | | | | | | | | | | | | | | | | | |
| Construction compounds | Ordinary watercourse / ditch network | ✓ | √ | ✓ | X | X | X | X | X | X | X | X | X | √ | 1 | √ | ✓ | X | X | X |
| Stockpiling areas | East Hanney Ditch | ✓ | √ | √ | X | X | X | X | X | X | X | X | X | √ | 1 | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | X | X | X | X | X | Х | X | ✓ | ✓ | ✓ | ✓ | X | X | X |
| Temporary utilities connections | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | √ | X | X | X | X | √ | X | √ | X | ✓ | ✓ | X | X | X |

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Element | s poten | tially a | affecte | ed | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | | Physic | co-ch | emica | I | Specific Pollutan ts | | H | ydromoi | rpholo | gical | | | Cl | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of new utilities connections, gas diversions, water mains diversions and piplines | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | X | X | X | X | ✓ | X | ✓ | X | √ | √ | X | X | Х |
| Construction surface water drainage | Childrey Brook (lower) | √ | √ | √ | √ | X | ✓ | X | X | ✓ | √ | ✓ | Х | X | Х | X | X | X | X | X |
| | East Hanney Ditch | √ | √ | √ | √ | X | ✓ | X | X | ✓ | √ | ✓ | Х | X | X | X | X | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | √ | √ | √ | X | ✓ | X | X | ✓ | √ | √ | Х | X | X | X | X | X | X | X |

| | | | | | | | WFD | Statu | ıs Eler | ments and | Qualit | y Elemen | ts poten | tially a | affecte | d | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | | Physic | co-ch | emica | al | Specific Pollutan ts | | H | ydromo | rpholo | gical | | | Cl | nemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction highway/road drainage/runoff | Childrey Brook (lower) | ✓ | ✓ | ✓ | X | X | √ | X | X | √ | X | ✓ | X | Х | X | X | X | ✓ | ✓ | √ |
| , and the second | East Hanney Ditch | ✓ | √ | √ | X | X | √ | X | X | ✓ | X | ✓ | X | X | X | X | X | ✓ | ✓ | ✓ |
| | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | X | X | X | X | √ | ✓ | ✓ |
| Accidental spillages/release of pollutants | Childrey Brook (lower) | √ | √ | √ | X | ✓ | ✓ | X | X | √ | X | X | X | Х | X | X | X | √ | √ | ✓ |
| · | East Hanney Ditch | √ | ✓ | ✓ | X | ✓ | ✓ | X | X | ✓ | X | X | X | Х | X | X | X | √ | ✓ | √ |

| | | | | | | | WFD | Statu | s Eler | ments and | Qualit | y Element | ts poten | tially a | affecte | ed | | | | |
|-------------------------------|--|------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | | Physic | co-ch | emica | l | Specific Pollutan ts | | H | ydromo | rpholo | gical | | | Cł | hemic | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | ✓ | ✓ | √ | X | √ | ✓ | X | X | ✓ | X | Х | X | X | X | X | X | ✓ | ✓ | √ |

Table 31 Construction phase - Letcombe Brook

| | | | | | | ٧ | VFD S | Status | Elen | nents and Q | uality | Element | s poter | ntially | affec | ted | | | | |
|--|-------------------|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) creation | Letcombe Brook | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | √ | √ | √ | √ | X | X | X |
| Construction highway/road drainage/runoff | Letcombe Brook | √ | ✓ | √ | X | X | ✓ | X | X | √ | X | √ | X | X | X | X | X | √ | ✓ | √ |

Table 32 Construction phase - Cow Common Brook and Portobello Ditch

| | | | | | | W | FD S | tatus | Elem | ents and C | Quality | y Elemer | nts pote | ntially | / affec | cted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | ydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of reservoir (borrow pit | Cow Common Brook | √ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | ✓ | √ | √ | √ | X | X | X |
| excavation), embankments and toe drain | Portobello Ditch | ✓ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | √ | √ | √ | √ | X | X | X |
| too arani | Landmead Ditch | √ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | ✓ | √ | ✓ | √ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | 1 | √ | X | √ | X | X | √ | X | √ | √ | ✓ | √ | √ | √ | X | X | X |
| Construction of reservoir tunnel and | Cow Common Brook | √ | √ | √ | √ | X | √ | X | X | √ | X | ✓ | ✓ | X | X | X | X | X | X | X |
| River tunnel (tunnelling) | Mere Dyke | √ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | X | X | X | X | X | X | X |

| | | | | | | W | /FD S | tatus | Elem | ents and C | uality | / Elemer | nts pote | ntiall | y affec | cted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | ydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | √ | ✓ | ✓ | ✓ | Х | ✓ | X | X | √ | X | √ | √ | Х | Х | Х | X | X | X | X |
| Construction of pumping station | Cow Common Brook | ✓ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | X | X | Х | X | X | X | X |
| structure/shaft (below ground works) | Ordinary watercourse / ditch network | √ | √ | √ | √ | X | √ | X | X | √ | X | √ | √ | X | X | X | X | X | X | X |
| Construction of pumping station | Cow Common Brook | √ | √ | √ | √ | X | √ | X | X | √ | X | √ | ✓ | √ | ✓ | ✓ | ✓ | X | X | X |
| structures (above ground works) | Ordinary watercourse / ditch network | √ | √ | √ | ✓ | X | √ | X | X | √ | X | √ | √ | √ | √ | √ | ✓ | X | X | X |
| Construction of recreational buildings | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | √ | √ | √ | ✓ | X | X | X |

| | | | | | | W | FD S | tatus | Elem | nents and C | Quality | y Elemer | nts pote | ntially | y affe | cted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | lydromo | rpho | logica | I | | С | chemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction and decommissioning of Railway Sidings and Material Handling Facility | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | X | X | X | Х | X | X | X | √ | √ | √ | √ | X | X | X |
| Construction of noise bunds | Ordinary watercourse / ditch network | √ | √ | ✓ | X | X | √ | X | X | √ | X | √ | X | √ | √ | √ | √ | X | X | X |
| Construction of recreational lakes | Ordinary watercourse / ditch network | √ | √ | ✓ | √ | X | √ | X | X | √ | X | √ | √ | √ | √ | √ | √ | X | X | X |
| Priority Areas for Biodiversity (PAB) | Cow Common Brook | √ | √ | 1 | X | X | √ | X | X | √ | X | ✓ | X | √ | √ | ✓ | √ | X | X | X |
| creation | Portobello Ditch | √ | √ | √ | X | X | √ | X | X | √ | X | √ | Х | √ | √ | √ | √ | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | ✓ | X | ✓ | X | √ | ✓ | √ | √ | X | X | Х |

| | | | | | | W | /FD S | tatus | Elem | nents and C | Quality | y Elemer | nts pote | ntially | y affec | cted | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | lydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | ✓ | X | X | √ | X | √ | X | √ | √ | √ | ✓ | X | X | X |
| Construction of watercourse | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | √ | √ | √ | X | √ | √ | ✓ | ✓ | X | X | X |
| realignments and diversions | Portobello Ditch | √ | √ | √ | X | X | √ | X | X | √ | √ | √ | X | √ | √ | √ | ✓ | X | X | X |
| | Landmead Ditch | √ | √ | √ | X | X | √ | X | X | √ | √ | ✓ | X | √ | ✓ | ✓ | √ | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | √ | √ | √ | X | √ | √ | √ | ✓ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | ✓ | √ | √ | X | √ | √ | √ | √ | X | X | X |
| Construction of W&B Canal | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | √ | X | ✓ | X | √ | ✓ | ✓ | √ | X | X | X |

| | | | | | | W | FD S | tatus | Elem | nents and C | Quality | y Elemer | nts pote | ntially | y affe | cted | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | lydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | √ | √ | √ | Х | X | ✓ | X | X | ✓ | X | √ | X | ✓ | √ | √ | ✓ | X | X | X |
| Temporary watercourse | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | X | X | ✓ | X | √ | X | √ | √ | X | X | X |
| crossings | Portobello Ditch | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | ✓ | √ | X | X | X |
| | Landmead Ditch | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | ✓ | √ | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | √ | √ | X | X | Х |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| Construction of permanent | Cow Common Brook | √ | √ | √ | X | X | ✓ | X | X | X | X | √ | X | ✓ | X | √ | √ | X | X | Х |

| | | | | | | W | FD S | tatus | Elem | ents and C | Quality | y Elemer | nts pote | ntially | y affec | cted | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | o-ch | emica | al | Specific Pollutan ts | | Н | lydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| watercourse crossings | Mere Dyke | ✓ | √ | √ | X | X | √ | X | X | Х | X | √ | X | √ | X | ✓ | ✓ | X | X | Х |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | √ | ✓ | X | X | X |
| Construction compounds | Ordinary watercourse / ditch network | √ | 1 | √ | X | X | X | X | X | X | X | X | X | √ | √ | √ | √ | X | X | X |
| Stockpiling areas | Cow Common Brook | ✓ | √ | √ | X | X | X | X | X | X | X | X | X | √ | √ | ✓ | √ | X | X | X |
| | Portobello Ditch | ✓ | √ | √ | X | X | X | X | X | X | X | X | X | √ | ✓ | ✓ | √ | X | X | X |
| | Landmead Ditch | √ | √ | √ | Х | X | X | X | X | X | X | X | X | √ | ✓ | √ | √ | X | X | Х |
| | Mere Dyke | √ | √ | √ | Х | X | X | X | X | Х | X | Х | Х | √ | √ | √ | √ | X | Х | Х |

| | | | | | | W | /FD S | tatus | Elem | ents and C | uality | / Elemer | nts pote | ntially | / affec | cted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | ydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Ordinary watercourse / ditch network | √ | √ | 1 | X | X | X | X | X | X | X | X | X | ✓ | ✓ | √ | ✓ | X | X | X |
| Temporary utilities connections | Cow Common Brook | ✓ | √ | √ | X | X | √ | X | X | Х | X | √ | X | √ | X | √ | ✓ | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | Х | X | ✓ | X | √ | X | √ | ✓ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| Construction of new utilities connections, | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | X | X | ✓ | X | ✓ | X | ✓ | √ | X | X | X |
| gas diversions, water mains diversions and pipelines | Portobello Ditch | ✓ | √ | √ | X | X | √ | X | X | Х | X | √ | X | √ | X | √ | √ | X | X | X |
| p.po00 | Landmead Ditch | √ | √ | √ | X | X | √ | X | X | X | X | ✓ | X | √ | X | √ | √ | X | X | X |

| | | | | | | W | /FD S | tatus | Elem | ents and C | uality | y Elemer | nts pote | ntially | y affe | cted | | | | |
|-------------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | lydromo | rpho | logica | I | | С | chemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | Х | X | √ | X | ✓ | X | √ | ✓ | X | X | X |
| | Ordinary watercourse / ditch network | √ | 1 | √ | X | X | √ | X | X | Х | X | √ | X | √ | Х | √ | √ | X | X | X |
| Construction surface water drainage | Cow Common Brook | √ | √ | √ | √ | X | √ | X | X | ✓ | √ | √ | X | X | X | X | X | X | X | X |
| | Portobello Ditch | √ | √ | √ | √ | X | √ | X | X | ✓ | √ | √ | X | X | X | X | X | X | X | X |
| | Landmead Ditch | √ | √ | √ | √ | X | √ | X | X | ✓ | √ | √ | X | X | X | X | X | X | X | Х |
| | Mere Dyke | √ | √ | √ | √ | X | √ | X | X | √ | √ | √ | X | X | X | X | X | X | X | Х |
| | Ordinary watercourse / ditch network | √ | √ | √ | √ | X | √ | X | X | √ | √ | √ | X | X | X | X | X | X | X | X |

| | | | | | | W | FD S | tatus | Elem | ents and C | uality | / Elemer | nts pote | ntially | y affec | cted | | | | |
|---------------------------------|--|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Biol | logica | al | F | Physic | co-ch | emica | al | Specific Pollutan ts | | Н | ydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction highway/road | Cow Common Brook | ✓ | √ | √ | X | X | √ | X | X | ✓ | X | ✓ | X | X | X | X | X | ✓ | √ | √ |
| drainage/runoff | Portobello Ditch | ✓ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | X | X | X | X | ✓ | √ | √ |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | X | X | X | χ | √ | √ | √ |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | ✓ | Х | √ | X | X | X | X | X | √ | √ | √ |
| Accidental spillages/release of | Cow Common Brook | √ | √ | √ | X | √ | √ | X | X | √ | X | X | Х | X | X | X | X | √ | √ | √ |
| pollutants | Portobello Ditch | ✓ | √ | √ | X | √ | √ | X | X | ✓ | X | X | Х | X | X | Х | X | √ | √ | √ |
| | Landmead Ditch | ✓ | √ | √ | X | √ | √ | X | X | ✓ | X | X | X | X | X | X | X | ✓ | √ | √ |

| | | | | | | W | FD S | tatus | Elem | ents and C | uality | / Elemer | nts pote | ntiall | y affec | cted | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | logica | al | F | hysic | co-ch | emica | al | Specific Pollutan ts | | Н | ydromo | rpho | logica | I | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Mere Dyke | √ | √ | √ | X | √ | √ | X | X | √ | X | Х | X | Χ | X | X | X | ✓ | √ | √ |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | √ | √ | X | X | √ | X | X | X | X | X | X | X | ✓ | √ | √ |

Table 33 Construction phase - Sandford Brook (source to Ock)

| | | | | | | ٧ | VFD S | Status | s Elen | nents and Qu | uality | Element | s poter | ntially | affec | ted | | | | |
|---------------------------------|---|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologi | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of noise bunds | Sandford Brook | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | √ | √ | √ | √ | X | X | Х |
| | Ordinary watercourse / ditch network | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | √ | √ | √ | ✓ | X | X | X |
| Priority Areas for Biodiversity | Sandford Brook | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | ✓ | √ | √ | ✓ | X | X | X |
| (PAB) creation | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | X | X | √ | X | √ | X | √ | ✓ | √ | √ | X | X | X |
| Temporary watercourse | Sandford Brook | √ | √ | √ | X | Х | √ | X | X | X | X | ✓ | X | √ | X | √ | √ | X | X | X |
| crossings | Ordinary watercourse / ditch network | √ | √ | √ | X | Х | √ | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |

Appendix 5.1 - WFD screening and scoping report: part 2 - annexes Classification - Public

| | | | | | | V | VFD S | Status | s Elen | nents and Qu | uality | Element | s poter | ntially | affec | ted | | | | |
|-------------------------------|---|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | Cl | hemio | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of permanent | Sandford Brook | √ | √ | √ | Х | Х | √ | X | X | Х | X | √ | X | ✓ | X | √ | √ | X | X | X |
| watercourse crossings | Ordinary watercourse / ditch network | ✓ | ✓ | √ | X | X | √ | X | X | Х | X | √ | X | √ | X | √ | ✓ | X | X | X |
| Construction compounds | Sandford Brook | √ | √ | √ | X | X | X | X | X | Х | X | X | X | √ | √ | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | ✓ | √ | X | X | X | X | X | X | X | X | X | √ | √ | √ | ✓ | X | X | X |
| Stockpiling areas | Sandford Brook | √ | √ | √ | X | X | X | X | X | X | X | X | X | ✓ | √ | √ | ✓ | X | X | X |
| Construction surface water | Sandford Brook | √ | √ | √ | √ | X | √ | X | X | ✓ | √ | √ | X | X | X | Х | X | X | X | X |
| drainage | Ordinary watercourse | ✓ | √ | √ | √ | X | √ | X | X | √ | √ | √ | X | X | X | X | X | X | X | X |

| | | | | | | ٧ | VFD S | Status | Elen | nents and Qu | uality | Element | s poter | itially | affec | ted | | | | |
|-------------------------------|---|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | hemic | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | / ditch network | | | | | | | | | | | | | | | | | | | |
| Construction highway/road | Sandford Brook | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | X | Х | X | X | √ | √ | √ |
| drainage/runoff | Ordinary watercourse / ditch network | √ | √ | ✓ | X | X | √ | X | X | √ | X | √ | X | X | X | X | X | √ | √ | √ |
| Accidental spillages/release | Sandford Brook | √ | √ | √ | X | √ | √ | X | X | ✓ | X | Х | X | X | X | Х | X | √ | √ | √ |
| of pollutants | Ordinary watercourse / ditch network | ✓ | √ | ✓ | X | √ | ✓ | X | X | √ | X | X | X | X | X | X | X | √ | ✓ | ✓ |

Table 34 Construction phase - Ginge Brook and Mill Brook

| | | | | | | V | VFD S | Status | Elem | ents and Qua | ality E | lement | s potent | ially | affec | ted | | | | |
|---------------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logic | al | | Cł | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | Ginge Brook | √ | ✓ | √ | X | X | √ | X | X | ✓ | X | ✓ | X | √ | √ | ✓ | √ | X | X | X |
| creation | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | ✓ | X | X | ✓ | X | ✓ | X | √ | ✓ | ✓ | ✓ | X | X | X |
| Construction highway/road | Ginge Brook | ✓ | √ | √ | X | X | ✓ | X | X | ✓ | X | √ | X | X | X | X | X | √ | √ | ✓ |
| drainage/runoff | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | √ | X | X | √ | X | √ | X | X | X | X | X | ✓ | ✓ | ✓ |

Table 35 Construction phase - Moor Ditch and Ladygrove Ditch

| | | | | | | W | FD S | tatus | Eleme | ents and Qu | ality E | Element | s potent | ially a | affect | ted | | | | |
|--|----------------|------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bio | ologic | al | F | Physic | o-che | emica | I | Specific Pollutant s | | H | ydromor | phol | ogica | ıl | | CI | nemic | al |
| Project activity / element Wa | atercour se | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | рН | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction highway/road Mo drainage/runoff | oor Ditch | ✓ | ✓ | √ | X | X | √ | Х | Х | √ | X | √ | Х | X | X | X | X | √ | √ | √ |

Table 36 Construction phase - Thames (Evenlode to Thame)

| | | | | | | ١ | WFD | Statu | s Eler | ments and Q | uality | Elemen | ts poter | ntially | affec | ted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rphol | logica | I | | CI | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of reservoir tunnel and River tunnel | River Thames | √ | √ | √ | √ | X | √ | X | X | ✓ | X | √ | √ | X | X | X | X | X | X | X |
| (tunnelling) | Oday Ditch System | √ | √ | √ | √ | X | √ | X | X | ✓ | X | √ | ✓ | X | X | X | X | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | √ | ✓ | √ | X | √ | X | X | √ | X | √ | √ | X | X | X | X | X | X | X |
| Construction of intake/outfall shaft (below ground works) | River Thames | ✓ | √ | ✓ | √ | X | ✓ | X | X | √ | X | √ | ✓ | X | X | X | X | X | X | X |
| Construction of intake/outfall structures (above ground and inchannel works) | River Thames | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | X | X | X | ✓ | X | X | X |

| | | | | | | , | WFD | Statu | s Eler | ments and Q | uality | Elemen | ts poter | ntially | affec | ted | | | | |
|--|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | I | | Cl | nemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction of River Thames flood mitigation 'berm' | River Thames | √ | ✓ | ✓ | X | X | ✓ | X | X | ✓ | X | √ | Х | X | ✓ | X | √ | X | X | X |
| Construction of permanent watercourse | Oday Ditch System | √ | √ | √ | X | X | √ | X | X | X | X | ✓ | X | √ | X | ✓ | ✓ | X | X | X |
| crossings | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | √ | X | X | Х | X | ✓ | X | ✓ | X | ✓ | ✓ | X | X | X |
| Construction compounds | Oday Ditch System | √ | ✓ | √ | X | X | X | X | X | Х | X | X | X | √ | √ | ✓ | √ | X | X | X |
| Construction surface water drainage | River Thames | √ | √ | √ | √ | X | √ | Х | X | ✓ | ✓ | √ | X | X | X | Х | X | X | Х | X |
| water drainage | Oday Ditch System | √ | √ | √ | √ | X | √ | X | X | √ | √ | √ | X | X | X | X | X | X | X | X |
| | River Thames | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | X | X | X | X | √ | ✓ | √ |

| | | | | | | ١ | WFD | Statu | s Eler | ments and Q | uality | Elemen | ts poter | tially | affec | ted | | | | |
|---------------------------------|--|----------|--------------------|----------------------------|-------------------|----------|------------------|---------|-----------|---------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | I | | Cl | nemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Construction highway/road | Oday Ditch System | ✓ | √ | ✓ | X | X | ✓ | X | X | √ | X | ✓ | X | X | X | X | X | ✓ | √ | √ |
| drainage/runoff | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | ✓ | X | X | √ | X | √ | X | X | X | X | X | ✓ | ✓ | √ |
| Accidental spillages/release of | River Thames | √ | √ | ✓ | X | ✓ | √ | X | X | ✓ | X | X | X | X | X | X | X | ✓ | √ | ✓ |
| pollutants | Oday Ditch System | ✓ | √ | ✓ | X | √ | √ | X | X | √ | X | X | X | X | X | X | X | ✓ | √ | √ |

Table 37 Construction phase – Groundwater bodies

| | | WI | FD Stat | us Elem | ents and | Quality | Element | s potent | ially affe | cted |
|--|---------------------------|---|--------------------------|-------------------------------|----------------------------|---|---|----------------------|---------------------------|-----------------------|
| | | | Quai | ntitative | | | 1 | Chemica | al | |
| Project activity / element | Groundwater body | Quantitative Dependent Surface Water Body Status | Quantitative GWDTEs test | Quantitative Saline Intrusion | Quantitative Water Balance | Chemical Dependent Surface Water Body Status | Chemical Drinking Water Protected Area | Chemical GWDTEs test | Chemical Saline Intrusion | General Chemical Test |
| Construction highway/road drainage/runoff | Vale of White Horse Chalk | X | Х | X | X | Х | Х | X | X | ✓ |
| Construction of ground- mounted solar | Shrivenham Corallian | X | X | X | X | X | X | X | X | √ |
| Priority Areas for Biodiversity (PAB) creation | Shrivenham Corallian | X | X | X | X | X | X | X | X | √ |
| Construction compounds | Shrivenham Corallian | X | X | X | X | X | X | X | X | √ |
| Accidental spillages / | Vale of White Horse Chalk | X | X | X | X | X | X | X | X | √ |
| release of pollutants | Shrivenham Corallian | X | X | X | X | X | X | X | X | √ |

A4.2 Scoping of operational phase Project activities/components and WFD quality elements potential effected

Table 38 Operational phase - Ock and tributaries (Land Brook confluence to Thames)

| | | | | | | | WFD | Stati | us El | ements and (| Qualit | y Eleme | nts pote | ntiall | y affec | cted | | | | |
|---|----------------------|----------|--------------------|----------------------------|-------------------|-------|------------------|----------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | P | hysic | o-che | mical | | Specific Pollutants | | ŀ | Hydromo | rphol | logica | l | | (| Chemic | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Reservoir (footprint) | River Ock (lower) | √ | √ | √ | X | X | √ | X | X | X | √ | √ | Х | X | X | X | X | X | X | Х |
| Watercourse realignments | River Ock (lower) | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | X | √ | ✓ | √ | X | X | X |
| Watercourse crossings - Culverts | River Ock (lower) | ✓ | ✓ | ✓ | √ | X | X | X | X | X | X | √ | Х | √ | X | √ | √ | X | X | Х |
| Provision of Wilts & Berks Canal | River Ock (lower) | √ | √ | √ | √ | X | √ | X | X | Х | √ | √ | X | X | X | X | X | X | X | X |
| Ground-mounted Solar (Solar Farm Reprovision) | River Ock (lower) | ✓ | X | X | X | X | X | √ | ✓ | ✓ | X | Х | X | X | X | X | √ | √ | √ | Х |

| | | | | | | | WFD | State | us El | ements and | Qualit | y Eleme | ents pote | ntiall | y affec | cted | | | | |
|---|--|----------|--------------------|----------------------------|-------------------|-------|------------------|----------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | F | hysic | o-che | emical | I | Specific Pollutants | | ŀ | Hydromo | rphol | ogica | I | | (| Chemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Ground-mounted Solar (Solar Farm Reprovision) | Ordinary watercourse / ditch network | √ | X | X | X | X | X | 1 | ✓ | ✓ | X | X | Х | X | X | X | ✓ | ✓ | √ | X |
| Surface water drainage | River Ock (lower) | √ | √ | √ | X | X | X | 1 | ✓ | ✓ | √ | √ | X | X | X | Х | √ | ✓ | √ | ✓ |
| Foul drainage (including ICW) | River Ock (lower) | √ | ✓ | √ | √ | X | ✓ | √ | ✓ | √ | √ | X | X | X | X | X | X | ✓ | √ | √ |
| Operational highway/road drainage/runoff | River Ock (lower) | √ | √ | √ | X | X | √ | X | X | √ | X | √ | Х | X | X | X | √ | ✓ | √ | √ |
| Priority Areas for Biodiversity (PAB) | River Ock (lower) | ✓ | √ | ✓ | √ | X | X | √ | √ | X | X | ✓ | X | X | X | X | √ | X | X | X |
| Priority Areas for Biodiversity (PAB) | Nor Brook | √ | √ | √ | √ | X | X | √ | ✓ | X | X | √ | X | X | X | Х | √ | X | X | Х |

| | | | | | | | WFD | Statı | us El | ements and (| Qualit | y Eleme | ents pote | ntiall | y affec | cted | | | | |
|---------------------------------------|--|------|--------------------|----------------------------|-------------------|-------|------------------|---------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | Р | hysic | o-che | mical | | Specific Pollutants | | ŀ | Hydromo | rphol | ogica | l | | (| Chemio | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | ✓ | X | X | ✓ | ✓ | X | X | ✓ | X | X | X | X | ✓ | X | X | X |

Table 39 Operational phase - Childrey and Woodhill Brooks

| | | | | | | ٧ | VFD S | Status | Elen | nents and Qu | uality | Element | s poter | itially | affec | ted | | | | |
|---|------------------------------------|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | Cl | nemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Ground- mounted Solar (Solar Farm Reprovision) | Childrey Brook (upper) | x | X | X | X | x | X | ✓ | √ | ✓ | X | X | X | X | x | X | ✓ | ✓ | ✓ | X |
| Reprovision) Priority Areas for Biodiversity | Childrey Brook (upper) | √ | √ | √ | √ | X | X | √ | √ | X | X | √ | X | Х | X | X | √ | X | X | X |
| (PAB) | Ordinary watercourse network | √ | √ | ✓ | √ | X | X | ✓ | √ | X | X | √ | X | X | X | X | √ | X | X | X |

Table 40 Operational phase - Childrey Brook and Norbrook at Common Barn

| | | | | | | | WF | D Sta | tus Ele | ements and C | uality | Elements | potenti | ally a | affecte | ed | | | | |
|----------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | В | iologic | al | | Physic | co-che | emical | | Specific Pollutants | | ŀ | Hydromo | rpho | ologica | al | | С | hemi | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hď | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Reservoir (footprint) | Childrey Brook (lower) | √ | √ | √ | X | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| | East Hanney Ditch | √ | ✓ | √ | X | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | ✓ | X | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| Watercourse diversions | Childrey Brook (lower) | √ | √ | √ | X | X | √ | √ | ✓ | X | √ | √ | X | X | √ | √ | ✓ | X | X | Х |
| | East Hanney Ditch | √ | √ | √ | X | X | √ | √ | √ | X | √ | √ | X | X | √ | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | ✓ | √ | X | X | ✓ | ✓ | √ | X | ✓ | √ | X | X | √ | √ | ✓ | X | X | X |

| | | | | | | | WF | D Sta | tus Ele | ements and C | uality | Elements | potenti | ally a | affecte | ed | | | | |
|----------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | | Physic | co-che | emical | | Specific Pollutants | | ŀ | Hydromo | orpho | ologica | al | | С | hemi | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Watercourse realignments | Ordinary watercourse / ditch network | √ | ✓ | √ | X | X | ✓ | X | X | X | X | ✓ | X | X | ✓ | √ | √ | X | X | X |
| Watercourse crossings - Culverts | Ordinary watercourse / ditch network | √ | √ | ✓ | ✓ | X | X | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| Provision of Wilts & | Childrey Brook (lower) | √ | √ | √ | √ | X | √ | X | X | X | √ | √ | X | X | X | Х | X | X | X | X |
| Berks Canal | East Hanney Ditch | ✓ | √ | √ | √ | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | ✓ | ✓ | X | ✓ | X | X | X | √ | √ | X | X | Х | Х | X | X | X | X |
| | Childrey Brook (lower) | ✓ | ✓ | √ | X | X | X | ✓ | ✓ | √ | √ | √ | X | X | X | X | ✓ | ✓ | √ | √ |

| | | | | | | | WF | D Sta | tus Ele | ements and C | uality | Elements | potenti | ally a | affecte | ed | | | | |
|----------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | В | iologic | al | | Physic | co-che | emica | l | Specific Pollutants | | ŀ | Hydromo | orpho | ologica | al | | С | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Surface water | East Hanney Ditch | √ | ✓ | √ | X | X | X | √ | √ | √ | √ | √ | X | X | X | X | √ | √ | √ | ✓ |
| drainage | Ordinary watercourse / ditch network | √ | ✓ | √ | X | X | X | √ | ✓ | ✓ | √ | √ | X | X | X | X | √ | ✓ | ✓ | √ |
| Groundwate r drainage | Childrey Brook (lower) | √ | ✓ | √ | X | X | √ | √ | √ | √ | √ | √ | ✓ | X | X | X | X | ✓ | √ | √ |
| | East Hanney Ditch | √ | ✓ | ✓ | X | X | √ | √ | √ | ✓ | √ | √ | √ | X | X | X | X | ✓ | √ | ✓ |
| | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | ✓ | ✓ | √ | ✓ | √ | √ | X | X | X | Х | ✓ | ✓ | ✓ |
| Foul drainage | Childrey Brook (lower) | √ | ✓ | √ | √ | X | √ | √ | √ | ✓ | √ | X | X | X | X | X | Х | √ | √ | √ |

| | | | | | | | WF | D Stat | tus Ele | ements and Q | uality | Elements | potenti | ally a | affecte | ed | | | | |
|----------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | В | iologic | al | | Physic | co-che | emical | | Specific Pollutants | | ŀ | Hydromo | rpho | ologica | al | | С | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| (including ICW) | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | ✓ | X | ✓ | ✓ | ✓ | √ | √ | X | X | X | X | X | Х | ✓ | √ | √ |
| Priority Areas for | Childrey Brook (lower) | √ | ✓ | √ | √ | X | X | ✓ | √ | X | X | ✓ | X | X | X | X | ✓ | X | X | X |
| Biodiversity (PAB) | East Hanney Ditch | ✓ | √ | √ | √ | X | X | √ | √ | X | X | ✓ | X | X | X | X | ✓ | X | X | X |
| | Ordinary watercourse / ditch network | √ | √ | ✓ | ✓ | X | X | √ | √ | X | X | √ | X | X | X | Х | ✓ | X | X | X |

Table 41 Operational phase - Letcombe Brook

| | | | | | | ٧ | WFD S | Status | s Elen | nents and Qu | uality | Element | s poter | itially | affec | ted | | | | |
|---|-------------------|------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | Н | ydromo | rpho | logica | al | | Cl | nemic | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | Letcombe Brook | ✓ | ✓ | √ | ✓ | × | X | ✓ | ✓ | X | X | √ | X | X | x | X | ✓ | X | X | X |

Table 42 Operational phase - Cow Common Brook and Portobello Ditch

| | | | | | | ٧ | VFD S | Status | Elen | nents and Q | uality | Elemen | ts potenti | ally a | iffect | ed | | | | |
|---------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | F | Physic | co-ch | emica | al | Specific Pollutant s | | F | łydromor | phol | ogica | al | | С | hemi | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Reservoir (footprint) | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | X | √ | √ | X | X | X | Х | X | X | X | Х |
| | Landmead Ditch | √ | ✓ | √ | X | X | ✓ | X | X | X | √ | ✓ | X | X | X | X | X | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | ✓ | √ | X | X | ✓ | X | X | X | ✓ | √ | X | X | X | X | X | X | X | X |
| Recreational Lakes (east and | Mere Dyke | X | X | X | X | X | X | X | X | X | √ | ✓ | X | X | X | X | X | X | X | X |
| west) (catchment loss) | Ordinary watercourse / ditch network | ✓ | √ | ✓ | X | X | ✓ | X | X | X | ✓ | ✓ | X | X | X | Х | X | X | X | X |

| | | | | | | \ | WFD S | Status | s Elem | nents and Q | uality | Elemen | ts potenti | ially a | affect | ed | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|----|------------------|----------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | F | | co-ch | | | Specific Pollutant s | | | lydromor | | | | | С | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Watercourse diversions | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | Х | √ | ✓ | X | X | X | X | X | X | X | X |
| | Portobello Ditch | ✓ | ✓ | √ | X | X | ✓ | √ | √ | X | ✓ | √ | X | X | ✓ | √ | ✓ | X | X | X |
| | Landmead Ditch | √ | √ | √ | X | X | √ | √ | √ | Х | √ | √ | X | X | ✓ | √ | √ | X | X | X |
| | Mere Dyke | √ | √ | √ | X | X | √ | √ | √ | Х | √ | √ | X | X | √ | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | √ | √ | X | X | √ | √ | √ | Х | ✓ | √ | X | X | √ | √ | ✓ | Х | X | X |
| Watercourse realignments | Cow Common Brook | √ | √ | √ | X | X | √ | √ | √ | Х | √ | ✓ | X | X | √ | ✓ | √ | X | X | X |
| | Cow Common Brook | √ | √ | √ | X | X | √ | X | X | X | X | √ | X | X | √ | ✓ | √ | X | X | X |

| | | | | | | \ | WFD : | Status | s Elen | nents and Q | uality | Elemen | ts potenti | ally a | affect | ed | | | | |
|---------------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutant s | | ŀ | lydromor | phol | ogica | al | | С | hemi | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Watercourse crossings - Bridges | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | ✓ | X | X | X | X | Х | X | X | X | X | X | X | ✓ | X | X | X |
| Watercourse crossings - | Cow Common Brook | √ | √ | √ | √ | X | X | X | Х | X | X | Х | X | X | X | X | √ | X | X | X |
| Culverts | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | √ | X | X | X | X | X | X | Х | X | X | X | Х | ✓ | X | X | X |
| Provision of Wilts & Berks Canal | Cow Common Brook | √ | √ | √ | √ | X | X | X | X | X | X | √ | X | √ | X | ✓ | √ | X | X | X |
| | Landmead Ditch | ✓ | √ | ✓ | √ | X | X | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | ✓ | X | 1 | X | X | X | ✓ | √ | X | X | X | X | X | X | X | X |

| | | | | | | \ | WFD S | Status | s Elen | nents and Q | uality | Elemen | ts potenti | ally a | affect | ted | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|----------------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutant s | | F | lydromor | phol | ogica | al | | С | hem | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Surface water drainage | Cow Common Brook | ✓ | √ | √ | ✓ | X | ✓ | Х | Х | X | √ | √ | Х | X | X | X | Х | X | X | X |
| | Portobello Ditch | √ | √ | √ | √ | X | √ | X | X | X | √ | √ | X | X | X | X | X | X | X | X |
| | Landmead Ditch | √ | √ | √ | X | X | X | √ | √ | ✓ | √ | √ | X | X | X | X | ✓ | √ | √ | √ |
| | Mere Dyke | √ | √ | ✓ | Х | X | X | √ | √ | ✓ | √ | √ | X | X | X | X | ✓ | √ | √ | √ |
| | Ordinary watercourse / ditch network | ✓ | ✓ | ✓ | X | X | X | ✓ | ✓ | ✓ | ✓ | √ | Х | X | X | X | ✓ | √ | ✓ | √ |
| Groundwater drainage | Cow Common Brook | √ | 1 | √ | X | X | X | √ | √ | √ | √ | ✓ | X | X | X | X | 1 | √ | √ | 1 |
| | Portobello Ditch | √ | √ | √ | X | X | X | √ | √ | ✓ | √ | √ | X | X | X | X | ✓ | √ | √ | √ |
| | Landmead Ditch | √ | √ | √ | Х | χ | √ | √ | √ | √ | √ | √ | √ | X | X | X | X | √ | √ | ✓ |

| | | | | | | ١ | WFD S | Status | s Elem | nents and Q | uality | Elemen | ts potent | ially a | affect | ed | | | | |
|-------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | iologic | cal | ſ | Physic | co-ch | emica | al | Specific Pollutant s | | ŀ | Hydromoi | phol | ogica | ıl | | С | hem | ical |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| | Mere Dyke | √ | √ | √ | X | X | √ | √ | √ | √ | √ | ✓ | √ | X | X | X | X | √ | √ | ✓ |
| | Ordinary watercourse / ditch network | √ | ✓ | ✓ | X | X | √ | ✓ | ✓ | ✓ | ✓ | √ | √ | X | X | X | X | √ | ✓ | 1 |
| Foul drainage (including ICW) | Cow Common Brook | √ | √ | √ | X | X | √ | √ | √ | √ | √ | √ | ✓ | X | X | Х | X | √ | ✓ | 1 |
| Operational highway/road | Cow Common Brook | √ | √ | √ | X | X | √ | √ | √ | √ | √ | √ | ✓ | X | X | X | X | √ | ✓ | 1 |
| drainage/runoff | Portobello Ditch | √ | √ | √ | √ | Х | √ | √ | √ | ✓ | √ | X | Х | Х | Х | X | X | √ | √ | ✓ |
| | Mere Dyke | X | X | X | X | X | X | X | X | Х | X | Х | X | X | X | Х | X | X | X | X |
| | Ordinary watercourse / ditch network | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

| | | | | | | ٧ | VFD S | Status | s Elem | nents and Q | uality | Elemen | ts potent | ially a | affect | ed | | | | |
|---------------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|----------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | iologic | cal | F | Physic | co-ch | emica | al | Specific Pollutant s | | ŀ | lydromor | phol | ogica | I | | С | hemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hď | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | | √ | √ | √ | X | X | √ | X | X | √ | X | √ | X | X | X | Х | √ | ✓ | √ | √ |
| | Portobello Ditch | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | Х | X | X | √ | √ | ✓ | ✓ |
| | Mere Dyke | √ | √ | √ | X | X | √ | X | X | ✓ | X | √ | X | X | X | X | √ | √ | √ | ✓ |
| | Ordinary watercourse / ditch network | 1 | ✓ | ✓ | X | X | ✓ | X | X | ✓ | X | ✓ | X | X | X | Х | ✓ | √ | ✓ | √ |

Table 43 Operational phase - Frilford and Marcham Brook

| | | | WFD Status Elements and Quality Elements potentially affected Biological Physico-chemical Specific Hydromorphological | | | | | | | | | | | | | | | | | |
|---|------------------|------|--|----------------------------|-------------------|--------|------------------|----------|-----------|---------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | Н | ydromo | rpho | logica | al | | Cl | nemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Priority Areas for Biodiversity (PAB) | Marcham Brook | ✓ | ✓ | √ | ✓ | X | X | √ | ✓ | X | X | √ | Х | X | X | Х | √ | X | X | X |

Table 44 Operational phase - Sandford Brook (source to Ock)

| | | | | | | ٧ | WFD S | Status | Elen | nents and Q | uality | Element | s poter | ntially | affec | ted | | | | |
|---------------------------------|--|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologi | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Watercourse crossings - | Sandford Brook | √ | √ | √ | √ | X | X | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| Culverts | Ordinary watercourse / ditch network | √ | √ | √ | √ | X | X | X | X | X | X | √ | X | √ | X | √ | √ | X | X | X |
| Operational highway/road | Sandford Brook | √ | ✓ | √ | X | X | √ | X | X | √ | X | ✓ | X | X | X | X | √ | ✓ | ✓ | √ |
| drainage/runoff | Ordinary watercourse / ditch network | √ | ✓ | √ | X | X | √ | X | X | √ | X | √ | X | X | X | X | √ | √ | √ | √ |
| Priority Areas for Biodiversity | Sandford Brook | √ | √ | √ | √ | X | X | √ | √ | X | X | ✓ | X | X | X | X | √ | X | X | X |
| (PAB) | Ordinary watercourse / ditch network | √ | √ | ✓ | √ | X | X | √ | √ | X | X | √ | X | X | X | X | √ | X | X | X |

Table 45 Operational phase - Ginge Brook and Mill Brook

| | | | | | | ٧ | VFD S | Status | Elen | nents and Q | uality | Element | s poter | ntially | affec | ted | | | | |
|---|---------------|----------|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|---------------------|---------------------|-------------------------------------|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | hemic | al |
| Project activity / element | / Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| D: 11 A | Ginge Brook | ✓ | ✓ | ✓ | ✓ | X | X | ✓ | ✓ | X | X | ✓ | X | X | X | X | X | X | X | X |
| Priority Areas for Biodiversity (PAB) | I | √ | √ | √ | √ | X | X | √ | √ | X | X | √ | X | X | X | X | ✓ | X | X | X |

Table 46 Operational phase - Moor Ditch and Ladygrove Ditch

| | | | | | | | WF |) Stat | us Ele | ements and Q | uality | Element | s potentia | lly affe | cted | | | | | |
|--|-------------|----------|--------------------|----------------------------|-------------------|--------|------------------|---------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | olog | ical | | Physic | co-ch | emica | I | Specific Pollutants | | | Hydromor | pholog | gical | | | Cł | nemi | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Watercourse crossings - Bridges | Moor Ditch | √ | √ | √ | √ | X | X | X | X | X | X | X | X | X | X | X | √ | X | X | X |
| Watercourse crossings - Culverts | Moor Ditch | √ | ✓ | √ | √ | X | X | X | X | Х | X | ✓ | Х | √ | × | ✓ | ✓ | X | X | X |
| New highway realignments/ diversions/ widening | Moor Ditch | ✓ | √ | ✓ | X | X | X | X | X | X | X | √ | Х | ✓ | X | X | √ | X | X | X |

Table 47 Operational phase - Thames (Evenlode to Thame)

| | | WFD Status Elements and Quality Elements potentially affected | | | | | | | | | | | | | | | | | | |
|--|--|---|--------------------|----------------------------|-------------------|--------|------------------|----------|-----------|------------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | al | F | Physic | o-che | emical | | Specific Pollutants | | Н | ydromo | rphc | logic | al | | (| Chemic | cal |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Abstraction regime | River Thames | √ | √ | ✓ | X | Х | √ | Х | X | X | √ | √ | X | X | X | X | Х | X | Х | Х |
| Discharge regime | River Thames | √ | √ | √ | √ | X | √ | Х | X | X | √ | √ | X | X | X | X | X | X | X | X |
| Emergency Drawdown Test releases | River Thames | ✓ | √ | ✓ | √ | X | ✓ | X | X | Х | ✓ | ✓ | X | X | X | ✓ | X | X | X | X |
| Watercourse crossings - Culverts | Ordinary watercourse / ditch network | ✓ | √ | ✓ | √ | X | X | X | X | Х | X | ✓ | X | ✓ | X | ✓ | √ | X | X | X |
| River Thames flood mitigation berm | River Thames | ✓ | √ | ✓ | X | X | X | ✓ | ✓ | X | ✓ | ✓ | X | X | ✓ | X | √ | X | X | X |
| Intake/outfall structures (above ground) | River Thames | ✓ | ✓ | √ | X | X | ✓ | X | X | Х | X | ✓ | X | X | X | X | ✓ | X | Х | X |

Table 48 Operational phase - Thames Wallingford to Caversham

| | | | WFD Status Elements and Quality Elements potentially affected Biological Physico-chemical Specific Hydromorphological | | | | | | | | | | | | | | | | | |
|--|-----------------|----------|--|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | nemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Abstraction regime | River Thames | ✓ | ✓ | ✓ | X | X | ✓ | X | X | Х | ✓ | ✓ | x | X | X | X | X | X | X | X |
| Discharge regime | River Thames | √ | √ | ✓ | √ | X | √ | X | X | Х | √ | ✓ | х | X | X | X | X | X | X | X |
| Emergency Drawdown Test releases | River Thames | √ | √ | √ | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

Table 49 Operational phase - Thames (Reading to Cookham)

| | | | WFD Status Elements and Quality Elements potentially affected Biological Physico-chemical Specific Hydromorphological | | | | | | | | | | | | | | | | | |
|--|-----------------|----------|--|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologio | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | С | hemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Abstraction regime | River Thames | ✓ | ✓ | ✓ | X | X | √ | X | X | Х | ✓ | ✓ | x | X | X | X | X | X | X | X |
| Discharge regime | River Thames | √ | √ | ✓ | √ | Х | ✓ | X | X | Х | √ | ✓ | x | X | X | X | X | Х | X | X |
| Emergency Drawdown Test releases | River Thames | ✓ | ✓ | ✓ | X | X | X | X | X | X | X | X | X | X | X | × | X | X | X | X |

Table 50 Operational phase - Thames (Egham to Teddington)

| | | | WFD Status Elements and Quality Elements potentially affected Biological Physico-chemical Specific Hydromorphological | | | | | | | | | | | | | | | | | |
|--|-----------------|----------|--|----------------------------|-------------------|--------|------------------|---------|-----------|---------------------|---------------------|--|----------------------------------|------------------|---------------------------------|--|--------------------------------|-------------------------------|---------------------|------------------|
| | | Bi | ologic | cal | F | Physic | co-ch | emica | al | Specific Pollutants | | H | ydromo | rpho | logica | al | | C | nemic | al |
| Project activity / element | Watercourse | Fish | Macroinvertebrates | Macrophytes & Phytobenthos | Water Temperature | Hd | Dissolved Oxygen | Ammonia | Phosphate | Various | Hydrological Regime | Quantity and dynamics of water flow | Connection to groundwater bodies | River continuity | River depth and width variation | Structure and substrate of the river bed | Structure of the riparian zone | Priority hazardous substances | Priority substances | Other pollutants |
| Abstraction regime | River Thames | ✓ | ✓ | ✓ | X | X | ✓ | X | X | Х | ✓ | ✓ | x | X | X | X | X | X | X | X |
| Discharge regime | River Thames | √ | √ | ✓ | √ | X | √ | X | X | Х | √ | ✓ | х | X | X | X | X | X | X | X |
| Emergency Drawdown Test releases | River Thames | √ | √ | √ | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

Table 51 Operational phase – Groundwater bodies

| | WFD Status Elements and Quality Elements potentially affected | | | | | | | | | |
|---|---|---|--------------------------|-------------------------------|----------------------------|---|---|----------------------|---------------------------|-----------------------|
| | | | Quai | ntitative | | | | Chemica | al | |
| Project activity / element | Groundwater body | Quantitative Dependent Surface Water Body Status | Quantitative GWDTEs test | Quantitative Saline Intrusion | Quantitative Water Balance | Chemical Dependent Surface Water Body Status | Chemical Drinking Water Protected Area | Chemical GWDTEs test | Chemical Saline Intrusion | General Chemical Test |
| December (feetonint) | Vale of White Horse Chalk | x | X | X | ✓ | X | X | X | X | x |
| Reservoir (footprint) | Shrivenham Corallian | x | X | X | ✓ | X | X | X | X | X |
| New highway realignments/ | Vale of White Horse Chalk | X | X | X | X | ✓ | X | X | X | √ |
| diversions/ widening | Shrivenham Corallian | x | X | X | X | ✓ | X | X | X | ✓ |
| Operational highway/road | Vale of White Horse Chalk | x | X | X | X | ✓ | X | X | X | ✓ |
| drainage/runoff | Shrivenham Corallian | x | Х | X | X | ✓ | X | X | X | ✓ |
| Ground-mounted Solar (Solar Farm Reprovision) | Shrivenham Corallian | х | Х | X | X | ✓ | X | X | X | ✓ |
| Priority Areas for Shrivenham Corallian | | X | Х | X | X | ✓ | X | X | X | √ |

Appendix 5.1 - WFD screening and scoping report: part 2 - annexes Classification - Public

Annex 5 **Scoping assessment – potential effects on future status results**

A5.1 Potential effects on Reasons for Not Achieving Good (RNAG) status

Table 52 Scoping of potential effects of the Project on water body RNAGs

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|--|---------------------------------------|---|-------------------------------------|---------------------------------------|--------------------|---|
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| Ock (to Cherbury Brook) (GB106039023400) | Phosphate | Diffuse source | Poor Livestock Management | Agriculture and rural land management | Out | The Project will not result in changes to agriculture and rural land management (and associated livestock management) within the water body catchment. |
| | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project is not anticipated to result in changes to agriculture and rural land management (and associated nutrient management) within the water body catchment. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | In | The Project will include a new foul water discharge to the Cow Common Brook water body upstream, via an Integrated Constructed Wetland treatment solution. Scoped in on precautionary basis for water quality assessment at next design iteration. |
| | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | In | The Project will include a new foul water discharge to the Cow Common Brook water body upstream, via an Integrated Constructed Wetland treatment solution. There is therefore the potential to worsen this RNAG. Embedded design measures to comply with EQS requirements are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for water quality assessment at next design iteration. |
| | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | In | The Project will result in a change to agriculture and rural land management / use within a portion of the water body and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| Ock and tributaries (Land Brook confluence | Phosphate | Diffuse source | Poor Livestock Management | Agriculture and rural land management | In | The Project will result in changes to agriculture and rural management / use within a portion of the water body and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| to Thames) (GB1060390234300) | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Fish | Physical modification | Barriers - ecological discontinuity | Agriculture and rural land management | In | The Project will include the construction of a new access road crossing and culvert on the water body. There is therefore the potential to worsen this RNAG. Embedded design measures to ensure fish passage are anticipated to minimise any impacts. However, scoped in on precautionary basis for assessment at next design iteration. |
| | Fish | Physical modification | Land drainage | Agriculture and rural land management | Out | The Project will not result in any significant changes to physical modifications associated with land drainage within the water body catchment. |
| | Phosphate | Diffuse source | Poor Livestock Management | Agriculture and rural land management | Out | The Project will not result in changes to agriculture and rural land management (and associated livestock management) within the water body catchment and may contribute towards alleviating this RNAG. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|--|---------------------------------------|---|---------------------------------|---|--------------------|---|
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Stutfield Brook (source to Ock) | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| (GB106039023340) | Macrophytes and Phytobenthos Combined | Suspect data | Not applicable | No sector responsible | Out | The Project will not have implications for 'Suspect data'. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Phosphate | Point source | Trade/Industry discharge | Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| Childrey and Woodhill | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural In within the water body catchment ar | | The Project will result in some changes to agriculture and rural land management / use within the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| Brooks (GB106039023370) | Invertebrates | Diffuse source | Poor nutrient management | dement and management In within the water body | | The Project will result in some changes to agriculture and rural land management / use within the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Invertebrates | Point source | Trade/Industry discharge | Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| | Macrophytes and Phytobenthos Combined | Suspect data | Not applicable | No sector responsible | Out | The Project has no implications for 'Suspect data'. |
| | Macrophytes and Phytobenthos Combined | Diffuse source | Poor nutrient management | Agriculture and rural land management | In | The Project will result in some changes to agriculture and rural land management / use within the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined | Point source | Trade/Industry discharge | Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Childrey Brook and | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Norbrook at Common Barn (GB106039023380) | Phosphate | Diffuse source | Poor Livestock Management | Agriculture and rural land management | In | The Project will result in changes to agriculture and rural land management / use within a portion of the water body and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in any changes in sewage discharges to the water body. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|--|---------------------------------------|---|-------------------------------------|---------------------------------------|--------------------|---|
| | Macrophytes and Phytobenthos Combined | Diffuse source | Poor Livestock Management | Agriculture and rural land management | In | The Project will result in changes to agriculture and rural land management / use within a portion of the water body and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined | Physical modification | Land use - arable | Agriculture and rural land management | In | The Project will result in a changes to agriculture and rural land management / use in a portion of this water body, as well as the removal of the majority of the East Hanney Ditch and its replacement with a newly designed ditch network/habitats, which may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Cypermethrin (Priority) | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in release of Priority substances to the water body. |
| | Benzo(g-h-i)perylene | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Letcombe Brook (GB106039023350) | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Fish | Physical modification | Urbanisation - urban development | Urban and transport | Out | The Project will not result in any new, or changes in existing, physical modifications of the water body. |
| | Fish | Physical modification | Land drainage | Agriculture and rural land management | Out | The Project will not result in any new, or changes in existing, physical modifications of the water body. |
| | Fish | Physical modification | Barriers - ecological discontinuity | Other | Out | The Project will not result in the addition of any new, or changes to / removal of any existing, barriers to fish passage along the water body. |
| | Macrophytes and Phytobenthos Combined | Suspect data | Not applicable | No sector responsible | Out | The Project will not have implications for 'Suspect data'. |
| | Dissolved oxygen | Natural | Drought | No sector responsible | In | The Project will result in a permanent loss of a portion of the catchment area of the water body under the footprint of the new reservoir and so has the potential to reduce baseflow and exacerbate natural low flow pressures on dissolved oxygen concentrations. There is therefore the potential to worsen this RNAG. Scoped in for further assessment at next design iteration. |
| Cow Common Brook and Portobello Ditch (GB106039023360) | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | In | The Project will result in changes in agriculture and rural land management / use in a significant portion of the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Phosphate | Diffuse source | Poor Livestock Management | Agriculture and rural land management | In | The Project will result in changes in agriculture and rural land management / use in a significant portion of the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Phosphate | Point source | Sewage discharge (continuous) | Urban and transport | In | The Project will include a new foul water discharge to the water body, via an Integrated Constructed Wetland treatment solution. There is therefore the potential to worsen this RNAG. Embedded design measures to comply with EQS requirements are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for water quality assessment at next design iteration. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|---|--|---|---------------------------------|---------------------------------------|--------------------|---|
| | Macrophytes and Phytobenthos Combined | Diffuse source | Poor Livestock Management | Agriculture and rural land management | In | The Project will result in changes in agriculture and rural land management / use in a significant portion of the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined | Diffuse source | Poor nutrient management | Agriculture and rural land management | In | The Project will result in changes in agriculture and rural land management / use in a significant portion of the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined Point source | | Sewage discharge (continuous) | Urban and transport | In | The Project will include a new foul water discharge to the water body, via an Integrated Constructed Wetland treatment solution. There is therefore the potential to worsen this RNAG. Embedded design measures to comply with EQS requirements are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for water quality assessment at next design iteration. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Invertebrates | Physical modification | Land use - arable | Agriculture and rural land management | In | The Project will remove many existing physical modifications associated with agricultural land use (e.g. straightened / realigned channel, access track culverts) via the creation of a new diverted channel around the reservoir. However, some new modifications are also proposed as part of the Project (e.g. new culverts). Scoped in for assessment at next design iteration. |
| | Invertebrates | Natural | Natural conditions - other | No sector responsible | In | The Project will not alter natural conditions. However, it will involve the creation of a new diverted watercourse around the reservoir that will provide a more naturalised channel form, riparian habitat structure and connectivity with the floodplain; which may contribute towards alleviating this RNAG. Scoped in on precautionary basis for further assessment. |
| | Dissolved oxygen | Point source | Sewage discharge (continuous) | Domestic General Public | Out | The Project will not result in any changes to domestic sewage discharges to the water body. |
| | Dissolved oxygen | Diffuse source | Poor nutrient management | Agriculture and rural land management | In | The Project will result in changes in agriculture and rural land management / use in a significant portion of the water body catchment and may contribute towards alleviating this RNAG. Scoped in for assessment at next design iteration. |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharge to the water body. |
| | Macrophytes and Phytobenthos Combined | Natural | Natural conditions - other | No sector responsible | Out | The Project will not result in any changes that have any implications for natural conditions pressures on macrophytes and phytobenthos in the water body. |
| Frilford and Marcham Brook (GB106039023420) | Macrophytes and Phytobenthos Combined | Physical modification | Land use - arable | Agriculture and rural land management | Out | The Project will not result in any changes in the physical modification of the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharge to the water body. |
| | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in any changes to sewage discharge to the water body. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|---|---------------------------------------|---|---|----------------------------|--------------------|---|
| | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in any changes to sewage discharge to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharge to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Sandford Brook (source | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| to Ock) (GB106039023410) | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Ginge Brook and Mill | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| Brook (GB106039023660) | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Macrophytes and Phytobenthos Combined | Other pressures | Other (not in list, must add details in comments) | No sector responsible | Out | No information currently available regarding the nature of this pressure. The Project will not result in impacts to Macrophytes and Phytobenthos within the water body considering mitigation measures for construction highway/road drainage/runoff. |
| | Invertebrates | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Moor Ditch and Ladygrove Ditch (GB106039023630) | Macrophytes and Phytobenthos Combined | Point source | Trade/Industry discharge | Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|-------------------------------|---------------------------------------|---|--|---------------------------------------|--------------------|--|
| | Phosphate | Point source | Trade/Industry discharge | Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Invertebrates | Invasive non-native species | North American signal crayfish | No sector responsible | Out | The Project will not result in any changes that that will influence the presence or spread of North American signal crayfish within the water body. |
| | Invertebrates | Physical modification | Urbanisation - urban development Urban and transport Urban and transport Urban and transport Out The Project will not result in ar The Project will involve some project will involve some project will involve some project will not result in ar The Project will not result in | | | The Project will not result in any significant physical modifications of the water body. The Project will involve some permanent works to an existing highway/road crossing (with the potential requirement for an extension of an existing culvert). If required, this is not anticipated to affect the invertebrate status of the water body and embedded design measures (e.g. to retain natural bed substrate) will apply to minimise any localised impacts. |
| | Invertebrates | Physical modification | Land use - arable | Agriculture and rural land management | Out | The Project will not result in any changes to physical modification linked to agriculture and rural land management within the water body. |
| | Tributyltin Compounds | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Γhames (Evenlode to Γhame) | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| (GB106039030334) | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project will not result in changes to agriculture and rural land management / use within the water body catchment. The proposed changes to agriculture land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Invertebrates | Invasive non-native species | North American signal crayfish | No sector responsible | In | The Project has the potential to impact on the spread of INNS within the water body due to the proposed operational reservoir abstraction and discharge regime. There is therefore the potential to worsen this RNAG. Scoped in for assessment at next design iteration |
| | Invertebrates | Suspect data | Not applicable | No sector responsible | Out | The Project does not have any implications for 'Suspect data'. |
| Thames Wallingford to | Mercury and Its Compounds | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Caversham (GB106039030331) | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Recreation | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|------------------------------|---------------------------------------|---|---|---------------------------------------|--------------------|---|
| | | | | | | modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Local and Central Government | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Benzo(b)fluoranthene | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Benzo(g-h-i)perylene | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Navigation | Out | RNAG related to HMWB mitigation measures not yet in place. RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Diffuse source | Other (not in list, must add details in comments) | Agriculture and rural land management | Out | The Project will not result in any changes to agriculture and rural land management / use within the water body catchment. The proposed changes to agriculture land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Benzo(g-h-i)perylene | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority substances or Priority hazardous substances |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| Thames (Reading to | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| Cookham) (GB106039023233) | Benzo(b)fluoranthene | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Recreation | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Navigation | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|--|---------------------------------------|---|---|---------------------------------------|--------------------|--|
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Water Industry | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Navigation | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| Thames (Cookham to Egham) (GB106039023231) | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Local and Central Government | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| (02.0000002020.) | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project will not result in any changes to agriculture and rural management / use within the water body catchment. The proposed changes to agricultural land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (intermittent) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Diffuse source | Transport Drainage | Urban and transport | Out | The Project will not result in any changes to transport drainage runoff / discharges to the water body. |
| | Perfluorooctane sulphonate (PFOS) | Unknown (pending investigation) | Unknown (pending investigation) | Sector under investigation | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Macrophytes and Phytobenthos Combined | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project will not result in any changes to agriculture and rural management / use within the water body catchment. The proposed changes to agriculture land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Macrophytes and Phytobenthos Combined | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| hames (Egham to eddington) GB106039023232) | Temperature | Flow | Low Flow (not drought) | No sector responsible | In | The Project will involve periodic abstraction and discharge of water from and to the River Thames as part of the reservoir operation. Abstraction would be limited to periods where the minimum river level flow for abstraction (also referred to as the 'hands off flow' level) would be at least 50% of the Q50 flow as measured at Culham and Kingston. As such, the Project will not exacerbate low flow pressures of water temperature in the water body. However, the operational discharge regime from the reservoir will result in larger summer flows and a reduction in the frequency of low flows within the water body relative to the baseline (and associated increases in both level and velocity during those periods, assuming no amendment to existing level-control operations). This therefore has the potential to indirectly reduce low flow pressures on water temperatures and may contribute towards alleviating this RNAG. Scoped in for further assessment at next design iteration. |
| | Temperature | Physical modification | Water level management in | Other | Out | The Project will not result in any changes to existing physical modifications / impoundments within water body. |

| Water body name | Classification Element | Surface Water Management Issue (SWMI) | Activity | Category | Scoping Outcome | Scoping - justification |
|---|---------------------------------------|---|---|---------------------------------------|--------------------|--|
| | | | impounded water bodies | | | |
| | Temperature | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project will not result in any changes to agriculture and rural management / use within the water body catchment. The proposed changes to agriculture land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Phosphate | Diffuse source | Transport Drainage | Urban and transport | Out | The Project will not result in any changes to transport drainage runoff / discharges to the water body. |
| | Polybrominated diphenyl ethers (PBDE) | measures delivered to address reason, awaiting recovery | Not applicable | No sector responsible | Out | The Project will not result in release of Priority hazardous substances to the water body. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Water Industry | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Local and Central Government | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | Phosphate | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The Project will not result in any changes to agriculture and rural management / use within the water body catchment. The proposed changes to agriculture land management / use within the River Ock tributary catchment upstream are not anticipated to have a measurable effect on the water body (given the size of the water body and wider River Thames catchment area upstream). |
| | Phosphate | Point source | Sewage discharge (continuous) | Water Industry | Out | The Project will not result in any changes to sewage discharges to the water body. |
| | Mitigation Measures Assessment | Physical modification | Other (not in list, must add details in comments) | Navigation | Out | RNAG related to HMWB mitigation measures not yet in place to address physical modification pressures. The Project will not result in any changes to physical modifications within the water body. Potential effects on latest HMWB mitigation measures are covered separately in Table 72. |
| | General Chemical Test | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The vast majority of land overlying the groundwater body are outside of the Project's draft Order Limits and the Project will not result in any changes agricultural land management (and associated nutrient management) within the water body catchment extent. |
| /ale of White Horse Chalk GB40601G601000) | General Chemical Test | Point source | Landfill leaching | Industry | Out | The Project will not impact landfill management and therefore no impact on landfill leaching. |
| 35,1000,1000,1000) | Trend Assessment | Diffuse source | Poor nutrient management | Agriculture and rural land management | Out | The vast majority of land overlying the groundwater body are outside of the Project's draft Order Limits and the Project will not result in any changes agricultural land management (and associated nutrient management) within the water body catchment extent. |

A5.2 Potential effects on RBMP Programme of Measures

Table 53 Scoping of potential effects on Thames RBMP Programme of Measures

| Measure | Summary Measure information | Management catchment | Operational catchment | Water body name | Scoping – measure relevant to water bodies screened in? | Scoping – potential for measure to be affected by Project activities / elements screened in? | Scoping outcome | Scoping justification |
|--|---|----------------------|-----------------------|--------------------|---|---|-----------------|---|
| Water Industry Asset Management Plan Price Review 2019 Water Industry National Environment Programme Projects - Catchment Projects | Catchment Projects e.g. Farm nutrient management plans and soil testing - improved farming practice | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any proposed WINEP Catchment Projects (including the development of farm nutrient management plans). If ongoing engagement with the Environment Agency identifies any, this will be updated in future assessments. |
| Water Industry Asset Management Plan Price Review 2019 Water Industry National Environment Programme Projects - water resources | Sustainable abstraction improvements through changes to abstraction licences, licence conditions and non licence changes at specific sites | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect changes to abstraction licenses and conditions to improve abstraction sustainability. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Abstraction Plan delivery - Environment | Greater access to water and sustainable abstraction improvements through: changes to abstraction licences including compulsory and voluntary licence changes, time limited licences renewal, apply powers for serious damage, revocation of unused licences, reducing quantities on under used licences and non licence changes | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect changes to abstraction licenses and conditions to improve abstraction sustainability. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Abstraction Plan delivery - Priority Catchments | Working collaboratively with all stakeholders to deliver integrated catchment solutions to mitigate the impact of climate change and unsustainable abstraction. Update Abstraction Licence Strategy with findings from priority catchments by 31 July 2021 | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect collaborative work with stakeholder to identify ICM solutions or the update of the Abstraction Licence Strategy. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Environment Agency Environment Programme and Flood and Coastal Risk Management capital programme | Diffuse pollution control initiatives, recovery of priority species - habitat restoration or creation and reintroducing species | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised benefits from proposed areas of PAB habitat creation. | ln | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Water Industry Asset Management Plans Price Review 2019 Water Industry National Environment Programme Projects - sewage | Sewage treatment improvements by changes to licence conditions at specific sites | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect proposed WINEP projects to improve sewage treatment works (STW) sites and/or changes to licence conditions. Operational foul drainage is to be connected to Abingdon or Drayton sewage treatment works (STW), except for the Integrated Constructed Wetland, which will treat the foul water |

| Measure | Summary Measure information | Management catchment | Operational catchment | Water body name | Scoping – measure relevant to water bodies screened in? | Scoping – potential for measure to be affected by Project activities / elements screened in? | Scoping outcome | Scoping justification |
|---|---|-------------------------------|-------------------------|---|--|---|-----------------|---|
| | | | | | | | | from the nature education centre and discharge into the Western Watercourse Diversion. The associated discharges from the Drayton STW to Ginge Brook, and Abingdon STW to the River Thames have been scoped out on the basis that these STW discharges are regulated by existing environmental permits. |
| Ock Arable Project. | Engage with farmers across the catchment and develop a farmer cluster group to help tackle pollution and improve the water environment. | Gloucestershir e and the Vale | Ock | Ock (to Cherbury Brook), Childrey and Woodhill Brooks | Yes - Ock (to Cherbury Brook); Childrey and Woodhill Brooks | Yes - potential localised benefits from proposed areas of PAB habitat creation. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Mechanism = Environment Agency Environment Programme and Flood, Coastal Erosion Risk Management (Flood and Coastal Risk Management) capital programme | No information provided | No information provided | No information provided | No information provided | Unknown (water body level information not provided) | No | Out | The Project will not affect the Environment Agency FCERM capital programme. |
| Aquatic Biosecurity Campaigns | Slowing the introduction and spread of Invasive Non Native Species via public awareness campaigns including Check, Clean, Dry. Funded by the Aquatic Biosecurity Partnership | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the funding or implementation of INNS via public awareness campaigns. |
| Enabling actions and legislation to enforce actions in the European Union Invasive Alien Species Regulation | Various measures controlling Invasive Non Native Species. Enabling actions and legislation to enforce actions in the European Union Invasive Alien Species Regulation | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect enabling actions and legislation for the control/regulation of INNS. |
| Great Britain level co-ordination of Invasive Non Native Species actions | Various measures to control Invasive Non Native Species. Co-ordination of Invasive Non Native Species actions and approach via the Great Britain Invasive Non Native Species programme board and strategy | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the Great Britain INNS programme board actions and strategy. |
| National Highways Invasive Non Native Species control work | Various measures to control Invasive Non Native Species by National Highways | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect National Highways measures to control INNS. |
| Invasive Non Native Species eradication - national programmes | Various measures to control Invasive Non Native Species. National eradication and control programmes for aquatic Invasive Non Native Species e.g. top mouth gudgeon and water primrose | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect national eradication programmes for aquatic INNS such as top mouth gudgeon and water primrose. |

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|---|---|----------------------|-----------------------|--------------------|--|---|-----------------|--|
| Management of invasive non- native species at selected protected sites by Natural England | Various measures to control Invasive Non Native Species. Management of invasive non- native species at selected protected sites by Natural England | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect measures to control INNS at any designated / protect sites. |
| Invasive Non Native Species Secretariat; co-ordination of alert system, species records, and the Invasive Non Native Species Information Portal | Various measures to control Invasive Non Native Species. Supporting data, evidence and processes to inform Invasive Non Native Species control and management | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect supporting data, evidence and processes to inform INNS control and management. Note – The Project will broadly support the delivery of this measure by providing new baseline field survey datasets. |
| Partnership pennywort work - developing a shared strategy | Various measures to control floating pennywort | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential for localised adverse effects from operational abstraction and discharge regime, which has the potential to cause the spread of floating pennywort within Thames water body at and immediately downstream of reservoir. | In | The Project will not affect the development of a shared strategy but has the potential to hinder the delivery of control measure locally. Embedded measures (including INNS management plans) are anticipated to minimise any potential impacts. However, scoped in for further assessment (including detailed baseline assessment). |
| Environment Agency, Natural England and partners will implement rapid responses to contain and eradicate new Invasive Non Native Species invasions, where practicable | Various measures to control Invasive Non Native Species Invasive Non Native Species - rapid response | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect rapid response measures by the Environment Agency, Natural England and partners to contain and eradicate new INNS invasions. |
| Invasive non native species local action groups | Funding and support for local Invasive non native species action groups | various | various | various | Unknown (water body level information not provided) | No | Out | The Project will not affect funding and support for local INNS action groups. |
| England Woodland Creation Offer | Tree planting primarily to achieve UK Net Carbon Zero with incentives to target woodland in places with biodiversity, flood, water quality, water resources and climate adaptation benefits | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from proposed areas of PAB habitat creation (including new areas of woodland planting) | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Riparian shade - provide tools and evidence to deliver targeted riparian shading at greater national scale with partners - Keeping Rivers Cool 2 – an England-wide tree shade map | Geographic Information Systems based tool to target woodland creation to provide riparian shade in areas most at need | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from proposed areas of PAB habitat creation (including new areas of woodland planting) | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. This also includes the provision of baseline survey data that will provide ground-truth information regarding the structure of riparian |

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| | | | | | | | | zone habitats and degree of channel shading for the river water bodies affected by the Project. Scoped in for further assessment. |
| Safeguard and create thermal refuges through tree planting/fencing to increase riparian shade | Riparian tree planting and fencing - Seek to safeguard and create thermal refuges through tree planting/fencing to increase riparian shade - target 50,000 trees and 50km fencing in England by 2024 | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from proposed areas of PAB habitat creation (including new areas of woodland planting) | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Water Industry Asset Management Plan Price Review 24 Water Industry National Environment Programme Projects - Habitat improvements | Habitat restoration or creation and species recovery. E.g. river and lake restoration, removal of barriers to fish movement, tackle Invasive Non Native Species, achieve objectives for water-dependent Sites of Special Scientific Interest and European sites, and actions to conserve and enhance priority habitats and species | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from the proposed western river diversion of the Cow Common Brook and areas of PAB habitat creation | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Maritime Fisheries Fund | Explore opportunity for Maritime Fisheries Fund to support measures to protect migratory fish in the marine environment | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any marine environments or funding to support measures to protect migratory fish in the marine environment. |
| Fisheries Improvement Programme and Wild Trout Trust contract | Various habitat improvement projects to benefit fisheries in partnership will have additional benefits for River Basin Management Plans environmental objectives | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation (including woodland planting) along riparian corridors. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Nature Recovery Network | Various actions to protect, improve, expand, and connect habitats including water and water-dependent environments. Sites designated for nature conservation, such as European sites and Sites of Special Scientific Interest are at the core of this network | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from the proposed areas of PAB habitat creation | In | The Project has the potential to contribute to the delivery of this measure locally. Scoped in for further assessment. |
| Green Recovery Challenge Fund | Various environmental improvement projects - fish passage; land management change to address pollution; river, lake and wetland restoration; tree planting; peatland restoration. £80 million funding value over two £40million rounds, Round 1 delivery by March 2022, Round 2 by March 2023 | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect implementation of Green Recovery Challenge Fund projects (note - delivery timeframe has passed). |

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| Nature for Climate peatland restoration capital grant Project | Creation and restoration of peatland - habitat creation and enhancements | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any peatland creation and enhancement measures / projects. |
| Implement actions required to achieve and maintain objectives for European sites | Implement 'remedies' for the Sites of Special Scientific Interest that underpin water-dependent European sites. Remedies are actions needed to address reasons for adverse condition and restore the site to favourable condition. These are site-specific remedies and agreed between Natural England and the organisation responsible for their delivery on the site. Continue to progress actions identified in Site Improvement Plans. These provide a high level description of issues affecting the condition of a site and identify priority actions required to address the issues | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not impact on any Sites of Special Scientific Interest that underpin water-dependent European sites or inhibit remedial actions to address reasons for adverse condition and restore the site to favourable condition. |
| Lake Restoration Programme for European sites and Sites of Special Scientific Interest | Continue developing and implementing lake restoration plans for European site and Site of Special Scientific Interest lakes e.g. action to improve water quality, advice on nutrient management within the catchment, restoration of natural hydrological regime, restoration of vegetation and natural fish communities, sediment removal | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any European site and Site of Special Scientific Interest lakes or inhibit restoration plan and actions. |
| Wet agriculture and peatlands forestry - Paludiculture Exploration Fund | Providing technical support for new facilitative fund. Enable paludiculture (wetter farming) to become viable as a way of conserving carbon by raising the water table in peat soils, whilst maintaining a (different) peatland agricultural land use | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect technical support and funding for paludiculture. |
| Delivery of Lowland Agricultural Peat outcomes | Develop strategic position on future for sustainable land use on lowland agricultural peat soils | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect development of a strategic position on future for sustainable land use on lowland agricultural peat soils. |
| River Restoration Programme for European sites and Sites of Special Scientific Interest | Continue to develop and implement strategic river restoration plans for European sites and Site of Special Scientific Interest rivers | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not impact any river related European protected sites or Site of Special Scientific Interest or inhibit the development and implementation of river restoration plans and actions. |
| Improving Fish Passage at Environment Agency Assets | Improving fish passage at Environment Agency assets through opportunities and partnership programme of works approach | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential for minor / localised adverse effects from proposed new culverts on the River Ock and Sanford Brook | In | The Project has the potential to hinder the delivery of this measure locally. Embedded measures are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for further assessment. |

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| Water Leaders Group aligned approaches to landscape scale restoration, from soil to sea | Water Leaders Group to act as advocates for landscape-scale restoration of natural processes within our freshwater catchments and coastal waters | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Water Leaders Group initiatives. |
| Catchment Sensitive Farming Rural Development Programme England | Various farm infrastructure improvements and wider agricultural practice | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the implementation of any Catchment Sensitive Farming Rural Development Programme measures/projects |
| Championing the Farmed Environment - Advice to farmers on environmental improvements | Various measures to prevent impacts from agriculture | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the Environment Agency's advisory role with farmers to champion measures to prevent impacts from agriculture. |
| Countryside Stewardship Agrienv, including Water Environment Grant, Projects that run over into 2022 to 2027 | Various environmental improvements by farmers and land managers including on farm, river corridor improvements and wider collaborative nature based solutions including Natural Flood Management | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Environment Land Management Projects | Various environmental improvements by farmers and land managers including on farm improvements to wider collaborative nature based solutions including Natural Flood Management and buffer zones | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Regulation of agricultural and rural land including targeted regulation of protected areas such as Nitrate Vulnerable Zones | Regulation by Environment Agency officers - preventing pollution of nitrates, phosphates and sediment. Increased agricultural regulatory resource secured in 2021 continues to at least 2025. Activity focusses on: compliance with the Farming Rules for Water; compliance with Silage Slurry and Agricultural Fuel Oil Regulations. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the Environment Agency's regulatory role. |
| Tried and Tested - Advice to farmers on nutrient management | Agricultural nutrient management | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the Environment Agency's advisory role with farmers regarding agricultural nutrient management |
| Diffuse Water Pollution Plans for European sites | Continue progressing implementing Diffuse Water Pollution Plans for European sites where the site condition is affected by diffuse water pollution. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any European protected sites or the implementation of Diffuse Water Pollution Plans for European sites. |
| Nature Based Solutions | Develop a strategic position and associated guidance on Nature Based Solutions, to support our activities and engagement with those working in this area | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the Environment Agency's strategic position and guidance on Nature Based Solutions. |

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| Environment Agency Third Adaptation Report and associated actions | Various actions to improve the Environment Agency approach to adapting to climate change | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect actions to improve the Environment Agency's approach to adapting to climate change. |
| Re-fresh of Shoreline Management Plans | The Environment Agency has been working closely with the Coastal Group Network to manage a 'refresh' of the Shoreline Management Plans (SMPs) covering the English coast. The current SMPs were developed between 2006 and 2012. The refresh is not a third cycle of SMPs, but an update to ensure SMPs reflect the most current evidence, experience, and policy. The SMP Refresh project will be completed March 2023. | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect the update of the SMPs. |
| Environment Agency Flood Coast Risk Management Coastal Habitat Compensation and Restoration Programme | Environment Agency Flood Coast Risk Management Coastal Habitat Compensation and Restoration Programme | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect any coastal habitats or the Environment Agency's FCRM Coastal Habitat Compensation and Restoration Programme. |
| National Coastal Erosion Risk Map 2 | National Coastal Erosion Risk Map 2 | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect any coastal areas or the development of the National Coastal Erosion Risk Map 2. |
| National Network of Regional Coastal Monitoring Programmes | National Network of Regional Coastal Monitoring Programmes | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect any coastal areas or the Environment Agency's National Network of Regional Coastal Monitoring Programmes. |
| Environment Agency Flood Coast Risk Management Maintenance Programme | Implement the recent changes to funding policy arrangements, including payment for environmental benefits, the Environmental Statutory Allowance and Nature for Climate funding, to achieve greater environmental cobenefits from projects that manage flood and coastal erosion risk (Timescales: by 2027). | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect any coastal areas or the Environment Agency's FCRM Maintenance Programme and funding arrangements. |
| Environment Agency Flood Coast Risk Management Funding | Implement the recent changes to funding policy arrangements, including payment for environmental benefits, the Environmental Statutory Allowance and Nature for Climate funding, to achieve greater environmental cobenefits from projects that manage flood and coastal erosion risk (Timescales: by 2027). | Various | Various | All | Yes – applicable to all water bodies screened in for assessment | No | Out | The Project will not affect the Environment Agency's FCRM funding arrangements. |

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| Environment Agency Flood and Coastal Risk Management capital programme beyond current confirmed projects | Delivery of mitigation measures for Flood and Coastal Erosion Risk Management assets - river restoration and fish pass improvements | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential for minor / localised adverse effects from proposed new culverts on the River Ock and Sanford Brook | In | The Project has the potential to hinder the delivery of this measure locally. Embedded measures are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for further assessment. |
| Environment Agency Navigation Capital Asset Investment | Addressing physical modification on Environment Agency owned regulatory assets to maintain navigable waterways and restore fish passage | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environment Agency owned regulatory assets to maintain navigable waterways or inhibit any measures/actions to address associated physical modification and fish passage impacts. |
| Water Leaders Group work on integrated investment in catchments | Water Leaders Group develop shared guidance and case studies for integrating investment in and across catchments | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Water Leaders Group initiatives and guidance. |
| Natural Environment Investment Readiness Fund (NEIF) | Create new woodlands, restore peatlands, create new coastal wetlands, restore freshwaters and wetlands | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation (including woodland planting). | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Water Leaders Group shared guidance on developing and implementing market approaches to Paid Ecosystem Services | Implement measures through Paid Ecosystem Service markets | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Water Leaders Group initiatives and guidance. |
| Nature Based Solutions Landscapes Project | A set of demonstration projects to develop the multi-sector funding approach to landscape-scale Nature-based Solutions, funded through Shared Outcome Fund | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any demonstration projects to develop the multi-sector funding approach to landscape-scale Nature-based Solutions. |
| Water Environment Transformation (WET) Programme | The Environment Agency to explore more flexible approaches to permitting, to support wider implementation of nature based solution through water industry price review process (PR24) and land managers/agriculture sector. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environment Agency initiatives to adopt flexible approach to permitting to support wider implementation of Nature-based Solutions. |
| European Union Structural Funded projects that may run over into 2022 to 2027 e.g. European Union Inter Regional Cooperation Programme Projects | Various environmental improvement projects e.g. pollution control initiatives, abstraction management and habitat restoration | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any European Union Structural Funded projects. |

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| Other Heritage Lottery, Landfill Charge Levy or Philanthropic funded projects that may run over into 2022 to 2027 e.g. European Union Inter Regional Cooperation Programme Projects or Local Enterprise Partnerships funded projects | Various environmental improvement projects e.g. pollution control initiatives, abstraction management and habitat restoration | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any Heritage Lottery, Landfill Charge Levy or Philanthropic funded environmental improvement projects. |
| UK Prosperity Fund projects that may run over into 2022-27 e.g. with Local Enterprise Partnerships | Various environmental improvement projects e.g. pollution control, abstraction management and habitat restorations pollution control initiatives | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any UK Prosperity Fund environmental improvement projects. |
| Explore better data sharing approaches with Arm's Length Bodies and partners | Data sharing restrictions between partners, including Arm's Length Bodies can be a barrier for a holistic targeted approach to regulating, advice and grant aid. Explore better data and evidence sharing approaches | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect data sharing initiatives with Arm's Length Bodies and partners. |
| Environment Agency Championing Coastal Coordination (3Cs) Project Phase 2 | Phase 2 - work with coastal partners and other interested parties to review the phase 1 pilots and develop recommendations for a national framework for future governance and joint working to improve alignment of water planning and delivery. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any coastal areas or Championing Coastal Coordination (3Cs) projects. |
| Catchment Based Approach | Catchment partnership led projects and measures related to multiple funding streams and outcomes for water quality, quantity, habitat and flood risk reduction. Examples can be seen in the River Basin Management Plan Catchment Partnership Pages | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Improved Integrated Local Delivery | Working with partners, to improve strategic national engagement for local collective action. Achieve this through better collaborative system governance, alignment and integration from catchment to coast for multiple environmental and social outcomes and climate resilience e.g. towards a national framework for water governance, local estuarine and coastal restoration plans | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Improved Integrated Local Delivery initiatives. |
| Blue Impact Fund - Marine habitat restoration fund bid | Developing ocean trust fund to support marine environmental enhancement | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any marine environments or funding. |

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| Environment Agency programme of work to realise our Ambition for Water | Various measures arising from the Environment Agency reviewing their approach to water and setting out a roadmap for how they will work with partners to deliver our Water Ambition. This will coordinate multiple activities detailed elsewhere in this River Basin Management Plan Programme of Measures spreadsheet | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environment Agency Ambition for Water initiatives. |
| Water Environment Improvement Fund | Local habitat/Invasive Non Native Species improvement Projects and agricultural/urban pollution control initiatives. Also funding 2021-22 to support improved coordination of coastal-based partnership working | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any Water Environment Improvement Fund projects. |
| Environment Agency Environment Programme beyond current confirmed projects | Diffuse pollution control initiatives, recovery of priority species - habitat restoration or creation and reintroducing species | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential localised beneficial effects from the proposed western and eastern watercourse diversions and areas of PAB habitat creation. | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| Environment Act Targets water and biodiversity | The Environment Act 2021 stipulates the Government will set a minimum of one long-term legally binding targets in four priority areas. These include water, waste and resources, air quality and biodiversity. There will need to be various environmental improvement projects to achieve these targets. The public consultation on the proposed targets closed on 27 June 2022. Those proposed for water include addressing rivers polluted by abandoned metal mines, pollution coming from wastewater; agriculture and to reduce water demand. Biodiversity targets will also aid the environment by halting the decline of species abundance, extinction and creating wildlife-rich habitats in our streams, rivers, estuaries and coastal waters. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect targets set under the Environment Act 2021. |
| Water Leaders Group aligning approaches to behaviour change campaigns on water | No information available | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Water Leaders Group initiatives. |
| Development Planning - Statutory Biodiversity net gain | Planning requirement that aims to ensure that developments have a net positive impact on biodiversity overall, by minimising any negative impacts, restoring existing areas or offsetting | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the setting of development planning biodiversity net gain (BNG) requirements. Note – compliance with BNG objectives assessed separately at ES stage. |
| A new framework of Green Infrastructure Standards | Various measures that result in greener cities and cleaner waters | Various | Various | Various | Unknown (water body level | No | Out | The Project will not affect Green Infrastructure Standards. Note – The |

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| supports mainstreaming of good green-blue infrastructure | | | | | information not provided) | | | Project will integrate various green- blue infrastructure components as part of its design, including SUDs features and the proposed ICW. |
| Local Nature Recovery Strategies | Various actions to protect, improve, expand and connect habitats including water and water-dependent environments. These will be identified through the Statement of Biodiversity Priorities and the Local Habitat Map in each Local Nature Recovery Strategy. Actions to restore habitat should seek to deliver wider environmental outcomes such as flood risk mitigation, water quality improvements and climate change adaptation wherever possible | Various | Various | Various | Unknown (water body level information not provided) | Yes - potential localised beneficial effects from the proposed areas of PAB habitat creation | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment. Scoped in for further assessment. |
| National Highways Strategic Road Investment Strategy | Measures to mitigate impacts from road run-off | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential for minor, localised adverse effects from construction and operational highway runoff | In | The Project has the potential to hinder the delivery of this measure locally. Embedded measures (integration of SuDs) are anticipated to minimise any potential impacts. However, scoped in on precautionary basis for further assessment. |
| Regulatory campaigns in urban areas including industrial estates and retail parks | Regulation by Environment Agency officers - prevent pollution | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environment Agency regulatory activities. |
| Environment Agency Chief Scientific Advisors Office Clean and Plentiful Water Environmental Quality Standards Project | Environmental Quality Standards development post European Union Exit | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect EQS development. |
| Water Industry Asset Management Plan Price Review 2024 Water Industry National Environment Programme Projects arising from Chemicals Investigation programme | Sewage treatment improvements through changes to licence conditions at specific sites | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect proposed WINEP projects to improve sewage treatment works (STW) sites and/or changes to licence conditions. Operational foul drainage is to be connected to Abingdon or Drayton sewage treatment works (STW), except for the Integrated Constructed Wetland, which will treat the foul water from the nature education centre and discharge into the Western Watercourse Diversion. The associated discharges from the Drayton STW to Ginge Brook, and Abingdon STW to the River Thames have been scoped out on the basis that these STW discharges are |

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| | | | | | | | | regulated by existing environmental permits. |
| Implement findings from review of Polluter Pays/Fair Share project due end of 2021 | Price Review/Asset Management Plan | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect implementation of findings from review of Polluter Pays/Fair Share project. |
| Drainage Waste Water Management Plans to inform measures identified by Water Industry in Price Review24 | Integrated drainage management - Measures to address pollution, flood risk and habitat function | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect delivery Drainage Waste Water Management Plan measures. |
| Abstraction plan 2 - Refreshed Sustainable abstraction plan delivery | Measures include: changes to abstraction licences including compulsory and voluntary licence changes, time limited licences renewal, application of powers in relation to actual and risk of serious damage, risk of deterioration and actual deterioration, revocation of unused licences, and reducing quantities on under used licences and non licence changes, delivery of a stronger catchment focus updating Abstraction Licence Strategies | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect delivery of Abstraction plan 2 measures. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Achieve sustainable abstraction to deliver resilient catchments and meet the challenge of climate change | Greater clarity on un-sustainable abstraction improvements through: changes to abstraction licences for example time limited licences, serious damage, unused licences, new authorisations. New licences issued only to the sustainability standards of the flow and groundwater objective thresholds as consulted. Deviation from this only by agreed quality of scientific evidence, provided at the developers cost | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect abstraction license reviews and new authorisations. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Develop Environmental Destination statements. Establish a consistent understanding of the long term water resource needs and climate change impacts | Environmental destination statement informs regional planning options and on the ground measures | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environmental Destination statements. |
| Implementation of a stronger catchment focus for water resources | Working collaboratively with all stakeholders to deliver integrated catchment solutions to mitigate the impact of climate change and unsustainable abstraction. Where appropriate deliver innovative solutions to increase access to water and sustainable abstracting improvements and update all Abstraction Licencing System by 2027 | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect collaboration with stakeholders to deliver integrated catchment solutions to mitigate the impact of climate change and unsustainable abstraction. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |

| Measure | Summary Measure information | Management catchment | Operational catchment | Water body name | Scoping – measure relevant to water bodies screened in? | Scoping – potential for measure to be affected by Project activities / elements screened in? | Scoping outcome | Scoping justification |
|---|--|----------------------|-----------------------|--------------------|---|---|-----------------|--|
| Modernise our abstraction licensing service to deliver resilient and sustainable catchments and to meet the challenge of climate change | Access to water and sustainable abstraction improvements through modernising the abstraction service. Ending exemptions, moving to a digital platform and introducing Environmental Permitting Regulation and a stronger regulatory and compliance regime based on delivering sustainable abstraction | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect modernisation of the abstraction licensing service. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| New Authorisations - previously Exempt Licence determinations by December 2023 | Abstractions Licensed and established for review against sustainability standards at Common End Dates against surface and groundwater sustainability tests | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect abstraction license reviews (timeframe passed). Note – the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Review of Heavily Modified Water body and Level Managed system flow objectives to assure achievement of sustainable abstraction and ecosystems they support. | Establish sustainable flow objectives for Heavily Modified Water Bodies and Level Managed Systems to identify unsustainable abstraction and establish these thresholds for licensing and the associated groundwater sustainability for licence reviews | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect establishment of sustainable flow objectives for Heavily Modified Water Bodies and Level Managed Systems to identify unsustainable abstraction and establish these thresholds for licensing. Note – whilst the Project will involve operational abstractions that will affect HMWBs downstream these will be subject to Environmental Permitting/license conditions, and the Project broadly supports this measure through provision of sustainable abstraction into the future. |
| Development of Regional Plans Water Resources and environmental destination statement | Give the water sector a stronger strategic steer on long term water resources planning. Includes: coordinating Regional planning groups and setting the environmental destination. Also inform the development of new water infrastructure and design future regulatory frameworks. Do this through RAPID (Regulators' Alliance for Progressing Infrastructure Development) Abstraction Licence reductions to deliver Sustainable Abstraction. This is a key measure in our response to climate change | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect strategic steer on long term water resources planning, coordination of regional planning groups and the setting the environmental destination. Note – the Project broadly supports this measure through provision of sustainable abstraction into the future and is driven by long term water resource planning and follows the RAPID process and guidance. |
| Time Limited Abstraction Licence renewal - Give licence holders six years notice of renewal | Licence holders have six years notice to renew time limited licences. To meet the sustainability test, the Environment Agency will mainly prioritise action to prevent deteriorations up to the end of 2027 | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect renewal of time limited abstraction licences. |
| Water Resource Assets Capital Investment | Ensure water transfer Projects are safe, resilient, environmentally sustainable and can operate when required | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect Environment Agency assurance role for water transfer Projects. Note - The Project broadly supports this measure |

| Measure | Summary Measure information | Management catchment | Operational catchment | Water body name | Scoping – measure relevant to water bodies screened in? | Scoping – potential for measure to be affected by Project activities / elements screened in? | Scoping outcome | Scoping justification |
|---|---|----------------------|-----------------------|--------------------|---|--|-----------------|---|
| | | | | | | | | through provision Thames to Southern Transfer (T2ST). |
| Water Industry Asset Management Plan Price Review 2024 Water Industry National Environment Programme Projects - water resources | Sustainable abstraction improvements through changes to abstraction licences and licence conditions at specific sites | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect WINEP water resource projects and changes to abstraction licences and conditions to improve abstraction sustainability. Note – the Project broadly supports this measure through provision of sustainable abstraction and water resources into the future. |
| The Flood and Coastal Resilience Innovation Programme - 25 projects targeting flood resilience | Various measures to improve flood resilience, which may include: | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect The Flood and Coastal Resilience Innovation Programme projects. |
| As part of Water Ambition the Environment Agency will work with partners to bring a particular focus on protecting and improving chalk rivers | Various regulatory and partnership measures to improve and protect chalk rivers - quality, quantity, habitat and biodiversity | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential for temporary minor, localised adverse effects from construction works, but minor, localised benefits from proposed areas of PAB habitat creation | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment overall in the long-term. Scoped in for further assessment. |
| OxCam Arc - Working with the wider Defra group to influence the Spatial framework and wider OxCam work. | Ensuring we use planned growth and development as an opportunity for improving nature. Influencing planning policy, influencing development corporations, providing environmental evidence and advice and test/showcase best practice. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect the OxCam Arc Spatial framework and work to influence planning / development policy to provide improvements for nature. |
| Identify Natural Flood Management Opportunities. | Listed in the Thames river basin district FRMP - various local authorities will use a catchment based approach by 2027; to work with communities and landowners to identify nature based solutions including natural flood management. Local authority funding | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential minor, localised benefits from proposed areas of PAB habitat creation and design of proposed watercourse diversions | In | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment overall in the long-term. Scoped in for further assessment. |
| Thames natural flood management. | Thames Regional Flood and Coastal Committee collaborating on £1.3m programme of natural flood management to 2027. Also building on draft plan consultation feedback, explore across Thames scaling up catchment based approach, packaging measures, innovative finance/funding. To achieve more investible propositions, nature based solutions, social and natural capital benefits e.g. natural | Various | Various | Various | Unknown (water body level information not provided) | Yes – potential minor, localised benefits from proposed areas of PAB habitat creation, design of proposed watercourse diversions, and operational surface water drainage design | ln | The Project has the potential to contribute to the delivery of this measure locally within Ock catchment overall in the long-term. Scoped in for further assessment. |

| Measure | Summary Measure information | Management catchment | Operational catchment | Water body name | Scoping – measure relevant to water bodies screened in? | Scoping – potential for measure to be affected by Project activities / elements screened in? | Scoping outcome | Scoping justification |
|--|---|----------------------|-----------------------|--------------------|--|---|-----------------|---|
| | flood management, SUDs. Building relationships including with CaBA Catchment Partnerships and capacity through collaborative Thames RFCC working groups | | | | | (which will integrate SUDs) | | |
| Rivers and Wetlands Community Day (RWCD) Fund. | The Rivers and Wetlands Community Days fund is provided by Thames Water distributed by a board consisting of the Angling Trust, the Environment Agency, the Institute of Fisheries Management, Thames Water Utilities Limited and the Wild Trout Trust. Projects are engaging and educating local communities, practically involving them in improving rivers and wetlands habitats and water quality. Examples funded include Rivers Weeks, Outfall Safaris in London, natural flood management and creating backwaters. Thirteen projects are being funded 2020/21 at various scales and locations (59 past projects completed) and the partnership is seeking future funding to continue this successful programme contributing to health, wellbeing and green skills. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect RWCD funding / projects. |
| Chalk and Ephemeral Stream sustainability actions and flow protection | Policy and voluntary driven abstraction reductions against ground and surface water sustainability assessment standards under CaBA Chalk stream Strategy Actions, Environment Bill sustainability standards and designations. Includes review of licences and flow objective achievement against the naturalised perennial head | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect implementation of policy and voluntary driven abstraction reductions against ground and surface water sustainability assessment standards under CaBA Chalk stream Strategy Actions, Environment Bill sustainability standards and designations. |
| Implementation of the Water Resources Catchment Based Approach (CaBA) Chalk Stream Restoration Group (CSRG) chalk strategy | Policy and voluntary measures to drive abstraction reductions in ground and surface waters in chalk catchments. A local response to climate change and abstraction pressure in these catchments. Policy support is intended to develop to underwrite these. | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect implementation of policy and voluntary measures to drive abstraction reductions in ground and surface waters in chalk catchments. |
| Water companies work with catchment partners to support flagship chalk stream restoration projects | Habitat restoration measures | Various | Various | Various | Unknown (water body level information not provided) | No | Out | The Project will not affect any flagship chalk stream restoration projects. |

A5.3 Potential effects on A/HMWB Mitigation Measures

Table 54 Scoping of potential effects of the Project on water body A/HMWB Mitigation Measures

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|------------------------------|------------------------|--|--------------------|--|
| Thames (Egham to Teddington) | 36930 | Thames (Egham to Teddington) | Out | No measure details available – unable to assess. Review at next stage. |
| (GB106039023232) | 37804 | Restore backwater at Riverbank residential development, Staines . | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37805 | Penton Hook marina create 2.5 hect BAP habitat. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality. |
| | 37806 | Restoration of backwaters at Truss's island. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37807 | Enhance and extend natural bank at Silver sands, Egham TQ0364869740 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37808 | Add shelter at gravel pit Penton Hook for fish shelter TQ0412869338 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37809 | Backwater enhancements at Mixnams Island Penton Hook TQ0429568586 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37810 | Enlarging Penton Hook backwater on north bank TQ0438969492 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37811 | Selective opening up of right bank at Laleham. Create beach areas TQ0491168870 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37812 | reduce the wash by having signs to reduce boat speed - Waterways | Out | Project does not prevent implementation of Mitigation Measure. |
| | 37813 | Laleham Identify piece meal bankwork for removal. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37814 | Ensure water company modify fish screen at Laleham intake. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37815 | Burway Ditch, Abbey mead some floodplain grazing marsh possible TQ0469667521. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality. |
| | 37816 | Remove Abbey Chase weir on Abbey River and install stoplogs which can be removed over time | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37817 | Dockett Eddy enhance reinforced bank, work is located on left bank - F & B TQ0659166278 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|---|--------------------|---|
| | 37818 | Create wetland and backwater habitats and enhance riverbank | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37819 | Compensatory habitat at Desborough Island | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37820 | Habitat Improvement in Backwater from Desborough Cut into Shepperton. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37821 | Install mitigation if hydropower is installed on left bank | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37822 | Sunbury depot island create reed bed to create BAP habitat TQ1029367893 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37823 | Walton 2 intake - screening on intake to prevent fish entrapment | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37824 | LTS Molesey weir - fish pass to replace fish trap finishes 2014 TQ1508968738 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37825 | Install new channel to provide access to tributary and create functional flow dependent habitat | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37826 | Canbury Gardens:- 1 mile of natural riverbank, beaches and habitat to rivers edge. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37827 | Broom Road Teddington Natural Beach next to the recreation ground - TLS Project proposed | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37828 | LTS - Teddington weir, new 2 stage fish pass proposed with hydropower Project TQ1697971418 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37829 | Redevelopment of Marina may have possible habitat enhancement | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37839 | River bed raising or lowering. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37840 | Create low flow channels in over-widened/over-depended channels | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37841 | GB106039023232 Create reed fringes | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|--|--------------------|---|
| | 37842 | Create shallow margin in front of hard defence | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37843 | Backwater creation/enlargement at Penton Hook | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37844 | Narrow over-wide channels, Sunbury lock and weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37845 | Narrow over-wide channels, Penton Hook pit | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37846 | Reconnect and restore historic aquatic habitats, Penton Hook pit | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37847 | Reconnect and restore historic aquatic habitats. Covered by WTh_Low_001897 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37848 | Recreate a sinuous river channel (re-meandering), Abbey River | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37849 | Recreate a sinuous river channel (re-meandering), Hurst Park | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37850 | GB106039023232 Recreate a sinuous river channel (remeandering) | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37851 | Removal of hard engineering structures (e.g. naturalisation) | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37852 | GB106039023232 Replace existing structures with new structural designs | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37853 | Replace hard defence with soft engineering, Sunbury lock and weir | | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37854 | Install technical fish pass, Chertsey weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|---|--------------------|---|
| | 37855 | Install fish pass, Molesey weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37856 | Install fish pass, Tumbling Bay weir, Sunbury | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37857 | Install fish screening at Thames Water laleham intake. | Out | Project does not prevent implementation of installation of fish screens at Thames Water Laleham intake. No physical works proposed at this location or anywhere within water body extent. |
| | 37858 | Hampton intake install fish screens at Thames water intake | Out | Project does not prevent implementation of installation of fish screens at Thames Water Hampton intake. No physical works proposed at this location or anywhere within water body extent. |
| | 37859 | GB106039023232 Engaging with navigation users to reduce bank erosion and sediment input | Out | Project does not prevent implementation of engagement with navigation users. |
| | 37860 | Encourage use of environmentally friendly vessel design. | Out | Project does not prevent implementation of encouraging the use of environmentally friendly vessel design. |
| | 37861 | Lateral zoning to concentrate boats within a central channel | Out | Project does not prevent implementation of lateral zoning to concentrate boats within a central channel. No physical works proposed at this location or anywhere within water body extent. |
| | 37862 | Limit number of mooring permits available | Out | Project does not prevent implementation of limiting the number of mooring permits available. |
| | 37879 | Design moorings for ecological benefit. E.g. offline revenue moorings. | Out | Project does not prevent implementation of ecologically beneficial mooring design. No physical works proposed at this location or anywhere within water body extent. |
| | 37880 | Sunbury lock and weir. Create fish and wildlife channel through Sunbury Lock Island. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37881 | Create wetland and backwater features at Hurst Park | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37882 | Wetland and reed bed creation at Penton Hook pit. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhe within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37883 | Introduce minimum flow limits on abstractions | Out | Project does not prevent implementation of Mitigation Measure. Whilst the water body is within the predicted zone of influence for the proposed operational reservoir abstraction regime, this will be subject to the conditions of an environmental permit, the terms of which will be agreed upon with the Environment Agency. The permit would include conditions or limits on abstraction and discharge to prevent adverse effects on flows and water quality within the River Thames and downstream. The emerging design would abstract up to 1000MI/d at the intake / outfall structure, where the daily increase to reach this maximum would not exceed 300MI/d. Abstraction would be limited to periods where the minimum river level flow for abstraction (also referred to as the 'hands off flow' level) would be at least 50% of the Q50 flow as measured at Culham and Kingston. Accordingly, the Project is currently not deemed to conflict with the measure based on the current design information |
| | 37884 | Abbey River, Install fish pass at Abbey Chase | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhe within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37885 | Reconnect and restore historic aquatic habitats, Create compensation habitats | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|---|------------------------|--|--------------------|--|
| | | | | abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37886 | Penton Hook. Install fish shelters and predator refuge in Penton Hook Pit. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37887 | Enhancement opportunities through Penton Hook marina redevelopment. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37888 | Removal of hard engineering structures/ bank rehabilitation/reprofiling. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37894 | Install fish pass in conjunction with Hydropower proposal at Teddington weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37895 | Beach Recharge, import gravel to dress selected marginal areas of the watercourse. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37896 | Lower weir at Abbey Chase. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37897 | Narrow over-wide channels | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37898 | GB106039023232 Recreate a sinuous river channel (remeandering) | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37899 | Create a fish and wildlife channel to bypass Chertsey weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37900 | Install fish pass on Teddington boat rollers, Teddington weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37901 | Surbiton (Seething wells) intake. Install fish screen | Out | Project does not prevent implementation of implementing fish screens at the Surbiton intake. No physical works proposed at this location or anywhere within water body extent. |
| | 37902 | Change maintenance technique to minimise disturbance | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37903 | Recreation of gravel bars and riffles. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37904 | Replace hard defence with soft engineering | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| Thames (Cookham to Eghan (GB106039023231) | 37863 | Multi-Species fish pass installation at Boulters mill channel & weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37864 | Replace hard banks and establish shallows and emergent plants. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37865 | Upgrade to multi species fish pass at Bray SU9092579733 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|--|--------------------|--|
| | 37866 | Pigeonhill Eyot/bray mill stream phase two enhancement. SU9097779649 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37867 | Connect Windsor Marina Lakes to Thames | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37868 | Beach Recharge, import coarse material to dress existing beach areas along river. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on scour potential. |
| | 37869 | Eton backwater Restoration. Improve in lateral connectivity to floodplain habitat. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37870 | Create a fish and wildlife channel at Old Windsor Weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37871 | Create a fish and wildlife channel at Bell Weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37872 | Create a fish and wildlife channel at Hedsor Weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37873 | Modify sluice at Bray Mill. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37874 | Install fish screen to stop entrainment, TW Datchet intake | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37875 | Fish screen to stop entrainment, Sunnymeads intake, Datchet | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37876 | Fish screen to stop entrainment, Hythe End intake | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37877 | Fish screen to stop entrainment, Egham intake | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within the water body extent. |
| | 37878 | Engaging with navigation users to reduce bank erosion and sediment input | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within the water body extent. |
| | 37889 | Canoe fish connection through Papermill site | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
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| | 37890 | Amerden Stream. Augment flow using jubilee river and associated in channel enhancement work | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37891 | Old Mill sluice could be modified to change the flow SU9097779649 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37892 | Naturalisation of right bank of Monkey island | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37893 | Managed retreat on the towpath opposite Ruddles Pool SU9373377203 | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37914 | Reprofile the river bank, plant vegetation and create beaches. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37915 | Improve fish passage at Boveney Weir | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37916 | Move impoundment structures upstream at Clewer Mill Stream | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37917 | Install fish passes and habitat works at Tangier Mill Stream | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37918 | Habitat enhancement through Eton College | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed within water body extent. |
| | 37919 | Strategic placement of dredged material. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed within water body extent. |
| | 37920 | Strategic placement of dredged material at Lower Chalvey Ditch | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed within water body extent. |
| Thames (Reading to Cookham) | 37932 | Install fish pass in conjunction with Hydropower proposal at Shiplake weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37933 | In-channel habitat improvements at Henerton backwater. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37934 | Reconnect ditches at Remenham. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37935 | Deculvert river at Frog Mill inlet, Bisham Brook and put in bypass channel around 2 weirs. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37939 | GB106039023233 Create riffles and side streams. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |
| | 37950 | GB106039023233 Create small riffles, re-profile banks, fence watercourses and put in buffer strips throughout. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|-------------------------------|------------------------|---|--------------------|---|
| | 37961 | GB106039023233 Secure habitat creation through development | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| hames Wallingford to aversham | 21194 | GB106039030331 Create small riffles, re-profile banks, fence watercourses, buffer strips throughout | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| GB106039030331) | 37923 | Where possible, improve and protect small tributaries coming into the Thames. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. No impacts on tributaries within water body extent. |
| | 37924 | Create wetland and improve floodplain connectivity at Cleeve | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within the water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37925 | Restrict navigation to one side of poplar island and Appletree Eyot island. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within the water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37926 | Create wetland habitat at Tilehurst on left hand bank. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within the water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37927 | Pursue gains through the planning process around the Reading area. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37928 | Habitat gains and bank improvements in conjunction with bridge construction | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. No impacts on tributaries within water body extent. |
| | 37929 | Improve connection with the river at Reading Marina. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37942 | GB106039030331 Create riffles and side streams. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. No impacts on tributaries within water body extent. |
| | 37944 | Identify areas that could be connected to the floodplain | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility. |
| | 37945 | Limit dredging activities by Navigation/ Waterways at significant shallows on onside of bend | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37946 | Maintain habitat at the tail of Benson Weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. No impacts on tributaries within water body extent. |
| | 37947 | Protection of sandy beach features downstream of Wallingford Bridge. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on scour potential. |
| | 37948 | Protect gravels at the confluences of the Bradfords Brook and Mill Brook and with the Thames | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on scour potential. |
| | 37951 | Opening up of backwater near South Stoke STW | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|---|--------------------|--|
| | | | | abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on measure feasibility or functionality (including no worsening/reduction in low flows). |
| | 37952 | Protection of the sediment deposits in Cleeve Weirpool. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on scour potential. |
| | 37953 | Protection of shallows at head and tail of islands near Beale Park. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on typical flow depths and habitats. |
| | 37954 | Protection of flow dependant habitat in Whitchurch Weirpool. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on flow types/habitats. |
| | 37955 | Protection of margins on right hand bank below Whitchurch bridge for 150 - 200m. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on channel margin habitats. |
| | 37956 | Protection of margins either side of Sulham Brook to Thames confluence. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on channel margin habitats. |
| | 37958 | Protection of weirpool habitat at Mapledurham Lock. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on flow types/habitats. |
| | 37959 | Preservation of river margins beside railway line near Purley/Tilehurst. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on channel margin habitats. |
| | 37960 | Protection of gravel shoal at Caversham weir B | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on scour potential. |
| | 37962 | Protection of shallow area on bend downstream of Caversham weir. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywhere within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on typical flow depths and habitats. |
| | 37964 | GB106039030331 Secure habitat creation through development | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37965 | Bank reprofiling (rehabilitation) throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37966 | Create shallow margin in front of hard defence throughout the water body. | | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37967 | Removal of hard engineering structures (e.g. naturalisation) throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |

| WFD water body | Measure / Action ID | Measure | Scoping Outcome | Scoping Assessment - Justification |
|----------------|------------------------|---|--------------------|---|
| | 37968 | Replace existing structures throughout the water body with new structural designs | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37969 | GB106039030331 Replace hard defence with soft engineering throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37970 | Use of engineering techniques to assist natural recovery throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37971 | Use soft engineering techniques throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37972 | Create compensation habitats throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37973 | GB106039030331 Narrow over-wide channels throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37974 | Reconnect and restore historic aquatic habitats throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37975 | River bed raising or lowering (regrading) throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37976 | Provide fish passage solutions throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. The measure location is within the current assumed zone of influence/impact of the reservoir abstraction/discharges. However, minor impacts on flows only at this location and so no significant impacts on fish passage. |
| | 37977 | Bank reprofiling (rehabilitation) for the stretch of the Thames downstream of Wallingford | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed at this location or anywher within water body extent. |
| | 37978 | Introduction of stock-proof fencing to reduce bankside erosion | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37979 | Change operational regime of weirs and locks to protect and enhance flows and habitats | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37980 | GB106039030331 Introduce riparian vegetation/green corridors throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37981 | Retain marginal vegetation throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37982 | Modify existing structures throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37983 | Cessation of maintenance throughout the water body. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37984 | If dredging occurs, strategically place dredged material. | Out | Project does not prevent implementation of Mitigation Measure. No physical works proposed anywhere within water body extent. |
| | 37985 | Work with landowners to optimise sensitive management practices. | Out | Project does not prevent implementation of Mitigation Measure. |

