Preliminary Environmental Information Report

Volume 4
Appendix 7.7

Habitats Regulations Assessment - Hazards Identification and Assessment Scope

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Introduction

This report documents the identification of hazards associated with the construction and operation of the River Thames Scheme (RTS or project) as part of the Habitats Regulations Assessment (HRA) for the project. This report has been produced to support the preliminary assessment of environmental effects documented within the Preliminary Environmental Information Report (PEIR) completed as part of the Environmental Impact Assessment (EIA) for the RTS.

Habitats Regulations Screening

An HRA Screening assessment for the RTS was carried out in September 2022 (Appendix N of the EIA Scoping Report; Environment Agency, 2022) in accordance with PINS Advice Note 10 (Planning Inspectorate, 2022). The Screening assessment was undertaken at the same time as, and supported, the Environmental Impact Assessment (EIA) scoping report and was used to support consultation with Natural England.

The Screening assessment concluded that there will be a Likely Significant Effect on the South West London Waterbodies (SWLW) SPA and Ramsar Site, and therefore that an Appropriate Assessment will need to be carried out to assess whether the RTS will have an Adverse Effect on Integrity (AEoI) on those designated sites. The waterbodies which make up the SWLW designations are shown on drawing number ENVIMSE500260-CBI-ZZ-3ZZ-DR-EN-00142 (Appendix A) together with the project boundary for EIA PEIR.

Natural England confirmed via correspondence in May 2023 that it agreed with the findings of the HRA Screening assessment carried out in September 2022, and that the Appropriate Assessment should focus on the SWLW SPA and Ramsar site and functionally linked land around it.

SWLW SPA and Ramsar Site Features and Conservation Objectives

The SWLW SPA and Ramsar sites are spatially identical. They are both designated for gadwall *Mareca strepera* over winter and for northern shoveler *Anas clypeata* over winter and when on spring and autumn migration. The Conservation Objectives for the SWLW designations are to ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and,
- The distribution of the qualifying features within the site. (Natural England, 2019)

Functionally Linked Land

The RTS only has potential to affect three waterbodies included within the SWLW designations boundary: Wraysbury Reservoir, Wraysbury 2 (N) and St Ann's Lake. Gadwall and shoveler also use other waterbodies within the project boundary for EIA PEIR. Those waterbodies provide suitable alternative habitats and support the designated site populations and as such have a functional linkage to the SWLW SPA and Ramsar sites. For the HRA Screening, data from BTO Wetland Bird Surveys and surveys carried out for RTS between 2012 and March 2021 were used to identify which potentially affected waterbodies outside the SWLW designations boundary provide a critical supporting function (i.e. whether the habitats are necessary to maintain or restore the conservation status of the designated species). A waterbody was categorised as 'supporting' (i.e. as providing a critical supporting function to) the SWLW SPA and Ramsar site if the numbers of gadwall or shoveler that regularly use it are 1% or greater than the total SWLW population as stated in the Ramsar site citation. The following waterbodies were categorised as 'supporting' and are within / up to 100m of the project boundary for EIA PEIR and could therefore be directly affected or disturbed (shown on drawing number ENVIMSE500260-CBI-ZZ-3ZZ-DR-EN--00142):

Land South of Wraysbury Reservoir Habitat Creation Area

- Hythe End Central
- Hythe End West
- Hythe End East

Runnymede Channel

- Lake south of Green Lane
- Abbey Lake
- Manor Lake
- Fleet Lake
- Abbey 1
- Twynersh Lakes Complex

Spelthorne Channel

- Littleton South
- Littleton East
- Sheepwalk West 1
- Sheepwalk West 2
- Sheepwalk East
- Black Ditch Pond
- Halliford Mere Complex
- Ferry Lane Lake.

Wintering bird surveys were carried out during winter 2022/23 and will be repeated in winter 2023/24 to give an up-to-date data set. The waterbodies that are categorised as 'supporting' will be reviewed in 2024 using this data and the most recently available BTO Wetland Bird Survey data.

The Appropriate Assessment will consider the effects of the RTS on all waterbodies identified as 'supporting' and the supporting function they provide, in addition to considering the effects on the three waterbodies included in the SWLW designations boundary (Wraysbury Reservoir, Wraysbury 2 (N) and St Ann's Lake) that are potentially affected by the RTS. The effects on individual waterbodies will be used to assess the effect on the SWLW designations as a whole.

Hazard Identification

The scheme components and the project activities described in the PEIR were reviewed to identify the hazards they could pose to the SWLW SPA and Ramsar site and their qualifying features. All identified hazards apply equally to both qualifying features of the SWLW SPA and Ramsar site.

No construction or operation phase hazards have been identified associated with the River Thames capacity improvement works downstream of Desborough Cut or at the Sunbury, Molesey and Teddington weirs, or the potential opportunity for Thames Water to adjust the timing of their abstractions to existing storage reservoirs during large flood events so that the highest rate of abstraction coincides with the flood peak.

Due to the nature and permanence of the RTS, no consideration has been given to decommissioning as part of this assessment.

Construction Hazards

Construction Hazard C1 – Direct harm to qualifying features

Tree/vegetation removal; general construction activities in water; and, specific activities including dewatering / over-pumping of waterbodies, sheet piling and the use of temporary wharfs and mobile pontoons have potential to cause direct harm to gadwall or shoveler through physical impact, entrapment in equipment and from accidental pollution.

Construction Hazard C2 - Temporary habitat loss and fragmentation

Tree/vegetation removal; dewatering / over-pumping of waterbodies to manage working areas; creation/use of construction compounds; temporary stockpiling of materials; temporary changes in hard-standing; erection of temporary screens/fences; and, temporary access routes for the movement of construction vehicles, equipment and operatives (on site) could result in the temporary loss and fragmentation of habitat.

Construction Hazard C3 - Sediment generation from construction works

Sediment will be mobilised by general construction activities in water and on land close to aquatic environments, and by specific activities including sheet piling, material excavation and use of excavated material needed to construct the Runnymede and Spelthorne channels, flood control structures, flood embankments and erosion prevention, new pedestrian / cycle bridges, and habitat improvements. This could lead to changes in turbidity, sedimentation, dissolved oxygen levels and water quality.

Construction Hazard C4 - Pollution incidents resulting from construction activities

General construction activities in water; material excavation (contaminated and natural ground); temporary stockpiling of materials; processing and placement of material; creation/use of construction compounds; and the movement of construction vehicles, equipment and operatives close to or within aquatic environments has the potential to lead to fine particles (e.g. dust generated by construction activities, particulates from vehicle emissions), lubricants, fuel and other materials mixing with water leading to a risk of pollution.

Constructing the flood relief channel through existing landfills (excavation of contaminated material) also has the potential to lead to leachate, solids or landfill gases mixing with water to cause a risk of pollution. Such pollution could lead to changes in turbidity, sedimentation, dissolved oxygen levels and water quality.

Construction Hazard C5 - Introduction of invasive non-native species

Movement of construction vehicles, equipment and operatives; material excavation; and, the use of excavated material elsewhere in the project, have the potential to introduce or spread invasive species of flora and fauna to the SPA. Invasive species could be inadvertently carried into the RTS project boundary on vehicles or on clothing/footwear and could spread between areas within the project boundary via the same mechanisms and through movements of material that contains invasive non-native species.

Construction Hazard C6 - Sensory (visual, auditory and vibration) disturbance

General construction activities in water and on land; the movement of construction vehicles, equipment and operatives (on site); and, specific activities including sheet piling and the use of temporary wharfs and mobile pontoons, will lead to a wider area being disturbed by visual, noise and/or vibration disturbance. If lighting is used at site compounds, along access routes or in working areas, this may also cause sensory disturbance.

Operation Hazards

Operation Hazard O1 – Permanent loss and fragmentation of habitat

The permanent presence of the Runnymede and Spelthorne channels, flood control structures, flood embankments and erosion prevention, new blue open spaces, and new pedestrian / cycle bridges have the potential to lead to a permanent loss and fragmentation of habitats that support the qualifying features within the SWLW SPA and Ramsar site. The existence of the flood relief channel through existing waterbodies could alter existing water levels because of the introduction of the augmented flow and during flood events, thus also potentially changing habitat extents.

Operation Hazard O2 - Changes in water flow velocity resulting in habitat change

The existence of the flood relief channel through existing waterbodies could alter existing water flow velocities because of the introduction of the augmented flow and during flood events.

Operation Hazard O3 - Sediment generation during flood relief channel operation

The existence of the flood relief channel through existing waterbodies means that during flood events the flood relief channel will bring flows high in suspended sediment from the River Thames into the channel and connected waterbodies. The

increased flow velocity passing through the waterbodies during flood conditions may also mobilise existing sediments within the waterbodies. Introduction of an augmented flow through the flood relief channel may also introduce additional suspended sediment into the waterbodies.

Operation Hazard O4 - Pollution from operation of flood relief channel through areas of landfill

The existence of the flood relief channel through existing areas of landfill has the potential to create new pathways between the existing landfill material and water bodies leading to a risk of leachate, solids or landfill gases mixing with water to increase the risk of pollution. Migration of contaminants from landfilled material into currently uncontaminated material and towards the flood relief could also occur due to compression from overlying materials and new landscaping. Such pollution could lead to changes in turbidity, sedimentation, dissolved oxygen levels and water quality.

Operation Hazard O5 - Changes in water quality resulting in habitat change

The existence of the flood relief channel through existing waterbodies, and the introduction of an augmented flow, means that water from the River Thames will be diverted through waterbodies during normal conditions and flood events. The quality of water in the River Thames, including nutrient levels, may be different to that currently in the waterbodies and so introducing it could result in changes to habitat conditions. Sediment mobilisation and pollution events could also cause changes in water quality.

Operation Hazard O6 - Introduction of invasive non-native species

The existence of the flood relief channel through existing waterbodies, and the introduction of an augmented flow, creates a new connectivity between the River Thames and currently isolated waterbodies providing a pathway for the spread of invasive non-native species and other River Thames biota. Colonisation of waterbodies by species that are not currently present could result in changes to habitat conditions.

Operation Hazard O7 – Sensory (visual and auditory) disturbance

The use of new/enhanced publicly accessible areas provided by the landscape and green infrastructure design (new blue open space, new green open space, areas of enhanced public connection including new pedestrian / cycle bridges), could lead to a wider area being disturbed by visual and/or noise disturbance. Channel

maintenance to restore the design profile will also be a source of visual and/or noise disturbance.

Hazards Applicable to each Waterbody

Each waterbody to be considered in the Appropriate Assessment, and the qualifying features using each waterbody, will be exposed to different hazards depending on their spatial relationship to the different project elements. Table HRA 1, Table HRA 2 and Table HRA 3 identifies which hazards are applicable for each waterbody.

Waterbodies that will be part of the flood relief channel will be exposed to all construction hazards and to operation hazards O1 to O6. Waterbodies that are also under consideration as new blue open space, or adjacent to areas of enhanced public connection or areas under consideration as new green open space, may also be exposed to operation hazard O7 (sensory disturbance).

Waterbodies that are within, or outside but within 100m of, the project boundary for EIA PEIR but that will not be part of the flood relief channel may be exposed to a potential pollution incident, sensory disturbance, and the spread of INNS due to the proximity of construction works. Those waterbodies may also be exposed to sensory disturbance during operation if they are adjacent to areas of enhanced public connection or areas under consideration as new green open space. Some of those waterbodies (e.g. Twynersh Lakes Complex) are also hydraulically linked to waterbodies that are directly connected to the flood relief channel, providing a potential pathway for effects on water quality (including sediment mobilisation) and the spread of INNS unless a waterbody becomes completely isolated by the project.

Waterbodies that are under consideration for habitat creation, mitigation or enhancement for the purposes of the RTS (not necessarily to mitigate for potential effects on the SWLW SPA and Ramsar site) will be potentially exposed to all construction hazards and certain operation hazards.

Table HRA 1: Hazards applicable to waterbodies to be considered at Land South of Wraysbury Reservoir – Priority area habitat creation, enhancement and mitigation in the Appropriate Assessment

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
Wraysbury Reservoir (SPA)	C6	None	Source of hazards is terrestrial habitat creation works between the toe of Wraysbury Reservoir south embankment and the railway line. Works are outside of the SPA and will not affect lake edge habitats, are 'downslope' from the waterbody, are not part of the flood relief channel, and do not create public access. Therefore there are no pathways for pollution events or aquatic INNS to reach the reservoir. Construction disturbance (noise, visual) is scoped in to be precautionary.
Wraysbury 2 (N) (SPA)	C3, C4, C5, C6	None	Source of hazards is as per Wraysbury Reservoir. Colne Brook flows past and downslope of the habitat creation area and has a hydraulic connection with Wraysbury 2 (N), hence there is a pathway for mobilised sediment, pollution events and spread of INNS as well as for sensory disturbance.
Hythe End Central	C6	None	As per Wraysbury Reservoir. The railway line separates the habitat creation works area from this waterbody and this waterbody has no connectivity with Colne Brook.

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
Hythe End West	C6	None	As per Hythe End Central.
Hythe End East	C6	None	As per Hythe End Central.

Table HRA 2: Hazards applicable to waterbodies to be considered on the Runnymede Channel in the Appropriate Assessment

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
Lake south of Green Lane	All hazards	All hazards	Part of flood relief channel and adjacent to area of enhanced public connection.
Fleet Lake	All hazards	O1, O2, O3, O4, O5, O6	Part of flood relief channel, but not proposed as blue open space or adjacent to an area of enhanced public connection.
Abbey Lake	All hazards	O1, O2, O3, O4, O5, O6	As per Fleet Lake.
Manor Lake	All hazards	O7	Not part of or connected to the flood relief channel. Adjacent to an area of enhanced public connection (improvements to an existing route) which may require vegetation management and other works to be carried out along lake edges and which may result in increased use of an existing public access route.

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
St Ann's Lake (SPA)	All hazards	O3, O4, O5, O6, O7	The waterbody is in hydraulic connectivity with the flood relief channel. Construction work needed at hydraulic control structures. Adjacent to an area of enhanced public connection (improving an existing route) which may require vegetation management and other works to be carried out along lake edges and which may result in increased use of an existing public access route.
Twynersh Lakes Complex	C3, C4, C5	O3, O4, O5, O6	The waterbody is in hydraulic connectivity with the flood relief channel via St Anne's Lake and Meadlake Ditch, providing a potential pathway for effects on water quality and spread of INNS.
Abbey 1	All hazards	O1, O6, O7	Not part of flood relief channel, but adjacent to construction area for the section of flood relief channel connecting Abbey Lake with Abbey 2 through landfill, with a potential visitor centre adjacent the northern lake edge with an access point for water-based recreation. Proposed blue open space (non-motorised, self-propelled boats only) and adjacent to area of enhanced public connection.

Table HRA 3: Hazards applicable to waterbodies to be considered on the Spelthorne Channel in the Appropriate Assessment

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
Littleton South	All hazards	O1, O6, O7	Not part of flood relief channel, but construction of a new walkway along the northern edge of the lake as part of enhanced connectivity exposes the waterbody to all construction hazards and to a permanent change in habitats. Use of the walkway could cause disturbance and spread INNS.
Littleton East	All hazards	All hazards	Part of flood relief channel and adjacent to area of enhanced public connection.
Sheepwalk West 1	All hazards	O3, O4, O5, O6, O7	Some construction work needed at hydraulic control structures. Adjacent to an area of enhanced public connection (improving an existing route) which may require vegetation management to be carried out along lake edges. Will remain in hydraulic connectivity with the flood relief channel during operation, with a potential for increased use of the existing footpath.
Sheepwalk West 2	All hazards	All hazards	Part of flood relief channel and adjacent to area of enhanced public connection (improvements to existing route).

Waterbody	Construction Hazards	Operation Hazards	Supporting Information
Sheepwalk East	All hazards	O3, O4, O5, O6	Some construction work needed at hydraulic control structures. Will remain in hydraulic connectivity with the flood relief channel during operation.
Black Ditch Pond	C3, C4, C5, C6	O7	Nearby construction activities for new green space pose potential pollution risk. Use of new green space may pose a risk of increased disturbance. The level of risk will depend on the final design of the green space and access arrangements.
Halliford Mere Complex	C3, C4, C5, C6	O7	As per Black Ditch Pond.
Ferry Lane Lake	All hazards	All hazards	Part of flood relief channel and adjacent to areas of enhanced public connection.

Other Projects and Plans to be included in the In-Combination Effects Assessment

A long list of 'other developments (projects and plans) for consideration in the EIA Cumulative Effects Assessment has been developed. These are summarised in Table HRA 4. The Appropriate Assessment will consider this long list against the residual effects of the project on the SWLW SPA and Ramsar site to determine where there are pathways for In-Combination Effects.

Table HRA 4: Long list of other developments to be included in the In-Combination Effects Assessment

ID	Application reference	Brief Description
1	129088-JAC-REP-EMF-000001 Rev A02	Western Rail Link to Heathrow. A new rail connection on the Great Western Main Line, providing a more direct rail route for passengers travelling to Heathrow.
2	TR020003	Expansion of Heathrow Airport. Includes a third runway to the north-west of the existing two, a new terminal building, transport, and additional surface access (moving roads and redirecting the M25 through a tunnel under the new runway).
3	7210693 / 18/01212/OUT	Shepperton Studios expansion. The redevelopment of Shepperton Studios: demolitions and new builds, new vehicular and pedestrian access from Shepperton Road and the relocation of existing access off Studios Road.
4	21/03939/FUL / PP-10416630	Surrey County Hall. Refurbishment, restoration and extension of Surrey County Hall (Grade II*).
5	(Surrey CC Ref 2009/0015)	Stroude Road Extraction. Mineral extraction together with the erection of processing plant and associated ancillary infrastructure, mineral processing and concrete production, the provision of a new roundabout access into Stroude Road and the restoration of the site to open grazed parkland and grassland through the importation of inert materials on a site of some 57 Ha.

ID	Application reference	Brief Description
6	(Surrey CC Ref 2021/0023)	Whitehall Farm Extractions. Extraction of sand and gravel from land at Whitehall Farm together with the erection of processing plant and associated mineral infrastructure, the provision of a new access from Stroude Road, restoration involving the importation of inert materials to agriculture, parkland, wet grassland, reedbeds, and new woodland on a site of approximately 38 Ha, and the temporary closure of footpath 64, and permanent diversion of footpath 39.
7	(Surrey CC Ref 2021/0013) / (Surrey CC Ref 2021/0030) / (Surrey CC Ref 2020/0052)	Queen Mary Quarry. Installation of a concrete screed plant including silo, water tank, batch tower and aggregate storage bin for use in connection with existing concrete batching plant at Queen Mary Quarry (retrospective).
8	(Surrey CC Ref 2012/0061)	Queen Mary Quarry. Extraction of sand and gravel and restoration to landscaped lakes for nature conservation after use at Manor Farm, Laleham and provision of a dedicated area on land at Manor Farm adjacent to Buckland School for nature conservation study; processing of the sand and gravel in the existing Queen Mary Quarry (QMQ) processing plant and retention of the processing plant for the duration of operations; erection of a concrete batching plant and an aggregate bagging plant within the existing QMQ aggregate processing and stockpiling areas. Installation of a field conveyor for the transportation of mineral and use for the transportation of mineral from Manor Farm to the QMQ processing plant; and construction of a tunnel beneath the Ashford Road to accommodate a conveyor link between Manor Farm and QMQ for the transportation of mineral.

ID	Application reference	Brief Description
9	Surrey CC Ref 2019/0099 / SCC Ref 2020/0049	Queen Mary Quarry. Land at Queen Mary Quarry, west of Queen Mary Reservoir, Ashford Road, Laleham, Staines - Construction of a new double weighbridge and office building and the subsequent demolition of the existing double weighbridge and office building.
10	Surrey CC Ref 2021/0141	Manor Farm Quarry, Ashford Road, Laleham Section 73 planning application to vary conditions 2, 44 and 48 of planning permission SP/2012/01132 for the extraction of sand and gravel at Manor Farm Quarry including ancillary development and the restoration of the site.
11	RU.22/0393 Runnymede	Longcross Garden Village. Outline planning application for a mixed use Garden Village development (1800 units) comprising: residential development (Use Classes C3), care home/extra care accommodation (Use Class C2), land reserved for up to 10 travelling showpeople plots (sui generis), retail, food and drink (Use Classes E and F.2), public house (sui generis), community facilities (Use Classes E, F1 and F2), employment use (Use Class E), a primary school including early years provision (Use Class F1), public open space including allotments, sports pitches and ancillary facilities (Use Class F2), Suitable Alternative Natural Greenspace (SANG) (Use Class F2), landscaping and associated infrastructure and works including enabling demolition and ground works (Environmental Statement submitted).
12	RU.23/0292 Runnymede	Animal and Plant Health Agency (APHA) Scheme. Demolition of existing technical and support buildings on site and redevelopment to provide a secure campus-style research and development facility; new laboratory buildings (including high-containment); new conferencing facilities; new supporting facilities (plant, offices, write-up space, etc); car parking, servicing, etc; supporting welfare facilities; and future phases of development.

ID	Application reference	Brief Description
13	RU.23/0470 Runnymede / Surrey CC 2023-0043	Norlands Lane Landfill. Importation and recovery of inert engineering materials to allow improvements to gas management and surface water drainage, together with the provision of a long-term sustainable landform with associated biodiversity enhancements.
14	RU.23/0374 Runnymede (Original planning was RU.18/0703)	Norlands Lane Residential. Alterations and change of use of offices to form 56 Extra Care apartments and communal facilities, and erection of 23 Extra Care apartments (79 in total) together with access and parking provisions to form a Continuing Care Retirement Community (Class C2).
15	2022/2127 Elmbridge	Proposed development to provide a retired community development (C2 use).
16	2022/2327 Elmbridge	Brooklands College Redevelopment. Proposed development at Brooklands College with the enhancement of the existing education facility including provision of new sports hall and enterprise hub and a residential development of up to 350 new homes or up to 270 homes and a care home, including the conversion of Brooklands Mansion to residential apartments, with extensive landscaping, new access routes and associated works.
17	2022/1392 Elmbridge	St George Business Park. Proposed development of approximately 270 residential units.
18	2022/1444 Elmbridge	Weylands Old Treatment Works. Proposed hybrid development of an employment-led mixed-use development comprising of employment (B1, B2, B8 and Class E), affordable housing (C3) and in-building waste recycling (sui generis) following demolition of existing buildings and structures on site.

ID	Application reference	Brief Description
19	23/00650/EIASCR Windsor and Maidenhead	Redevelopment at Sawyers Close. Demolition of existing 4 x 8 storey buildings (192 dwellings) to provide 417 new affordable dwellings in town houses and apartment buildings up to 8-storeys in height. The site is located in the northwest of Windsor, approximately 2 km north west of the town centre. The site area for the emerging proposals is 3.59 ha, comprising land within Abri ownership (2.16 ha) and land owned by RBWM (1.19 ha).
20	22/02683/EIASCO Windsor and Maidenhead	Development at Maidenhead Golf Course. 2,000 dwellings, mixed use local centre, primary and secondary school, open space and associated infrastructure.
21	22/02796/EIASCR Windsor and Maidenhead	Land North and South Gays Lane, Maidenhead. Demolition of the existing agricultural buildings to create a new state-of-the-art Film and TV Studio including sound stages, ancillary offices, virtual reality studio, storage and warehouses, workshops, specialist studio facilities, and outdoor film backlot; together with the creation of a new Nature Park incorporating hard and soft landscaping, green infrastructure, sustainable drainage systems, waste storage and new cycle and pedestrian facilities; supporting infrastructure to include long-stay car parking, cycle parking, boundary treatments, sub-station, new access roundabout and vehicle route.
22	22/03403/EIASCR Windsor and Maidenhead	Site B open field north of Lower Mount Farm. Residential development of up to 200 homes, with associated landscaping, parking and infrastructure.
23	Thames Valley Flood Scheme.	The Thames Valley Flood Scheme is investigating ways to manage flood risk on a large scale across the Thames Valley catchment. This is the area of land around the non-tidal section of the River Thames and the rivers and streams that flow into it. This includes everything from the source of the Thames in Gloucestershire to the tidal limit in West London.

ID	Application reference	Brief Description
24	Datchet to Hythe End Flood Improvement Measures.	The River Thames from Datchet to Hythe End was previously included in the River Thames Scheme as Channel 1. However, Channel 1 was unfortunately neither viable nor deliverable without either additional funding or greater flexibility sought over council tax. The council's original commitment of £10 million is still ring-fenced to contribute to alternative flood alleviation works. This meant that River Thames Scheme Sponsorship Group decided in July 2020 to proceed without Channel 1. The Datchet to Hythe End Flood Improvement Measures project was therefore established. It aims to better protect communities, including approximately 3,700 properties, that would previously have benefited from Channel 1. Flood risk remains a very real threat in the area, with a history of floods that have hit communities.
25	River Severn to River Thames Waste Transfer	This is a project to transfer water from the North West and Midlands to the South East to support the South East of England during drought events. The water would be taken from the River Severn, with additional sources of water provided by Severn Trent Water and United Utilities. The water would be moved from the River Severn to the River Thames either by a new pipeline or restoration of the Cotswold canals.
26	South East Strategic Reservoir Option.	A new water storage reservoir, the South East Strategic Reservoir Option, would be built in the Upper Thames catchment, south west of Abingdon in Oxfordshire. It would be filled with water from the River Thames during periods of high river flow. When river levels drop or demand for water increases, water would be released back into the River Thames for re-abstraction downstream.
27	Teddington Direct River Abstraction.	A new water abstraction would be sited on the River Thames close to Teddington Weir. Abstracted water would be transferred via an existing underground tunnel to the Lee Valley reservoirs in East London.

ID	Application reference	Brief Description
28	Surrey Minerals Plan Primary Aggregates Development Plan 2009-2026.	A list of sites which have potential for future mineral development which includes: • Addlestone Quarry Extension • Hamm Court Farm • Milton Park Farm • Whitehall Farm • Home Farm Quarry Extension • Homers Farm • King George VI Reservoir • Manor Farm • Queen Mary Reservoir • Watersplash Farm Some of these have been included within this 'long list' separately where planning applications have been received by local planning authorities.
29	Thames Estuary 2100	The Plan aims to take an adaptive approach to managing the risk of flooding to people, property and the environment. Protect the social, cultural and commercial value of the tidal Thames, tributaries and floodplain. Ensure sustainable and resilient development in the floodplain. Tackle the climate crisis by enhancing and restoring ecosystems and maximising benefits of natural floods.

Next Steps

The HRA Screening assessment, the assessment of which waterbodies are functionally linked land, and the assessment of hazards to the SWLW designations will be reviewed following consultation on the PEIR. The final Screening assessment and the Appropriate Assessment will be reported in the information to be provided to the Competent Authority 'for the purposes of the assessment' with submission of the Development Consent Order (DCO) application for the project.

The Appropriate Assessment will consider the 'design for technical assessment', will identify additional measures to avoid the potential pathways for effects identified in this assessment, and will identify and assess the effectiveness of measures to mitigate effects where avoidance is not possible. Any required additional measures to avoid the potential pathways for effects will be subject to a further design stage before submission of the DCO application.

References

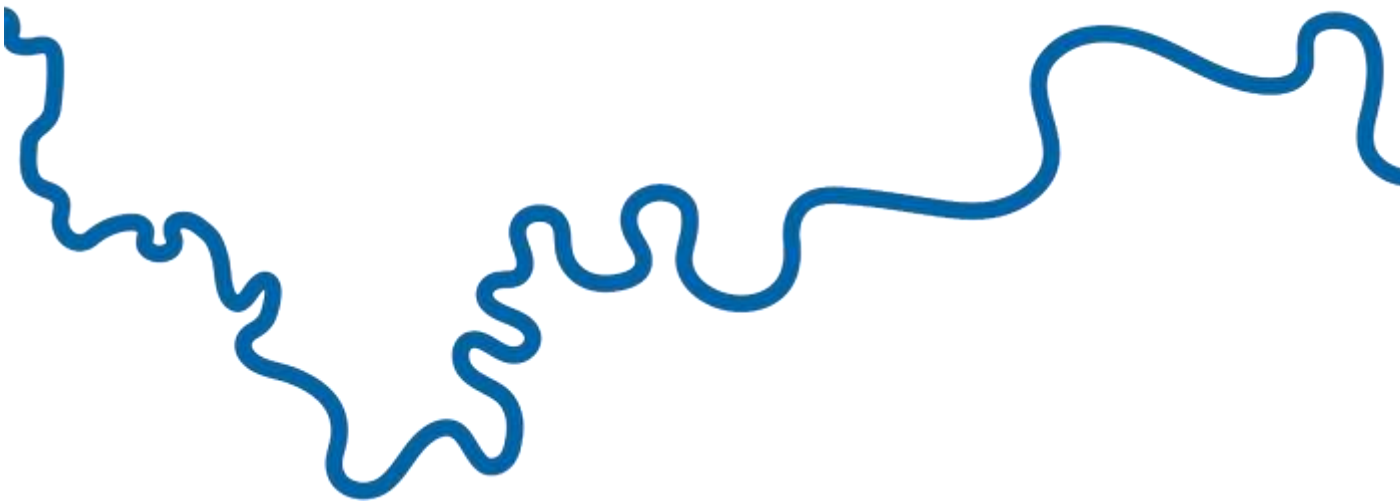
Environment Agency, 2022. River Thames Scheme, Environmental Impact Assessment Scoping Report, September 2022

Natural England, 2019. European Site Conservation Objectives for South West London Waterbodies Special Protection Area, Site Code: UK9012171. Version 3, 21 February 2019

Planning Inspectorate, 2022. Advice Note Ten: Habitats Regulations Assessment relevant to Nationally Significant Infrastructure Projects. Version 9, August 2022. Published on Planning Inspectorate website at: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-ten/

Appendix A Drawings

ENVIMSE500260-CBI-ZZ-3ZZ-DR-EN-00142 – Habitats Regulations Assessment: South West London Waterbodies SPA and Ramsar site and supporting waterbodies



The River Thames Scheme, delivered in a partnership led by the Environment Agency and Surrey County Council, will reduce flood risk for residents and businesses and improve the surrounding area.