Southern Inshore Fisheries and Conservation Authority

Inshore Netting Review: Process, Tools & Intentions 2021

(2025 Update)

Supporting Document as part of the Inshore Netting Review

Document Control

Title	Inshore Netting Review: Process, Tools and Intentions 2021
Author	Pia Bateman, Deputy Chief Officer
Approver	The Southern Inshore Fisheries Authority
Approval date	9th December 2021 at the Meeting of the Authority Amendments (in green) approved on 17th March 2022 at the Meeting of the Authority, following Net Fishing Byelaw Formal Consultation stage
Owner	Southern IFCA

Annual Revision History

Date	Author	Version	Status	Reason	Approver(s)
6th February 2025	*E Condie*	*2025 Update*	*Final*	*Updates (in purple) to Section C2.1 Access Criteria to include S2.1.2 Year 2 and to Section C2.2 to update Procedure for Application with reference to Year 2. Year 2 being 1st March 2025 to 31st March 2026.*	Technical Advisory Sub-Committee on 6th February 2025.

Table of Contents

INTRODUCTION TO THE INSHORE NETTING REVIEW

1.0 Background

The Southern IFCA Inshore Netting Review ('Review') began in 2017 in response to the outcomes of the Southern IFCA Review of Management Measures (2015). Southern IFCA committed to delivering this work under subsequent annual plan priorities (2018/2019, 2019/2020, 2020/2021) as underpinned by the Southern IFCA Five-Year Legislative Forecast (2019-2023)[1].

On the 31st August 2017 Members of the Technical Advisory Committee resolved to review and, if necessary, develop netting regulations for the District's harbours and estuarine waters. Consequently, a Net Fishing Working Group was established which has met on 14 occasions throughout the duration of the Review.

Since the beginning of the Review there have been three periods of public consultation and engagement, namely during a 'Call for Information' in December 2017, followed by periods of public consultation on proposed net management in June 2019 and later during January and February 2020.

2.0 Policy Objectives

Since setting the original Policy Objectives[2] for the Review in August 2017, Members of the Working Group have refined these in order to better reflect the Authority's legislative duties alongside policy objectives. The Policy Objectives of the Netting Review:

a. To support the use of estuaries and harbours in the District as essential fish habitats.

b. To provide protection to migratory salmonids as they transit through the Districts estuaries and harbours.

c. To balance the social and economic benefits of net fisheries.

d. To further the conservation objectives of Designated Sites.

3.0 Scope of Review

The Review is district wide, encompassing forty-nine sites which have each been subject to relevant assessments. For ease these sites have been grouped into the following areas. A full list of sites can be found in Annex 1.

- **Isle of Wight**
- **Langstone Harbour**
- **Portsmouth Harbour**
- **Southampton Water**
- **The Solent**
- **Christchurch Harbour**
- **Poole Harbour**
- **West Dorset**

[1] Authority Reports: Southern IFCA (southern-ifca.gov.uk)

[2] (a) support the use of estuaries and harbours in the District by fish such as bass as nursery, feeding and refuge areas, (b) provide protection to migratory salmonids as they transit through the Districts estuaries and harbours, (3) to balance the social and economic benefits of exploiting the fishery.

4.0 Document Map

Part A: **'Legislative Drivers'** provides overarching summaries of the legislative and policy drivers which have led to a need for site specific management intervention in the net fisheries.

Part B: **'Best Available Evidence'** provides the reader with an understanding of the evidence base used to underpin and guide the development of management measures specific to the Districts net fisheries.

Part C: 'Management Tools and Application' seeks to provide the reader with an understanding of the mechanisms put in place to manage the net fisheries across the District. This section seeks to summarise the provisions contained within the Net Fishing Byelaw, the Net Fishing Permits and the Net Fishing Code of Conduct. This section provides clarity of intention and process which will underpin future management decisions regarding the management of net fishing across the Southern IFCA District under the Net Fishing Byelaw. This section also details the access criteria for applicants seeking a Net Permit.

Part D: '**Overarching Management Intentions'** detail the management action Southern IFCA are taking in response to a number of scenarios, to include proposed management in response to legislative drivers (within and adjacent to SAC, within a SSSI, within high functionally linked areas) and in-combination risk assessments (for areas of medium or low functional linkage, fishing within essential fish habitats and fishing in areas utilised by migratory salmonids).

Part E: '**Synergetic Management Models'** draw together the risk components which have been identified for Functionally Linked Areas, areas utilised by Migratory Salmonids and Essential Fish Habitats in order to inform, in combination, the site-specific management outcomes. In addition, the Models also capture the legislative drivers underpinning management intentions as well as those areas subject to existing governance.

5.0 Supporting Policy and Documentation

This document is to be read in conjunction with the supporting papers which are signposted throughout via blue underlined text. These supporting papers combined, provide context and transparency of the process which has informed management intervention, as well providing clarity of intention regarding the ongoing management of the district's net fisheries.

All of the following papers are available on the Southern IFCA website:

- The Net Fishing Byelaw
- Net Fishing Permit Monitoring and Control Plan
- Salmonid Code of Practice
- Net Fishing Around Piers Code of Conduct
- Net Fishing Byelaw Impact Assessment

Documents subject to Natural England formal review:

- The Net Fishing TLSE
- The Net Fishing Byelaw Conservation Packages

Evidential Underpinning:

- Site Specific Evidence:
    - Isle of Wight Site Assessment Package
    - Langstone Harbour Site Assessment Package

    - Portsmouth Harbour Site Assessment Package
    - Southampton Water Site Assessment Package
    - The Solent Site Assessment Package
    - Christchurch Harbour Site Assessment Package
    - Poole Harbour Site Assessment Package
    - West Dorset Site Assessment Package

- Wider Evidence Base
    - Net Fishing Byelaw Literature Review

PART A: LEGISLATIVE DRIVERS

1.0 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

1.1 Legislative Underpinning

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019[3], ('Conservation Regulations') transposes the land and marine aspects of the Habitats Directive and the Wild Birds Directive into domestic law and outlines how a National Site Network will be managed.

The National Site Network[1] is a network of protected sites which are designated for rare and threatened species and rare natural habitat types. These sites include Special Areas of Conservation (SAC) and Special Protection Areas (SPA), designated under the EC Habitats Directive 1992[4] and EC Birds Directive 2009 (amended)[5], respectively.

Under Article 6 of the Conservation Regulations, Southern IFCA as a named competent Authority must ensure that fishing activity occurring within or adjacent to an SAC or SPA does not damage, disturb or lead to a deterioration of a species which receives protection under the relevant designation, so as to ensure compliance with the Habitats Directive and Birds Directives.

1.2 Habitats Regulation Assessment

Article 6(3) of the Habitats Directive requires any plan or project likely to have a significant effect on an SPA or SAC within the National Site Network, either individually or in combination with other plans or projects, to undergo an appropriate assessment. The plan or project must be assessed in view of the site's conservation objectives, IFCAs are unable to consider economic or social impacts.

The first stage to this assessment is a Test of Likely Significant Effect (TLSE), which is designed to test whether a plan/project will cause a likely significant effect on an SAC or SPA. All the features/sub-features and supporting habitats for a site are subject to the TLSE assessment. Where the potential for a likely significant effect cannot be excluded, Southern IFCA, as the competent authority must then undertake a Habitats Regulation Assessment (HRA), The HRA must consider the potential effects of the plan/project itself and in combination with other existing plans or projects.

1.3 Relevance to the Inshore Netting Review

The outcomes of The Net Fishing TLSE identified that net fishing is likely to have a significant effect on Atlantic salmon (*Salmo salar*), a species afforded protection in the River Itchen SAC and the River Avon SAC.

As such a HRA has been undertaken for the following areas, with the overall purpose to conclude that net fishing within, or adjacent to the River Itchen SAC and the River Avon SAC does not damage, disturb or lead to a deterioration of Atlantic salmon, so as to secure compliance with the Habitats Directive.

- **The River Itchen** (within and adjacent to the River Itchen SAC)
- **The River Avon** (within and adjacent to the River Avon SAC)

[3] The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (legislation.gov.uk)
[4] The Habitats Directive - Environment - European Commission (europa.eu)
[5] The Birds Directive - Environment - European Commission (europa.eu)

For the purposes of the Inshore Netting Review 'adjacent' is defined as 'next to or adjoining' as consistent with the Oxford English Dictionary definition.

Please refer to the Southampton Water Site Assessment Package for the HRA specific to The River Itchen and the Christchurch Harbour Site Assessment Package for the HRA specific to The River Avon.

2.0 The Wildlife and Countryside Act, 1981

2.1 Legislative Underpinning

Under the Wildlife and Countryside Act (WCA) 1981[6], Southern IFCA must take reasonable steps to further the conservation and enhancement of features for which a Site of Special Scientific Importance (SSSI) has been designated.

2.2 Site of Special Scientific Importance Assessment

An assessment is required to be undertaken to ensure that fishing activity within a SSSI is managed to ensure that there is no adverse effect on Atlantic salmon and/or sea trout (*Salmo trutta*) if either species are a faunal component or notified feature of the SSSI.

This process will ensure that Southern IFCA fulfil its legislative duties under the WCA.

2.3 Relevance to the Inshore Netting Review

The following area falls within the Lymington River SSSI. As such a SSSI Assessment has been undertaken in order to ensure that net fishing within the Lymington River SSSI will not have an adverse effect on sea trout, so as to ensure compliance with the WCA.

- **Lymington River, upper reaches** (sea trout as a faunal component of the Lymington River SSSI)

Please refer to The Solent Site Assessment Package for the SSSI specific to Lymington River, upper reaches.

3.0 The Marine and Coastal Access Act, 2009

3.1 Legislative Underpinning

Under Section (153) of the Marine and Coastal Access Act, 2009 (MaCAA)[7], Southern IFCA must manage the exploitation of sea fisheries resources within their District.

In preforming this duty and in accordance with Section (153, 2b) Southern IFCA must balance the social and economic benefits of fishing with the need to protect the marine environment from the effects of such fishing. In accordance with the legal position provided by the Department of Fisheries and Agriculture (Defra) in 2014, salmonids fall within the definition of the 'marine environment' as specified in Section (186), namely 'flora or fauna which are dependent on, or associated with, a marine and coastal environment'.

[6] Wildlife and Countryside Act 1981 (legislation.gov.uk)
[7] Marine and Coastal Access Act 2009 (legislation.gov.uk)

As described in the Explanatory Notes[8] (435) for Section (153) of the Marine and Coastal Access Act, IFCAs are able to apply precautionary measures in order to fulfil their main duty under Section (153). '…Precautionary measures in this context means that the absence of adequate scientific information should not be used as a reason for postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment…'.

3.2 Relevance to the Inshore Netting Review: Essential Fish Habitats

As part of the Inshore Netting Review, Southern IFCA determined to enhance the environmental, socio-economic and sustainability of fisheries within the District by supporting the use of estuaries and harbours by bass and other fish populations as nursery, feeding and refuge areas. Collectively these areas are referred to as Essential Fish Habitats (EFH).

For the purposes of the Inshore Netting Review, an EFH is one which provides ecological value for spawning, feeding and refuge for non-salmonid fish species.

3.2.1 Essential Fish Habitat Assessments

An EFH Assessment is required to determine the ecological value of a given habitat in supporting spawning, feeding and/or refuge for non-salmonid species.

All relevant areas of the District will be subject to an EFH Assessment, with the exception of those areas located (1) within or adjacent to SAC or within a SSSI (where Atlantic salmon or sea trout are conservation features) (2) areas which have a high functional linkage to an SAC or SSSI, and (3) areas closed to net fishing under pre-existing legislations governed by other regulatory bodies. Please refer to Table 1 for a list of relevant sites.

The Authority have developed EFH Risk Components in order to determine the level of ecological value that an EFH may provide in supporting nursery, feeding or refuge for non-salmonid fish species, which may increase vulnerability to net capture. Please refer to Figure 1. The EFH Risk Components consider ecological value, as informed by (1) Site Specific Evidence which considers habitat, fish and benthic species data, as well as (2) the Net Fishing Byelaw Literature Review which further informs Southern IFCAs understanding of likely habitats used to support nursery, feeding or refuge of fish species.

The EFH Risk Components form one element of the Synergetic Management Models (Section E of this document) which will be used to inform site specific management outcomes in-combination with other relevant assessments.

In developing a risk-based approach, the Authority are able to determine a proportionate management approach which is underpinned by precaution, as aligned with Southern IFCAs duties under paragraph (153) of the MaCAA.

3.3 Relevance to the Inshore Netting Review: Areas utilised by Migratory Salmonids

As part of the Inshore Netting Review, Southern IFCA determined to enhance the environmental, socio-economic and sustainability of fisheries within the District by supporting the use of estuaries and harbours by migratory salmonids. Migratory salmonids, namely Atlantic salmon (*Salmo salar*) and sea trout (*Salmo trutta*) form an important component of the marine environment. In addition, both salmon and the sea trout are identified as priority

[8] Marine and Coastal Access Act 2009 - Explanatory Notes (legislation.gov.uk)

species under the UK Biodiversity Action Plan (BAP) and are subsequently listed as a Species of Principal Importance under the Natural Environment and Rural Communities Act, 2006[9].

For the purposes of the Inshore Netting Review, areas utilised by migratory salmonids mean those areas within the District which fall outside of SACs, SSSI and High Functionally Linked Areas where Atlantic Salmon or sea trout receive protection as a conservation feature.

3.3.1 Migratory Salmonid Assessments

A Migratory Salmonid Assessment is required to determine the relationship between net fishing and migratory salmonids.

All areas of the District will be subject to an MS Assessment, with the exception of those areas located (1) within or adjacent to SAC or within a SSSI (where Atlantic salmon or sea trout are conservation features) (2) in areas assessed under a FLA Assessment which have been determined as high or medium risk (3) in areas closed to net fishing under pre-existing legislations governed by other regulatory bodies. Please refer to Table 2 for a list of relevant sites.

The Authority have developed a Migratory Salmonid (MS) Risk components in order to determine the level of risk net fishing activity may have on migratory salmonids. In developing a MS Risk Components, the Authority are able to determine a proportionate management approach which is underpinned by precaution as aligned with Southern IFCAs duties under paragraph (153) of the MaCAA.

The MS Risk Components (Figure 2) seek to capture the circumstances where there will be a higher risk of interaction between nets and migratory salmonids, as informed by both Site-Specific Evidence and the Net Fishing Byelaw Literature Review. This includes migratory routes, pinch points or refuge areas for salmonids and the geographic proximity of these areas to Principal Salmonid Rivers.

The MS Risk Components will form one component of the Synergetic Management Models (Section E of this document) which will be used to inform site specific management outcomes in-combination with other relevant assessments.

[9] http://www.legislation.gov.uk/ukpga/2006/16/contents

Figure 1: Essential Fish Habitat Risk Components

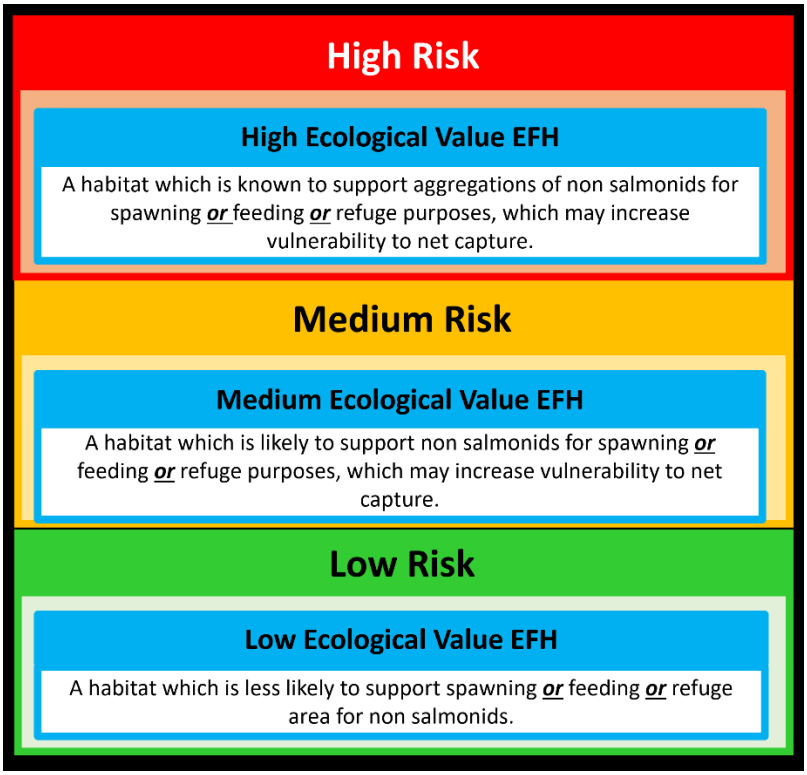


Table 1: Areas subject to an Essential Fish Habitat Assessment

Area subject to EFH Assessment			Further Details
Isle of Wight	Bembridge Harbour King's Quay	River Medina	Isle of Wight Assessment Package
Langstone Harbour	Main Channel Broom Channel	Bridge Lake Wider Harbour	Langstone Harbour Assessment Package
Portsmouth Harbour	Fareham Creek Wider Harbour		Portsmouth Harbour Assessment Package
Southampton Water	Outside Main Channel River Hamble, Areas 1-4	River Hamble, Area 5	Southampton Water Assessment Package
The Solent	River Meon Lymington River, Outside Main Channel	Keyhaven River	The Solent Assessment Package
Christchurch Harbour	East of Harbour Christchurch Box, Outside Main Channel	Mouth of River Mude	Christchurch Harbour Assessment Package
Poole Harbour	Wider Harbour Wareham Approaches Lychett Bay	Wych and Middlebere Lakes South Deep Holes Bay North	Poole Harbour Assessment Package
West Dorset	Fleet, West Fleet, East	Lyme Bay Bridport Harbour	West Dorset Assessment Package

Figure 2: Migratory Salmonid Risk Components

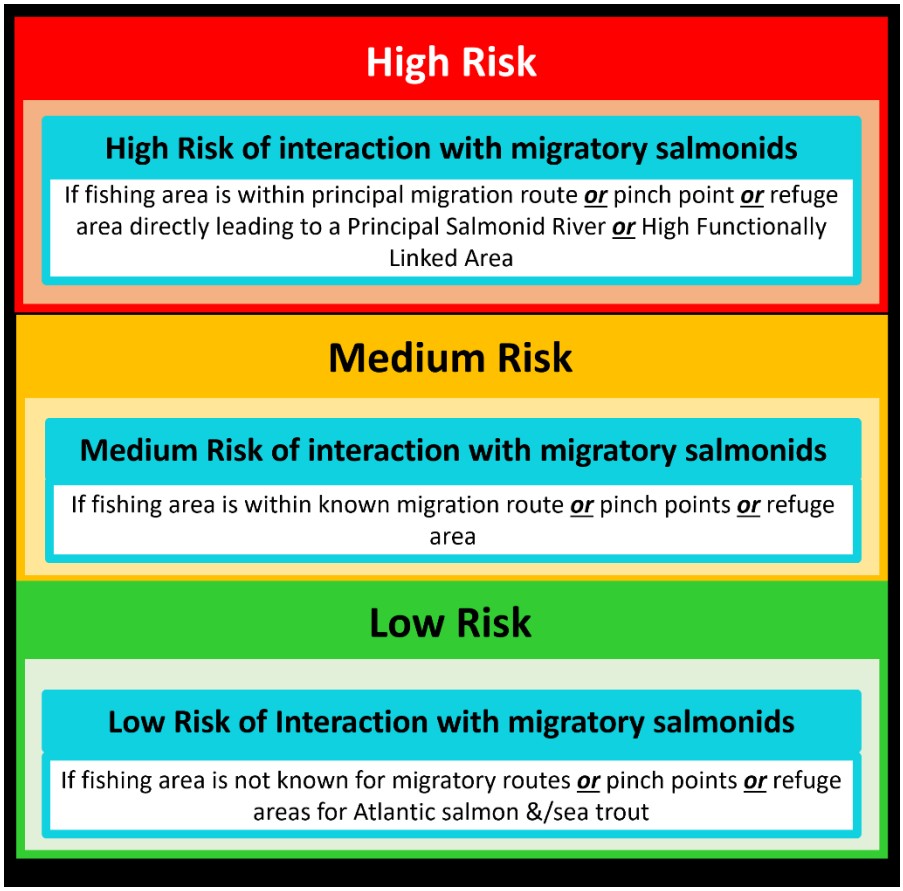


Table 2: Areas subject to a Migratory Salmonid Assessment

	Area subject to MS Assessment		Further Details
Isle of Wight	Bembridge Harbour King's Quay	River Medina	Isle of Wight Assessment Package
Langstone Harbour	Main Channel Broom Channel	Bridge Lake Wider Harbour	Langstone Harbour Assessment Package
Portsmouth Harbour	Fareham Creek Wider Harbour		Portsmouth Harbour Assessment Package
Southampton Water	Outside Main Channel River Hamble, Areas 1-4	River Hamble, Area 5	Southampton Water Assessment Package
The Solent	River Meon Lymington River, Outside Main Channel	Keyhaven River	The Solent Assessment Package
Christchurch Harbour	East of Harbour Christchurch Box, Outside Main Channel	Mouth of River Mude	Christchurch Harbour Assessment Package
Poole Harbour	Wider Harbour Wareham Approaches Lychett Bay	Wych and Middlebere Lakes South Deep Holes Bay North	Poole Harbour Assessment Package
West Dorset	Fleet, West Fleet, East	Lyme Bay Bridport Harbour	West Dorset Assessment Package

4.0 Synergetic Legislative Drivers

4.1 Legislative underpinning

Areas which are functionally linked to an SAC or SSSI fall outside of the specified remit of Southern IFCAs duties under the Conservation Regulations, where Southern IFCA must ensure that fishing activity does not damage, disturb or lead to a deterioration of species within or adjacent to an SAC. Similarly, functionally linked areas also fall outside of the specified remit of Southern IFCAs duties under the WCA, where Southern IFCA must, within an SSSI take reasonable steps to further the conservation and enhancement of features for which a SSSI site is designated.

However, case law[10] (where the term 'Functional Linkage' was coined) dictates that Southern IFCA must consider the role that functionally linked areas may play in supporting Atlantic salmon and sea trout populations, in line with the intentions underpinning the Habitats Directive (as enacted in UK legislation via the Conservation Regulations). As such, and as guided by case law, Southern IFCA will consider the role of areas which are functionally linked to SACs and SSSIs, where salmonids are a feature afforded protection under the Conservation Regulations and the WCA. Southern IFCA will consider these legislative duties alongside the duties specified under Section (153) of the MaCAA, namely, Southern IFCA must balance the social and economic benefits of fishing with the need to protect the environment from the effects of such fishing.

4.2 Context to Inshore Netting Review

In the context of the Southern IFCA Netting Review, 'functional linkage' refers to the role that the sea beyond the boundary of an SAC or SSSI might fulfil in terms of supporting Atlantic salmon or sea trout populations. Such the area of sea is deemed to be 'linked' to the SAC or SSSI in question because it provides a role in maintaining or restoring a salmonid population at favourable conservation status.

In terms of practical application, if the boundaries of a SAC or SSSI were drawn to include all sea which might serve some function for salmonids, then the strict protection afforded would be applied more extensively than would be necessary to meet the objectives of the Habitats Directives[11] or WCA. In the context of the Inshore Netting Review, too strict an interpretation may subject fishers to unnecessary restrictions, or ultimately close fisheries under circumstances which were not intended to be incompatible with the Habitats Directive. Conversely, too lenient an interpretation carries different risks. Fishing may go ahead without sufficient consideration of the potential harm to salmonids, which may in turn lead to the deterioration of the protected species.

[10] Case law is law based on authoritative decisions made by court judgements, the Secretary of State or the Planning Inspectorate. Case Law is a vital source of information regarding how legislation should be correctly interpreted and applied. There have been two cases where the term 'functional linkage' has been applied to an SAC where Atlantic salmon are a qualifying species: (1) *The Sandale Case:* This case concerned the migration of Atlantic salmon upstream of an SAC. In the absence of a risk assessment upon which credible risks could have been excluded by obtaining relevant information and assessing the significance of the effects of the project upstream of an SAC on Atlantic salmon, the project was found not to satisfy the requirement of the Habitats Directive. Therefore, in summary, the lack of insufficient assessment of risk led to a precautionary management approach. (2) *Burbo Bank:* This case concerned the impact of noise from piling activity on Atlantic salmon migration. The risk was mitigated via the introduction of a timing restriction on the driving of piles.

[11] Chapman, C. & Tyldesley, D. 2016. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions. Natural England Commissioned Reports, Number 207.

These concepts, as discussed in a Natural England report by Chapman & Tyldesley (2016)[12] suggest that in areas deemed to be functionally linked, a proportionate approach to management may be considered. This has enabled Southern IFCA; in line with Defra guidance[13], to consider a risk-based approach to net fishing management within functionally linked areas, balancing Southern IFCAs duties under the Conservation Regulations and the WCA alongside the delivery of Southern IFCAs duties under Section (153) of the MaCAA.

4.3 Functionally Linked Area Assessment

A Functionally Linked Area (FLA) Assessment is required to determine whether net fishing occurring beyond the boundary of an SAC or SSSI (where salmonids are afforded protection) may have an adverse impact on salmonids. Table 3 lists the sites which are subject to a FLA Assessment as part of the Inshore Netting Review.

As there is recognised to be limited evidence base in wider literature regarding the relationship between salmonid interaction with nets specific to a non-targeted fishery, coupled with an absence of quantitative evidence from the functionally linked areas regarding interactions between net fishing and migratory salmonids, the Authority have developed Functional Linkage Risk Components (Figure 3) in order to determine the likely level of risk net fishing activity may have on salmonids within functionally linked areas. Determination of the FLA Risk Components have been directly informed by Site Specific Evidence Packages and the Net Fishing Byelaw Literature Review.

This method has enabled Southern IFCA to determine a proportionate management approach which is underpinned by precaution for functionally linked areas. In the absence of a risk-based approach the Authority would be guided by a precautionary approach. Therefore, in the recognised absence of robust scientific information relating to interactions between net fishing and migratory salmonids in a non-targeted fishery, Southern IFCA are applying the precautionary principle[14] in a proportionate manner (based on likely risk) in order to determine the management of net fisheries within functionally linked areas.

The Functional Linkage Risk Components form one element of the Synergetic Management Models (Section E) which will be used to inform site specific management outcomes in-combination with other relevant assessments.

[12] In summary - a broad interpretation of functional linkage could potentially place unnecessary restrictions on fishing which might not otherwise be required. By way of example, based on a strict interpretation of 'Functional Linkage', a site designated for harbour porpoises would need to potentially include vast areas of sea to ensure that the boundaries were drawn to include all the areas which might possibly provide some degree of support, at some point in time, for a given population. In taking this approach, regulatory procedures would be imposed on the basis that a harbour porpoise might occasionally feed or travel through the area affected by them.

[13] ifca-byelaw-guidance.pdf (association-ifca.org.uk) Section 8.6

[14] Explanatory notes for MaCAA Section 153: (435) '…IFCAs will be able to apply precautionary measures…in order to fulfil their main duty. Precautionary measures in this context means that the absence of adequate scientific information should not be used as a reason for postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment…'

Figure 3: Functional Linkage Risk Components

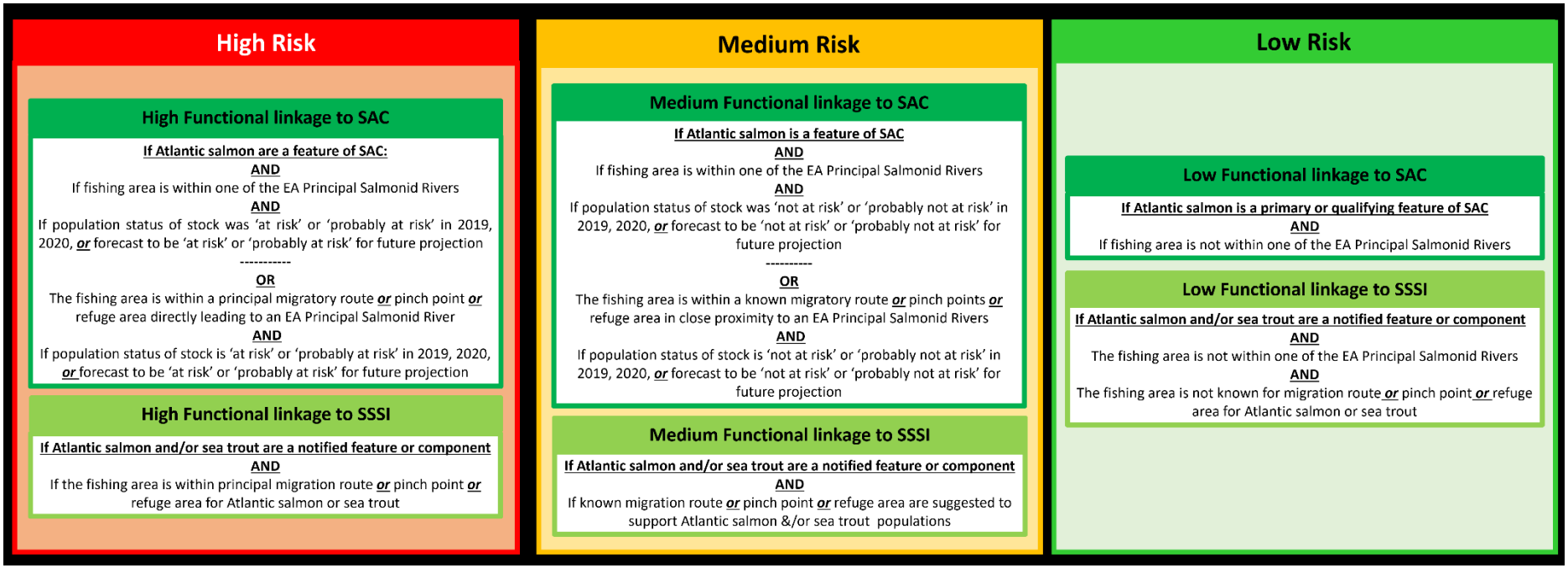


Table 3: Areas subject to Functional Linkage Assessments

Functional Linkage	Area subject to FLA Assessment			Further Details
River Itchen SAC, River Itchen SSSI, River Test SSSI	Southampton Water	The River Test	River Hamble, Main Channel	Southampton Water Assessment Package
		Main Channel	River Hamble, Areas 1-4	
		Outside Main Channel	River Hamble, Area 5	
Lymington River SSSI	The Solent	Lymington River, Main Channel	Lymington River, Outside Main Channel	The Solent Assessment Package
River Avon SAC, Avon Valley SSSI, River Avon System SSSI	Christchurch Harbour	Main Channel	Mouth of River Mude	Christchurch Harbour Assessment Package
		East of Harbour	Christchurch Box, Outside Main Channel	
River Frome SSSI	Poole Harbour	Main Channel	Wareham Channel	Poole Harbour Assessment Package
		Wareham Approaches		

PART B: BEST AVAILABLE EVIDENCE

In accordance with Section 153(3) of the Marine and Coastal Access Act, Defra have issued IFCAs with best practice Guidance[15] on making byelaws. IFCA must have regard to this guidance when carrying out their functions. The guidance outlines the best practice for the delivery and implementation of byelaws, which must be based on sound evidence.

In accordance with Section (8.5) of the best practice guidance, '… a risk-based approach to byelaw development may be used to assess the potential risks that fishing activity may present to the marine environment. A risk assessment would provide the evidence base for prioritising the development of management measures, enabling IFCAs to carry out their duties in an evidence based, strategic and proportionate way...'

For the purposes of the Inshore Netting Review, the best available evidence is presented in the following forms:

- Site Specific Evidence Packages
- Net Fishing Byelaw Literature Review

These evidential underpinnings have been used collectively in order to inform the Inshore Net Fishing Review.

1.0 Site Specific Assessments

Site Specific Assessments have been undertaken for each net fishing site within the District. These Assessments, in conjunction with the Net Fishing Byelaw Literature Review have directly informed the management outcomes for each site.

The Site-Specific Assessments detail and capture the following information specific to each site in question in order to build a narrative of the fishing area subject to review. For note, text marked with an * are relevant to sites assessed under an HRA, SSSI Assessment or FLA Assessment/MS assessment. Text marked with a ^ are relevant to sites assessed under an FLA, MS and EFH Assessments. Text marked with ¬ are relevant to sites assessed under an EFH Assessment only.

- Map of fishing area.
- Geographic proximity to either an SAC, SSSI or FLA*.
- Fishing effort occurring at each site. This information has been gathered during the Inshore Netting Review consultation periods (December 2018, June 2019, Jan 2020) and well as via ongoing engagement with fishers since 2017.
- Social economic information where relevant ^
- Existing net fishing restrictions.
- Evidence of salmonids using the fishing area where relevant*.
- Incidental and known interactions between net fishers and salmonids* these consider only interactions which have occurred within legitimate net fisheries, or comparable fisheries. As such any evidence relating to the known illegal targeting of salmonids has been excluded from the evidence base.
- Habitat data¬
- Fish data and Invertebrate data¬,

[15] http://www.association-ifca.org.uk/Upload/About/ifca-byelaw-guidance.pdf

2.0 Net Fishing Byelaw Literature Review

The aim of the Net Fishing Byelaw Literature Review ('Literature Review') is to inform and support Southern IFCAs understandings of (1) likely salmonid and net interactions and (2) the ecological value that an essential fish habitat may have in terms of providing feeding, nursery or refuge areas for non-salmonid fish species. This information has been used, in combination with site specific evidence to inform the Southern IFCA Netting Review.

The Literature Review consists of peer reviewed papers and reports. Contextual discussion sections have been added to the document in order to consider the findings of the Literature Review in a context which reflects the current fishing practice which is undertaken across the Southern IFCA District.

The Literature Review supports and informs a risk-based approach which allows for the proportionate use of the precautionary principle to inform management measures specific to net fishing interaction with salmonids, as well as habitat vulnerability to net fishing.

In the absence of a risk-based approach the Authority would solely be guided by the precautionary principle. For example, in the recognised absence of robust scientific information relating to interactions between net fishing and migratory salmonids in a non-targeted fishery, Southern IFCA are applying the precautionary principle[16] based on likely risk in order to determine the management of net fisheries within these areas.

This approach is aligned with Defra guidance (Section 8.6) on the use of preventative and precautionary measures, specifically '…where it may be difficult to assess whether an activity would hinder the achievement of IFCA legislative duties, for example where there is insufficient information regarding an activity or environment...' As per Defra guidance, the precautionary principle is applied '…in the circumstances where there are reasonable grounds for concern that an activity is harmful but where there is uncertainty about the degree of risk and harm. In simple terms, this means that where a risk assessment leads the IFCA to conclude that there is an unacceptable risk of harm to the environment or fish stocks, but conclusive evidence is lacking, this should not be used as a reason for not acting. In these situations, a precautionary approach would involve the IFCA taking proportionate action to address the risk whilst gathering further evidence to understand the issue better…'. Please refer to Part C, Section 2.3 for information regarding Southern IFCA's intention to undertake a Research Project in areas of low functional linkage.

[16] Explanatory notes for MaCAA Section 153: (435) '…IFCAs will be able to apply precautionary measures…in order to fulfil their main duty. Precautionary measures in this context means that the absence of adequate scientific information should not be used as a reason for postponing or failing to take management measures to conserve target species, associated or dependent species and non-target species and their environment…'

PART C: MANAGEMENT TOOLS AND APPLICATION

1.0 The Net Fishing Byelaw

The following provisions will be introduced under a Net Fishing Byelaw (NFB). A list of definitions are provided in paragraph (1) of the NFB.

Please refer to Section E for further details on how each area has been defined, in line with the specified areas listed below.

1.1 The Introduction of Specified Areas

1.1.1 Net Prohibition Areas

The Net Prohibition Areas are defined in Schedule 3 of the NFB. In these areas a person must not use a net.

- **Isle of Wight**
  - **Bembridge Harbour**
  - **Wootton Creek**
  - **Yarmouth Harbour and Western Yar**
  - **Newtown Harbour**
  - **King's Quay**
  - **River Medina**
- **Langstone Harbour**
  - **Bridge Lake**
  - **Channels**
- **Portsmouth Harbour**
  - **Fareham Creek**
  - **Channels**
- **Southampton Water**
  - **The River Itchen and River Itchen**
  - **Channels and River Hamble**
- **The Solent**
  - **River Beaulieu**
  - **Lymington**
  - **Keyhaven**
- **Christchurch Harbour**
  - **The River Avon, River Stour and Western**
  - **Channels**
  - **River Mude**
- **Poole Harbour**
  - **River Frome and River Piddle**
  - **Channels**
  - **Lytchett Bay and River Sherford**
  - **Wych and Middlebere Lakes**
  - **Holes Bay North**

- **West Dorset:**
  - **Western Fleet**
  - **Weymouth Harbour**
  - **Bridport Harbour**

1.1.2 Net Restriction Areas

The Net Restriction Areas are defined in Schedule 1 of the NFB. Net fishing within these areas is subject to site specific seasonal and gear restrictions.

- **Langstone Harbour Net Restriction Area**
  - *A person must not use a net other than a ring net.*
- **Portsmouth Harbour Net Restriction Area**
  - *A person must not use a net between 1st March and 31st October.*
- **River Meon Net Restriction Area**
  - *A person must not use a net between 1st March and 31st October.*
  - *A person must not use a net other than a ring net outside the period 1st March to 31st October.*
- **Christchurch Box Net Restriction Area**
  - *A person must not use a net other than a ring net between 15th February and 30th September.*
  - *A person must not use a net other than a bottom set net or ring net between 1st October and 14th February.*
- **Poole Harbour Net Restriction Area**
  - *A person must not use a net between 1st March and 31st October.*
- **Wareham Approaches Net Restriction Area**
  - *A person must not use a net other than a ring net.*
- **Eastern Fleet Net Restriction Area**
  - *A person must not use a net other than a ring net.*
- **Lyme Bay Net Restriction Area**
  - *A person must not use a net within three metres of the surface of the water at any state of the tide.*

1.1.3 Net Permit Areas

The Net Permit Areas are defined in Schedule 2 of the NFB. Net fishing within these areas is permitted under a Net Fishing Permit. Please refer to Section C (2.4) for further details regarding the scope of permit conditions.

- **Southampton Water Net Permit Area**

- **Christchurch Harbour Net Permit Area**
- **River Hamble Net Permit Area**

1.2 The requirement of all nets in the District to be marked with specific information

Under paragraphs (15-18) of the NFB all nets in the District are to be marked with specific information. This will enable any nets which are unmarked or marked but not permitted to fish to be easily identifiable for removal. These measures will assist with ensuring that incidences of illegal net fishing within the District are reduced.

1.3 The use of a ring net

Under paragraph (10) of the NFB, a user of a ring net must operate the net in accordance with the specified process. This ensures that operation of this net type is in line with the methodology assessed when developing the NFB.

1.4 The Introduction of Flexible Permit Conditions

The facility to introduce flexible permit conditions under the scope of the NFB is primarily to enable Southern IFCA to fulfil its obligations under paragraph 153(2) of the Marine and Coastal Access Act 2009.

As directed by Section (156) of the Marine and Coastal Access Act 2009, and in accordance with paragraph (34) of the NFB, the Authority may attach, vary or remove conditions to a permit, which may relate to the following matters:

- limiting the amount of sea fisheries resources a permit holder may take.
- limiting the amount of time a permit holder may spend net fishing.
- prohibiting or restricting any method of net fishing.
- setting the requirements for the use of video recording equipment.
- setting the frequency of deadlines for and content of catch returns.

1.5 Cost of Permits

As laid out in paragraph (29) of the NFB, the Authority may charge a fee for each permit. It is the intention of the Authority at year one to charge a fee of £170.00 for a Net Permit. This value is based on administrative costs only. The Authority will review the suitability of the permit fees in line with the Review Procedure outlined in paragraph (36) of the NFB. As part of the Review Procedure the Authority will consider any costs associated with the management of the Net Permits in line with paragraph (37) of the NFB.

A total cost analysis is provided in Annex 2 of this document.

1.6 The Number of Permits

As laid out in paragraph (32) of the NFB, the Authority may limit the number of permits that it may grant. Please refer to Section C (2.1) of this document for details regarding access and eligibility.

1.7 Review Procedure

The Net Permit Conditions will be subject to an annual review, following the Review Procedure determined in paragraph (36) of the NFB. This process specifies a clear procedure for reviewing the suitability of flexible permit conditions, permit fees and limitations on numbers of permits in accordance with a set procedure, based on consideration of evidence, as defined in paragraph (37) of the NFB, which includes consideration of the data gathered through the Net Permit Byelaw Monitoring and Control Plan

2.0 Net Permits

2.1 Access Criteria

2.1.1 At Introduction of Byelaw

Net Permits were allocated on a restricted entry basis and applicable at the time of byelaw implementation for fishers who had historically engaged in net fishing within the Net Permit Areas. This was an important measure to ensure that the permitted fishing activity remained compatible with the conservation objectives of Designated Sites. Introductory Net Permits will be valid for a period of up to one year.

Applicants seeking a **Christchurch Harbour Net Permit**, or a **Southampton Water Net Permit** needed to demonstrate that, during the reference period of January 2018 to October 2021 (inclusive), they had:

- used a net to fish commercially from a vessel within the Permit Area for which they were applying, *and*
- had fished legitimately during that period.

Applicants seeking a **River Hamble Net Permit** need to demonstrate that during the reference period of January 2018 to October 2021 (inclusive) they had:

- been a holder of a net permit to fish the River Hamble, as issued by the River Hamble Authority, *and*
- used a net to fish commercially within the River Hamble Net Permit Area, *and*
- had fished legitimately during this period.

2.1.2 Entry requirements for Year 2 (1st March 2025 to 31st March 2026)

Net Permits will be allocated on a restricted entry basis, the number of available permits is 17 reflecting the number of permits issued at the introduction of the Byelaw (Year 1). Maintaining restricted entry at 17 permits ensures that permitted fishing activity remains compatible with the conservation objectives of Designated Sites and the outcomes of the NFB Conservation Assessment Package.

Applicants seeking a **Christchurch Harbour Net Permit**, or a **Southampton Water Net Permit** must demonstrate they have:

- held a permit in Year 1 for the same permit area for which a Year 2 application is made

Applicants seeking a **River Hamble Net Permit** must demonstrate they have:

- held a permit for the River Hamble Permit Area in Year 1; *and*
- been a holder of a net permit to fish the River Hamble, as issued by the River Hamble Authority in Year 1

The Year 2 permit will be valid from the 1st of March 2025 until the 31st of March 2026 both days inclusive. This one off 13-month permit period allows for alignment between the financial

year and permits from 2026 onwards, with Year 3 permits valid between 1st April to the 31st March both days inclusive.

2.1.3 New Entrants Access to fishery

Future entry into this fishery will be subject to the outcomes of the annual review of the Monitoring and Control Plan in line with the Review Procedure identified in paragraph (36) of the NFB. This mechanism is in place to ensure that the future management of the net fishery remains compatible with the conservation objectives of the Designated Areas, as informed by the best available evidence provided by the annual monitoring process.

New entrants' criteria will be determined by the Authority at a time in which Net Permits may become available.

2.2 Procedure for Application

Net Permit applications are to be made in line with paragraph (22) of the NFB.

Applicants seeking a Net Permit must apply to the Authority in writing. All accompanying evidence, such as sales notes and mooring receipts should be submitted to the Authority at the time of application in order to support the submission.

Applications for introductory Net Permits, must be made during a twelve-week period immediately following the confirmation of the Net Fishing Byelaw by the Secretary of State.

Applications for Year 2 Net Permits must be made during the application window stipulated by the Authority. The Authority will communicate the application window with eligible Year 2 applicants in writing.

It will be at the discretion of the Chief Officer whether an applicant requires an interview following an assessment of the written application. Interviews will be conducted by a Permit Byelaw Panel in order to determine whether the applicant has proved to its satisfaction that the access criteria has been met. The Permit Byelaw Panel will report to the Technical Advisory Committee (TAC) regarding the status of the application. It will be at the discretion of the TAC whether the access criteria have been met.

Permits will be issued to applicants following confirmation of the NFB by the Secretary of State (or a nominated representative). Notice of the NFB confirmation and the procedure for application shall be posted on the Authority's website.

Year 2 Net Permits will be issued to applicants following the closure of the Year 2 Net Permit application window and consideration of all applications received.

2.2.1 Appeals Procedure

Any person who is dissatisfied with any decision made by the Authority with respect to the issuing of a Net Permit is to have the following right of appeal, in writing or in person, either alone or accompanied by a legal advisor or friend to The Appeals Panel.

An appeal will only be heard if a request is received in writing, within 28 days of written confirmation of an Authority decision.

For any appeal, the Authority and the appellant will each be responsible for their own costs.

2.3 Change of Permit

2.3.1 Change of Vessel

A Permit Holder may apply to the Authority in writing to transfer a Permit to a different vessel to that named on their Permit. It will remain at the discretion of the Authority whether a Permit transfer will be granted to ensure that net fishing within the Net Permit Area remains compatible with the conservation objectives of the site.

2.3.2 Miscellaneous Permit changes

A Permit Holder may apply to the Authority in writing to make a change to their Permit following a change of circumstance (for example, but not limited to, a change in vessel ownership or ill health).

2.4 Permit Conditions

The following provisions will be introduced under the conditions of the Net Fishing Permits in the first year following the implementation of the NFB.

2.4.1 Prohibiting or restricting methods of harvesting

- **Southampton Water Net Permit Area**

A person must not use a net other than a ring net or a bottom set net.

- **Christchurch Harbour Net Permit Area**

A person must not use a net other than a ring net.

- **River Hamble Net Permit Area**

A person must not use a net other than a ring net.

2.4.2 Setting the frequency of deadlines for and content of catch returns

A permit holder must comply with permit conditions specific to (1) the reporting of dead salmonids and (2) in the event of an interaction between their net and a salmonid. These conditions have been developed in conjunction with the Net Permit Area Monitoring and Control Plan.

2.5 Monitoring and Control Plan

Areas which are to be managed under a Net Permit will be subject to a Monitoring and Control Plan. The implementation of the Monitoring and Control Plan will allow the Authority to be confident that they are using the best available evidence when considering the ongoing management of net fisheries in harbours and estuaries under a Net Permit in areas which have a low functional linkage to a SAC and/or SSSI. The Monitoring and Control Plan will ensure that net fishing remains compatible with the conservation objectives of SACs (notably Atlantic salmon) and SSSIs (notably Atlantic salmon and /or sea trout as a component of a SSSI).

The Monitoring and Control Plan will facilitate specific and robust monitoring of the permitted net fishery. The Monitoring and Control Plan considers an On-Site Monitoring Programme which captures five components of monitoring which will be conducted in each Net Permit Area. These layers of monitoring will work in parallel, for example, any salmonid interaction will be counted in accumulation across all monitoring components.

Threshold Trigger Levels have been determined in the Monitoring and Control Plan for salmonids which are (a) dead in a permitted net or (b) interacting with a permitted net. These trigger levels will activate a 'control mechanism' which determine the actions to take when a Threshold Trigger Point is reached.

The Monitoring and Control Plan also considers information sources which will be used in order to support understandings of salmonid health overtime, based on the best available evidence provided by partner organisations such as the Environment Agency and Natural England. It is the intention that this information will be reviewed alongside the data from the On-Site Monitoring Programme and used to collectively inform the Annual Review of the Net Permit Conditions.

Please refer to The Net Permit Area Monitoring and Control Plan for further details.

2.6 Ongoing Evidence Collection – Research Project

In conjunction with the ongoing management of net fishing within Net Permit Areas, Southern IFCA are committed to undertake a Research Project in order to improve understandings of potential interactions between the use of drift nets and salmonids in a non-targeted fishery. The outcomes of this Research Project will be used to inform the ongoing management of net fishing within Net Permit Areas.

3.0 Codes of Practice

3.1 Salmonid Code of Practice

A Salmonid Code of Practice (CoP) which will be introduced in order to inform fishers operating in Net Restricted Areas and Net Permit Areas about handling and release practices which will help reduce injury and/or stress and increase the likelihood of more rapid resumption of upstream movement.

The Code of Practice has been directly informed by the Net Fishing Byelaw Literature Review.

3.2 Net Fishing Around Piers Code of Practice

When managing the exploitation of sea fisheries resources in the District, the Authority has duties under Section 153(d) of the MaCAA to seek to balance the different needs of persons engaged in the exploitation of sea fisheries resources in the district.

Recreational Sea Angling (RSA) is an important social and economic activity in the Southern IFCA District. In 2017, the total economic impact of sea angling in the UK was estimated to be £1.94 billion, providing £388 million of GVA (direct) and supporting around 16,300 jobs[17]. Sea angling also has important social and well-being benefits including providing relaxation, physical exercise, and a route for socialising. Many of the District's piers provide easy access to RSA participants at all levels, including those with disabilities, and have developed as focal points for the pastime in the District with strong associations having developed with clubs, angling shops and competitions.

Concerns have been raised over the potential for fishing nets, when used near pier structures, to negatively impact RSA activity. This matter has been considered through the Authority's Netting Review and the Authority received a high level of feedback on this matter through two

[17] Sea Angling in the UK in 2016 & 2017 (publishing.service.gov.uk)

periods of informal public consultation[18,19]. Following further consultation with both the commercial and recreational fishing sectors, involving representatives from the South Coast Fisherman's Council (SCFC) and the Recreational Angling Sector Group (RASG), an opportunity has been identified to address the matter through small changes in fishing practice, introduced through a Code of Practice. The Netting Working Group has therefore recommended that a Net Fishing Around Piers Code of Practice (CoP) is introduced to exclude the use of fishing nets from within 200m of nine pier locations within the District.

Both sectors have agreed that the CoP should be reviewed by 31st December 2022. Should the CoP prove ineffective, the Authority will consider the introduction of regulatory measures.

[18] Net-Public-Consultation-on-Net-Management-2019.pdf (toolkitfiles.co.uk)
[19] Net-Secondary-Consultation-Net-Management-2020.pdf (toolkitfiles.co.uk)

PART D: OVERARCHING MANAGEMENT INTENTIONS

1.0 Fishing within or adjacent to an SAC

To prohibit net fishing in order to ensure no adverse effect on Atlantic salmon (damage, disturb or lead to a deterioration of species) within and adjacent to an SAC, in order to fulfil Southern IFCAs legislative duties under the Conservation Regulations.

2.0 Fishing within a SSSI

To prohibit net fishing in order to further the conservation and enhancement of Atlantic salmon and/or sea trout which are either a notified or component feature for which a SSSI site has been designated, in order to fulfil Southern IFCAs legislative duties under the WCA.

3.0 Fishing within a Functionally Linked Area

3.1 Fishing within an area of High Functional Linkage

To prohibit net fishing in order to ensure no adverse impact on salmonids utilising areas beyond the boundary of an SAC or SSSI where salmonids are afforded protection, in order to fulfil Southern IFCAs legislative duties under the Conservation Regulations, the WCA and the MaCAA.

3.2 Fishing within an area of Medium Functional Linkage

To restrict net fishing in order to minimise the interaction between net fishing and salmonids beyond the boundary of an SAC or SSSI where salmonids are afforded protection, in order to fulfil Southern IFCAs legislative duties under the Conservation Regulations, the WCA and the MaCAA.

In areas of Medium Functional Linkage, site-specific management intentions will be considered in-combination with the outcomes of an EFH Assessment. Please refer to Section E for further details.

3.3 Fishing within an area of Low Functional Linkage

To manage net fishing under a net permit in order to minimise the interaction between net fishing and salmonids beyond the boundary of an SAC or SSSI where salmonids are afforded protection, in order to fulfil Southern IFCAs legislative duties under the Conservation Regulations, the WCA and the MaCAA.

In areas of Low Functional Linkage, site-specific management intentions will be considered in-combination with the outcomes of an EFH Assessment and a MS Assessment. Please refer to Section E for further details.

4.0 Fishing within an Essential Fish Habitat

4.1 Fishing within an area where there is a high risk

To prohibit net fishing within areas which provide high ecological value in supporting spawning, feeding or refuge areas for non-salmonid species, in order to fulfil Southern IFCAs legislative duties under the MaCAA in line with the Policy Objectives of the Netting Review.

4.2 Fishing within an area where there is a medium risk

To restrict net fishing within areas which provide medium ecological value in supporting spawning, feeding or refuge areas for non-salmonid species, in order to fulfil Southern IFCAs legislative duties under the MaCAA in line with the Policy Objectives of the Netting Review.

In areas of Medium Risk, site-specific management intentions will be considered in-combination with the outcomes of either a FLA Assessment or a MS Assessment. Please refer to Section E for further details.

4.3 Fishing within an area where there is low risk

In areas providing low ecological value there will be no management intervention. Site-specific management intentions will be considered in combination with the outcomes of a FLA Assessment or MS Assessment. Please refer to Section E for further details.

5.0 Fishing within areas utilised by migratory salmonids

5.1 Fishing within an area where there is a high risk

To prohibit net fishing where there is a high risk of interaction with migratory salmonids in areas which fall outside of SACs or SSSIs (where salmonids receive protection as a conservation feature), in order to fulfil Southern IFCAs legislative duties under the MaCAA in line with the Policy Objectives of the Netting Review.

5.2 Fishing within an area where there is a medium risk

To restrict net fishing where there is a medium risk of interaction with migratory salmonids in areas which fall outside of SACs or SSSIs (where salmonids receive protection as a conservation feature), in order to fulfil Southern IFCAs legislative duties under the MaCAA in line with the Policy Objectives of the Netting Review.

In areas of Medium Risk, site-specific management intentions will be considered in-combination with the outcomes of an EFH Assessment. Please refer to Section E for further details.

5.3 Fishing within an area where there is low risk

In areas where there is a low risk there will be no management intervention. Site-specific management intentions will be considered in combination with the outcomes of EFH Assessment. Please refer to Section E for further details.

6.0 Areas subject to existing legislative closures

To prohibit net fishing in areas subject to existing legislative closures managed by other regulatory bodies.

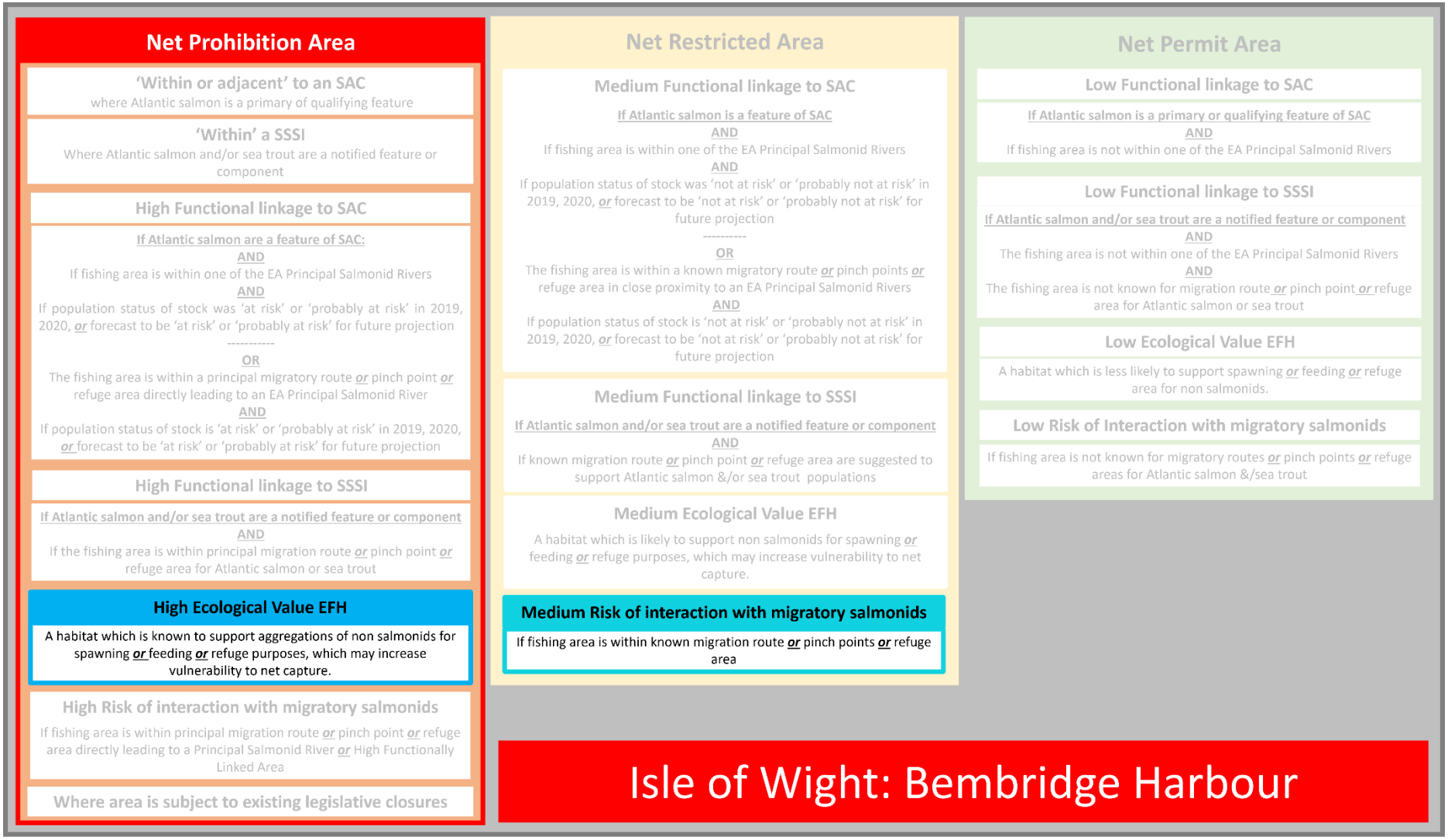
PART E: SYNERGETIC MANAGEMENT MODELS

The site specific Synergetic Management Models ('Model') draw together the risk components which have been identified for functionally linked areas, areas utilised by Migratory Salmonids and Essential Fish Habitats in order to inform, in combination, the site-specific management outcomes. The risk components have been directly informed by Site Specific Evidence Packages as well as the Net Fishing Byelaw Literature Review in order to use the best available evidence to inform management outcomes. A risk component which has been identified as 'high' will supersede any other risk category. The Models also capture the legislative drivers underpinning management intentions (as described in Section A of this document), as well as areas which are subject to relevant legislative closures. Please refer to Annex 3 which provides the base Model and Annex 4 which provides an overview of the drivers which have informed management intervention.

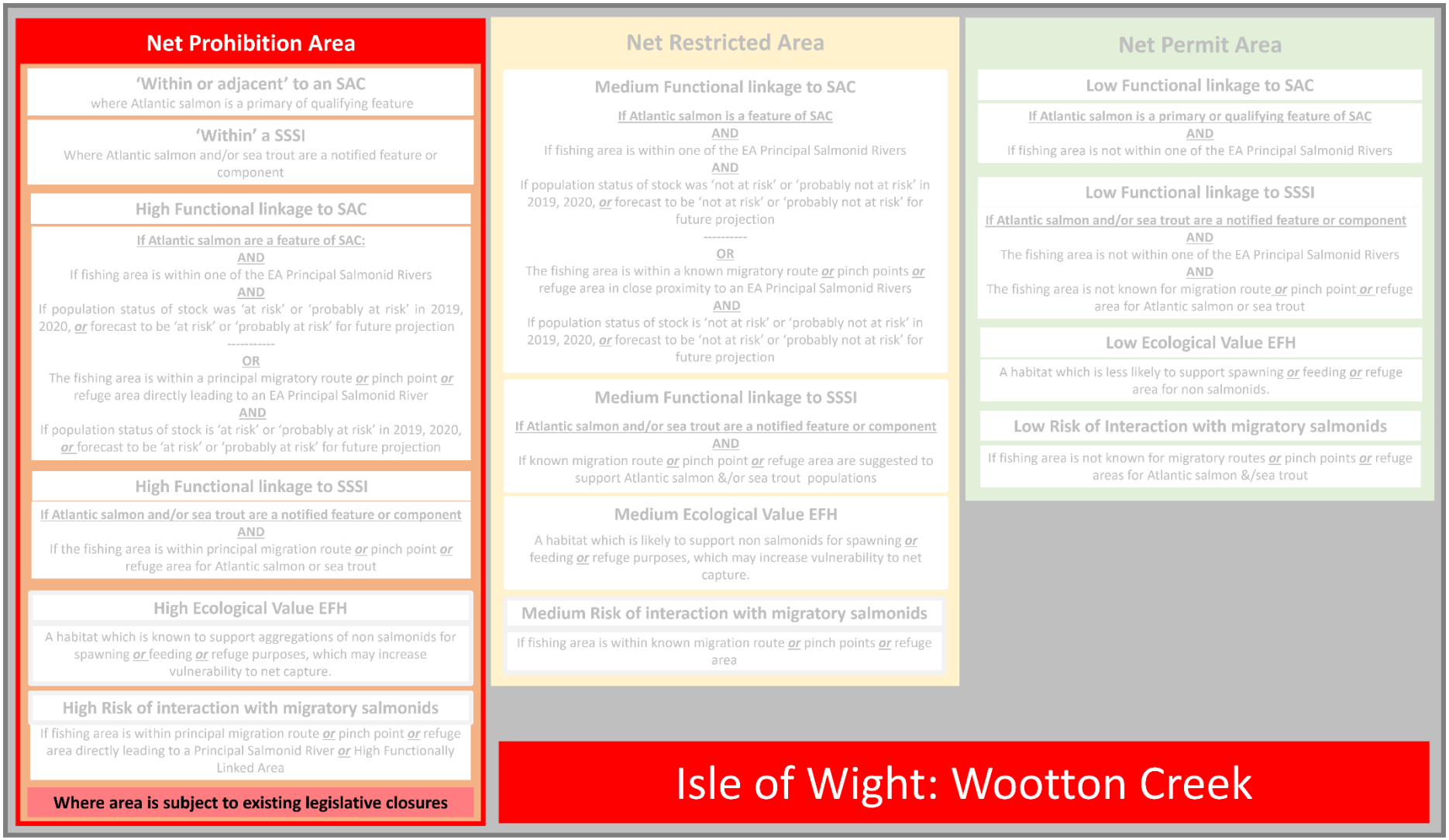
1.0 Glossary of Terms relevant to Models

Adjacent	'next to or adjoining' as consistent with the Oxford English Dictionary definition.
Aggregation	the coming together of a number of fish species into an area.
Migration (Migratory) Routes	Routes which are customarily followed by migrating salmonids either upstream to return to their natal river for spawning, or downstream by juvenile salmon to enter the marine phase of their life cycle. The route and seasonal timing of the migration is similar each year and is driven by environmental cues and homing instincts exhibited by salmonid species
	Principal Migratory Route: is defined as 'first, in order of importance' as consistent with the Oxford English Dictionary definition.
	Principal Migratory Route: is defined as 'familiar, or within scope of knowledge' as consistent with the Oxford English Dictionary definition.
Pinch Points	Areas where the movement of fish is funnelled when they are moving through the harbour and estuarine landscape, as a result of either man-made or natural landscape features. Pinch points are of conservation importance as the funnelling of fish may render then vulnerable to increased net interaction.
	Principal Pinch Point: is defined as 'first, in order of importance' as consistent with the Oxford English Dictionary definition.
	Known Pinch Point: is defined as 'familiar, or within the scope of knowledge' as consistent with the Oxford English Dictionary definition.
Principal Salmonid River	A river listed by the Environment Agency as being key for Atlantic salmon or sea trout migration. A Principal Salmonid River has two targets associated with it, a Conservation Limit and a Management Target, against which the status of an individual river stock is evaluated annually.
Population Status of stock	The probability of a river meeting the Management Objective, classifies a river as 'At risk' (<5% probability), 'Probably at risk' (5-50% probability), 'Probably not at risk' (50-95% probability) and 'Not at risk' (>95% probability).
Refuge	An area where fish are able to congregate to rest or seek protection from predators. Protection may be provided by habitats such as seagrass beds and saltmarsh which are inaccessible to predators or provide cover from visual predators, i.e., bird species. In addition, for estuaries with large intertidal areas, subtidal channels provide refuge areas for fish species at low tide.
	Principal Refuge Area: is defined as 'first, in order of importance' as consistent with the Oxford English Dictionary definition.
	Known Refuge Area: is defined as 'familiar, or within the scope of knowledge' as consistent with the Oxford English Dictionary definition.
Vulnerability	Risk of being exposed to interaction with a net.

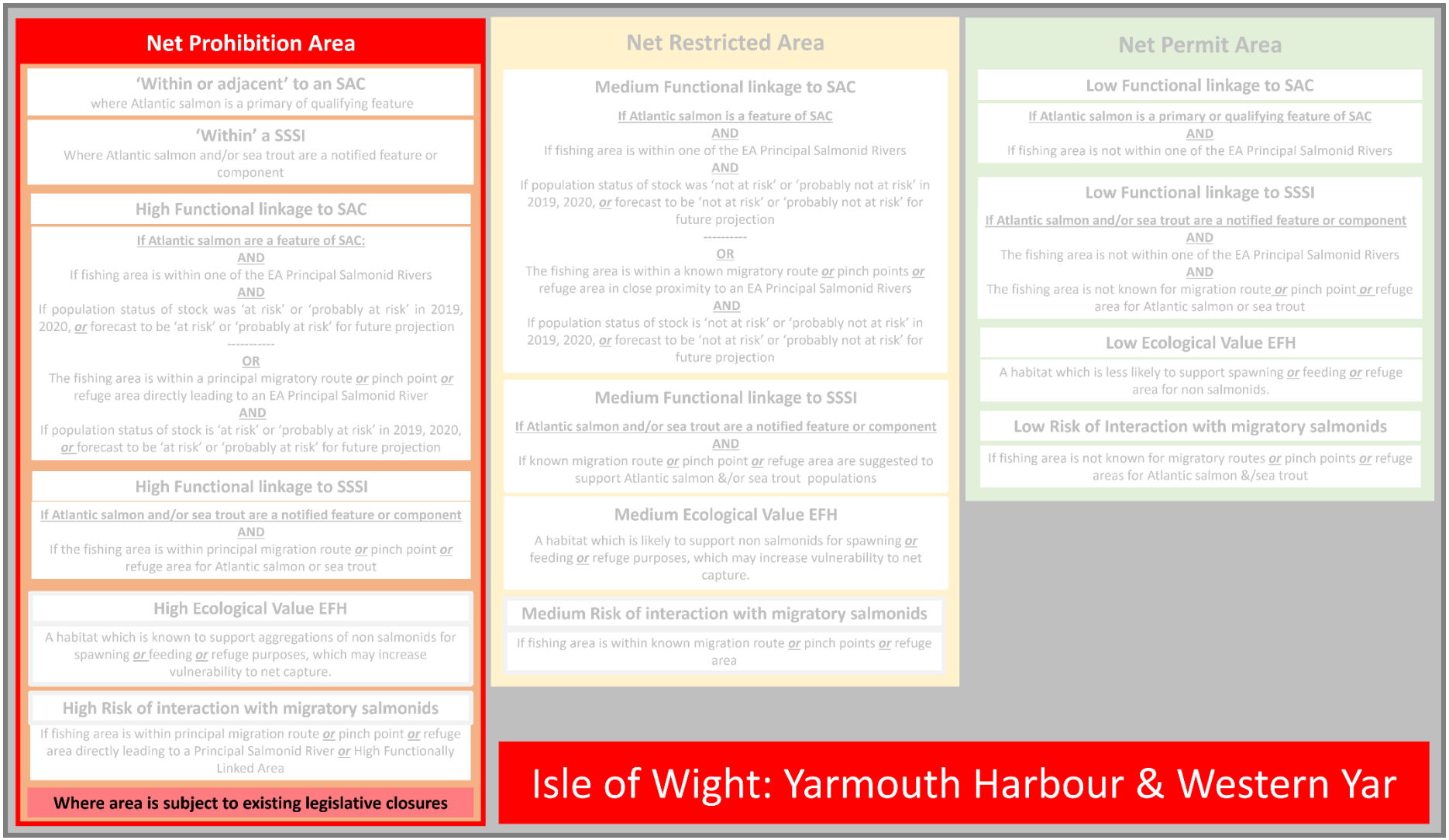
Isle of Wight: Bembridge Harbour



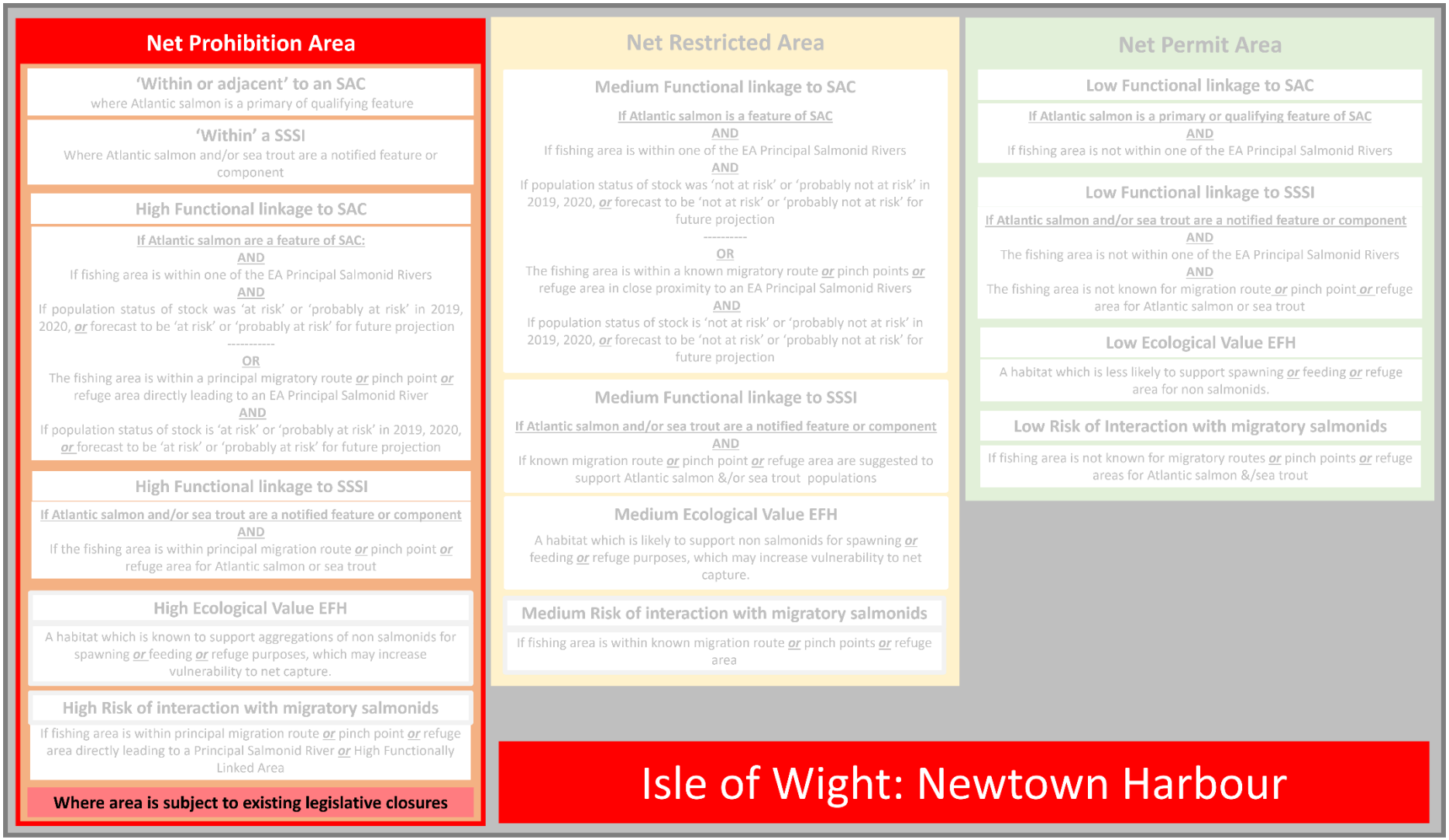
Isle of Wight: Wootton Creek



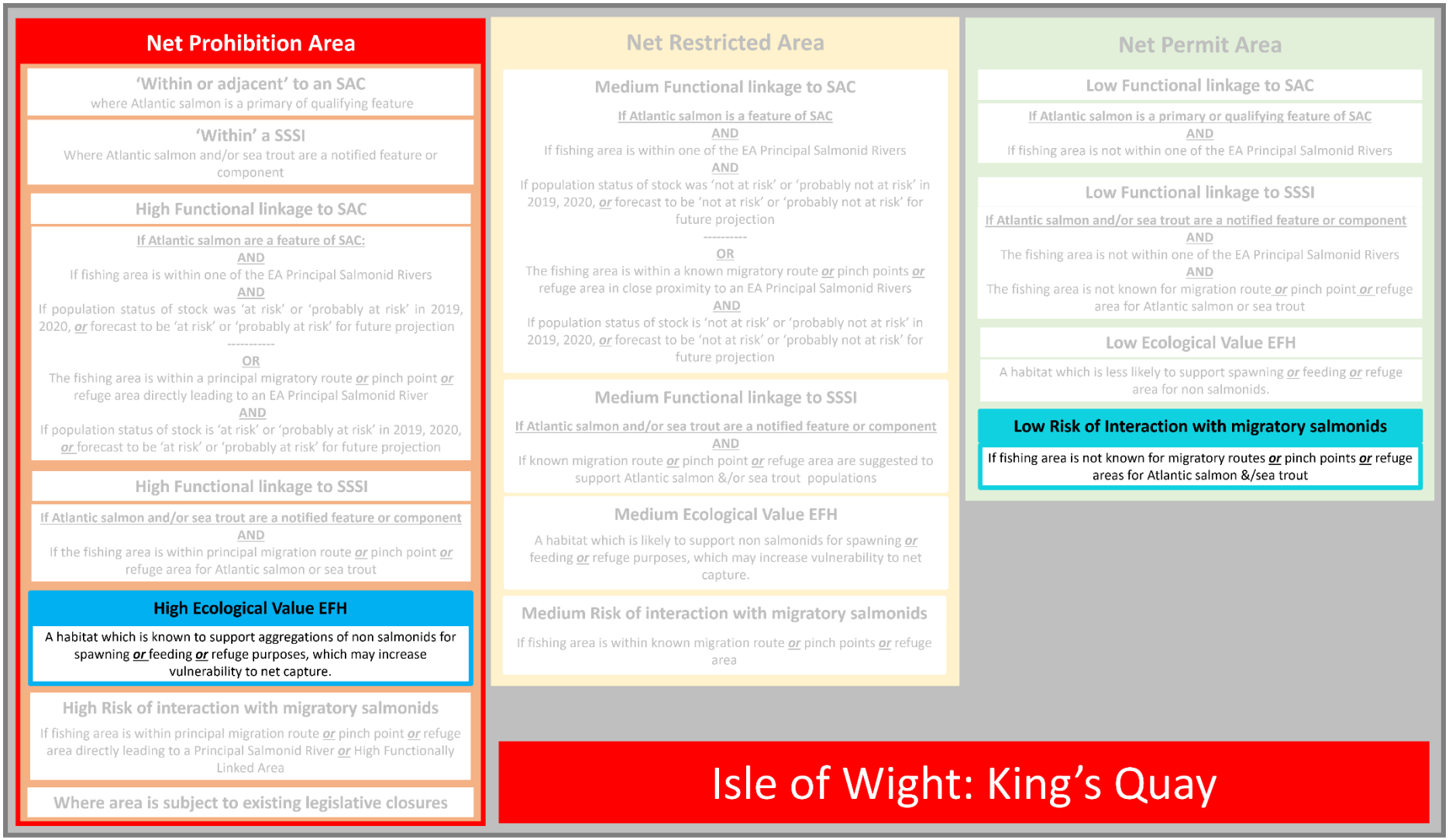
Isle of Wight: Yarmouth Harbour and Western Yar



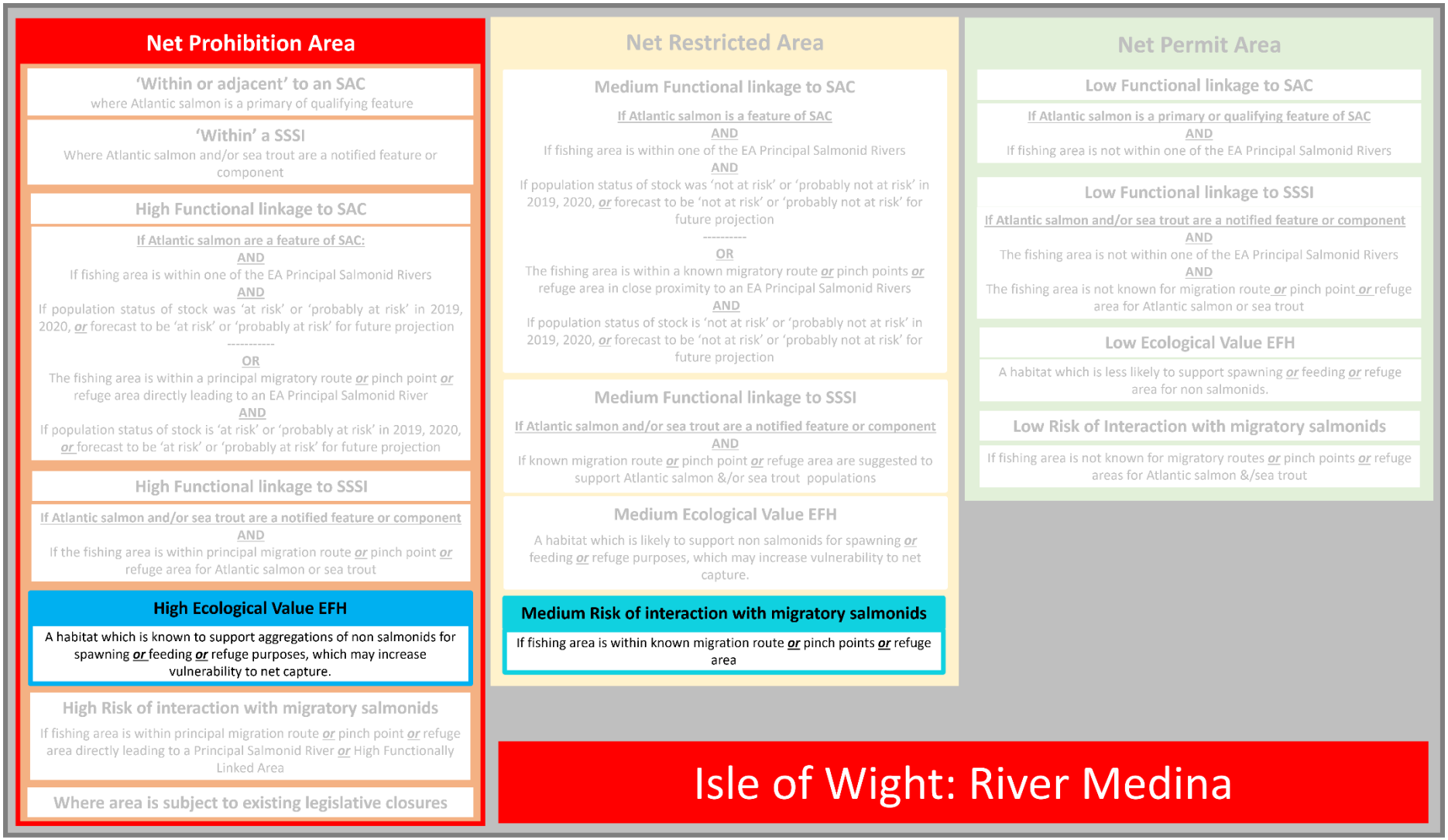
Isle of Wight: Newtown Harbour



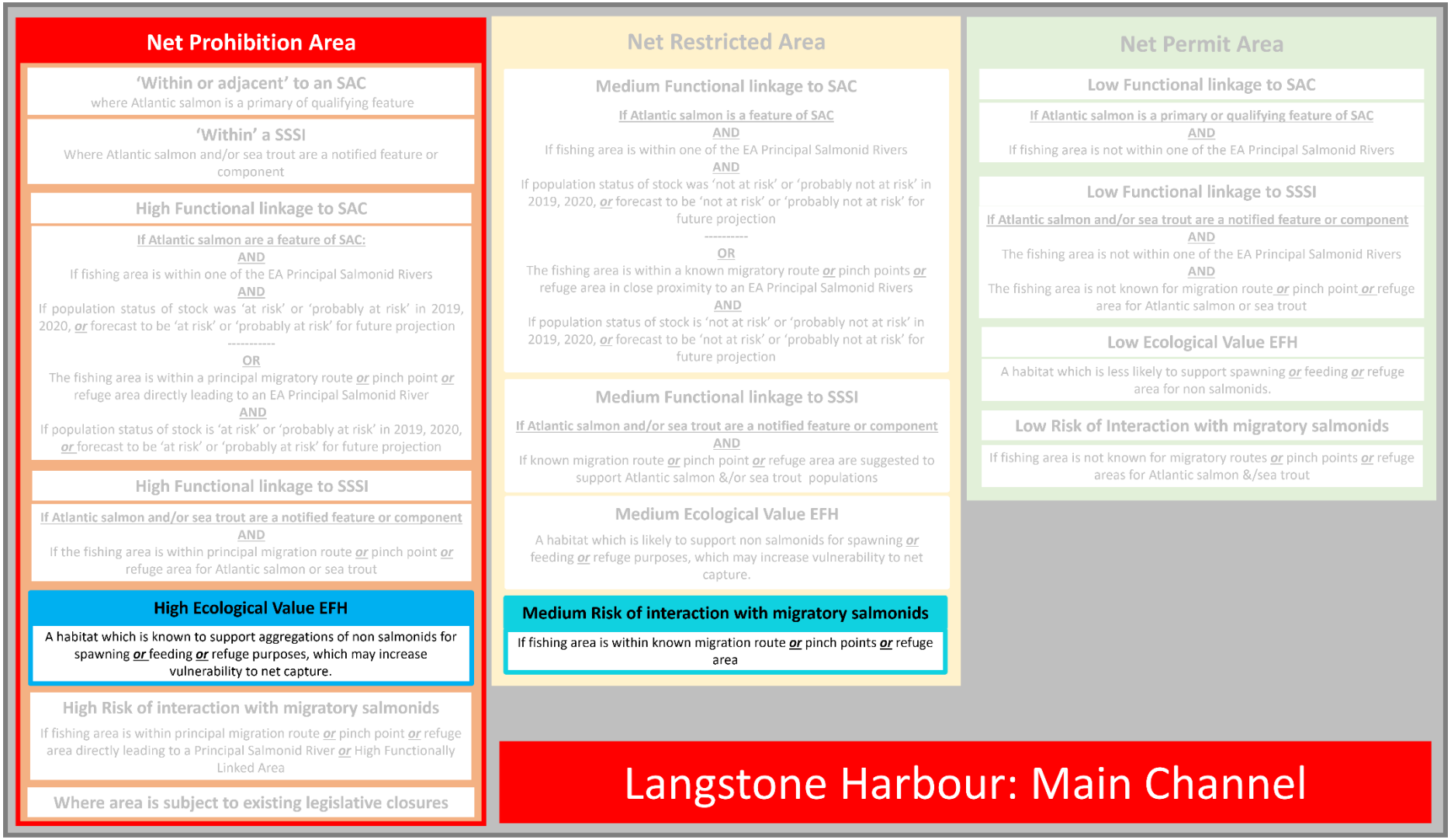
Isle of Wight: King's Quay



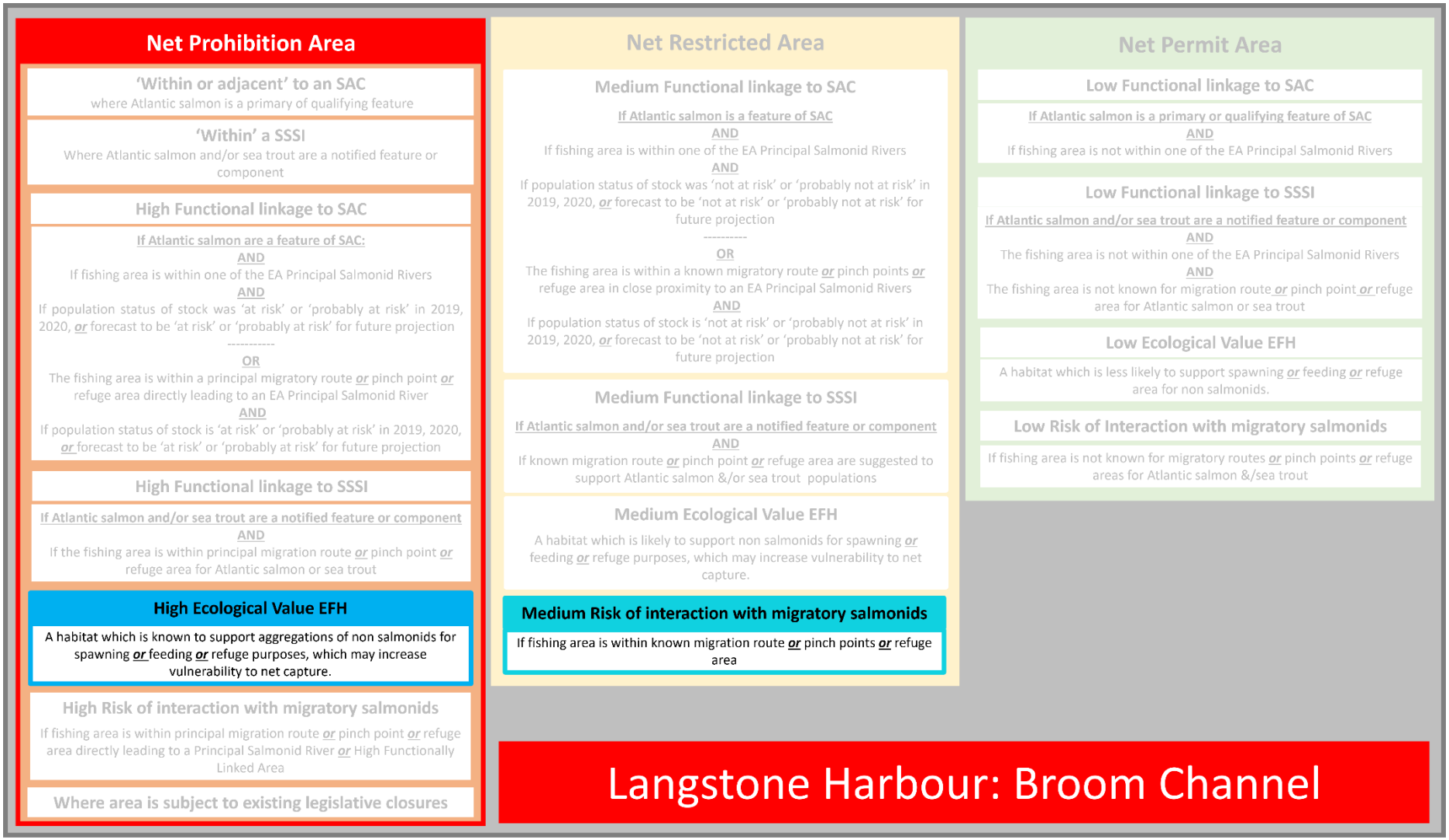
Isle of Wight: River Medina



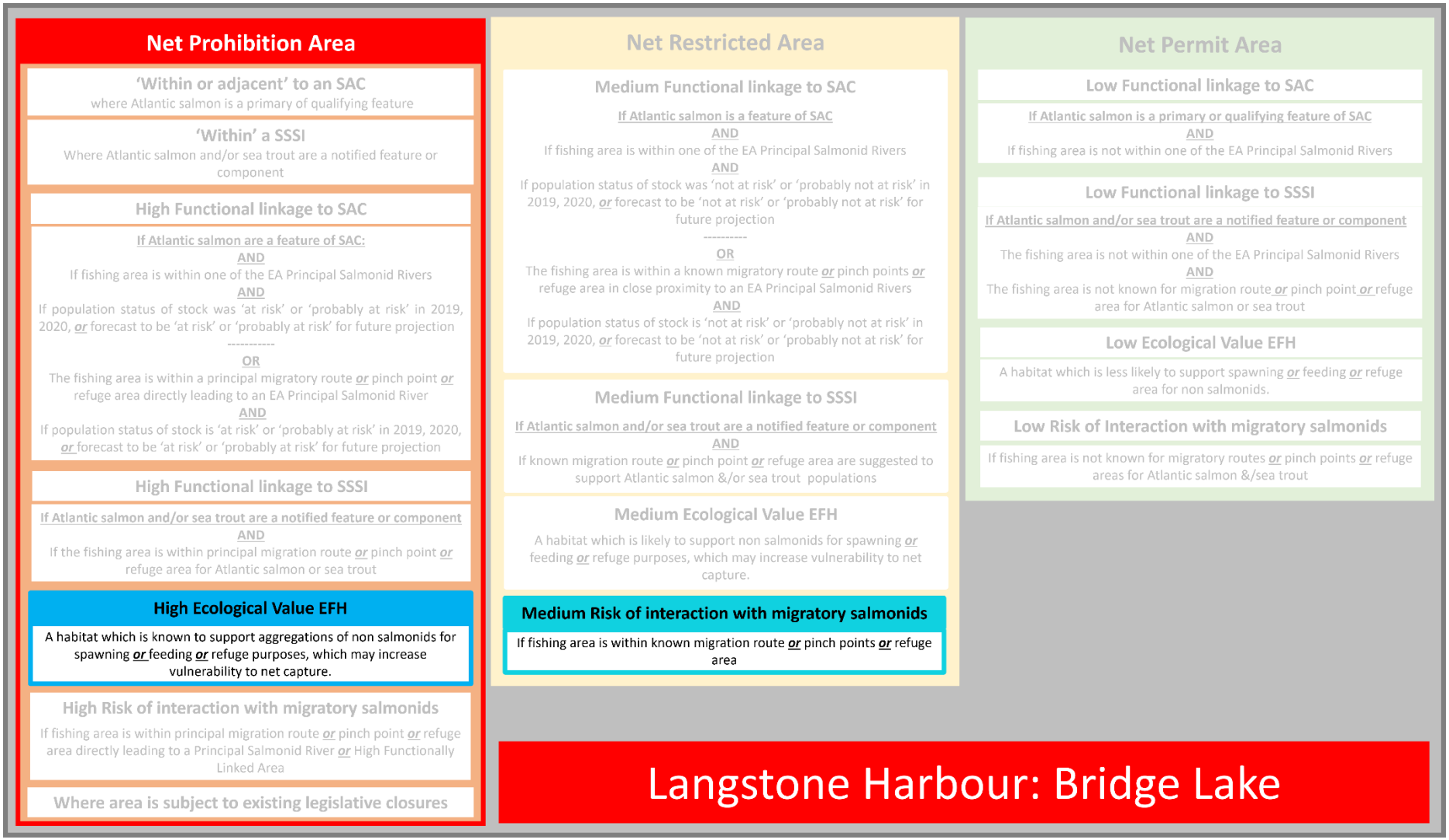
Langstone Harbour: Main Channel



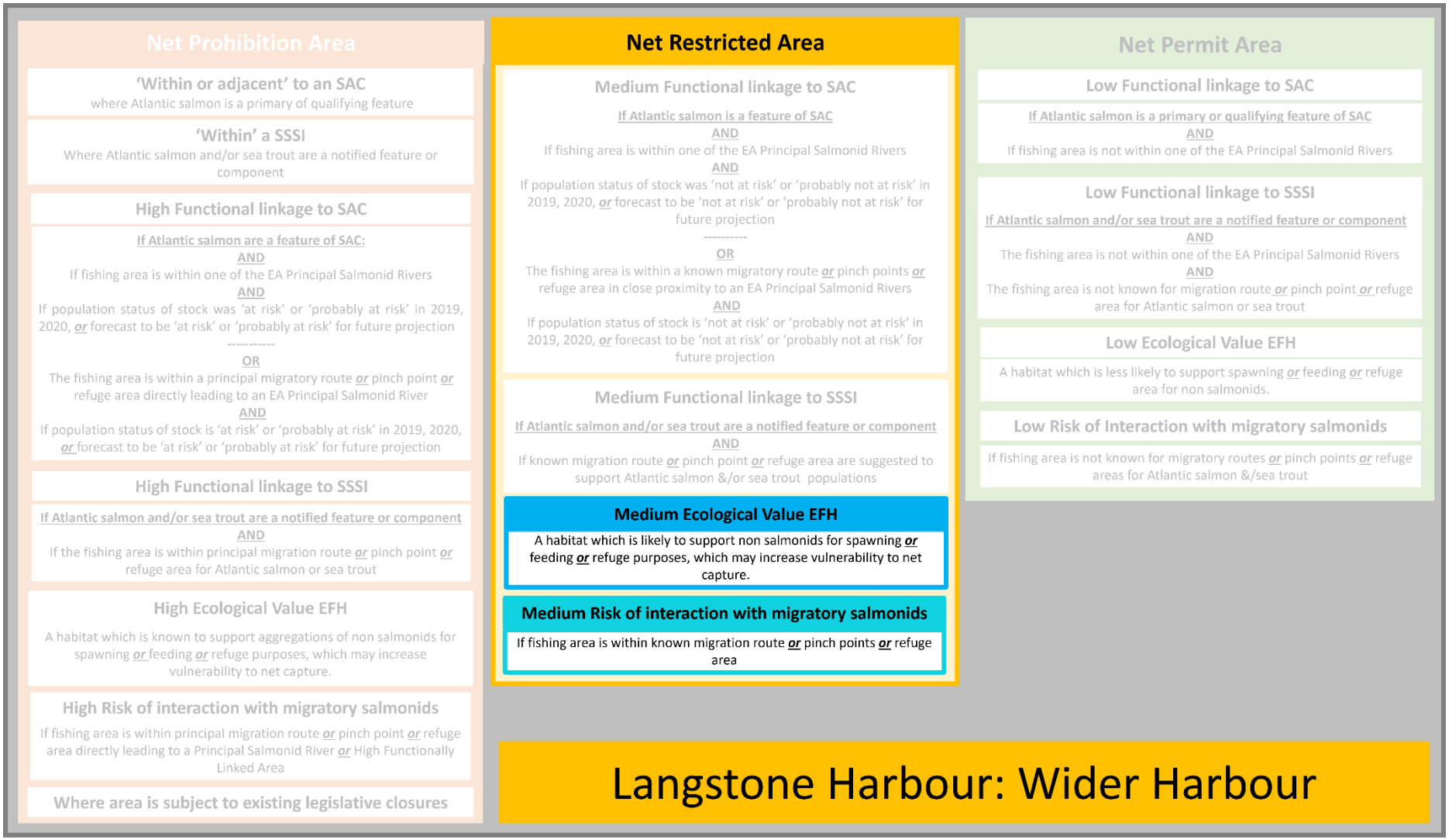
Langstone Harbour: Broom Channel



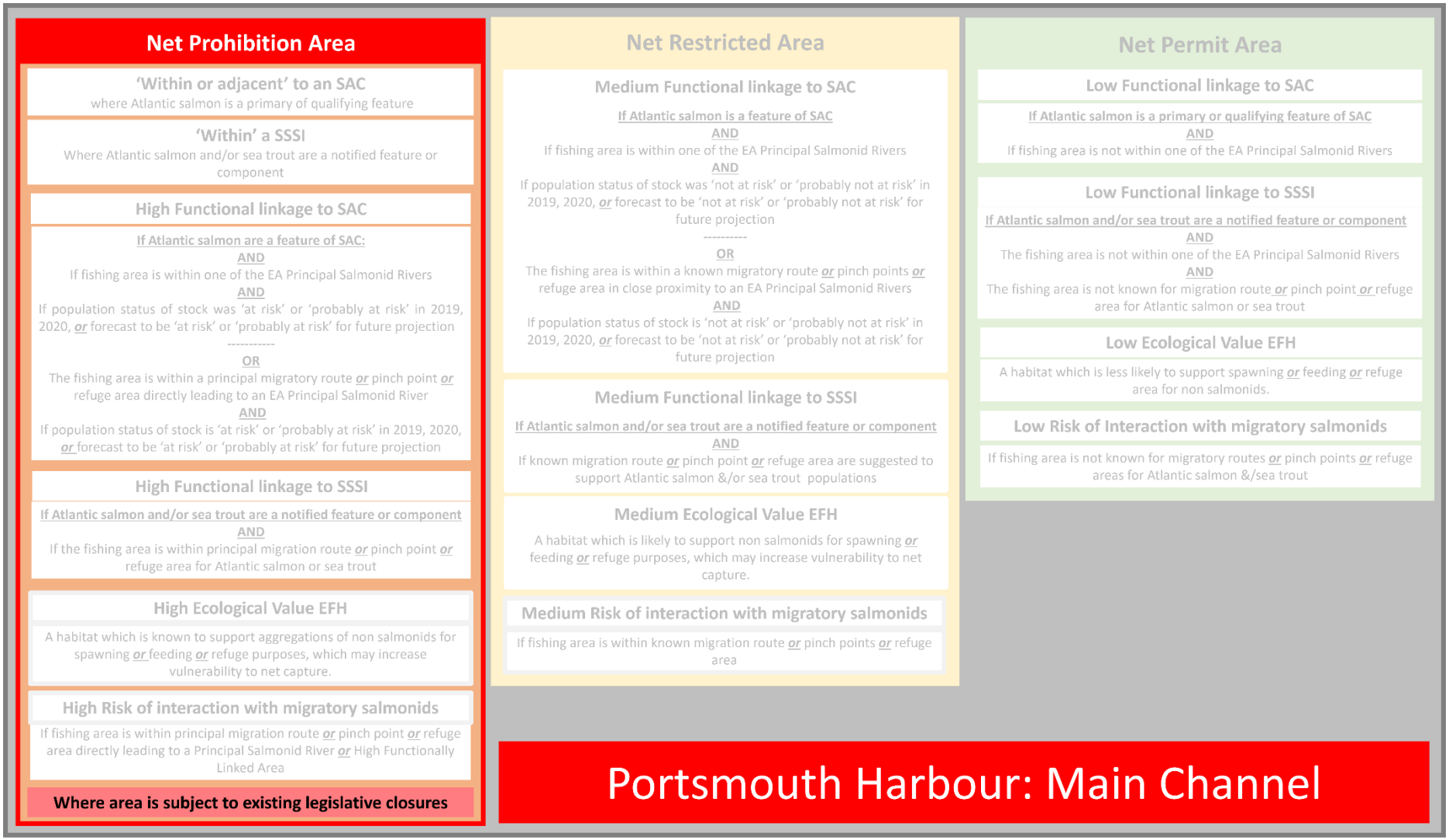
Langstone Harbour: Bridge Lake



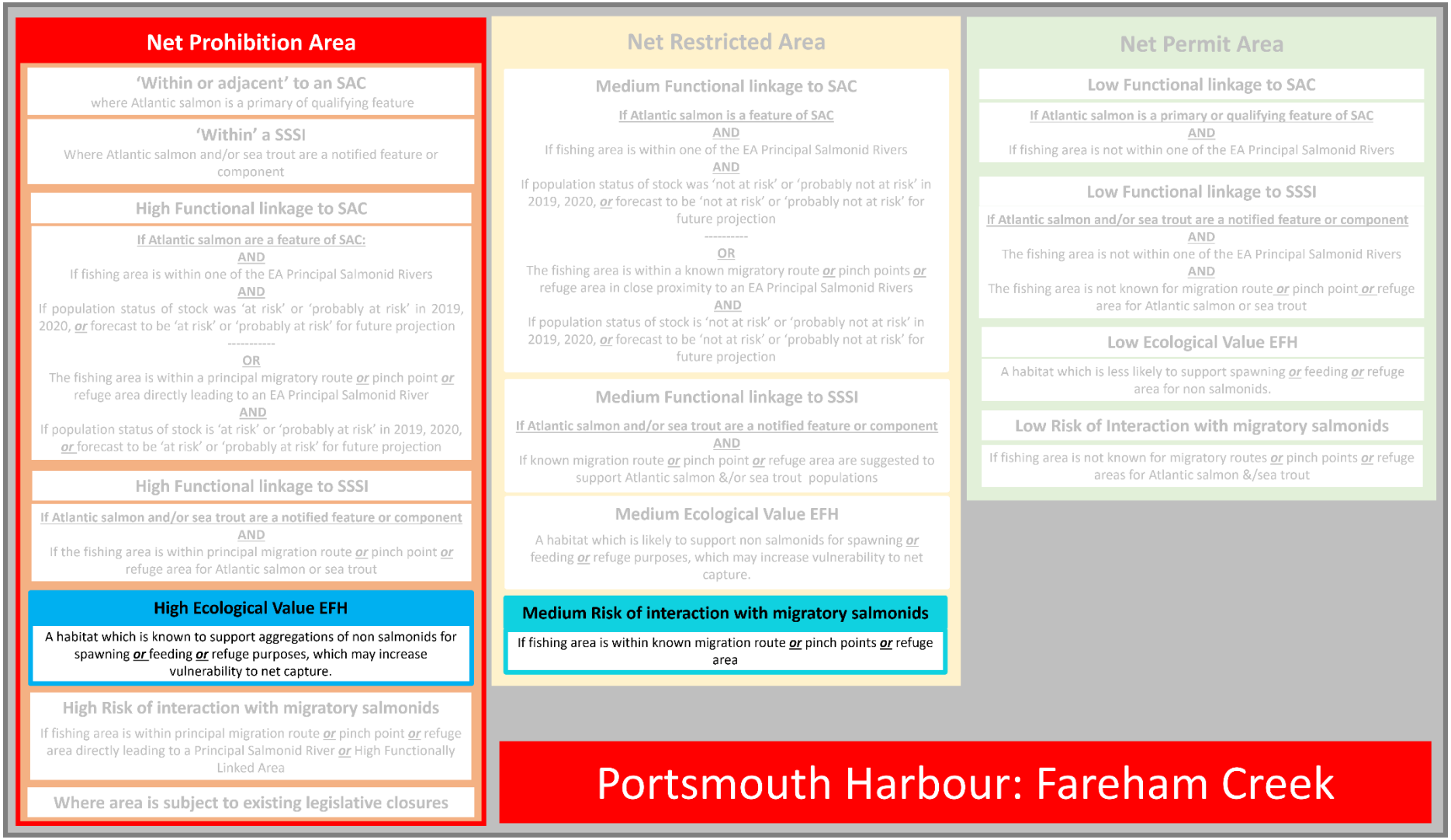
Langstone Harbour: Wider Harbour



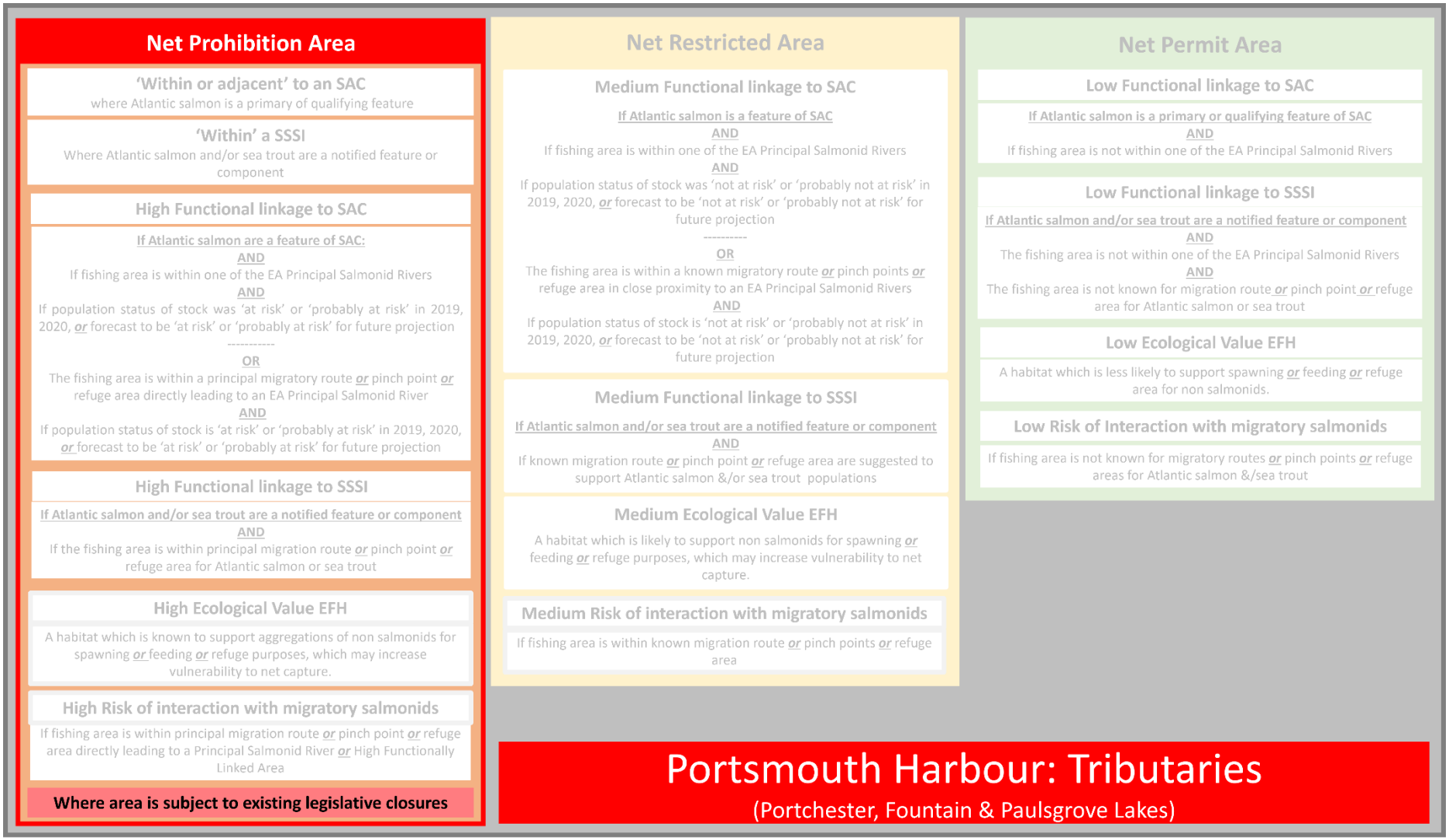
Portsmouth Harbour: Main Channel



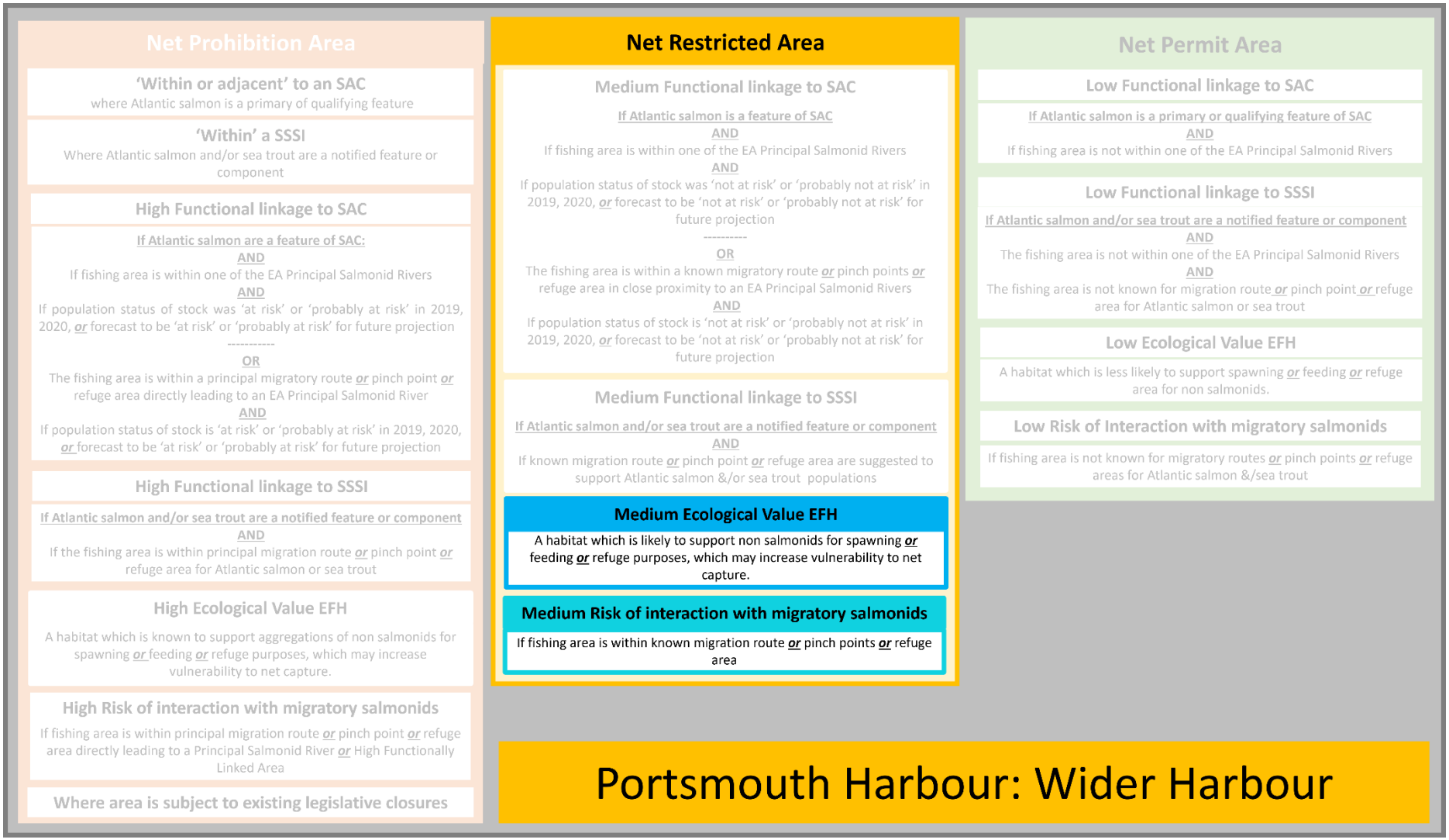
Portsmouth Harbour: Fareham Creek



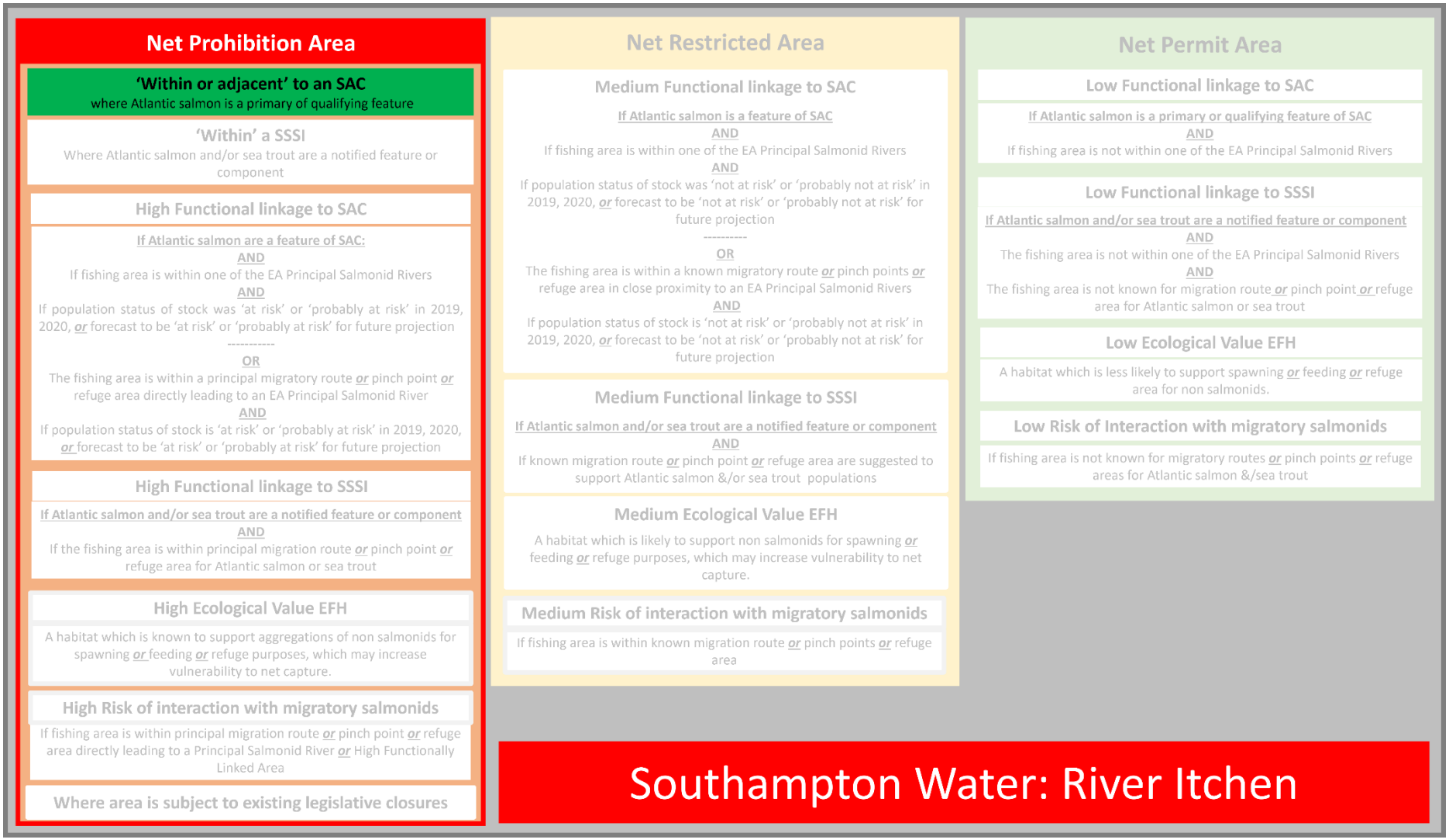
Portsmouth Harbour: Tributaries



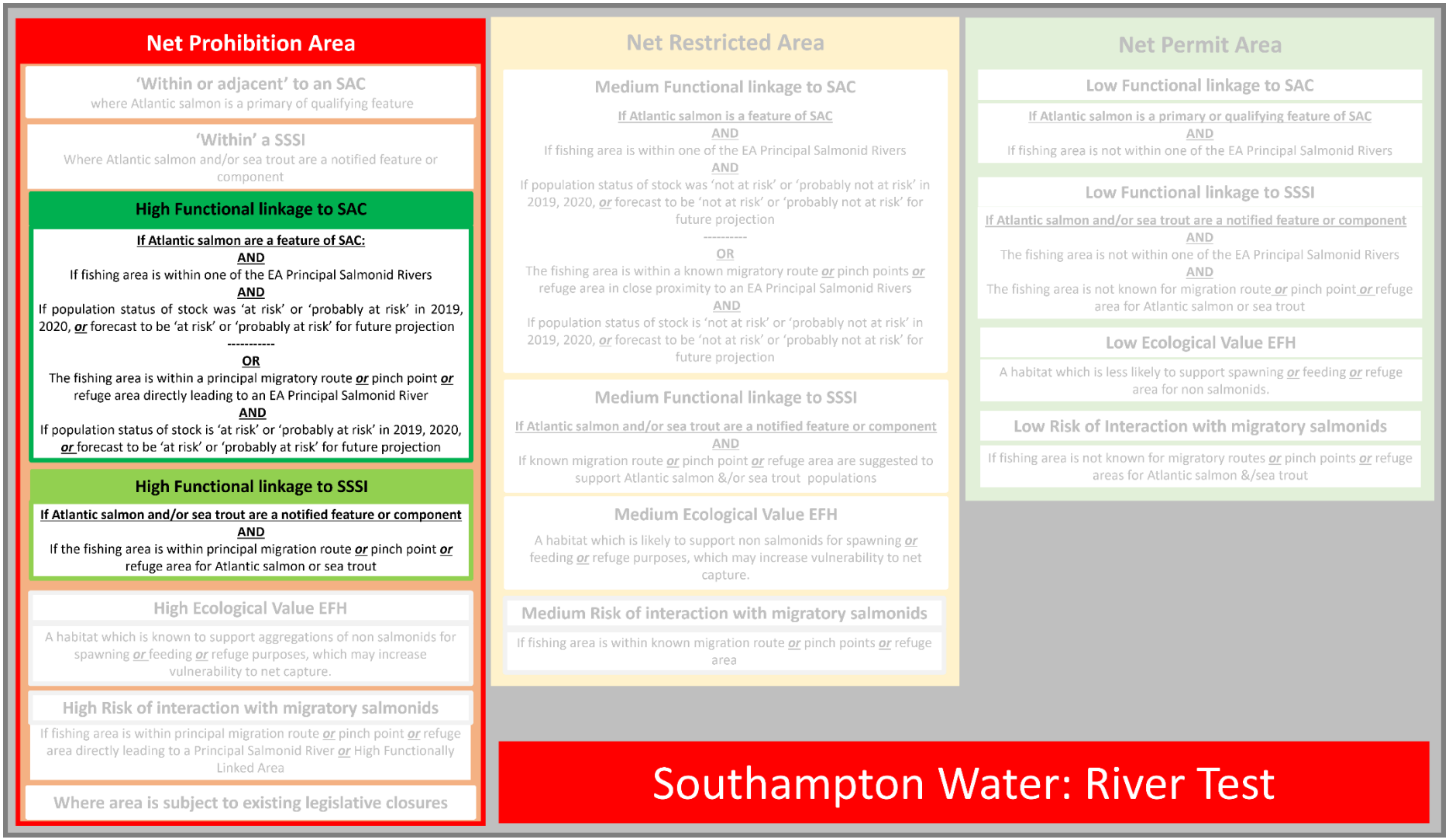
Portsmouth Harbour: Wider Harbour



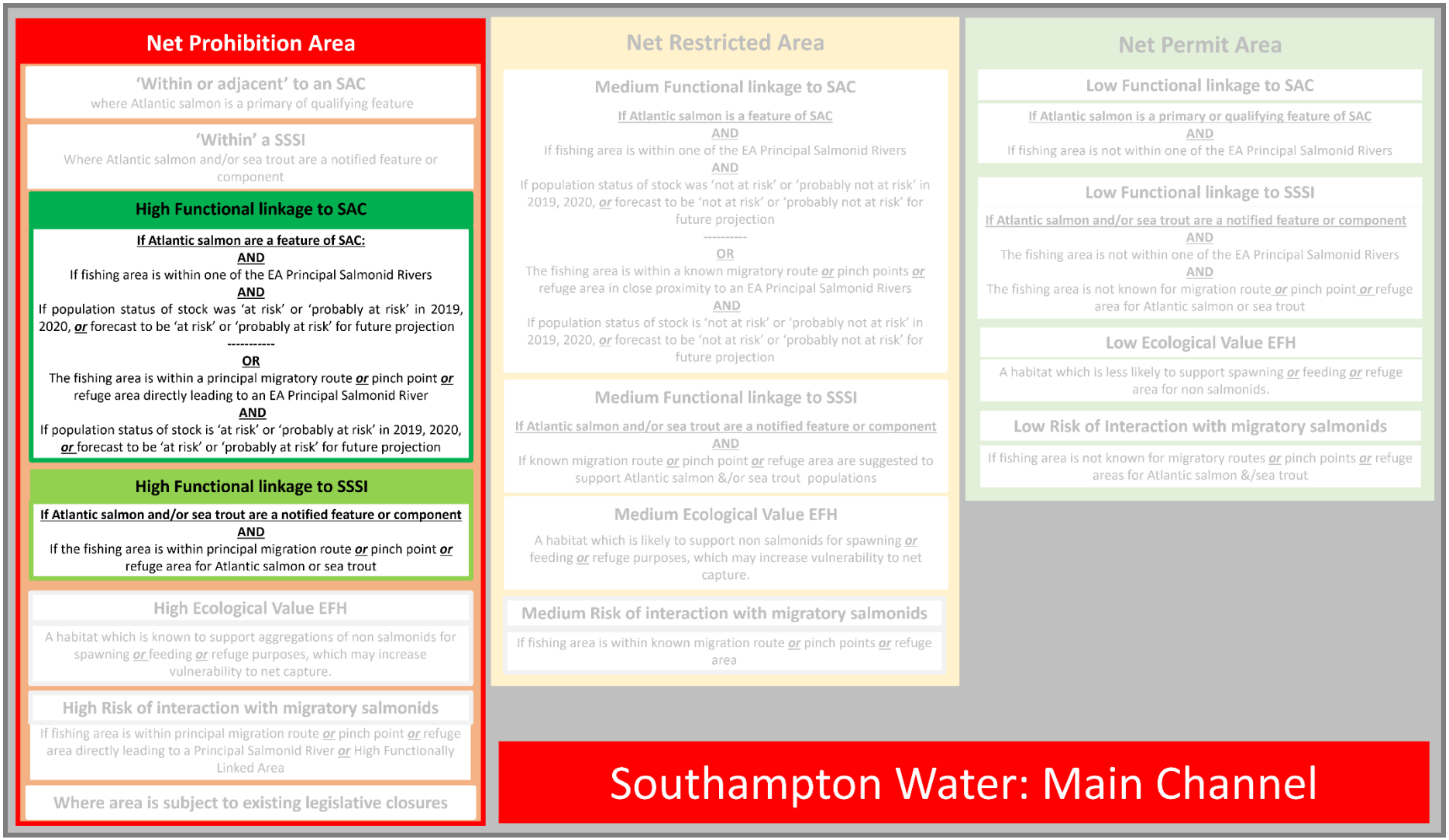
Southampton Water: River Itchen



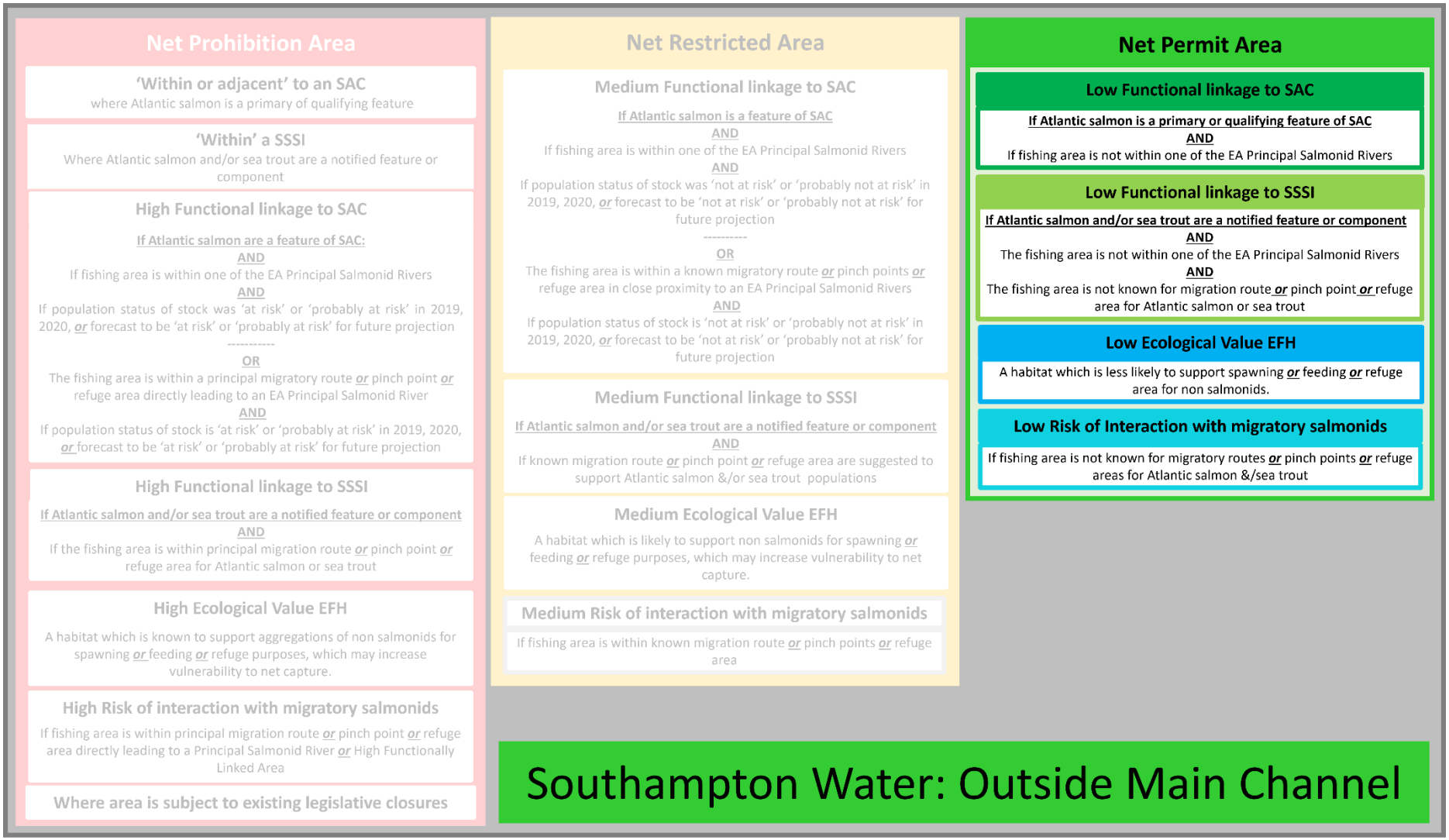
Southampton Water: River Test



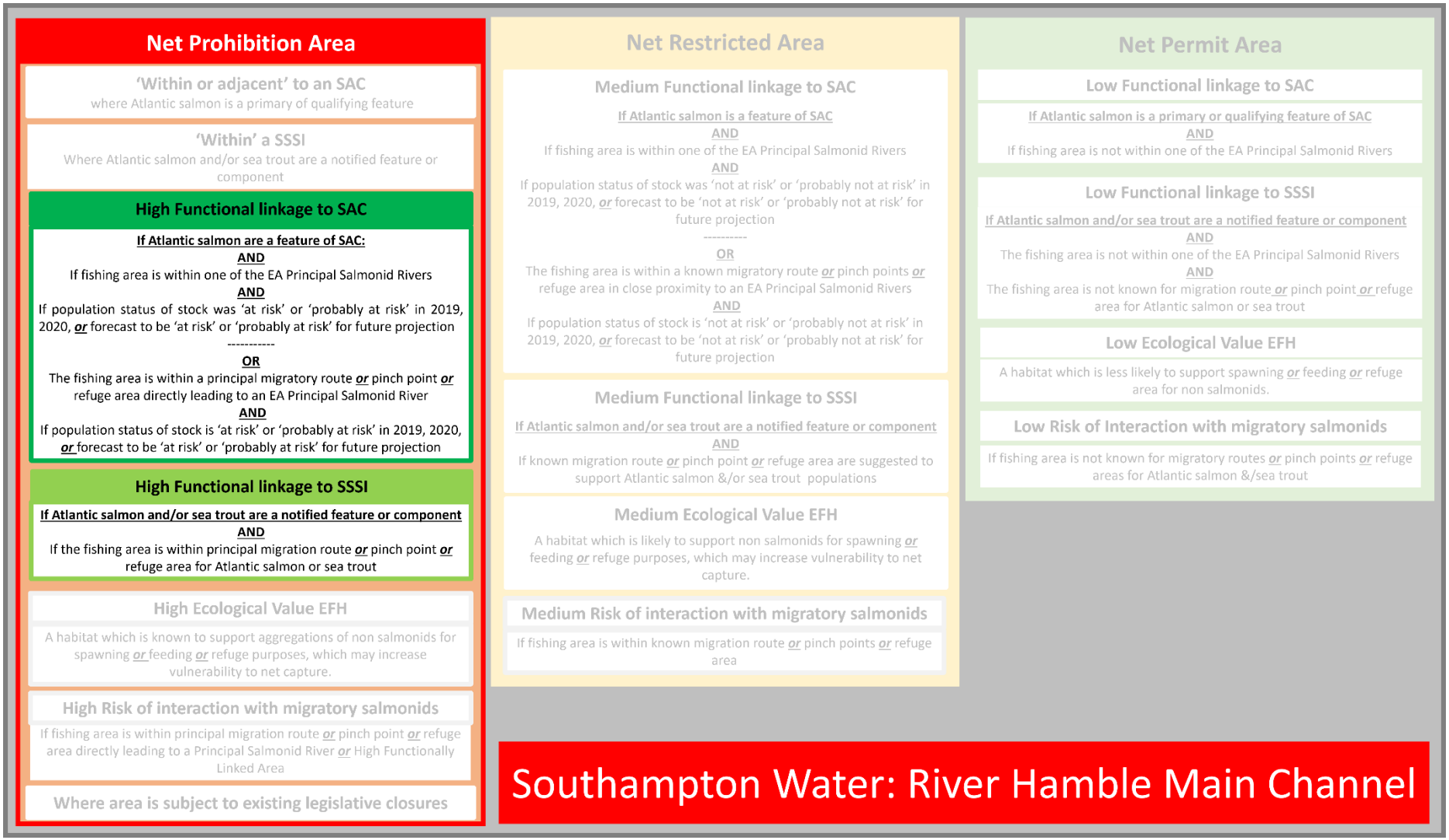
Southampton Water: Main Channel



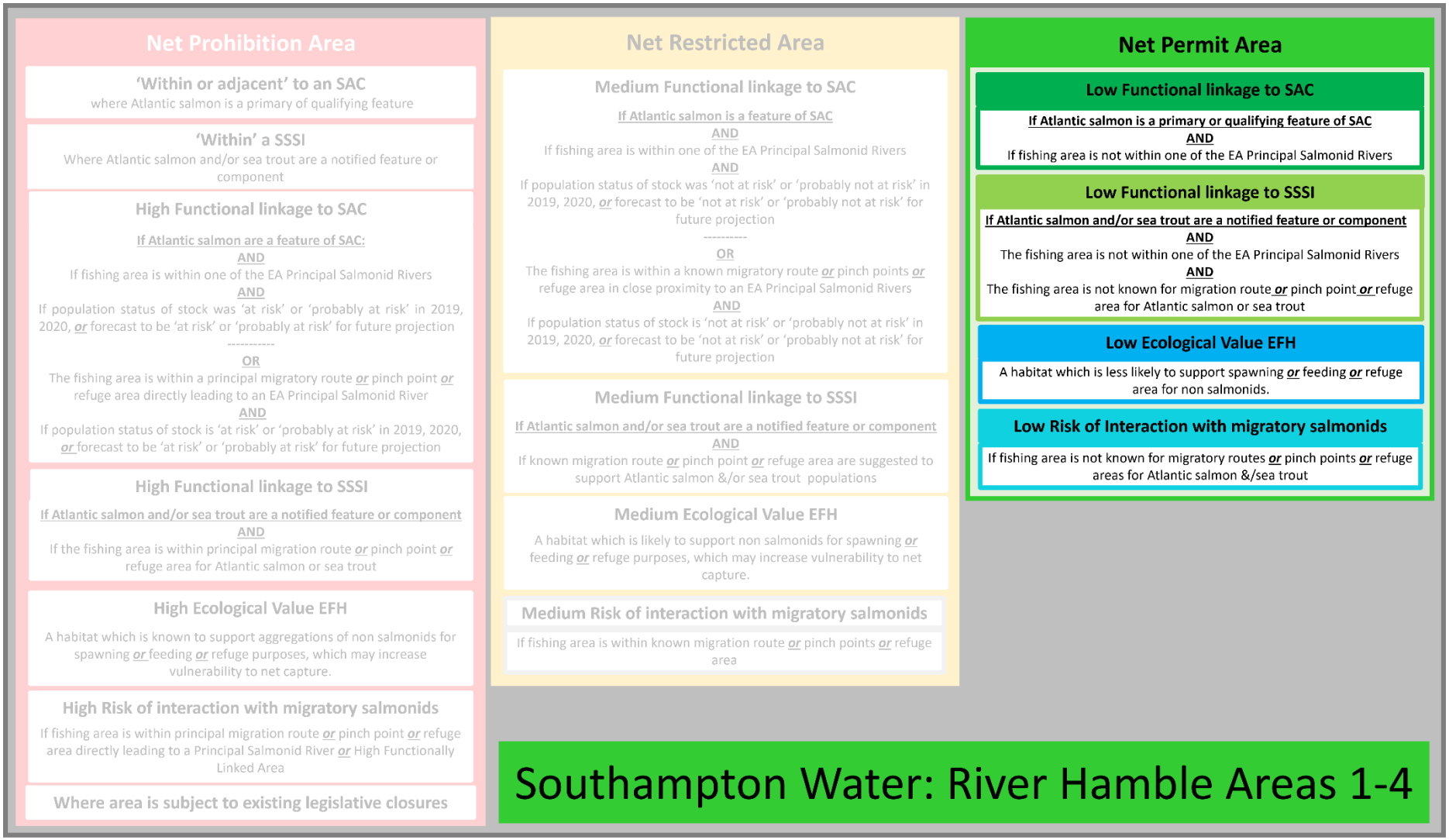
Southampton Water: Outside Main Channel



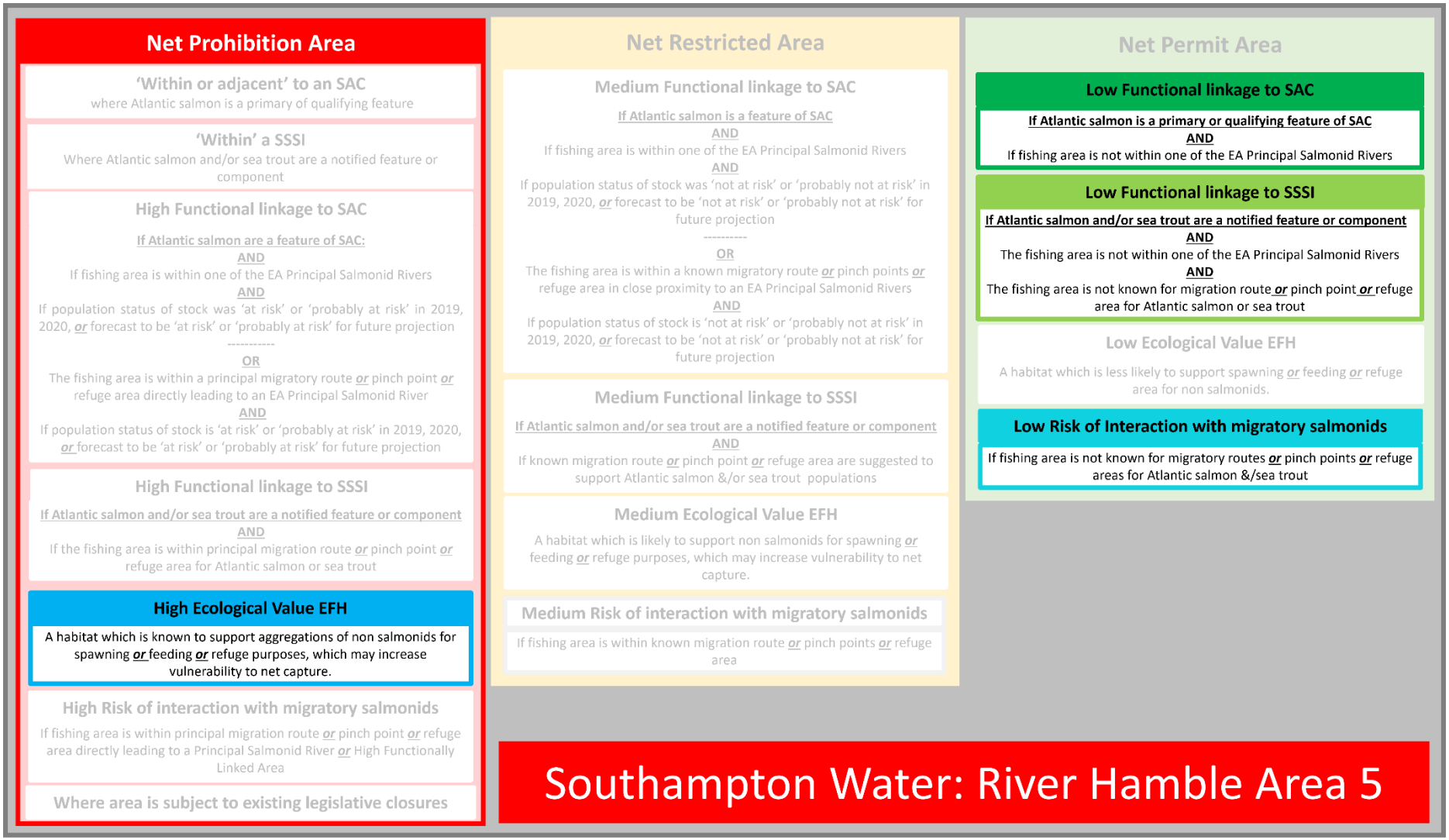
Southampton Water: River Hamble Main Channel



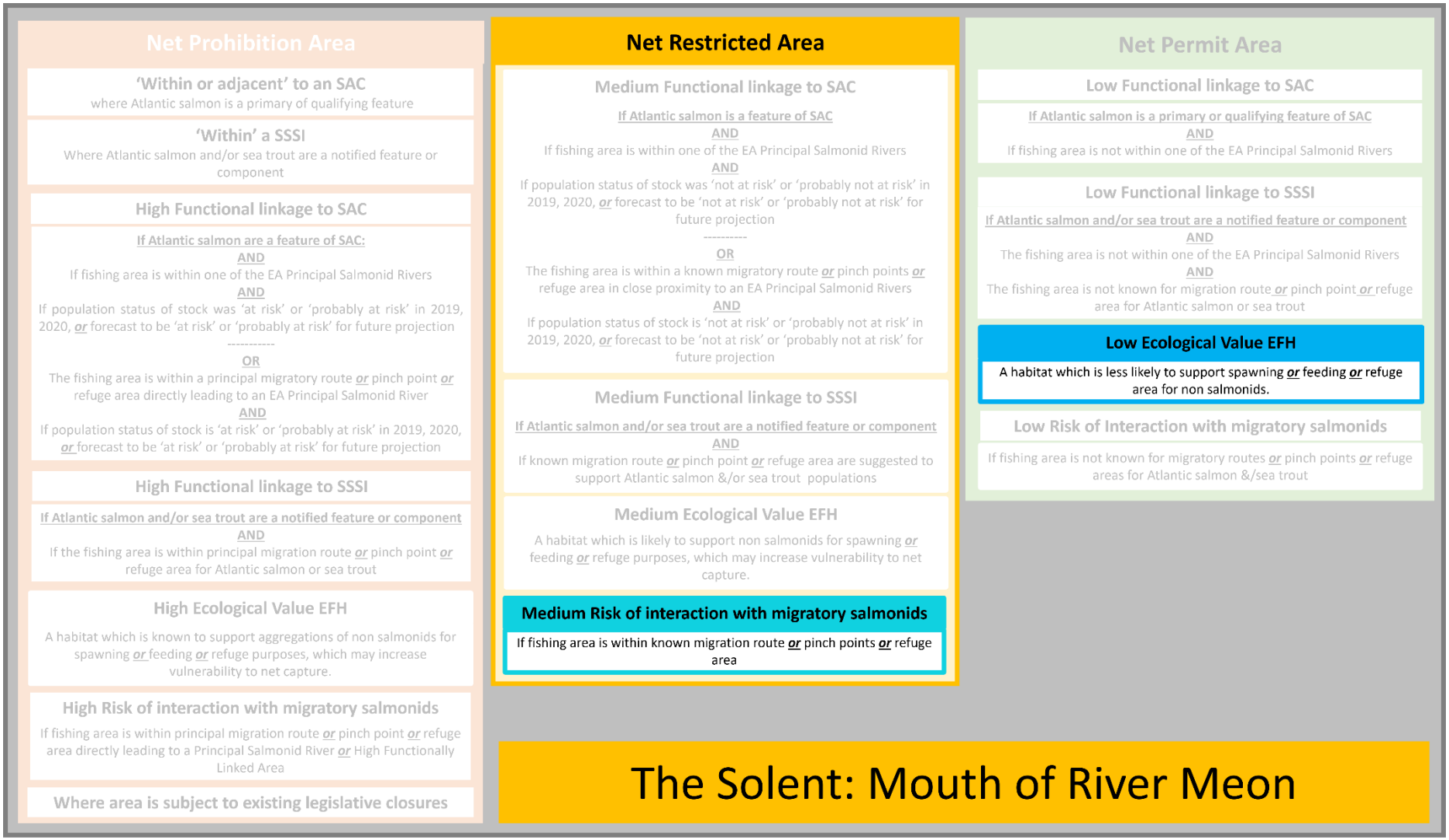
Southampton Water: River Hamble Areas 1-4



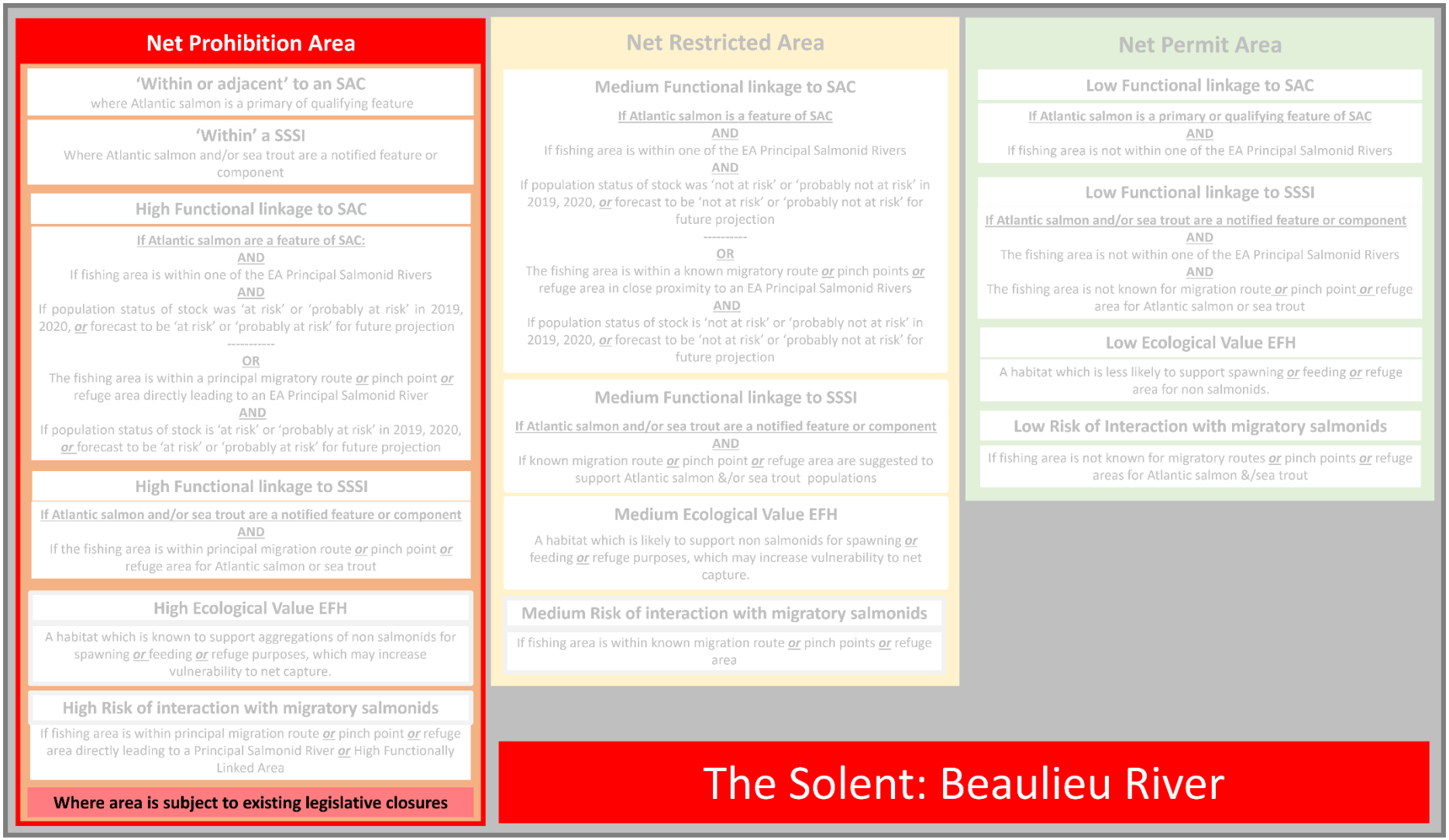
Southampton Water: River Hamble Area 5



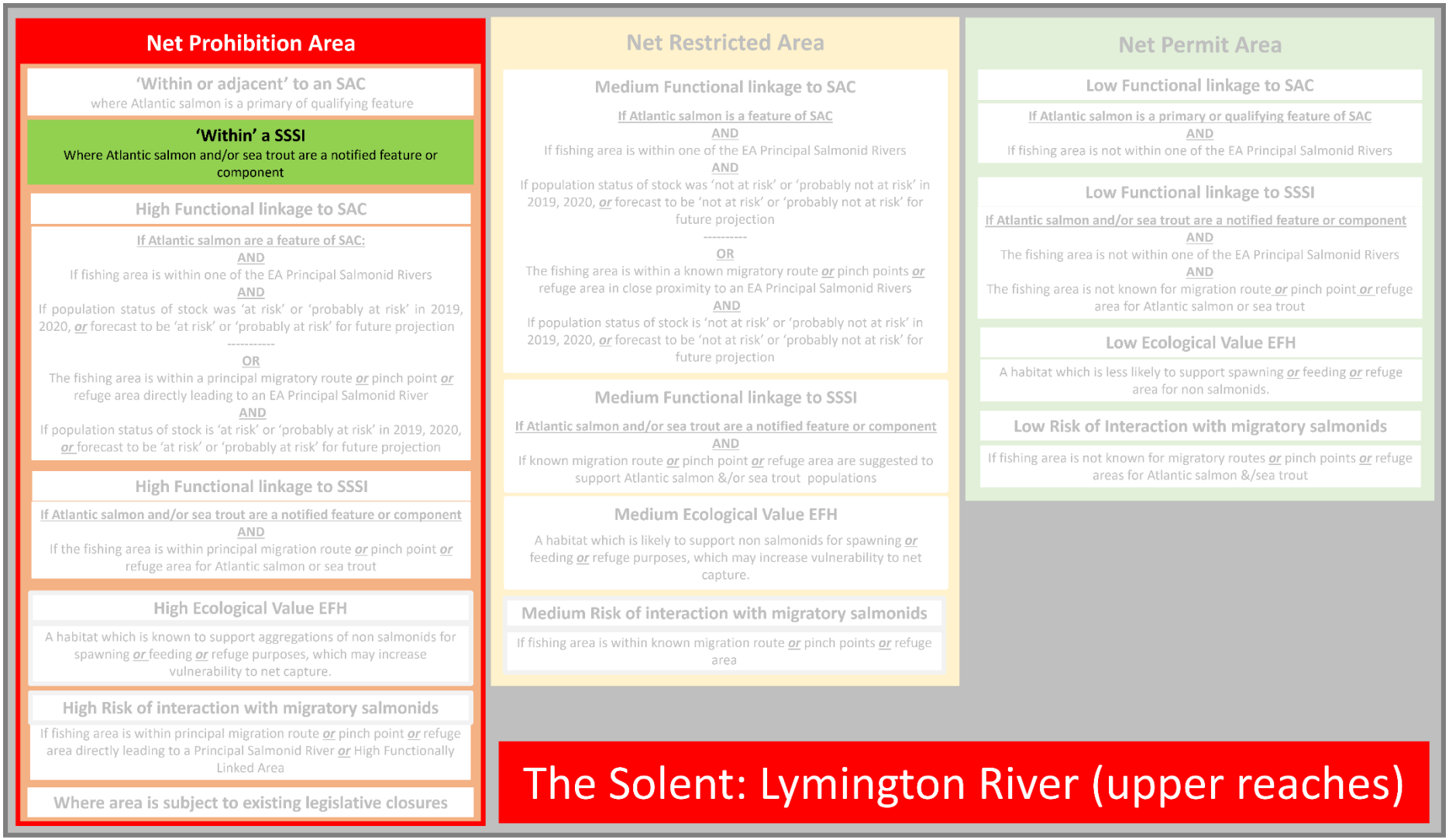
The Solent: Mouth of River Meon



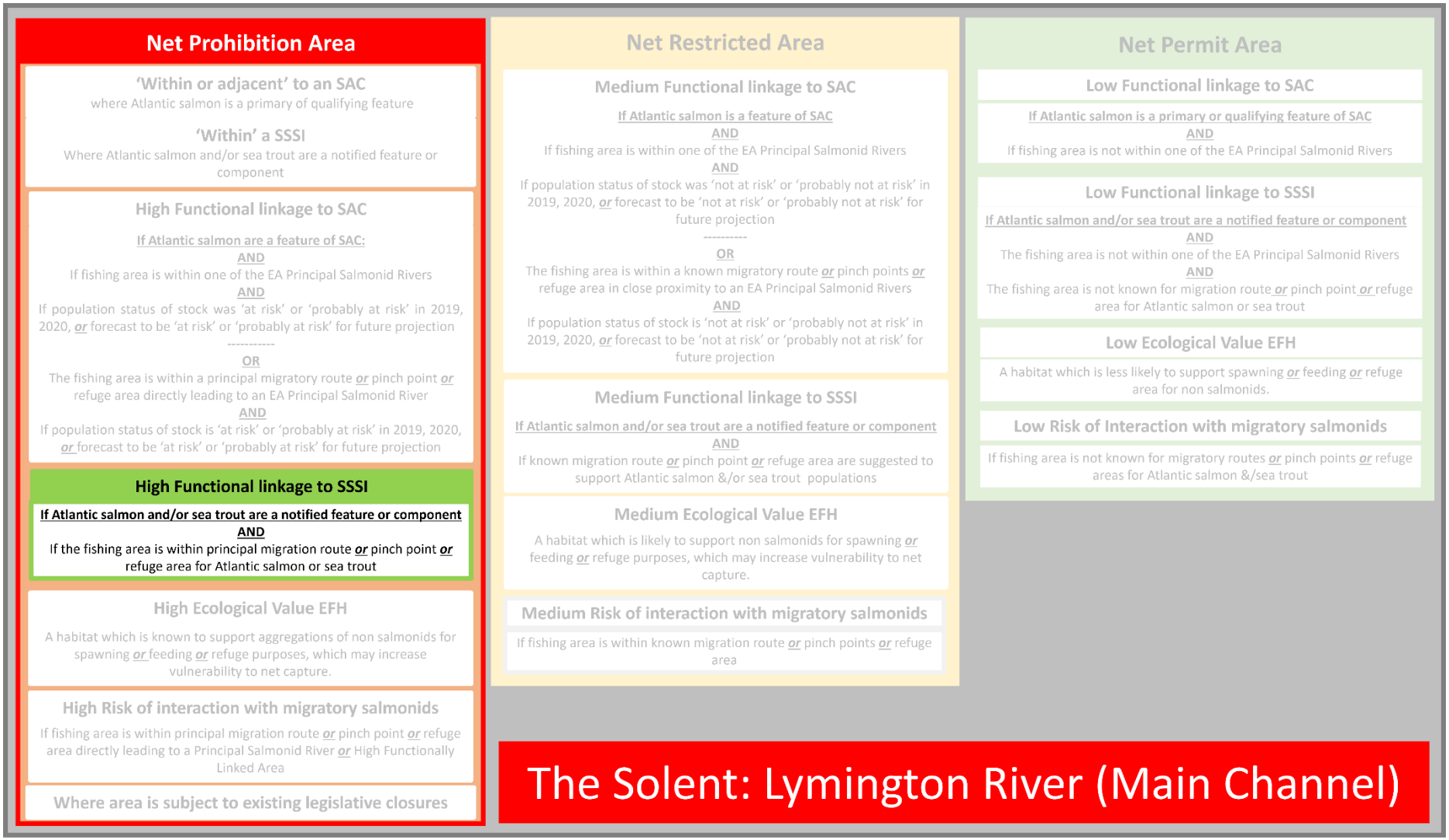
The Solent: Beaulieu River



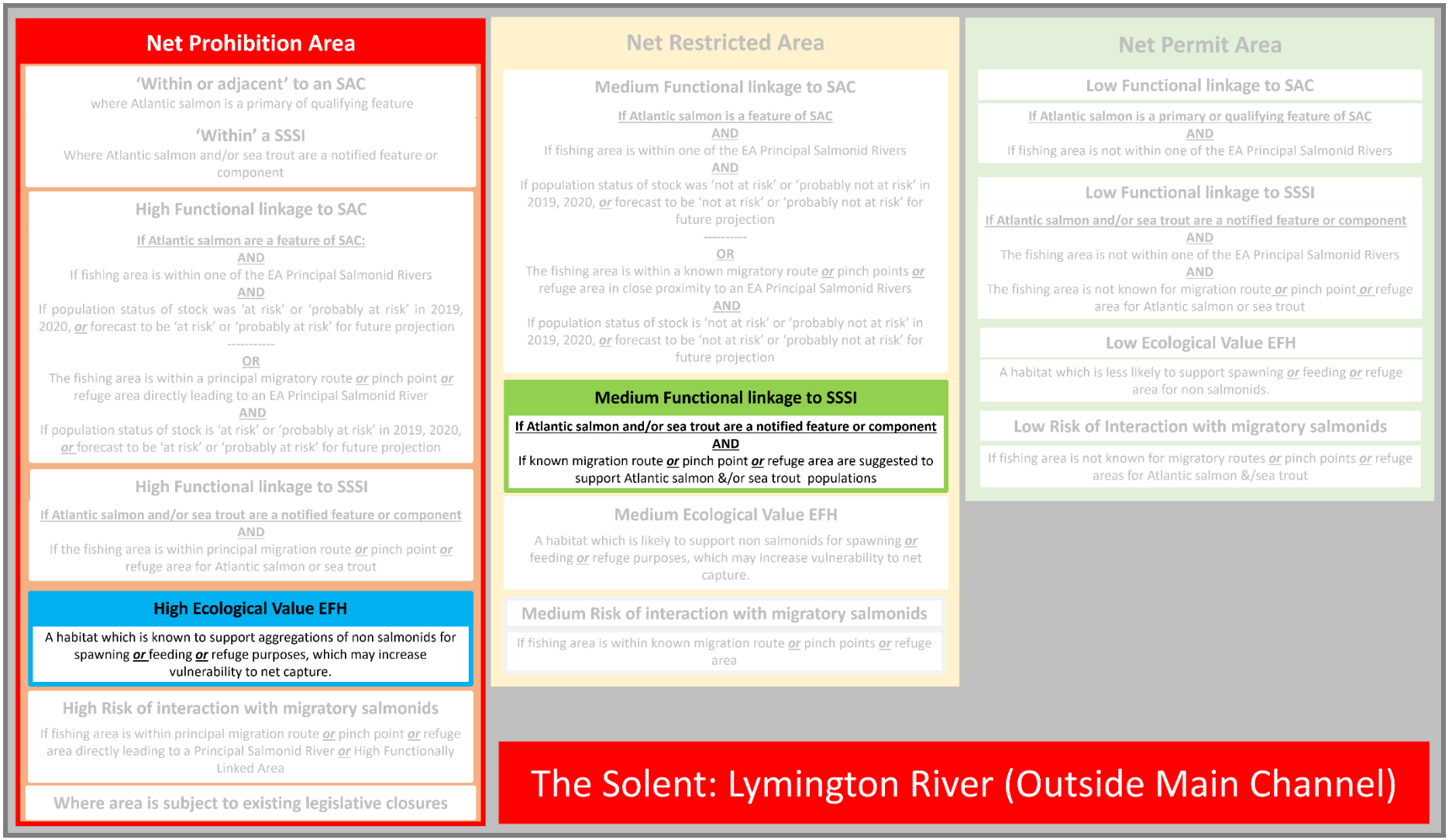
The Solent: Lymington River (upper reaches)



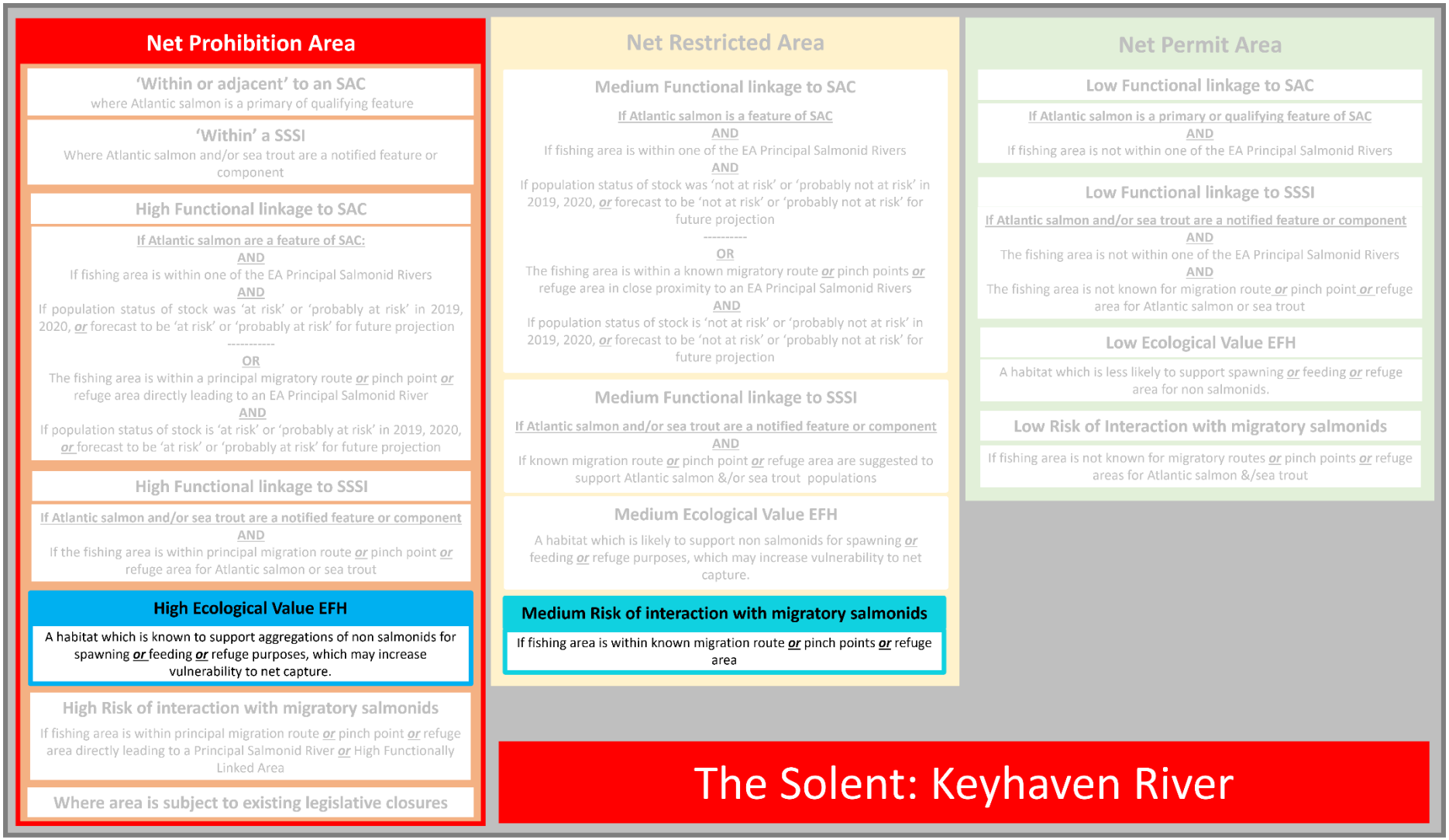
The Solent: Lymington River Main Channel



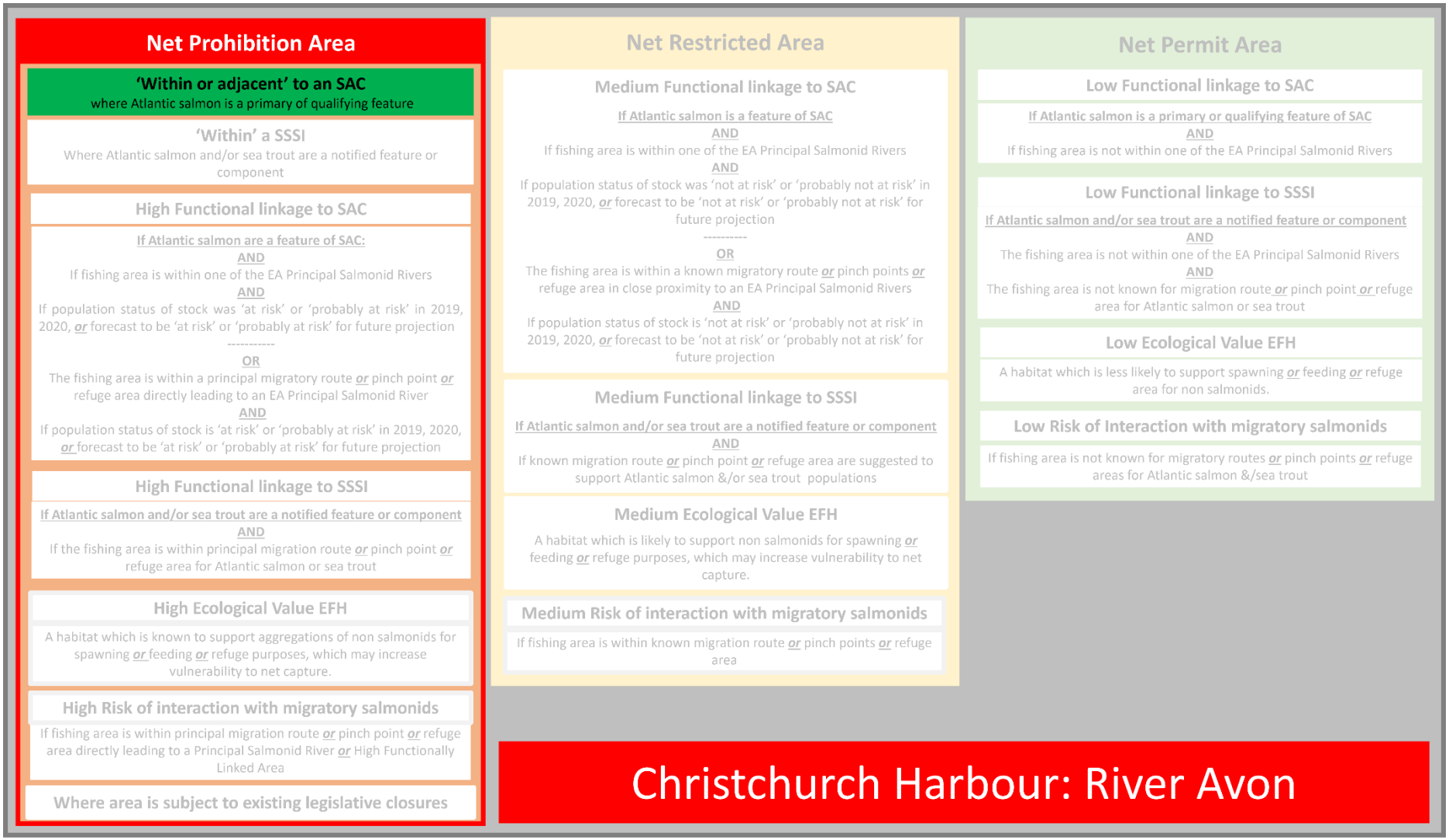
The Solent: Lymington River Outside Main Channel



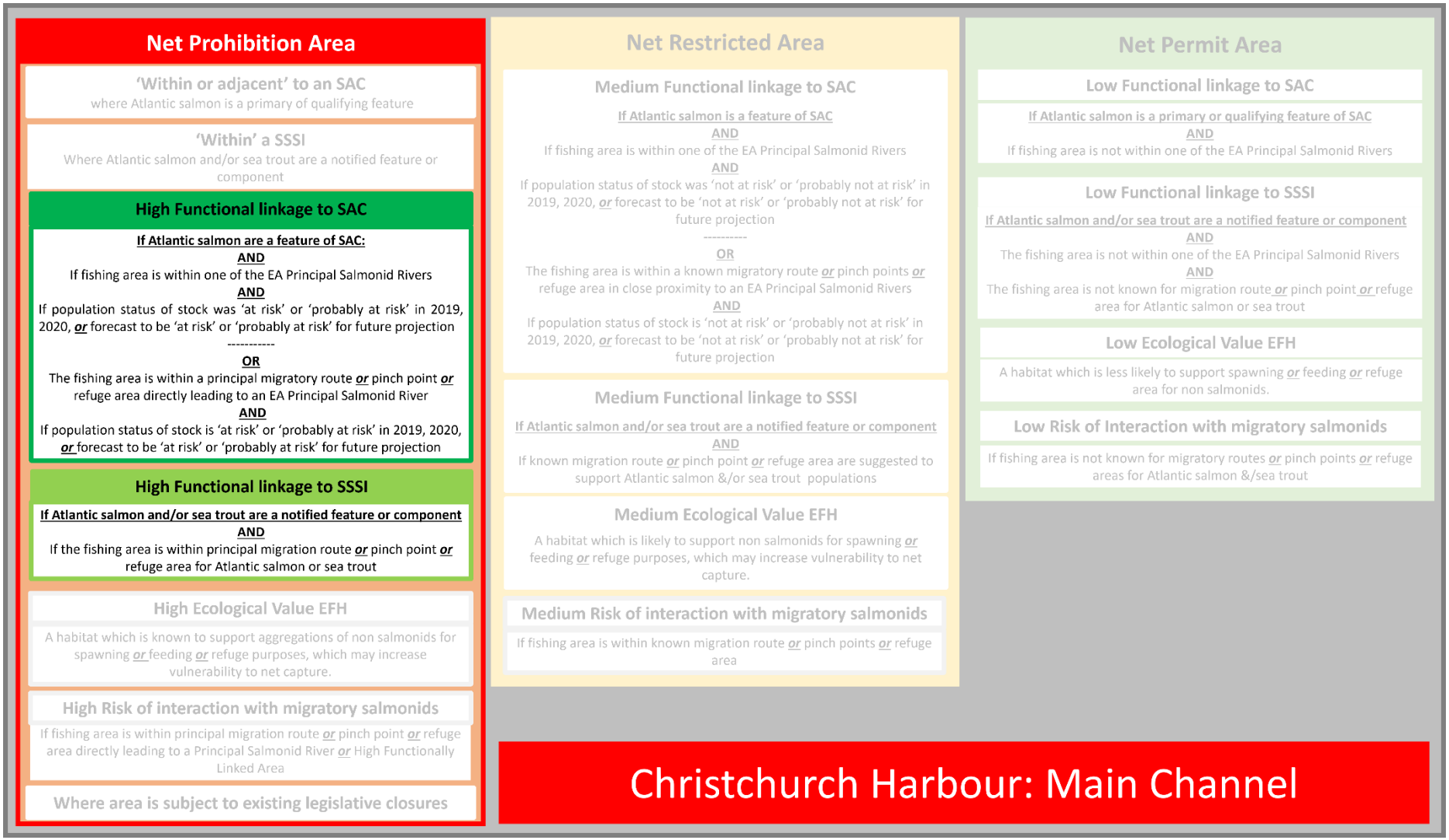
The Solent: Keyhaven River



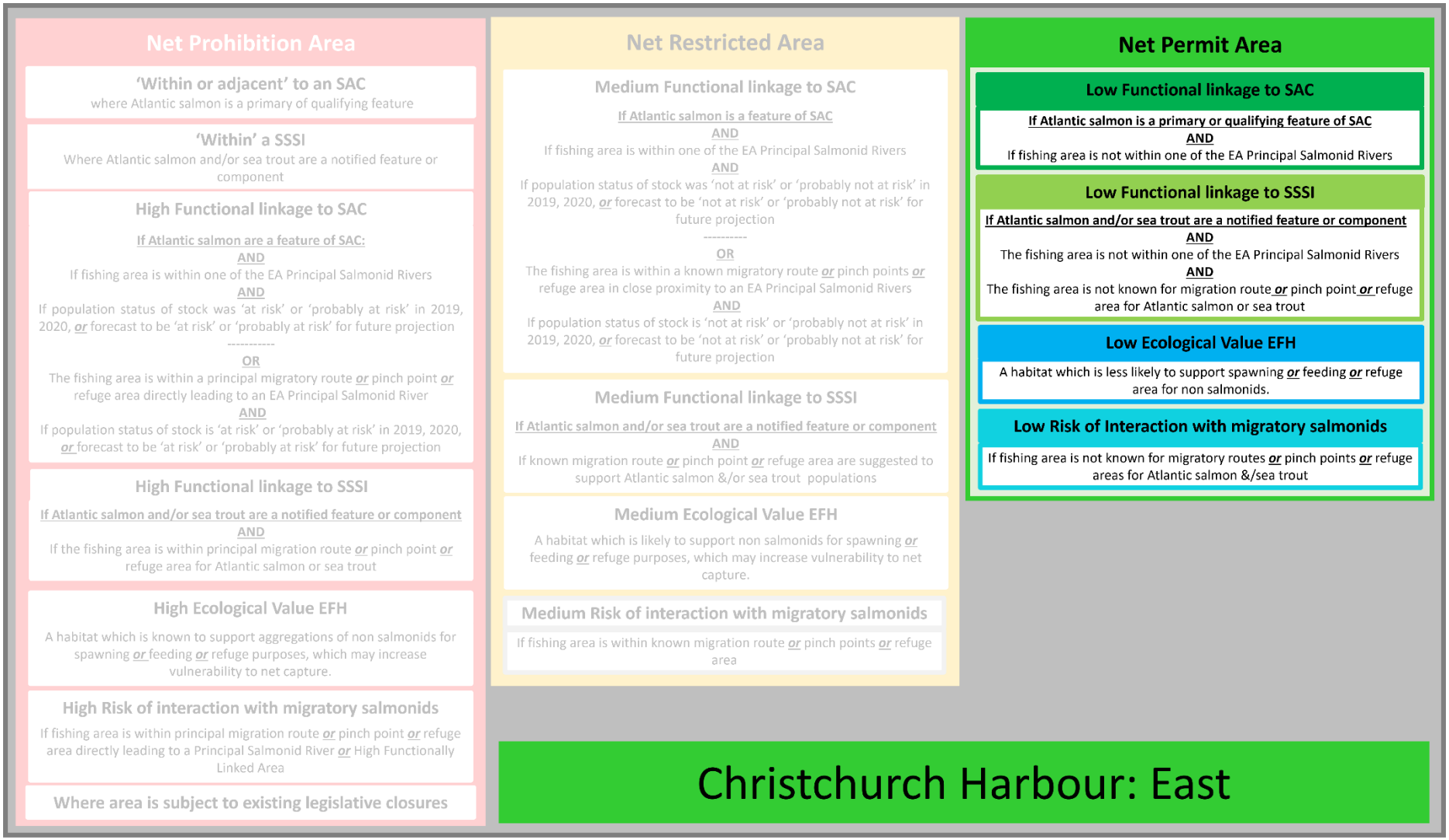
Christchurch Harbour: River Avon



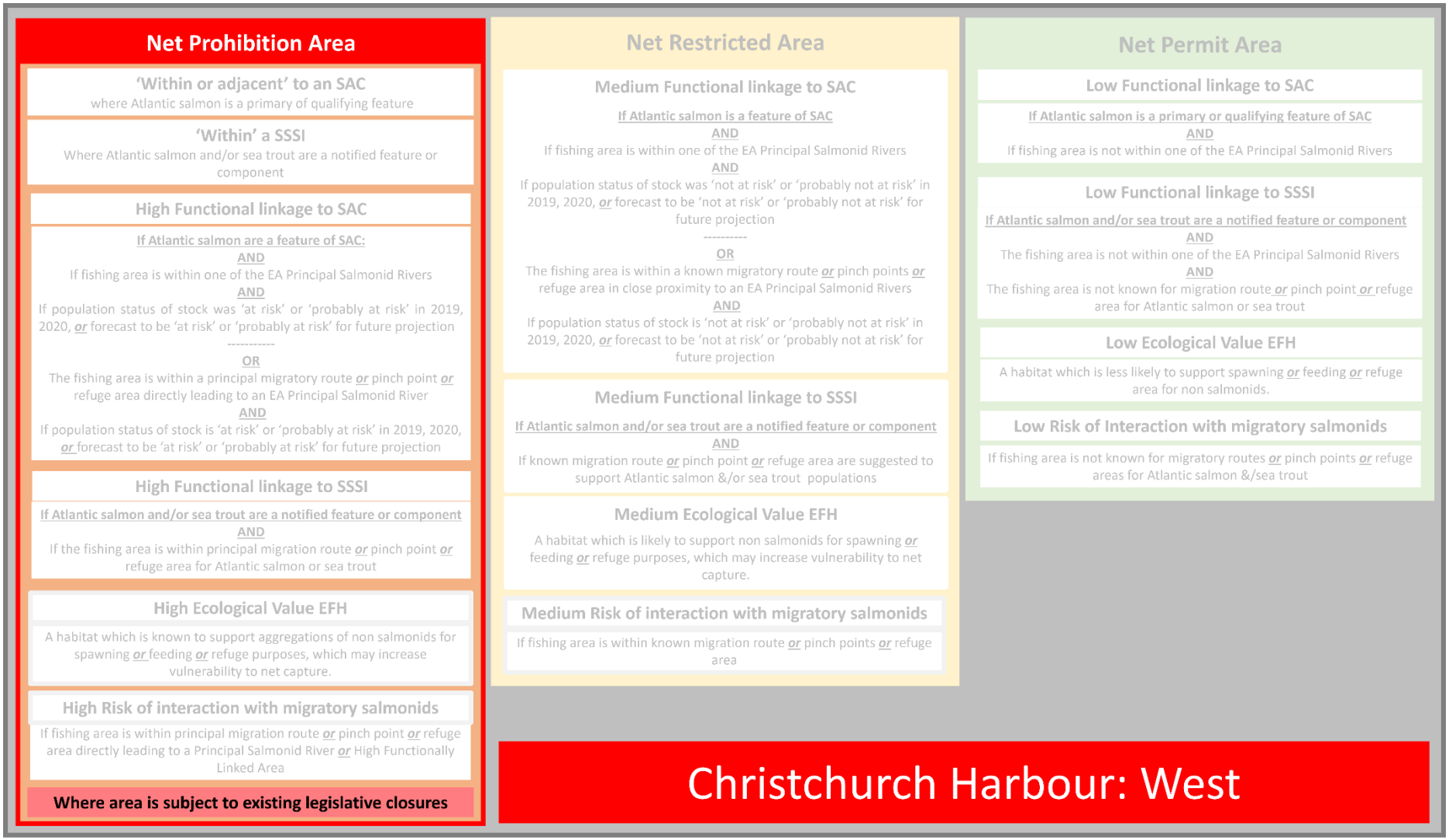
Christchurch Harbour: Main Channel



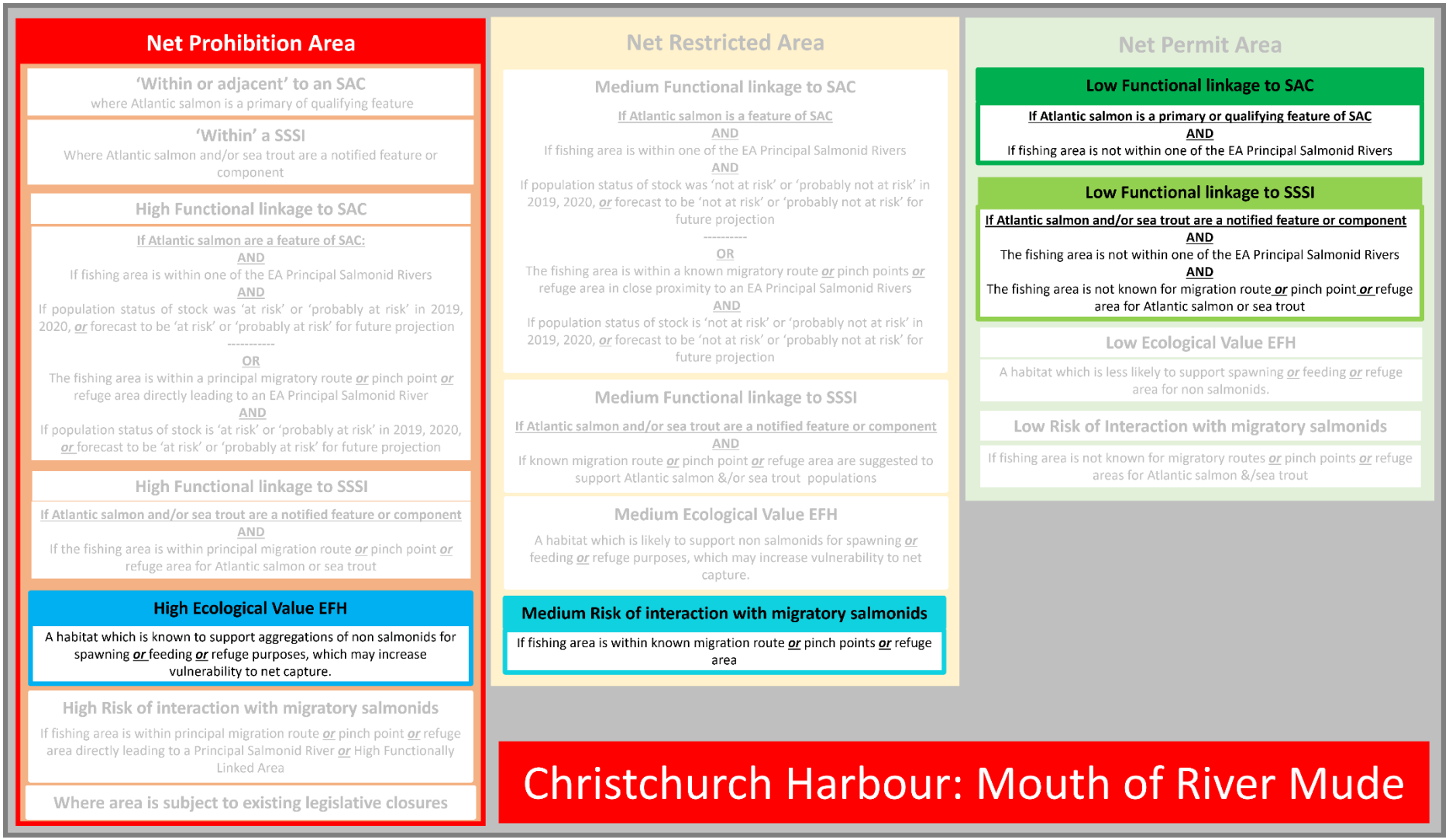
Christchurch Harbour: East



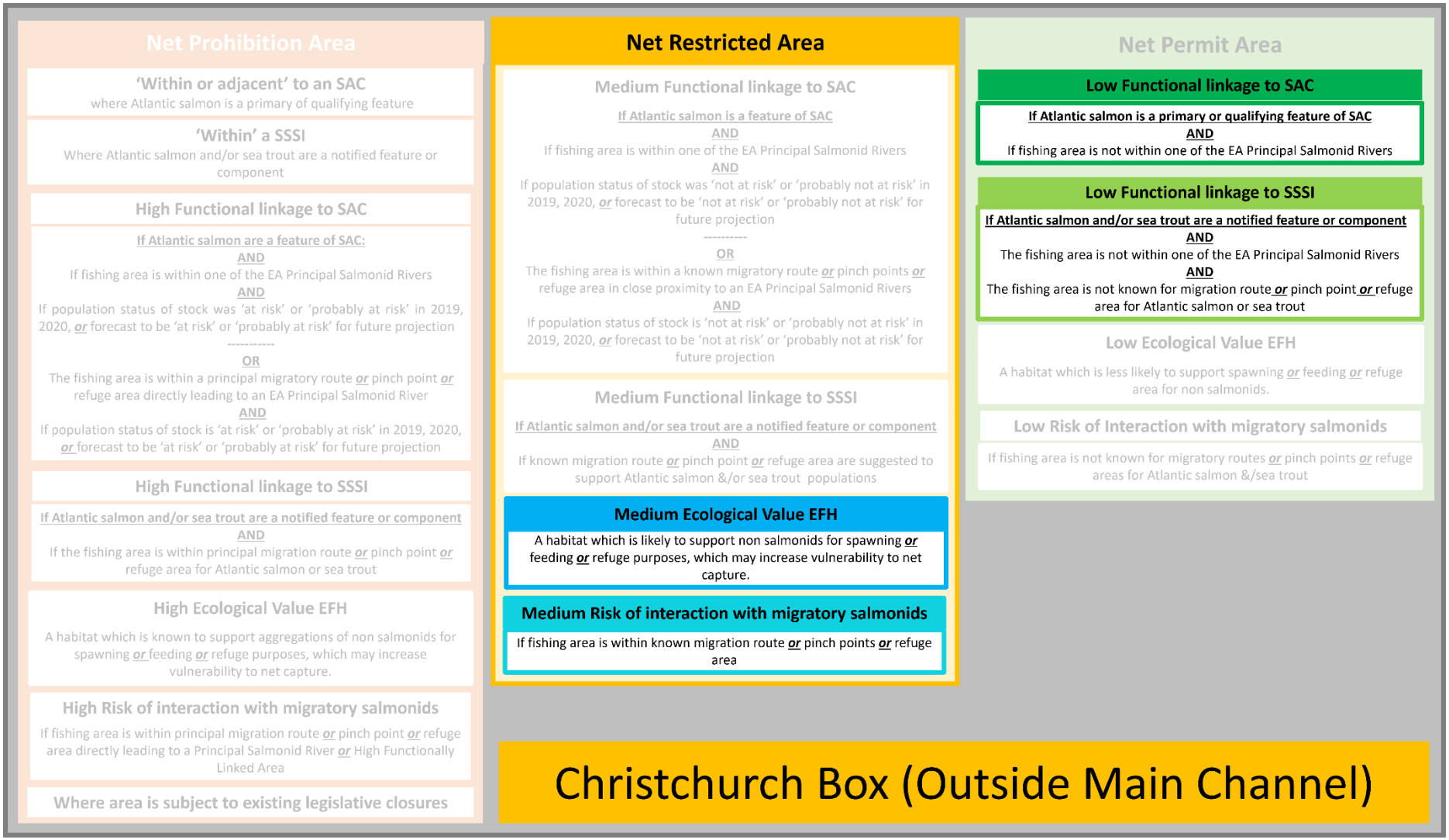
Christchurch Harbour: West



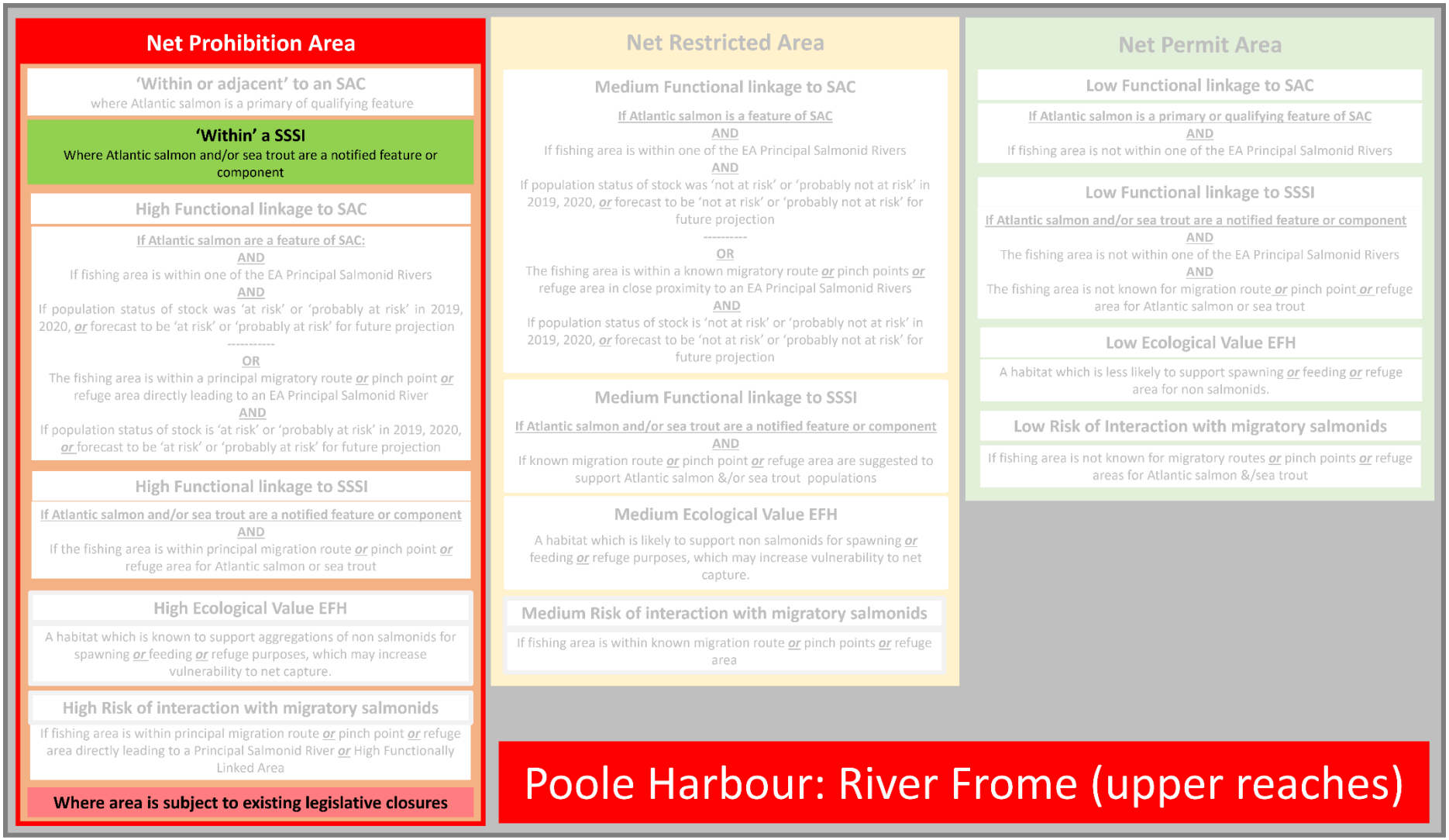
Christchurch Harbour: Mouth of River Mude



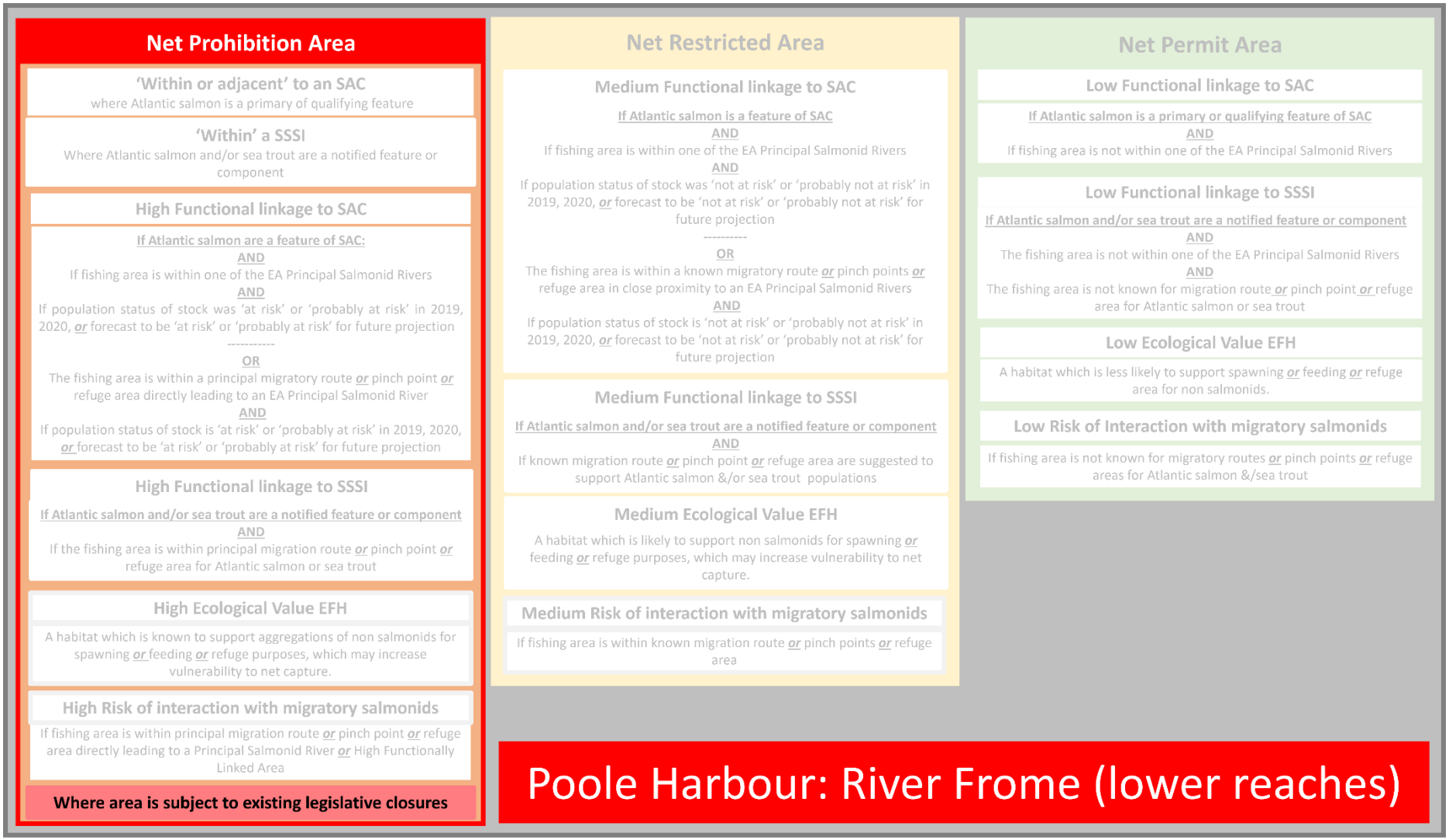
Christchurch Box: Outside Main Channel



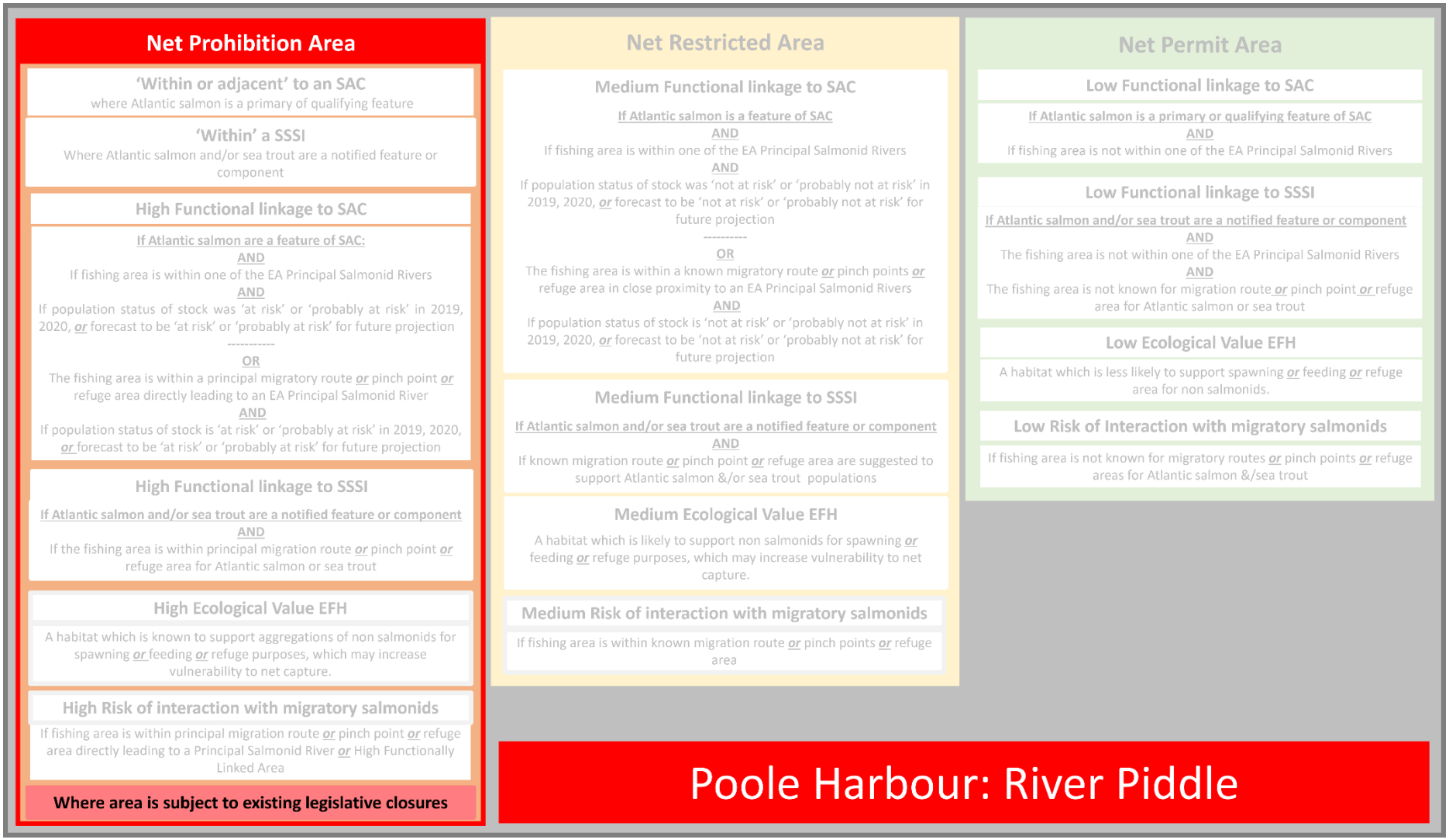
Poole Harbour: River Frome (upper reaches)



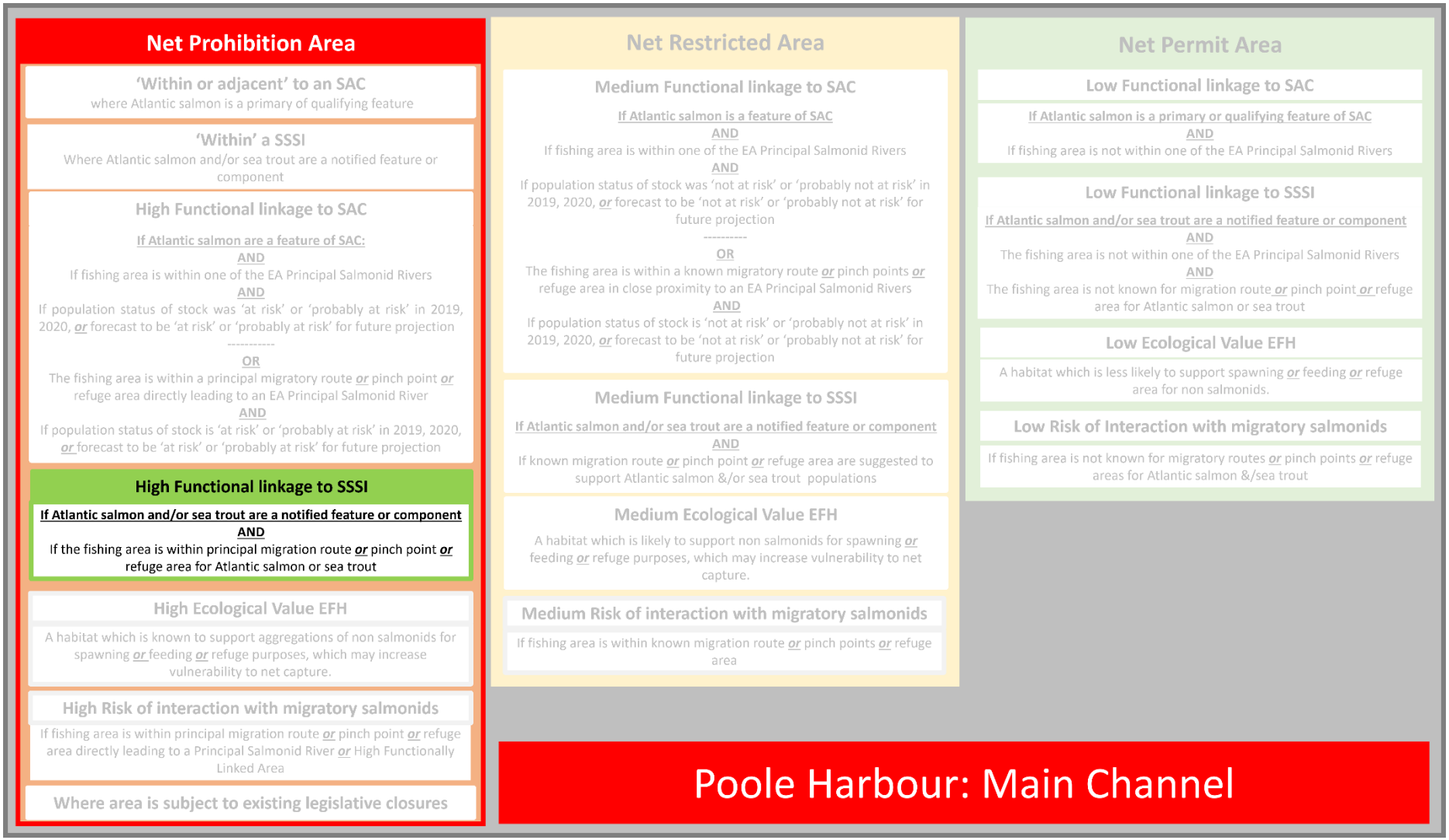
Poole Harbour: River Frome (lower reaches)



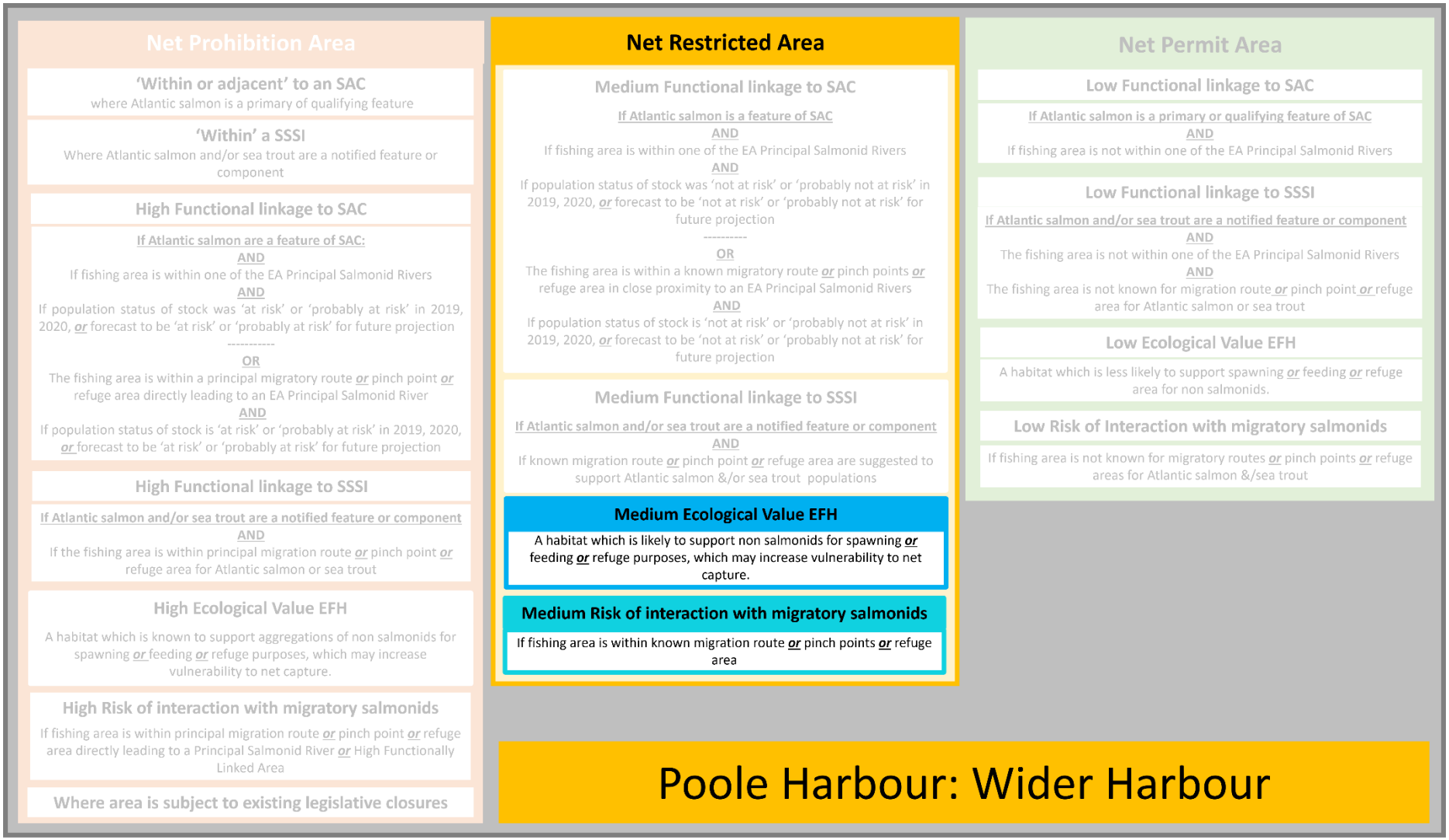
Poole Harbour: River Piddle



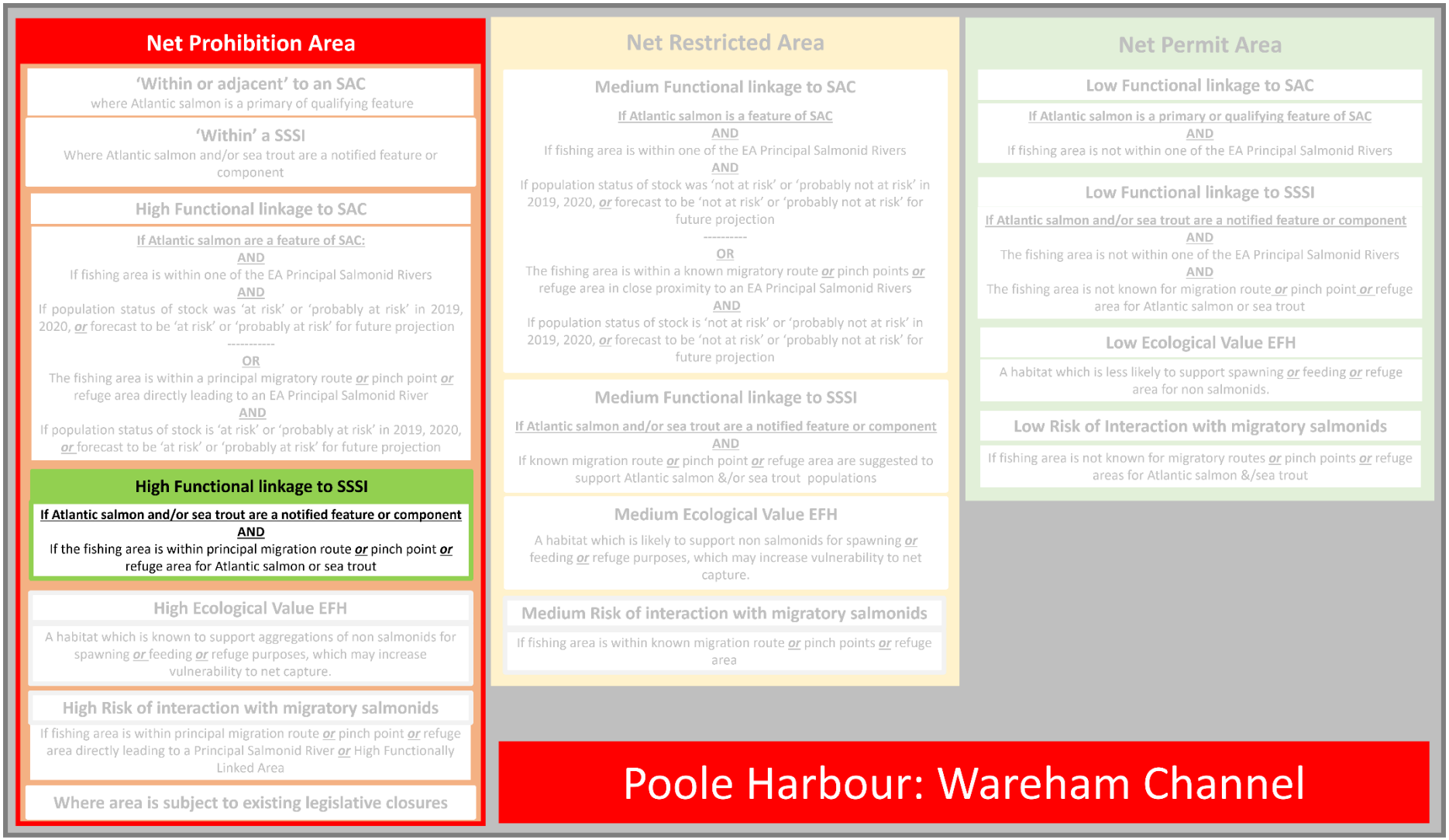
Poole Harbour: Main Channel



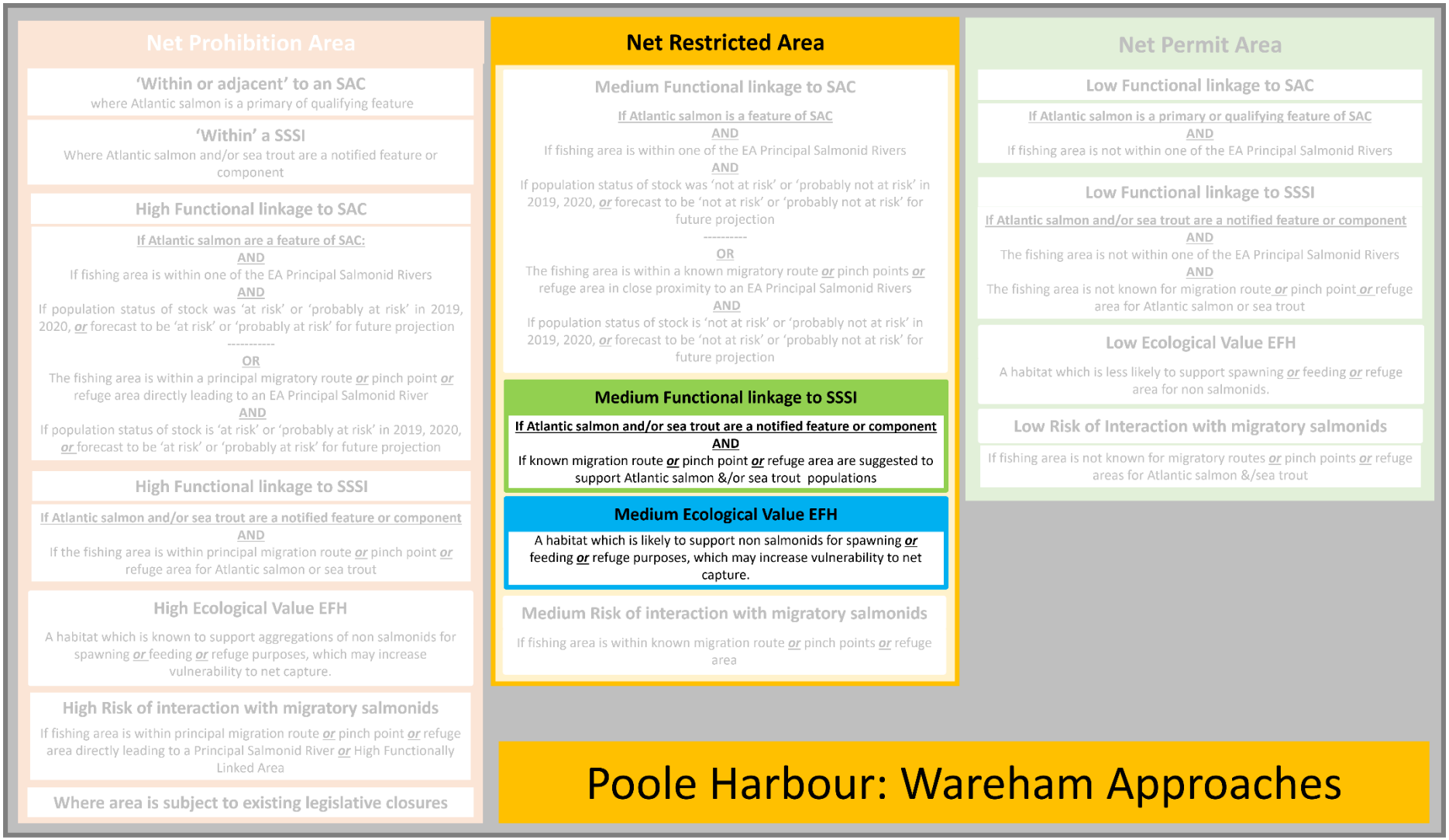
Poole Harbour: Wider Harbour



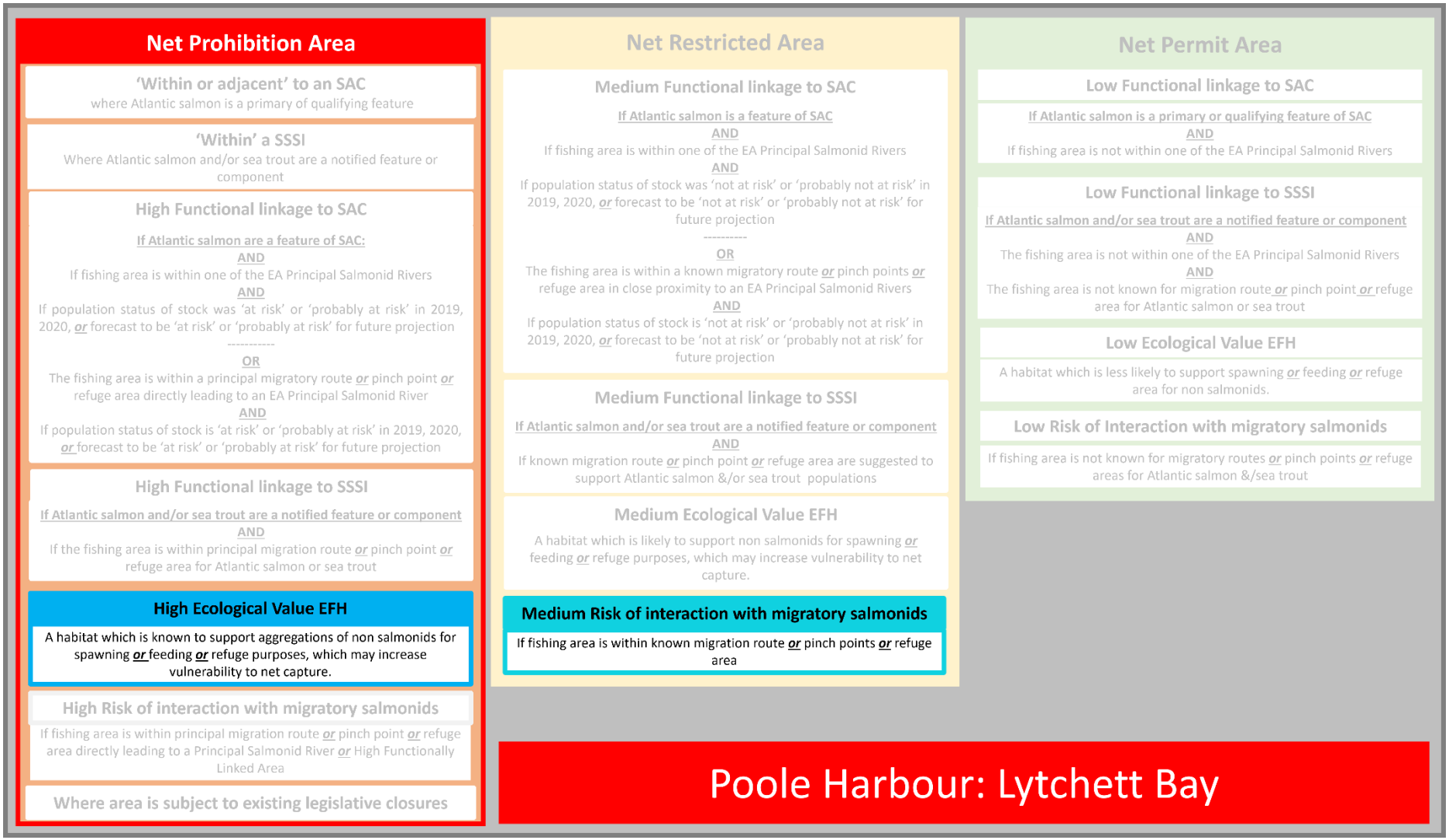
Poole Harbour: Wareham Channel



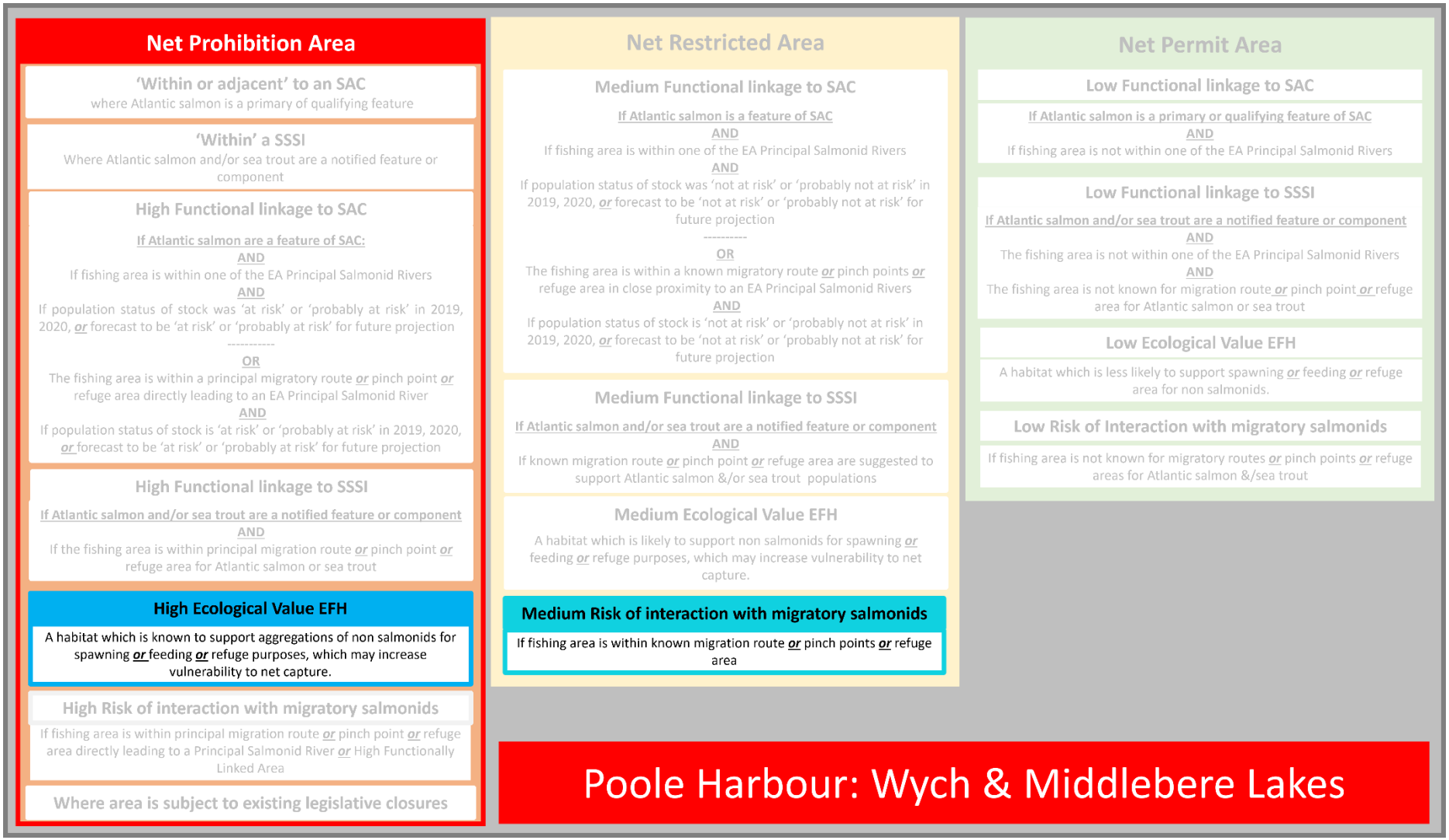
Poole Harbour: Wareham Approaches



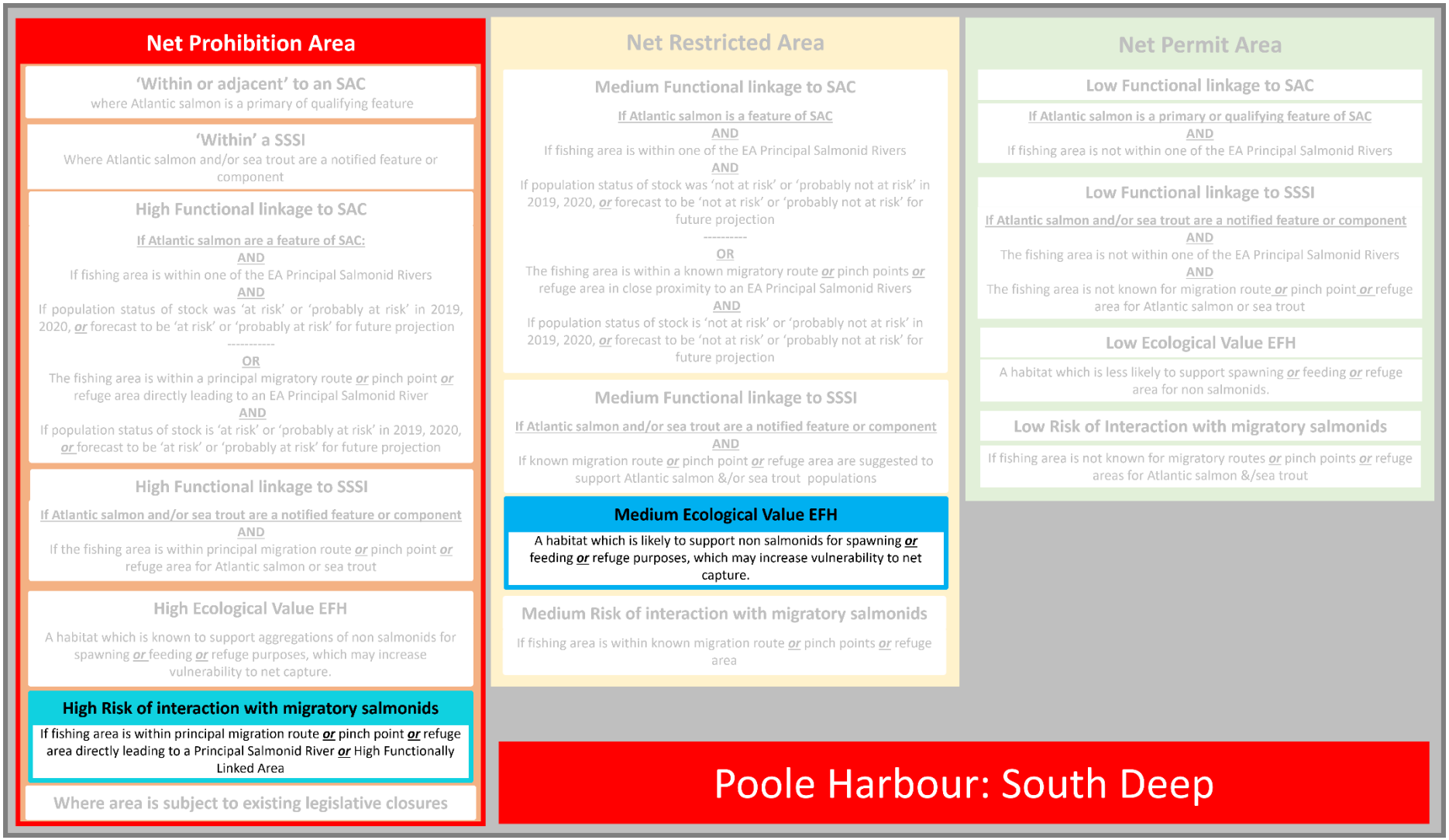
Poole Harbour: Lytchett Bay



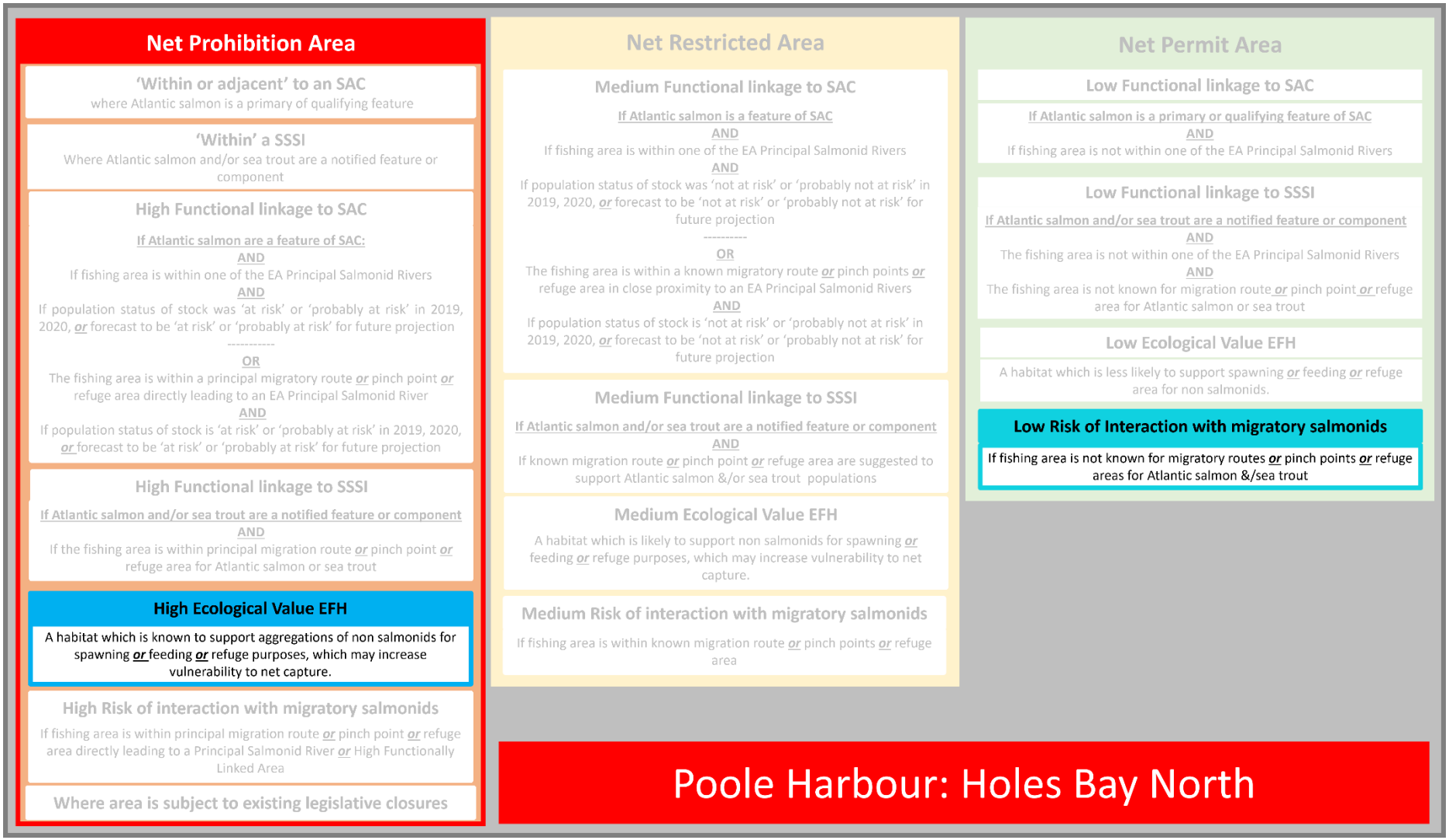
Poole Harbour: Wych and Middlebere Lakes



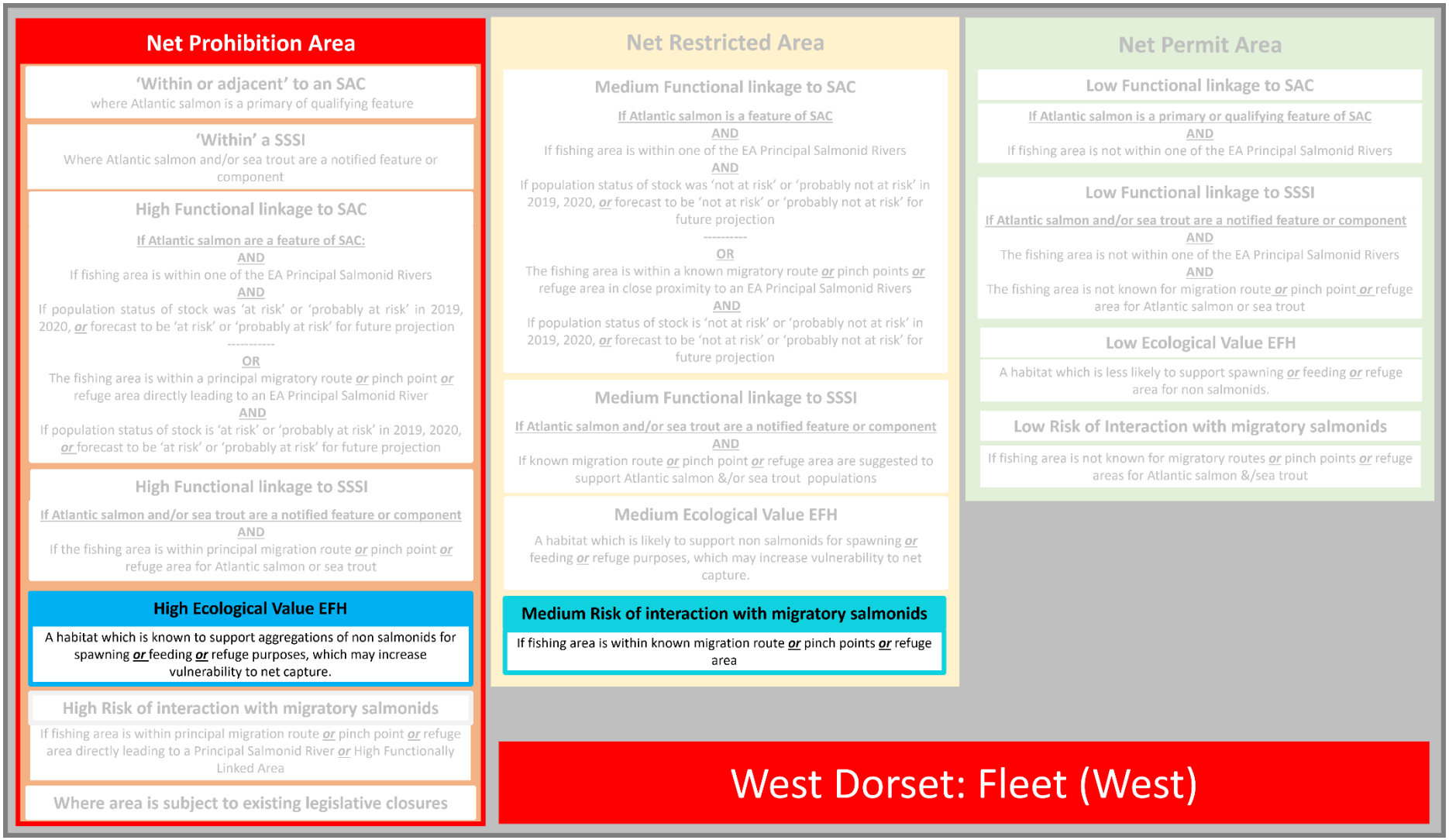
Poole Harbour: South Deep



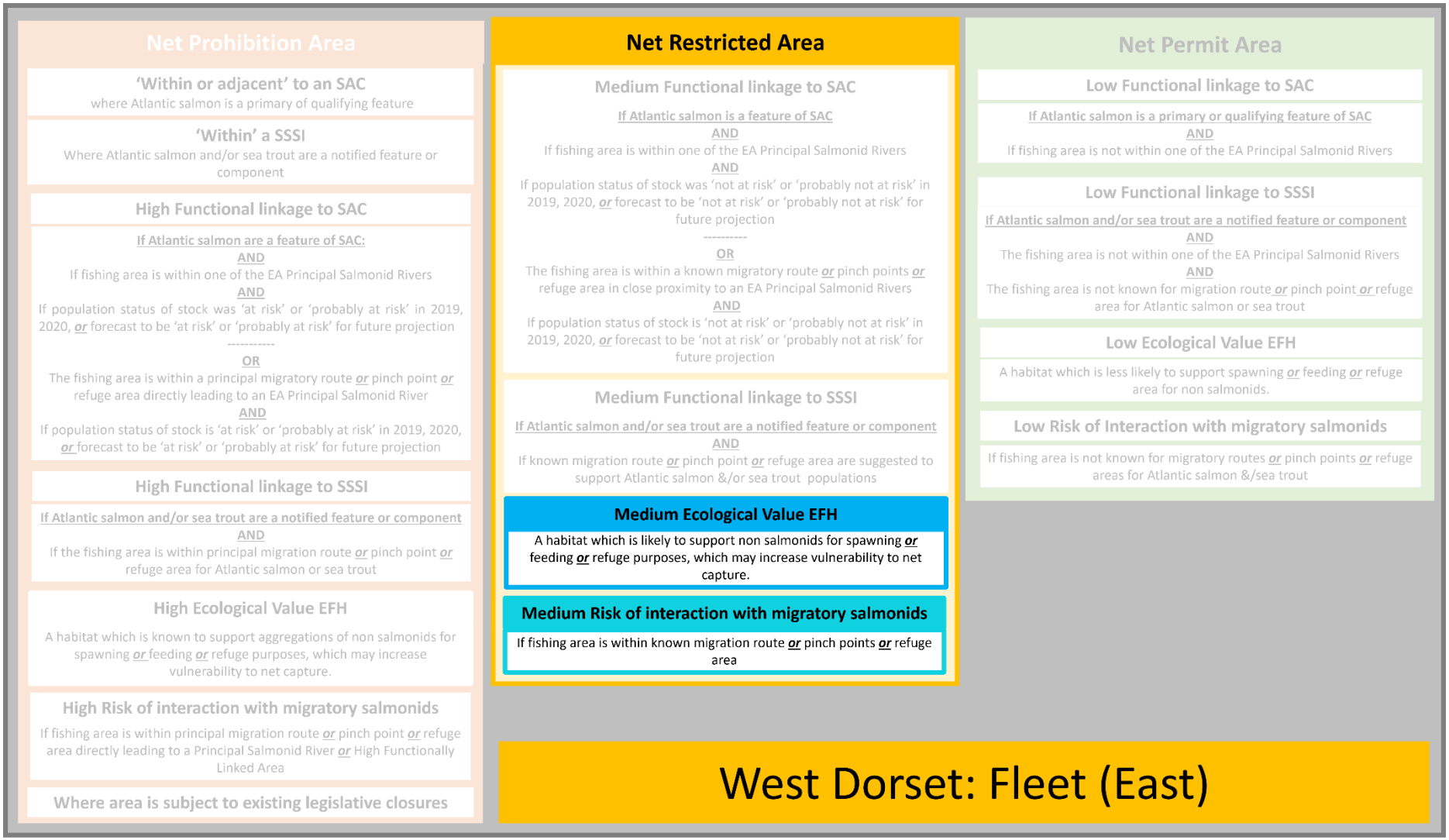
Poole Harbour: Holes Bay North



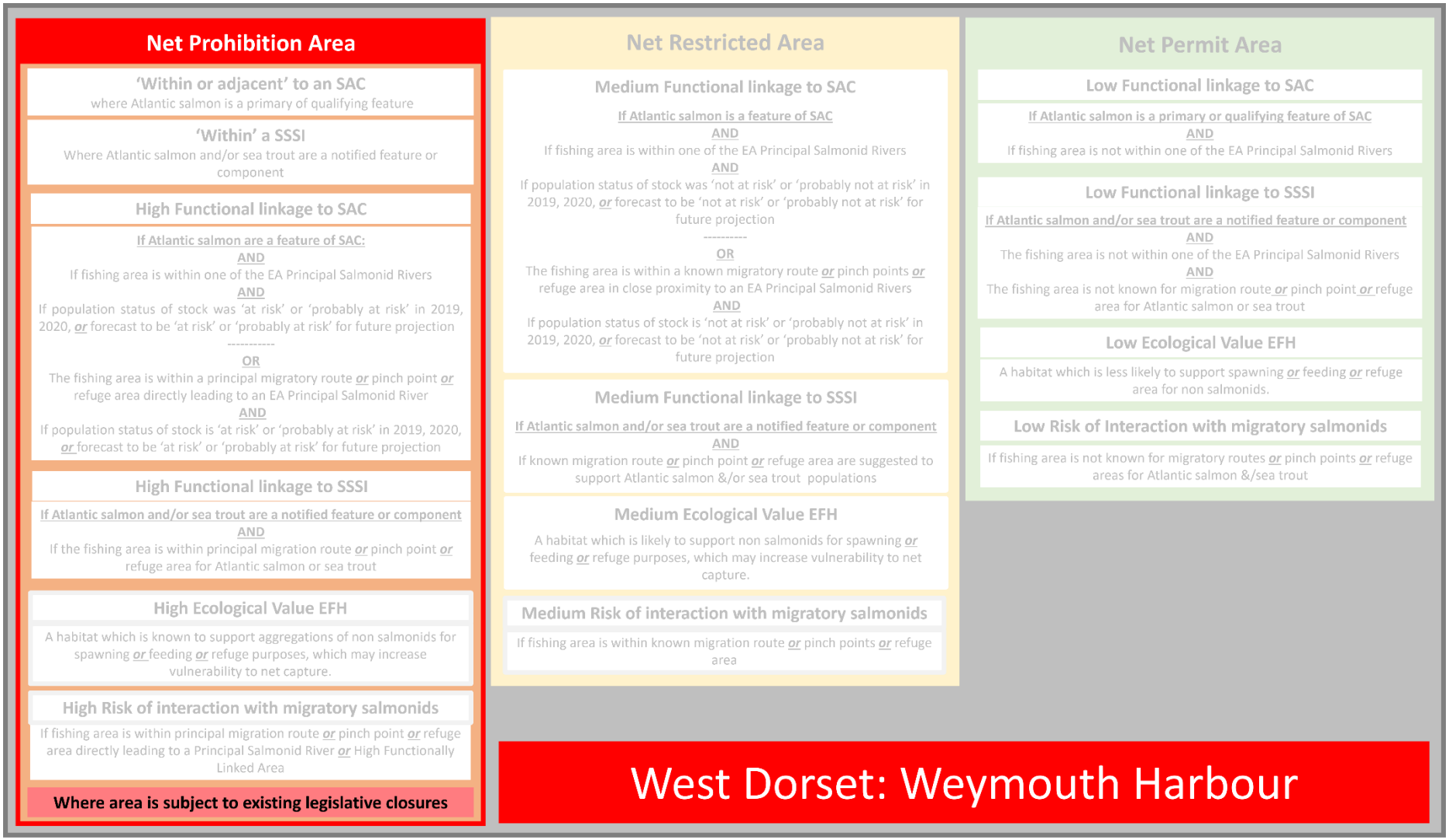
West Dorset: Fleet West



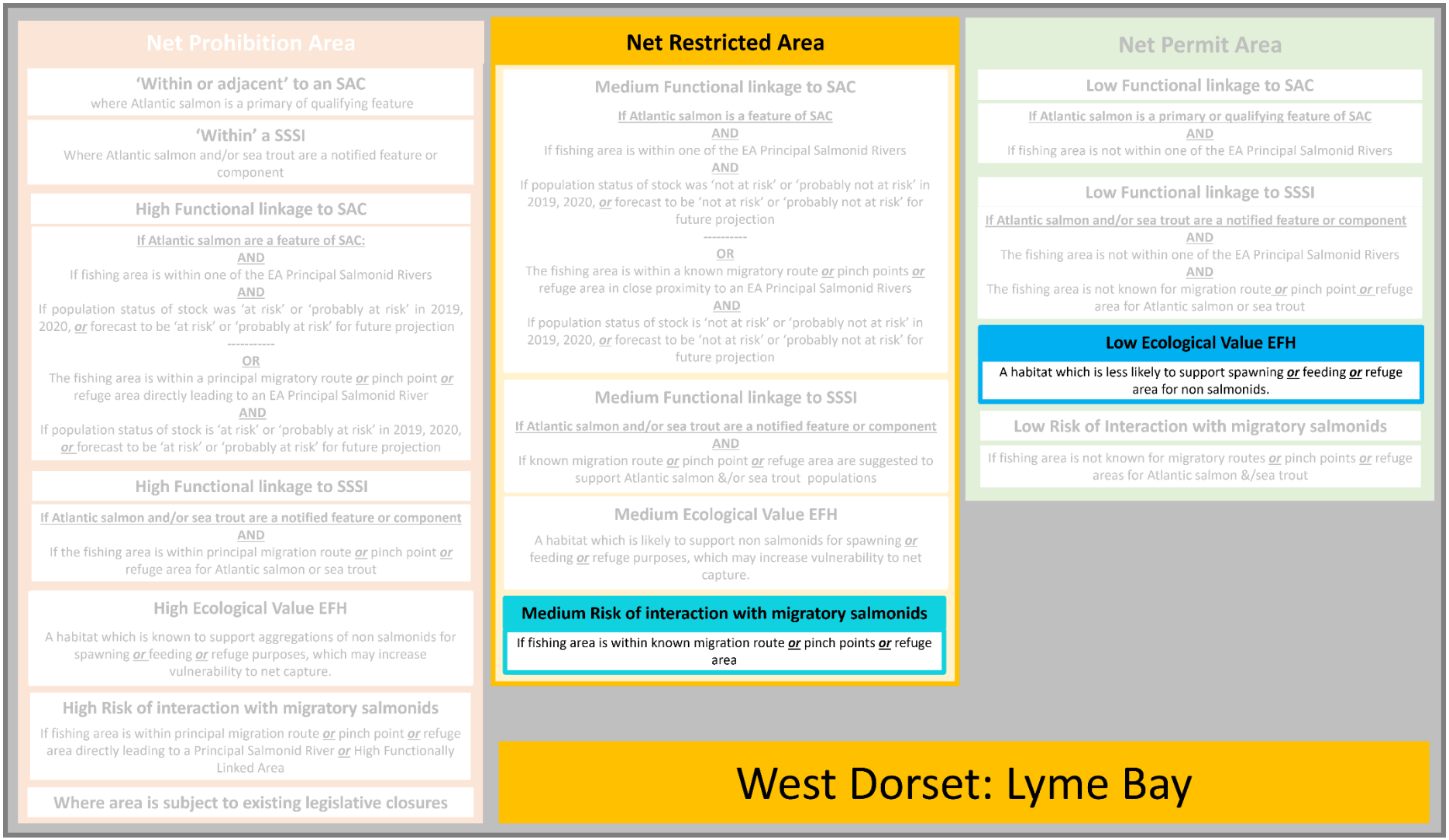
West Dorset: Fleet East



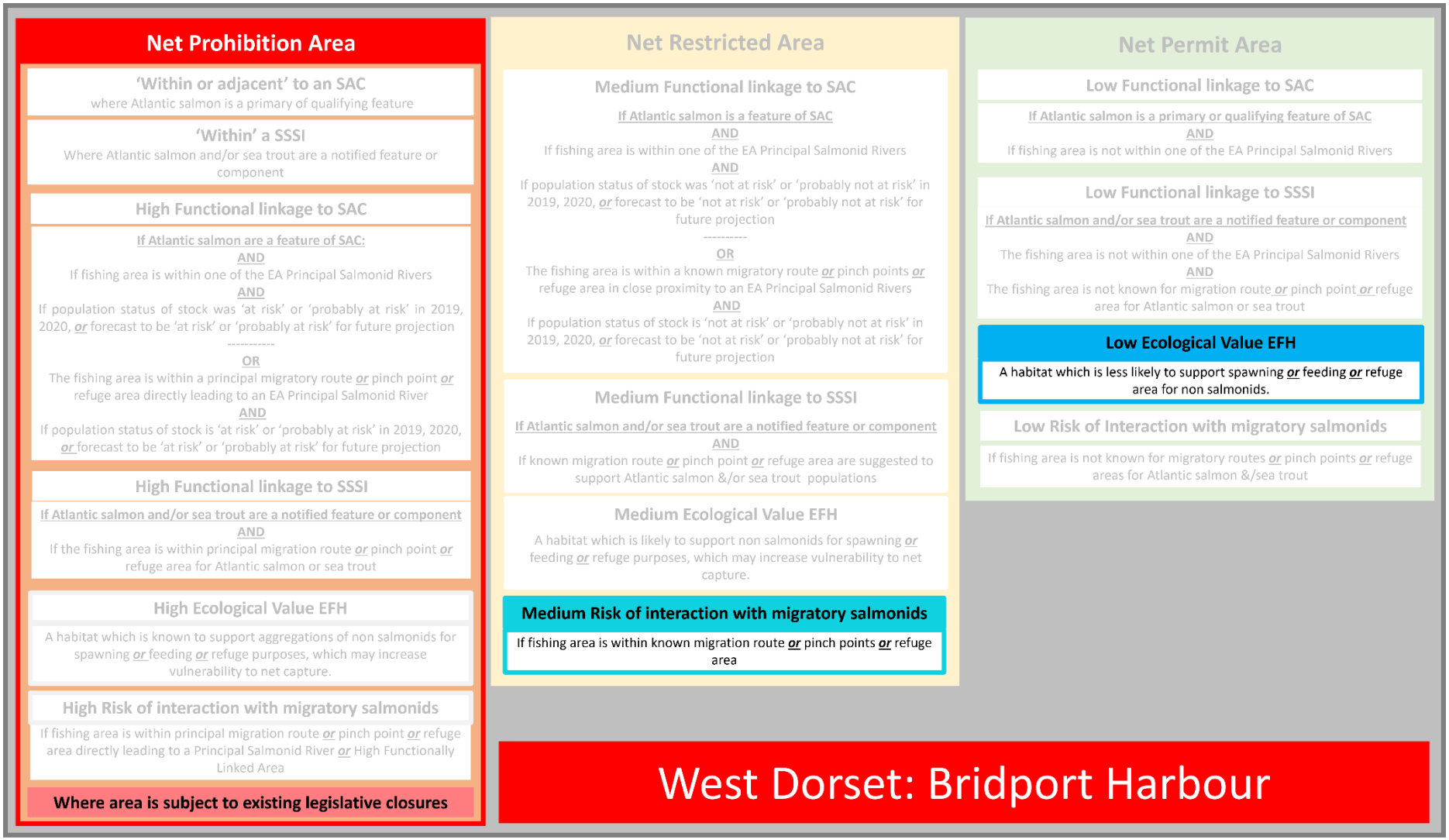
West Dorset: Weymouth Harbour



West Dorset: Lyme Bay



West Dorset: Bridport Harbour



ANNEX 1: Sites Subject to Assessment

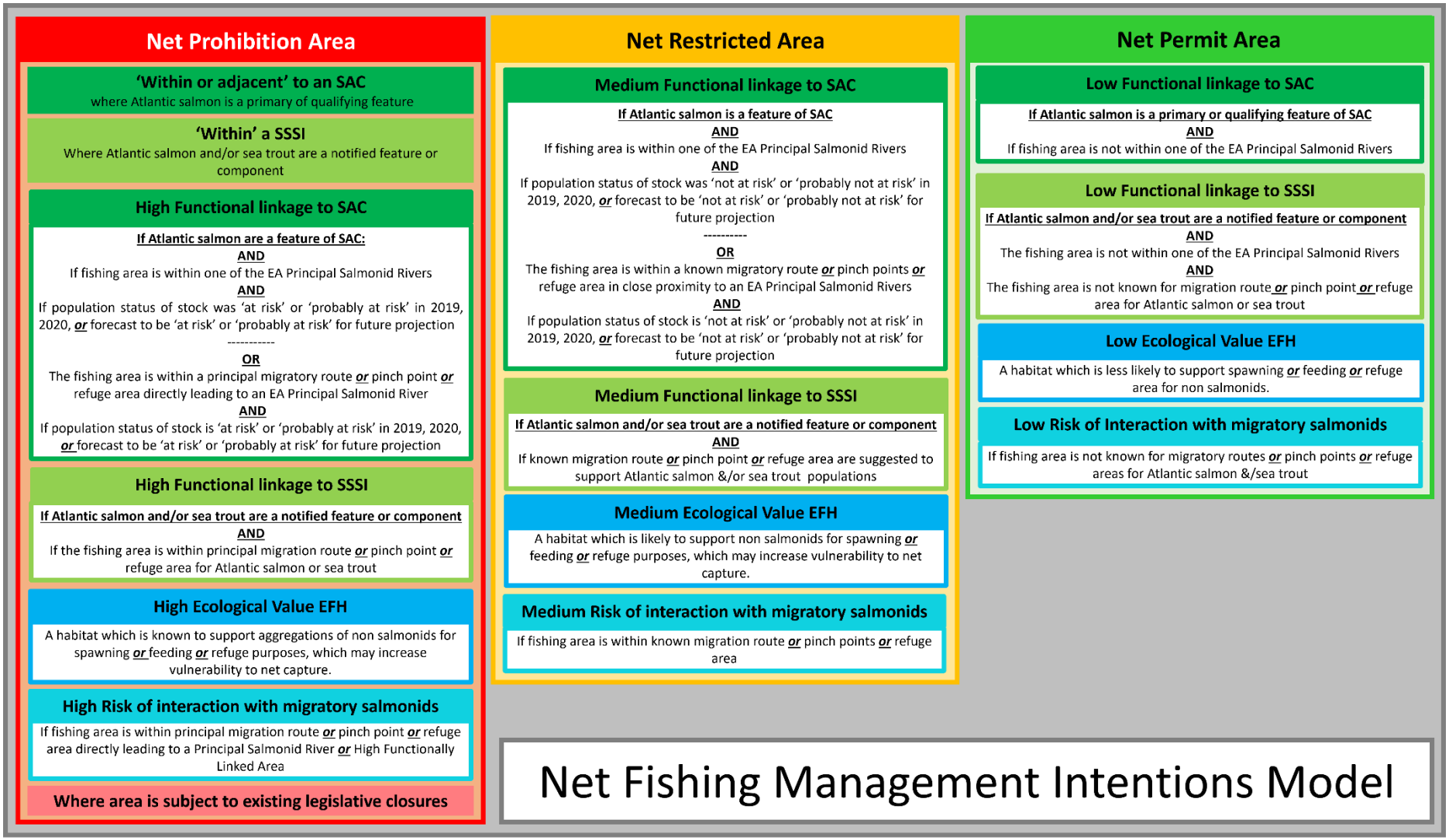
Site		
Isle of Wight	Bembridge Harbour	Newtown Harbour
	Wootton Creek	King's Quay
	Yarmouth Harbour & Western Yar	River Medina
Langstone Harbour	Main Channel	Bridge Lake
	Broom Channel	Wider Harbour
Portsmouth Harbour	Main Channel	Tributaries
	Fareham Creek	Wider Harbour
Southampton Water	The River Itchen	River Hamble, Main Channel
	The River Test	River Hamble, Areas 1-4
	Main Channel	River Hamble, Area 5
	Outside Main Channel	
The Solent	Mouth of River Meon	Lymington River, Main Channel
	Beaulieu River	Lymington River, Outside Main Channel
	Lymington River, upper reaches	Keyhaven River
Christchurch Harbour	The River Avon	West
	Main Channel	Mouth of River Mude
	East	Christchurch Box, Outside Main Channel
Poole Harbour	River Frome (upper & lower)	Wareham Approaches
	River Piddle	Lytchett Bay
	Main Channel	Wych and Middlebere Lakes
	Wider Harbour	South Deep
	Wareham Channel	Holes Bay North
West Dorset	Fleet, West	Lyme Bay
	Fleet, East	Bridport Harbour
	Weymouth Harbour	

ANNEX 2: Cost Analysis: Administrative formula

Cost Breakdown	Cost (£)
Administration of Net Permits	1,053.98
Administration of Monitoring & Control	1,833.00
Total Administration Cost	**2,886.98**
Total cost per permit (17 permits)	**169.82**

Table 2: Breakdown of Net Permit Administrative costs

ANNEX 3: Net Fishing Management Intention Model (base model)



ANNEX 4: Synergetic Drivers for Management Intervention

			DRIVERS FOR MANAGEMENT INTERVENTION						MANAGEMENT INTERVENTION		
			Legislative			Policy		Other			
			Conservation Regs 2019	WCA 1981	MaCAA, Regs 2019 & WCA	MaCAA		Subject to Existing Closures	Net Prohibition Area	Net Restriction Area	Net Permit Area
		Site Specific Assessments	*HRA*	*SSSI*	*FLA*	*EFH*	*MS*				
Site					Synergetic Risk Assessments						
IOW	1	Bembridge Harbour				HIGH	MEDIUM				
	2	Wootton Creek									
	3	Yarmouth Harbour & Western Yar									
	4	Newtown Harbour									
	5	King's Quay				HIGH	LOW				
	6	River Medina				HIGH	MEDIUM				
Langstone Hbr	7	Main Channel				HIGH	MEDIUM				
	8	Broom Channel				HIGH	MEDIUM				
	9	Bridge Lake				HIGH	MEDIUM				
	10	Wider Harbour				MEDIUM	MEDIUM				
Portsmouth Hbr	11	Main Channel									
	12	Fareham Creek				HIGH	MEDIUM				
	13	Tributaries									
	14	Wider Harbour				MEDIUM	MEDIUM				
Southampton Water	15	The River Itchen									
	16	The River Test			HIGH						
	17	Main Channel			HIGH						
	18	Outside Main Channel			LOW	LOW	LOW				
	19	River Hamble, Main Channel			HIGH						
	20	River Hamble, Areas 1-4			LOW	LOW	LOW				
	21	River Hamble, Area 5			LOW	HIGH	LOW				

The Solent	22	Mouth of River Meon				LOW	MEDIUM				
	23	Beaulieu River									
	24	Lymington River, upper reaches									
	25	Lymington River, Main Channel			HIGH						
	26	Lymington River, Outside Main Channel			MEDIUM	HIGH					
	27	Keyhaven River				HIGH	MEDIUM				
Christchurch Hbr	28	The River Avon									
	29	Main Channel			HIGH						
	30	East			LOW	LOW	LOW				
	31	West									
	32	Mouth of River Mude			LOW	HIGH	MEDIUM				
	33	Christchurch Box, Outside Main Channel			LOW	MEDIUM	MEDIUM				
Poole Hbr	34	River Frome (upper reaches)									
	35	River Frome (lower reaches)									
	36	River Piddle									
	37	Main Channel			HIGH						
	38	Wider Harbour				MEDIUM	MEDIUM				
	39	Wareham Channel			HIGH						
	40	Wareham Approaches			MEDIUM	MEDIUM					
	41	Lytchett Bay				HIGH	MEDIUM				
	42	Wych and Middlebere Lakes				HIGH	MEDIUM				
	43	South Deep				MEDIUM	HIGH				
	44	Holes Bay North				HIGH	LOW				
West Dorset	45	Fleet, West				HIGH	MEDIUM				
	46	Fleet, East				MEDIUM	MEDIUM				
	47	Weymouth Harbour									
	48	Lyme Bay				LOW	MEDIUM				

	49	Bridport Harbour			LOW	MEDIUM	