

## Appendix M: Gap Analysis Spreadsheets - Irish Seas Conservation Zone

(Cross reference to Section 5 of the Report)

This Appendix provides the results of the gap analysis in four separate spreadsheets with tabs for presence, extent and condition.

The High, Moderate and Low refer to the scores obtained from the Confidence Assessments as given in Appendix K.

|               |   |
|---------------|---|
| High          | H |
| Moderate      | M |
| Low           | L |
| No confidence | N |

Gap is defined as a site having less than high confidence for one or more features (or less than high confidence for boundaries) therefore any site that has a orange cell will be considered to have a gap.

| rMCZ                 |        |
|----------------------|--------|
| North of Celtic Deep | RMCZ5  |
| Flyde Offshore       | RMCZ8  |
| Cumbria Coast        | RMCZ11 |
| Hilbre Island Group  | RMCZ14 |

|  |   | Irish Sea |         |         |         |
|--|---|-----------|---------|---------|---------|
|  |   | ISCZ 05   | ISCZ 08 | ISCZ 11 | ISCZ 14 |
| BSH                                    | High energy intertidal rock   |           |         | H       |         |
|  | Moderate energy intertidal rock   |           |         |         |         |
|  | Low energy intertidal rock  |           |         |         |         |
|  | Intertidal coarse sediment  |           |         |         |         |
|  | Intertidal sand and muddy sand  |           |         | H       |         |
|  | Intertidal mud  |           |         |         |         |
|  | Intertidal mixed sediments  |           |         |         |         |
|  | Coastal saltmarshes and saline reedbeds                                   |           |         |         |         |
|  | Intertidal sediments dominated by aquatic angiosperms                     |           |         |         |         |
|  | Intertidal biogenic reefs   |           |         | L       |         |
|  | High energy infralittoral rock  |           |         |         |         |
|  | Moderate energy infralittoral rock  |           |         | L       |         |
|  | Low energy infralittoral rock   |           |         |         |         |
|  | High energy circalittoral rock  |           |         |         |         |
|  | Moderate energy circalittoral rock  | L         |         |         |         |
|  | Low energy circalittoral rock   |           |         |         |         |
|  | Subtidal coarse sediment  | M         |         |         |         |
|  | Subtidal sand   | M         | L       |         |         |
|  | Subtidal mud  |           |         |         |         |
|  | Subtidal mixed sediments  |           |         |         |         |
| Subtidal macrophyte-dominated sediment |   |           |         |         |         |
| Subtidal biogenic reefs                |   |           |         |         |         |
| Deep-sea bed                           |   |           |         |         |         |
| HABITATS                               | Blue Mussel beds (including intertidal beds on mixed and sandy sediments) |           |         | H       | L       |
|  | Cold-water coral reefs  |           |         |         |         |
|  | Coral Gardens   |           |         |         |         |
|  | Deep-sea sponge aggregations  |           |         |         |         |
|  | Estuarine rocky habitats  |           |         |         |         |
|  | File shell beds   |           |         |         |         |
|  | Fragile sponge&anthozoan communities on subtidal rocky habitats           |           |         |         |         |
|  | Intertidal under boulder communities                                      |           |         | H       |         |
|  | Littoral chalk communities  |           |         |         |         |
|  | Maerl beds  |           |         |         |         |
|  | Horse mussel ( <i>Modiolus modiolus</i> ) beds                            |           |         |         |         |
|  | Mud habitats in deep water  |           |         |         |         |
|  | Sea-pen and burrowing megafauna communities                               |           |         |         |         |
|  | Native Oyster <i>Ostrea edulis</i> beds                                   |           |         |         |         |
|  | Peat and clay exposures   |           |         | L       | L       |
|  | Honeycomb worm <i>Sabellaria alveolata</i> reefs                          |           |         | H       |         |
|  | Ross worm <i>Sabellaria spinulosa</i> reefs                               |           |         |         |         |
|  | Seagrass beds   |           |         |         |         |
|  | Sheltered muddy gravels   |           |         |         |         |
|  | Subtidal chalk  |           |         |         |         |
| Subtidal sands and gravels             | M   | L         |         |         |         |
| Tide-swept channels                    |   |           |         |         |         |
| SPECIES                                | <i>Padina pavonica</i>  |           |         |         |         |
|  | <i>Crوريا cruoriaeformis</i>  |           |         |         |         |
|  | <i>Grateloupia montagnei</i>  |           |         |         |         |
|  | <i>Lithothamnion corallioides</i>   |           |         |         |         |
|  | <i>Phymatolithon calcareum</i>  |           |         |         |         |
|  | <i>Alkmania romijni</i>   |           |         |         |         |
|  | <i>Armandia cirrhosa</i>  |           |         |         |         |
|  | <i>Gobius cobitis</i>   |           |         |         |         |
|  | <i>Gobius couchi</i>  |           |         |         |         |
|  | <i>Hippocampus guttulatus</i>   |           |         |         |         |
|  | <i>Hippocampus hippocampus</i>  |           |         |         |         |
|  | <i>Victorella pavidia</i>   |           |         |         |         |
|  | <i>Amphianthus dohrni</i>   |           |         |         |         |
|  | <i>Eunicella verrucosa</i>  |           |         |         |         |
|  | <i>Halicystus auricula</i>  |           |         |         |         |
|  | <i>Leptosammia pruvoti</i>  |           |         |         |         |
|  | <i>Lucernariopsis campanulata</i>   |           |         |         |         |
|  | <i>Lucernariopsis cruxmelitensis</i>                                      |           |         |         |         |
|  | <i>Nematostella vectensis</i>   |           |         |         |         |
|  | <i>Gammarus insensibilis</i>  |           |         |         |         |
|  | <i>Gitanopsis bispinosa</i>   |           |         |         |         |
|  | <i>Pollicipes pollicipes</i>  |           |         |         |         |
|  | <i>Palinurus elephas</i>  |           |         |         |         |
|  | <i>Arctica islandica</i>  |           |         |         |         |
|  | <i>Atrina pectinata</i>   |           |         |         |         |
|  | <i>Caecum armoricum</i>   |           |         |         |         |
|  | <i>Ostrea edulis</i>  |           |         |         |         |
|  | <i>Paludina littorina</i>   |           |         |         |         |
|  | <i>Tenella adspersa</i>   |           |         |         |         |
|  | <i>Osmerus eperlanus</i>  |           |         |         |         |
| <i>Anguilla anguilla</i>               |   |           |         |         |         |
| <i>Raja undulata</i>                   |   |           |         |         |         |

|  |   | Irish Sea |         |         |         |
|--|---|-----------|---------|---------|---------|
|  |   | ISCZ 05   | ISCZ 08 | ISCZ 11 | ISCZ 14 |
| BSH                                    | High energy intertidal rock   |           |         | H       |         |
|  | Moderate energy intertidal rock   |           |         |         |         |
|  | Low energy intertidal rock  |           |         |         |         |
|  | Intertidal coarse sediment  |           |         |         |         |
|  | Intertidal sand and muddy sand  |           |         | H       |         |
|  | Intertidal mud  |           |         |         |         |
|  | Intertidal mixed sediments  |           |         |         |         |
|  | Coastal saltmarshes and saline reedbeds                                   |           |         |         |         |
|  | Intertidal sediments dominated by aquatic angiosperms                     |           |         |         |         |
|  | Intertidal biogenic reefs   |           |         | L       |         |
|  | High energy infralittoral rock  |           |         | L       |         |
|  | Moderate energy infralittoral rock  |           |         |         |         |
|  | Low energy infralittoral rock   |           |         |         |         |
|  | High energy circalittoral rock  |           |         |         |         |
|  | Moderate energy circalittoral rock  | L         |         |         |         |
|  | Low energy circalittoral rock   |           |         |         |         |
|  | Subtidal coarse sediment  | M         |         |         |         |
|  | Subtidal sand   | M         | L       |         |         |
|  | Subtidal mud  |           |         |         |         |
|  | Subtidal mixed sediments  |           |         |         |         |
| Subtidal macrophyte-dominated sediment |   |           |         |         |         |
| Subtidal biogenic reefs                |   |           |         |         |         |
| Deep-sea bed                           |   |           |         |         |         |
| HABITATS                               | Blue Mussel beds (including intertidal beds on mixed and sandy sediments) |           |         | L       | L       |
|  | Cold-water coral reefs  |           |         |         |         |
|  | Coral Gardens   |           |         |         |         |
|  | Deep-sea sponge aggregations  |           |         |         |         |
|  | Estuarine rocky habitats  |           |         |         |         |
|  | File shell beds   |           |         |         |         |
|  | Fragile sponge&anthozoan communities on subtidal rocky habitats           |           |         |         |         |
|  | Intertidal under boulder communities                                      |           |         | L       |         |
|  | Littoral chalk communities  |           |         |         |         |
|  | Maerl beds  |           |         |         |         |
|  | Horse mussel ( <i>Modiolus modiolus</i> ) beds                            |           |         |         |         |
|  | Mud habitats in deep water  |           |         |         |         |
|  | Sea-pen and burrowing megafauna communities                               |           |         |         |         |
|  | Native Oyster <i>Ostrea edulis</i> beds                                   |           |         |         |         |
|  | Peat and clay exposures   |           |         | L       | L       |
|  | Honeycomb worm <i>Sabellaria alveolata</i> reefs                          |           |         | L       |         |
|  | Ross worm <i>Sabellaria spinulosa</i> reefs                               |           |         |         |         |
|  | Seagrass beds   |           |         |         |         |
|  | Sheltered muddy gravels   |           |         |         |         |
|  | Subtidal chalk  |           |         |         |         |
| Subtidal sands and gravels             | M   | L         |         |         |         |
| Tide-swept channels                    |   |           |         |         |         |
| SPECIES                                | <i>Padina pavonica</i>  |           |         |         |         |
|  | <i>Crوريا cruoriaeformis</i>  |           |         |         |         |
|  | <i>Grateloupia montagnei</i>  |           |         |         |         |
|  | <i>Lithothamnion corallioides</i>   |           |         |         |         |
|  | <i>Phymatolithon calcareum</i>  |           |         |         |         |
|  | <i>Alkmania romijni</i>   |           |         |         |         |
|  | <i>Armandia cirrhosa</i>  |           |         |         |         |
|  | <i>Gobius cobitis</i>   |           |         |         |         |
|  | <i>Gobius couchi</i>  |           |         |         |         |
|  | <i>Hippocampus guttulatus</i>   |           |         |         |         |
|  | <i>Hippocampus hippocampus</i>  |           |         |         |         |
|  | <i>Victorella pavidia</i>   |           |         |         |         |
|  | <i>Amphianthus dohrnii</i>  |           |         |         |         |
|  | <i>Eunicella verrucosa</i>  |           |         |         |         |
|  | <i>Halicystus auricula</i>  |           |         |         |         |
|  | <i>Leptosammia pruvoti</i>  |           |         |         |         |
|  | <i>Lucernariopsis campanulata</i>   |           |         |         |         |
|  | <i>Lucernariopsis cruxmelitensis</i>                                      |           |         |         |         |
|  | <i>Nematostella vectensis</i>   |           |         |         |         |
|  | <i>Gammarus insensibilis</i>  |           |         |         |         |
|  | <i>Gitanopsis bispinosa</i>   |           |         |         |         |
|  | <i>Pollicipes pollicipes</i>  |           |         |         |         |
|  | <i>Palinurus elephas</i>  |           |         |         |         |
|  | <i>Arctica islandica</i>  |           |         |         |         |
|  | <i>Atrina pectinata</i>   |           |         |         |         |
|  | <i>Caecum armoricum</i>   |           |         |         |         |
|  | <i>Ostrea edulis</i>  |           |         |         |         |
|  | <i>Paludina littorina</i>   |           |         |         |         |
|  | <i>Tenella adspersa</i>   |           |         |         |         |
|  | <i>Osmerus eperlanus</i>  |           |         |         |         |
| <i>Anguilla anguilla</i>               |   |           |         |         |         |
| <i>Raja undulata</i>                   |   |           |         |         |         |

|  |   | Irish Sea |         |         |         |
|--|---|-----------|---------|---------|---------|
|  |   | ISCZ 05   | ISCZ 08 | ISCZ 11 | ISCZ 14 |
| BSH                                    | High energy intertidal rock   |           |         | L       |         |
|  | Moderate energy intertidal rock   |           |         |         |         |
|  | Low energy intertidal rock  |           |         |         |         |
|  | Intertidal coarse sediment  |           |         |         |         |
|  | Intertidal sand and muddy sand  |           |         | L       |         |
|  | Intertidal mud  |           |         |         |         |
|  | Intertidal mixed sediments  |           |         |         |         |
|  | Coastal saltmarshes and saline reedbeds                                   |           |         |         |         |
|  | Intertidal sediments dominated by aquatic angiosperms                     |           |         |         |         |
|  | Intertidal biogenic reefs   |           |         | L       |         |
|  | High energy infralittoral rock  |           |         | L       |         |
|  | Moderate energy infralittoral rock  |           |         |         |         |
|  | Low energy infralittoral rock   |           |         |         |         |
|  | High energy circalittoral rock  |           |         |         |         |
|  | Moderate energy circalittoral rock  | L         |         |         |         |
|  | Low energy circalittoral rock   |           |         |         |         |
|  | Subtidal coarse sediment  | L         |         |         |         |
|  | Subtidal sand   | L         | L       |         |         |
|  | Subtidal mud  |           |         |         |         |
|  | Subtidal mixed sediments  |           |         |         |         |
| Subtidal macrophyte-dominated sediment |   |           |         |         |         |
| Subtidal biogenic reefs                |   |           |         |         |         |
| Deep-sea bed                           |   |           |         |         |         |
| HABITATS                               | Blue Mussel beds (including intertidal beds on mixed and sandy sediments) |           |         | L       | L       |
|  | Cold-water coral reefs  |           |         |         |         |
|  | Coral Gardens   |           |         |         |         |
|  | Deep-sea sponge aggregations  |           |         |         |         |
|  | Estuarine rocky habitats  |           |         |         |         |
|  | File shell beds   |           |         |         |         |
|  | Fragile sponge&anthozoan communities on subtidal rocky habitats           |           |         |         |         |
|  | Intertidal under boulder communities                                      |           |         | L       |         |
|  | Littoral chalk communities  |           |         |         |         |
|  | Maerl beds  |           |         |         |         |
|  | Horse mussel ( <i>Modiolus modiolus</i> ) beds                            |           |         |         |         |
|  | Mud habitats in deep water  |           |         |         |         |
|  | Sea-pen and burrowing megafauna communities                               |           |         |         |         |
|  | Native Oyster <i>Ostrea edulis</i> beds                                   |           |         |         |         |
|  | Peat and clay exposures   |           |         | L       | L       |
|  | Honeycomb worm <i>Sabellaria alveolata</i> reefs                          |           |         | L       |         |
|  | Ross worm <i>Sabellaria spinulosa</i> reefs                               |           |         |         |         |
|  | Seagrass beds   |           |         |         |         |
|  | Sheltered muddy gravels   |           |         |         |         |
|  | Subtidal chalk  |           |         |         |         |
| Subtidal sands and gravels             | L   | L         |         |         |         |
| Tide-swept channels                    |   |           |         |         |         |
| SPECIES                                | <i>Padina pavonica</i>  |           |         |         |         |
|  | <i>Crوريا cruoriaeformis</i>  |           |         |         |         |
|  | <i>Grateloupia montagnei</i>  |           |         |         |         |
|  | <i>Lithothamnion corallioides</i>   |           |         |         |         |
|  | <i>Phymatolithon calcareum</i>  |           |         |         |         |
|  | <i>Alkmania romijni</i>   |           |         |         |         |
|  | <i>Armandia cirrhosa</i>  |           |         |         |         |
|  | <i>Gobius cobitis</i>   |           |         |         |         |
|  | <i>Gobius couchi</i>  |           |         |         |         |
|  | <i>Hippocampus guttulatus</i>   |           |         |         |         |
|  | <i>Hippocampus hippocampus</i>  |           |         |         |         |
|  | <i>Victorella pavidia</i>   |           |         |         |         |
|  | <i>Amphianthus dohrni</i>   |           |         |         |         |
|  | <i>Eunicella verrucosa</i>  |           |         |         |         |
|  | <i>Halicystus auricula</i>  |           |         |         |         |
|  | <i>Leptosammia pruvoti</i>  |           |         |         |         |
|  | <i>Lucernariopsis campanulata</i>   |           |         |         |         |
|  | <i>Lucernariopsis cruxmelitensis</i>                                      |           |         |         |         |
|  | <i>Nematostella vectensis</i>   |           |         |         |         |
|  | <i>Gammarus insensibilis</i>  |           |         |         |         |
|  | <i>Gitanopsis bispinosa</i>   |           |         |         |         |
|  | <i>Pollicipes pollicipes</i>  |           |         |         |         |
|  | <i>Palinurus elephas</i>  |           |         |         |         |
|  | <i>Arctica islandica</i>  |           |         |         |         |
|  | <i>Atrina pectinata</i>   |           |         |         |         |
|  | <i>Caecum armoricum</i>   |           |         |         |         |
|  | <i>Ostrea edulis</i>  |           |         |         |         |
|  | <i>Paludina littorina</i>   |           |         |         |         |
|  | <i>Tenella adspersa</i>   |           |         |         |         |
|  | <i>Osmerus eperlanus</i>  |           |         |         |         |
| <i>Anguilla anguilla</i>               |   |           |         |         |         |
| <i>Raja undulata</i>                   |   |           |         |         |         |