# **Tweed Estuary SAC Simple Assessment**

**Habitat Regulations Assessment document:** TSAC – tLSE001

| European Marine Site:    | Tweed Estuary SAC   |
|--------------------------|---|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and Sea lamprey, Intertidal Coarse Sediment |
| Gear type(s):            | Scament   |
| NIFCA tLSE type:         | Heavy otter trawl   |
| Gear/feature interaction | Simple  |
| reference(s):            | TSAC - 001 TSAC - 002 TSAC - 003 TSAC - 004 TSAC - 005 TSAC - 006 TSAC - 007 TSAC - 008 TSAC - 009 TSAC - 010 TSAC - 334  |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.). |

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

### **Conclusion**

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC   |
|--------------------------|---|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and Sea lamprey, Intertidal coarse sediment |
| Gear type(s):            |   |
|                          | Light otter trawl   |
| NIFCA tLSE type:         | Light offer trawi   |
| Gear/feature interaction | Simple  |
| reference(s):            | TSAC - 012  |
|                          | TSAC - 013  |
|                          | TSAC - 014  |
|                          | TSAC - 015  |
|                          | TSAC - 016  |
|                          | TSAC - 017  |
|                          | TSAC - 018  |
|                          | TSAC - 019  |
|                          | TSAC - 020  |
|                          | TSAC - 021  |
|                          | TSAC - 335  |
|                          | 10/10 000   |

| Revision history |                  |        |
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| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
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| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.).  |
|  | Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.   |

| The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and sub-features |
|--|
| identified previously, as shown in Table 1.  |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |  |
|---|------------|--|
| Date of document completion/'sign-off':                                       | 05/02/2015 |  |

| Feature  | Conservation Advice Sub feature           | NIFCA/NE sub-feature (expert judgement) |
|--|---|---|
| Estuaries  | Subtidal coarse sediments                 | Subtidal gravel and sand                |
| Estuaries  | Subtidal sand                             | Subtidal muddy sand                     |
| Estuaries  | Infralittorial rock                       | Estuarine rock                          |
| Estuaries  | Subtidal mixed sediments                  | Subtidal mixed sediment                 |
| Estuaries  |   | Subtidal mud                            |
| Estuaries  | Intertidal rock                           | Intertidal boulder and cobble reef      |
| Estuaries  | Intertidal coarse sediment                |   |
| Estuaries  | Intertidal mixed sediments                |   |
| Estuaries  | Intertidal sand & muddy sand              |   |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mud                            | Intertidal mud                          |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal sand & muddy sand              | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mixed sediments                | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal coarse sediment                |   |
| Annex II species   | River lamprey (Lampetra fluviatilis)      | River & Sea lamprey                     |
| Annex II species   | Sea lamprey ( <i>Petromyzon marinus</i> ) | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and Sea lamprey, Intertidal coarse<br>sediment |
| Gear type(s):            | Anchor seine   |
| NIFCA tLSE type:         | 7 menor seme   |
| Gear/feature interaction | Simple   |
| reference(s):            | TSAC - 023   |
|                          | TSAC - 024   |
|                          | TSAC - 025   |
|                          | TSAC - 026   |
|                          | TSAC - 027   |
|                          | TSAC - 028   |
|                          | TSAC - 029   |
|                          | TSAC - 030   |
|                          | TSAC - 031   |
|                          | TSAC - 032   |
|                          | TSAC - 336   |

| Revision history |                  |        |
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| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.)   |

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

| Feature  | Conservation Advice Sub feature           | NIFCA/NE sub-feature (expert judgement) |
|--|---|---|
| Estuaries  | Subtidal coarse sediments                 | Subtidal gravel and sand                |
| Estuaries  | Subtidal sand                             | Subtidal muddy sand                     |
| Estuaries  | Infralittorial rock                       | Estuarine rock                          |
| Estuaries  | Subtidal mixed sediments                  | Subtidal mixed sediment                 |
| Estuaries  |   | Subtidal mud                            |
| Estuaries  | Intertidal rock                           | Intertidal boulder and cobble reef      |
| Estuaries  | Intertidal coarse sediment                |   |
| Estuaries  | Intertidal mixed sediments                |   |
| Estuaries  | Intertidal sand & muddy sand              |   |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mud                            | Intertidal mud                          |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal sand & muddy sand              | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mixed sediments                | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal coarse sediment                |   |
| Annex II species   | River lamprey (Lampetra fluviatilis)      | River & Sea lamprey                     |
| Annex II species   | Sea lamprey ( <i>Petromyzon marinus</i> ) | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and Sea lamprey, Intertidal coarse<br>sediment |
| Gear type(s):            |  |
| NIFCA tLSE type:         | Scottish/fly seine   |
| Gear/feature interaction | Simple   |
| reference(s):            | TSAC - 034   |
|                          | TSAC - 035   |
|                          | TSAC - 036   |
|                          | TSAC - 037   |
|                          | TSAC - 038   |
|                          | TSAC - 039   |
|                          | TSAC - 040   |
|                          | TSAC - 041   |
|                          | TSAC - 042   |
|                          | TSAC - 043   |
|                          | TSAC - 337   |

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| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |

Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.)

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they | Yes |
|---|-----|
| agree)?   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

European Marine Site:

Generic sub-feature(s):

River and Sea lamprey

Mid-water trawl (single)

NIFCA tLSE type:

Simple

Gear/feature interaction reference(s):

Tweed Estuary SAC

River and Sea lamprey

Tiple

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No   |
|--|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.).   |
|  | Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.  |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

05/02/2016

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

European Marine Site:

Generic sub-feature(s):

River and Sea lamprey

Gear type(s):

Industrial trawls

NIFCA tLSE type:

Simple

Gear/feature interaction reference(s):

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No   |
|--|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.).   |
|  | Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.  |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
|   |            |
| Date of document completion/'sign-off':                                       | 05/02/2016 |

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                  | Tweed Estuary SAC  |
|--|--|
| Generic sub-feature(s):                | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, Intertidal coarse sediment |
| Gear type(s):                          | Dredges (towed): Scallops  |
| NIFCA tLSE type:                       | Simple   |
| Gear/feature interaction reference(s): | TSAC - 078 TSAC - 079 TSAC - 080 TSAC - 081 TSAC - 082 TSAC - 083 TSAC - 084 TSAC - 085 TSAC - 086 TSAC - 088  |

| Revision history |                  |        |
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| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically does not occur within the Tweed Estuary SAC (no scallop grounds) (Jon Green, pers. comms.).   |
|  | Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.   |

| The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |
|---|
|---|

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
| <u> </u>  |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                  | Tweed Estuary SAC  |
|--|--|
| Generic sub-feature(s):  Gear type(s): | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and sea lamprey, Intertidal coarse<br>sediment |
|  | Dredges (towed): Mussels, clams, oysters   |
| NIFCA tLSE type:                       |  |
| Gear/feature interaction               | Simple   |
| reference(s):                          | TSAC - 089   |
|  | TSAC - 090   |
|  | TSAC - 091   |
|  | TSAC - 092   |
|  | TSAC - 093   |
|  | TSAC - 094   |
|  | TSAC - 095   |
|  | TSAC - 096   |
|  | TSAC - 097   |
|  | TSAC - 098   |
|  | TSAC - 099   |

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| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.).  |

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                  | Tweed Estuary SAC  |
|--|--|
| Generic sub-feature(s):  Gear type(s): | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and sea lamprey, Intertidal coarse<br>sediment |
| dear type(s).                          | Burney and an Annaldan alama)  |
| NIFCA tLSE type:                       | Pump scoop (cockles, clams)  |
| Gear/feature interaction reference(s): | Simple   |
| reference(s).                          | TSAC - 100   |
|  | TSAC - 101   |
|  | TSAC - 102   |
|  | TSAC - 103   |
|  | TSAC - 104   |
|  | TSAC - 105   |
|  | TSAC - 106   |
|  | TSAC - 107<br>TSAC - 108   |
|  | TSAC - 108<br>TSAC - 109   |
|  | TSAC - 109   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically does not occur within the Tweed Estuary SAC (no cockle/clam stocks) (Jon Green, pers. comms.).  |

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and sea lamprey, Intertidal coarse<br>sediment |
| Gear type(s):            | Suction (cockles)  |
| NIFCA tLSE type:         | Simple   |
| Gear/feature interaction | ·  |
| reference(s):            | TSAC - 111   |
| , ,                      | TSAC - 112   |
|                          | TSAC - 113   |
|                          | TSAC - 114   |
|                          | TSAC - 115   |
|                          | TSAC - 116   |
|                          | TSAC - 117   |
|                          | TSAC - 118   |
|                          | TSAC - 119   |
|                          | TSAC - 120   |
|                          | TSAC - 121   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |

Activity historically does not occur within the Tweed Estuary SAC (no cockle stocks) (Jon Green, pers. comms.).

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they | Yes |
|---|-----|
| agree)?   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC   |
|--------------------------|---|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and sea lamprey, Intertidal coarse sediment |
| Gear type(s):            |   |
| Gear type(5).            | Dredges (other): Tractor  |
| NIFCA tLSE type:         | Dieages (earreigh tracter   |
|                          | Simple  |
| Gear/feature interaction | S.III.p.c   |
| reference(s):            | TSAC - 122  |
|                          | TSAC - 123  |
|                          | TSAC - 124  |
|                          | TSAC - 125  |
|                          | TSAC - 126  |
|                          | TSAC - 127  |
|                          | TSAC - 128  |
|                          | TSAC - 129  |
|                          | TSAC - 130  |
|                          | TSAC - 131  |
|                          | TSAC - 132  |
|                          | 10/10 202   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | QA               |        |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.). |

Activity prohibited outside the Tweed Estuary SAC: NIFCA Byelaw 7: Prohibition of the use of mobile fishing gear within the English section of the Berwickshire and North Northumberland SAC.

The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1.

### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they | Yes |  |
|---|-----|--|
| agree)?   |     |  |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|   |            |

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Estuarine rock, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Intertidal boulder and cobble reef, Intertidal coarse sediment |
| Gear type(s):            | Handwork (access from vessel)  |
| NIFCA tLSE type:         | Simple   |
| Gear/feature interaction | TSAC - 135   |
| reference(s):            | TSAC - 137   |
|                          | TSAC - 138   |
|                          | TSAC - 139   |
|                          | TSAC - 141   |
|                          | TSAC - 143   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

# Test for Likely Significant Effect (LSE)

| Potential for Likely       | No  |
|----------------------------|---|
| Significant Effect?        |   |
| Justification and evidence | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.   |
|                            | No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.)  |
|                            | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

### Conclusion

# Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they | Yes |
|---|-----|
| agree)?   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                  | Tweed Estuary SAC   |
|--|---|
| Generic sub-feature(s):                | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediments,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, Intertidal coarse sediment |
| Gear type(s):                          | Pots/creels (crustacea/gastropods)  |
| NIFCA tLSE type:                       | Simple  |
| Gear/feature interaction reference(s): | TSAC - 150 TSAC - 151 TSAC - 152 TSAC - 153 TSAC - 154 TSAC - 155 TSAC - 156 TSAC - 157 TSAC - 158 TSAC - 160   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely       | No   |
|----------------------------|--|
| Significant Effect?        |  |
| Justification and evidence | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|                            | Potting for Green crab used to occur within the estuary but hasn't taken place for about 15 years. No other species have been known to be prosecuted within the Tweed SAC using pots/creels (Jon Green, pers. comms.).  The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs |

| (JG, JR, SA) and Natural England lead adviser (CS) assigned   |
|---|
| features and sub-features based on expert judgement (see table 1)                                       |
| at the beginning of the project. As of January 2016 draft   |
| Conservation Advice was made available, the features and sub-   |
| ·   |
| ,   |
| features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
|   |     |

# Date of document completion/'sign-off': 05/02/2016

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

|                          | <del>-</del>  |
|--------------------------|---|
| European Marine Site:    | Tweed Estuary SAC   |
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediments,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and sea lamprey, Intertidal coarse<br>sediment |
| Gear type(s):            |   |
| NIFCA tLSE type:         | Cuttle pots   |
| Gear/feature interaction | Simple  |
| reference(s):            | TSAC - 161  |
|                          | TSAC - 162  |
|                          | TSAC - 163  |
|                          | TSAC - 164  |
|                          | TSAC - 165  |
|                          | TSAC - 166  |
|                          | TSAC - 167  |
|                          | TSAC - 168  |
|                          | TSAC - 169  |
|                          | TSAC - 170  |
|                          | TSAC - 171  |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |  |
|--|---|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |  |
|  | Activity historically does not occur within the Tweed Estuary SAC (or the NIFCA district as a whole) (Jon Green, pers. comms.)  |  |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs  |  |

| (JG, JR, SA) and Natural England lead adviser (CS) assigned       |
|---|
| features and sub-features based on expert judgement (see table 1) |
| at the beginning of the project. As of January 2016 draft         |
| Conservation Advice was made available, the features and sub-     |
| features neatly correlate with the features and subfeatures       |
| identified previously, as shown in Table 1.                       |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |  |
|---|-----|--|
|   |     |  |

Date of document completion/'sign-off': 05/02/2016

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC   |
|--------------------------|---|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediments, Subtidal mixed sediment, Intertidal boulder and |
| Gear type(s):            | cobble reef, River and sea lamprey, Intertidal coarse sediment  |
| NIFCA tLSE type:         | Fish traps  |
| Gear/feature interaction | Simple  |
| reference(s):            | TSAC - 172<br>TSAC - 173  |
|                          | TSAC - 174<br>TSAC - 175  |
|                          | TSAC - 176  |
|                          | TSAC - 177<br>TSAC - 178  |
|                          | TSAC - 179<br>TSAC - 180  |
|                          | TSAC - 181<br>TSAC - 182  |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect?   | No  |
|--|---|
| Synthesis of evidence and local knowledge informing to occurred between January 2014 and the date of this decreation with stakeholders (where appropriate) and oth authorities. Natural England (CS) was involved with this process. |   |
|  | No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.) The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs |

| (JG, JR, SA) and Natural England lead adviser (CS) assigned       |
|---|
| features and sub-features based on expert judgement (see table 1) |
| at the beginning of the project. As of January 2016 draft         |
| Conservation Advice was made available, the features and sub-     |
| features neatly correlate with the features and subfeatures       |
| identified previously, as shown in Table 1.                       |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |  |
|---|-----|--|
|   |     |  |

Date of document completion/'sign-off': 05/02/2016

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

European Marine Site:

Tweed Estuary SAC

Generic sub-feature(s):

River and sea lamprey

Drift nets (pelagic)

NIFCA tLSE type:

Simple

Gear/feature interaction reference(s):

TSAC - 225

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

### **Test for Likely Significant Effect (LSE)**

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.   |
|  | No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.)  |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
| agree,  |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                     | Tweed Estuary SAC  |
|---|--|
| Generic sub-feature(s):                   | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rock, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, River and sea lamprey, Intertidal coarse<br>sediment |
| Gear type(s):                             | Drift nets (demersal)  |
| NIFCA tLSE type: Gear/feature interaction | Simple   |
| reference(s):                             | TSAC - 227<br>TSAC - 228<br>TSAC - 229<br>TSAC - 230   |
|   | TSAC - 231<br>TSAC - 232<br>TSAC - 233   |
|   | TSAC - 234<br>TSAC - 235<br>TSAC - 236<br>TSAC - 237   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | Activity historically doesn't occur within the Tweed Estuary SAC (Jon Green, pers. comms.) Effectively regulated by the Tweed Commission and the River Tweed Order 2006 which prohibits targeted fishing for salmon or  |

| freshwater fish using any means other than a rod and line or net and coble).  |
|---|
| The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| agree)? | Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---------|---|-----|
|---------|---|-----|

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediments, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and sea lamprey, Intertidal coarse sediment |
| Gear type(s):            |  |
| NIFCA tLSE type:         | Longlines (demersal)   |
| Gear/feature interaction | Simple   |
| reference(s):            | TSAC - 238   |
|                          | TSAC - 239   |
|                          | TSAC - 240   |
|                          | TSAC - 241   |
|                          | TSAC - 242   |
|                          | TSAC - 243   |
|                          | TSAC - 244   |
|                          | TSAC - 245   |
|                          | TSAC - 246   |
|                          | TSAC - 247   |
|                          | TSAC - 248   |

| Revision history |                  |        |  |
|------------------|------------------|--------|--|
| Date             | Revision         | Editor |  |
| 23/04/2015       | Document created | SM     |  |
| 11/12/2015       | Features amended | SM     |  |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|  | No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.) The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs   |

| (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) |
|---|
| at the beginning of the project. As of January 2016 draft   |
| Conservation Advice was made available, the features and sub-   |
| features neatly correlate with the features and subfeatures   |
| identified previously, as shown in Table 1.   |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes        |
|---|------------|
| Date of document completion/'sign-off':                                       | 05/02/2016 |

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

**European Marine Site:** Tweed Estuary SAC

Generic sub-feature(s): River and sea lamprey

Gear type(s): Longlines (pelagic)

NIFCA tLSE type: Simple

**Gear/feature interaction** 

reference(s):

**TSAC - 258** 

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

## **Test for Likely Significant Effect (LSE)**

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.   |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.)   |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
|---|-----|

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

**European Marine Site:** Tweed Estuary SAC

Generic sub-feature(s): River and sea lamprey

Gear type(s): Handlines (rod/gurdy etc.)

NIFCA tLSE type: Simple

**Gear/feature interaction** 

reference(s):

**TSAC - 269** 

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

## **Test for Likely Significant Effect (LSE)**

| Potential for Likely       | No  |
|----------------------------|---|
| Significant Effect?        |   |
| Justification and evidence | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.   |
|                            | No current activity within Tweed Estuary SAC (Jon Green, pers. comms.).   |
|                            | Recreational prosecution of migratory fish species e.g. Salmon, Sea Trout and Brown trout (which are not designated features of the SAC) using rod and line does occur on the Tweed. However, this activity is regulated by the Tweed Commission and the Environment Agency.  |
|                            | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they | Yes |
|---|-----|
| agree)?   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature  | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|--|--------------------------------------|---|
| Estuaries  | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries  | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries  | Infralittorial rock                  | Estuarine rock                          |
| Estuaries  | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries  |                                      | Subtidal mud                            |
| Estuaries  | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries  | Intertidal coarse sediment           |   |
| Estuaries  | Intertidal mixed sediments           |   |
| Estuaries  | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal sand & muddy sand         | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal mixed sediments           | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by seawater at low tide | Intertidal coarse sediment           |   |
| Annex II species   | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species   | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

**European Marine Site:** Tweed Estuary SAC

Generic sub-feature(s): River and sea lamprey

Gear type(s): Jigging/trolling

NIFCA tLSE type: Simple

**Gear/feature interaction** 

reference(s):

**TSAC - 280** 

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |

### **Test for Likely Significant Effect (LSE)**

| Potential for Likely Significant Effect? | No   |
|--|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|  | No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.)   |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
|---|-----|

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:                  | Tweed Estuary SAC   |
|--|---|
| Generic sub-feature(s):                | Subtidal gravel and sand, Subtidal muddy sand,<br>Estuarine rocks, Subtidal mud, Intertidal mud,<br>Intertidal mud and sand, Intertidal mixed sediment,<br>Subtidal mixed sediment, Intertidal boulder and<br>cobble reef, Intertidal coarse sediment |
| Gear type(s):                          | Commercial diving   |
| NIFCA tLSE type:                       | Simple  |
| Gear/feature interaction reference(s): | TSAC - 304 TSAC - 305 TSAC - 306 TSAC - 307 TSAC - 308 TSAC - 309 TSAC - 310 TSAC - 311 TSAC - 312 TSAC - 313 TSAC - 314  |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |
| 11/12/2015       | Features amended | SM     |

| Potential for Likely Significant Effect? | No   |
|--|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|  | Activity historically does not occur within the Tweed Estuary SAC (Jon Green, pers. comms.) The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) |

| at the beginning of the project. As of January 2016 draft<br>Conservation Advice was made available, the features and sub- |
|--|
| features neatly correlate with the features and subfeatures identified previously, as shown in Table 1.                    |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes |
|---|-----|
| agree):   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

European Marine Site:

Tweed Estuary SAC

Generic sub-feature(s):

Estuarine rocks, Intertidal boulder and cobble reef

Digging with forks

NIFCA tLSE type:

Simple

Gear/feature interaction reference(s):

TSAC – 328
TSAC - 330

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 23/04/2015       | Document created | SM     |

### **Test for Likely Significant Effect (LSE)**

| Potential for Likely Significant Effect? | No   |
|--|--|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  |
|  | No interaction of activity with features listed within the Tweed Estuary SAC.  |
|  | Bait digging does not occur on estuarine rock, intertidal boulder or cobble reef.  |
|  | The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and subfeatures neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they | Yes |  |
|---|-----|--|
| agree)?   |     |  |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estuary SAC  |
|--------------------------|--|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Estuarine rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and sea lamprey, Intertidal coarse |
| Gear type(s):            | sediment   |
| NIFCA tLSE type:         | Beach seine/ring nets  |
| Gear/feature interaction | Simple   |
| reference(s):            | TSAC - 282   |
|                          | TSAC - 283   |
|                          | TSAC - 284   |
|                          | TSAC - 285   |
|                          | TSAC - 286   |
|                          | TSAC - 287   |
|                          | TSAC - 288   |
|                          | TSAC - 289   |
|                          | TSAC - 290   |
|                          | TSAC - 291   |
|                          | TSAC - 292   |

| Revision history |                  |        |
|------------------|------------------|--------|
| Date             | Revision         | Editor |
| 11/12/2015       | Document created | SM     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.  No current activity within the Tweed Estuary SAC (Jon Green, pers. comms.) |
|  | One berth remains on the Tweed SAC however it is not currently fished and is effectively regulated by the Tweed Commission and the River Tweed Order 2006 which prohibits targeted fishing for  |

| salmon or freshwater fish using any means other than a rod and line or net and coble).  |
|---|
| The Tweed Estuary SAC has never had Regulation 33/35 advice since designation in 2000. The working group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead adviser (CS) assigned features and sub-features based on expert judgement (see table 1) at the beginning of the project. As of January 2016 draft Conservation Advice was made available, the features and sub-features neatly correlate with the features and subfeatures identified previously, as shown in Table 1. |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they | Yes |
|---|-----|
| agree)?   |     |

| Date of document completion/'sign-off': | 05/02/2016 |
|---|------------|
|---|------------|

Table 1 | Correlation table of Expert Judgment and Draft Conservation Advice feature.

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittorial rock                  | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           |                                      | Subtidal mud                            |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                | •                                    | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |

| European Marine Site:    | Tweed Estu   | ıary SAC     |            |
|--------------------------|--|--------------|------------|
| Generic sub-feature(s):  | Subtidal gravel and sand, Subtidal muddy sand, Intertidal rock, Infralittoral rock, Subtidal mud, Intertidal mud, Intertidal mud and sand, Intertidal mixed sediment, Subtidal mixed sediment, Intertidal boulder and cobble reef, River and Sea lamprey, Intertidal coarse sediment |              |            |
| Gear type(s):            | intertidal coa   | arse seument |            |
| NIFCA tLSE type:         | Crab tiling  |              |            |
| Gear/feature interaction | Simple   |              |            |
| reference(s):            | TSAC - 315   | TSAC - 316   | TSAC - 317 |
|                          | TSAC - 318   | TSAC - 319   | TSAC - 320 |
|                          | TSAC - 321   | TSAC - 322   | TSAC - 323 |
|                          | TSAC - 324   | TSAC - 325   |            |

| Revision history |                    |        |
|------------------|--------------------|--------|
| Date             | Revision           | Editor |
| 18/09/2018       | Document created   | NW     |
| 11/11/2024       | Reviewed by NE     | SR/PW  |
| 12/11/2024       | Document finalised | SR     |

| Potential for Likely       | No  |
|----------------------------|---|
| Significant Effect?        |   |
| Justification and evidence | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process. |
|                            | No Activity within the Tweed Estuary SAC (Jon Green, Nick Weir and Mark Southerton pers. comm).   |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on | Yes |
|--|-----|
| this tLSE (and do they agree)?                 |     |
|  |     |

| Date of document completion/'sign-off': 11/11/2024 |
|--|
|--|

| European Marine Site:                  | Tweed Estuary SAC  |
|--|--|
| Generic sub-feature(s):                | Intertidal mud and sand, Intertidal mud,<br>Intertidal mixed sediment, Intertidal coarse<br>sediment, Infralittoral rock   |
| Gear type(s):                          | Handwork (access from land)  |
| NIFCA tLSE type:                       | Simple   |
| Gear/feature interaction reference(s): | TSAC – 339 Intertidal sand and muddy sand<br>TSAC – 340 Intertidal mud<br>TSAC – 341 Infralittoral rock<br>TSAC – 342 Intertidal mixed sediment<br>TSAC – 344 Intertidal coarse sediment |

| Revision history |   |        |
|------------------|---|--------|
| Date             | Revision                                | Editor |
| 28/09/2018       | Document created                        | AA     |
| 26/07/2022       | Infralittoral rock included and amended | KS     |
| 11/11/2024       | Reviewed by NE                          | SR/PW  |
| 12/11/2024       | Documents finalised                     | SR     |

| Potential for Likely   | No   |
|--|--|
| Significant Effect?  |  |
| <b>Justification and evidence</b> Synthesis of evidence and local knowledge informing this decision of between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Na (CS) was involved with this formal process. |  |
|  | NIFCA officers record sightings of intertidal hand work activity observed during routine patrols when a site visit coincides with low water (± 2 hours). Between January 2016 and March 2022, one individual was recorded collecting periwinkles (April 2021) by officers and two records of four individuals collecting (May and July 2021) by the River Tweed Commission within Tweed Estuary SAC, all sightings were on the intertidal rock feature within the site. This interaction has been assessed in another document (TSAC tLSE 031). Based on expert judgement, intertidal handwork in Northumberland IFCA district involves collection of periwinkles ( <i>Littorina littorea</i> ), mussels ( <i>Mytilus edulis</i> ) or <i>Salicornia</i> sp. by hand or cleeking for European lobster ( <i>Hommarus gammerus</i> ). |

| These activities do not occur at this site on the features listed above (Jon Green, |
|---|
| pers. comms.). Collection of M. edulis and Sallicornia sp. does not occur as the    |
| species are not present at the site.  |

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

| Has Natural England been formally consulted on this tLSE (and do they agree)? | Yes.                    |
|---|-------------------------|
|   |                         |
| Date of document completion/'sign-off':                                       | 11/11/2024 (Pete Welby) |

**Tweed Estuary SAC European Marine Site:** Intertidal mud and sand, Intertidal mud, Generic sub-feature(s): Intertidal mixed sediment, Intertidal coarse sediment, Infralittoral rock Handwork (access from land) Gear type(s): **Simple** NIFCA tLSE type: TSAC - 339 Intertidal sand and muddy sand Gear/feature interaction TSAC – 340 Intertidal mud reference(s): TSAC – 341 Infralittoral rock TSAC – 342 Intertidal mixed sediment TSAC – 344 Intertidal coarse sediment

| Revision history |   |        |
|------------------|---|--------|
| Date             | Revision                                | Editor |
| 28/09/2018       | Document created                        | AA     |
| 26/07/2022       | Infralittoral rock included and amended | KS     |

| Potential for Likely Significant Effect? | No  |
|--|---|
| Justification and evidence               | Synthesis of evidence and local knowledge informing this decision occurred between January 2014 and the date of this document's creation with stakeholders (where appropriate) and other statutory authorities. Natural England (CS) was involved with this formal process.   |
|  | Based on expert judgement, intertidal handwork in Northumberland IFCA district involves collection of periwinkles ( <i>Littorina littorea</i> ), mussels ( <i>Mytilus edulis</i> ) or <i>Salicornia</i> sp. by hand or cleeking for European lobster ( <i>Hommarus gammerus</i> ). These activities do not occur at this site on the features listed above (Jon Green, pers. comms.) Collection of <i>M. edulis</i> and <i>Sallicornia</i> sp. does not occur as the species are not present at the site.  NIFCA officers record sightings of intertidal hand work activity observed during routine patrols when a site visit coincides with low water (± 2 hours). Between January 2016 and March 2022, one individual was recorded collecting periwinkles (April 2021) by officers and two records of four individuals collecting (May and July 2021) by the River Tweed Commission within Tweed Estuary SAC. |

| In previous assessments for the Tweed Estuary SAC there was no   |  |  |
|--|--|--|
| conservation advice or Regulation 33/35. At the time, a working  |  |  |
| group of NIFCA eIFCOs (JG, JR, SA) and Natural England lead      |  |  |
| adviser (CS) assigned features and sub-features based on expert  |  |  |
| judgement (see table 1) at the beginning of the project. As of   |  |  |
| January 2016, draft Conservation Advice was made available, the  |  |  |
| features and sub-features neatly correlate with the features and |  |  |
| subfeatures identified previously, as shown in Table 1.          |  |  |

#### Infralittoral rock

There is currently no site-specific evidence available for the infralittoral rock sub-feature within the Tweed Estuary. Information will be updated when it becomes available.

#### Conclusion

Is the proposal likely to have a significant effect 'alone or in combination' on the Tweed SAC?

No

| Has Natural England been formally consulted on this tLSE (and do they agree)? |   |
|---|---|
|   | T |
| Date of document completion/'sign-off':                                       |   |

| Feature                             | Conservation Advice Sub feature      | NIFCA/NE sub-feature (expert judgement) |
|-------------------------------------|--------------------------------------|---|
| Estuaries                           | Subtidal coarse sediments            | Subtidal gravel and sand                |
| Estuaries                           | Subtidal sand                        | Subtidal muddy sand                     |
| Estuaries                           | Infralittoral rock                   | Estuarine rock                          |
| Estuaries                           | Subtidal mixed sediments             | Subtidal mixed sediment                 |
| Estuaries                           | Intertidal mud                       | Intertidal mud                          |
| Estuaries                           | Intertidal rock                      | Intertidal boulder and cobble reef      |
| Estuaries                           | Intertidal coarse sediment           |   |
| Estuaries                           | Intertidal mixed sediments           |   |
| Estuaries                           | Intertidal sand & muddy sand         |   |
| Mudflats & sandflats not covered by |                                      |   |
| seawater at low tide                | Intertidal mud                       | Intertidal mud                          |
| Mudflats & sandflats not covered by | Intertidal sand & muddy sand         |   |
| seawater at low tide                |                                      | Intertidal mud and sand                 |
| Mudflats & sandflats not covered by | Intertidal mixed sediments           |   |
| seawater at low tide                |                                      | Intertidal mixed sediment               |
| Mudflats & sandflats not covered by | Intertidal coarse sediment           |   |
| seawater at low tide                |                                      |   |
| Annex II species                    | River lamprey (Lampetra fluviatilis) | River & Sea lamprey                     |
| Annex II species                    | Sea lamprey (Petromyzon marinus)     | River & Sea lamprey                     |