

# Environmental Standard Operating Procedure

|                      |   |
|----------------------|---|
| <b>ESOP Name</b>     | Biosecurity   |
| <b>ESOP Number</b>   | 2   |
| <b>Revision Date</b> | 22/02/2024  |
| <b>Related ESOPs</b> | All ESOPs should be read with reference to the biosecurity ESOP and supplementary biosecurity advice, where required. |



## Aim

The Broads are a highly diverse yet delicate ecosystem which may be seriously degraded by the establishment of invasive species. These standard procedures aim to prevent the transfer and spread of invasive species into, around or out of the Broads.

## Standard Methodology

- All staff, volunteers and contractors receive guidance in identification of key non-native invasive species and the risks associated, through provision of ID cards – on request from the Ecology and Design Team.
- Check origin of equipment coming from outside the broads and likely presence of non-natives. Ensure that all equipment is clean and has been dry for a minimum of 48 hours.
- Where possible, carry out task order at sites known to have no non-native invasive species first.

- Ensure that no equipment leaves site without following the [Check, Clean, Dry](#) procedure.
- Where the drying phase is impractical, all equipment must be cleaned in situ prior to leaving site. If steam cleaning is required, it must be carried out at a minimum nozzle temperature of 60°C. Steam cleaning should only be undertaken when equipment has been on sites or in river systems where there are known to be invasive species. Steam cleaning should only occur where practicable, equipment may be washed down with clean water and brushes.
- Ensure that no waste water is transferred from site to site.
- If you suspect presence of an invasive species whilst working on site, contact an Ecologist, who will advise and instruct

## Procedure

### Pre-works

- Ecologists to survey the works area if invasive species are suspected to be present. Staff and contractors to be made aware before they arrive on site, and when necessary during operations, and be given ID materials before works commence.
- Assessment will inform a site-specific Method Statement to guide operatives.

### Operational



- If any plants are found that are suspected to be invasive, works should stop and photos should be taken of the plant and sent to an ecologist to check to confirm whether or not action should be taken.
- Biosecurity “check, clean, dry” protocols must be followed at all times.

## Consultation

The following must be confirmed by the Ecology team before works commence:

- No invasive species are present and if they are, that the appropriate consents and permissions are in place to control the invasive plants.

## Non-Native Invasive Species in the Broads

|  |  |   |   |
|--|--|---|---|
| <p>Killer shrimp<br/><i>Dikerogammarus villosus</i></p>                            | <p>Australian swamp stonecrop<br/><i>Crassula helmsii</i></p>                      | <p>Japanese knotweed<br/><i>Fallopia japonica</i></p>                               | <p>Floating pennywort<br/><i>Hydrocotyle ranunculoides</i></p>                      |
|   |   |   |  |
| <p>Giant hogweed<br/><i>Heracleum mantegazzianum</i></p>                           | <p>Himalayan balsam<br/><i>Impatiens glandulifera</i></p>                          | <p>Parrots feather<br/><i>Myriophyllum aquaticum</i></p>                            |   |
|  |  |  |   |

## Risk Assessment

| Hazard   | Initial Risk |   |   | Controls / Safeguards / Precautions   | Revised Risk |   |   |
|--|--------------|---|---|---|--------------|---|---|
|  | S            | L | R |   | S            | L | R |
| Disturbance of existing invasive species allowing them to spread beyond the site | 4            | 5 | C | If invasive species are suspected, ensure that site is checked by an ecologist prior to works commencing .<br>Areas not to be managed until programme of eradication has been planned and completed   | 4            | 2 | B |
| Vegetation removal allowing invasive species to be spread off site.              | 4            | 3 | C | Any arisings from site to be burnt or stacked on the site and not moved off site under any circumstances.   | 4            | 1 | A |
| Transfer of invasive species on or off site on kit, equipment or machinery       | 4            | 3 | C | Undertake pre-works survey to check for any invasives on kit/equipment or existing on the site.<br>Follow biosecurity measures strictly at all times, ensure all kit and equipment is thoroughly cleaned before moving to a different site. | 4            | 2 | B |

Matrix

|   |   | LIKELIHOOD    |          |                   |        |             |
|---|---|---------------|----------|-------------------|--------|-------------|
|   |   | Very unlikely | Unlikely | Moderately likely | Likely | Very likely |
| SEVERITY  |   | 1             | 2        | 3                 | 4      | 5           |
| <b>Low</b> (minimal, short-term disturbance levels and negligible damage to native habitats.)   | 1 | A             | A        | A                 | A      | A           |
| <b>Medium</b> (moderate, short-term disturbance levels, some damage to native habitats/species. Regenerates quickly.)   | 2 | A             | A        | A                 | B      | B           |
| <b>High</b> (high disturbance levels over a longer period and displacement of species. Damage to native habitats. Significant time to regenerate)               | 3 | A             | B        | B                 | C      | C           |
| <b>Very High</b> (Long-term disturbance with displacement/death of species. Significant damage to native habitats that takes a significant time to regenerate.) | 4 | B             | B        | C                 | C      | C           |

| RISK |   |
|------|---|
| A    | OK. Work to provisions in risk assessment         |
| B    | Proceed with caution. Dynamically review risks.   |
| C    | Cancel task. Approach project in a different way. |