



## Nuttall's waterweed - *Elodea nuttallii*

An aquatic, perennial and submerged plant (apart from the tiny white flowers on long threadlike stalks) which grows up to 3m in length. It is difficult to distinguish between Nuttall's waterweed and Canadian waterweed (*Elodea canadensis*). However Nuttall's waterweed is found in more nutrient-rich water and is less common than Canadian waterweed in northern England, Scotland and Ireland. The waterweed produces dense growth in slow flowing rivers, drainage channels and canals can impede flow and exacerbate flooding. It can replace native aquatic plant species and reduce biodiversity in lakes and ponds and interfere with recreational activities such as angling and boating.

### Management Options:

#### Mechanical Cutting

Cut using the most appropriate equipment for the site, such as weed knives, trailing knives, chains, rakes, etc. The location should be netted to retain propagules.

- Suitability:** Best performed before July. Roots die-off in June, when it forms its maximum growth. Cutting in Spring will require further cutting later in the season.
- Equipment:** Boats, drysuits, specialist cutting equipment, wheelbarrows, forks, rakes. Vehicle & trailer if not disposing at site. Stop-nets and sweep nets. Life jacket and any other personal protective equipment deemed necessary after risk assessment.
- Efficiency:** Moderate - depending on the efficiency of the equipment at the site. Submerged objects, such as tree trunks, will compromise efficiency. Remove bulk of biomass before August.
- Constraints:** Requires good access and appropriate methods for waste management. Removal may create a niche for more invasive submerged macrophytes, if present.

#### Manual Pulling

Hand-pull (if water depth allows) and dispose of material by composting away from water habitats.

- Suitability:** Best performed before July. Roots die-off in June, when it forms its maximum growth. Cutting in Spring will require further cutting later in the season. Suitable for volunteer groups.
- Equipment:** Boats, drysuits, wheelbarrows, forks, rakes. Vehicle & trailer if not disposing at site. Stop-nets and sweep nets. Life jacket and any other personal protective equipment deemed necessary after risk assessment.
- Efficiency:** Moderate/Poor, and of limited application to most sites.
- Constraints:** Time-consuming, and requires good access. Removal may create a niche for more invasive submerged macrophytes, if present.

#### Plant Suppression

Cover submerged growth with jute matting, weighted down with stones, as described by methodology developed by Central Fisheries Service, Ireland (now Inland Fisheries Ireland).

