LANFiM12

Plan and manage electrofishing operations to meet scheduled fishing objectives

Overview

This standard is about planning and managing electrofishing operations to meet the scheduled fishing objectives safely and effectively. It includes being able to establish and manage all aspects of the electrofishing activity.

This standard requires that electrofishing techniques are deployed, taking account of the purpose, fishing objectives, the environmental conditions, the effectiveness of the equipment and following the manufacturer's specification. This standard also requires that the condition of fish is maintained during capture, storage, processing, data collection and release.

This standard requires that you confirm that work is completed safely, in line with relevant legal, health and safety requirements and licensing requirements and that you ensure work maintains bio-security and minimises environmental disturbance at all times.

The relevant legislation controlling the application of this standard will vary depending on the location of the fishery – in England, Wales, Northern Ireland or Scotland.

Performance criteria

You must be able to:

1. confirm that all activities required to plan and manage electrofishing operations to meet scheduled fishing objectives, are carried out safely in line with relevant health and safety requirements
2. assess the risks associated with the site and the proposed electrofishing activity
3. select and implement the appropriate working methods in accordance with the assessed risks
4. plan electrofishing operations to meet the required scheduled fishing objectives
5. obtain the necessary licence/permit(s) for electrofishing operations from the relevant authorities
6. manage the required resources to achieve the scheduled electrofishing objectives, taking into account the characteristics of water body, the species of fish and the environmental conditions
7. confirm that those involved in electrofishing operations are using the appropriate personal protective equipment (PPE)
8. confirm that those involved in electrofishing activities are fully trained, according to the relevant requirements of your organisation
9. confirm that electrofishing equipment is prepared and maintained to the relevant standard for electrofishing
10. confirm that fish-holding facilities are in a condition suitable for receiving, processing and maintaining the health and wellbeing of fish
11. manage electrofishing operations to meet the scheduled fishing objectives within the fishing area, and be able to respond to variations
12. confirm that the electrofishing team use anaesthetics correctly during electrofishing operations
13. adjust electrofishing operations to take account of changes in the environmental conditions
14. confirm the correct processing of captured fish and oversee the condition, health and wellbeing of captured fish throughout the electrofishing activities
15. maintain accurate information in order to keep up-to-date records of electrofishing operations
16. communicate the electrofishing operational requirements to all

those involved in the activity

17. in the event of an incident, implement emergency procedures if required
18. confirm all work is carried out in line with bio-security requirements, and that all waste and surplus materials are disposed of correctly

Knowledge and understanding

You need to know and understand:

1. your responsibilities under the relevant environmental and health and safety legislation and codes of practice associated with electrofishing operations
2. how to assess the risks associated with the site and electrofishing operations
3. the importance of selecting the appropriate working methods in accordance with the assessed risks
4. the importance of using the correct personal protective equipment (PPE)
5. how, when and from whom to obtain the necessary licence/permit(s) for electrofishing operations
6. the principles of electrofishing and its limitations, advantages and disadvantages
7. how to plan and manage electrofishing operations to meet scheduled fishing objectives, including the selection of an appropriate fishing area
8. the survey types used in electrofishing
9. how resource requirements vary according to the survey type and location
10. how morphology, water temperature, water conductivity and fish size can impact on electrofishing activities and the results obtained
11. the types of errors and environmental variations that can affect scheduled electrofishing operations
12. how the correct use of electrofishing equipment can minimise the potential damage caused to fish
13. when to use boom boats and handheld anodes
14. how different fish species react during electrofishing and how to maintain the condition, health and wellbeing of captured fish throughout electrofishing activities
15. how to modify electrofishing operations to take account of large numbers of fish, fish transfers, and changes in water conditions
16. data collection and the organisation's recording requirements
17. how to recognise signs of stress in fish
18. which anaesthetics are used during electrofishing activities and why

19. how to prepare, use and dispose of anaesthetics for electrofishing operations
20. how to establish and maintain the bio-security of the fishing area during electrofishing activities
21. the importance of communication with the electrofishing team during the electrofishing operations

Glossary

Anode

An anode is an electrode through which conventional current flows into a polarized electrical device.

Morphology

A branch of biology dealing with the study of the form and structure of organisms and their specific structural features.

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