LANFIM29 Use non-capture technology to determine fish population characteristics



Overview

This standard is about preparing to and using electronic monitoring technology to monitor fish population characteristics. It also includes preparing the monitoring equipment for use, setting up the fishing area, deploying the monitoring equipment and the safe use of equipment to collect data in both running water and still water.

This standard requires the use of monitoring equipment such as:

- 1. acoustic equipment
- 2. video/motion recognition equipment
- 3. acoustic cameras
- 4. electrical resistance equipment.

It also requires that fishing activity is modified because of changes in water and environmental conditions.

This standard requires that you carry out work safely in line with health and safety requirements and that you work to maintain bio-security and minimise environmental disturbance at all times.

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

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Performance criteria

You must be able to:

- P1 obtain survey specification
- P2 assess prevailing conditions to determine if it is safe to apply selected monitoring techniques
- P3 prepare and maintain equipment into a serviceable and safe operating condition
- P4 set up monitoring equipment in fishing area according to survey requirements
- P5 control monitoring equipment to ensure survey requirements are achieved
- P6 modify monitoring activities in response to changes in water and environmental conditions, to maintain their effectiveness
- P7 accurately record data from monitoring devices
- P8 report on the performance of the monitoring activity ensuring compliance with specification
- P9 clean and store equipment after use

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Knowledge and understanding

You need to know and understand:

- K1 the health and safety requirements associated with monitoring activities
- K2 the techniques and equipment that are used to monitor fish population characteristics
- K3 the application of non-capture data in fisheries management
- K4 the advantages and disadvantages of non-capture techniques
- K5 the environmental conditions required for the deployment of monitoring devices and the potential impact of adverse environmental conditions
- K6 how to prepare and maintain monitoring equipment in a safe operating condition
- K7 the effective range of monitoring equipment
- K8 how water conditions can impact on the quality of data collected (visibility, water flow, depth)
- K9 the expected reaction of different fish species to monitoring devices

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Developed by	LANTRA
Version number	1
Date approved	April 2010
Indicative review date	April 2012
Validity	Current
Status	Original
Originating organisation	LANTRA
Original URN	NFIM29
Relevant occupations	Agriculture, Horticulture and Animal Car; Skilled Agricultural Trades
Suite	Fisheries Management
Key words	monitoring, fish, populations, electronic, equipment