

Managed wetland activities affected by New Authorisations

Technical briefing document outlining the regulatory changes affecting abstractions for Managed Wetland Systems (MWS), including guidance on when a licence is required for wetland activities which were previously exempt.

Note: This technical guidance document and mock wetlands application has been produced to support the initial introductory briefing document titled 'New rules on water use for wetlands' found [here](#). These documents should be read in conjunction.

Background on New Authorisations – Removal of previously exempt water abstraction activities

An abstraction licencing system has been in place since the 1960's, however, certain abstractions have historically remained lawfully exempt from licencing control. This is largely because they were considered low risk or not widely used. As more information has become known about these exempt abstractions, our assessment and understanding of their risk has improved.

The Water Act 2003 included provisions to remove these licencing exemptions in England and Wales. Implementing the legislation will help to protect the water environment and make people's rights to take water fairer, while also helping to meet the requirements under the Water Framework Directive (WFD) to achieve "Good" water body status. The project to bring these activities into our licencing control is referred to as 'New Authorisations'. Existing abstractors will be able to submit their application via a 'transitional route' which provides a much lighter touch and risk based approach to entering regulation, compared to the standard day job approach.

Abstractions for managed wetland systems have been affected by changes to the definition of 'land drainage' in the legislation. This was previously defined in section 29(5) of the Water Resources Act 1991

(5) *In this section, "land drainage" includes the protection of land against erosion or encroachment by water, whether from inland waters or from the sea, and also includes warping and irrigation other than spray irrigation.*

The previous definition for land drainage included irrigation other than spray irrigation, and therefore encompasses a number of activities which could be argued to be for the purpose of managed wetland systems, i.e. putting water onto land. Section 7(5) of the Water Act 2003 amended the definition of land drainage, which now only covers activities that prevent the encroachment of water onto land:

(5) For subsection (5) there is substituted—

“(5) In this section, “land drainage”—

(a) includes the protection of land against erosion or encroachment by water, whether from inland waters or from the sea; but

(b) does not include warping, irrigation (including spray irrigation), or transferring water from one source of supply to another (whether with or without intervening use) solely or mainly in order to augment the latter.”

The term ‘irrigation’ involves putting water onto land, and so historically a lot of operators will have viewed their wetland operations as falling within this definition. Although some could have arguably been licensable for the specific purpose of ‘conservation’ or ‘wetland support’, given the wording in the legislation these abstractions will also be allowed to come into the licencing system through the ‘transitional route.

Therefore, as a result of the change in the land drainage definition, the following activities are now likely to require an abstraction licence:

- traditional water meadows
- wet grassland and other land inundation for conservation purposes
- water for conservation schemes for flora or fauna
- managed wetlands
- warping and flood irrigation
- wet fencing.

The Water Abstraction and Impounding (Exemptions) Regulations 2017 have also been introduced which means that for some of the activities listed above, only certain abstractions will need a licence. The new regulations feed into the principles for how we licence these abstractions, detailed in licencing principles section.

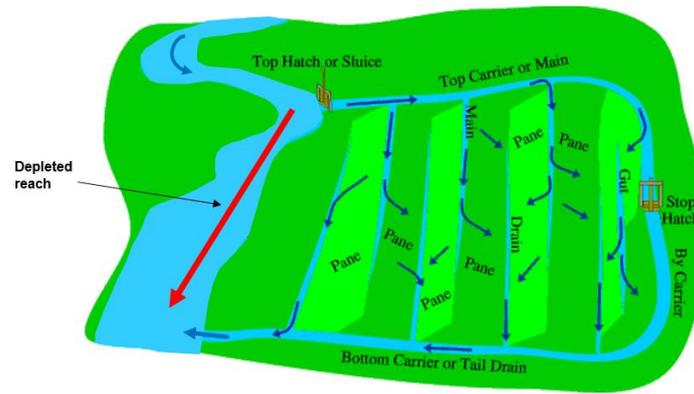
What is an abstraction?

Before considering the application process and licence requirements, it is important to first establish whether an abstraction is actually taking place. For a number of wetland activities listed above, water may be naturally entering the site, and so it could be interpreted that no abstraction from a source of supply (see section below for definition of a source of supply) is occurring. The definition of an abstraction is outlined in the interpretation section (221) Water Resources Act 1991, and is shown below:

“abstraction”, in relation to water contained in any source of supply, means the doing of anything whereby any of that water is removed from that source of supply, whether temporarily or permanently, including anything whereby the water is so removed for the purpose of being transferred to another source of supply; and “abstract” shall be construed accordingly

Therefore, any method/means of taking water from a source of supply, be that a pump, structure, engineered depression, or other artificial means of diverting water from a source of supply would be considered an abstraction. This includes water transfers, whereby water is removed from a source of supply (e.g a river) to another source of supply (e.g channels within a wetland). Even if water is removed from a source of supply, and eventually returned to the same source of supply (e.g downstream of the initial abstraction point), then this is also considered an abstraction. In the context of MWS’s, the transfer of water from a source of supply into a wetland system to then be returned downstream of where the water was originally removed from, would leave a ‘depleted reach’. This is the length of watercourse between the point of abstraction or impoundment and the point of return where the flow is reduced due to the abstraction. The resulting effects of the depleted reach could impact on the water body status, affect habitats within it, or

impact on fish movement. The diagram below shows a typical water meadow system with the depleted section of the river shown as a red arrow.



What constitutes a 'source of supply' will also have a bearing on whether an abstraction is taking place and will also determine the type of abstraction licence required (full or transfer licence). The definition of a source of supply is also outlined in the interpretation section (221) of the Water Resources Act 1991.

Source of supply" means—

- (a) any inland waters except, without prejudice to subsection (3) below in its application to paragraph (b) of this definition, any which are discrete waters; or*
- (b) any underground strata in which water is or at any time may be contained;*

The majority of abstractions into MWS's are likely to be from surface water rather than underground strata via an aquifer, and therefore the definition of an 'inland water' is likely to be the most important factor in the context of this sector. This is defined as:

- Any river, stream, ditches, drains, cuts, culverts dykes or passages which allow water to flow.
- Any lake or pond, whether natural or artificial, provided they are not considered discrete¹.
- Any channel, creek, bay, estuary or arm of the sea.

Taking all of the above into consideration, an abstraction licence would only be required where there is an **abstraction** from a **source of supply**. If water levels rise and either spill onto land, or into a system of wetland channels, due to the hydraulic characteristics of the natural watercourse (for example an area of wet grassland acting as a natural floodplain), then provided there are no engineered or artificial means to facilitate this, no abstraction has occurred. In addition, if runoff or rainfall is simply held back and retained on land, then an abstraction from a source of supply has not taken place as the land does not meet the definition of a 'source of supply'.

Licensing principles and remaining exemptions

The Water Abstraction and Impounding (Exemptions) Regulations 2017 introduced the concept of a MWS, which is defined as the following;

- (a) an area of land that is periodically inundated or saturated by abstracted water in order to provide ecological benefits to flora and fauna, or*
- (b) an area of land through which abstracted water flows, through a system of channels, sluices, carriers or other apparatus in order to provide ecological benefits to flora and fauna;*

If the definition of a MWS has been met, then only the intake(s) which moves water from the donor river/source of supply into the MWS boundary requires a licence. A licence is not needed for abstractions or transfers within the MWS boundary provided they are for the sole purpose of the management, operation or maintenance of water levels or flows in that MWS. This is embodied in paragraph 8 of the 2017 regulations, and means that:

1. The main focus of control from a water resources management perspective is at the donor river (which helps protect against the creation of a deprived reach and abstractions at times of low flows when the environment of the donor river and downstream interests could be adversely affected) and
2. The approach is similar to how we now licence Internal Drainage Boards and Navigation activities, and therefore gives parity to the principles applied to these sectors of not licensing subsequent abstractions within the system

The Exemption Regulations only remove the need for a licence for abstractions within the MWS boundary where they are for the specific operation/maintenance of the system, and therefore a licence is still needed for any other abstractions within the MWS, for example for spray irrigation. In addition, if water is simply being evacuated off the site to prevent flooding, then this will meet the remaining land drainage exemption and also not require a licence.

Exemption consents

In order to qualify for the exemption for abstraction within a MWS, in some cases an operator will need to apply for the exemption and be granted a consent by us. This is in cases where the wetland is associated with, or has potential to impact on, any site designated under the Habitats Directive.

This will involve the applicant providing us with details of their operation (MWS boundary, location of abstractions, purpose and seasonality of abstraction) and then us assessing the application against the proximity to any European designated sites (Habitats Directive). Where we have an application to bring the primary abstraction into licensing regulation (the main abstraction into the MWS), we are likely to accept this as the application for the exemption consent for any secondary abstractions within the system, but it is important that we have all details of the operation to allow us to advise accordingly.

Abstractions within larger level controlled systems:

A number of activities covered by the MWS sector are likely to fall within an Internal Drainage District (IDD's). A separate paper found [here](#) addresses the issue of licencing requirements for third party abstractions within an IDD. A flow chart has been included in this paper to assist with the decision as to whether an abstraction licence is required. Where a MWS is contained within an IDD, then the extent of the MWS owned or operated jointly or individually by any third party will be limited to the boundary or curtilage of each individually managed wetland site and not the whole of the IDD area. We expect that in the majority of cases, where a third party abstraction into a MWS is located within an IDD, it is likely to require an abstraction licence.

As a working expedient, we take a MWS to mean the curtilage or boundary of the site that abstractor (or agent) are responsible for. National Nature Reserves, SSSI's and Local Wildlife Sites are likely to have more clearly defined boundaries and therefore are easier to identify, provided they still align with the legal definition of a MWS. For smaller, fragmented wetland areas, we will be pragmatic in working with applicants to decide on what constitutes the boundary of a MWS. Where the structure/means of abstraction is operated jointly by multiple parties, a conversation at a local level needs to take place to decide who the most appropriate organisation to hold the licence is. In addition, multiple operators may be involved with

1. Discrete water means:

a lake, pond or reservoir which does not discharge to any other inland waters; or
one of a group of two or more lakes, ponds or reservoirs (whether near to or distant from each other) and of watercourses or mains connecting them, where none of the inland waters in the group discharges to any inland waters outside the group;

managing water levels within a MWS, but only the operator abstracting into the MWS needs to hold a licence. Abstractions within the systems boundary will remain exempt if they are for the sole purpose of the management, operation or maintenance of water levels or flows in that MWS. Please note, Natural England is not able to apply for licences on behalf of SSSI owner/occupiers or agreement holders. Natural England is required to apply for licences only on land where it is the owner/occupier (e.g. NNRs) and is responsible for managing the structure(s).

What licence type is required?

In most cases, there will be a structure on the main river or at the inlet to the MWS which is used to abstract water from the donor waterbody into a MWS. The nature of the MWS will then affect the licence type which is required. There are likely to be one of two types of abstraction licence issued for these activities:

- A “full” abstraction licence involves the removal or taking of water from a source of supply for a consumptive purpose where the water is not fully returned to another source of supply. For example in a flood irrigation scheme, water will be flooded onto land which **does not** come under the definition of a source of supply. An application for a full licence costs £135 and there is an annual subsistence charge based on the quantities of water you are licensed to abstract.
- A “transfer” abstraction licence involves the removal or taking of water from a source of supply for it to be transferred to a different source of supply (e.g. channels within a managed wetland system) with no intervening use, for example as part of wet fencing or wetland habitat activities. An application for a transfer licence costs £1500, with no annual subsistence charge.

Examples shown in the appendix of this document demonstrate which licence types are appropriate for each activity. If there are a number of abstraction points from the same source of supply it is likely that these can be all included on one licence (for example one licence can be used for a number of mole drains if all from the same river).

Most managed wetlands systems are controlled through a system of sluices, dam boards and weirs. In the majority of cases, an impounding licence will not be required as the structure is acting as the means of abstraction and an abstraction licence is therefore the most appropriate means of controlling the structure. Similarly, any structures used to manage water within the MWS boundary are likely to be acting as abstractions rather than impoundments and therefore will meet the exemption for abstractions within the system.

Application process and calculating historical abstraction

Special transitional arrangements are in place that will allow you to secure your rights to the water that you have historically used. These end on 31 December 2019 and will not be available retrospectively and therefore should not be missed. You will need to submit a valid licence application by 31 December 2019 to benefit from these arrangements. Typically, the licence will then be based on what you historically abstracted during the 7 year qualifying period from 2011 to 2017. You can find the application forms [here](#).

The transitional application process requires evidence of abstraction during the qualifying period, which includes outlining the amount abstracted each year. The nature of the purposes covered under the MWS sector means that in a large number of cases, abstraction is likely to have been via a fixed structure or engineered depression or channel. As meter readings are therefore unlikely to be available, an estimate of the abstracted quantities can be made based on the basic measurements and parameters of the structure, and associated water levels in the vicinity of those structures. A volume validation tool has been created for

New Authorisations which accounts for a number of these structures, and is available along with the application forms in the link above. A guidance document has also been produced [here](#) which provides further guidance on calculating abstracted quantities using relevant worked examples for varying types of structure. Note, an example of using the tool for a sluice structure is demonstrated in the model application form which accompanies this guidance document.

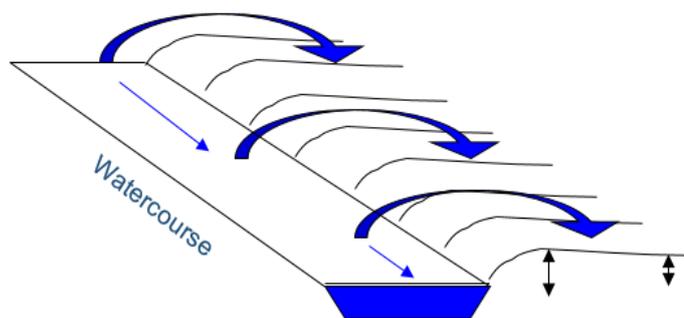
If having read the .gov.uk guidance you are still unsure if you require a licence, or you have questions about preparing your application, please call our dedicated New Authorisations hotline on **03708506506**. In order to advise you further we will require basic information such as a description of the activities you undertake, how you are moving water (for example by pump or use of structures including pipes and sluices), and possibly schematics or annotated maps of the site.

Example licencing scenarios

The attached appendix covers some of the licencing scenarios which may be affected by the removal of the exemptions. The list is not exhaustive, and has been included as a general guide to demonstrate what is considered an abstraction, and the associated licencing requirements. The key principles of licencing the input into the MWS are shown, while any abstractions (for the purposes of maintenance/operation of the MWS) within the system remain exempt.

Appendix – Licencing scenarios

Example 1: Natural flood irrigation



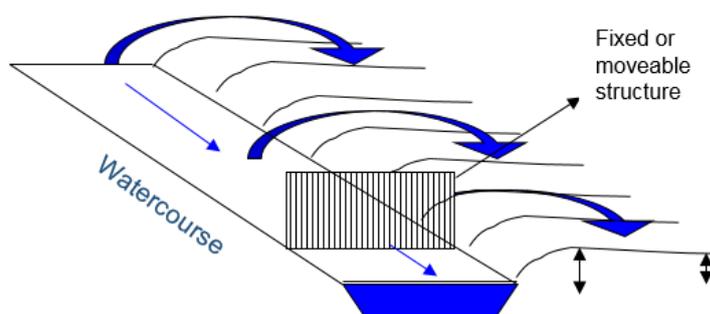
Description:

Water levels rise in the river due to increases in flow and the natural hydraulic characteristics of the river. Water then spills onto land (which could be an area of grassland acting as the natural floodplain)

Licence requirements:

None – no abstraction has taken place as water naturally floods onto the fields/land

Example 2: Engineered flood irrigation



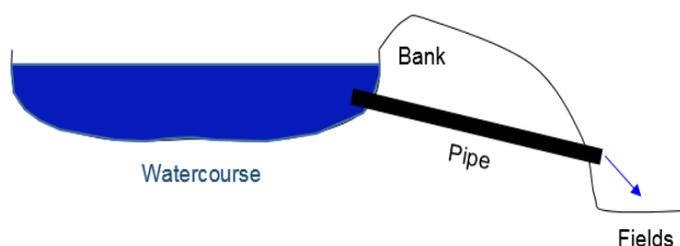
Description:

A structure is positioned in the water which could either be fixed or movable. The structure causes the water level behind it to rise and flood the land.

Licence requirements:

Yes - Full abstraction licence – The structure acts as the means of abstraction from the water course. Water is moved onto land (which is not classed as a source of supply), therefore a transfer licence is not appropriate.

Example 3: Flood irrigation via pipe



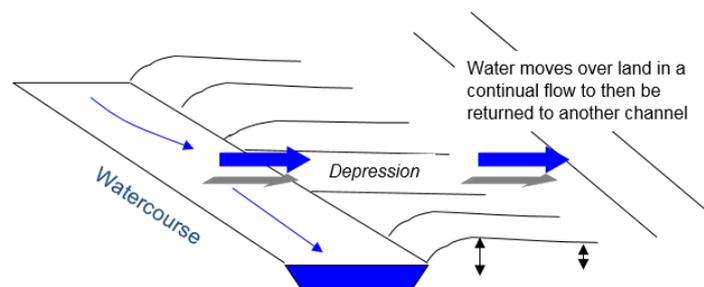
Description:

A pipe has been installed in the bank of a watercourse which allows water to be abstracted onto land for the use of flood irrigation.

Licence requirements:

Yes – Full abstraction licence – Similar to example 2, the pipe is acting as means of abstraction onto land. If the pipe fed into a ditch or channel which could be considered a source of supply (e.g as part of a wet fencing or water meadow system), then a transfer licence would be appropriate.

Example 4: Engineered depression into wetland



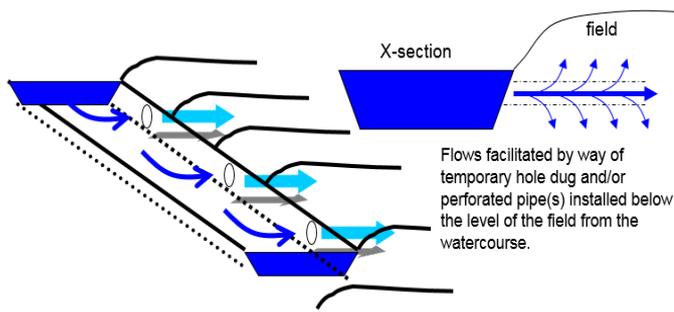
Description:

An engineered depression has been created in the bank of river to flow into another channel which is part of managed wetland system (e

Licence requirements:

Yes – Transfer licence – The engineered depression is considered an abstraction as it is the 'the means of doing anything whereby water is removed from a source of supply'. In this example, as the engineered depression is acting as a means of abstraction into another channel which is part of a managed wetland system, then a transfer licence is appropriate.

Example 5: Sub irrigation



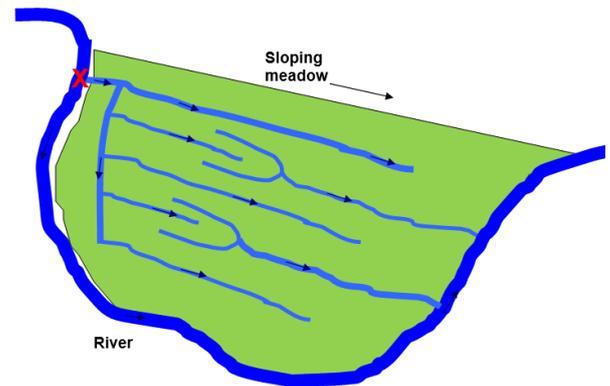
Description:

A series of mole drains have been created to abstract water beneath the fields to help create high soil water levels for crops.

Licence requirement:

Yes – Full abstraction – The mole drains are acting as the means of abstraction from the watercourse. For sub-irrigation there needs to be a deliberate action – i.e the insertion of a pipe /drain etc. Water just soaking through the bank into the sub-soil may still be regarded as sub-irrigation but we would not class this as an abstraction

Example 6: Traditional water meadow



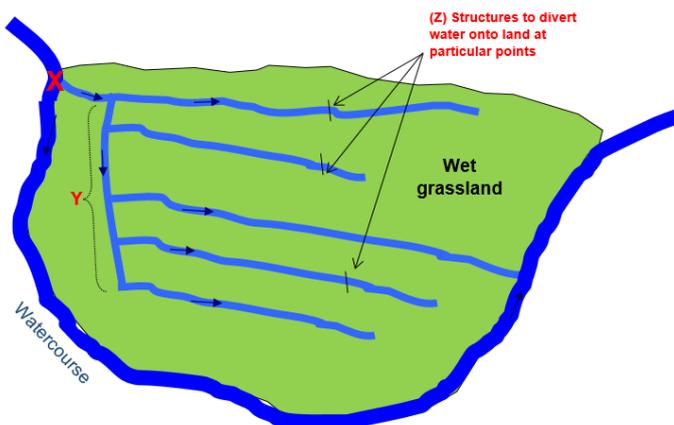
Description

A structure is located at X abstracting water into the MWS (the boundary of which is shown in green). Water moves into the meadow through a series of channels. As the meadow is sloping, it then flows overland via gravity from channel to channel.

Licence Requirements:

Yes – Transfer licence – A transfer licence is located at point X for the initial abstraction into the MWS boundary.

Example 7: Wet grassland scheme



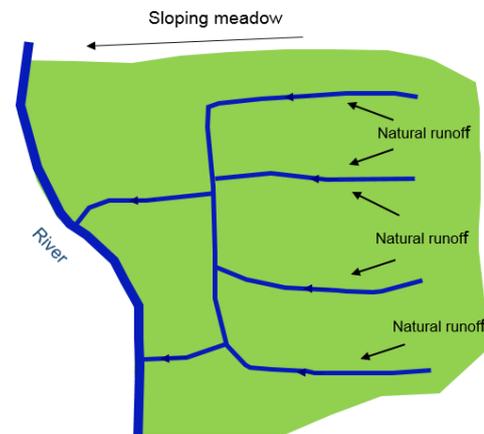
Description:

Similar to example 6, a structure is located at X abstracting water into the MWS. Water moves onto the meadow through a series of channels. Structures at Y and Z allow for secondary control of water movement and abstraction within the system.

Licensing requirements:

Yes – Transfer licence – A licence is required for the initial abstraction into the MWS marked X. Provided the boundary of the system shown in green meets the legal definition of a MWS, then all abstractions via Y and Z meet the exemption for abstractions within a MWS (Note: an exemption consent may be required for the secondary abstractions if they are within or could affect a Habitats Directive site)

Example 8: Natural sloping meadow



Description:

A wet fencing or water meadow system is fed through the natural runoff of the surrounding land. The channels within the sloping meadow then flow into a nearby river

Licensing requirements:

None – no abstraction has taken place as water enters the channel as part of the natural gradient and physical characteristics of the surrounding land. There are no structures abstracting water into the system from the river. (Note: provided the boundary of the MWS shown in green meets the legal definition of a MWS, then any abstractions within the boundary used to maintain the MWS would be exempt. If they are within a Habitats Directive site, you will need to contact us to obtain an exemption consent).