



New Forest Abstraction Licensing Strategy

A strategy to manage water resources
sustainably Version 3
March 2019

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We help people and wildlife adapt to climate change and reduce its impacts, including flooding, drought, sea level rise and coastal erosion.

We improve the quality of our water, land and air by tackling pollution. We work with businesses to help them comply with environmental regulations. A healthy and diverse environment enhances people's lives and contributes to economic growth.

We can't do this alone. We work as part of the [Defra](#) group (Department for Environment, Food & Rural Affairs), with the rest of government, local councils, businesses, civil society groups and local communities to create a better place for people and wildlife.

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1. About the licensing strategy

This strategy sets out our approach to managing new and existing [abstraction](#) and [impoundment](#) within the New Forest [catchment](#) in the South East river basin district.

The New Forest catchment encompasses an area of approximately 450 square kilometres, of which the majority lies within the New Forest National Park boundary. The habitats of the area and its coast are especially valued and have both national and international conservation designations. The New Forest is essentially a rural area with small towns such as New Milton, Lyndhurst, Brockenhurst and Lymington but there is significant industrial development located to the east along Southampton Water.

A combination of clay and sand deposits underlie the New Forest and only provide limited groundwater to support the numerous streams and wetland which provide important habitats for wildlife. Rainfall causes flow in those streams to rise rapidly and so the rivers are characterised by naturally low summer flows with high winter flows following rainfall. The River Lymington and River Beaulieu catchments dominate the area but there are many smaller streams.

There is not significant abstraction in this area as the New Forest only has limited aquifers and rivers to support abstraction and there is also a need to protect the sensitive habitats that depend on water.

Our approach ensures that River Basin Management Plan objectives for water resources activities are met and we avoid deterioration within this catchment.

We apply this approach to the [water body](#) in which the abstraction is located. It also applies to all downstream [surface water](#) bodies that may be affected by any reduction in abstraction-related flow, or adjacent [groundwater](#) bodies affected by any reduction in groundwater level.

Please see [Managing Water Abstraction](#) for the technical explanation, legal and policy requirements behind the Abstraction Licensing Strategy ([ALS](#)).

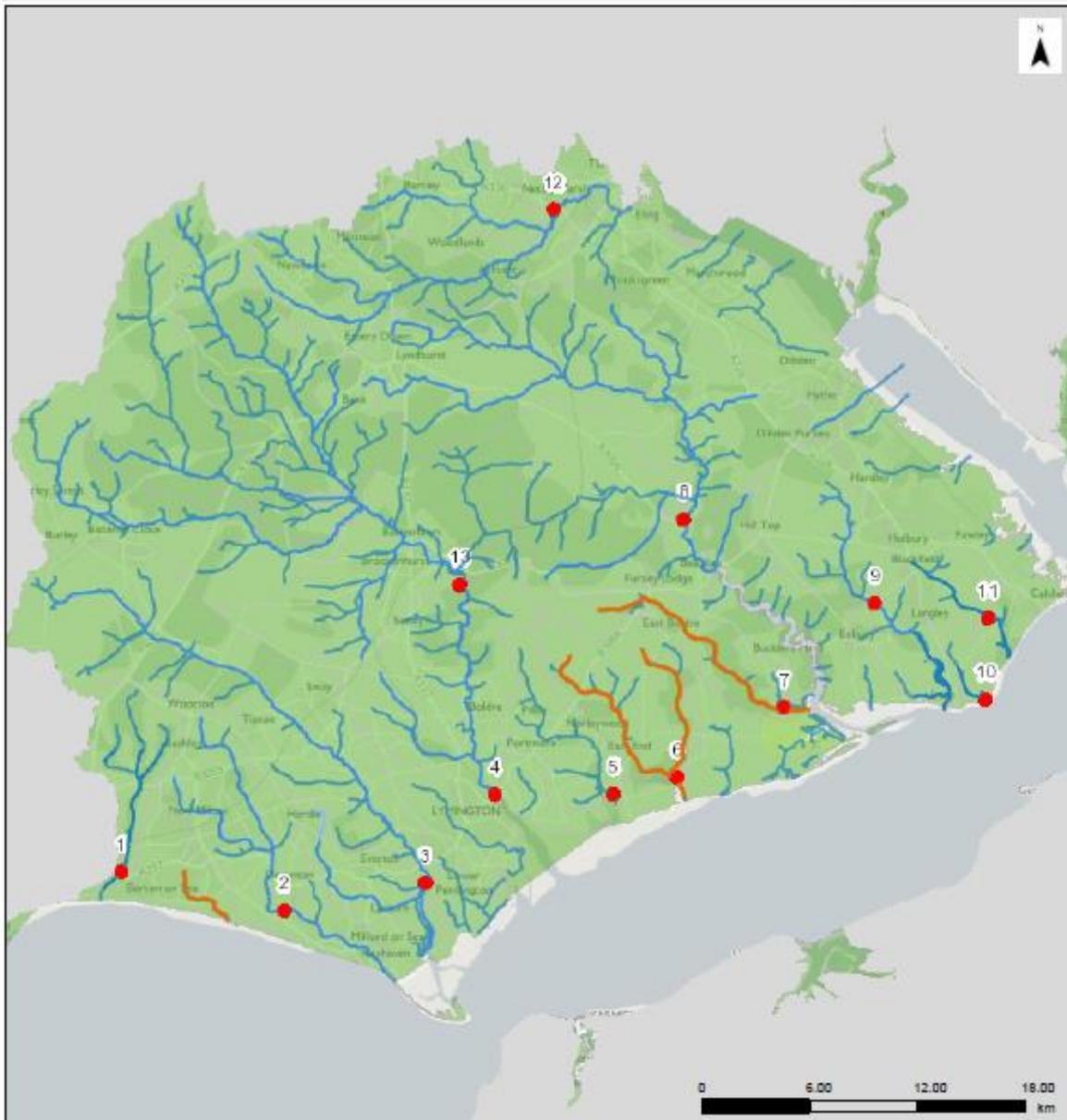
Please see [abstraction pages on gov.uk](#) for advice on who needs an abstraction or impoundment licence, and how to apply.

2. Water resource availability of the New Forest ALS

2.1. Resource availability

The water resource availability, calculated at four different flows, Q95 (the flow of a river which is exceeded on average for 95% of the time i.e. low flow), Q70, Q50, and Q30 (higher flow) for this ALS are presented and explained in Maps 1 to 4 and section 2.1.1 below.

Map 1: Water resource availability colours at Q30 for New Forest ALS.



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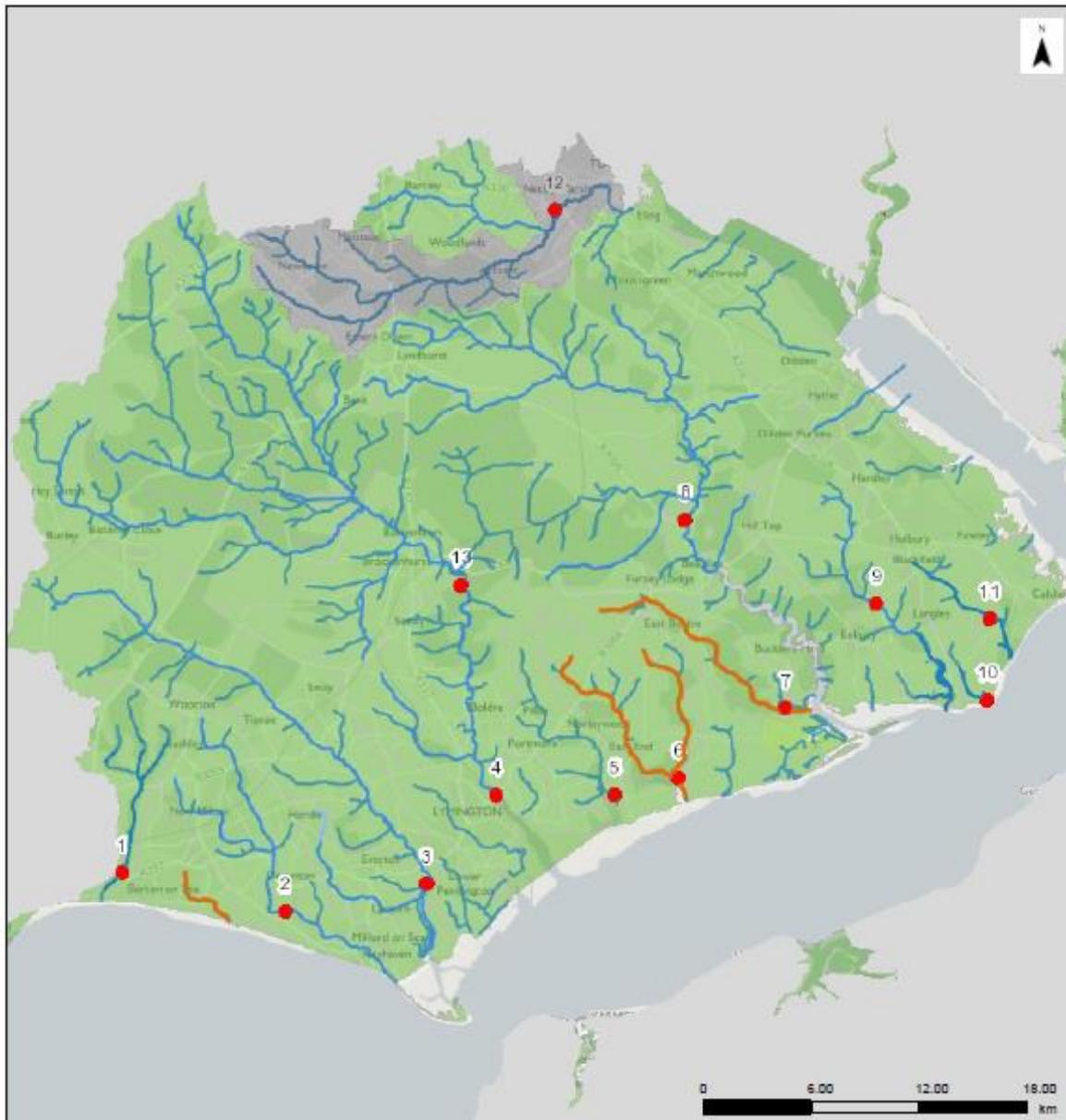
Legend:

- Assessment Points
- Heavily Modified and Artificial Rivers
- Rivers

Water Availability at Q30:

- Water available

Map 2: Water resource availability colours at Q50 for New Forest ALS.



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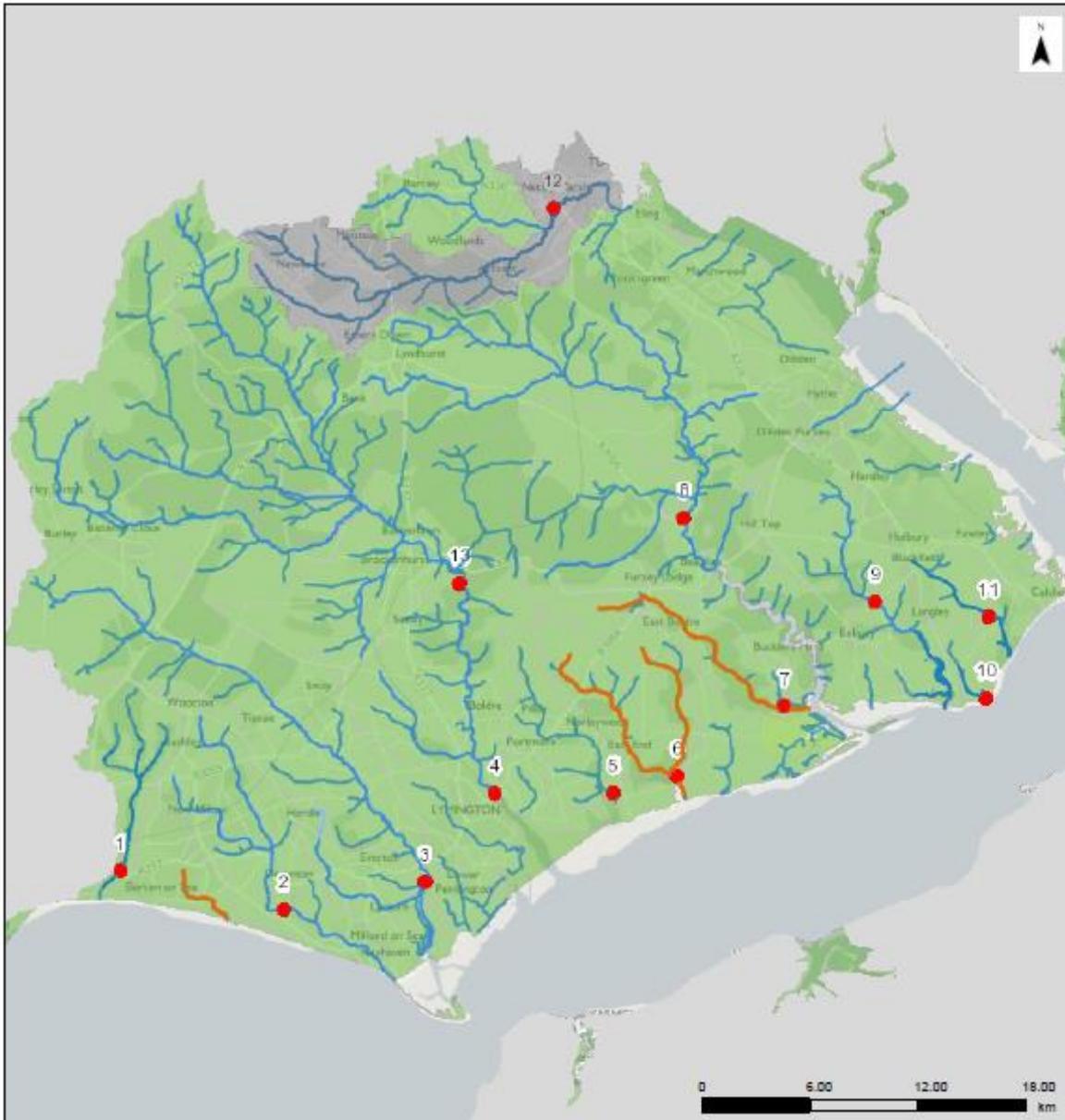
Legend:

- Assessment Points
- Heavily Modified and Artificial Rivers
- Rivers
- Discharge Rich Waterbodies

Water Availability at Q50:

- Water available

Map 3: Water resource availability colours at Q70 for New Forest ALS.

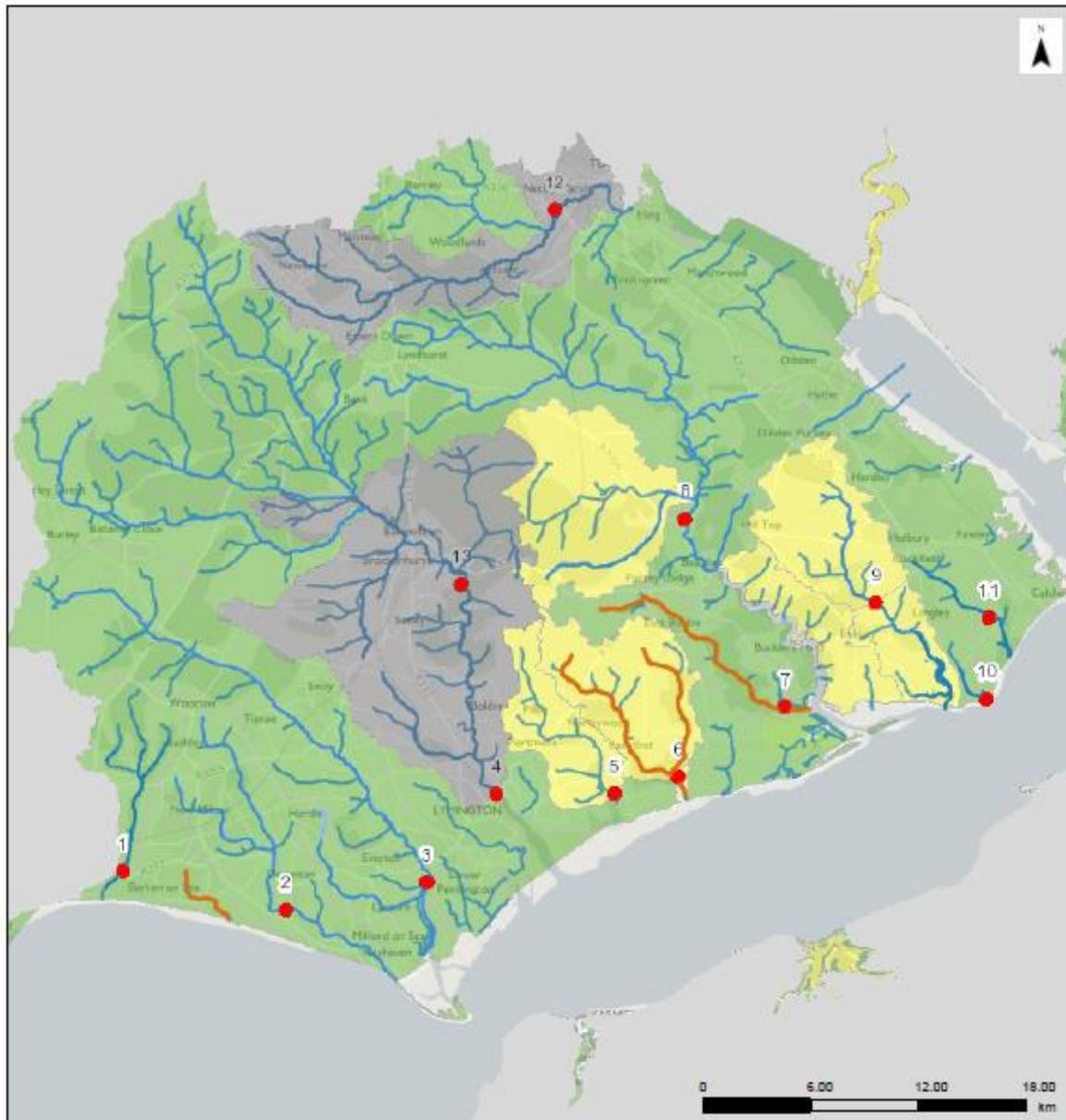


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Legend:

- Assessment Points
 - Heavily Modified and Artificial Rivers
 - Rivers
 - Discharge Rich Waterbodies
- Water Availability at Q70:
- Water available

Map 4: Water resource availability colours at Q95 for New Forest ALS



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Legend:

- Assessment Points
 - Heavily Modified and Artificial Rivers
 - Rivers
 - Discharge Rich Waterbodies
- Water Availability at Q95:
- Water available
 - Restricted water available

2.1.1. Water resource availability colours and implications for licensing

Water available for licensing

Green 

There is more water than required to meet the needs of the environment.

New licences can be considered depending on local and downstream impacts.

Restricted water available for licensing

Yellow 

Full Licensed flows fall below the [Environmental Flow Indicators EFIs](#).

If all licensed water is abstracted there will not be enough water left for the needs of the environment. No new consumptive licences would be granted. It is likely we'll be taking action to reduce full licensed risks. Water may be available if you can 'buy' (known as licence trading) the entitlement to abstract water from an existing licence holder.

Water not available for licensing

Red 

Recent actual flows are below the EFI.

This scenario highlights water bodies where flows are below the indicative flow requirement to help support a healthy ecology in our rivers. We call this 'Good Ecological Status' ([GES](#)) or 'Good Ecological Potential' ([GEP](#)) where a water body is heavily modified for reasons other than water resources.

Note: we are currently taking action in water bodies that are not supporting GES or GEP. We will not grant further licences. Water may be available if you can buy (known as licence trading) the amount equivalent to recently abstracted from an existing licence holder.

Heavily Modified Water Bodies ([HMWBs](#)) (and/or [discharge](#) rich water bodies

Grey 

These water bodies have a modified flow that is influenced by reservoir compensation releases or they have flows that are augmented. These are often known as 'regulated rivers'. They may be managed through an operating agreement, often held by a water company. The availability of water is dependent on these operating agreements. More detail if applicable can be found in section 4.2.1 Surface Water

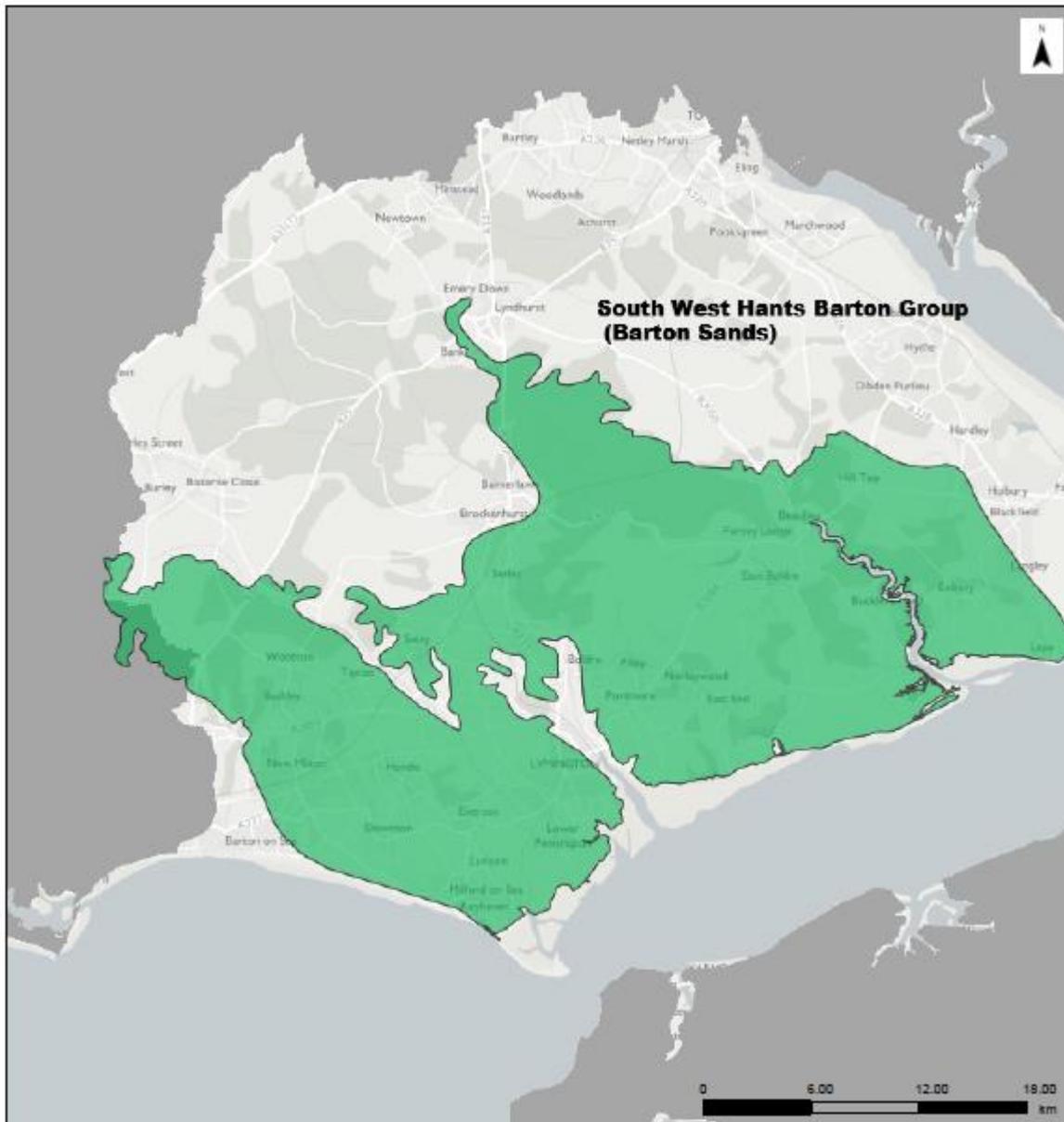
There may be water available for abstraction in discharge rich catchments, you need to contact the Environment Agency to find out more.

2.2. Groundwater resource availability

Water availability is not the same for surface water and groundwater in the New Forest ALS.

In certain areas, resource concerns over groundwater mean that the standard water resource availability colours have been overridden. Section 2.2.1 explains the groundwater resource availability colours, and Map 5 shows these colours for groundwater in New Forest area.

Map 5: Groundwater resource availability colours for New Forest ALS



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Legend:

Groundwater Availability:

 Water available

2.2.1. Groundwater resource availability colours and implications for licensing

Water available for licensing

Green 

Groundwater unit balance shows groundwater available for licensing. New licences can be considered depending on impacts on other abstractors and on surface water.

Restricted water available for licensing

Yellow 

Groundwater unit balance shows more water is licensed than the amount available, but that recent actual abstractions are lower than the amount available OR that there are known local impacts likely to occur on dependent wetlands, groundwater levels or cause saline intrusions but with management options in place.

In restricted groundwater units no new consumptive licences will be granted. It may also be appropriate to investigate the possibilities for reducing fully licensed risks. Water may be available if you can 'buy' (known as licence trading) the entitlement to abstract water from an existing licence holder.

In other units there may be restrictions in some areas e.g. in relation to saline intrusion.

Water not available for licensing

Red 

Groundwater unit balance shows more water has been abstracted based on recent amounts than the amount available.

We will not grant further licences.

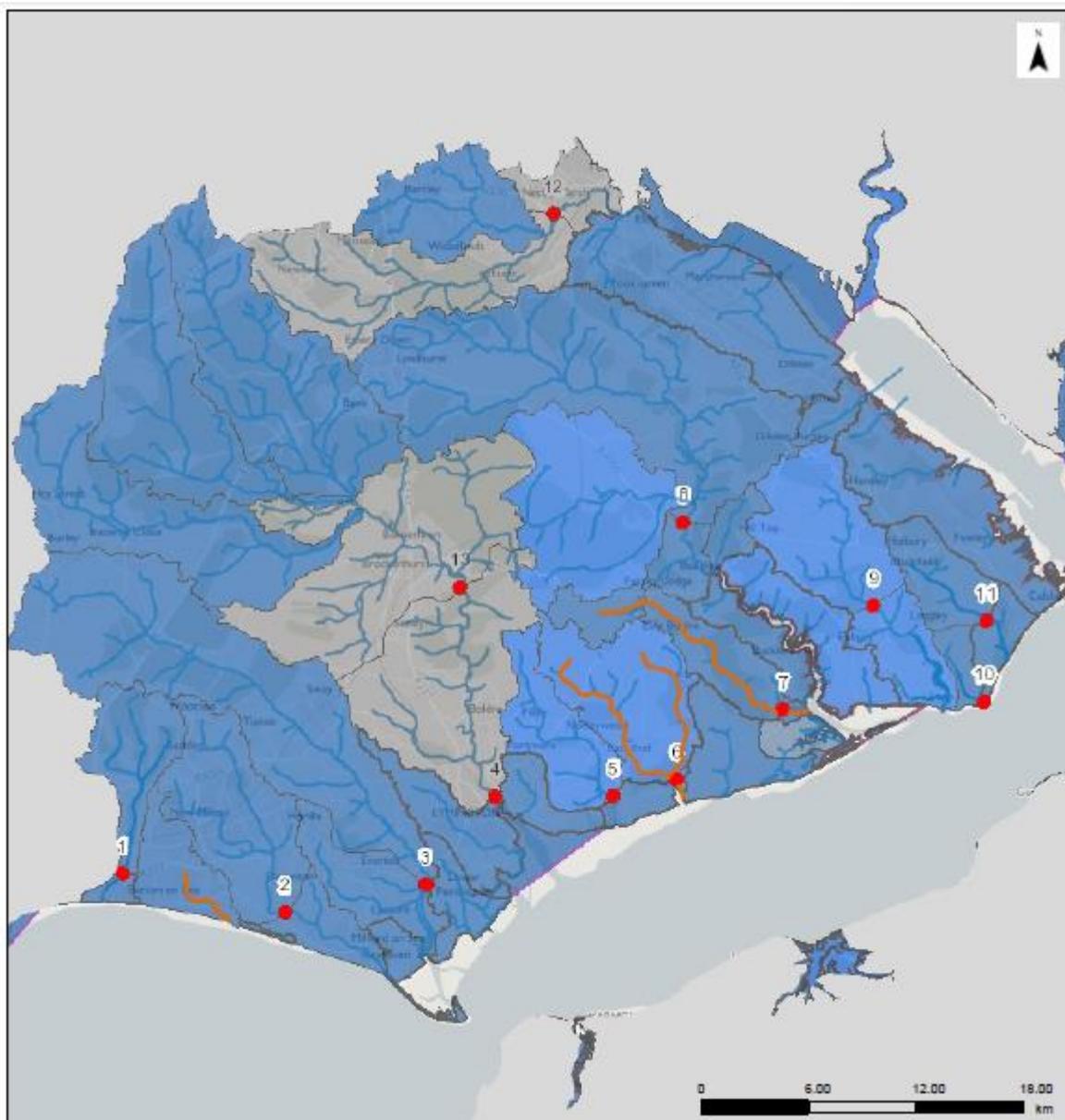
2.3. Resource reliability

If you want to apply for a licence, it's worth considering the reliability of your abstraction.

By assessing the quantity of water available at different flows it's possible to see when there is a surplus or deficit of water and the associated reliability of an abstraction. This is an indication only; actual reliability of a licence will be discussed when you apply.

Map 6 gives an indication of the resource availability for [consumptive abstraction](#) in New Forest area expressed as a percentage of time.

Map 6: Water resource reliability of the New Forest ALS expressed as percentage of time available



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Legend:

- Assessment Points
- Heavily Modified and Artificial Rivers
- Rivers
- Discharge Rich Waterbodies

Percentage of the time additional consumptive resource may be available:

- Consumptive abstraction available at least 70% of the time
- Consumptive abstraction available at least 95% of the time

2.4. Other considerations for availability and reliability

We may have to add constraints to licences such as '[hands off flow](#)' (HoF) conditions to protect the environment and the rights of other abstractors. As a result, when we grant a licence, it doesn't mean that we guarantee a supply of water. These conditions specify that if the flow in the river drops below what's needed to protect the environment, abstraction must reduce or stop. So, in dry years, restrictions are likely to apply more often, which will affect the reliability of supply.

Whilst this document may say that water is available for abstraction, this doesn't guarantee that all applications will be successful. This is because we have to determine each application on its own merits, and local factors may mean we're either unable to grant a licence as applied for, or even at all.

New licences within an ALS are usually given a Common End Date ([CED](#)), which allows them to be reviewed at the same time. The next CED for this ALS is 31/03/2026 and the subsequent one is 31/03/2032.

2.5. Impoundments

Applications for impoundments will be dealt with on a case by case basis. More information may be found on our [water management web pages on gov.uk](#).

3. How we manage abstraction in the New Forest ALS

3.1. Assessment points

We assess surface water flows at [Assessment points](#) (APs), which are significant points on a river, often where two major rivers join or at a gauging station. APs cover multiple surface water bodies.

Where groundwater abstractions directly impact on surface water flows, the impact is measured at the surface water AP.

Table 1 gives an indication of how much water is available for further abstraction and the associated restrictions we may have to apply to new and varied [abstraction licences](#) from the main river. Tributaries to the main river may be subject to different restrictions and quantities and will be assessed locally on a case by case basis.

Each HoF is linked to an AP and is dependent on the resource availability at that AP. In some cases additional restrictions may apply to licences where there is a more critical resource availability downstream to protect the ecological requirements of the river. This is detailed in the last column of Table 1 if applicable.

All abstraction licence applications are subject to an assessment to take account of any local and downstream issues and may be subject to further restrictions.

Reading from top to bottom in Table 1 are the APs in the New Forest ALS area. Reading across the columns you can see the potential HoF that may be applied to a licence, the number of days water may be available under this restriction and the approximate volume of water in [Ml/d](#) that may be available etcetera.

| AP | Name | Water Resource Availability | HOF Restriction (MI/d) | Number of days per annum abstraction may be available | Approximate volume available at restriction (MI/d) | Is there a gauging station at this AP? | Additional restrictions |
|----|-------------------------------------|--|------------------------|---|--|--|---|
| 1 | Walkford Brook at Chewton Glen | Water available for licensing | 3 | 310 | <0.5 MI/d | Yes | Small catchment. Limited water available. Further assessment likely to be required. |
| 2 | Danes Stream at New Valley Road | Water available for licensing | 2 | 347 | <0.5 MI/d | No | Small catchment. Limited water available. Further assessment likely to be required. |
| 3 | Avon Water at Great Newbridge Copse | Water available for licensing | 9 | 310 | <1 MI/d | No | Lower reaches are discharge rich. |
| 4 | Lymington at Lymington Toll Bridge | Water available for licensing | 6 | 347 | 3 | No | Discharge rich. |
| 6 | Sowley Stream | Restricted water available for licensing | 2 | 325 | <0.5 MI/d | No | Small catchment. Limited water available. Further assessment likely to be required. |

| AP | Name | Water Resource Availability | HOF Restriction (MI/d) | Number of days per annum abstraction may be available | Approximate volume available at restriction (MI/d) | Is there a gauging station at this AP? | Additional restrictions |
|---|-----------------------------------|--|------------------------|---|--|--|---|
| 8 | River Beaulieu at Hartford Bridge | Water available for licensing | 4 | 347 | <1 MI/d | Yes | Limited water available. Further assessment likely to be required. |
| 13 | Lymington at Brockenhurst GS | Water available for licensing | 3 | 347 | 2 | Yes | Lower reaches are discharge rich. Limited water available. Further assessment likely to be required. |
| Assessment points where summer flows are less than 2MI/d | | | | | | | |
| 5 | Plummers Water | Small catchment with limited water available No gauging stations Further assessment will be required to consider the detailed impact of each application and to determine appropriate licence conditions | | | | | |
| 7 | Hatchett Stream | | | | | | |
| 9 | Darkwater | | | | | | |
| 10 | Stone Stream | | | | | | |
| 11 | Stanswood Stream | | | | | | |
| 12 | Bartley Water | | | | | | |

Table 1: Summary of licensing approach for the assessment points of New Forest ALS.

Although we have calculated resource availability for most streams in the New Forest, Table 1 only includes details for Assessment Points where the summer flows are likely to exceed 2 Ml/d. For streams where summer flows are less than 2 Ml/d, there is unlikely to be a reliable low flow resource available. These assessment points are listed at the end of Table 1. Due to the natural low flows and high environmental sensitivity of the New Forest ALS area, it is unlikely that we will allow abstraction below a HOF1 (QN95).

We will maintain our long held policy of encouraging potential abstractors to apply to take water during high flow periods, to provide reservoir storage for subsequent re-use during drier months. This allows abstractors to use water for consumptive purposes during summer months when other surface water resources are unavailable and protects flows in the summer when they are most needed to support water dependent habitats.

In some catchments, the small summer low flows are supplemented by discharges from waste water treatment works. The Environment Agency has no control over the continued operation of discharges in the ALS area and so cannot guarantee reliability. At present, we cannot grant licences for water that is made up from discharges. There is also a need to maintain low flows for dilution of the discharge.

Small streams without assessment points and located in the tidal or coastal reaches are modelled in the New Forest ALS, but we have low confidence of resource assessment and reliability in these areas on account of no measured flow data or ecological monitoring. We will consider potential applications in these water bodies on a case-by-case basis.

3.2. Groundwater

For major aquifers we may divide the area into groundwater management units (GWMU). In these cases we use the information and assessments on these units to determine water availability and licence restrictions.

Where groundwater abstractions directly impact on surface water flows, including reduction of base flow, the impact is measured at the surface water AP. In these cases, restrictions may be applied to licences, such as Hands off Level ([HoL](#)) conditions. The HoL is a groundwater level below which an abstractor is required to reduce or stop abstraction.

Other restrictions may apply where availability is limited or to protect the environment, for example to prevent saline intrusion.

Licence restrictions on groundwater abstractions in the New Forest ALS area South West Hants Barton Group (Barton Sands) - Water available for licensing

Abstractions from the Barton Sands have the potential to impact on a wide variety of water dependent features such as; rivers, wetlands, mires, alluvial woodlands of which a lot are designated for conservation. The impact of new licences on the New Forest SAC and SPA and Solent Maritime SAC and Solent & Southampton Water SPA will be considered and an Appropriate Assessment may be required in support of an application. Extensive test pumping will usually be required to determine impacts on the designated sites and other abstractors prior to any licence application.

Decisions about an application will be made on a case by case basis and so customers wishing to enquire about the availability of a source should contact the Environment Agency.

3.3. Coasts and estuaries

The coastline of the New Forest ALS area is highly designated for conservation and includes parts of the Solent Maritime SAC, Solent & Southampton Water Ramsar & SPA, which are all internationally important environments.

The Lymington River, Danes Stream, Avon Water, Plummers Water and Sowley Stream flow out to the Solent through the Hurst Castle & Lymington River Estuary SSSI. This SSSI spans 9km of the shoreline and is host to a wide range of coastal habitats including intertidal mud, salt marshes and saline lagoons important for nationally important breeding birds. Freshwater flow to the estuary and inter-tidal areas is essential for the wildfowl.

The Beaulieu River flows through Beaulieu Pond to its estuary which forms part of the North Solent SSSI. As well as the Beaulieu, which makes up the majority of the SSSI area, it also includes inflow from the Dark Water, Stanswood Stream and Stone Stream.

Several of the other smaller coastal streams along the shoreline of Southampton Water feed the Hythe to Calshot Marshes SSSI. The Bartley Water at the top of the ALS area flows through the coastal Eling & Bury Marshes SSSI before emptying to the River Test and into Southampton Water. There are some large tidal abstractions from Southampton Water.

3.4. Heavily modified water bodies

There are two heavily modified water bodies for water resources in the New Forest ALS area – Sowley Pond and Sowley Stream.

Sowley Pond is an artificial lake with an area of 0.16km² created in the 14th Century. During the 17th and 18th centuries it was used as a water supply for an ironworks situated on Sandpit Lane. The pond is owned by the Sowley Estate and is designated as a SSSI. The pond discharge is predominately used by a small local fishing club for low intensity coarse fishing but Sowley Estate also abstract water for irrigation in the summer. Flows from the pond feed the downstream designated coastal environment of Solent Maritime SAC, Solent & Southampton Water Ramsar & SPA, Hurst Castle & Lymington River Estuary SSSI. The measures needed to secure flow from the pond into the downstream watercourse are all in place although there is a need to formalise the gate operation. Abstraction licences have been modified to protect the downstream flow to the coastal environments.

Sowley Stream is heavily modified due to the on-line storage reservoir on the eastern tributary. The storage reservoir is a combined impoundment and abstraction licence. The licence has several conditions, including a requirement to maintain flow downstream all year. Fish passage is an important consideration.

3.5. Protected areas

UK law provides a very high level of protection to two types of designated sites due to their special environment. These are:

- Special Areas of Conservation ([SAC](#)), which contribute to biodiversity by maintaining and restoring habitats and species;
- Special Protection Area ([SPA](#)), which provides protection to birds and their nests, eggs and habitats

Ramsar sites and Sites of Special Scientific Interest ([SSSI](#)) also carry a high level of environmental importance.

In the New Forest ALS area the following protected areas need to be considered:

- New Forest SPA, SAC, Ramsar
- Solent Maritime SAC
- Solent and Southampton Water SPA and Ramsar Site

4. Managing existing licences

4.1. Water rights trading

We want to make it easier to trade water rights. A water rights trade is where a person sells all or part of their water right, as defined by their abstraction licence(s), to another person on a permanent or temporary basis. In the majority of cases a trade will involve a change in abstraction location and/or use which we will need to approve through the issue or variation of abstraction licences.

In licensing trades, as with new abstraction licences, we need to make sure that we don't cause any deterioration in water body status both within the water body / bodies where the trade will take place and to downstream water bodies. The section below provides a guide to the potential for trading in water bodies of a particular ALS water resource availability colour, as shown previously on Maps 1 to 4.

To find out more about licence trading please go to our [water management web pages on gov.uk](#)

Guide to the potential trading in water bodies of a particular ALS water resource availability colour

Water available for licensing

Green 

Allow trades of recent actual abstraction and licensed abstraction, but little demand for trading expected within water body as water available for new abstractions.

Restricted water available for licensing

Yellow 

There may be opportunities for licence holders to trade up to their full licensed quantities, but the quantities of water available to trade may be restricted once levels of actual abstraction reach sustainable limits. We will not permit licence trades in water bodies where we are taking action to prevent deterioration unless the trade is consistent with achieving water body objectives.

Water not available for licensing

Red 

We will only trade recent actual abstraction but no increase in recent actual abstraction is permitted in water body. Licensed abstraction will be recovered for the environment.

HMWBs

Grey



Opportunities for trading will depend on local operating agreements and local management.

4.2. Taking action on unsustainable abstraction

We have reviewed a large number of permissions to determine their impact on Natura 2000 sites in Solent & South Downs Area through the Habitats Directive Review of Consents. We implemented all the required changes to licences by December 2015. Changes to abstraction licences have been made in the New Forest ALS area to ensure that freshwater flows into designated coastal sites are protected.

4.3. Regulating currently exempt abstraction

As the abstraction licensing system in England and Wales developed over the past 50 years, certain abstractions have remained lawfully exempt from licensing control. This meant that unlimited supplies of water could be abstracted, even in areas that are water stressed.

This means that those exempt abstractions could potentially take unlimited amounts of water, irrespective of availability and without regard to impacts on the environment or other abstractors.

Following two public consultations Government have introduced new Regulations to take effect from 1st January 2018. The Water Resources (Transitional Provisions) Regulations 2017 have removed the majority of previous exemptions from licensing control, and current exempt abstractors will now require a licence to lawfully abstract water.

The main activities affected are:

- transferring water from one inland water system to another in the course of, or as the result of, operations carried out by a navigation, harbour or conservancy authority;
- abstracting water into internal drainage districts;
- dewatering mines, quarries and engineering works, except in an emergency;
- warping (abstraction of water containing silt for deposit onto agricultural land so that the silt acts as a fertiliser);
- all forms of irrigation (other than spray irrigation, which is already licensable), and the use of land drainage systems in reverse (including transfers into managed wetland systems) to maintain field water levels;
- abstracting within currently geographically exempt areas, including some rivers close to the borders of Scotland; and
- abstractions covered by Crown and visiting forces (other than Her Majesty the Queen and the Duchies of Cornwall and Lancaster in their private capacity).

Where we have details of these abstractions, we've included them in our assessments to consider how they impact on the catchment

5. List of abbreviations

ALS

Abstraction Licensing Strategy.

AP

Assessment Point.

CED

Common End Date.

Defra

Department of Environment Fisheries and Rural Affairs.

EFI

Ecological Flow Indicator.

GEP

Good Ecological Potential.

GES

Good Ecological Status.

GW

Groundwater.

HMWB

Heavily Modified Water Body.

HoF

Hands off Flow.

HoL

Hands off Level.

MI/d

Megalitres per day.

SAC

Special Areas of Conservation.

SPA

Special Protection Areas.

SSSI

Sites of Special Scientific Interest.

UKTAG

United Kingdom's Technical Advisory Group.

WB

Water body.

6. Glossary

Abstraction

Removal of water from a source of supply (surface or groundwater).

Abstraction licence

The authorisation granted by the Environment Agency to allow the removal of water.

Assessment point

A significant point on a river, often where two major rivers join or at a gauging station.

Catchment

The area from which precipitation and groundwater will collect and contribute to the flow of a specific river.

Consumptive abstraction

Abstraction where a significant proportion of the water is not returned either directly or indirectly to the source of supply after use. For example for the use of spray irrigation.

Discharge

The release of substances (for example, water, treated sewage effluent) into surface waters.

Environmental flow indicator

Flow indicator to prevent environmental deterioration of rivers, set in line with new UK standards set by [UKTAG](#).

Groundwater

Water that is contained in underground rocks.

Hands off flow

A condition attached to an abstraction licence which states that if flow (in the river) falls below the level specified on the licence, the abstractor will be required to reduce or stop the abstraction.

Impoundment

A structure that obstructs or impedes the flow of inland water, such as a dam, weir or other constructed works.

Surface water

This is a general term used to describe all water features such as rivers, streams, springs, ponds and lakes.

Water body

Units of either surface water or groundwater which we use to assess water availability.

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