



Hampshire Avon Abstraction Licensing Strategy

A strategy to manage water resources sustainably

February 2020

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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 Hampshire Avon [catchment](#) in the South West river basin district.

A significant area of the Hampshire Avon catchment and its rivers are designated as a Site of Special Scientific Interest, Special Area of Conservation or Special Protection Area.

This strategy is designed to protect the habitats and species within these designated sites.

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](#)).

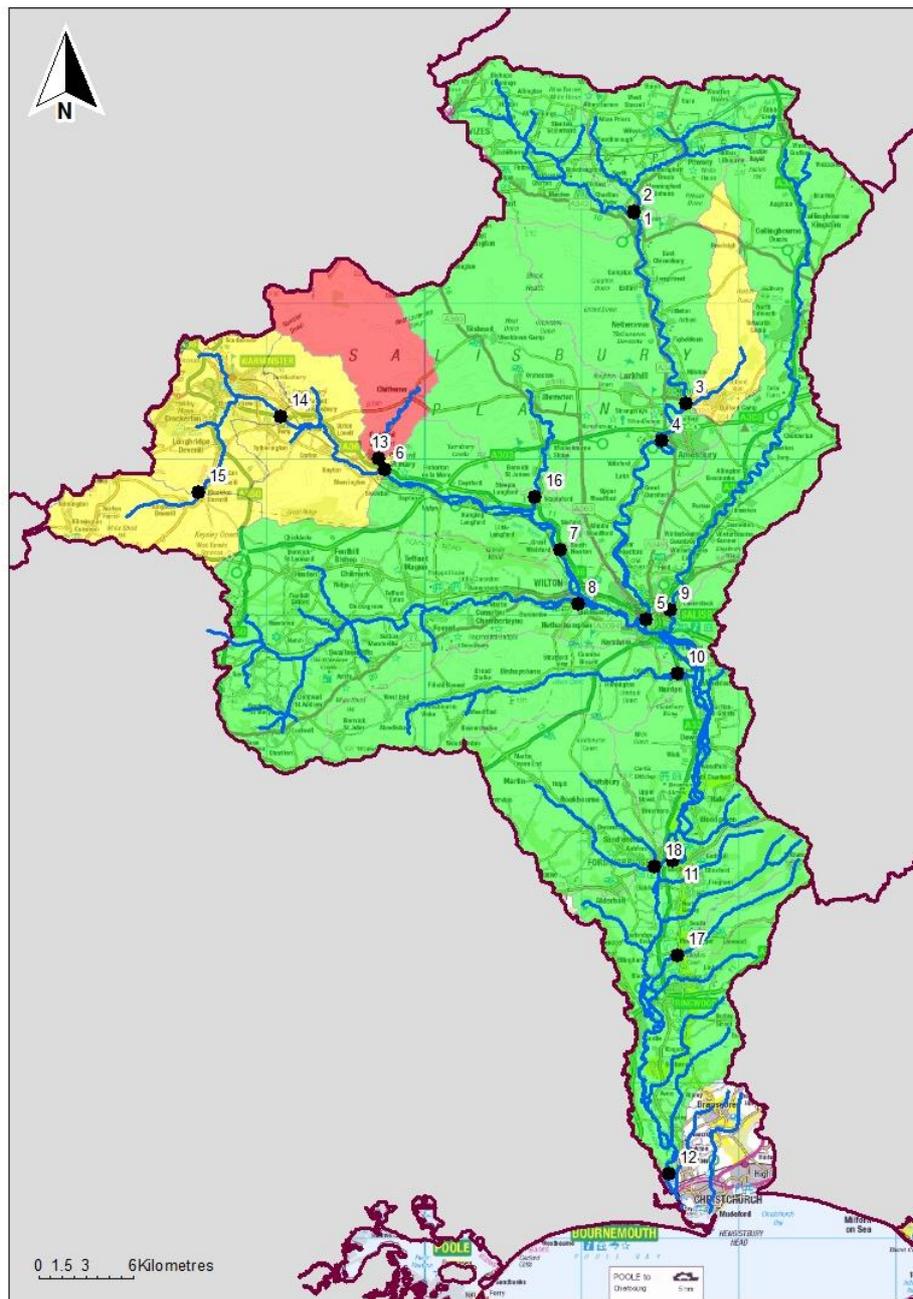
Please see [abstraction pages on gov.uk](#) for advice on who needs an abstraction or impoundment licence, and how to apply.

2. Water resource availability of the Hampshire Avon ALS

2.1. Surface water 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 Maps1-4 and Section 2.1.1 below.

Map 1 Surface water resource availability colours at Q30 (higher flows) for Hampshire Avon ALS.



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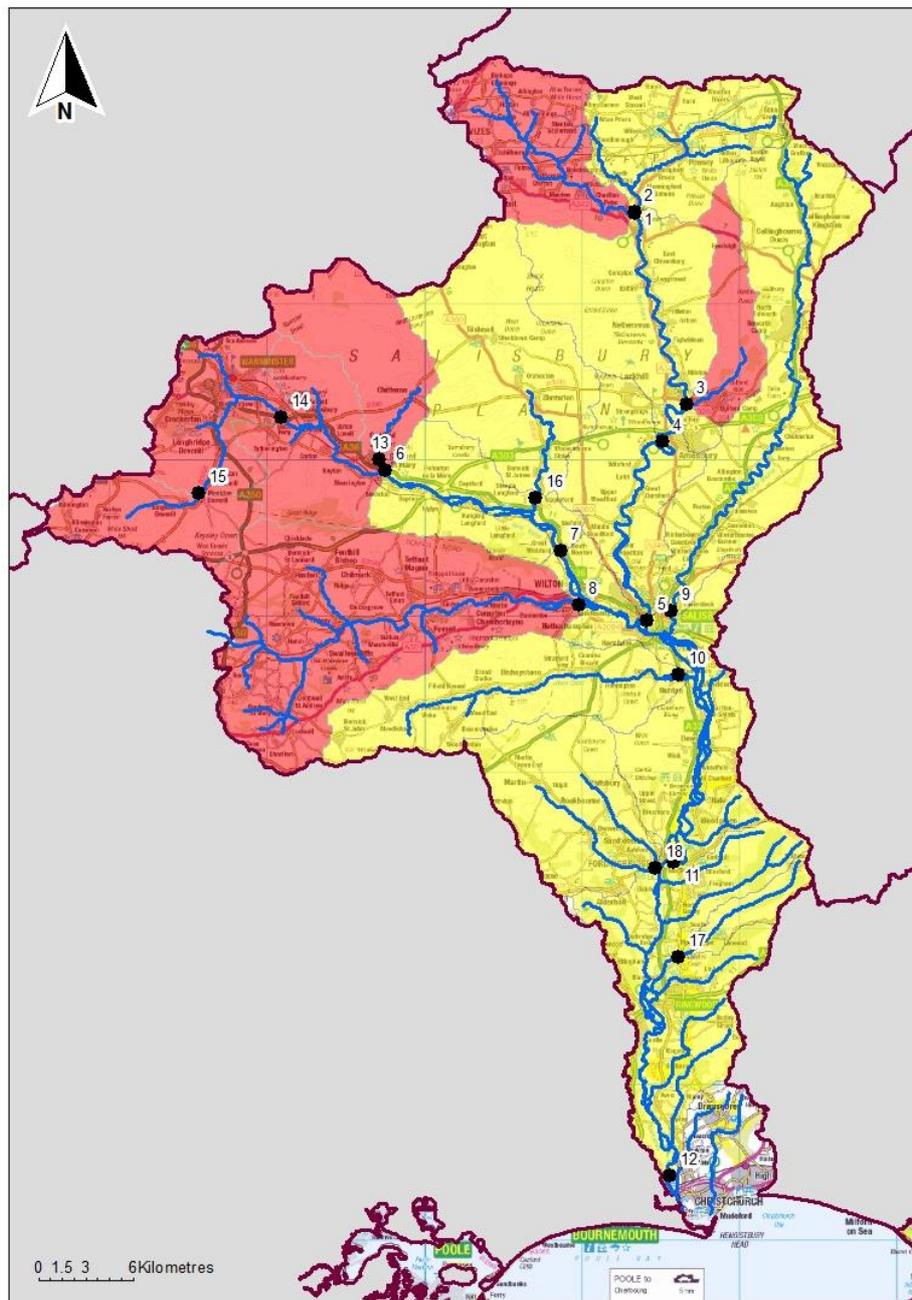
Legend:

- Assessment Points
- Rivers

Water Availability at Q30:

- Water available
- Restricted water available
- Water not available

Map 2 Surface water resource availability colours at Q50 (moderate flows) for Hampshire Avon ALS.



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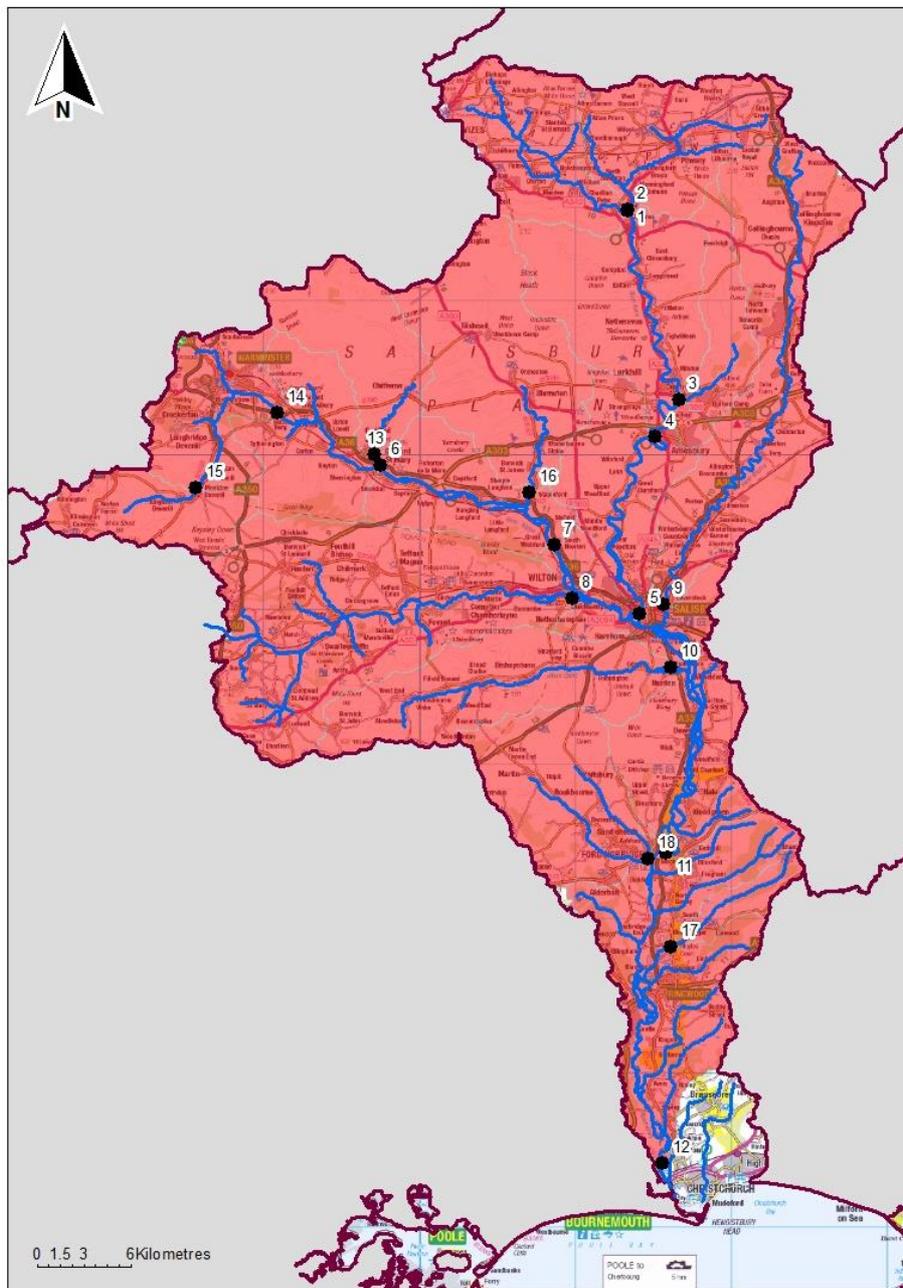
Legend:

- Assessment Points
- Rivers

Water Availability at Q50:

- Water available
- Restricted water available
- Water not available

Map 3 Surface water resource availability colours at Q70 (below moderate flows) for Hampshire Avon ALS.



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Legend:

● Assessment Points

— Rivers

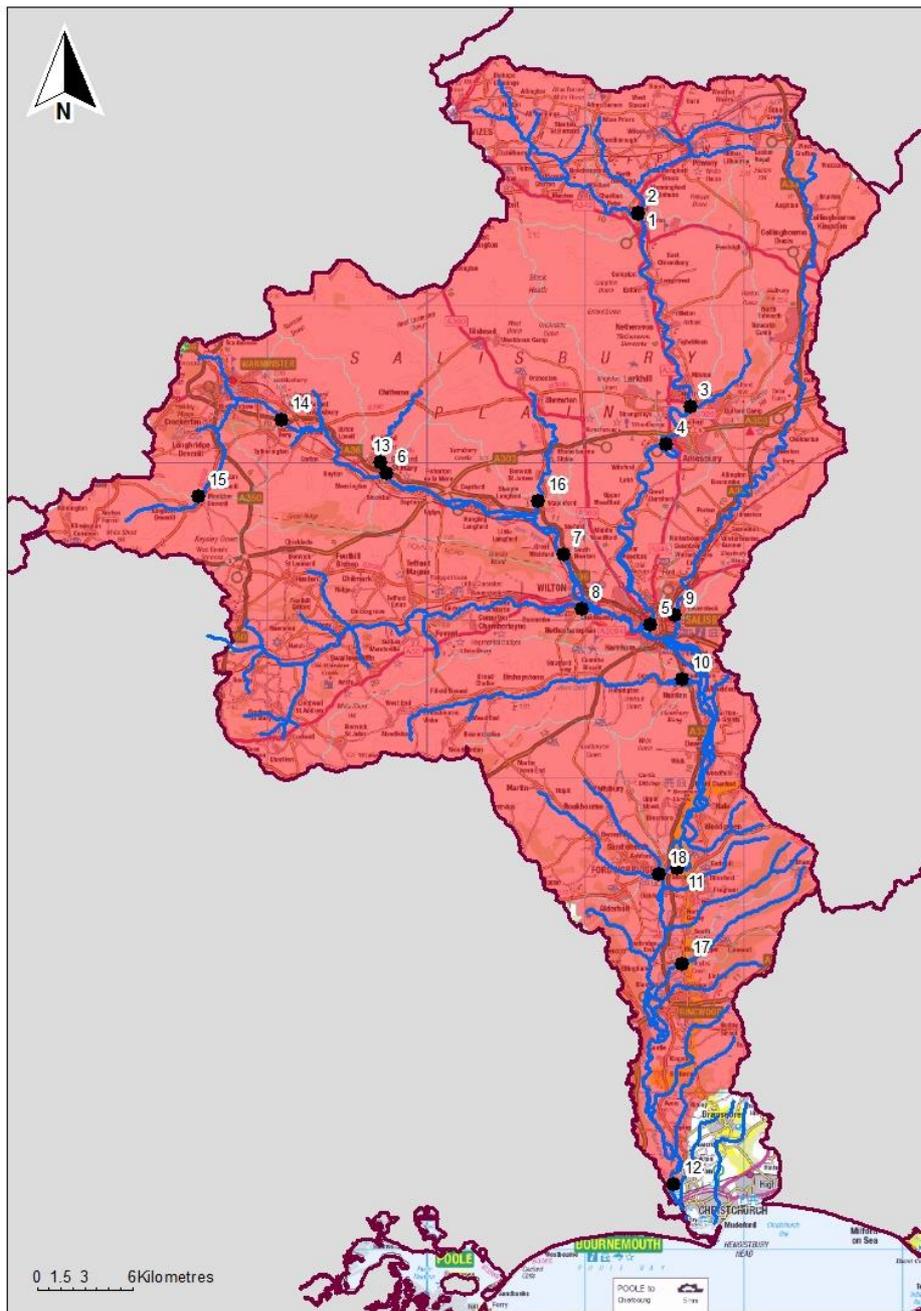
Water Availability at Q70:

■ Water available

■ Restricted water available

■ Water not available

Map 4 Surface water resource availability colours at Q95 (low flows) for Hampshire Avon ALS



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Legend:

● Assessment Points

— Rivers

Water Availability at Q95:

■ Water available

■ Restricted water available

■ Water not available

2.1.1. Surface 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 at this flow. 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 (or have been overridden by a downstream AP where 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.

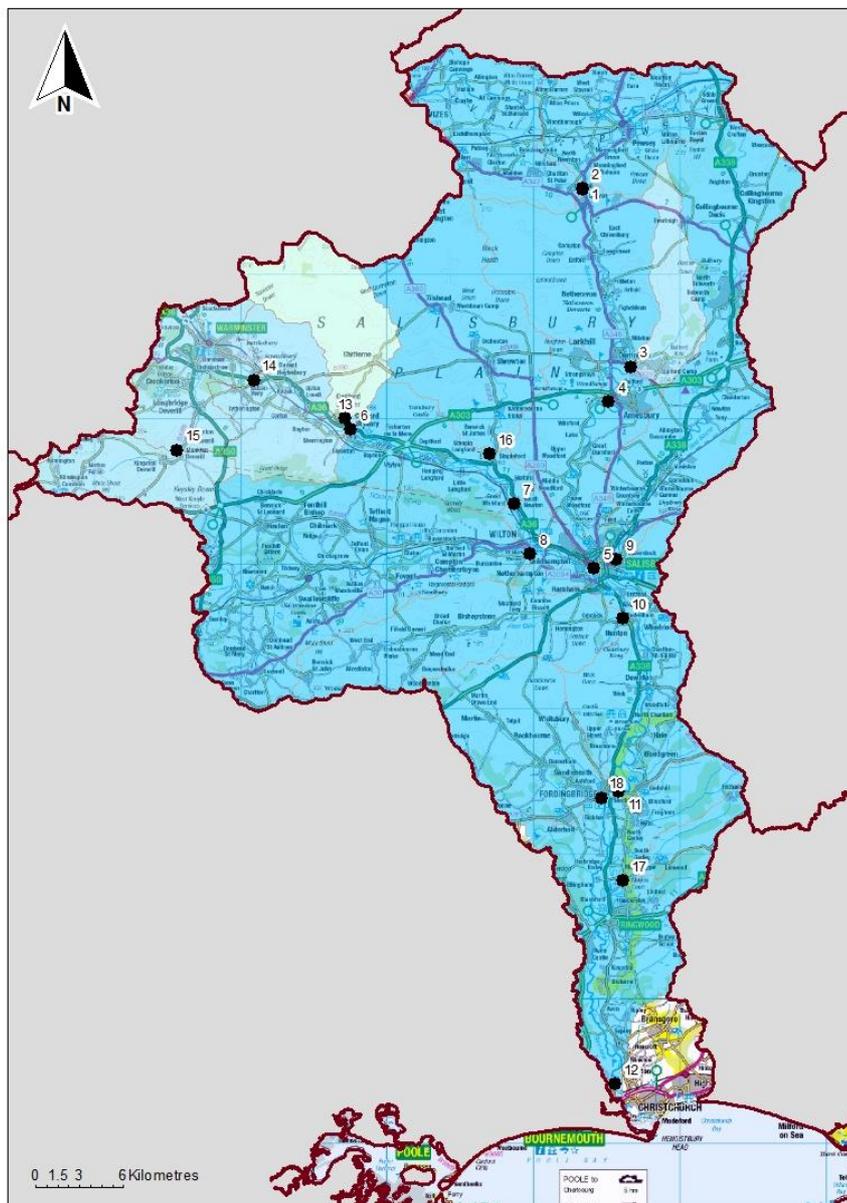
2.2. Surface water resource reliability

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 5 gives an indication of the surface water resource availability for [consumptive abstraction](#) in the Hampshire Avon area expressed as a percentage of time. It uses the same information as Maps 1-4 and Table 1, but expressed as a single reliability map.

Map 5 Surface water resource reliability of the Hampshire Avon area expressed as percentage of time available



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Legend:

● Assessment Points

— Rivers

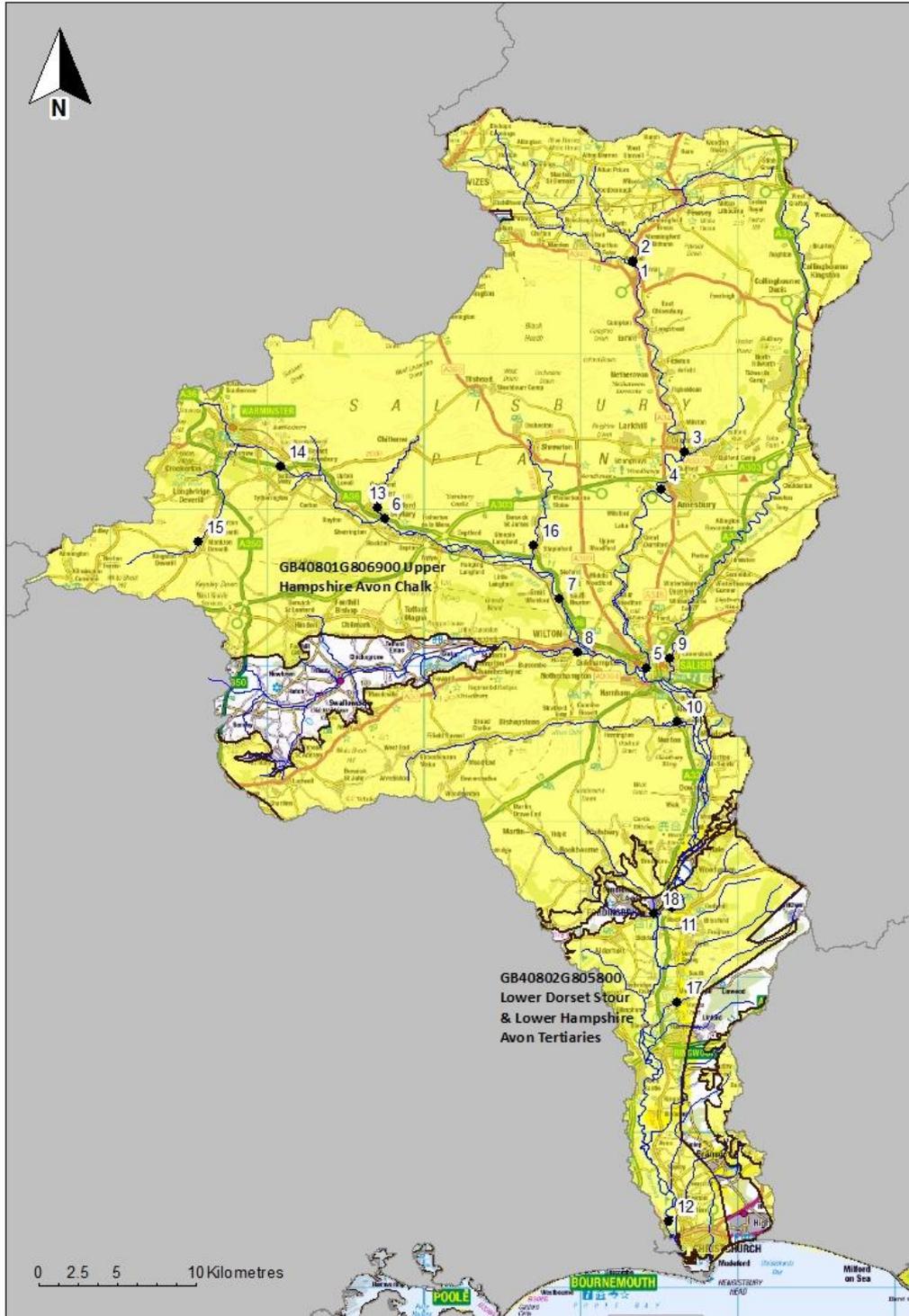
Percentage of the time additional consumptive resource may be available:

- Consumptive abstraction available less than 30% of the time
- Consumptive abstraction available at least 30% of the time
- Consumptive abstraction available at least 50% of the time
- Consumptive abstraction available at least 70% of the time

2.3. Groundwater resource availability

In certain areas, resource concerns over groundwater mean that the standard water resource availability colours have been overridden. Section 2.3.1 explains the groundwater resource availability colours, and Map 6 shows these colours for groundwater in the Hampshire Avon area.

Map 6 Groundwater resource availability colours for Hampshire Avon ALS



2.3.1. 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 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 new consumptive licences will only be granted at high flows. 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 river augmentation (see Section 3.2).

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 consumptive licences.

2.4. Other considerations for availability and reliability

We may have to add constraints to licences such as '[hands off flow](#)' (HoF) or '[hands off level](#)' (HoL) 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 March 2025 and the subsequent one is 31 March 2037.

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 Hampshire Avon ALS

3.1. Surface water assessment points

We assess surface water flows at [Assessment points \(APs\)](#), which are significant points on a river, often 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, as will applications not linked to an AP.

Each HoF is linked to an AP and is dependent on the resource availability at that AP. All HoFs are designed to protect the designated habitats and species in this catchment. 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. In this catchment, the restrictions in the majority of upstream APs have been overridden by the status of AP12 Knapp Mill. This has been taken into account in the figures given in Table 1.

This document is only a guide and all abstraction licence applications are subject to a site specific 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 Hampshire Avon ALS area. Reading across the columns you can see the potential reliability of a new licence expressed as a percentage of the year and the number of days water may be available under this restriction.

As new licences are issued the percentage of the year that water is available will go down.

AP	Name	Surface water Resource Availability	Percentage of the year water may be available	Number of days per annum abstraction may be available	Is there a gauging station at this AP?	Additional information
1	Upavon West	Restricted water available for licensing	50	183	Yes	Reductions have been made by the water company in this AP. Further investigations into the impacts of abstraction commenced in 2020.
2	Upavon East	Restricted water available for licensing	51	186	Yes	No additional information.
3	Bulford Village - Nine Mile	Water not available for licensing	35	128	No	Investigations into the impacts of abstraction in this AP commenced in 2020.
4	Amesbury - Avon	Restricted water available for licensing	51	186	Yes	Investigations into the impacts of abstraction in this AP commenced in 2020.
5	Salisbury - Avon	Restricted water available for licensing	51	186	No	No additional information.
6	Stockton Park - Wylde	Restricted water available for licensing	36	131	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.

7	South Newton - Wylve	Restricted water available for licensing	51	186	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.
8	Wilton - Nadder	Restricted water available for licensing	51	186	Yes	For the Fonthill water body the availability of water will be limited to higher flows because reductions have been made by the water company.
9	Laverstock - Bourne	Restricted water available for licensing	51	186	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.
10	Nunton Bridge - Ebble	Restricted water available for licensing	51	186	Yes	No additional information.
11	East Mills - Avon	Restricted water available for licensing	51	186	Yes	No additional information.
12	Knapp Mill - Avon	Restricted water available for licensing	51	186	Yes	Investigations into the impacts of abstraction in this AP commenced in 2020.
13	Codford - Chitterne	Restricted water available for licensing	26	95	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.

14	Norton Bavant - Wylde	Restricted water available for licensing	36	131	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.
15	Brixton Deverill - Wylde	Restricted water available for licensing	36	131	Yes	Reductions have been made by the water company in this AP. Water may be available when no augmentation is occurring.
16	Bury Bridge - Till	Restricted water available for licensing	51	186	No	Reductions have been made by the water company in this AP. Further investigations into the impacts of abstraction in this AP commenced in 2020. Water may be available when no augmentation is occurring.
17	Moyles Court - Dockens Water	Restricted water available for licensing	51	186	Yes	No additional information.
18	Ashford Water	Restricted water available for licensing	51	186	Yes	No additional information.

Table 1 Summary of licensing approach for the surface water assessment points of Hampshire Avon ALS.

3.2. Groundwater

For Principal Aquifers we may divide the area into groundwater management units (GWMU), which are sub-divisions of the groundwater bodies. In these cases we use the information and assessments on these units to determine water availability and licence restrictions. In the Hampshire Avon we have maintained the simple groundwater body division between the Chalk Aquifer in the north and overlying Tertiary strata comprising sands, gravels and clays in the south.

All groundwater abstractions are largely at the expense of flows which would otherwise discharge as surface waters. Each groundwater abstraction is assessed to determine its impact on surface water flows, including the degree of flow reduction, and where the impact is measured at the surface water AP. In cases where the surface water AP is already adversely depleted due an existing level of licensed demand, 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 to protect the surface water flow.

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 Hampshire Avon ALS area

Groundwater provides spring flow to streams and plays a very important part in the flow regime particularly during periods of low rainfall during summer and early autumn. Depletion in groundwater due to borehole abstraction can have a very significant influence on spring flow and hence stream flow across the year. When assessing whether we will grant licences for abstraction from the Chalk therefore, we have to determine how those abstractions may affect nearby water features including springs, the flow in the water course near and downstream from the abstraction, other licence holders and the overall balance of water resources in the Chalk aquifer.

Our Groundwater analysis shows that there is very little scope for any additional abstraction over a significant portion of the Chalk Aquifer, where that abstraction would cause further impacts on sensitive water features already depleted due to the existing licensed use. This applies to those catchments defined as 'water not available for licensing'. Consequently, where this is the case, there is a presumption against new consumptive groundwater abstractions from the Chalk. In less sensitive Chalk catchments, defined as 'restricted water available', consumptive abstraction will be granted. Although in all cases there is likely to be restrictions limiting abstraction to high flow winter months. In all cases, licence trading or non-consumptive licence purposes will be considered.

Table 2 shows the restrictions that may be applied to new or varied abstractions for consumptive use.

Examples of consumptive licences are agriculture, domestic use, public water supply and water bottling. Non consumptive uses include ground source heat pumps (closed loop or fully returned water). Non consumptive abstractions will be assessed on a case by case basis taking into account the local conditions.

AP	Name	Groundwater Resource Availability
1	Upavon West	Water not available for licensing
2	Upavon East	Restricted water available for licensing based on local assessment
3	Bulford Village - Nine Mile	Water not available for licensing
4	Amesbury - Avon	Restricted water available for licensing based on local assessment
5	Salisbury - Avon	Restricted water available for licensing based on local assessment
6	Stockton Park - Wylde	Water not available for licensing
7	South Newton - Wylde	Water not available for licensing
8	Wilton - Nadder	Restricted water available for licensing based on local assessment
9	Laverstock - Bourne	Water not available for licensing
10	Nunton Bridge - Ebbles	Restricted water available for licensing based on local assessment
11	East Mills - Avon	Restricted water available for licensing based on local assessment
12	Knapp Mill - Avon	Restricted water available for licensing based on local assessment
13	Codford - Chitterne	Water not available for licensing
14	Norton Bavant - Wylde	Water not available for licensing
15	Brixton Deverill - Wylde	Water not available for licensing
16	Bury Bridge - Till	Water not available for licensing
17	Moyles Court - Dockens Water	Restricted water available for licensing based on local assessment
18	Ashford Water	Restricted water available for licensing based on local assessment

Table 2 Summary of licensing approach for groundwater in the Hampshire Avon ALS.

3.3. 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.

The majority of the Hampshire Avon and its tributaries are designated as the River Avon SAC and the River Avon system SSSI. The floodplain below Fordingbridge is designated as the Avon Valley SPA. The riverine SAC designation means that the majority of the river has more restrictive flow targets than the standard EFI. This means that more water is protected from abstraction to ensure the river has adequate water to support the habitat and species it is designated for. The potential reliability of new licences shown in Table 1 and the groundwater availability described in Section 3.2 have taken this into account and will provide protection for the SAC if new licences are granted.

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 on maps 1 - 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.

4.2. Taking action on unsustainable abstraction

To ensure an acceptable level of environmental protection for the SAC, all existing abstraction licences were reviewed by the Environment Agency as part of the Habitats Directive Review of Consents. This assessment identified that changes were required for a number of water company groundwater abstractions, to achieve the agreed flow criteria for the river. These licence changes have now mitigated the risk of detrimental impact to the SAC from abstraction and ensured that abstraction is sustainable into the future. The last of these licence changes came into force on 1 April 2018.

The restrictions on availability of surface and groundwater explained in Sections 3.1 and 3.2 are designed to maintain sustainable river flows based on these Habitats Directive targets.

A number of further investigations are planned in 2020-2025 to assess the impact of abstractions on several APs and groundwater bodies (see notes in Table 1).

Environmental targets are periodically reviewed by the Environment Agency and Natural England to take into account the latest available information. Any changes to the situation will be reported in the ALS documents.

4.3. Regulating previously exempt abstractions

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 introduced new Regulations which came into effect on 1st January 2018. The Water Resources (Transitional Provisions) Regulations 2017 have removed the majority of previous exemptions from licensing control, and previously exempt abstractors will now require a licence to lawfully abstract water. In the majority of cases these activities will be licensed on the basis of their current operation unless there is evidence of significant impact on the water environment.

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 had details of these abstractions, we've included them in our assessments to consider how they impact on the catchment. When these new licences are issued the details will be updated/confirmed to ensure they are all properly accounted for in our resource assessment. This process is due to be completed by 31 December 2022.

5. List of abbreviations

ALS

Abstraction Licensing Strategy.

AP

Assessment Point.

CED

Common End Date.

Defra

Department of Environment Food and Rural Affairs.

EFI

Environmental Flow Indicator.

GEP

Good Ecological Potential.

GES

Good Ecological Status.

HMWB

Heavily Modified Water Body.

HoF

Hands off Flow.

HoL

Hands off Level.

SAC

Special Areas of Conservation.

SPA

Special Protection Areas.

SSSI

Sites of Special Scientific Interest.

UKTAG

United Kingdom's Technical Advisory Group.

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.

Augmented water body

Where river flows are artificially increased for part of their length. This is usually by pumping water from the groundwater into the river to increase the flow in order to mitigate the impact of a nearby abstraction. This is also known as stream support.

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, general agriculture, domestic use, public water supply and water bottling.

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.

Hands off level

A condition attached to an abstraction licence which states that if the level (in the borehole) 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.

Non consumptive abstraction

Abstraction where a significant proportion of the water is returned either directly or indirectly to the source of supply after use. For example for hydropower.

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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