Shropshire Middle Severn Abstraction Licensing Strategy

A strategy to manage water resources sustainably

July 2021

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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

1.1. Overview

This strategy sets out how we manage new and existing abstraction and Impoundment within the Shropshire Middle Severn catchment in the Severn river basin district.

It ensures that we:

- meet River Basin Management Plan (RBMP) objectives for water resources activities
- 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
- adjacent groundwater bodies affected by any reduction in groundwater level

Managing water abstraction describes the technical explanation, legal and policy requirements behind the Abstraction Licensing Strategies (ALS).

The abstraction pages advise on:

- who needs an abstraction or impoundment licence
- how to apply for a licence

1.2. How is the licensing strategy set out?

This ALS provides an overview of how water is sustainably managed in the Shropshire Middle Severn catchment to:

- provide water for abstraction
- protect the environment

The following is a summary of what each section covers:

- Catchment background - sets out additional information about the catchment and the influences and pressures on water availability.
- Water resource availability - explains how much water is available for abstraction in the catchment.
- How we manage water resource availability - explains the local licensing approach for the catchment which is summarised in Table 2 (surface water) and Table 3 (groundwater). This includes the potential water available for licensing and the restrictions that would be required.
- Managing the catchment together - details the actions we are taking where abstraction is currently unsustainable in the catchment. Approaches to ensure sustainable water management in the future are outlined, including information on licence trading.
- Related links - are listed for further information on water resource management.
- Abbreviations – lists the full text of abbreviations used in this document
- Glossary – explains technical terms included throughout this document
- Contact details – on how to get in touch

Note: whilst our assessment tools are continuously updated, we aim to update this document on a 3 year basis. Therefore some details within this document, for example Hands off Flow (HoF) values may be outdated. Use this document as a guide to water availability, but for the most up to date information please contact us.

1.3. Collaborative and sustainable water management

Our long term goal is to develop a stronger catchment focus for water resources. We are working with abstractors and catchment groups to:

- develop local solutions to existing pressures
- to prepare for the future

Catchment groups may include a variety of different partnership groups such as:

- abstractor groups
- local catchment partnerships
- priority catchment groups
- environmental groups.

Since the autumn of 2018, we have been collaborating with local partners. In several priority catchments across England we have explored:

- modern and innovative ways of improving access to water
- alternative ways to achieving sustainable abstraction

This strategy is a tool to make informed decisions on the choices abstractors make about their use of water. We want this strategy to help abstractors plan their water use and become more resilient in the face of climate change.

2. Catchment overview

The catchment area predominantly covers the county of Shropshire and includes watercourses which are tributaries (on both banks) of the River Severn. It does not include the River Severn itself as this is covered in the Severn Corridor ALS. The catchment is largely rural but includes the market towns of Ellesmere, Newport and Market Drayton as well as parts of Shrewsbury and Telford.

2.1. Landscape and land use

The catchment covers an area of approximately 1422 km^2. The north of the area is characterised by low lying, productive agricultural land, making arable and grassland the predominant land uses. To the south of the area the land is more undulating and incorporates the Shropshire Hills which are predominantly pasture and an Area of Outstanding Natural Beauty (AONB). The steep sided volcanic hills of the Long Mynd are covered by open moorland and particularly dominate this part of the area.

2.2. Water Resources

The main watercourses covered by the Shropshire Middle Severn ALS are the Rivers Tern, Perry, Roden, Strine, Meese, the Cound Brook and Rea Brook. These watercourses ultimately flow into the River Severn.

The area contains significant quantities of groundwater within the Permo-Triassic sandstone aquifers. These are high yielding, strategically important principal aquifers that support significant abstraction for public supply, industrial and agricultural use. They also provide important flows (known as baseflow) to connected rivers and wetlands. Such flows are particularly important during the drier seasons. The area also contains geological

deposits with more variable permeability where water is encountered in sufficient but lower quantities. These are capable of supporting locally important abstractions for both agricultural and domestic purposes.

The catchment includes a number of boreholes which form the Shropshire Groundwater Scheme (SGS). These boreholes draw water from the sandstone aquifer. This scheme was devised to work in conjunction with the Clywedog and Vyrnwy reservoirs to balance the demands of water abstraction from the River Severn, while maintaining flows to protect the river environment. The Rivers Tern, Roden and Perry are used to transport water from these boreholes to the River Severn. This means that their flows are artificially maintained at times when the scheme is operational.

There is a large demand for water in this area for spray irrigation of agricultural land. This has the potential to conflict with environmental needs for water as peak demand for irrigation usually coincides with periods of low levels within watercourses. Whilst spray irrigation licences account for a large number of the licences issued within this catchment, the smaller number of both public water supply and SGS boreholes account for the largest proportion of all the water that is licensed. The main water company operating within this area is Severn Trent Water Limited.

2.3. Climate change

Climate change will likely impact on the quantity and seasonal availability of water resources within the catchment.

The projected climate change impacts on rainfall and river flow for the Midlands Region by the 2050's are for:

- rainfall to decrease by 34% in the summer but increase by 29% in the winter
- low flows to be 65% lower but peak river flows to be 30% higher

Climate change projections are estimated using data from UKCP09, consistent with a 4^{o}C rise by 2100. Further details on the assumptions used can be found in the Environment Agency Climate impacts tool.

2.4. Environment and sustainability

Our licensing approach ensures that we avoid Deterioration within this catchment in line with the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (WFD). The WFD Regulations (2017) seek environmental objectives to protect and enhance the water environment. It ensures the sustainable use of water resources for economic and social development. We assess the impacts of new water abstraction applications to make sure that they comply with the WFD Regulations (2017). This includes ensuring water bodies will maintain a healthy ecology. If the ecology is not good, we ensure abstraction will not deteriorate the ecology further. WFD status is assessed at a water body scale. Water body WFD Regulations (2017) status can be:

- bad
- poor
- moderate
- good
- high

Groundwater body status is assessed with a separate set of tests, with the status reported as either good or poor.

3. Water resource availability in the Shropshire Middle Severn catchment

3.1. Surface water availability

The method for calculating the water resource availability is explained in Managing water abstraction. Water availability is calculated at selected Assessment points (APs). The maps show the water availability calculated at the AP, local water availability may differ. There are 8 APs in the Shropshire Middle Severn ALS:

- AP1 covers the whole of the River Perry catchment from its source to its confluence with the River Severn upstream of Shrewsbury. It includes the Tetchill Brook, Common Brook and War Brook tributaries. The sandstone underlies a significant proportion of the area upstream of this AP. However the presence of overlying thick, unconsolidated geological deposits means that the contribution of groundwater to surface water flows is variable
- AP2 covers the whole of the Rea Brook catchment from its source to its confluence with the River Severn at Shrewsbury. It includes the Minsterley Brook, Pontesford Brook, Rowley Brook and Westbury Brook tributaries
- AP3 covers the River Tern from its source through Market Drayton to its confluence with the Bailey Brook. The majority of the catchment overlies the sandstone aquifer
- AP4 covers the whole of the Coley Brook catchment upstream of Aqualate Mere
- AP5 covers the River Meese from its outflow at Aqualate Mere to its confluence with the River Tern. The majority of the catchment overlies the sandstone aquifer
- AP6 covers the whole of the River Roden catchment from its source at Wem to its confluence with the River Tern. It includes the Sleap Brook and Soulton Brook tributaries. A significant proportion of the catchment overlies the sandstone aquifer
- AP7 covers the River Tern from its confluence with the Bailey Brook to its confluence with the River Severn downstream of Shrewsbury. Tributaries include the River Strine, Platt Brook, Wall Brook and Beanhill Brook. The majority of the catchment overlies the sandstone aquifer
- AP8 covers the whole of the Cound Brook catchment from its source to its confluence with the River Severn between Shrewsbury and Ironbridge. Tributaries include the Coundmoor Brook and the Row Brook

3.1.1. Water resource availability colours and implications for licensing

We use colours to represent different surface water availability at a range of flows:

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. Licences will be issued with a Hands Off Flow (HoF) restriction to protect environmental requirements at lower flows.

Restricted water available for licensing

Yellow 

Full Licensed flows fall below the Environmental Flow Indicators (EFI).

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.

For further information about licence trading please refer to section 5.3.

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.

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

The water resource availability is calculated and the colour assigned at four different flows:

- Q30 – the flow of a river which is exceeded on average for 30% of the time, therefore you would expect the river flow to be lower than Q30 on 256 days in an average year. Q30 is a high flow
- Q50 – the flow of a river which is exceeded on average 50% of the time, therefore you would expect the river flow to be lower than Q50 on 183 days in an average year
- Q70 – the flow of a river which is exceeded on average for 70% of the time, therefore you would expect the river flow to be lower than Q70 on 110 days in an average year
- Q95 – the flow of a river which is exceeded on average for 95% of the time, therefore you would expect the river flow to be lower than Q95 on 18 days in an average year. Q95 is a low flow

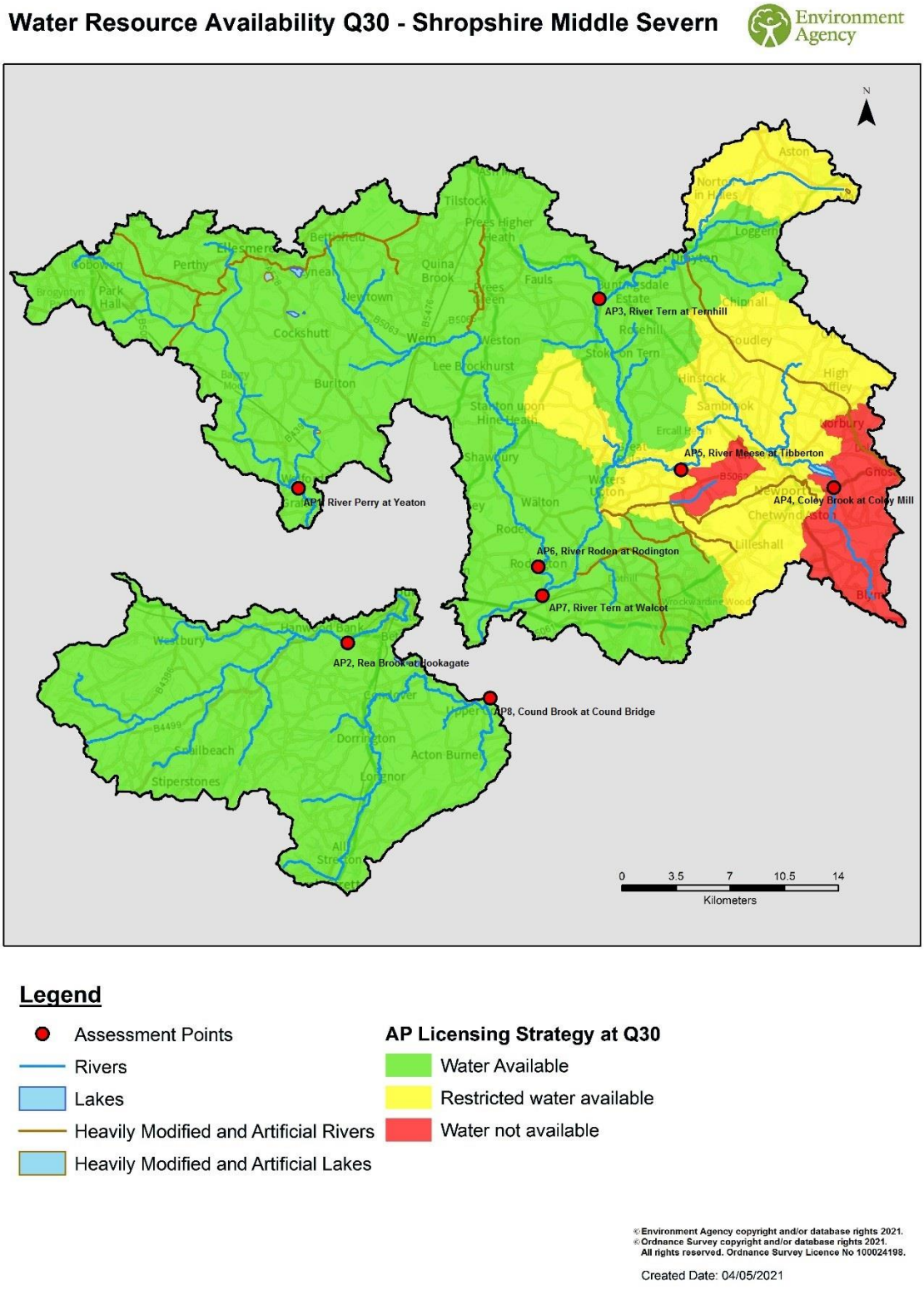
3.1.2. Water availability maps

The water availability colours for the Shropshire Middle Severn catchment are presented in Maps 1-4.

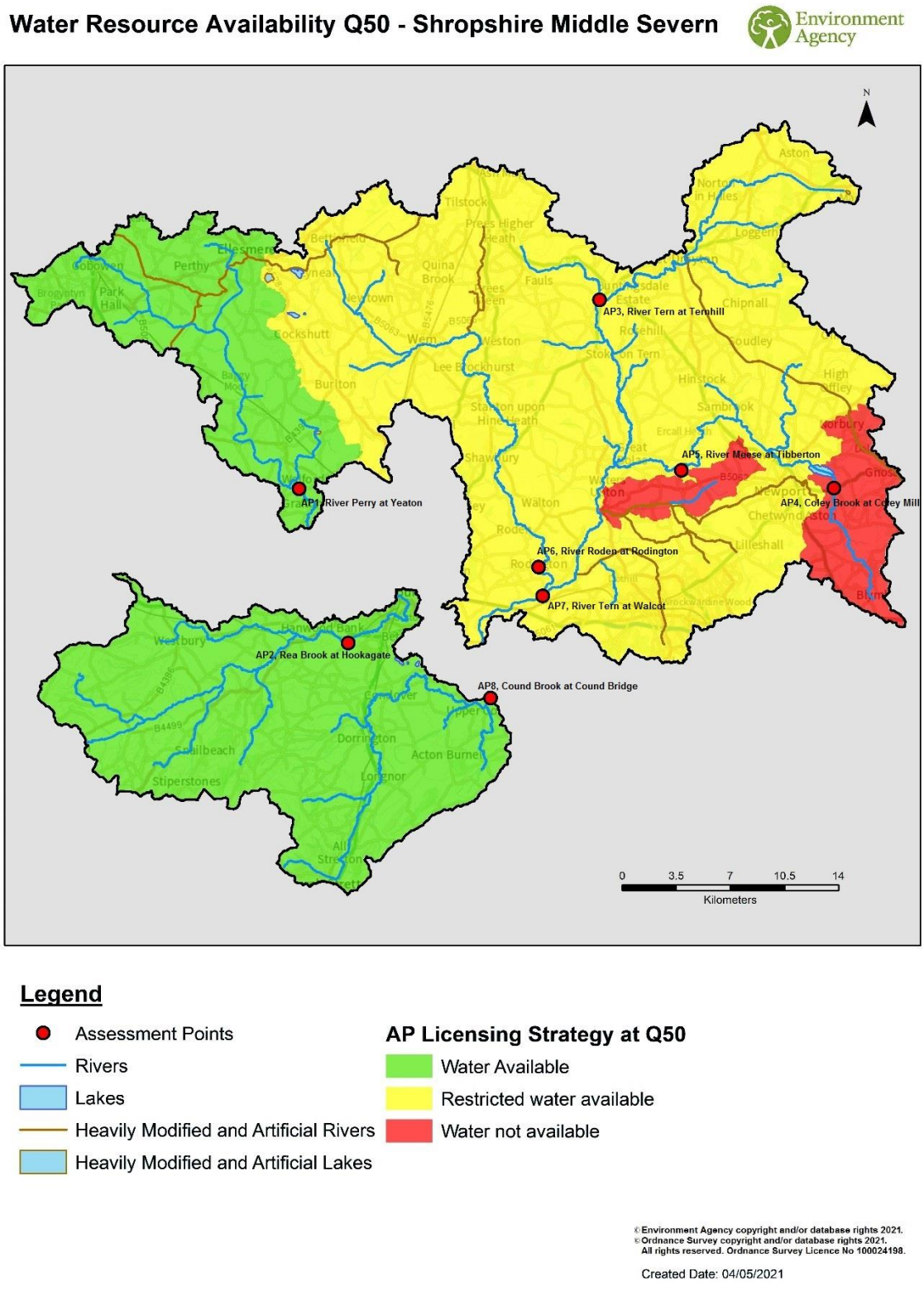
Assessment Point	Name	Q30	Q50	Q70	Q95
1	River Perry at Yeaton	Available	Available	Restricted	Restricted
2	Rea Brook at Hookagate	Available	Available	Restricted	Restricted
3	River Tern at Ternhill	Available	Restricted	Restricted	Not available
4	Coley Brook at Coley Mill	Not available	Not available	Not available	Not available
5	River Meese at Tibberton	Restricted	Restricted	Not available	Not available
6	River Roden at Rodington	Available	Restricted	Restricted	Restricted
7	River Tern at Walcot	Available	Restricted	Restricted	Restricted
8	Cound Brook at Cound Bridge	Available	Available	Restricted	Restricted

Table 1: Summary of Maps 1 to 4 – water availability at each assessment point by flow category

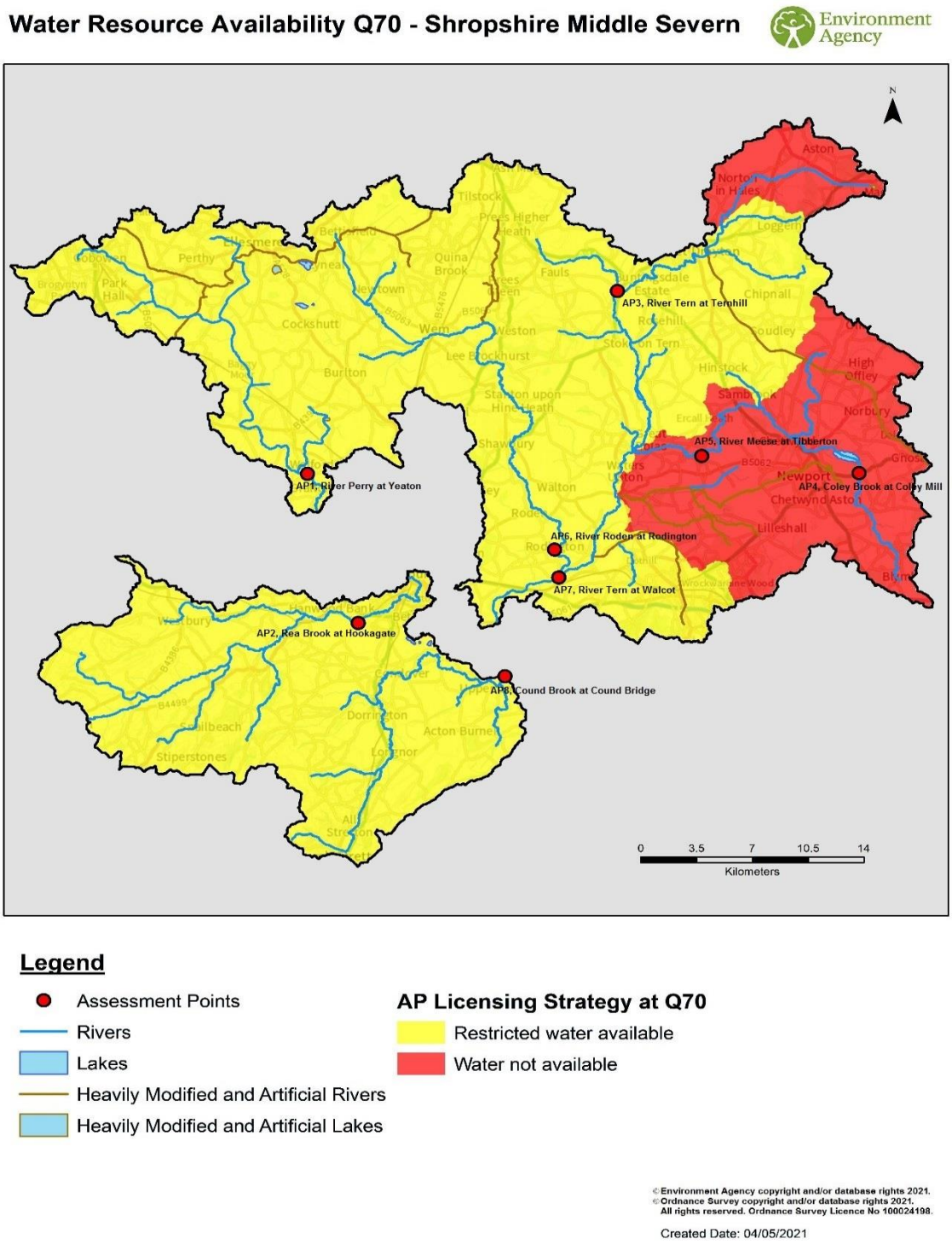
Map 1: Water resource availability colours at Q30 for Shropshire Middle Severn ALS.



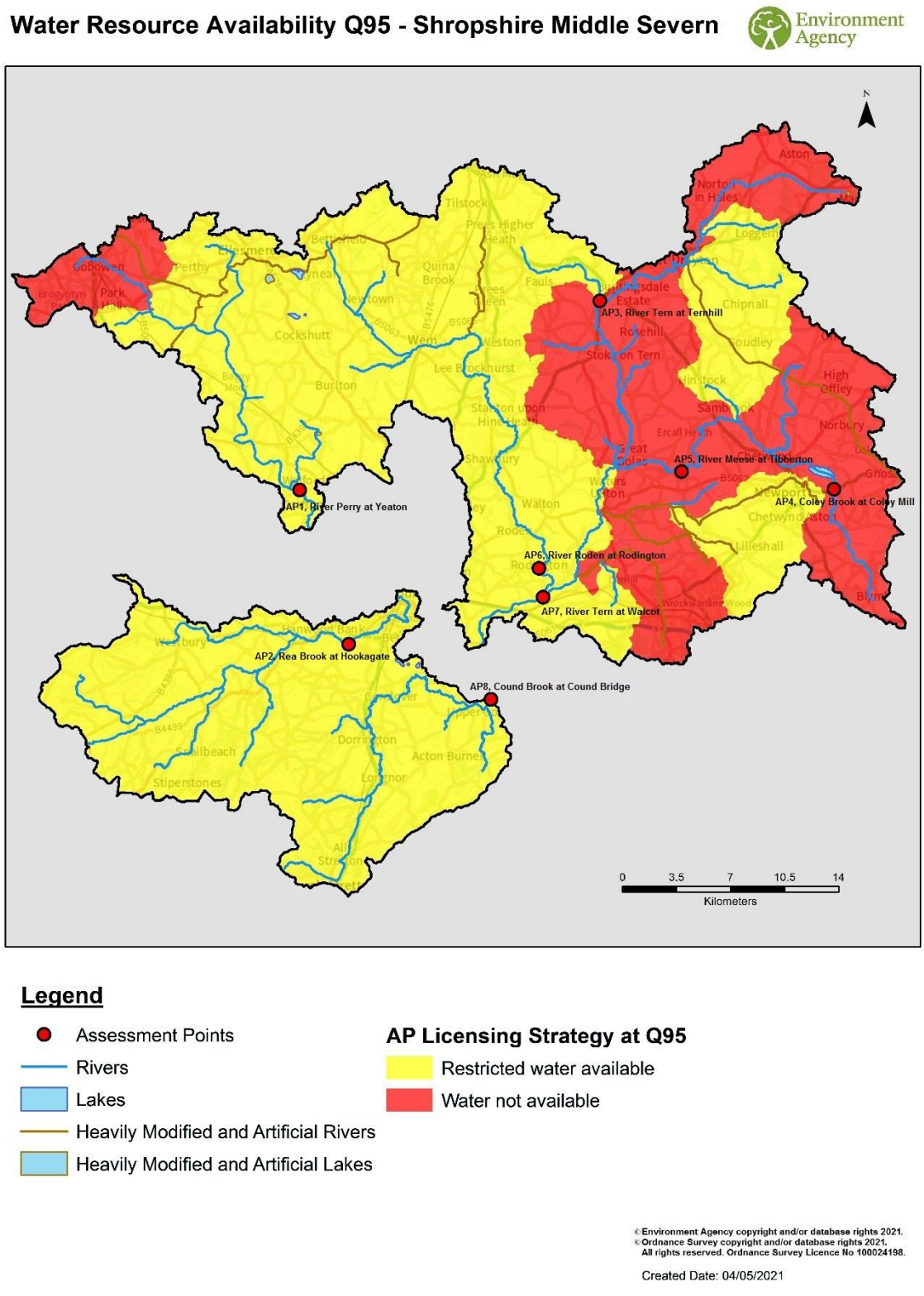
Map 2: Water resource availability colours at Q50 for Shropshire Middle Severn ALS



Map 3: Water resource availability colours at Q70 for Shropshire Middle Severn ALS.



Map 4: Water resource availability colours at Q95 for Shropshire Middle Severn ALS.



3.2. Groundwater resource availability

Groundwater availability is guided by the surface water resource availability unless we:

- have better information on principal aquifers
- are aware of local issues we need to protect

For the principal aquifers in the Shropshire Middle Severn ALS area, water availability has been assessed using a number of tests. This is combined with monitoring data, numerical modelling and surface water availability. For secondary aquifers, where we typically have less information, groundwater availability is guided by the surface water availability.

In certain areas, resource concerns over groundwater mean that the standard water resource availability colours have been overridden.

Under the WFD Regulations (2017), aquifers are designated as named groundwater bodies (GWBs). We may divide GWBs into groundwater management units (GWMUs). In the case of principal aquifers, we use the information and assessments on these units to determine water availability and licence restrictions. Within the Shropshire Middle Severn catchment, groundwater has been assessed using both GWBs and GWMUs to represent the water resource status for groundwater.

The Permo-Triassic Sandstone is a principal aquifer of strategic importance. It provides a large part of Shropshire and surrounding areas with drinking water supply. It has a vast outcrop area within the Shropshire Middle Severn catchment.

It is mostly made up of the Shropshire Middle Severn Permo-Triassic Sandstone East Shropshire GWB but also includes parts of the Dee Permo-Triassic Sandstone and Severn Uplands Permo-Triassic Sandstone Knockin GWB.

This large area of the sandstone aquifer has been further split into 12 different GWMUs (see Map 5 and Table 3):

- Whittington
- Alberbury
- Wellings and Market Drayton
- Aqualate
- Adeney
- Stanton
- Ensdon
- Merrington
- New Radmoor
- Longdon
- Sambrook East
- Knockin

3.2.1. Groundwater resource availability colours and implications for licensing

We use colours to represent different groundwater availability:

Water available for licensing

Green 

Groundwater management unit balance shows groundwater is available for licensing. New licences can be considered depending on their impacts on other abstractors and providing there will be no significant impact on surface water flows, dependent wetlands, groundwater levels and they do not cause saline intrusions.

Restricted water available for licensing

Yellow 

Groundwater management 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 surface water flows, dependent wetlands, groundwater levels or cause saline intrusions but with management options in place.

In restricted groundwater management units no new consumptive licences will be granted where the groundwater balance and/or surface water flows/groundwater dependent wetlands are at risk of becoming unsustainable as a result of existing licensed abstraction. It will be appropriate to take action to reduce 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, for example in relation to saline intrusion or surface water flows. Where flow impacts are a concern, Hands off Flows may be applied.

Water not available for licensing

Red 

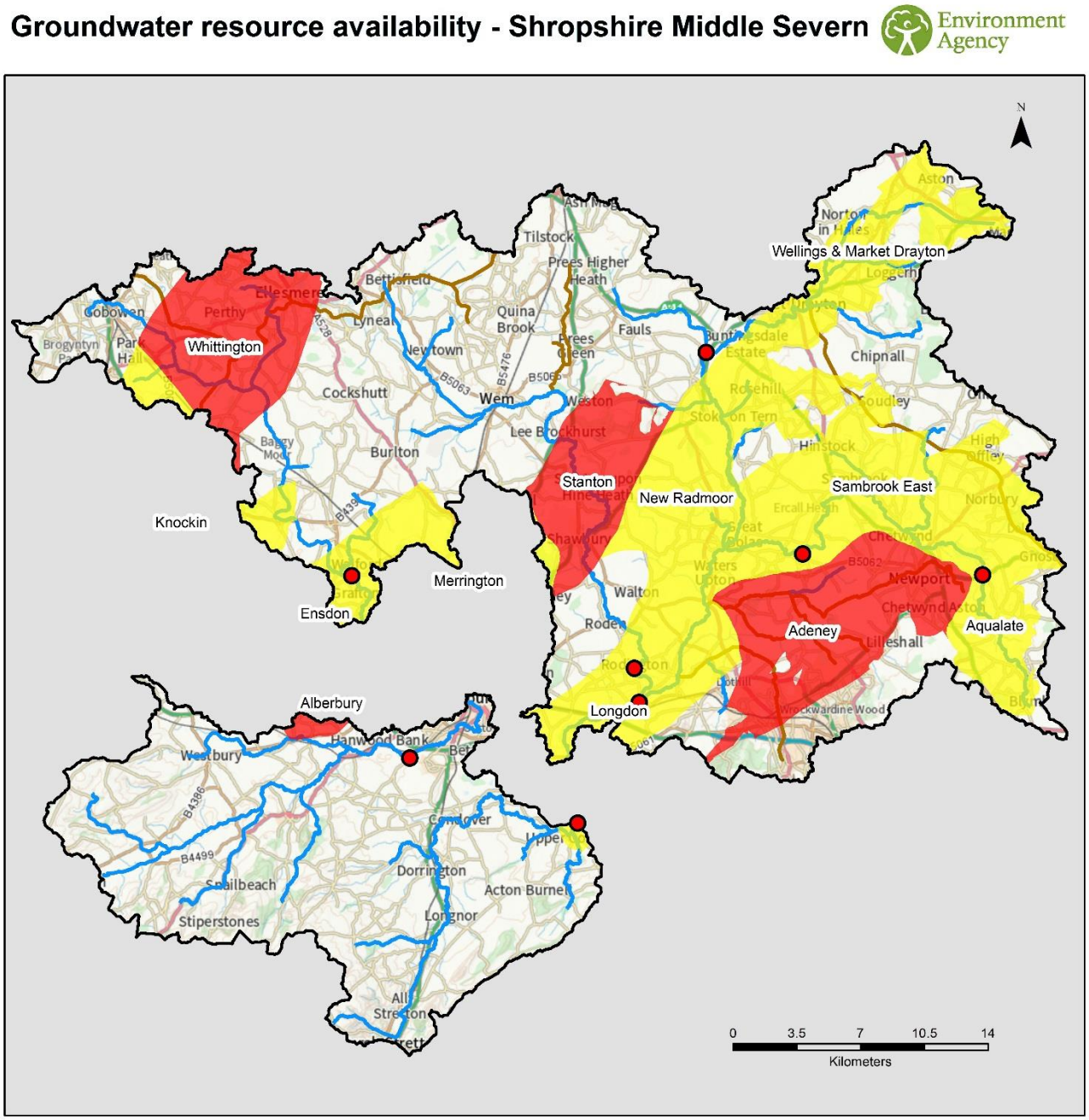
Groundwater management unit balance shows more water has been abstracted based on recent amounts than the amount available.

We will not grant further consumptive licences. It will be appropriate to take action to reduce 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.

For further information about licence trading please refer to section 5.3.

3.2.2. Groundwater availability map

Map 5: Groundwater availability in the Shropshire Middle Severn area.



Legend

- Assessment Points
- Restricted water available GWMU
- Water Not Available GWMU
- Rivers
- Heavily Modified and Artificial Rivers

Created Date: 06/05/2021

3.3 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
- the associated reliability of an abstraction

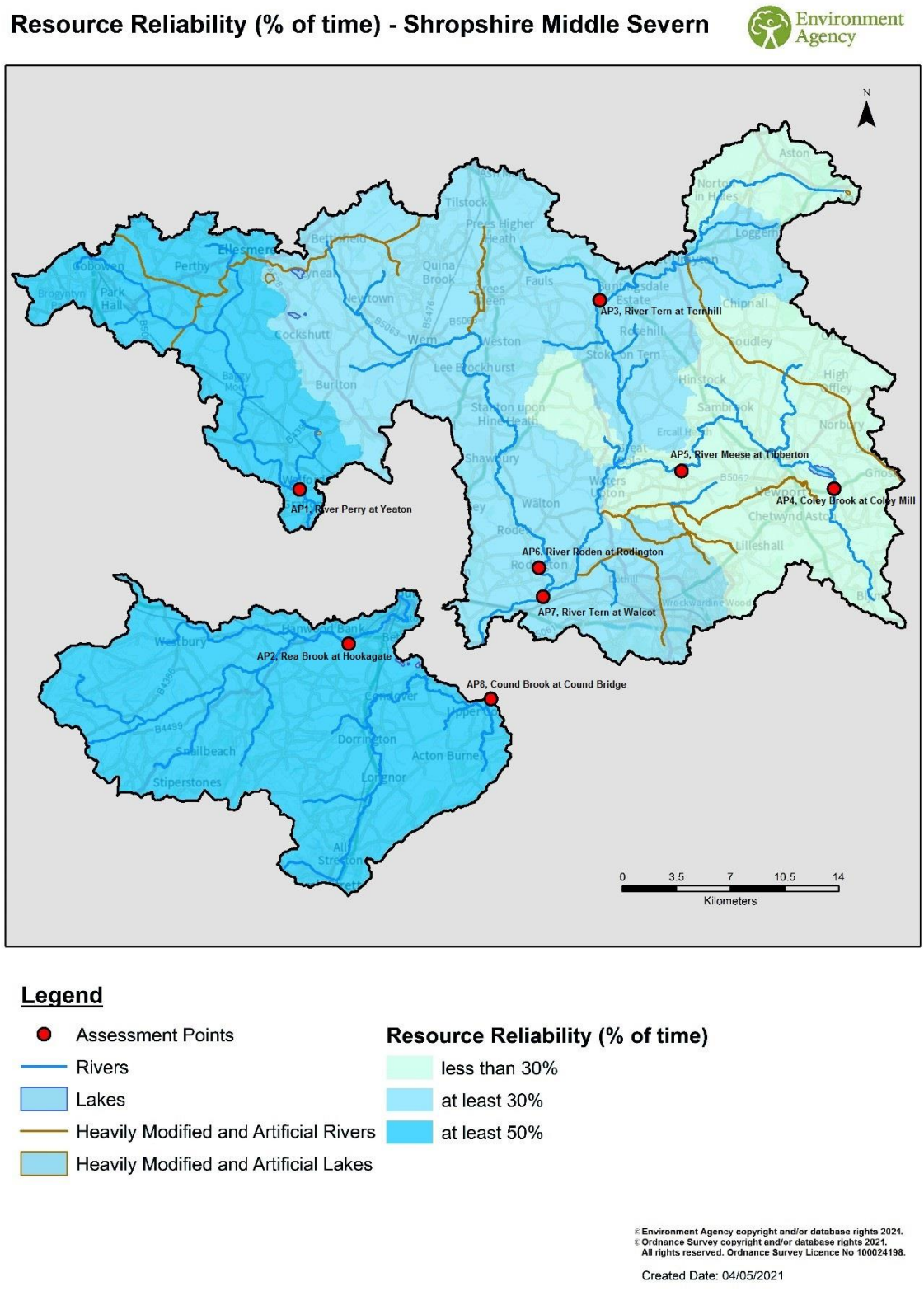
This is an indication only. Actual reliability of a licence will be discussed when you apply.

Map 6 gives an indication of the resource availability for consumptive abstraction in the Shropshire Middle Severn area expressed as a percentage of time.

In this catchment consumptive abstraction is available:

- less than 30% of the time at, or upstream of AP4 and AP5
- at least 30% of the time at, or upstream of APs 3, 6 and 7
- at least 50% of the time at, or upstream of APs 1,2 and 8

Map 6: Water resource reliability of the Shropshire Middle Severn ALS expressed as percentage of time available



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3.4 Other considerations for resource availability and reliability

We will add constraints to licences such as hands off flow (HoF) conditions to protect:

- the environment
- 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. In dry years, restrictions are likely to apply more often. This will affect the reliability of supply.

There is no guarantee that we will grant licences even where water is available for abstraction. This is because we have to determine each application on its own merits. Local factors may mean we're either unable to grant a licence as applied for, or even at all.

New licences within a catchment 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 2039 and the subsequent one is 31 March 2051.

3.5 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.

4. How we manage water availability in the Shropshire Middle Severn ALS

4.1 Surface water

We assess surface water flows at Assessment points (APs), which are significant points on a river, often where 2 major rivers join or at a gauging station. APs cover multiple surface water bodies.

To protect the environment we will issue licences with a condition referred to as a hands-off flow (HoF). It means that if the flow in the river drops below that which is required to protect the environment, abstraction must stop, hence 'hands off flow'.

Each HoF is linked to an AP and is dependent on the assessment of the river at that AP and downstream. This determines the water 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.

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

Where groundwater abstractions directly impact on surface water flows, the impact is measured at the surface water AP. Surface waters are supported by groundwater where they interact with aquifers:

- springs feed headwaters or contribute further downstream
- baseflow supports flow through riverbeds along the watercourse route

Groundwater abstractions can lower the water table. This could reduce groundwater inputs via springs and baseflow so reducing surface water flows and impacting ecology.

The potential for groundwater abstraction to affect groundwater and surface water connectivity is included in the assessment of the groundwater resource status and risk.

In this catchment, the Permo-Triassic Sandstone Principal Aquifers comprise the Shropshire Middle Severn Permo-Triassic Sandstone East Shropshire Groundwater Body and parts of the Dee Permo-Triassic Sandstone and Severn Uplands Permo-Triassic Sandstone Knockin Groundwater Body. Groundwater abstraction from these either impact or has the potential to impact the watercourses that rise on them or flow across them. The key AP's where surface water flows over the sandstone aquifer and which are likely to be impacted by this groundwater abstraction are identified in Section 3.1.

Table 2 gives an indication of:

- how much water is available for further abstraction from surface water
- the associated restrictions we may have to apply to new and varied abstraction licences from the main river

Depending on the nature of the catchment, tributaries to the main river may be subject to different restrictions and quantities. This may be assessed locally on a case-by-case basis.

Reading from top to bottom in Table 2 are the APs in the Shropshire Middle Severn 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
- the approximate volume of water in Ml/d that may be available.

Across the Shropshire Middle Severn area, the HoF restrictions are driven by the need to protect flows going into the River Severn. Flows of 2,271 Ml/d are needed in the River Severn at Bewdley to protect resources for existing abstractors and the river ecology. All HOFs in the catchment have therefore been set at flows which are equivalent to, or higher than 2,271 Ml/d at the Bewdley gauging station. Where watercourses need further protection of flows due to unfavourable local water resource situations, then the HOFs are set at a suitable higher flow.

At APs 1 and 2 (the River Perry and the Rea Brook) the lower HOF stipulated in the final column in table 2 will be used most frequently. The more restrictive HOF will only be used when Severn Trent Water Limited need to abstract water under their Birmingham Resilience Licence. This large strategic abstraction will only take place during the winter months and is unlikely to be required every year.

Any new surface water abstraction licences granted on the Rivers Tern, Roden and Perry will have due consideration of any increase in flow which occurs when releases are being made from the Shropshire Groundwater Scheme (SGS) boreholes. This may mean that flow inputs from SGS will be deducted from gauged flows in order to manage HOF restrictions.

The conditions in Table 2 apply to new or varied consumptive abstractions and may not apply if the abstraction is non-consumptive (i.e. it doesn't result in a loss of water to any part of the catchment) or if the licence results in an overall environmental benefit. Any existing licence which the holder applies to have formally varied to increase the volume abstracted will be subject to the same conditions as new licences on the increased part of the licence only.

To protect fish and eels we may also require the installation of a correctly-sized screen and/or fish pass.

The strategy outlined in Table 2 depends on the resource situation remaining as it is currently. Any changes to major abstractions from or discharges to the catchment may result in a change in this licensing strategy or to the volumes of water available.

AP	Name	AP National Grid Reference	Water Resource Availability	HOF Restriction (Ml/d)	Number of days per annum abstraction may be available	Approximate volume available at restriction (Ml/d)	Additional restrictions
1	River Perry at Yeaton	SJ 43397 19232	Water Available for licensing at Q60	67 Ml/d	219	7 Ml/d	A lower restriction of 64 Ml/d will apply when abstraction is not required under Severn Trent Water's Birmingham Resilience Licence.
2	Rea Brook at Hookagate	SJ 46585 09234	Water Available for licensing at Q60	58 Ml/d	219	18 Ml/d	A lower restriction of 54 Ml/d will apply when abstraction is not required under Severn Trent Water's Birmingham Resilience Licence.
3	River Tern at Ternhill	SJ 62847 31484	Water Available for licensing at Q36	427 Ml/d at Walcot gauging station on the Tern (AP7)	131	See AP7	* New abstraction from the headwaters of the River Tern (upstream of the Loggerheads Brook) will be assessed on a case by case basis due to concerns over sustainability.
4	Coley Brook at Coley Mill	SJ 78017 19275	Water Available for licensing at Q18	25 Ml/d	66	0.3 Ml/d	*New abstraction from the Coley Brook catchment will be assessed on a case by case basis due to concerns over sustainability.
5	River Meese at Tibberton	SJ 68148 20423	Water Available for licensing at Q20	738 Ml/d at Walcot gauging station on the Tern (AP7)	73	18 Ml/d	*New abstraction from the River Meese will be assessed on a case by case basis due to concerns over sustainability.

AP	Name	AP National Grid Reference	Water Resource Availability	HOF Restriction (Ml/d)	Number of days per annum abstraction may be available	Approximate volume available at restriction (Ml/d)	Additional restrictions
6	River Roden at Rodington	SJ 58910 14154	Water Available for licensing at Q36	427 Ml/d at Walcot gauging station on the Tern (AP7)	131	See AP7	
7	River Tern at Walcot	SJ 59174 12286	Water Available for licensing at Q36	427 Ml/d	131	45 Ml/d (for the whole of the River Tern catchment. Less will be available upstream and from tributaries)	* New abstraction from the River Strine catchment and the Platt Brook catchment will be assessed on a case by case basis due to concerns over sustainability.
8	Cound Brook at Cound Bridge	SJ 55794 05661	Water Available for licensing at Q60	40 Ml/d (at Boreton Bridge Gauging Station)	212	1.5 Ml/d	

Table 2 Summary of licensing approach for the assessment points of the Shropshire Middle Severn ALS.

* New consumptive abstraction will only be available during high/flood flows, and any application will need to be supported by a local hydrological assessment to demonstrate that the abstraction is sustainable. A restrictive HOF will be used to limit the abstraction to high flows, and investment will be required from abstractors to install a local flow measuring structure to ensure compliance with the HOF.

4.2 Groundwater

Principal aquifers are designated as named groundwater bodies (GWB). We may divide principal aquifers into groundwater management units (GWMU), which are sub-divisions of the groundwater bodies. In these cases we use the status and objectives of the GWBs together with information and assessments on GWMUs to determine water availability and licence restrictions. GWMU water availability status may be overridden to support GWB objectives.

Where groundwater abstractions directly impact on surface water flows the impact is measured at the surface water AP. This includes where the impact reduces baseflow. In these cases, restrictions may be applied to licences, such as Hands off Level (HoL) or Hands off Flow (HoF) conditions. The HoL is a groundwater level below which an abstractor is required to reduce or stop abstraction. The HoF is applied when flows fall below a certain rate in a connected watercourse.

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 Shropshire Middle Severn ALS area

As set out in Section 3.2 there are 12 GWMUs within the boundary of the Shropshire Middle Severn catchment.

Table 3 details water availability status for these GWMUs and the associated superficial deposits. It sets out the restrictions that might be applied to abstractions likely to impact on groundwater-dependent environments. Overall no new water is available for licensing from the groundwater resources. This is to protect groundwater resources, river baseflow and dependent environments.

Groundwater body	Groundwater body status	Groundwater management unit	Water resource availability colour	Licence restriction
Dee Permo-Triassic Sandstone	Good quantitative status but at risk of deterioration	Whittington	Water Not Available for Licensing. No new consumptive abstractions will be granted.	Opportunities to reduce fully licensed risks will be taken. Time limited licence renewals will require changes to reflect historic usage in order to manage the risk of future deterioration to the environment.
Shropshire Middle Severn - PT Sandstone East Shropshire	Poor quantitative status and at risk of deterioration	Alberbury Adeney Stanton	Water Not Available for Licensing. No new consumptive abstractions will be granted.	Opportunities to reduce fully licensed risks will be taken. Time limited licence renewals will require changes to reflect historic usage in order to manage the risk of future deterioration to the environment.
Shropshire Middle Severn - PT Sandstone East Shropshire	Poor quantitative status and at risk of deterioration	Wellings & Market Drayton Ensdon Aqualate Merrington New Radmoor	Restricted water available for licensing. No new consumptive abstractions will be granted.	Opportunities to reduce fully licensed risks will be taken. Time limited licence renewals will require changes to reflect historic usage in order to manage the risk of future deterioration to the environment.

Groundwater body	Groundwater body status	Groundwater management unit	Water resource availability colour	Licence restriction
		Longdon Sambrook East		
Severn Uplands - PT Sandstone Knockin	Good quantitative status but at risk of deterioration		Restricted water available for licensing. No new consumptive abstractions will be granted.	Opportunities to reduce fully licensed risks will be taken where deterioration of surface water body status is a risk. In these locations, time limited licence renewals will require changes to reflect historic usage in order to manage the risk of future deterioration to the environment.

Table 3 Summary of licensing approach for the GWMUs of the Shropshire Middle Severn ALS.

Secondary aquifers

New groundwater licence applications for abstraction outside of the principal aquifers will continue to be assessed on a case by case basis. Consideration will include potential impacts on existing water users, groundwater dependent terrestrial ecosystems, groundwater resources, surface water level and flow. We must ensure that no deterioration of the water environment is allowed to occur.

4.3 Coasts and estuaries

The Severn Estuary supports a wide array of habitats and species and is designated as a Site of Special Scientific Interest (SSSI), a Habitats Directive Special Protection Area (SPA) and Special Area of Conservation (SAC), and is included on the list of wetlands of international importance under the Ramsar Convention (Ramsar Site). The intertidal mudflats, sand banks, rocky platforms and salt marsh are among the largest and most important in Britain; supporting internationally important populations of waterfowl, invertebrate populations of considerable interest and large populations of migratory fish including Atlantic Salmon, Sea Trout, Allis and Twaite Shad, Sea and River Lamprey and European Eels.

The Estuary receives a significant proportion of its flow from the River Severn catchment, and as we have an obligation to protect all Habitats Directive sites, this means that the River Severn and all of its tributaries must be managed using appropriate flow restrictions to protect the environmental needs of the Estuary. All the HoFs to be applied to new or upwardly varied surface water licences granted on the River Severn and its tributaries are equal to or more restrictive than the flow required by the estuarine ecology.

4.4 Protected sites

The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations) provides a very high level of protection to 2 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

Government policy treats Ramsar sites (internationally important wetland sites) in the same way as SACs and SPAs. Ramsars, SACs and SPAs are referred to collectively as European sites. Sites of Special Scientific Interest (SSSI) also carry a high level of environmental importance.

Conservation objectives are the main objectives for European and SSSI protected sites to maintain at, or to reach, favourable condition. These are set by Natural England. The process for setting targets is described through the Joint nature conservation committee approved 'Common Standards Monitoring Guidance' (CSMG). Natural England use these targets to assess the condition of European and SSSI protected sites. These quantitative targets are considered by Natural England as a pre-requisite for achieving the conservation objectives for European or SSSI designated sites. We have a duty to have regard to Natural England's advice when determining licence applications that may impact on a designated site.

We may need more detailed supporting information when a licence application could impact on a designated conservation site. This will allow us to complete the required statutory assessment.

Table 4 Important local features that may affect water availability

Designation	Site name
Special Area of Conservation	The Stiperstones and The Hollies Fens, Whixall, Bettisfield and Cadney Mosses Brown Moss
Site of Special Scientific Interest	Allscott Settling Ponds Aqualate Mere Berrington Pool Betton Dingle & Gulley Green Bomere, Shomere & Betton Pools Brown Moss Brownheath Moss Bullhill Brook Burnt Wood Clarepool Moss Cole Mere Coundmoor Brook Earls Hill & Habberley Valley Fernhill Pastures Hencott Pool Hodnet Heath Hope Valley Meadows Loynton Moss Maer Pool Marton Pool Minsterly Meadows Montgomery Canal Muxton Marsh Newport Canal Old River Bed, Shrewsbury Prees Branch Canal Ruewood Pastures Sweat Mere & Cross Mere The Stiperstones & the Hollies The Long Mynd

Designation	Site name
	White Mere
Ramsar Sites	Midlands Meres and Mosses Phase 1 and Phase 2 – This includes some of the SSSI's listed above

5. Managing the catchment together

5.1. Action on unsustainable abstraction

Managing water abstraction gives details on:

- what an unsustainable abstraction is
- the measures available to resolve environmental issues caused by abstraction

There are a series of actions that we are taking to address unsustainable abstraction. These are listed here and are followed by work that is being done in individual catchments.

Revocation for non-use / reduction of under used licences

The Environment Agency's unused licences programme is addressing the large amount of water licensed within abstraction licences that is not abstracted each year. This limits water availability for those that need it and in some cases, presents a significant environmental risk if abstraction were to be restarted. The majority of changes to licensed quantities are made voluntarily. However where there is risk of environmental damage, the Environment Agency can propose the revocation of unused licences using legal powers under section 52 of the Water Resources Act 1991.

During the three phases of this programme so far, we have contacted almost 180 abstractors in the Shropshire Middle Severn area. The sum of water reduced or revoked so far is 165,886 cubic metres per year.

Changes to time limited licences

Where environmental sustainability is not in question renewal of time limited licences will be considered subject to local considerations and the following criteria:

- there is a continued justification of need for the water
- the water is used efficiently

Where these two criteria are met but the abstraction of water is unsustainable we will require licence changes to reflect historic usage. In order to manage the risk of future deterioration to the ground or surface water body we would not wish to see growth into licensed headroom. This would result in a sustained increase in abstraction and damage to the environment. We may also issue renewed licences with a short time-limit.

Water availability colours for surface water at Q30, Q50, Q70 and Q95 can be found on maps 1-4 and for each Groundwater Management Unit on map 5.

Surface water abstraction licences

Surface water licences will be renewed on the following broad principles around environmental sustainability:

Water available for licensing

Green 

We will consider renewing the licence at the same quantities, subject to the renewal criteria, when the waterbody, and downstream waterbodies, have environmentally sustainable rates of water abstraction both now and at times when abstractors take their full licensed quantities of water.

Restricted water available for licensing

Yellow 

On renewal of abstractions in waterbodies where full licensed flows have fallen below the EFI, we may seek to reduce unused portions of licensed quantities to reduce the risk of surface water bodies becoming unsustainable at fully licensed rates of abstraction or the ecology deteriorating compared to the River Basin Management Plan (RBMP) 2015 baseline.

Water not available for licensing

Red 

These surface water bodies are already subject to unsustainable rates of abstraction so we will need to renew the licences with measures to help restore that waterbody to a sustainable level of abstraction.

On renewal, time limited licences may be capped at historic maximum abstraction. This will reduce the risk of abstraction from surface water bodies becoming increasingly unsustainable at fully licensed rates of abstraction or the ecology deteriorating compared to the River Basin Management Plan (RBMP) 2015 baseline. We will also consider more restrictive terms and conditions such as hands off flow/level conditions.

Where measures are still under investigation, then a licence would be renewed with a cap at historic maximum uptake and may be time-limited to an earlier date.

Groundwater abstraction licences

Individual Groundwater Management Unit status and water availability is summarised in Section 4.2.

Groundwater licences will be renewed on the following broad principles around environmental sustainability:

Water available for licensing

Green 

We will consider renewing the licence at the same quantities when the groundwater body/groundwater management unit, overlying rivers and associated wetland

habitats have environmentally sustainable rates of water abstraction both now, and at times when abstractors take their full licensed quantities of water.

Restricted water available for licensing

Yellow 

If the groundwater/surface water bodies and/or groundwater management unit in which the groundwater abstraction sits are at risk of deterioration, time limited renewals will require licence changes to reflect historic usage in order to manage the risk of deterioration i.e. reduce fully licensed risk.

Water not available for licensing

Red 

If the groundwater/surface water bodies and/or groundwater management unit in which the groundwater abstraction sits are already subject to unsustainable rates of abstraction, we will renew the licence with measures to help restore a more sustainable level of abstraction. These measures could be licence quantity reductions or Hands off Flow/level conditions. Where ‘water body’ scale measures are still under investigation, then licence changes to reflect historic usage and a short time-limit will be applied. Requirements for any further licence changes (reductions, HoFs etc.) can then be assessed on the subsequent renewal.

Water Industry National Environment Programme (WINEP) and Asset Management Plans (AMP)

We are working with Water Companies to investigate and deliver environmental improvements which are needed to meet Water Framework Directive and national targets. Water companies will be carrying out investigations in AMP7 (2020-2025) to understand the risk of deterioration due to planned sustained increases in abstraction utilising headroom (previously unused quantities) on already licensed abstractions. If the investigations show potential detrimental impacts they will need to carry out an Options Appraisal to identify measures to mitigate the risks and prevent deterioration of WFD status. Mitigation or changes to abstraction to prevent deterioration will need to be implemented before deterioration is predicted to occur.

Serious Damage

In order to be classified as being at Serious Damage a surface water body must meet the following 3 criteria:

- be identified as being Band 3 non-compliant for flow. This means that they are experiencing severe levels of abstraction pressure causing recent actual flows to fall into deficit against the EFI
- have an overall WFD Regulations (2017) status of less than 'Good'
- have the abstraction of water and subsequent low flows confirmed as the reason, or contributing to the reason, for not achieving 'Good' WFD Regulations (2017) status

New applications for abstraction from waterbodies that are classified as being at, or at risk of, Serious Damage will be assessed on a case by case basis, to ensure that no deterioration of the water environment is allowed to occur.

There are currently 5 WFD Regulations (2017) surface waterbodies within the Shropshire Middle Severn ALS that have been identified as being at risk of Serious Damage. These are:

Wall Bk - source to confluence Pipe Strine (GB109054050130)
Strine - confluence Pipe Strine to confluence River Tern (GB109054050141)
Strine Bk - source to confluence Wall Bk (GB109054050160)
Meese - Aqualate Mere tributaries (GB109054050190)
Platt Bk - source to confluence River Tern (GB109054050210)

For a groundwater body, serious damage occurs when:

- there is a deterioration in combined overall WFD Regulations (2017) groundwater body status from good to poor
- there is a deterioration in combined overall WFD Regulations (2017) groundwater status from poor (low confidence) to Poor (High confidence)
- the WFD Regulations (2017) Groundwater Dependent Terrestrial Ecosystem (wetlands) test is assessed as poor

A groundwater body is at risk of serious damage where the full licence conditions could result in:

- the deterioration in combined overall WFD Regulations (2017) groundwater body status from good to poor
- the deterioration in combined overall WFD Regulations (2017) groundwater status from poor (low confidence) to Poor (High confidence)

The Shropshire Middle Severn - Permo-Triassic Sandstone East Shropshire GB40901G300100) has an overall quantitative status of poor (Low Confidence) under recent actual abstraction. It is deemed at risk of potential Serious Damage as under fully licenced conditions this classification would deteriorate to Poor (High Confidence). More information on these programmes is available in our Abstraction Plan on gov.uk https://www.gov.uk/government/publications/water-abstraction-plan-2017/water-abstraction-plan-environment.

5.2. Action that has been taken on unsustainable abstraction in this catchment

River Strine Catchment

During AMP6 (2015-2020) Severn Trent Water Ltd investigated the impact of its public water supply abstractions within the Strine catchment. They have an existing abstraction which is used to augment flows in the Strine waterbodies. During AMP7 (2020-2025) the effectiveness of this augmentation scheme will be improved by drilling a new borehole and discharging the water directly to the Strine Brook.

In the period 2020-2025, Severn Trent Water will also implement environmental measures in the River Strine Waterbodies. These will reduce the ecological susceptibility to low flows by improving habitat and/or water quality within the waterbodies.

Weir Brook Catchment

Groundwater abstraction for public water supply in the Knockin groundwater management unit has resulted in a depletion of flows in the Weir Brook, a small tributary of the River Severn. To mitigate these impacts Severn Trent Water Ltd pump water to supplement low flows.

Shropshire Middle Severn – PT Sandstone East Shropshire (including Alberbury, Wellings & Market Drayton, Aqualate, Adeney, Stanton, Ensdon, Merrington, New Radmoor, Longdon and Sambrook East GWMU's)

Unsustainable groundwater abstraction and the resulting environmental impacts are largely associated with the principal aquifers, in this case the Shropshire Middle Severn - PT Sandstone East Shropshire Groundwater Body and related groundwater management units. As a result of historical licensing, the groundwater resource balance is unsustainable for a number of Groundwater Management Units. This gives rise to level and flow impacts on groundwater and surface water systems in some parts of the ALS area e.g. River Strine catchment. This groundwater body is therefore considered to be at overall poor quantitative status and, due to the large unused licence headroom, at risk of deterioration.

Groundwater abstraction within a number of catchments has resulted in flow impacts on surface watercourses within this groundwater body. Previous investigation into groundwater abstraction impacts on the Strine Brook, Pipe Strine, Upper Tern, Lonco Brook, Aqualate Mere, and Maer Pool have been undertaken.

We will take the following action to reduce abstraction is this catchment:

- no new consumptive abstractions will be granted
- we will take opportunities to reduce fully licensed risks
- new authorisations will be determined based on historic use
- time limited licences will be capped on renewal to reflect historic use
- we will only accept licence trades if the trade is consistent with achieving water body objectives
- we will seek a voluntary approach to change permanent non-water company licences
- the Water Companies will undertake further investigation of a number of sources to identify the measures required to comply with the WFD Regulations (2017) no deterioration requirements and implement sustainability changes where required
- we will seek to ensure that the water company will adhere to its responsibilities under the WFD Regulations (2017) no deterioration requirements
- we will seek to address unused and underused groundwater abstraction licences to reduce licenced headroom to reduce the risk of deterioration defined by the WFD Regulations (2017)

Alongside our role as lead environmental regulator in England, we also have responsibility for the ownership, management and operation of the Shropshire Groundwater Scheme (SGS) providing strategic water transfer support to the Severn catchment. Our own abstractions may have the capacity to adversely affect the environment and so should be considered as part of any sustainability reviews and actions along with other water resource regional planning activity. A technical review of the Shropshire Groundwater Scheme abstraction licence commenced in 2020. This assessment is being undertaken in context to our duty under the WFD Regulations (2017) to deliver sustainable catchments. This aims to deliver a good balanced judgement between WFD environmental risk and supply of water for Severn regulation. Funding is being sought to ensure delivery of the next stage of the SGS review by 2023.

Severn Uplands – PT Sandstone Knockin Groundwater Body (including the Knockin GWMU)

The Severn Uplands Permo-Triassic Sandstone Knockin groundwater body also partially falls within the Shropshire Middle Severn ALS area. This groundwater body is considered to be at good status but at risk of deterioration. There are however some localised level and flow impacts on groundwater and surface water systems resulting from groundwater abstraction.

We will take the following action to reduce abstraction is this catchment:

- to protect the overall status of the Groundwater Body no new consumptive licences will be granted
- we will take appropriate action to reduce fully licensed risks where surface water bodies are adversely impacted
- new authorisations will be determined based on historic use
- time limited licences will be capped on renewal to reflect historic use where surface water bodies are adversely impacted
- we will only accept licence trades if the trade is consistent with achieving water body objectives
- we will seek a voluntary approach to change permanent non-water company licences
- the Water Companies will undertake further investigation to identify the measures required to comply with the WFD Regulations (2017) no deterioration requirements and implement sustainability changes where required
- we will seek to ensure that the water company will adhere to its responsibilities under the WFD Regulations (2017) no deterioration requirements
- we will seek to address unused and underused groundwater abstraction licences to reduce licenced headroom to reduce the risk of deterioration defined by the WFD Regulations (2017)

Dee Permo-Triassic Sandstone Groundwater Body (including the Whittington GWMU)

The Dee Permo-Triassic Sandstone groundwater body also partially falls within the Shropshire Middle Severn ALS area. This groundwater body is considered to be at good status but at risk of deterioration. On a local scale, the Whittington groundwater management unit water balance is considered unsustainable, with associated surface water compliance issues. We will take opportunities to reduce fully licenced risks where there is potential for deterioration of the groundwater balance, surface water bodies or groundwater dependent terrestrial ecosystems.

We will take the following action to reduce abstraction is this catchment:

- to protect the overall status of the GWMU no new consumptive licences will be granted
- we will take appropriate action to reduce fully licensed risks
- new authorisations will be determined based on historic use
- time limited licences will be capped on renewal to reflect historic use
- we will only accept licence trades if the trade is consistent with achieving water body objectives
- we will seek a voluntary approach to change permanent non-water company licences
- the Water Companies will undertake further investigation of a number of sources to identify the measures required to comply with the WFD Regulations (2017) no deterioration requirements and implement sustainability changes where required
- we will seek to ensure that the water company will adhere to its responsibilities under the WFD Regulations (2017) no deterioration requirements
- we will seek to address unused and underused groundwater abstraction licences to reduce licenced headroom to reduce the risk of deterioration defined by the WFD Regulations (2017)

5.3. Water rights trading

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. 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. This is both:

- within the water body / bodies where the trade will take place
- to downstream water bodies

This section provides a guide to the potential for trading in water bodies of a particular ALS water resource availability colour, as shown in maps 1 to 4 (surface water) and map 5 (groundwater).

Guide to potential trading based on water resource availability

Water available for licensing

Green 

There may be opportunities to 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 or groundwater management units 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 up to recent actual abstraction but no increase in recent actual abstraction is permitted in these water bodies/groundwater management units. Licensed abstraction will be recovered for the environment.

HMWBs

Grey 

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

5.3.1. Groundwater rights trading

The principles detailed in Section 5.3 apply to permanent trading of groundwater within the same GWMU. The following additional principles apply for the permanent trading of groundwater between Groundwater Management Units (GWMU) within the same Groundwater Body (GWB);

- the trade must be compatible with this abstraction licensing strategy for the recipient GWMU and surface water bodies
- there is a presumption against trading between GWMU's that are in deficit. (A deficit balance within a GWMU can also be read as Restricted Water Available or No Water Available (Section 4.2))
- licence trades will only be considered where the recipient GWMU water balance is in surplus. (A surplus balance within a GWMU can also be read as Water Available (Section 4.2)

- the trade must not result in deterioration of the status on any Groundwater Body or surface water body test
- the trade should be compatible with the ambition to maintain good or the pathway to achieving good status. The ambition should be realistic and cost beneficial
- the trade must not cause any environmental damage
- the trade must not derogate any Protected Right and must have due regard to lawful users. A pump test is likely to be required to assess potential impacts on these and other water features
- there is a presumption against trading to a non-compliant surface water body
- the receiving trade abstraction point(s) must consider the distributed impact across surface water bodies. There is a presumption against trading where the distributed impact results in depleting flows within a non-compliant surface water body

To find out more about licence trading please go to our Water management web pages

Help for trading water rights map: this may help abstractors to identify potential trades - it provides information on nearby licences and an indication of the potential for a trade.

6. Related links

Agriculture and Horticulture Development Board (AHDB) website - provides information on effective use of water on livestock farms

Catchment Based Approach community website - provides further information on the catchment based approach

UK Centre for Ecology and Hydrology Drought Portal - is an interactive portal presenting information on the latest hydrological situation across the UK

Environment Agency, how to apply for a water abstraction or impoundment licence web pages - provide all the information needed to go through the application process to get a licence

Environment Agency manage your water abstraction or impoundment licence online web service - allows abstractors to view and share licence information and submit abstraction returns

Environment Agency priority catchments website - provides further information about the priority catchment work

Environment Agency National Framework for Water Resources - explores England's long-term water needs and the importance of planning at the regional scale and link to the catchment scale

Linking Environment and Farming (LEAF) Simply Sustainable Water guide – explains 6 simple steps for managing water quality and industrial use

National Farmer's Union web pages on Irrigation and water resources – provide useful information

Natural England's website provides further information on protected sites and species

The UK Irrigation Association and Cranfield University - provide a range of irrigation booklets that tackle key issues

Waste and Resources Action Programme website has guidance on water efficiency in the food and drink industry

Water and Resource Action Programme website has a guide to water saving devices and practices

7. List of abbreviations

ALS
Abstraction Licensing Strategy.

AMP
Asset Management Plan

AP
Assessment Point.

CaBA

Catchment Based Approach.

CED
Common End Date.

Defra
Department of Environment Food 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.

Ml/d
Megalitres per day.

RBMP
River basin management plan

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.

8. 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.

Asset Management Plan
Every five years Ofwat assesses water company business plans, including spending and investment. The Water Industry National Environment Programme (WINEP) is included in the business plans and is considered by Ofwat in the determination of water company prices. The WINEP consists of investigations, monitoring, options appraisals and schemes to improve, prevent deterioration and protect the water environment. These form part of a water company's Asset Management Plan (AMP). We are currently in AMP7 with measures being delivered between 2020 and 2025.

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

Catchment based approach
Partnership working at the river catchment scale to deliver a range of environmental, social and economic benefits while protecting our precious water environments for the benefit of all.

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.

Deterioration
Deterioration is a change in the class of any one of the quality elements used to determine the WFD Regulations (2017) status in a water body from its existing class to the class below, or any deterioration within the lowest class. It is not change within a class unless already in the lowest class.

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.

Protected Right

A protected right is simply a right to abstract. The Environment Agency has a statutory duty to not take away from, or weaken a protected right, by granting another licence.

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.

9. Contact details for further information

You can call the Environment Agency on 03708 506 506 (calls cost no more than a national rate call to on 01 or 02 number) or email enquiries@environment-agency.gov.uk

Would you like to find out more about us or your environment?

Then call us on

03708 506 506 (Monday to Friday, 8am to 6pm)

email

enquiries@environment-agency.gov.uk

or visit our website

www.gov.uk/environment-agency

incident hotline

0800 807060 (24 hours)

floodline

0345 988 1188 (24 hours)

Find out about call charges (www.gov.uk/call-charges)

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