




A proposed reservoir in the Fens

Phase two consultation –
associated water infrastructure proposals



May 2024

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A guide to our documents

We have published a series of documents for the consultation. These can be viewed online at www.fensreservoir.co.uk/documents and are available in hard copy by contacting our team.

Alternatively, you can scan the QR code below with your phone's camera to access the documents online.



SUPPORTING INFORMATION	
A guide to our proposals and phase two consultation	An overview of our phase two consultation, with more information about what we're consulting on, where to find out more about our proposals and how you can have your say.
Project fact sheets	Supporting information about our approach to a range of topics and themes that we know are important.
RESERVOIR	
Phase two consultation – main site design brochure	Information on the emerging design for the main reservoir site and the factors we considered to reach this point. This provides information about the initial opportunities for the features it could include, and how it is likely to operate.
Main site design report	An explanation of the emerging design for the reservoir site, and how this was developed.
ASSOCIATED WATER INFRASTRUCTURE	
Phase two consultation – associated water infrastructure proposals	This booklet – Information about our proposals for drawing available water from the sources we've identified, transferring the water to the reservoir, treating it, and supplying it to customers. This explains the infrastructure we may need, and the preferred options we've identified at this stage.
Options appraisal report	An overview of the options appraisal process that we have been through to identify the preferred options and sites for the associated water infrastructure. This explains the four stages (stages A to D) of our appraisal process, how the options that were progressed for detailed assessment compared to one another, and the different combinations we assessed to identify the proposals we're taking forward at this stage.



Find out more

Scan the QR code with your phone's camera to access the documents online.



Please note: this is an indicative image and the design may change as our proposals develop.



Our vision and plans for a new reservoir

Anglian Water and Cambridge Water are proposing a new reservoir in the Fens to help meet the growing demands on water supply in the East of England.

The new reservoir is at the heart of a whole new water supply project. Together with the associated water infrastructure we need to transfer water to the reservoir, treat the water, and supply it to homes and businesses, it will secure a reliable water supply for generations to come.

When there is available water in rivers that would otherwise drain to the sea, we would draw that water and transfer it to the reservoir using new and existing infrastructure and waterways. The reservoir will store the water for when it's needed.

Having this new water resource will reduce demands on sensitive sources such as chalk streams, helping us to protect and restore the environment. It will make us more resilient to a changing climate, reducing the impact of droughts while helping to manage river levels in wetter periods.

The proposed reservoir is located between Chatteris and March, near to Doddington, Wimblington and Manea. Before our phase one consultation, we completed a thorough site selection process for the reservoir and are continuing

to work hard to develop our plans for the chosen site.

Our latest proposals include:

- An emerging design for the reservoir including opportunities for recreation, wildlife, the environment and other features.
- The infrastructure we need to transfer available water from rivers to the reservoir, treat the water, and then supply it to homes and businesses.

Where possible, we will consider ways to include features that local communities would value and use.



Our vision for the project goes beyond simply creating a new public water supply. This is a significant investment in England's water infrastructure and a once-in-a-generation opportunity to deliver lasting benefits for people, place and the environment.

We will explore opportunities that could deliver ecological benefits and promote sustainability.

We will also consider what new opportunities there are to teach future generations about how water shapes our lives and the environment.

Through our engagement with regional partners and stakeholders, it's clear that others also want us to think about how the reservoir and its associated water infrastructure could enable separate, wider opportunities beyond those we hope to create from the reservoir itself.

We're exploring exactly that, through working together with others that share our ambition to bring environmental, social and economic prosperity to our unique region.



To see how the project could contribute to our wider plans for the region, read the **guide to our proposals and phase two consultation brochure**, available online at www.fensreservoir.co.uk/documents

Help shape our proposals

We understand that our proposals will have an effect on landowners, homeowners, and communities. We're committed to working with these groups as we develop our plans and want to hear all views on our emerging proposals.

During our phase one consultation in 2022, we asked people for their comments on the proposed site we had identified for the reservoir and the features they would like to see included.

We have since been developing our proposals for the reservoir site to give everyone a better idea of what it could look like and what it could deliver, taking on board the feedback we received.

We've also been developing our plans for the associated water infrastructure that we need to fill the reservoir with water, treat it, and supply it to homes and businesses.

This booklet explains our proposals for the associated water infrastructure. You can see what our latest proposals include, and where to find out information about the parts of the project that aren't explained here, on **page 12**.



Our consultation is open from 30 May until 9 August 2024.

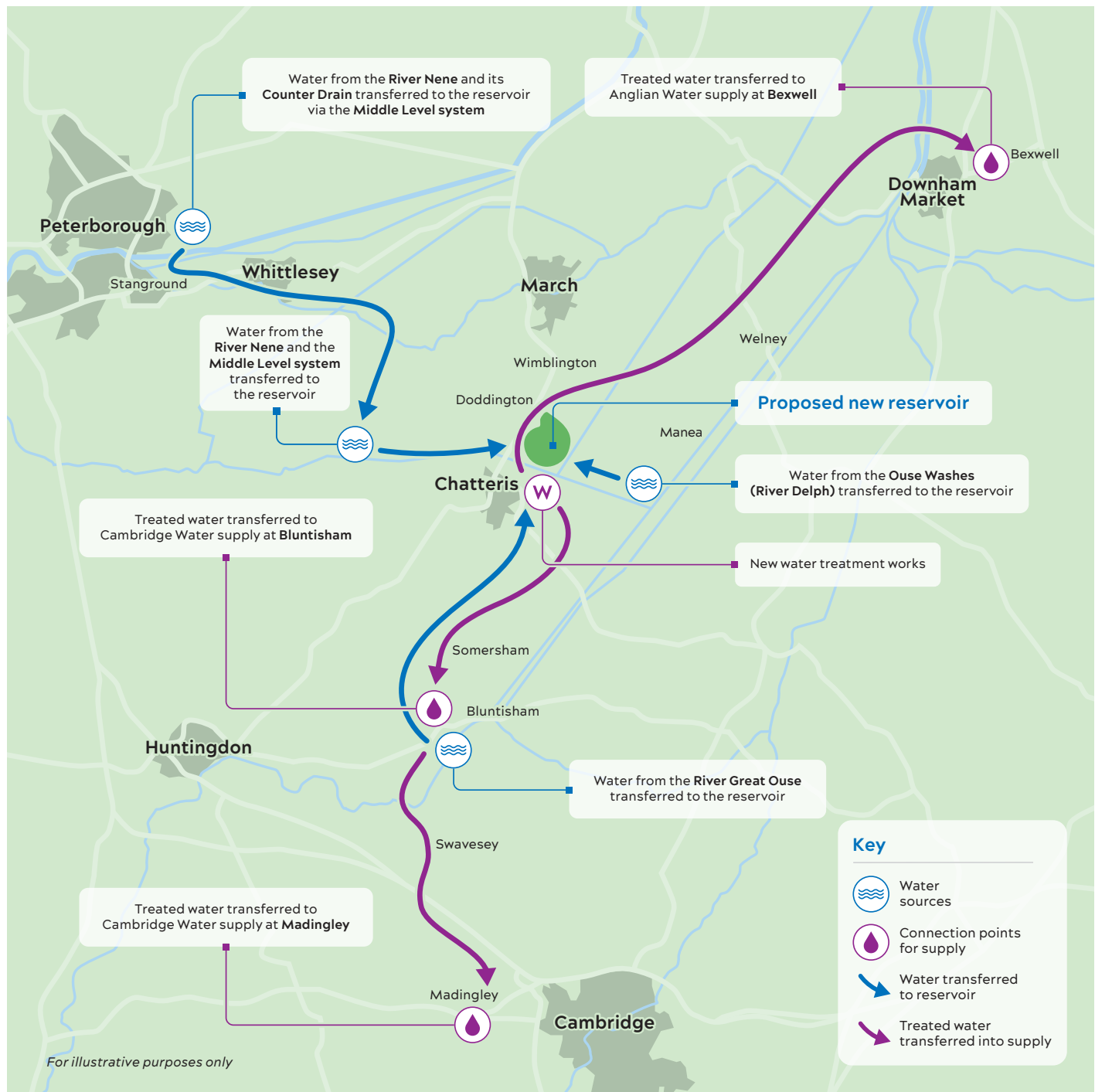
See **page 39** for how to provide your feedback.

We look forward to receiving your comments.



the Sixteen Foot Drain

This illustrative map shows the sources where water is being transferred from to the reservoir, and then where the treated water is being sent into supply.



Getting water to and from the reservoir

One of the key factors in choosing the preferred location for the reservoir was the availability of water to supply it, and where in the existing water system we needed to connect to so that we could supply water to homes and businesses.



Sourcing water

When completing our site selection process for the reservoir itself, we had already identified possible water sources that would have water available to fill the reservoir.

These are the sources that are included in our phase two proposals, shown in the order of which we would draw available water from them:

- **The Middle Level system**
- **Either the River Great Ouse or the Ouse Washes (River Delph)**
- **The River Nene and its Counter Drain**

We've since carried out more work to assess how much water could be drawn from each source, and how we connect the reservoir to these sources using channels or pipelines.



Supplying water

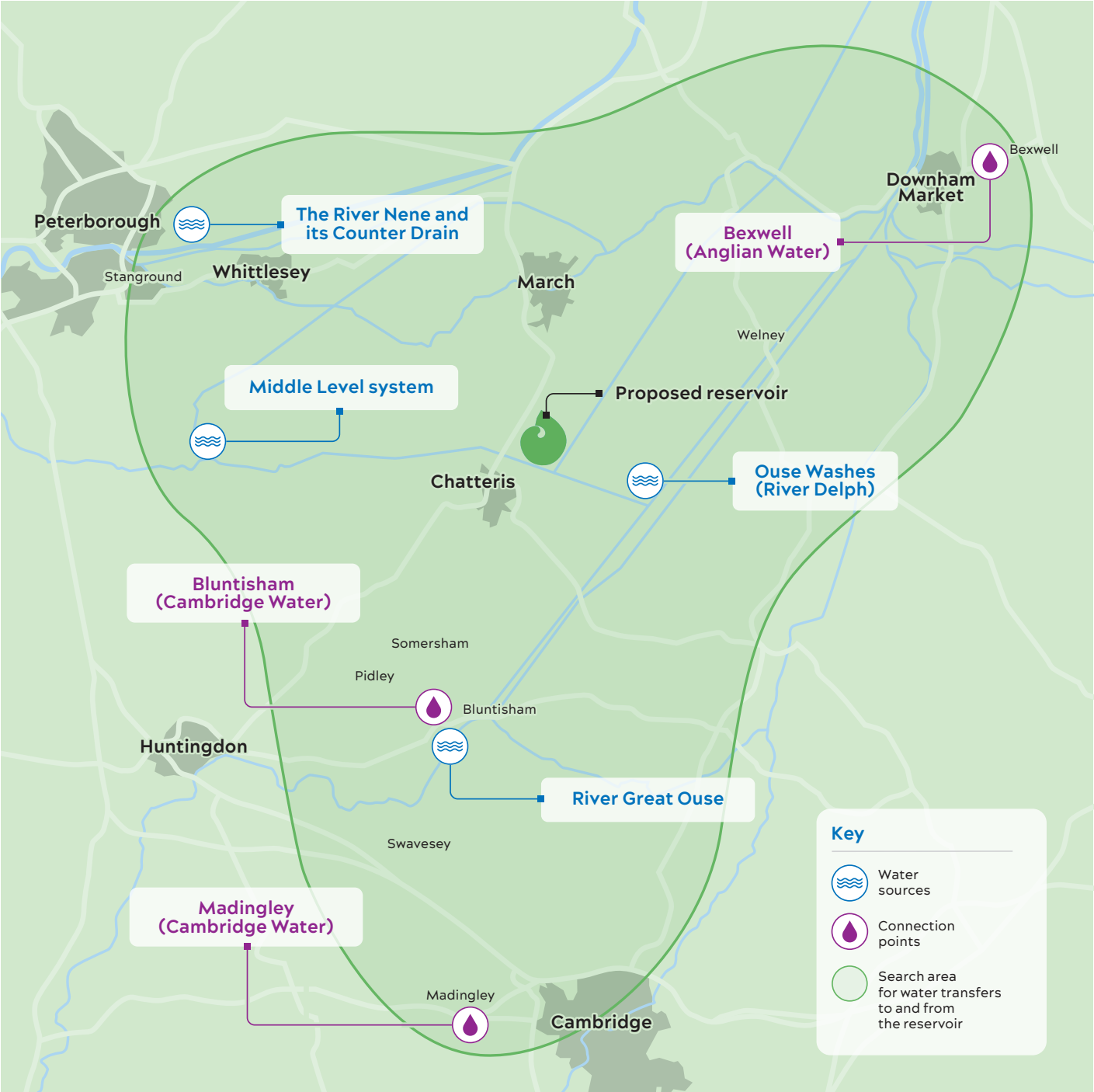
Half the treated water from the new reservoir is needed by Anglian Water customers, and the other half by Cambridge Water customers. These supply needs are identified in both companies' Water Resources Management Plans (WRMPs).

The WRMPs identify **Bexwell** in Norfolk as the best place to connect to Anglian Water's supply, and two locations in Cambridgeshire, **Bluntisham** and **Madingley**, for Cambridge Water's supply.



the River Nene in Peterborough

How we began looking at possible locations for the associated water infrastructure based on the proposed reservoir site, the water sources, and the connection points for supply identified in our WRMPs.





Identifying the preferred options

We've completed a multi-stage assessment to identify preferred ways for transferring water to and from the reservoir, and the associated water infrastructure needed.



We started by looking across the broad area between the water sources, the reservoir and the connection points to identify a list of locations and options for the infrastructure we might need.

This included route options for transferring water to the reservoir via new underground pipelines or existing waterways, and possible locations near the water sources for building the equipment needed.

It also included location options for a new water treatment works, as well as routes for transferring treated water into supply via new underground pipelines and service reservoirs.

We then looked at this long list of options and assessed them to see which ones were most suitable for what we needed to build, taking into account factors such as existing infrastructure, environmental designations and planning policy.

The most suitable options were then assessed in more detail against a range of criteria including:

Environment

Natural environment features such as existing rivers and watercourses, nature conservation areas, landscape designations, and the historic environment.

Social and Community

Existing built-up areas, community infrastructure, and access and amenity resources.

Engineering

What the construction of the infrastructure would involve, and the need to design and build in a safe, carbon and cost-efficient way. We also considered how the infrastructure could interact with existing rivers and watercourses.

Planning and land use

Considering each option for the presence of other nationally significant infrastructure projects as well as features such as designated common land and mineral safeguarding zones.

We also looked at potential opportunities that the different options might unlock, including whether they could enhance the environment, support existing water resources management initiatives or potentially unlock navigation opportunities.

We took forward the options that were preferred based on the wide range of criteria considered, and then looked at how the options could work together to draw, treat and distribute water to homes and businesses. This helped us identify a preferred combination.

Working with stakeholders

We engaged a range of stakeholders who provided input throughout the appraisal process, including:

- Statutory bodies such as the Environment Agency, Natural England and Historic England.
- Water management, waterway and drainage authorities, including the Middle Level Commissioners.
- Local authorities, to seek their initial views on how we could minimise potential impacts and maximise potential benefits.



Find out more

For more information on how we identified the associated water infrastructure, please read our **options appraisal report**, available online at www.fensreservoir.co.uk/documents

What the project includes

This diagram shows what we're currently proposing, and how all these parts fit together to create a new, major public water supply resource.

Our proposals for everything in **blue** and **purple** – all the associated water infrastructure – are explained in this document.

The colours will help you navigate through this document.

Everything in **green** is about the reservoir itself and the equipment we need to build at the site to operate it. All these elements are explained in another document – our **main site design brochure**.

Our latest proposals

Key



The proposed reservoir



Water sources



Connection points



Water treatment works

River Nene and its Counter Drain

Abstraction infrastructure if required (pump station, treatment facilities) and transfer of water from River Nene to Middle Level system via Stanground Lock

Middle Level system

Ouse Washes (River Delph)

Abstraction infrastructure (pumping station, treatment facilities if required) and transfer of water from Ouse Washes (River Delph) to Forty Foot Drain

River Great Ouse

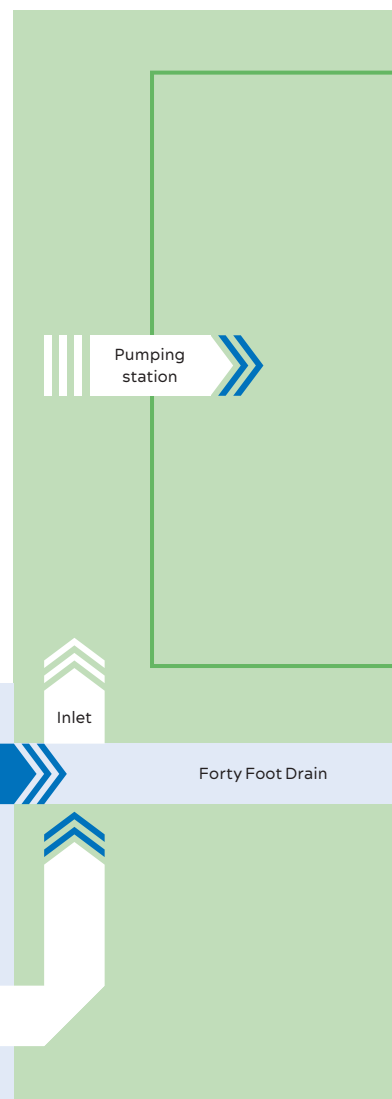
Abstraction infrastructure (pumping station, treatment facilities if required) and transfer of water to reservoir site via underground pipeline

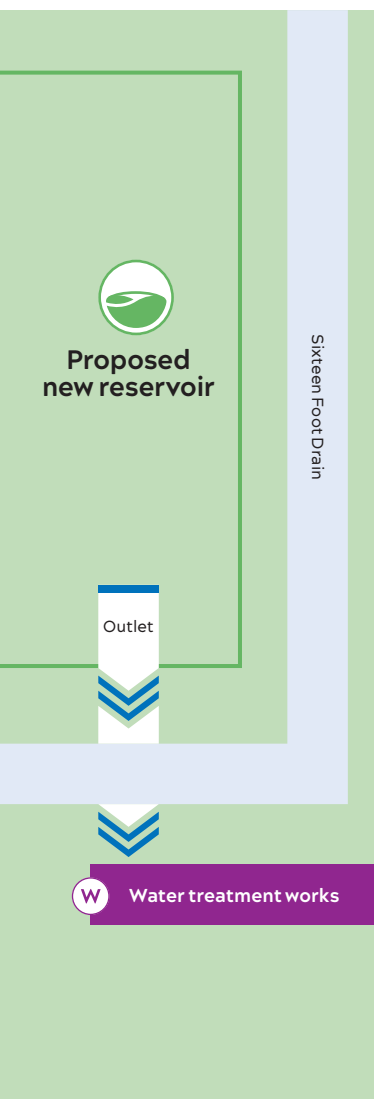


Water sources infrastructure

The infrastructure needed to draw water from each source. This includes equipment to take in water flows, pump the water and, where needed, treatment facilities to remove impurities and manage water quality.

This also includes underground pipelines to transfer water to the reservoir, and the routes to transfer water into the reservoir using existing open channel waterways.





The reservoir site

Our emerging design for the reservoir, including opportunities for recreation, wildlife, nature and other features, and how we would likely operate the reservoir.

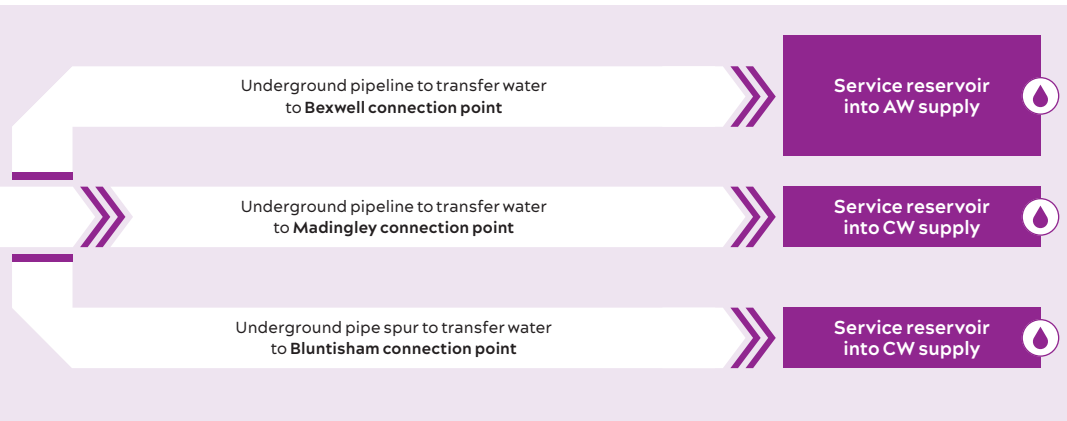
This also includes preliminary proposals for areas of land in the vicinity of the reservoir we could need for environmental mitigation and enhancement, construction, and wider uses.



Water supply infrastructure

The infrastructure we need to treat the water stored at the reservoir and supply it to homes and businesses. This includes a new water treatment works located at the reservoir, and the underground pipelines to transfer the

treated water to Anglian Water (AW) and Cambridge Water (CW) connection points for supply. We may need to build a new service reservoir at each connection point to help us put the water into the supply network.



Provide feedback on our emerging design for the reservoir












To find out more about the main reservoir site and provide views on our emerging design, scan the code with your phone to see the [main site design brochure](#) or visit the website link www.fensreservoir.co.uk/documents

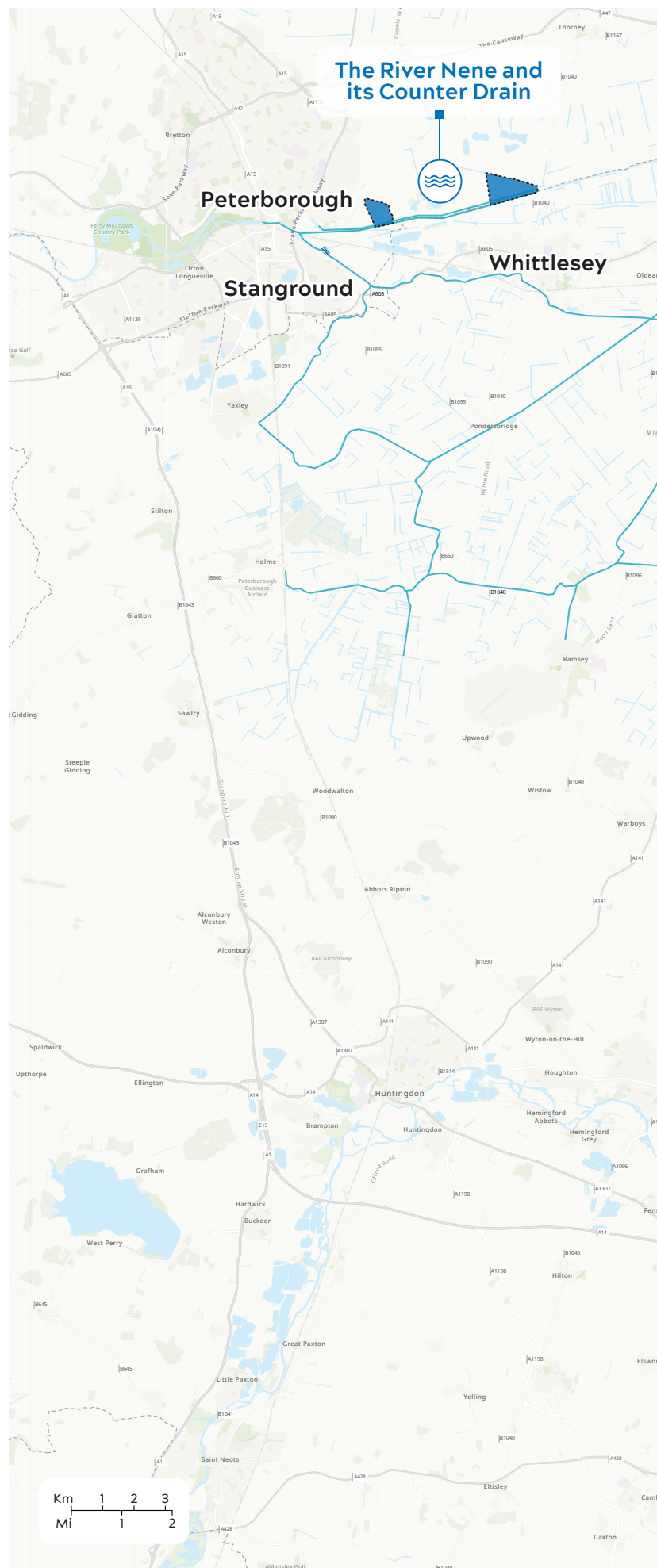


Where our proposals are

This map shows the indicative whole scheme, as explained on the previous page. The following pages of this booklet explain each part.

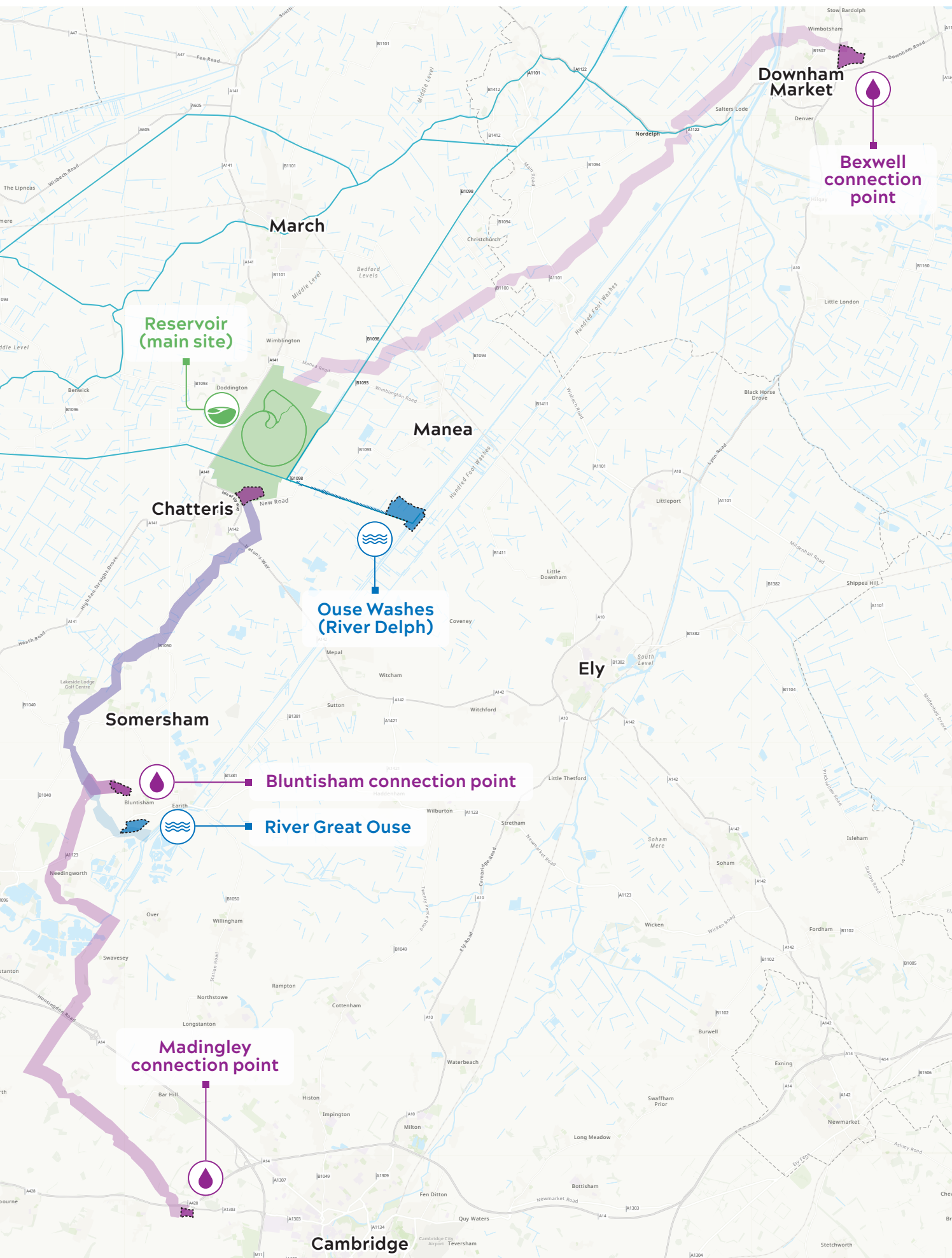
Key

-  Existing watercourses connecting between abstraction points and reservoir
-  Land areas identified for water sources abstraction infrastructure
-  Pipeline corridors identified for transferring water from sources to the reservoir
-  Areas identified for modifications or upgrades needed along existing watercourses to support transfers from water sources
-  Land areas identified for water treatment and supply infrastructure
-  Shared corridor for water sources pipeline corridor and water supply pipeline corridor
-  Pipeline corridors identified for transferring treated water into supply
-  Indicative boundary for main reservoir site
-  Reservoir shape, based on emerging design
-  Water sources
-  Connection points for supply



Have your say

Your feedback will play a valuable role in helping us shape these proposals further. You can view the proposals in more detail using the interactive map on our website: projectmap.fensreservoir.co.uk



Transferring water to the reservoir

To fill the reservoir and provide the required amount of water to homes and businesses, we will need to draw water from more than one source.

We have identified the following sources as having water available to fill the reservoir, and know that we need to use three of these sources.

The Middle Level system

This will be our primary source of water for the reservoir. When there's water available in local waterways that could be used for public supply, it will be pumped into the reservoir from the Forty Foot Drain by a pumping station located at the reservoir site.



More information about this transfer is on the **next page**.

The Ouse Washes (River Delph)

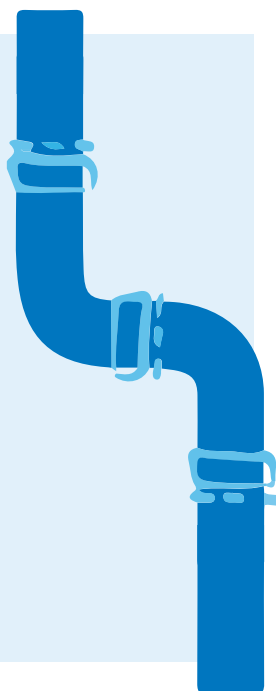
When there's not enough water available in the Middle Level system, we'll either need to draw water from the Ouse Washes (River Delph) or the River Great Ouse. Using water from this source would involve building equipment near Welches Dam Pumping Station to draw water from the Ouse Washes (River Delph) and pump it to the Forty Foot Drain. A section of the Forty Foot Drain would be refurbished to carry the water into the reservoir from a point north of Welches Dam Lock.



See **pages 22-23** to find out more about our proposals for transferring water from this source.

River Great Ouse

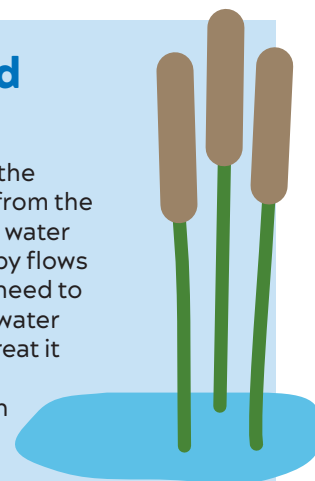
If we need to use water from the River Great Ouse instead of the Ouse Washes (River Delph), we will draw water from the River Great Ouse at Earith. Our proposals for transferring water from this source to the reservoir involve pumping it northwards to the reservoir through a new underground pipeline, that would pass east of Chatteris.



See **pages 24-25** to find out more about the infrastructure proposed for transferring water from this source.

The River Nene and its Counter Drain

When we need more water than the amount we can sustainably use from the closer sources, we'll need to use water from the River Nene supported by flows from its Counter Drain. We may need to build infrastructure to draw the water from the Counter Drain (Nene), treat it and pump it into the River Nene, from where it would flow through Stanground Lock and into the Middle Level system, before being pumped into the reservoir.



See **pages 20-21** to find out more about the potential infrastructure needed for this transfer.

Our preferred combination of sources won't be confirmed until after we've carried out further assessments and engagement with statutory bodies.

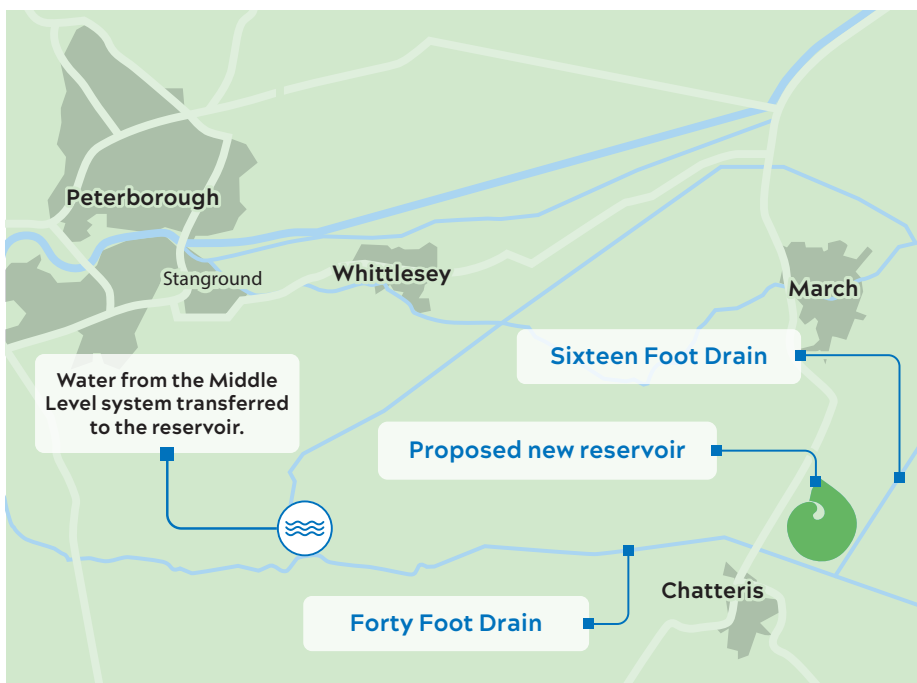
Using the Middle Level system

We're proposing to use available water from the drainage network operated by the Middle Level Commissioners as the main source for filling the reservoir.

We've identified that the Middle Level system has water available that could be used as public supply, rather than being drained away. Using this water to help fill the reservoir could also help reduce surface water flooding in the areas near the reservoir.

We'll need to build a new pumping station to lift water from these Middle Level channels into the reservoir, but this will be located at the reservoir site and is part of our emerging design proposals.

We also plan to use parts of the Middle Level system to transfer water from other sources further away from the reservoir. This helps us reduce the amount of new infrastructure needed in other places too.



This shows the proposed reservoir in relation to the Middle Level system

The Middle Level Commissioners control 120 miles of canals and drains across the Cambridgeshire Fens and are responsible for managing drainage and water levels across this network.

We've been working closely with the Middle Level Commissioners throughout this phase of our work to assess ways of getting water to the reservoir and exploring how the reservoir can integrate into a historic landscape for water management.

You can find out more about the Middle Level Commissioners here: www.middlelevel.gov.uk

What we need to build

We need to build different types of equipment to draw water when it's available and transfer it to the reservoir. The type of infrastructure needed depends on where the water is coming from and how it's being moved.

Abstraction

Abstraction is the process for drawing water from rivers when it's available so it can be transferred to the reservoir. Water will only be drawn when there is enough available, and the water would otherwise drain to the sea.

The different equipment that may be needed for this includes:



Example image of screen used at intake

Intake

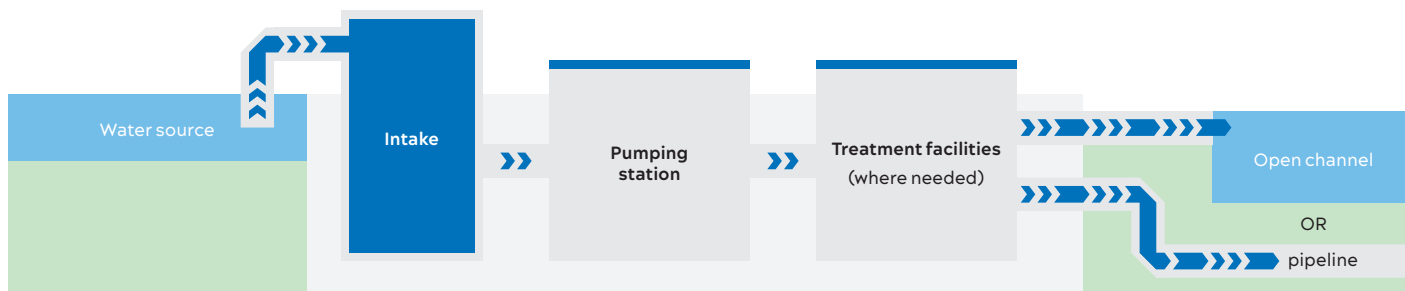
This is a structure built into the bank of the river with an underwater channel to withdraw water. It will be built from reinforced concrete and includes screens to remove any debris, such as branches or leaves. The structure would sit in a compound that includes mechanical and electrical equipment housed in kiosks and secured by fencing.



Example image showing water testing at treatment facility

Treatment facilities

Water from rivers in some cases requires treatment. This may be to remove any invasive non-native species (INNS) present, or to achieve the required water quality when moving water between river catchments. Treatment facilities typically include adding a solution to the water to make impurities stick together into larger particles, and then removing them through filters.



Transferring water to the reservoir

This involves moving the water we've drawn from the sources into the reservoir. We'll use existing watercourses to transfer the water, where feasible options to do so performed well in our assessments.

This will help minimise the amount of new infrastructure and associated construction work needed.

We may need to carry out work to existing watercourses so they can

carry the extra water, which could include widening and raising existing channels and their banks. We'll know more about this after further assessments are carried out.

The infrastructure that we may need to build to transfer water includes:



Example image of typical pumping station

Pumping station

A facility that contains pumps to lift or push water to another place. The pumping stations will mostly be co-located with the abstraction equipment to pump the water into the treatment facilities, if treatment is needed, and on to the transfer routes. Where we are transferring water using open channels, gravity does the rest. There will likely be other supporting electrical equipment in the building too.



Example image of pipeline installation

Pipeline

Where new transfer routes are required or are preferred over the use of existing watercourses, we'll need to create underground pipelines to transfer water to the reservoir, or to an existing watercourse that will then carry the water to the reservoir. Generally, we'll need to dig trenches to install these, that will then need to be filled in and the area reinstated. Where the pipeline route needs to cross a major road, railway route, river or major utility infrastructure, we would use equipment to install the pipeline underneath them that doesn't involve digging trenches.

What's a pipeline corridor?

A pipeline corridor is an area of land within which we would locate an underground pipeline. The corridors we've identified at this stage are around 500 metres wide – this is much wider than the area we'd need for constructing the pipeline along the route, which we expect to be around 50 metres wide. The specific pipeline route itself hasn't yet been determined. This will be part of our next stage of work, following further assessment and consideration of the feedback we receive.



The following pages explain what our proposals for drawing and transferring water from each source involve, and the proposed locations for the infrastructure needed.

The River Nene and its Counter Drain

To transfer water from the River Nene to the reservoir, we'll draw water from the Counter Drain (Nene) if required, and move it into the River Nene. Water from the River Nene will then flow to the Middle Level system via Stanground Lock.

Drawing water from its source

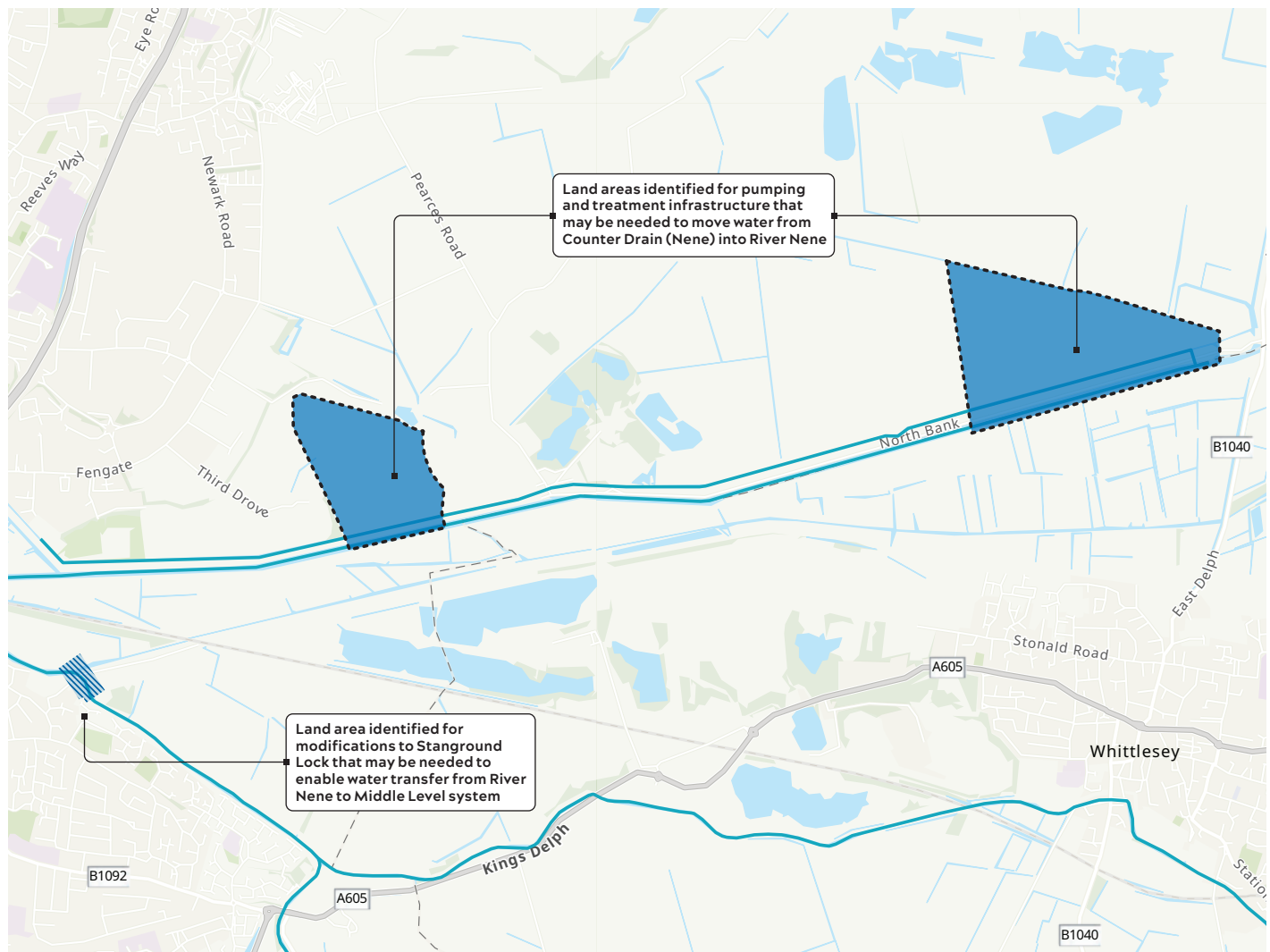
We are currently assessing whether there is enough water available in the River Nene to allow us to draw water from it, without needing to move water into the river from its Counter Drain. If we do need to move water from the Counter Drain (Nene) into the River Nene, we would need to build a river intake

structure and a pumping station to do so. We may also need to build equipment to treat the water before we put it into the River Nene.

We've identified two possible areas along North Bank, north east of Stanground, where we could build compounds to house this new equipment, if needed. One is near

Fengate, and the other is further east, near Levitt's Drove – both are shown below. We may only need to build infrastructure in one of these areas, depending on the water treatment equipment needed. This will be decided once we've carried out further assessments and engagement with statutory bodies.

The two areas we've identified are much larger than would be needed for the equipment. We'll refine our proposals further following more assessments and consideration of the feedback we receive.

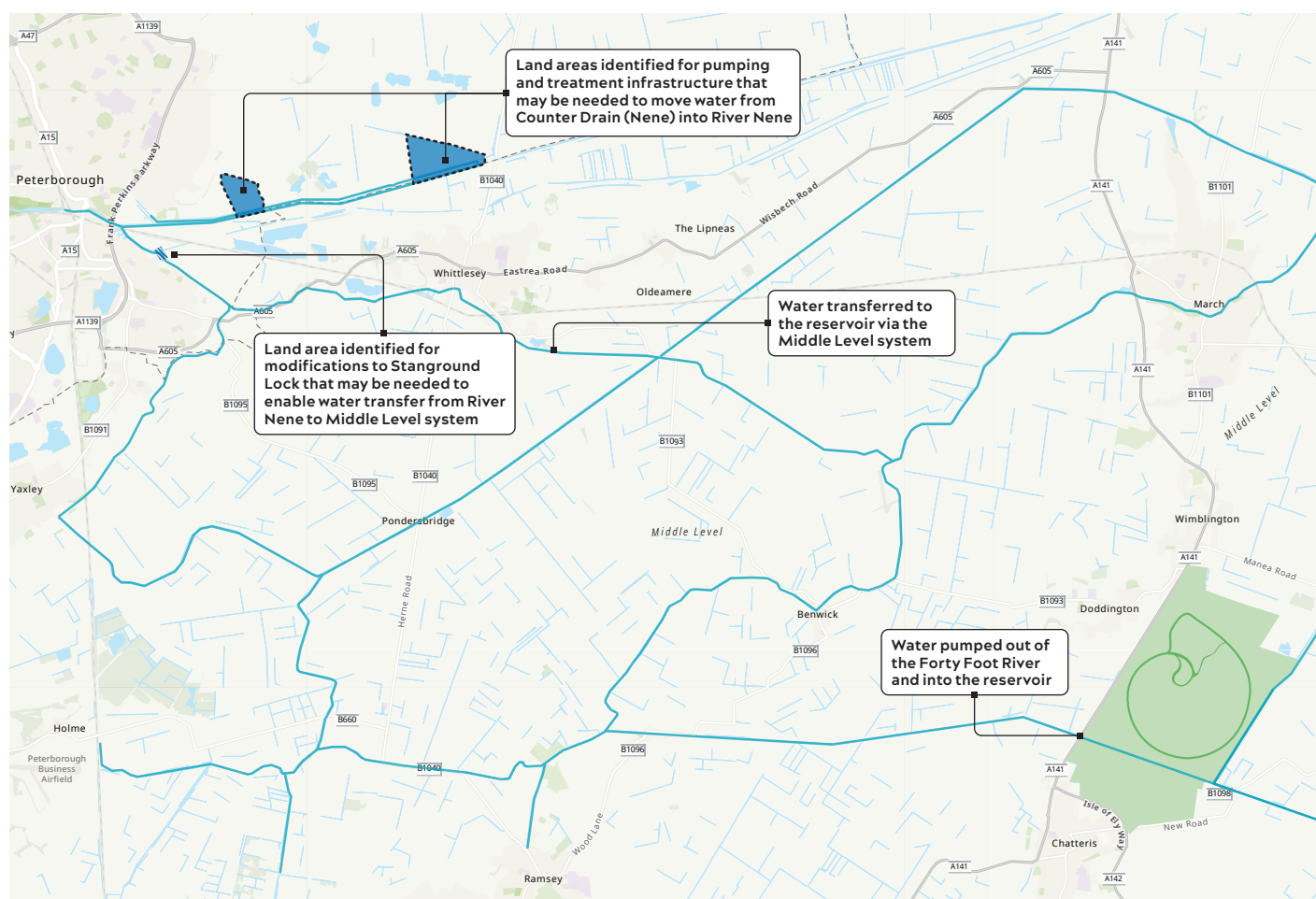


Transferring the water

The water will be transferred from the River Nene to the Middle Level system, after travelling along the River Nene and through Stanground Lock.

We may need to carry out work near the lock to create a bypass channel for the additional water to flow through. We've identified the area for where this work could take place on the maps.

The water would then travel through the Middle Level system, and it would be lifted out of the Forty Foot Drain and into the reservoir by a new pumping station located on the reservoir site.



Have your say

We want to know what you think about the areas we've identified. You can provide your views on this using the **'water sources infrastructure'** section of our feedback form. Head to **page 38** to find out how you can have your say.



Ouse Washes (River Delph)

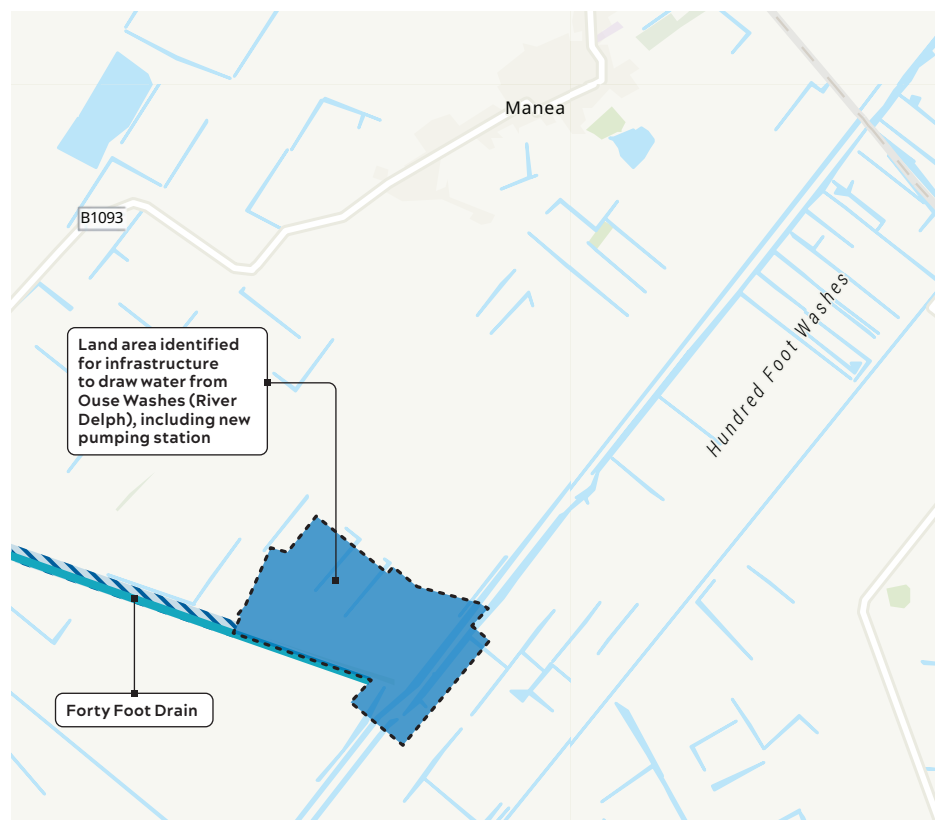
We may need to use available water from the Ouse Washes (River Delph), although are continuing our assessments to determine whether we use this source or the River Great Ouse. In the meantime, we've identified preferred locations for the infrastructure we'd need to build to do so.

Drawing water from its source

Through our assessments and from what people told us during our phase one consultation, we've identified that removing excess water from the Ouse Washes could unlock important benefits. For example, this is an area used by native birds during nesting season and for foraging in the winter. Removing water during times of high flood could help protect land needed for these important wildlife activities.

To draw the water, we'd need to build pumping equipment to move it out of the River Delph and into the Forty Foot Drain, in an area near the existing Welches Dam pumping station.

We've identified a proposed area of land for where any new infrastructure, including the river intake, pumps and, if needed, water treatment facilities could be built. This is shown opposite.



Transferring the water

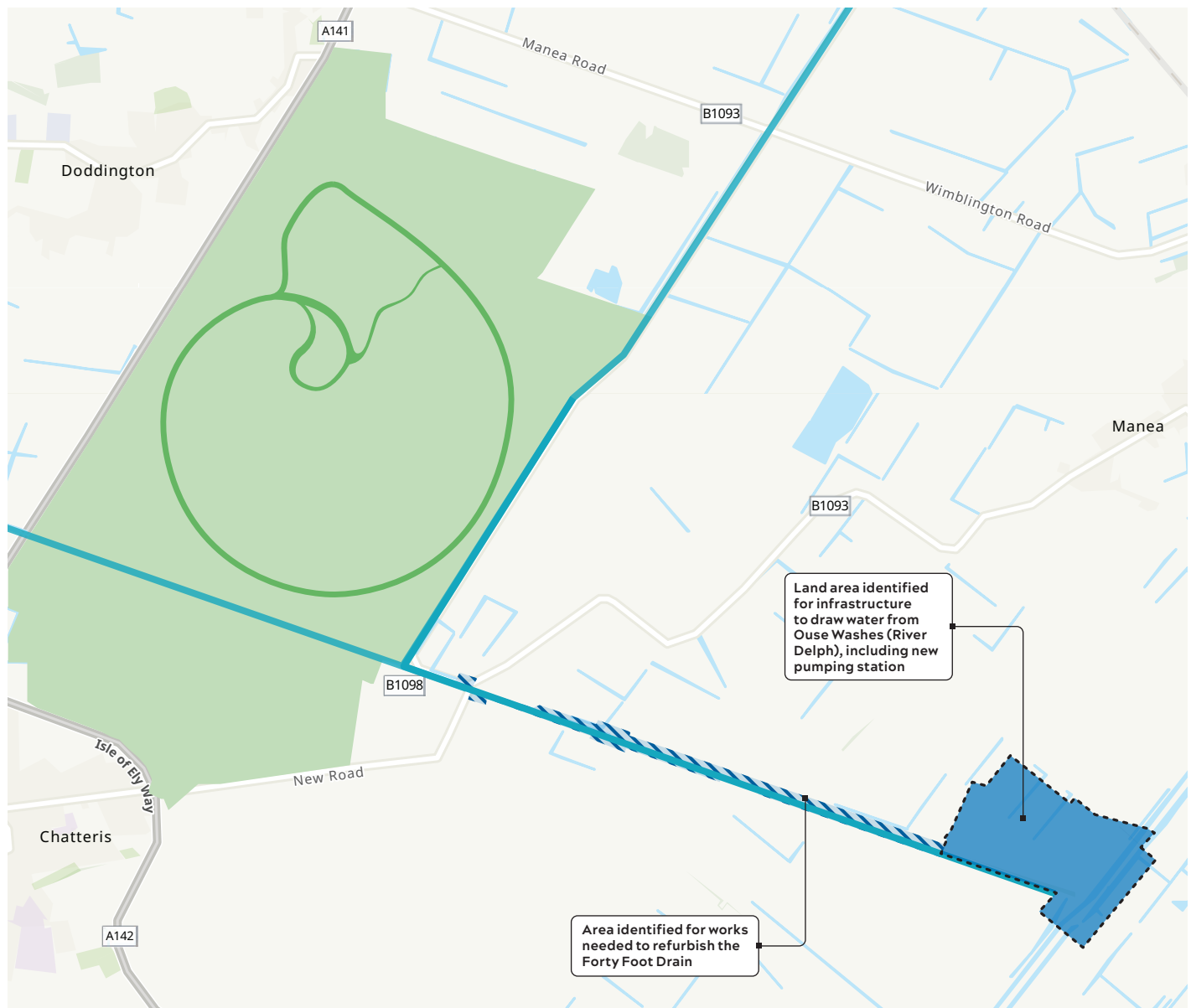
The water would then be pumped to the Forty Foot Drain through a pipe crossing the Counter Drain (Ouse).

We'd then transfer the water to the reservoir via the Forty Foot Drain. To do this, we'd need to refurbish the

dried-out section of this historic watercourse between Welches Dam Lock and Horseway Lock. Refurbishing this section of the drain would help reinstate this part of a historic navigation route,

and support biodiversity along this section of the channel.

The water would be lifted into the reservoir by the pumping station we'll be building at the site.



Find out more

If you'd like more information about how we assessed different ways of getting water from this source read our **options appraisal report**, available on our website: www.fensreservoir.co.uk/documents



River Great Ouse

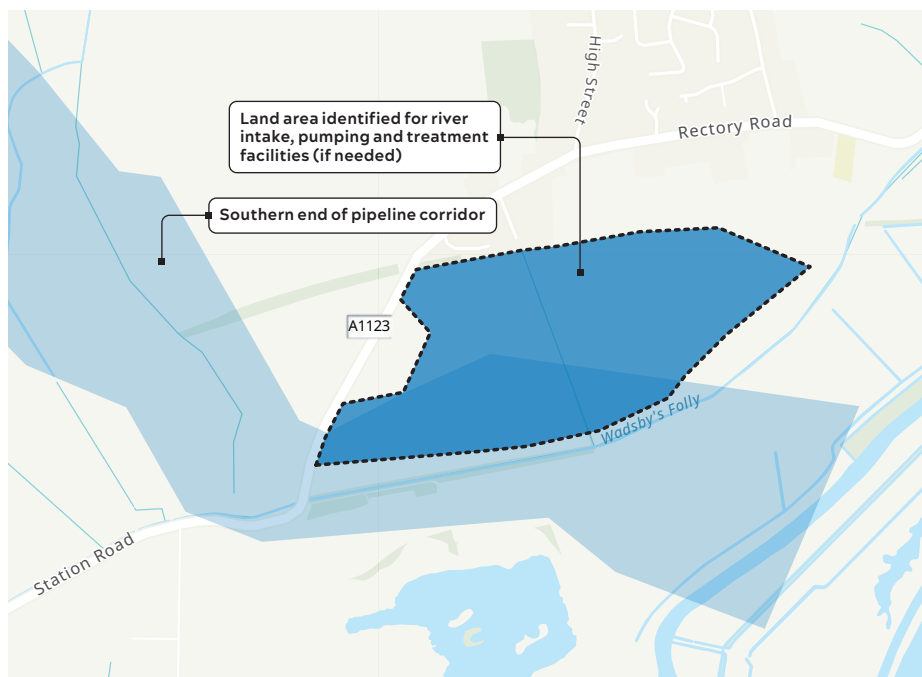
We'll need to use available water from the River Great Ouse, if our assessments tell us that we need to use this source instead of the Ouse Washes (River Delph). We've therefore identified preferred locations for the infrastructure we'd need to build if we need to use this source.

Drawing water from its source

Our preferred location for drawing available water from the River Great Ouse is near Earith, south of Bluntisham.

We'd need to build a river intake structure on the bank of the River Great Ouse, treatment equipment to remove any impurities from the water, if needed, and a pumping station to move the water.

Through our assessments, we've identified a preferred area of land for building this equipment. This area is between Wasby's Folly and Station Road, shown opposite.



Transferring the water

During our early assessments, we considered options for transferring the water either through a pipeline or by using existing watercourses.

We identified, through out early assessments, a new underground pipe as the preferred way to transfer the water, as this would minimise any impacts on habits and water quality.

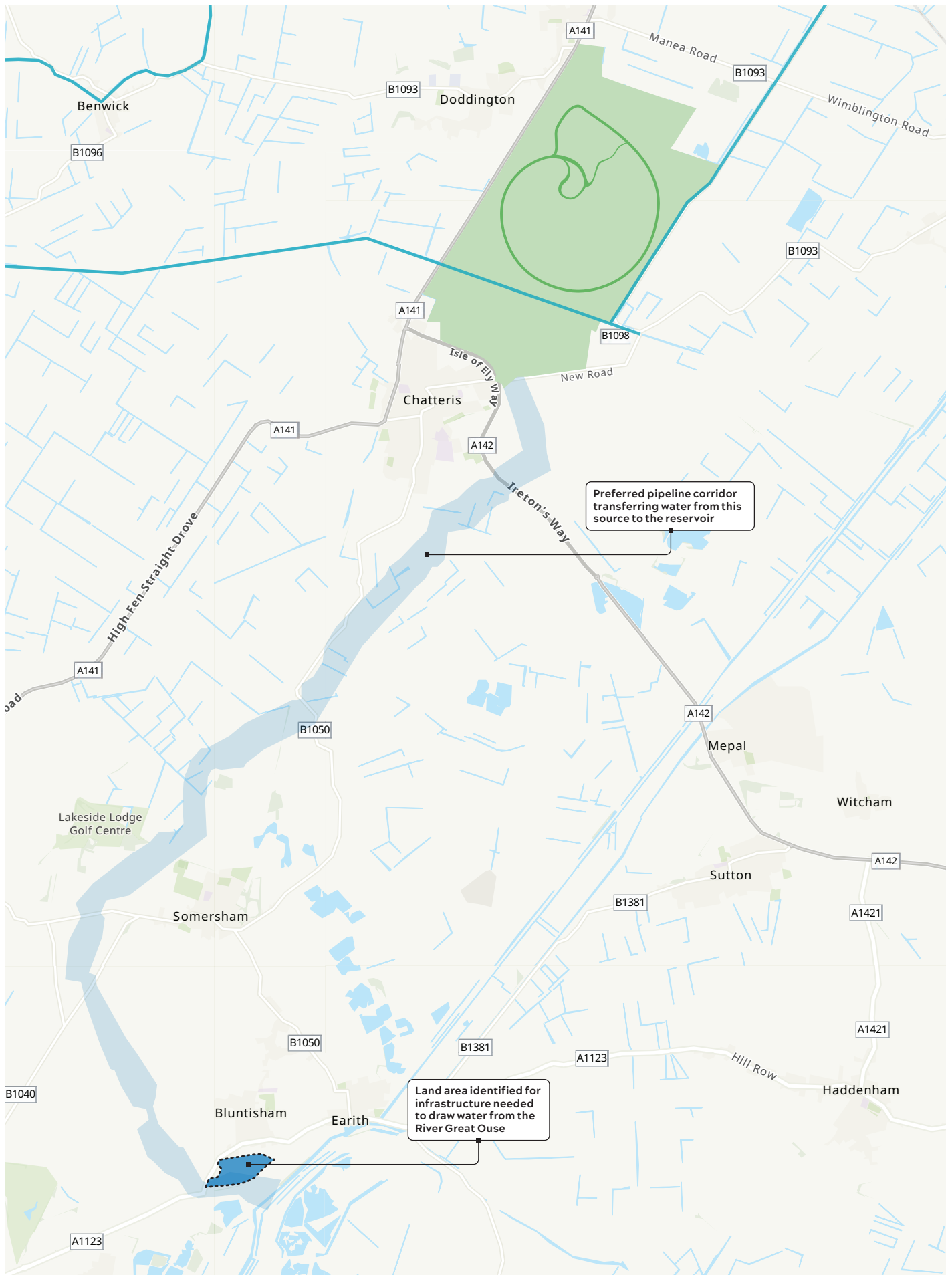
Our preferred pipeline corridor runs northwards to the west of Somersham, travelling alongside Chatteris Road. The corridor then runs to the east of Chatteris before reaching the reservoir.

This corridor is shorter than the other two options we assessed at this stage, with fewer crossings. It is also the same corridor as the one we've identified for a pipeline that would transfer treated water into Cambridge Water's supply at Madingley (see [page 34](#)).

The pipeline corridor we've identified at this stage is 500 metres wide. Our next stage of work will involve identifying the proposed pipeline route within the wider corridor. Your feedback will help us refine our proposals further.

Have your say

Your feedback will help refine our proposals further. You can provide your views on this using the ['water sources infrastructure'](#) section of our feedback form. Head to [page 38](#) to find out how you can have your say.

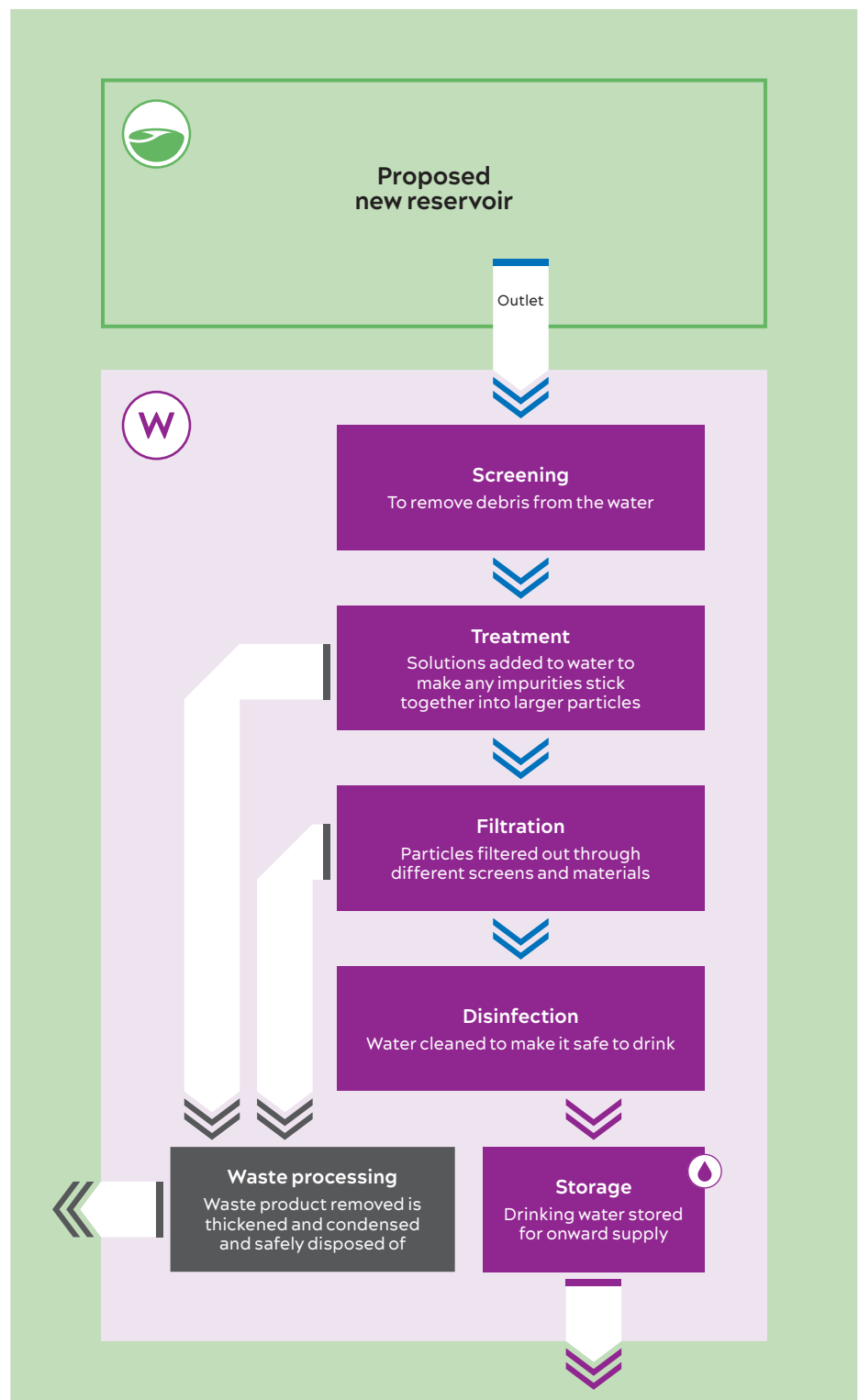


Treating and supplying water to customers

Water stored at the reservoir will need to be treated ready for public supply, before being transferred into Anglian Water and Cambridge Water supply networks.

Treating the water

A new water treatment works will make the water safe for people to drink. This facility includes screens to filter out debris from the water, equipment to remove impurities from the water by adding solutions that make these particles bigger, and then more equipment to filter these out through different screens and materials. The filtered water is then cleaned to make it safe to drink, before being transferred to homes and businesses.



Supplying treated water

Both companies' 2024 Water Resources Management Plans identify where the treated drinking water should be sent to, for supplying to

homes and businesses via our existing networks of pipes. The treated water will be transferred to each place via a new underground pipeline.

44.4 million litres of water

to be supplied to
Anglian Water
customers



every day

in Cambridgeshire
and Norfolk
via a connection into the
network at Bexwell

44.4 million litres of water

to be supplied to
Cambridge Water
customers

every day

via connections
into the network
at Bluntisham
and Madingley





What we need to build

We need to build a new water treatment works to treat the water stored at the reservoir, as well as new underground pipelines and other equipment to supply this treated water to homes and businesses.

Our proposals include the following pieces of water supply infrastructure:

Water treatment works

This will consist of a site containing multiple buildings to house all the treatment equipment and the network of pipes to carry water through the treatment process. The site will be secured, and will include space for safely storing materials and chemicals, access for staff to maintain the facility, and parking. More information about this can be found on the following pages.

Pumping station

A facility that contains pumps to lift or push water to another place. Any pumping equipment to help transfer water into supply will mostly be located at the water treatment works site itself.



Example of facilities at a typical water treatment works



Example image of typical pumping station

Pipelines

Underground pipes that transfer treated water to the places we've identified for supplying it into our existing networks. Generally, we'll need to dig trenches to install the pipe in most places, which will then be filled in and the area reinstated. Where the pipeline route needs to cross a major road, railway route, river or major utility infrastructure, we would look to use equipment to install the pipeline underneath them that doesn't involve digging trenches.



Example image of pipeline installation

Service reservoirs

These are small (approximately 200 metres by 200 metres), tank-like reservoirs for storing treated drinking water at a point close to the local supply network. They make sure that the water can flow into that network when it's needed. These reservoirs are fully enclosed to keep the water clean. They are typically partially buried concrete tanks with grassed earth embankments and planting to minimise visual impacts.



Example image showing inside of a typical service reservoir



More information about where we need to build this infrastructure is contained in the following pages.

Water treatment works

Through our assessments, we've identified a preferred area of land within which we could build a water treatment works. This area is north of Chatteris, adjacent to the Isle of Ely Way (A142).

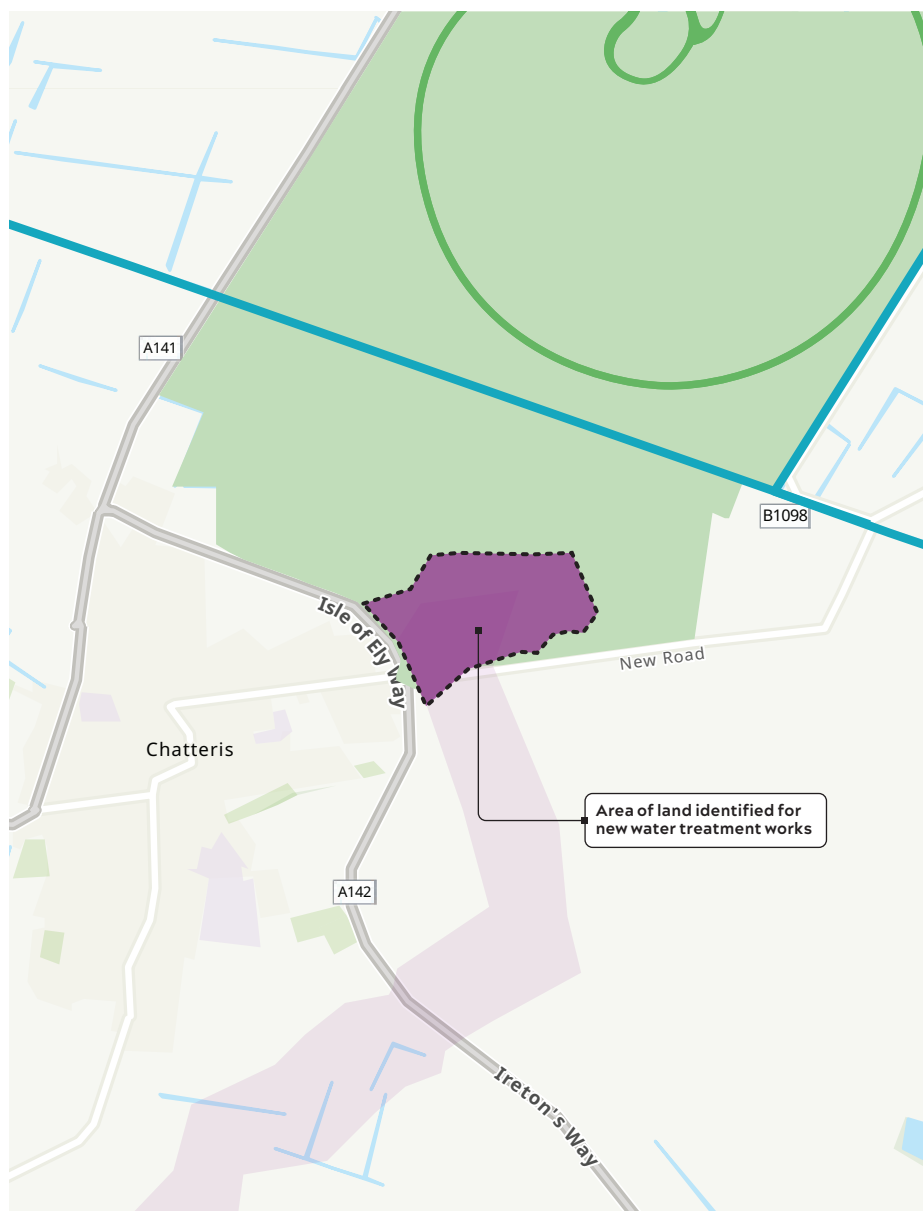
This area is shown below. It's around 45 hectares in size (less than half a square kilometre), although the water treatment works would be housed in an area smaller than this.

Your feedback and further assessments will help us identify a location within the area identified for where the water treatment works will be located.

Our emerging design includes an indicative size and location for the water treatment works within the preferred area, to help you understand the potential scale. You can see this in our **main site design brochure**.

When assessing possible locations for the treatment works, we aimed to identify an area suitable for building this type of facility, based on the ease of getting water from the reservoir to it. We also considered ongoing access requirements for operating the facility, and ways of minimising visual and noise impacts during construction and when in operation.

This location performed best against our assessment criteria, when considered in combination with the other associated water infrastructure. It is located away from nearby sites of historical importance, in an area which is at lower risk of flooding. The A141 also separates the facility from nearby residential areas.



Find out more

You can find out more about the alternative locations we considered and the assessment criteria we used in our **options appraisal report** available on our website: www.fensreservoir.co.uk/documents





Image showing an example of a building within a water treatment works site

Operating the treatment works

The water treatment works will comprise an operational area, which will be surrounded by security fencing and screened by landscaping and planting.

The facility would operate year-round for 24 hours a day, so noise control will be important. However, we expect any noise to be low level in relation to existing background noise from nearby traffic and other activity.

We will be carrying out further assessments to make sure any noise impacts are suitably mitigated.

There will also be vehicles travelling to and from the facility for deliveries, to collect and remove any waste product that's been filtered out of the water, and those owned by on-site staff. We don't know exactly how many vehicles this might be yet but our environmental assessments across

the whole project are continuing. We'll be sharing a report on these impacts and how we plan to mitigate them during a future phase of consultation.

The design will be a key consideration as we continue to refine our proposals for the reservoir site. The feedback you provide during this consultation will give us useful insight to help us make sure the treatment works design is sensitive to the local area.



Anglian Water supply at Bexwell

We'll transfer treated water from the reservoir to Anglian Water customers via an underground pipeline. This pipeline would be approximately 30 kilometres in length, travelling to a service reservoir near Bexwell, northeast of Downham Market.

Transferring treated water

Our preferred pipeline corridor runs in a northeasterly direction from the reservoir, between Christchurch and Welney. The corridor then crosses the A1122 just south of Nordelph, before continuing in a northeasterly direction towards Downham Market.

Through our later stage assessments, we found that this corridor was further away from a nearby scheduled monument than the other option we had taken forward for further consideration.

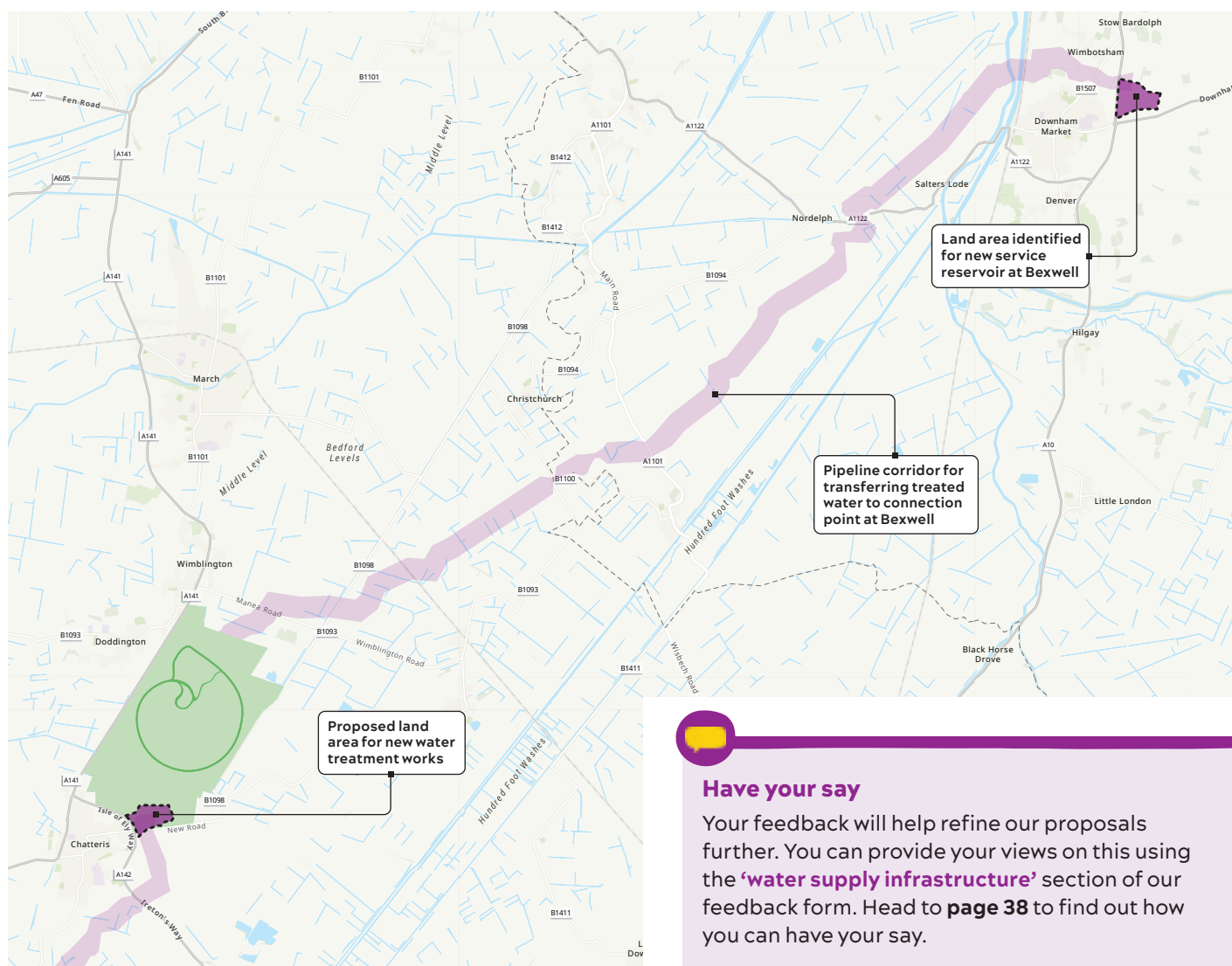
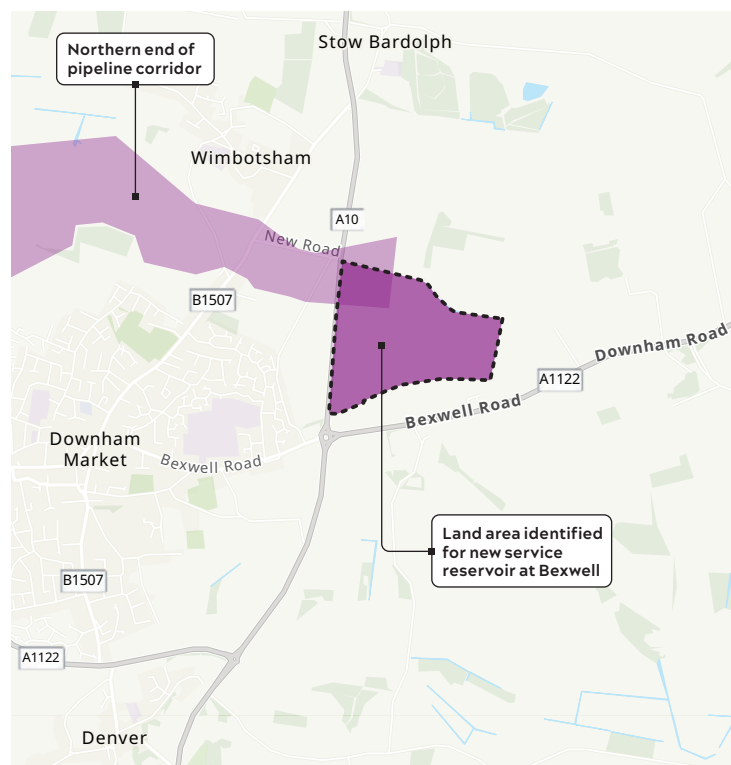
The pipeline corridor we've identified at this stage is 500 metres wide. Our next stage of work will involve identifying the proposed pipeline within the wider corridor. Your feedback will help us refine our proposals further.

Supplying water to customers

The pipeline would feed the treated water into a new service reservoir at the existing Anglian Water connection point near Bexwell. We've identified an area of land that we propose locating a new service reservoir in, which is adjacent to the A10, between Bexwell Business Park and New Road.

This location is further away from residential areas than other locations we assessed and more in keeping with the industrial buildings nearby. The area we've identified is larger than would be needed for the service reservoir. We'll refine our proposals further following more assessments and consideration of the feedback we receive.

We are aware that an existing planning consent is in place in the southern part of this area, and is acknowledged in the emerging local plan. However, there is enough space in the area of land not affected by this planning consent to accommodate the construction and operation of the new service reservoir.





Cambridge Water supply at Madingley

We'll transfer treated water to Cambridge Water customers via an underground pipeline. The pipeline will be approximately 45 kilometres long, running south to a connection point and new service reservoir at Madingley, northwest of Cambridge.

Transferring treated water

Our preferred pipeline corridor runs in a south-westerly direction from the reservoir, west of Somersham. From there, it runs south towards Elsworth and then in a south easterly direction to the existing Cambridge Water connection point at Madingley, north west of Cambridge.

The northern half of the route would share the same corridor as our preferred route for a pipeline to transfer raw water from the River Great Ouse to the reservoir, if further assessments show we need to use this source (see **pages 24–25** for details).

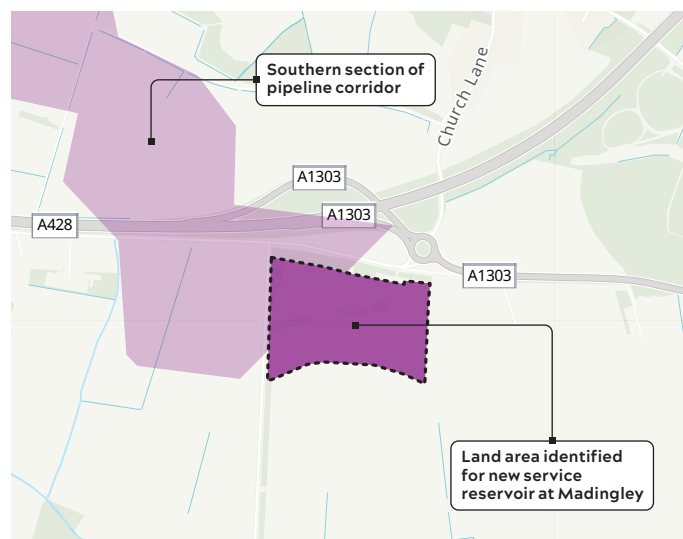
The pipeline corridor we've identified at this stage is 500 metres wide. Our next stage of work will involve identifying the proposed pipeline within the wider corridor. Your feedback will help us refine our proposals further.

Supplying water to customers

The pipeline will feed the treated water into a service reservoir at the connection point. We've identified a preferred location for the new service reservoir at Madingley, northwest of Cambridge. This is east of Coton, adjacent to Long Road.

This location is near to an existing service reservoir. This is our preferred place to connect to the existing Cambridge Water network because new infrastructure could be located next to existing infrastructure.

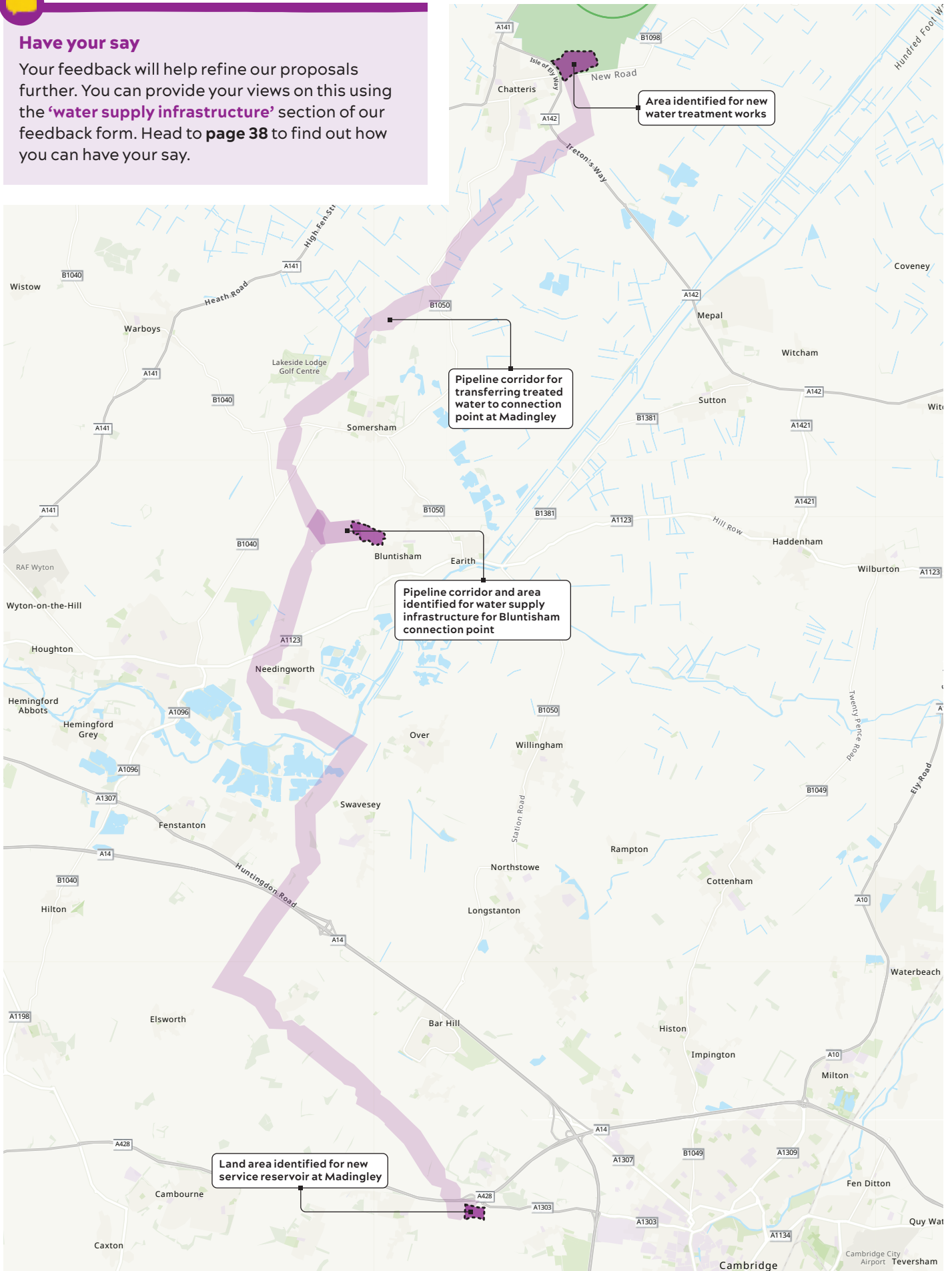
We are aware that this location is in an area of land designated as green belt. We're carrying out assessments to make sure our proposals can meet the strict legal tests that protect this land.





Have your say

Your feedback will help refine our proposals further. You can provide your views on this using the **'water supply infrastructure'** section of our feedback form. Head to **page 38** to find out how you can have your say.





Cambridge Water supply at Bluntisham

So we can connect to the other Cambridge Water connection point in Bluntisham, we're proposing a short pipeline that would spur off from the Madingley pipeline corridor, about halfway down.

Transferring treated water

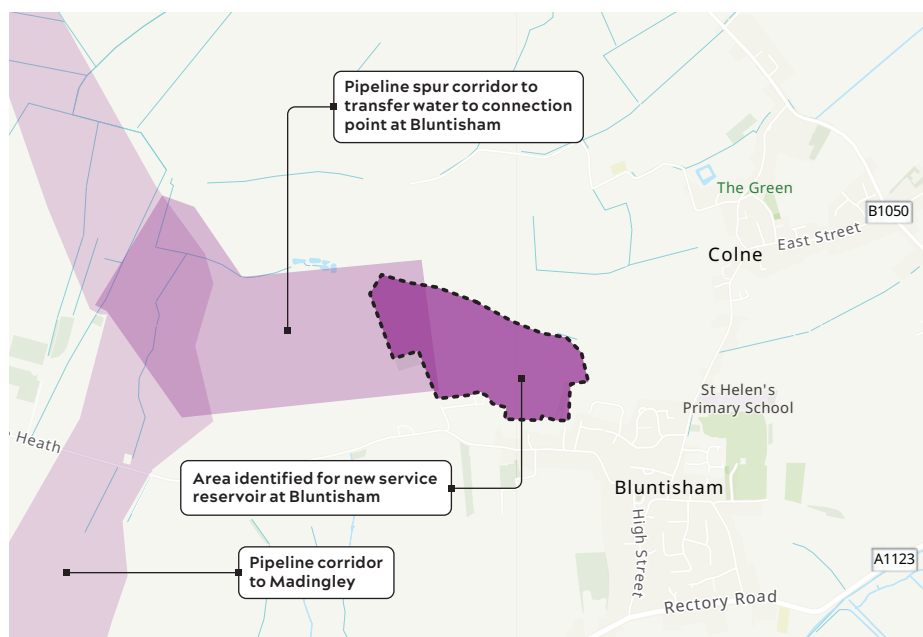
Our preferred pipeline corridor spurs off the main Madingley corridor south of Somersham, and travels along the northern side of The Heath towards Bluntisham.

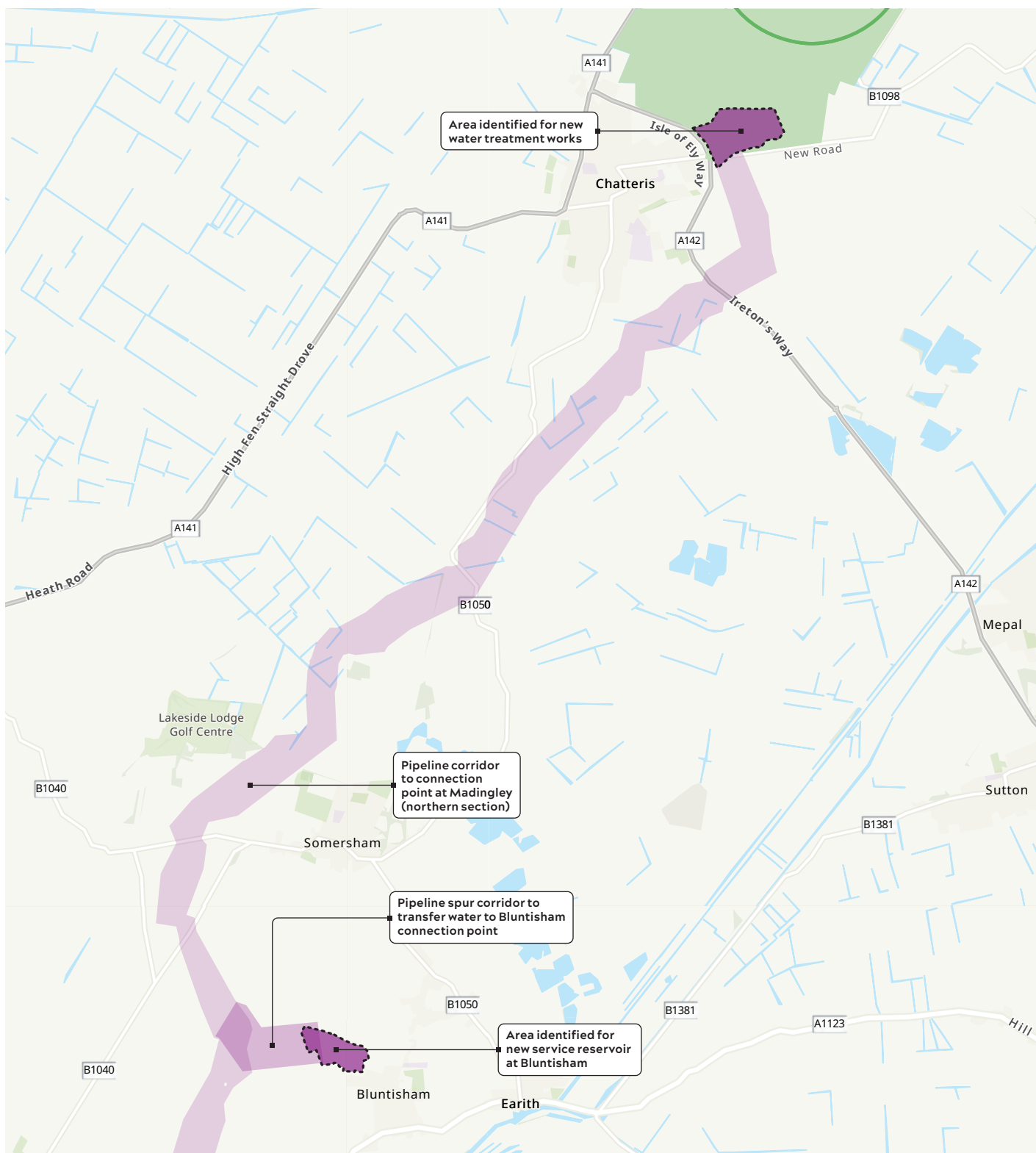
The pipeline corridor we've identified at this stage is 500 metres wide. Our next stage of work will involve identifying the proposed pipeline within the wider corridor. Your feedback will help us refine our proposals further.

Supplying water to customers

The pipeline will feed the treated water into a service reservoir at the connection point. We've identified an area of land to locate the Bluntisham service reservoir in, which is to the northwest of Bluntisham by Wood End.

The new service reservoir will need to supply water into the existing Cambridge Water supply infrastructure at Bluntisham. The proposed land area we've identified is closer to this existing infrastructure than any of the other options we considered and avoids impacts on a nearby wildlife site.





Find out more

Take part in our consultation and tell us what you think about the areas we've identified. You can provide your views on this using the **'water supply infrastructure'** section of our feedback form. Head to **page 38** to find out how you can have your say.



Having your say

Our proposals for the associated water infrastructure are at an early stage. Your knowledge is very valuable to us, and we welcome any feedback you have on the possible areas we've identified.



What we're consulting on

For this consultation we are asking for your feedback on the areas we've identified for:

- The **water sources infrastructure** needed to transfer water from sources to the reservoir.
- The **water supply infrastructure** needed to treat the water stored at the reservoir, and supply it to homes and businesses.

Where we are still considering more than one way of getting water to the reservoir for each source, we are keen to hear your views on the areas identified for all options. While technical discussions and assessments will help us determine the preferred options to proceed with, your insights could also help inform our proposals further.

There are some aspects that are not open to influence. That's because they cannot be shaped by feedback for technical reasons, such as safety and engineering requirements, or because they have been and continue to be consulted on through the statutory Water Resources Management Plan (WRMP) process.

This includes:

- The **sources identified** as having water available to fill the reservoir.
- The areas identified for connecting to our **existing supply networks**.



Help us deliver the best possible project

Find out about the consultation, and where to find information including about the planning application process we need to follow in our **guide to our proposals and phase two consultation brochure**: www.fensreservoir.co.uk/documents





How to get involved

This consultation is open from 30 May until 9 August 2024.

All feedback you share will be reviewed, recorded, and carefully considered as we develop our proposals.

We are committed to working with local people as the project develops and want to hear all views on our emerging proposals.

Submitting your comments

You can submit feedback to us in several different ways:

- Using the project website:
www.fensreservoir.co.uk
 - Sending written feedback to us at our freepost address:
Freepost Fens Reservoir
 - Sending an email to:
info@fensreservoir.co.uk
- Hard copies of our consultation materials and feedback forms will be available at our consultation events or upon request.



Please make sure you submit your feedback to us by 23:59 on Friday 9 August 2024



Get in touch

You can contact the project team by:



Email **info@fensreservoir.co.uk**



Freephone **0800 915 2492**



Write **Freepost Fens Reservoir**



Website **www.fensreservoir.co.uk**