



Candover Drought Order Scheme

Frequently Asked Questions

1. Why are you doing this work?

The Environment Agency is changing a number of our river abstraction licenses in order to protect the ecology of the Rivers Itchen and Test.

A legal agreement was signed between Southern Water and the Environment Agency limiting the amount of water we can take from the rivers in times of extreme drought.

This scheme addresses the short term supply issues encountered during drought conditions ahead of the delivery of Southern Water's long term strategic supply solutions.

The scheme enables us to maintain water supplies for our Customers across Hampshire and the Isle of Wight during extreme drought conditions while alleviating environmental impacts associated with low river flows.

2. Where will the source water come from?

In the event of a drought order, water (up to 27MI/day) will be abstracted from six Environment Agency boreholes at three sites in the vicinity of Preston Candover, within the Upper Itchen catchment, in north-east Hampshire.

These boreholes will be leased to Southern Water to support abstraction in the Lower Itchen at times of low flows.

3. Why was the first planning application issued during the Covid-19 pandemic?

The 2020 Planning Application submission date was agreed as a regulatory requirement within the legal agreement with the Environment Agency. This date was set before the start of the Covid-19 pandemic.

4. Have you considered all objections raised in response to the last planning application?

After the planning application was withdrawn in December 2020 we reviewed all the objections.

The latest option has sought to take into account as many of your concerns as possible.



The proposed consultation period, Parish Council meetings, and Drop-in Sessions are designed to ensure that we can continue to address any residual concerns you may have.

5. When do you plan to submit the next planning application?

The planning application (with the Environmental Statement) will be submitted in due course to Winchester City Council, South Downs National Park Authority and Basingstoke and Deane Borough Council.

This follows extensive discussions with major stakeholders involved in the scheme (Environment Agency, Natural England, Hampshire and Isle of Wight Wildlife Trust, Hampshire Highways) among others. We anticipate this to be in early 2022.

6. Why don't you simply re-use the 1970s Environment Agency Scheme which is in place, and which delivered water from boreholes near Axford through Candover valley?

The EA Drought Augmentation Pipeline discharges water directly into the Candover Stream, with potential impact on the population of White Clawed Crayfish. These are a protected species under the Wildlife and Countryside Act 1981 and listed as endangered on the global IUCN red list of threatened species.

They may be harmed if the scheme is now operated under drought conditions. This risk of harm means that there is no guarantee that the scheme could be operated in a Drought.

7. Why can't you use the water meadows on the Grange Estate as a 'buffer' to protect the White Clawed Crayfish?

Water temperature plays a very important role in both crayfish ecology and the timings of their behaviour. As such, the proposed discharge arrangements to the River Itchen at Itchen Abbas are designed to protect the white clawed crayfish population known to inhabit the Candover Stream.

Independent research has concluded that this population could be adversely affected if the entire flow required to support abstraction from the River Itchen was discharged to the Candover Stream during certain low flow conditions.

There is also a risk that if the entire flow were discharged down the Candover Stream at the existing EA outfall location, there could be a potential direct loss of crayfish from areas of suitable habitat through increased rates of drift, especially if the crayfish were under stress at the time and unable to withstand the increased flows.

The Candover Drought Order Scheme is designed to allow the majority of water to 'bypass' this white clawed crayfish population, thereby significantly reducing the risk of any impact on them. Discharge at the existing outfall location on the Candover Stream is still possible if required by the Environment Agency or Natural England, in order to support the Stream ecology during periods of drought.

Before, during and after the operational period, additional monitoring will be undertaken as part of the agreed Section 20 Monitoring and Mitigation Package and a package of compensation measures have also been agreed to compensate for any potential impact upon the crayfish population.

8. What impact does the discharge of 27ml/per day have on the fish farm and river? How is the discharge controlled at the fish farm? How is the impact mitigated and who approves the discharge into the river?

Test Valley Trout Farm have been consulted with regard to the discharge location. The addition of the flow during drought conditions is looked on favourably as it enables them to maintain river flows into the fish farm. The slightly lower water temperature is considered beneficial for fish growth.

Independent consultants (Ricardos) have undertaken chemical and temperature analysis of the borehole water. No adverse impacts due to these parameters have been identified. In addition, no changes to the effluent consent values as stated in the Fish Farms EA discharge consent licence as a result of the addition of the borehole water have been identified

The discharge to the River Itchen from the Fish Farm is controlled by adjustable weir at the downstream end of the fish farm. This is used to maintain levels in the fish farm. Due to the mass balance nature of the solution this will have no impact on the discharge rate to the river

The analysis of the borehole water has concluded no impact to the receiving waters. The discharge to the river will be approved by the EA.

9. Why have you decided to install the pipe below ground and what are the main benefits for communities?

A significant number of the objections to the previous planning application were directed at the above ground installation of the pipeline. As a result we are currently looking at burying the pipeline for the vast majority of the route

Installing the pipe underground means that the vast majority of the associated construction impact is experienced only once, regardless of how many times the scheme is implemented.

The revisions to the scheme will benefit the community by reducing the visual impact as most of the pipe will be installed below ground. It also removes the requirement for bulk storage of long sections of above ground pipeline. In addition,

burying the pipeline reduces disturbance to users of Public Rights of Way during drought implementation.

10. Are there any above ground sections?

It is intended to have three proposed above ground sections. These will be;

- a pipe crossing of the Candover Stream leading into Totford WSW,*
- laid across the Watercress Railway Line cutting adjacent to Ox Drove, and*
- a pipe bridge at the Test Valley Trout Farm over the River Itchen to deliver the flows to Fish Farm river intake structure*

These will be temporary and will only be installed during drought order implementation.

11. How will impacts on the environment be minimised during construction works, for example, to land, trees, wildlife and birds?

Ecological and arboricultural surveys have been carried out to determine the route alignment and to identify mitigation measures. The advice of specialists has been sought in relation to maximum widths of temporary hedgerow removals allowed and distances for tree clearances where practicable.

A tree survey, arboricultural impact assessment, arboricultural method statement and tree protection plan will be prepared for construction works within tree root protection areas.

Existing or new pipe bridges will be utilised for the installation of the temporary above ground sections of the pipe over the Candover Stream and River Itchen. This will reduce the requirement for construction works near the watercourse and will only be in place for the duration of the Drought Order.

During construction, track matting or alternative protection will be used within the compounds and parts of the working area along the pipeline as temporary surfacing which will reduce impacts on underlying soil structure and agricultural land.

The width of excavation for the pipeline trench has been minimised as much as possible to reduce the footprint of the works.

Temporary working areas will be reinstated upon completion of the construction phase

12. When will the works take place and how long will they take to complete?

We hope to start construction as soon as possible after the planning application is approved in 2022

Construction duration will be between 6 and 12 months. This is dependent on weather conditions, site and environmental constraints encountered, and agreements for working in highways.

13. Which delivery partner is Southern Water using to carry out the work? Who will be the point of contact for and issues or problems during the works?

A delivery partner has not yet been appointed. We will share this information with the relevant customer liaison officers when the delivery partner is appointed.

14. Where will you store the pipe-work during construction? Where will you store other materials?

Long term pipe storage will no longer be needed as the pipe will be buried. There will be the need for temporary construction compounds and we are in discussions with land owners to reduce visual impact

15. Where will you build the Water Booster pumping station (WBS)? Have you taken into account the potential for visual and noise impact?

The temporary WBS is proposed to be installed at Southern Water's Totford Water Supply Works. The location of the WBS would be in keeping with the nature of the existing operational infrastructure at the WSW. The WSW is screened on all sides by hedgerow and trees and as such direct views into the WSW are obscured. The WBS will be temporarily installed at the WSW in the event of a drought and for up to 6 months at a time.

To ensure we have an accurate understanding of noise impacts associated with the WBS, noise monitoring will be carried out in proximity to the WSW in order to have an understanding of baseline noise levels at the WSW and to determine mitigation measures as required. These could include but are not limited to the following:

- Well-maintained equipment used in the mode of operation that minimises noise, use of suppressors, silencers and other means of noise reduction on air operated equipment and exhausts;*
- Materials handled in a manner that minimises noise;*
- Vehicles shall not wait or queue on the public highway with engines running;*
- Site operatives will be briefed to refrain from shouting on site; and*
- Location and orientation of items such as generators, compressors and pumps liable to create noise and/or vibration whilst in operation away from sensitive receptors as far as reasonably practicable.*

16. How will you maintain access for road users, horse riders, cyclists and walkers?

Access will be maintained as far as practicable for all parties. In the interest of safety, it may be necessary to advertise temporary diversion routes if access is impeded. Regular updates will be communicated to parish councils and local authorities, customers, businesses and residents.

17. How will you maintain access to footpaths for walkers on the Watercress Way, long distance walking routes and footpaths?

Access will be maintained as far as practicable on the Watercress Way and other walkways. In the interest of safety, it may be necessary to advertise temporary diversion routes if access is impeded. Regular updates will be communicated to parish councils and local authorities, customers, businesses and residents

18. What is your working time on site during construction?

Construction working hours will be from 07:30 - 18:00 hours Monday to Friday and 7.30am and 1.30pm on Saturday and will be in line with the planning conditions

If the need for working beyond these hours arises, the local planning authority and local residents will be notified in advance.

19. What levels of noise will there be during construction and following completion?

The scheme will result in localised and temporary noise and vibration associated with construction activities. Through appropriate mitigation which will be set out in a Construction Environmental Management Plan it is anticipated that this impact will be reduced to an acceptable level.

20. How are you going to deal with the dust?

Our construction methods will minimise dust and dirt on the road during the construction phase. All activities are assessed and reviewed on a regular basis with regards to potential impacts.

Dust suppression methods will be implemented if weather conditions are such that dust becomes likely. Any site access roads will be cleaned and vehicles washed when required.

Any stockpiles of material are also managed in line with best practice dust control.

21. How will you manage traffic?

A Traffic Management Plan will be submitted to the local planning authorities, as part of the planning application.

Potential temporary road closures for B3046 north of Woolpack Inn, Totford Hill, and Northington Road. Potential 2 way traffic lights B3047 and where needed.

22. Will there be any problems with odours?

We understand that smells can be a concern for customers and as the scheme involves the transportation of raw water we do not anticipate any problems with odours.

23. Will access be maintained to private properties and businesses at all times?

Yes, although some customers and residents may experience some inconvenience when undertaking access or egress, which will be kept to a minimum, subject to health and safety requirements.

24. How is leakage managed within Southern Water? Could leakage rates be improved so this scheme would not be needed?

The Candover Drought Order scheme is a short term solution designed for use in extreme drought conditions for a limited design horizon. Southern Water's continued long term leakage reduction targets will progress in tandem and are expected to reduce the risk that the Drought Order scheme will be required. However, in the short term the leakage reduction benefits are not expected to meet the supply shortfall in the Hampshire and IOW supply areas.



