Draft Drought Plan 2018
Statement of Response

June 18, 2018
Version 1

Southern Water

Contents

Executive Summary

The draft Drought Plan, published in March 2018, sets out in detail the actions the company would take if a drought were to occur over the next five years.

The Drought Plan is complementary to the Water Resources Management Plan (WRMP), which is currently also under review. The WRMP is a strategic plan which describes how Southern Water aims to manage its supplies in future to meet forecast demands over the next 50 years. Drought Plans complement the WRMP, setting out the range of short-term actions necessary to monitor and manage the impact of drought on their customers and the environment.

The Drought Plan provides a framework for the company to make the necessary decisions for the management of water resources and demands during drought conditions. Drought Plans are required to ensure that the security of public water supplies is not threatened in periods of water shortage caused by exceptionally low rainfall. Drought Plans are required to set out how a water company will continue to meet its duties to supply adequate quantities of wholesome water during drought periods with as little recourse as possible to Drought Permits or Drought Orders.

This document comprises the Statement of Response to the representations received on the draft Drought Plan, during the 8 week consultation period from 5 March 2018 to 30 April 2018.

This Statement of Response is based on the results from the questionnaire responses on the draft Drought Plan and the more detailed technical responses from consultees. It is important to highlight that the company accepts the main recommendations of a number of representations, including those of the Environment Agency and Natural England.

This Statement of Response document addresses the representations received during the consultation process on the draft Drought Plan and identifies the company's consideration of the issues raised and identifies any change made to the Drought Plan as a result. The company has provided what it considers to be an appropriate, and sufficient, level of information in this Statement of Response to enable the nature and detail of the change to be identified and understood.

The Statement of Response also identifies the significant updates that have been made to the Drought Plan in relation to the proposals for the Western area (Hampshire and the Isle of Wight) resulting from an Inquiry into abstraction licences for the Test, Itchen and Candover boreholes that took place in March 2018.

The full detail of all the changes made will be incorporated in the final Drought Plan. This will only be finalised and published following Defra's consideration of this Statement of Response document, following any Hearing or Inquiry that Defra might consider needs to be held into the Drought Plan, and following any Direction(s) that Defra may make on changes required to the Drought Plan.

However, to illustrate and inform Defra on the intended scope and extent of the changes to the Draft Plan, a Revised Draft Drought Plan is being published alongside this Statement of Response. The Revised Draft Drought Plan does not have statutory status, and will be replaced by the final Drought Plan.

1. Introduction

We published our draft Drought Plan for consultation on 5 March 2018. The draft Drought Plan covers the five year period from 2018 to 2023. It sets out the activities we will implement to manage the impacts of drought, based on current circumstances and existing infrastructure.

The duty to prepare and maintain a Drought Plan is set out in Section 39B of the Water Industry Act 1991 as inserted by the Water Industry Act 2003.

A Drought Plan is required to address the following matters:

- What measures the water undertaker might need to take to refrain demand for water within its area;
- What measures the water undertaker might need to take to obtain extra water from other sources;
- How the water undertaker will monitor the effects of the drought and of measures taken under the drought plan.

In accordance with Defra and Environment Agency guidance, the draft Drought Plan has been the subject of a public consultation. The consultation period ran for 8 weeks from 5 March 2018 to 30 April 2018. This document represents our Statement of Response to representations received during the consultation and has been prepared in accordance with the Drought Plan (England) Direction 2016, the Water Company Drought Plan guideline[1] and supplementary technical information[2].

This Statement of Response sets out what changes we have made to our draft Drought Plan as a result of the consultation. It demonstrates:

- We have considered the comments we have received;
- The changes we have made to the draft Drought Plan and our reasons for making them;
- Where we have not made changes as a result of comments and our reasons for not doing so.

As well as responding to consultation representations, we are also proposing to make a number of other changes to our draft Drought Plan, resulting from changed circumstances and new information since its publication on 5 March 2018. A number of these changes result from the Inquiry into abstraction licenses for the Test, Itchen and Candover boreholes that took place in March 2018. The need for these changes are also set out in this Statement of Response document.

So that the changes we have made can be fully understood, we are publishing a Revised Draft Drought Plan along with this Statement of Response. This Revised Draft Drought Plan has no statutory status, and will be replaced by the final Drought Plan once we receive permission to publish it from Defra.

[1] How to write and publish a drought plan https://www.gov.uk/government/collections/how-to-write-and-publish-a-drought-plan
[2] Supplementary information provided to water companies on Defra's Huddle website

2. The consultation process and activities

Pre-draft consultation

Under Section 39B(7) of the Water Industry Act 1991, prior to preparing its Drought Plan, each water company must consult the Environment Agency, the Authority [i.e. Ofwat], the Secretary of State [i.e. Defra], and any licensed water supplier which supplies water to premises in the undertakers area via the undertakers supply system.

We took the opportunity to widen the scope of this consultation prior to the preparation of the draft plan (the 'pre-consultation' phase), to include correspondence with the following stakeholders:

- Statutory consultees: Environment Agency, Defra, Ofwat, and Natural England;
- Other stakeholders: Thames Water, Wessex Water, South East Water, Affinity Water South East, Sutton & East Surrey Water Bournemouth Water, Portsmouth Water and the Consumer Council for Water.

Responses to our pre-consultation letter were received from:

- Environment Agency
- Defra.

Consultation process

Under the Water Industry Act Section 39B(5), the approach to publication and representations for the Drought Plan must follow those prescribed for water resources management plans under Section 37B.

The draft Drought Plan was issued to the Secretary of State on 30 November 2017. We were given permission to publish our draft Drought Plan on 6 February 2018 by Defra, and the Plan was published on 5 March 2018 both in paper form and on our website.

To ensure our plan was accessible to a wide range of stakeholders and customers, our draft Drought Plan was presented on three levels and comprised the following:

- **Level 1: Non-technical summary for consultation** – To support the full set of technical documents, we produced a non-technical summary document to facilitate engagement with stakeholders, staff and informed customers. This is a high-level document, with a focus on restriction and activities that would affect customers.
- **Level 2: Technical summary** – This provided a more detailed technical summary of the Drought Plan, with links to Level 3 technical annexes for further information and summaries of the Strategic Environmental Assessment (SEA), Habitat Regulations Assessment (HRA) and Water Framework Directive (WFD) assessments of the Drought Plan.
- **Level 3**: **Technical annexes to the Drought Plan** – 15 detailed technical reports covering specific sections of the Drought Plan.

To fulfil our statutory duties and create an opportunity for customers, stakeholders and regulators to share feedback on our draft Drought Plan, we held an eight-week publication consultation from 5 March 2018 to 30 April 2018, alongside the first two-thirds of our consultation on the draft Water Resources Management Plan (the WRMP consultation ran for 12 weeks, whereas the Drought Plan was for 8 weeks).

In accordance with requirements prescribed in Paragraph 5 of The Drought Plan Direction 2016, we are required to publish a Statement of Response to representations within 15 weeks after the date on which we published our draft Drought Plan. In accordance with this requirement, this Statement of Response was published on 18 June 2018.

In accordance with the Drought Plan guideline, this statement details:

- The consideration the company has given to representations received;
- The changes made to the draft Drought Plan as a result of consideration of those representations, and the reasons for so doing; and
- Where no changes are made to the draft Drought Plan as a result of consideration of representations, the reason for this.

Consultation activities

We undertook a range of consultation activities to engage with everyone who may be impacted by the actions contained in the draft Drought Plan. It included all domestic and commercial customers of Southern Water, retail partners, community representatives, environmental groups and wider stakeholders and regulators.

Engagement material

The non-technical summary included information on water sources, types of drought, frequency of drought actions to secure water, restrictions and exemptions – supported with graphics and imagery. It also provided information on communication during a drought, the environment and details on the different way people could take part in the consultation.

The document was printed, and mailed to more than 800 stakeholders in the Southern Water supply area, as well as being available online at southernwater.co.uk/haveyoursay (either to download and in an e-reader tool to facilitate online reading).

The summary was supported by a questionnaire leaflet, with 14 questions about the Drought Plan, and this questionnaire was also made available online, with the completed surveys being emailed directly to Defra.

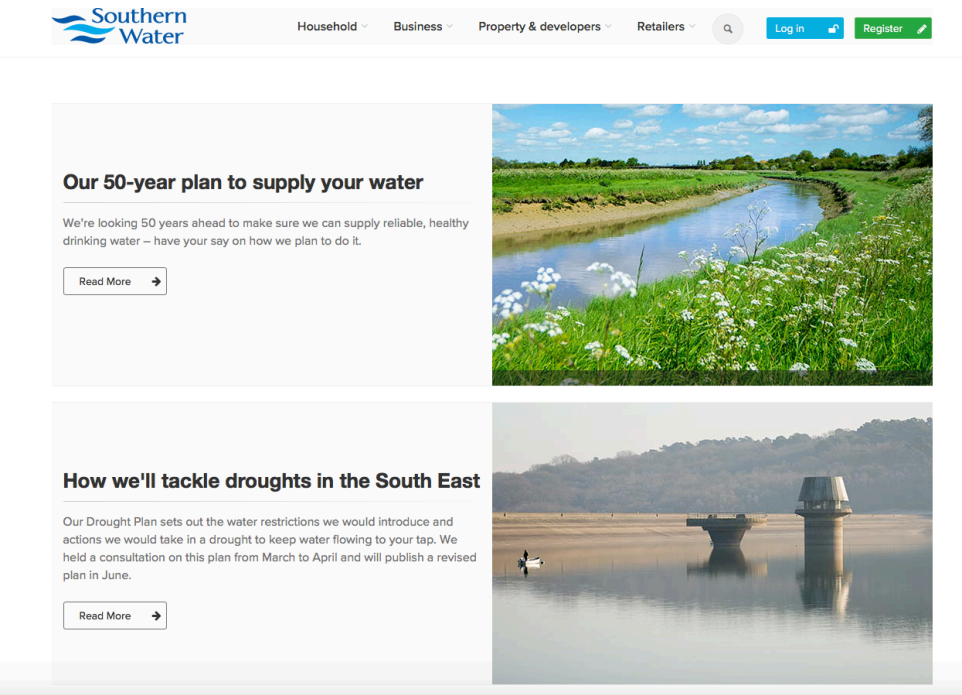
Website

The Southern Water website formed the central hub for the consultation, in a dedicated ‘Have Your Say’ area developed for engagement with customers at southernwater.co.uk/haveyoursay.

The Drought Plan section included information on the consultation, the contents of the draft Drought Plan, an interactive tool showing the phases of droughts and actions, the full list of

documents to download and the online questionnaire. A copy of the online questionnaire is included at Appendix 1.

In total there were 1,153 views of these five pages during the consultation.



Stakeholder engagement

We engaged with stakeholders with a potential interest in the Drought Plan consultation by posting a hard copy of the summary document, questionnaire and a stamped addressed envelope, addressed to Defra, and through an email announcement with a link to the Southern Water online consultation.

In total, we mailed the documents to 808 individuals or groups and emailed 1,800 stakeholders as detailed in Appendix 2. This was combined with similar information on the draft Water Resources Management Plan, as the consultations were running concurrently.

For the emails, the open and click rates were:

Kent	42% opened	2.4% CTR (click through rate)
Sussex	35% opened	5.5% CTR
Hants & IoW	33% opened	4.1% CTR.

These engagement rates are higher than average for Southern Water emails to stakeholders.

The targeted groups included:

- Regulators
- Historic England
- MPs
- Government committees
- Local authorities
- Rivers trusts, fisheries

- Environmental groups, wildlife trusts
- Customer/consumer groups
- Sports groups
- Horticultural bodies
- Farmers
- Trade organisations
- Developers
- Canal, port and waterways organisations, coastal organisations (navigation authorities)
- Water companies
- Car wash associations.

The draft Drought Plan was also discussed during the regular meetings of stakeholder panels, which Southern Water has formed to help inform its operational and strategic work on an on-going basis. These were held in Sussex, Kent and Hampshire during the consultation.

One-to-one briefings were offered and these were taken up by the West Sussex Growers Association, the Swimming Pool and Allied Trades Association, the Isle of Wight Council, Natural England, Newport Rivers Group, Arun District Council, Lewes District Council, Chichester District Council, West Sussex County Council, South Downs National Park and New Forest National Park.

Customer research

We carried out a dedicated online survey with YouGov and customer focus groups in Sussex, Kent and Hampshire to ensure we heard the views of a wide range of representative customers during the consultation.

Research was carried out with nearly 3,500 customers of Southern Water in an online survey carried out by YouGov. This was based on using a 'slider' tool to gauge customers support for activities or water resource options, while providing information about bill impact and social and environmental implications. This was a combined exercise for the Drought Plan and Water Resources Management Plan consultation.

We held three customer focus groups (Kent, Sussex and Hampshire) with eight bill-paying customers invited to each group, from a range of backgrounds and ages. The summary draft Drought Plan document was used as the discussion material for each group, alongside the YouGov survey.

The outcomes of the customer research are included in Section 8.

Customer engagement

A range of customer engagement activities were undertaken, including:

- **Social Media** - Our media team posted information about the consultation on the company's Twitter and Facebook accounts in March and April. The resulting engagement was:
  - Engagement on Twitter: likes, retweets, click-throughs (128)
  - Engagement on Facebook: reach (2,500), likes, shares and comments (34)

- **Advertising** - During March and April, we published an advert online with several media organisations, to promote the Drought Plan and Water Resources Management Plan consultations with our customers. In total, the online adverts resulted in nearly three million

impressions and more than 8,300 clicks to the Have Your Say website during the period of the Drought Plan consultation. It appeared on media and consumer websites run by Newsquest, Trinity Mirror, Global Advertising, Johnston Publishing and the Kent Messenger Group. The advert was also published in the Isle of Wight County Press for six weeks, which has a circulation of 23,000.

- **Community -** As part of its overall engagement with communities during the consultation periods, we attended 17 customer events to gather feedback and raise awareness, reaching a footfall of more than 71,000, with about 10% engagement.

- **Staff engagement** - Information on the draft Drought Plan and the consultation was shared with Southern Water employees through an announcement on the intranet, a feature in the company magazine, Southern Water News and a blog by the Chief Executive Officer. Questions about drought were included in a Survey Monkey questionnaire shared with staff to engage them on all the company's future plans.

Regulators

Engagement with regulators was prioritised during the pre-consultation phase to ensure the draft Drought Plan was in line with guidance and government policies prior to the deadline for submission to Defra in December 2017. During the consultation a meeting was held with Natural England to brief them on the draft Drought Plan as well as draft Water Resources Management Plan and Business Plan. This supported Natural England in providing a better informed representation on the draft Drought Plan.

3. Changes since the publication of the draft Drought Plan

River Itchen, River Test and Candover abstraction licence Public Inquiry

The Public Inquiry was instigated following a challenge by Southern Water to the Environment Agency's proposed variations to a series of its abstraction licences. The need for licence changes for more sustainable abstraction was never a principle that was opposed by Southern Water.

Southern Water's concern was that, particularly during times of drought, the conditions were such that they had the potential to impede the ability for the company to meet its statutory duties to supply public water.

The Inquiry hearing opened on March 13, 2018. It focused on a proposed operating agreement between Southern Water and the Environment Agency (EA) under Section 20 of the Water Resources Act 1991 ("The s20 Agreement"). The s20 Agreement had been drafted following submissions of evidence to the Inquiry in the preceding weeks and as a result of both parties reaching a better understanding the critical issues presented by the other.

During the course of the Inquiry the s20 Agreement was finalised and an outline package of monitoring, mitigation and IROPI compensation measures prepared. (An explanation of IROPI - imperative reasons of overriding public interest under the Habitats Directive is provided in Annex 11).

The s20 Agreement was signed and presented to the Inquiry at its closure on 29 March 2018. The determination of the Secretary of State on the Inquiry is awaited (June 2018).

The s20 Agreement

The s20 Agreement enables a new, positive way forward for both parties, for public water supplies and for the habitats and ecology of the River Itchen and River Test. Southern Water accepts the abstraction licences changes. The EA commits to procedural reassurances around how Southern Water can utilise the Drought Permit and Drought Order process to maintain public water supplies pending the implementation of new reliable water supplies to replace the water resources lost by the licence changes.

Southern Water also commits to a significant package of environmental monitoring and mitigation measures associated with the potential drought permits and drought orders that may be needed over the next ten years or so.

The main elements of the s20 Agreement are as follows.

Southern Water has agreed to:

- Accept all of the EA’s proposed licence changes, to be implemented immediately (upon the Secretary of State's determination).
- Use all best endeavours to implement the long term scheme for alternative water resources set out in its final Water Resources Management Plan 2019

- Rely on the use of Drought Permits and Drought Orders on the River Test and River Itchen during the interim period while long-term resources are developed, by following the procedure as set out in the s20 Agreement. For the avoidance of any doubt, the agreed procedure does NOT vary the statutory requirements for such applications but agrees the timing of drought permit applications to the Environment Agency and a set of principles to ensure that this process can be used and relied on more effectively.
- Ensure that the River Test Surface Water Drought Permit is reviewed every 6 months, to ensure that it is 'application ready'.
- Accept that on the basis of current ecological evidence a likely significant effect and adverse effect on the integrity of the Itchen SAC cannot be ruled out from the operation of the Candover Drought Order
- Commit a substantial package of environmental monitoring, mitigation and potential IROPI compensation measures in respect of the Drought Permits and Drought Orders.

The EA has agreed to:

- A timetable for the acceptance and determination of the River Test Drought Permit (35 days or less in the case of extreme urgency)
- Accept that at the time of the application:
  (a) Water use restrictions do not have to be in place (and only have to be in place at time of *implementing* the permit);
  (b) The case for 'exceptional shortage of rain' can include a forecast component
  (c) The refusal of access by landowners for monitoring and/or mitigation is not a detriment to being 'application ready'
- Accept that Southern Water's proposed Candover scheme could be implemented under a Drought Order during the interim period.
- Accept a 'force majeure' clause within the abstraction licences, so that Southern Water will be allowed to abstract above the new licence limits, should certain events or incidents (as defined in the s20 Agreement) develop outside of Southern Water's control, and it is necessary to maintain public water supplies.
- Use Article 4(6) of the Water Framework Directive in principle to enable the grant of a Test Surface Water Drought Permit authorising abstraction; and to accept that low flows on the River Test of between 355 Ml/d and 265 Ml/d are capable of constituting exceptional circumstances for the purposes of Article 4(6) WFD.
- Accept that subject to a material change of circumstances and until long-term solutions are implemented, Southern Water has a good case that it has no alternative solutions to its Candover and Itchen Drought Order schemes in order to maintain public water supply and that the schemes satisfies the test in Article 6(4) Habitats Directive, for an imperative reason of overriding public interest (IROPI).

In addition the s20 Agreement establishes a number of principles that are agreed between the Environment Agency and Southern Water. The most significant being:

- The Test, Candover and Itchen Interim Abstraction Scheme – This is the sequencing in which Southern Water plans to implement drought actions. It is subject to the principle that Southern Water will take into account ecological conditions (based on up to date monitoring data) in deciding the order of Drought Orders. This Scheme has been incorporated throughout this Drought Plan.
- Southern Water to develop proposals to investigate diurnal variation of abstraction from the River Test to identify any potential impacts on fish migration (to conclude mid-2021, the results of which will aim to be utilised when preparing future drought and water resource management). Southern Water confirm that it has already requested that this investigation be listed on the National Environmental Programme.

Southern Water's Monitoring commitments

The package of measures is documented in Annex 5.

This includes supplementing existing monitoring by other parties with a further network of:

- Hydrological monitoring (flows, velocities and groundwater water levels).
- Water quality modelling (including temperature).
- River, riparian and wetland ecological modelling, including fish monitoring.

The Environment Agency has also agreed to perform some of the monitoring commitments. All of the commitments identified in the respective monitoring packages will be funded by Southern Water.

Southern Water's Mitigation commitments

The package of measures is documented in Annex 5.

Up front mitigation commitments will be implemented by 2023-24. This is irrespective of whether a need for the Drought Permits or Drought Orders arises by then. They will improve ecological resilience on a permanent basis on both the River Test and River Itchen, including the Candover.

The schemes are at finalisation stage with the Environment Agency and have already been approved by Natural England. They will be included in the final version of the new Southern Water Drought Plan and are intended to be implemented in partnership with the EA and other delivery partners such as the Hampshire and Isle of Wight Wildlife Trust. The majority of implementation will be led by the EA, with some specific enhancements for southern damselfly and white clawed crayfish likely to be delivered by the Wildlife Trust. Again these works will be funded by Southern Water.

The Test and Itchen Catchment Partnership and the Watercress and Winterbournes Landscape Partnership Scheme (operating in the headwaters of the Test and Itchen), will also receive additional funding from Southern Water to help deliver some of the agreed mitigation commitments. The organisations involved in these partnerships will prioritise, agree, and implement works across the catchment that are complementary to the mitigation works outlined above.

The package of measures will include:

- White Clawed Crayfish habitat and population enhancement
- Southern Damselfly habitat and population enhancement
- River restoration and general habitat and ecological resilience enhancement.

Southern Water's IROPI compensation commitments

The Environment Agency in the s20 Agreement has agreed in principle to Southern Water's case for an imperative reason of overriding public interest under the Habitats Directive (considered in greater detail in Annex 11).

The need for a Drought Order may or may not in reality materialise. Nevertheless, a set of compensation commitments have been agreed in outline and are being developed further.

These measures are intended to be put into operation ahead of implementing the Candover and Itchen Drought Orders. Once the detail is finalised, the delivery and requisite timetable to can be

established in agreement with the Environment Agency and Natural England but it is anticipated that not all measures will need to be implemented immediately. Southern Water shall work alongside the Environment Agency and Natural England to ensure that the measures are secured. The measures must be at locations which are not directly impacted by the Drought Orders and include:

- Further White Clawed Crayfish habitat and population enhancement
- Further Southern Damselfly habitat and population enhancement
- Further river restoration and general habitat and ecological resilience enhancement including measures specifically focused on Salmonids.

Incorporating the Section 20 Agreement into the drought plan

The section 20 Agreement has several key components to it, as outlined above. These commitments have been incorporated throughout this drought plan and programmes of work that will be delivered over the course of this and subsequent drought plans. Some of the key features of the Agreement are:

- Drought permit readiness (Annex 14)
- 6 month application ready process (See below)
- The actions set out in the s20 Agreement are time limited to 2030 so will not run indefinitely - ONLY until a long term solution is in place. They will however also need to be accounted for in at least one future Drought Plan.
- Timing and sequencing of when the Drought Permits or Orders could be triggered (Table 4 in Annex 1)
- Stakeholder engagement intentions relating to s20 agreement (Annex 6)

Application readiness

As part of its commitment in the s20 agreement Southern Water has undertaken additional work on its drought order and permit applications for the Itchen, Test and Candover to ensure that they are “application ready”. Template documents can be found in Annex 14.

This commitment includes an agreed schedule of monitoring and mitigation measures, as described in Annexes 4 and 5 to this Drought Plan, and in the detailed Environmental Assessment Reports (EARs) for the individual drought permit and orders, as set out in Annex 15. The EARs have been discussed with the Environment Agency and Natural England and updated versions of each report have been issued to the Environment Agency and Natural England for review. Once we have had the feedback from both and discussed any comments during summer 2018, we will prepare a final version of the EARs.

The Hampshire Abstraction Licence Public Inquiry has inevitably focused attention onto the Drought Permit and Order applications that were discussed at length during the inquiry process. Southern Water recognises, however, that the rigorous approach being adopted for the Drought Permit and Order documentation for the Hampshire area would be equally beneficial for the Drought Permit and Order applications across its supply area as a whole. As a result, Southern Water has committed in Annex 4 of the Drought Plan to a specific programme of work (in order or priority) to enhance and update all of the EARs by April 2019.

Furthermore the Environmental Monitoring Plan (Annex 5) sets out a proposed programme to define and implement monitoring and mitigation measures for each Drought Permit and Order option. Southern Water has proposed a risk based approach and the principle of this has been agreed by the Environment Agency. The proposed programme will ensures that all the EARs are finalised by April 2019 so that, in the event that drought conditions arise in summer 2019, a full set of final EARs are available

Aside from the Test surface water Drought Permit, there is a low risk of requiring any Drought Permits / Orders before the end of April 2019 in view of the prevailing water resources position in June 2018. In light of the higher potential frequency of needing to apply for the Test surface water Drought Permit, and as agreed in the s20 Agreement, Southern Water has also committed to providing updated documents (including the EAR) for that application on a twice-yearly basis in early September and February each year for the Environment Agency's review to ensure application readiness. The application readiness process also requires extended public consultation and engagement and a 'trial-run' of the process. This is designed to ensure that at any time, the permit application is in a robust condition and potential issues are highlighted and can be addressed expediently. Timing is critical to the success of this process as a reliable means of tackling potential threats to water supply

Southern Water has agreed a detailed programme of environmental monitoring (and mitigation) for the Drought Order and Permit applications for the Itchen, Test and Candover. Funding is secured and contracts are being put in place with a number of parties, including primary delivery partners and landowners to enable the monitoring to commence and to continue through the period of this Drought Plan. This will provide invaluable information and evidence to inform any drought order or permit applications, the design and implementation of proposed mitigation, and to inform updates of the EARs.

In addition, Southern Water has discussed a detailed programme of work to ensure that enhanced environmental monitoring is undertaken across all of its supply areas. While not yet to the same level of detail as those produced through the Inquiry process, Annex 5 sets out Southern Water's proposals for this work, including a commitment to a 5 year programme of monitoring across its supply areas (see table 2.4 in Annex 5). This will be developed further.

Southern Water have also taken the Inquiry principle of the Test, Candover and Itchen Interim Abstraction Scheme to have regard to the potential environmental effects of the Drought Permit and Order applications and intends to apply this principle to all Drought Permits and Drought Orders proposed in this Drought Plan wherever it has the option to do so.

By adopting similar principles to those commitments of the s20 Agreement to the Plan as a whole, it is hoped that this will go some way to ensuring that Southern Water is application ready for all of its Drought Permits and Orders to ensure public water supplies are protected up to a 1:500 year drought (above and beyond the 1:200 year Southern Water are required to plan for). Southern Water considers this to be a responsible method of planning for a water stressed region with unique natural assets that need protection.

The commitments set out in this plan will deliver improved environmental evidence, a wider public understanding of drought scenarios, an increase in the application readiness of Southern Water's Drought Permit and Order applications, and will improve the resilience of the measures set out in the Drought Plan. Southern Water looks forward to working closely with the Environment Agency, Natural England, and a wide range of environmental partners in delivering this ambitious programme of work. Southern Water also look forward to using the outcomes of this work when considering future challenges and to influence the direction of future Drought Plans.

4. Overview of representations received

A total of 14 responses were received during the consultation period. These were a combination of online response forms and other written submissions. A full list of the respondents is included in Appendix 3.

Online Respondents

There were a total of six respondents to the online questionnaire form. Four of these responses were from individuals, with the remaining two from Arun District Council and Basingstoke and Deane Borough Council.

Written Submissions

A total of eight written submissions from organisations were received during the consultation as follows:

- Environment Agency
- Natural England
- Hampshire County Council
- Arun District Council (comments in addition to the online questionnaire)
- Portsmouth Water Ltd
- Hampshire and Isle of Wight Wildlife Trust
- West Sussex County Council
- Little River Management / Barker Mills Estate

Engagement with respondents in preparing this Statement of Response

Since receipt of the consultation responses, we have engaged with a number of the respondents to discuss issues arising, and to seek clarification and confirmation of matters raised:

- Continued discussions with EA and NE to finalise and sign off the compensation, mitigation and monitoring packages for Test, Itchen and Candover
- Continued discussions with Hants & IOW Wildlife Trust to agree scope of early survey work for the Test, Itchen and Candover compensation, mitigation and monitoring packages
- Meetings and discussions with Portsmouth Water (including a tripartite meeting with the EA) about the Lower Itchen sources Drought Order, the Madehurst and Portsmouth Water Slindon Drought Permits as well as operational testing of the new bulk supply to Hampshire Southampton East WRZ and the future bulk supplies set out in WRMP19
- Meeting and discussions with Natural England on the details of its Drought Plan representation, including in relation to the Candover and Itchen Drought Orders and the Shalcombe, Caul Bourne and Eastern Yar Drought Orders for the IOW
- Discussions with South East Water on bulk supply arrangements during drought conditions

- Meetings and discussions with the EA National Water Resources team on the EA's representations to clarify and agree the way forward in addressing their comments in the revised Drought Plan
- Meetings and discussions with the EA Area Teams (Solent & South Downs, Kent and South London) on the EA's representations to clarify and agree the way forward in addressing their comments in the revised Drought Plan. Additionally, the meetings discussed the timetables for finalising the Drought Permit/Order Environmental Assessment Reports, monitoring programmes and mitigation programmes. The EA agreed that a risk-based approach should be adopted in these timetables, taking account of the likelihood of requiring the Permit/Order and/or the relative environmental sensitivity of the water bodies that may be affected
- Further dialogue with landowners in respect of agreeing access to the lower River Test to carry out environmental surveys.

5. Analysis of responses to the Drought Plan questionnaire

The non-technical summary of the draft Drought Plan, 'Our plans to tackle droughts' poses a series of questions about our proposals to manage drought over the next 5 years (2018-2023). These questions were also incorporated into an online questionnaire. A copy of the questionnaire is included as Appendix 1.

This section presents an analysis of the responses to the questionnaire and where additional comments were made, a summary of the issues raised. We have also included our consideration of the responses and indicated, where appropriate, any changes we will make to our Drought Plan.

Analysis of responses to specific questions

Do you think the different stages of drought we use are easy to understand?

All six questionnaire respondents answered this question. 100% of respondents considered that the different stages of drought used are easy to understand.

We welcome confirmation that our 'triggers' to identify when a drought is on the way and the action we will take are well understood.

Themes and issues raised in representations	Resp No.	Company consideration of representation
Suggestion to add the AMP7, AMP8, ...AMP16 in the plan.	2	The AMP periods are not referred to in the non-technical summary or the technical summary of the draft Drought Plan. They are more relevant to the WRMP than the Drought Plan.
It is really helpful to have access to the stages of drought and great that customers are kept informed about it.	5	Noted.

What do you think is the best way for us to tell customers about a drought and restrictions? (please select a number in the boxes to show order of preference)

All 6 questionnaire respondents answered this question. TV was selected as the best way for customers to be told about drought and restrictions (four respondents). The remaining respondents selected Facebook and phone as the best means of contact. Conversely, four respondents selected phone as the least preferable way to be told. TV and Twitter were also

selected once each as the least preferable way to hear. Taking an average, the order of preference from most to least preferable across the 6 respondents was:

- TV (2.5)
- Facebook (3.5)
- Email (4.33)
- Radio (4.33)
- Twitter (4.5)
- Letter (4.83)
- Newspaper (5.5)
- Phone (6.5).

The results confirm that our 'Drought Communication Plan' strategy to raise awareness if we think that a drought is starting is the correct one. We use our social media channels to provide all the information customers may need but we will also work with the media and other partners, such as local councils, to raise awareness through newspapers, radio, television etc.

Do you understand the restrictions we can introduce under Temporary Use Bans and drought orders?

All 6 questionnaire respondents answered this question. 100% of respondents understood the restrictions that can be introduced under Temporary Use Bans and drought orders. The additional comments identified that making customers aware of the temporary bans and the restrictions are key to getting customers to learn when to use their water more effectively. The terminology will need to be very clear for members of the public to understand.

We welcome confirmation that our draft Drought Plan is sufficiently clear in setting out when and how restrictions would be put in place.

Themes and issues raised in representations	Resp No.	Company consideration of representation
Sharing the implications if licence abstraction and populations continue at the same rate.	2	Alongside this draft Drought Plan we have developed and also consulted on our updated Water Resource Management Plan. This Plan will ensure we have a long term plan to be resilient to drought and demonstrate the implications of future changes to abstraction and growth.
Making customers aware of the temporary bans and the restrictions within are key to getting customers to learn when to use their water more effectively.	5	Agreed. When a drought first hits it is important to reduce how much water is being used so that we can still supply essential water for drinking. The actions we will take to save water and the steps customers will need to take are set out in our draft Drought Plan.
Terminology will need to be very clear for members of the public to understand.	13	Agreed. Our Drought Communication Plan will ensure that the restrictions are clearly explained to a range of audiences.

Do you agree with the phases in which we would introduce restrictions as water becomes more scarce during a drought? (Our aim is to protect jobs and the economy by focusing restrictions on homes and gardens first before introducing to businesses)

All 6 questionnaire respondents answered this question. 83.33% of respondents agreed with the phases in which we would introduce restrictions as water becomes more scarce during a drought. One respondent was unsure if they agreed with the phases.

The response and the comments support the staged approach we have presented in our draft Drought Plan and it is accepted that this will need to be carefully communicated so that our customers understand that early restrictions focus on homes and gardens as this saves the most amount of water and protects public services, businesses, the economy and jobs. The Communication Plan presented in our draft Drought Plan ensures that who and what is exempt from restrictions will be clearly messaged.

Themes and issues raised in representations	Resp No.	Company consideration of representation
As there are a high proportion of elderly and more vulnerable residents within the District, it would be helpful and advisable to include reference to exemptions that apply in communications, so those within these groups do not make themselves more vulnerable through not realising.	3	Agreed. Annex 6: Management and communications sets out in detail our Communication Plan to achieve this. The focus of our communication activity should any restrictions be applied will be to clearly communicate to customers what is allowed, what is prohibited and what exemptions are allowed and for who.
Given the severity of future droughts, it may be worth considering a phase 3 severe drought level whereby more stringent cuts to use are taken	1	We currently test our plans against extreme droughts of up to 1:500 year return periods. These droughts have a very low chance of occurring. We are working with the other companies in the South East to improve the resilience of the region even further. However, if a more severe drought occurred before the additional investment has been put in place then we are able to use additional powers to secure more resources and restrict demand further. These actions would be authorised through an Emergency Drought Order, which is a different piece of legislation and therefore would not be a continuation of the previous phases.
Water is our most valuable resource in life, protecting it where needed is a must.	5	Agreed.
The phases in which restrictions are introduced would need to be made very clear to members of the public.	13	Agreed. Annex 6: Management and communications sets out in detail our Communication Plan to achieve this.

Do you think the balance between the actions we take to supply water and those we take to reduce demand for water is right?

All 6 questionnaire respondents answered this question. 100% of respondents considered that the balance between the actions taken to supply water and those taken to reduce demand for water within the draft Drought Plan is right.

Themes and issues raised in representations	Resp No.	Company consideration of representation
Actions applying to customers should remain after implementation and application of business actions, otherwise there would be a loss of confidence	3	Annex 6: Management and communications sets out how during an extended drought period we will expand media campaigns and customer contact to maintain understanding of restrictions. At the end of a drought period, we will continue to promote the work we are doing in the long term, such as achieving greater water efficiency, and the nature of the South East as a water-stressed region.
We cannot make new water, therefore protecting future resources is of key importance.	5	New technologies allow us to convert poorer quality water into fresh water for drinking water purposes. We do however agree that we should protect existing resources. This is why Southern Water has significantly reduced leakage and become more efficient in how we and our customers use water. This has resulted in less water being taken from the environment today than was taken over 30 years ago.

Do you agree with the exemptions from Temporary Use Bans, which are agreed by all water companies in the UK?

All 6 questionnaire respondents answered this question. 100% of respondents answered yes, agreeing with the agreed exemptions. Additional comments to this question noted that a significant number of residents fall within the first of these exemptions, so it needs to be stringently applied. It was also suggested by Respondent Ref: 3 that the application of exemptions for business may need to be more carefully considered as there is still a large proportion of the District's economy included in Agriculture, Horticulture and cleaning services (both domestic and commercial).

Themes and issues raised in representations	Resp No.	Company consideration of representation
A significant number of residents fall within the first of these exemptions, so it needs to be stringently applied	3	Agreed. Our draft drought plan sets out that Blue badge holders will be provided with an exemption during the first phase of imposing a Temporary Use Ban. If the drought

		continues then this exemption would be rescinded.
The application of exemptions for business may need to be more carefully considered as there is still a large proportion of the District's economy included in Agriculture, Horticulture and cleaning services (both domestic and commercial).	3	As set out in the draft Drought Plan, there are exemptions for businesses which use approved irrigation systems or use hosepipes as part of their cleaning business during Temporary Use Bans. There are no common exemptions from drought orders, but we will consider exceptions for businesses whose only work is based on using water (e.g. agriculture and horticulture). Customers would need to apply in writing and show that they are taking steps to save water where possible. It is therefore considered that the draft Drought Plan sets out a mechanism for businesses to achieve an exemption should it be appropriate to do so and for us to consider individual circumstances.
It is important all water companies are on the same page.	5	All of the companies in the South East of England work together during the onset of a drought in the region through the Water Resources in the South East of England (WRSE) group. Through this group the companies have agreed a consistent set of exemptions for the region which is appropriate for the drought severity at the time.

Which of the optional exemptions for Temporary Use Bans do you think we should consider during a drought, and which ones should we not consider?

All 6 questionnaire respondents answered this question. However, one of the respondents didn't respond to the categories of watering newly-laid turf for the first 28 days, removing graffiti and filling paddling pools.

100% of respondents felt that 'Customers on our Vulnerable Persons List who have mobility issues', should be considered for exemption from a Temporary Use Ban during a drought.

66.66% of respondents felt that 'Watering food crops at home or on allotments', should be considered for exemption from a Temporary Use Ban during a drought. 33.33% of respondents felt it should not be.

Out of the five respondents who responded to the categories of 'Watering newly-laid turf for the first 28 days', 'Removing graffiti', and 'Filling paddling pools', all felt that these should not be considered for exemption from a Temporary Use Ban during a drought. The respondent who did not respond to these categories noted that they did not feel that they had sufficient knowledge to comment but filling paddling pools, for example, may also be appropriate for exemption as these may apply as therapy for vulnerable people who have mobility issues (Respondent 3).

Additional comments from one other respondent emphasised that water for gardening, watering lawns, filling paddling pools and removing graffiti were not essential use of water and could be lived without for a short period of time (Respondent 1).

As set out in the draft Drought Plan we will consider making exemptions for other groups or activities and this will be dependent on the severity of the drought. During a drought, our website and other communication activities, will clearly state any additional exemptions that are being applied.

Which of the exemptions from a drought order do you think we should apply in a severe drought?

All 6 questionnaire respondents answered this question. However, one of the respondents didn't respond to the category of businesses who use water to remove graffiti. Out of the five respondents who did respond to this category, 100% felt that businesses who use water to remove graffiti should not be considered for exemption from a drought order in a severe drought. The respondent who did not respond to this category noted in the additional comments that some businesses may be focused on the removal of graffiti and may need to retain the ability to do this.

66.66% of respondents felt that Businesses who use water to grow plants, should be considered for exemption from a drought order in a severe drought. 33.33% of respondents felt it should not be.

83.33% of respondents felt that Businesses who use water to grow food, should be considered for exemption from a drought order in a severe drought. 16.66% of respondents felt it should not be.

Further additional comments noted that there may need to be a phase 3 severe drought whereby none of the above-mentioned categories can be exempt. At stage 1 and 2 of severe drought, exemptions can apply; beyond this there are no exemptions. As stated above, we will apply certain exemptions during a Temporary Use Ban. During a Drought Order there are no common exemptions but we will be able to take into account individual circumstances if certain exceptions are applied. The priorities highlighted above will feed into this decision-making process. In terms of a phase 3 severe drought, we will have the ability to seek an Emergency Drought Order. In the unlikely event this is required, this would allow us to apply further restrictions.

Do you support the drought permits and drought orders we have explained to increase supplies or are there others we should consider?

All 6 questionnaire respondents answered this question. 100% of respondents answered that yes, they do support the drought permits and drought orders. An additional comment stated that "I fully support them as I live in a water stressed area".

Themes and issues raised in representations	Resp No.	Company consideration of representation
Support drought permits and drought orders as live in a water stressed area.	5	Support is noted.

Do you think we have balanced the need to supply water with the need to protect the environment during a drought?

All 6 questionnaire respondents answered this question. 100% of respondents answered that yes, the need to supply water and the need to protect the environment during a drought has been balanced. An additional comment noted that protections are key for both the environment and water resources.

Themes and issues raised in representations	Resp No.	Company consideration of representation
Protections are key for both the environment and water resources.	5	Agreed.

Do you think it is ever okay to introduce emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day)?

All 6 questionnaire respondents answered this question. 33.33% answered that yes, they think it is okay to introduce emergency restrictions such as standpipes or rota cuts. 33.33% answered no to this, and another 33.33% answered not sure.

As set out in the draft Drought Plan, we would only apply for an emergency drought order if we had used all other options, and we would work with the local fire authorities to make sure there are supplies for firefighting. The possibility of these restrictions is extremely unlikely, and we would take every step to avoid them.

Themes and issues raised in representations	Resp No.	Company consideration of representation
These emergency restrictions should only be introduced if we are at the Cape Town level of drought where there is literally no other choice.	1	This would only be applied for the most severe drought.
Rota cuts would possible by okay but only in the most extreme circumstances for emergency restrictions, due to the level of vulnerable residents in the District.	3	This would only be applied for the most severe drought.
Given the increase in population and the demand for water it may be needed to take these steps.	5	Noted.
These restrictions should only be a last resort measure	13	This would only be applied for the most severe drought.

There should be clear plans to support the most vulnerable members of the community	13	We would work closely with local authorities and other agencies to ensure that the specific needs of vulnerable groups are considered, and that protective measures are put in place for them.

Do you think there is anything else we should include in our drought plan?

All 6 questionnaire respondents answered this question. 33.33% answered that yes, there are other things which should be included and these are noted in the comments table below. 33.33 of respondents answered that no, there are no other things which should be included. 33.33% of respondents answered that they were not sure whether anything else should be included in the drought plan.

Themes and issues raised in representations	Resp No.	Company consideration and representation
Information on more severe drought phase should be included. Specifically, something that is a little more of a bridge between significant actions and emergency drought orders.	1	It is considered that there is sufficient opportunity and flexibility within Phase 2 of a Severe Drought to introduce further restrictions by applying for and extending drought orders to increase the amount of water we can abstract from unused sources or more sensitive locations. We also have the discretion to apply further exemptions to the use of water by domestic and business customers.
Examples of other countries that have suffered a drought, along with the implications they suffered as a result, should be included.	2	Southern Water has looked at other countries to see how they have coped with droughts of the past. In particular the Millennium drought in Australia and those in the USA. More recently we have also been following the impact of the drought in Cape Town. In conjunction with this learning we have derived and used a new method to test more severe droughts, than have been observed in the past, against our supply systems. This approach using stochastic rainfall events helps us improve the resilience of our water supply systems to these more extreme events.
The balance of the plan is good.	5	Support is noted.

Did you find the information you needed in our drought plan consultation document and what else would you like to know?

All 6 questionnaire respondents answered this question. 100% of respondents answered that yes, they did find the information they needed in the drought plan consultation document. Additional comments noted that all the required information was found, and that the current level of information is right.

Themes and issues raised in representations	Resp No.	Company consideration of representation
I think the current level of information is just right.	5	Noted.
I found all the information I believe I would require	14	Noted.

How did you hear about this consultation?

All 6 questionnaire respondents answered this question. One respondent heard about the consultation from two sources, giving a total of 7 responses. Most of the respondents heard about the consultation from Southern Water's website (57%). Of the remaining respondents, one received an email, one via a community event and Basingstoke and Deane Borough Council responded following a direct meeting with the Chief Executive. Here it was also noted that that at times of drought, the Borough Council would wish to work with Southern Water to highlight key issues and ensure that the most vulnerable in the community are protected and considered.

6. Analysis of non-questionnaire responses received

Introduction

A total of eight non-questionnaire written submissions from organisations were received during the consultation, as follows:

- Environment Agency
- Natural England
- Hampshire County Council
- Arun District Council (comments in addition to the online questionnaire)
- Portsmouth Water Ltd
- Hampshire and Isle of Wight Wildlife Trust
- West Sussex County Council
- Little River Management / Barker Mills Estate

Some of the written submissions are very lengthy, raising numerous different issues, whereas others are relatively focused and short. For consistency, we have adopted the same approach to each of the representations we received.

We have assessed each of the responses that we received, identified the issues that they raise and then responded to them, highlighting where changes are proposed to be made to the Drought Plan in response.

A number of the respondents highlighted issues in relation to our drought proposals for the Western area, including in relation to matters being considered at the Hampshire Abstraction Licence Inquiry. As explained in section 3 of this Statement of Response, we have made significant changes and improvements to our draft Drought Plan in relation to the Western area drought proposals in response to the Inquiry.

A summary of the main changes proposed to be made to the Drought Plan as a result is set out in Section 8 of this Statement of Response. As previously noted, we have published a Revised Draft Drought Plan alongside this Statement of Response, to highlight the changes we propose to make. This includes a Revised Draft Drought Plan, and Revised Draft versions of the annexes that support the Drought Plan.

The Revised Draft Drought Plan documents do not have any statutory status, and the final Drought Plan will be published once we receive confirmation from Defra that we may do so. Defra can choose to hold a hearing or inquiry before giving its permission to publish the final Drought Plan, and/or direct us to make specific changes to the Drought plan before final publication.

The Environment Agency's representations

The Environment Agency made detailed representations on our Draft Drought Plan, giving recommendations for the draft plan, evidence to support the recommendations, and the Environment Agency's view on whether Southern Water has met relevant legislations and Government Directions.

The Environment Agency's representations are split into four sections:

- Summary of its view of our draft Drought Plan
- Compliance with the Drought Plan (England) Direction 2016
- Key recommendations for changes to our draft Drought Plan
- Outline of further improvements that it considers should be made

In addition, a separate document was subsequently submitted by the Environment Agency highlighting "Minor Issues" with the Draft Drought Plan. For completeness, we have included these minor issues within the overall Environment Agency's representation.

As noted in section 4 of this Statement of Response, we have met with Officers from the Environment Agency since receiving its representations, and discussed and agreed the principles of various changes that we propose to make to the Drought Plan as a response. These changes incorporate the details of the s20 agreement that was signed between the Environment Agency and ourselves as part of the Hampshire abstraction licence inquiries in March 2018, and the details of the monitoring, mitigation and compensation plans that were agreed as a result.

Details of the Environment Agency representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 4 to this Statement of Response document.

As set out in the table in Appendix 4, we consider that our Drought Plan is in compliance with the Drought Plan (England) Direction 2016.

Natural England's representations

Natural England also made detailed representations on our Draft Drought Plan. The representations related to both the principles of our drought planning approach, and to the detailed measures we propose to adopt in advance of, during and following a drought.

Natural England's representations relate to the Drought Plan itself, and to the detailed content of the related Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) documents that were published alongside the draft Drought Plan.

As noted in section 4 of this Statement of Response, we have met with Officers from Natural England since receiving its representations, and discussed and agreed the principles of various changes that we propose to make to the Drought Plan, and to the related SEA and HRA assessments as a response. These changes incorporate the details of the s20 agreement that was signed between the Environment Agency and ourselves as part of the Hampshire abstraction licence inquiries in March 2018, and the details of the monitoring, mitigation and compensation plans that were discussed and agreed as a result.

Details of Natural England's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 5 to this Statement of Response document.

Hampshire County Council's representations

Hampshire County Council submitted representations that included comments on the outcomes from the Hampshire abstraction licence inquiry, and the changes that the licence changes would bring to an area that has not experienced hosepipe bans in the past. Comments were also made about the need to protect vulnerable individuals in emergency drought conditions.

Details of Hampshire County Council's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

Arun District Council's additional representations

In addition to its questionnaire response, Arun District Council submitted additional comments in a written submission. The comments made supported the questionnaire response submitted.

Details of Arun District Council's additional representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

Portsmouth Water's representations

Portsmouth Water submitted representations identifying the different proposed levels of service between our Drought Plan, and its own drought plan. It also made comments on the Lower Itchen Drought Orders, the North Arundel Drought Permit, and the importance of working together.

Details of Portsmouth Water's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

Hampshire and Isle of Wight Wildlife Trust's representations

Hampshire and Isle of Wight Wildlife Trust submitted detailed comments in its representation, highlighting the importance of the agreement reached between ourselves and the Environment Agency as part of the Hampshire abstraction licence inquiry. The Trust specifically noted the importance of the monitoring, mitigation and compensation plans that have been agreed for the Test, Itchen and Candover, and the need for us to work closely with the Trust and other partners in implementing the agreed solution.

The Trust also provided comments on most of the questions in the questionnaire.

Details of Hampshire and Isle of Wight Wildlife Trust's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

West Sussex County Council's representations

West Sussex County Council submitted detailed representations on the Draft Drought Plan, with many of the comments mirroring the topics covered by the drought plan questionnaire. The response commented in detail on the importance of clear and consistent communication with businesses and residents during a drought, and the need for support for vulnerable individuals in the event emergency restrictions are required.

Details of West Sussex County Council's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

Little River Management, and Barker Mill Estate's representations

Representations were submitted by Little River Management, and by Barker Mill Estate on the River Test Drought proposals, specifically highlighting concerns on the principles and details of the monitoring and mitigation proposals that were discussed and agreed between ourselves and the Environment Agency as part of the Hampshire abstraction licence inquiry. The representations also identified concerns about the implementability of the various measures given the lack of agreement over access with the landowners and lessees.

Details of Little River Management and Barker Mill Estate's representations, our response to them, and the changes we propose to make to the Drought Plan in response are set out in the detailed table in Appendix 6 to this Statement of Response document.

7. Customer research findings

We carried out a dedicated online survey with YouGov and customer focus groups in Sussex, Kent and Hampshire to ensure we heard the views of a wide range of representative customers during the consultation.

Details of the research is set out below, along with our response to the issues raised.

Customer focus groups

We held three customer focus groups (Kent, Sussex and Hampshire) with eight bill-paying customers invited to each group, from a range of backgrounds and ages. The summary draft Drought Plan document was used as the discussion material for each group, alongside the YouGov survey.

Key feedback from these groups included:

- Being **informed about drought** is key. People want widespread coverage of impending issues so that preventative behaviour can be undertaken. Breadth of proactive coverage is required with social media being seen as a key resource (especially face book.) Broader reach approaches such as radio and newspapers are also highly relevant and can be presented in a locally relevant way
- There was little concern about the **phasing of water restrictions**, as people expect Southern Water to follow a plan that is sensible and trust them to do so. Primary concern is with actions that will personally impact, although it is understood that personal restrictions would take place before business restrictions
- People are widely accepting of Southern Water's expertise and take at face value the **proposed actions to supply water and reduce demand**, without engaging to closely with the detail of this
- The **exemptions from Temporary Use Bans** were broadly acceptable, however there was some concern around blue badge holders as it was felt that not all would necessarily have significant medical based need
- In terms of **specific exemptions,** it was considered the genuinely vulnerable people should be looked after (this does not necessarily correlate with mobility issues.) Watering food crops was seen to be a minority issue, but valid
- People are happy with **other restrictions**. In a time of drought people shouldn't be laying new turf. They were also happy for graffiti to be left and paddling pools not to be filled
- With **businesses** there is concern that those businesses that need water should be able to stay working from the point of personal livelihood. Concern was spontaneously expressed about personally relevant issues such as working as a hairdresser. From the specified severe drought action the priority was businesses who use water to grow food. There was less concern about businesses who grow plants, and lowest concern about businesses who use water to remove graffiti.
- **Drought permits** are an area of concern for people, particularly in areas with higher levels of environmental awareness, such as Brighton. There is concern that in taking water from rivers that the ecosystem will be severely impacted, with long term negative results. It was felt that if Southern Water got to the point where they needed to do this they would have failed. There is a high level of desire for well thought out plans to be in place to prevent this action from needing to happen

- **Rota cuts and standpipes** are very hard for people to get their heads around if they had never experienced them. It was felt that it water was in such restricted supply that this was the only route available then in should be utilised, however people were very reluctant for this to happen

YouGov research

Research was carried out with nearly 3,500 customers of Southern Water in an online survey carried out by YouGov. This was based on using a 'slider' tool to gauge customers support for activities or water resource options, while providing information about bill impact and social and environmental implications. The following groups were surveyed:

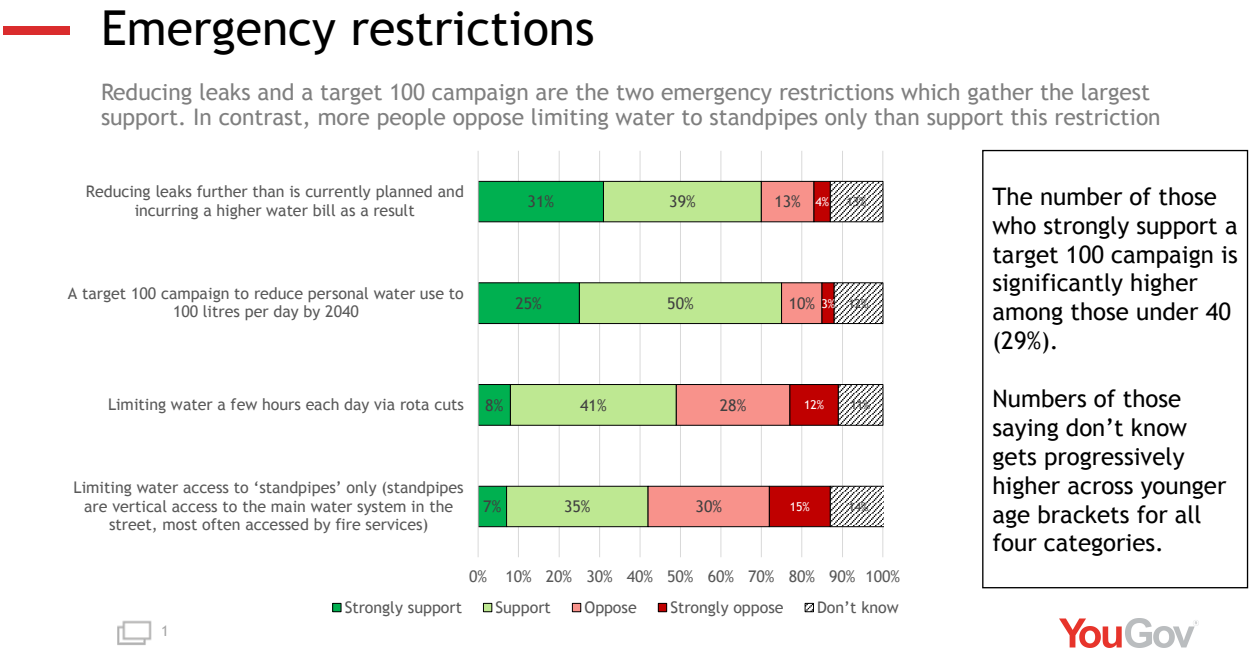
- 3,100 online domestic customers
- 260 business customers
- 100 face-to-face interviews with 'vulnerable' customers.

This was a combined exercise for the Drought Plan and WRMP consultation and below we have extracted relevant responses for the Drought Plan.

Domestic Customer responses

Support for exemptions from restrictions - Provision of exemptions to restrictions during drought is considered important by 50% of those surveyed. A further 27% thought it was moderately important for specific exemptions to apply.

Emergency restrictions - Those surveyed indicated that customers prefer reduced leakage and personal water use rather than the introduction of standpipes and rota cuts in an emergency drought. The detailed responses on this issue are identified below:



Business Customer responses:

Exemptions - Among this group 58% thought exemptions were important and a further 18% said they thought they were moderately important.

Emergency restrictions - Reducing leaks (77%) and a Target 100 campaign (75%) were by far the two most favoured restrictions among business customers.

Vulnerable customers' responses:

Exemptions - Among this group 50% thought exemptions were important and a further 27% said they thought they were moderately important.

Emergency restrictions - Vulnerable customers favour a Target 100 campaign most (75%) closely followed by reducing leaks (70%).

Our response to customer research

We welcome the input from customers and the broad support for the actions within our draft Drought Plan, in particular the phasing of water restrictions.

The results confirm that our 'Drought Communication Plan' strategy to raise awareness if we think that a drought is starting is the correct one. We will use our social media channels to provide all the information customers may need but we will also work with the media and other partners, such as local councils, to raise awareness through newspapers, radio, television etc.

The exemptions from Temporary Use Bans are based a common list signed up to by all UK water companies. This is to make the exemptions easier for customers to understand. It would be difficult to apply a system of qualifying criteria for blue badge holders and a blanket exemption is considered to be the most appropriate means of ensuring that vulnerable customers are protected during times of drought. Not all vulnerable customers are blue badge holders.

Should we need to place restrictions on businesses, we will take on board the above feedback and the priorities identified.

We acknowledge concern about the impact of increased river abstraction should a drought permit or order be required. As part of our draft Drought Plan we have carried out environmental assessments of our planned actions. These assessments are published in our SEA and HRA. If we apply for permits or orders during a drought, we would work with the Environment Agency to evaluate the effects of our actions and agree and put in place monitoring and 'mitigation measures' to reduce any effects.

Reluctance to see rota cuts and standpipes is understood. We would only apply for an emergency drought order if we had used all other options. The possibility of these restrictions is extremely unlikely (one in every 500 years on average) and we would take every step to avoid them.

8. Summary of main changes proposed to be made to the Drought Plan in response to the comments received

The following section summarises the main changes proposed to be made to the Drought Plan.

As previously noted, we have published a Revised Draft Drought Plan alongside this Statement of Response, to highlight the changes we propose to make. This includes a Revised Draft Drought Plan, and Revised Draft versions of the Annexes that support the Drought Plan.

The Revised Draft documents do not have any statutory status, and the final Drought Plan will be published once we receive confirmation from Defra that we may do so. Defra can choose to hold a hearing or inquiry before giving its permission to publish the final Drought Plan, and/or direct us to make specific changes to the Drought plan before final publication.

The main changes can be summarised as follows:

- New flow triggers for the Rivers Test and Itchen to reflect the agreed ordering of drought actions. These triggers have been tested against historical and stochastic droughts and the outputs are included in the revised Drought Plan;
- A series of actions and programmes to ensure that drought permits are 'application ready'. Each area has a generic 'Statement of Reasons' and 'application pack', which can be taken 'off the shelf' and adapted to the specifics of the drought permit/order application in question.
- Incorporation of lessons learned from the recent Bewl drought permit application.
- Further detail of stakeholder engagement in the Western area;
- Updates to the Strategic Environmental Assessment (SEA), Habitat Regulations Assessment (HRA) and Water Framework Directive (WFD) Assessment to reflect the agreements reached and incorporated in the Agreement. This includes updated Environmental Assessment Reports (EARs).
- Updates to the SEA and HRA to address the comments of Natural England.
- Commitment to a delivery programme for refining mitigation measures set out in the Environment Monitoring Plan
- Further explanation of how the SEA, HRA and WFD Assessment were used to examine potential options for inclusion in the Drought Plan and the excluded options.

We are also proposing to make detailed changes to the annexes of the Drought Plan, reflecting the summary identified above, and to fully set out our proposed drought planning approach.

A summary of the proposed changes to the annexes is included as Appendix 7 to this Statement of Response. The full revised annexes are published with the Revised Draft Drought Plan.

9. Conclusions and next steps

This Statement of Response document has been prepared in accordance with the Drought Plan (England) Direction 2016, the Water Company Drought Plan guideline[3] and supplementary technical information[4].

The document identifies the company's response to the representations on the draft Drought Plan, changes made to the draft Drought Plan and the reasons for them, or the reasons why no changes are proposed.

To accompany this Statement of Response document we have prepared a revised Drought Plan. A number of the revisions have resulted from the Agreement with the Environment Agency following the settlement of the River Itchen, River Test and Candover abstraction licensing Public Inquiry.

Other changes have been made in response to the detailed representations that have been received from consultees including the Environment Agency, Natural England and other respondents.

In addition to the changes, we have also identified a number of actions in our Revised Draft Drought Plan and we will continue to progress these with the Environment Agency and Natural England.

Our Drought Plan will only be finalised and published following Defra's consideration of the Statement of Response document, including any Hearing or Inquiry that Defra might consider needs to be held into the Drought Plan, and following any Direction(s) that Defra may make on changes required to be made to the Drought Plan.

[3] How to write and publish a drought plan https://www.gov.uk/government/collections/how-to-write-and-publish-a-drought-plan
[4] Supplementary information provided to water companies on Defra's Huddle website

Appendix 1: Copy of consultation questionnaire from the Draft Drought Plan

Drought Plan

By filling in this feedback form you will be entered into a free prize draw to win an iPad Pro.

Read our full terms and conditions.

1. Your details

Name

Name of business/group

Address

Town

Post Code

Email

Phone

2. Are you responding as a ...

- ◯ customer
- ◯ group, organisation or business
- ◯ employee

3. Do you think the different stages of drought we use are easy to understand?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

4. What do you think is the best way for us to tell customers about a drought and restrictions? (*please select a number in the boxes to show order of preference*)

- ☐ TV
- ☐ Radio
- ☐ Facebook
- ☐ Twitter
- ☐ Newspapers
- ☐ Email
- ☐ Letter
- ☐ Phone

5. Do you understand the restrictions we can introduce under Temporary Use Bans and drought orders?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

6. Do you agree with the phases in which we would introduce restrictions as water becomes more scarce during a drought? (Our aim is to protect jobs and the economy by focusing restrictions on homes and gardens first before introducing the to businesses)

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

7. Do you think the balance between the actions we take to supply water and those we take to reduce demand for water is right?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

8. Do you agree with the exemptions from Temporary Use Bans, which are agreed by all water companies in the UK?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

9. Which of the optional exemptions for Temporary Use Bans do you think we should consider during a drought, and which ones should we not consider?

	Should consider	Should not consider
Customers on our Vulnerable Persons List who have mobility issues	◯	◯
Watering food crops at home or on allotments	◯	◯
Watering newly-laid turf for the first 28 days	◯	◯
Removing graffiti	◯	◯
Filling paddling pools	◯	◯

If you have any comments, give them here.

10. Which of the exemptions from a drought order do you think we should apply in a severe drought?

	Should consider	Should not consider
Businesses who use water to remove graffiti	◯	◯
Businesses who use water to grow plants	◯	◯
Business who use water to grow food	◯	◯

If you have any comments, give them here.

11. Do you support the drought permits and drought orders we have explained to increase supplies or are there others we should consider?

◯ Yes

◯ No

◯ Not sure

If you have any comments, give them here.

12. Do you think we have balanced the need to supply water with the need to protect the environment during a drought?

◯ Yes

◯ No

◯ Not sure

If you have any comments, give them here.

13. Do you think it is ever okay to introduce emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day)?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

14. Do you think there is anything else we should include in our drought plan?

- ◯ Yes
- ◯ No
- ◯ Not sure

If you have any comments, give them here.

15. Did you find the information you needed in our drought plan consultation document and what else would you like to know?

- ◯ Yes
- ◯ Not
- ◯ Not sure

If you have any comments, give them here.

16. How did you hear about this consultation?

- ☐ Radio advertising
- ☐ Newspaper advert
- ☐ Southern Water website
- ☐ Email
- ☐ Community event
- ☐ Social media
- ☐ Other

If other, please specify.

Thank you for your time and your feedback.

Submit

Appendix 2: List of organisations and individuals consulted

Statutory

Environment Agency
Natural England
Ofwat
Historic England
Drinking Water Inspectorate
Southern Water Customer Advisory Panel

Local authorities (Chief Executives, Officers and Councillors)

Adur & Worthing Councils
Arun District Council
Ashford Borough Council
Basingstoke & Deane Borough Council
Association of Drainage Authorities
Brighton & Hove City Council
Canterbury City Council
Chichester District Council
Crawley Borough Council
Dover District Council
East Hampshire District Council
East Sussex County Council
Eastleigh Borough Council
Fareham Borough Council
Gravesham Borough Council
Hampshire County Council
Hastings Borough Council
Horsham District Council
Isle of Wight Council
Kent County Council
Lewes District Council
Maidstone Borough Council
Medway Council
Mid Sussex District Council
New Forest District Council
New Forest National Park Authority
Portsmouth City Council

Rother District Council
South Downs National Park Authority
Southampton City Council
Swale Borough Council
Test Valley Borough Council
Thanet District Council
Tonbridge & Malling Borough Council
Waverley Borough Council
West Sussex County Council
Wiltshire Council
Winchester City Council
Worthing Borough Council

Parish Councils

298 Parish and Town Councils

Fisheries and angling

Andover Angling Club
Avington Trout Fishery
Billingshurst Angling Society
Broadlands Lakes Coarse Fishery
Chalk Springs Trout Fishery
Cadland Fishery
Chalk Springs Trout Fishery
Chalk Stream Fishing Ltd
Duncton Mill Trout Fishery
Fish Legal
Furnace Lakes Fishery
Golden Pond Fishery
Greenridge Farm Coarse Fisheries Ltd
Hastings Fly Fishers Club
Henfield & District Angling Society
Herne Bay Angling Association
Horsham & District Angling Association
Kent Fisheries Consultative Association
Kent Fishing Club
Kemsley Community Angling Preservation Society
Lower Itchen Fishery Ltd
Mill Farm Fishery
Mopley Farm Cadland Fishery
Newells Carp & Coarse Fishery
Orchard Lakes Fishery

Petersfield & District Angling Club
River Farm Fishery
Rother Angling Club
Holbury Lakes Trout Fishery
Salmon & Trout Association
Southampton Piscatorial Soc. & Test Valley Angling
Stones Fishery
Sumners Ponds Fishery & Campsite
Sussex Inshore Fisheries and Conservation Authority
Swanborough Fishery
Test Valley Angling Club/Soton Piscatorial Society
Testwood & Nursling Fishery
Thameside Works Angling & Preservation Society
Timsbury Fishing
Woodington Fishery
Worthing & District Piscatorial Society

Rivers trusts

Arun and Rother Rivers Trust
Ouse & Adur Rivers Trust
South East Rivers Trust
The Rivers Trust
Wessex Chalk Stream & Rivers Trust

Trade and consumer bodies

Bathroom Manufacturers Association
British Swimming Pool Federation
Car Wash Advisory Service
Chartered Institution of Water and Environmental Management (CIWEM)
Citizens Advice
Consumer Council for Water
Country Land & Business Association
Energy UK
Federation of Small Businesses
Food & Drink Federation
Footprint Trust
Friends of the Elderly
Hampshire Chamber of Commerce
Horsham Chamber of Commerce
Horticultural Trades Association
Institute of Water
Institution of Civil Engineers
Isle of Wight Chamber of Commerce

Natural Enterprise
National Farmers Union (NFU)
Royal Agricultural Society of England
Royal Horticultural Society
Royal Institution of Chartered Surveyors (RICS) South
Home Builders Federation
Surfers Against Sewage
Sussex Chamber of Commerce
UKWIR
Water UK

Environmental groups

Blueprint for Water
Carbon Disclosure Project
CPRE Hampshire
CPRE Kent
CPRE Sussex Countryside Trust
Energy Saving Trust
Friends of the Earth
Green Alliance
Hampshire & Isle of Wight Wildlife Trust
High Weald AONB
Kent Wildlife Trust
Kentish Stour Countryside Partnership
Marine Conservation Society
National Joint Utilities Group (NJUG)
National Trust
RSPB
Sussex Wildlife Trust
Test & Itchen Association
Upper Itchen Group
West Sussex Growers Association
Wildfowl and Wetlands Trust
Wildlife and Countryside Link
WWF-UK
WWT Arundel Wetland Centre

Government

MPs
Business, Innovation and Skills Committee
10 Downing Street

Defence Committee
Department for Culture, Media and Sport
Department for Education
Department for Work and Pensions
Department of Health
Education Committee, Education & Skills Sub-committee
Environmental Audit Committee
European Scrutiny Committee, Business Innovation and Skills Committee
Energy & Climate Change Committee
Foreign Affairs Committee
HM Treasury
Regulatory Reform Committee, Work and Pensions Committee
Home Affairs Committee
Home Office
Transport Committee
Treasury Select Committee
Women and Equalities Committee

Regional partnerships

Coast to Capital
Coastal West Sussex Partnership
Energise Sussex Coast
Gatwick Diamond Business
National Flood Forum
Partnership for Urban South Hampshire (PUSH)
Solent Energy & Environmental Management Group
Solent LEP
South Downs Land Management Group
South East England Councils (SEEC)
Southern Regional Flood and Coastal Committee
West Sussex Flood Action Group

Navigation

British Waterways South East
Chichester Ship Canal Trust
Cowes Harbour Commission
Inland Waterways Association
Peel Ports Medway
River Medway Navigation Authority/Environment Agency
Royal Yachting Association
Sandwich Port & Haven Commissioners
Shoreham Port

Southampton Canal Society
Thames & Medway Canal Association
The Basingstoke Canal Society
The River Wey Trust
Waterway Recovery Group
Wey & Arun Canal Trust

Other

Age UK
Albion in the Community
Business in Brighton
Coastal West Sussex NHS Trust
First Wessex Housing Association
Joss Bay Surf School
Locate in Kent
Salvation Army
Saxon Weald
South & South East in Bloom
Sussex Community Foundation
Vitacress Salads Ltd
Woodcoombe Sports & Social Club

Water companies

Portsmouth Water
Thames Water
Affinity Water
South East Water
SES Water
Wessex Water
South West Water

Appendix 3: Schedule of respondents

The following table presents a full list of those who responded to the Draft Drought Plan.

Response No.	Name of responder
1.	Mr P Holton (Individual)
2.	Rodrigo (individual)
3.	Arun District Council questionnaire
4.	Arun District Council additional representation
5.	Mr R Marshall (individual)
6.	Portsmouth Water Ltd
7.	Hampshire County Council
8.	Natural England
9.	Hampshire and Isle of Wight Wildlife Trust
10.	West Sussex County Council
11.	Little River Management / Barker Mills Estates
12.	Environment Agency
13.	Basingstoke and Deane Borough Council
14.	Mr S Hazell (individual)

Appendix 4: Environment Agency representation and our response to the comments

The following table contains the Environment Agency representation, our response to the issues raised, and highlights how the Drought Plan is proposed to be changes in response.

ENVIRONMENT AGENCY REPRESENTATION ON SWS DRAFT DROUGHT PLAN

COMPLIANCE WITH RELEVANT LEGISLATION (The Drought Plan (England) Direction 2016			SWS' Consideration of Response	Changes Required to Drought Plan
Direction Not Complied with	**Information or changes required**			
(c) the permits and approvals that the water undertaker expects to need in order to implement the drought management measures	See recommendation 4		The issues are responded to in detail in Issue 4.2 below. The only "non compliance" issue relates to land ownership and access issues at the Lower Test, and the extent to which this could affect the ability to undertake monitoring and to deliver mitigation. This issue was discussed at length with the EA and other stakeholders at the Hampshire Licences Inquiry and agreement was reached between EA and SWS on the monitoring and mitigation measures that were necessary for the Test Drought Permit and Order to be considered application ready. It was further agreed that any landowner prevention of access for monitoring and mitigation would be taken into consideration by EA as part of Drought Permit or Order applications.	None as a consequence of this comment, however the Drought Plan has been updated to reflect the outcomes of the Hampshire Licences Inquiry
(e) the measures that may be needed to mitigate any adverse effect on the environment resulting from the implementation of a drought management measure	See recommendation 4			

Recommendation 1 – Testing the plan under a range of drought scenarios and outlining the timing and sequencing of actions				SWS' Consideration of Response	Changes Required to Drought Plan
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**		
Issue 1.1 - Chosen drought trigger and action(s) connected with each one.	The company does not include sufficient evidence in its draft drought plan to demonstrate how it will use its drought 'dashboard', and associated drought triggers to determine when to apply for drought permits/orders.	We cannot be assured that the appropriate actions are triggered at the right time to be effective in a drought. This could pose a risk to security of supply.	The revised drought plan should provide evidence to demonstrate how the drought 'dashboard' will be used to determine when to apply for drought permits/orders.	Annex 1 has been updated to reflect the new flow triggers developed for the Rivers Test and Itchen following the inquiry. These triggers have been developed to honour the ordering of drought actions set out in the s20 agreement and reflect Southern Water's level of service targets.	Annex 1 (Western area section in report and Appendix A) has been updated to reflect the new flow triggers developed for the Rivers Test and Itchen following the inquiry. These triggers have been developed to honour the ordering of drought actions set out in the s20 agreement and will be included in Southern Water's drought dashboard.
	In Western Area, there are no triggers relating to the application for the Test surface water drought order application. Annex 1 currently only includes a drought trigger graph using Allbrook and Highbridge Flows on the River Itchen.	There is inadequate information on which drought triggers will be used for the River Test surface water source.	This relates to the Western area. Our review of the draft plan has identified that the company must amend the plan to include the chosen drought triggers and actions, for the River Test surface water source. Given the company require additional drought permit and order options in the Western Area, it would be appropriate to update these triggers to show when drought permit/order applications would be considered, and when customer restrictions are likely to be required. Following the inquiry the company has committed in the Section 20 Agreement that it will include the provision of a drought trigger curve/dashboard in relation to the River Test, to be used with real-time monitoring and forecasting, as part of the company's multi-factorial approach to drought management decisions.		
Issue 1.2 Actions that would be implemented in each scenario.	The plan has been tested on historic droughts and synthetic drought scenarios (Annex 2). However, the plan does not show worked examples using the chosen historic droughts to show when demand and supply interventions would be implemented through the duration of the drought. Trigger profiles in Figures 3 - 8 of Annex 2 are not annotated and do not detail when actions described in the text would occur to make them	It is not clear when supply and demand side actions would have been implemented during historic droughts. This additional information would provide evidence that the plan is resilient to these notable historic droughts.	The company should include worked examples using the chosen historic droughts in each area to show when supply and demand interventions would be implemented through the duration of the drought. A worked example is provided of the supply and demand side actions that would have been taken in a 2012 drought event to show how the drought plan would work (see page 29 non- technical summary). Annex 2 would benefit from including worked examples like this to detail when supply and demand interventions would be implemented. Figures 3 – 8 in Annex 2 could benefit from annotation as detailed in the non-technical summary as to when supply and demand actions would occur to make them comprehensive worked examples.	SWS has discussed this comment with the EA and agreed to provide worked examples for 3 historic droughts (1921-22; 1976; 2012) plus 2 synthetic droughts (i.e. for more extreme than historic). The Annex 2 figures depicting example historical droughts have been updated to provide annotations in line with the equivalent stochastic diagrams. Furthermore, worked examples for Southern Water's Western area, using the new drought triggers set out in Annex 1, have been included.	The Annex 2 figures (5, 6 & 7) have been updated. Worked examples for Southern Water's Western area, using the new drought triggers set out in Annex 1, have been included and a table describing our actions has been set up.
Issue 1.3 - The order the company will implement drought permits/orders.	The order drought permits/orders will be implemented for all strategic supply areas was detailed in pre-consultation documents but is not well defined in the draft drought plan. For Western area the sequence of drought permits/orders is briefly outlined in Annex 1, p 25-26, however this information is not included in the plan for Eastern and Central areas.	We cannot be assured that supply-side drought management actions will be invoked in the least environmentally damaging order. This poses a risk to the environment.	The order all drought permits/orders will be implemented should be detailed in the plan. During pre-consultation the company provided a drought order and permit summary table detailing the phasing of options in each water resource zone (WRZ). It would be useful to include this summary table in the revised drought plan. This also includes referring to the sequence in Western area as set out in the Section 20 Agreement.	We have updated the Drought Plan to include in Annex 4 a table setting out the sequence of implementation of the drought permits/orders in each relevant Water Resources Zone. Where there is more than one drought permit / order option available, the sequencing takes account of the environmental effects of the option, with those options having greater environmental effects implemented later than those options with lower environmental effects. The sequencing of the drought permits / orders for the Lower Test, Candover and Lower River Itchen set out in Annex 1 to the Section 20 Agreement has also been included in Annex 4.	Table 4 has been added to Annex 4 to provide the information as agreed with the EA.

Area of issue	Issue and evidence	Implications	Information or changes required		
Issue 2.1 -Control curve diagrams to show chosen triggers and levels of operation.	The draft drought plan does not include control curve diagrams to show the chosen triggers and levels of operation for the River Test. (See appendix A of Annex 1 of the draft WCDP)	Control curves display what level of operation a company should be in, based on how much water is available and the time of the year. Without control curves with the trigger levels for the River Test it is not clear when the trigger levels would be crossed, what actions are connected with these triggers and when actions would be taken. For example when a drought permit or order would be applied for and when it would be used. It is not clear in the plan whether enough time has been allowed to prepare for and carry out the actions associated with the triggers.	The company must provide control curve diagrams for the River Test surface water source. These diagrams should show how frequently the triggers are crossed and the actions associated with nearing and crossing the trigger levels. The control curves should show the agreed trigger 35 days before Hands off Flow (HOF) for the River Test which is driving the need to apply for drought permits more frequently. The company has committed in the Section 20 Agreement that it will include the provision of a drought trigger curve/dashboard in relation to the River Test, to be used with real-time monitoring and forecasting, as part of the company's multi-factorial approach to drought management decisions.	Annex 1 has been updated to include the new flow triggers developed for the Rivers Test and Itchen following the inquiry. Control curves for the Rivers Test and Itchen flow have been included. These figures also show the key Hands off Flows (HoF) and example drought recessions. The triggers, and the Company's ability to respond during a drought, are tested more comprehensively in Annex 2.	Annex 1 (Appendix A) has been updated to provide the information as agreed with the EA.
Issue 2.2 - Test the drought triggers and proposed actions.	The drought triggers have been tested under a range of different drought scenarios to show how well they work. How the tests have been used to develop the drought triggers for the Test and Itchen drought orders is not clear.	The drought triggers may not be accurate. There is a risk that actions will not be taken at the correct time throughout the duration of a drought if the output from the scenario testing is not used to develop and inform the drought triggers. This poses a risk to the environment and security of supply.	The company should test the triggers for the Test and Itchen drought orders under a range of different drought scenarios. The company has committed in the Section 20 Agreement the following; "Inclusion of worked examples of how the company's drought trigger curve/dashboard would operate under a range of historic droughts or other plausible drought events."	New flow triggers have been developed for the Rivers Test and Itchen following the inquiry (and included in Annex 1). These triggers have been tested against historical and stochastic droughts, and the output from this assessment have been included in the updated Annex 2.	Annexes 1 (Appendix A) and 2 have been updated to provide the information as agreed with the EA.
Recommendation 3 – Ensure drought permits and orders are application ready					
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**		
Issue 3.1 Drought permit/order application preparation for all drought permits/orders.	There is information missing that would ensure the drought permits are "application ready". This includes information, for example, on the exceptional shortage of rain (ESoR) case that would be used for each application, and also a draft of the advert that will be published when the application is submitted.	There could be a potential risk to drought permit implementation as the principles of "application ready" have not been followed. This could result in a risk to security of supply if permits cannot be granted or are delayed because preparatory work has not been completed. The company should carry out as much preparation work as possible in advance of a drought event. Applications for drought permits/orders should, where possible, be ready to submit before they are needed. This will help process the permit application more quickly to avoid delays and identify any problems in advance, which could impact customers.	This is relevant to all three strategic supply areas. The company should consider the guideline extra information on drought permit and order application ready. The company should include information on the following, as appropriate for the priority of the actions: · Arrangements for advertising the application based on the priority of the action. · As much of the case for "exceptional shortage of rain" that can be completed in advance as is possible, including which rain gauges will be used (see position statement on Exceptional shortage of rain). · Set out a plan or programme of how it will complete the work that can only be completed at the time of application and ensure this is factored in to timing of triggers. · Explore and detail in the plan all outcomes of permits and orders. For example a venue ready for public hearings and a backup to maintain supply for complicated applications. · The company should include a work programme detailing how it will do the work required for a drought permit/order application. It should provide worked examples including how it would put together an ESoR case and threat to supplies.	Southern Water has prepared a generic 'Statement of Reasons' and 'application pack' for each of its three Areas, which can be taken 'off the shelf' and adapted to the specifics of the drought permit/order application in question. This is separate to the Hampshire permit/orders draft documentation. These will be provided in draft form to the Environment Agency alongside the revised Drought Plan. Further information is provided below: · The structure of the Statement of Reasons is consistent with the evidence requirements of the government guidance for preparing drought permits/orders, as well as the EA's position statement on 'Exceptional shortage of rain', and contains data and methods consistent with the company's Draft WRMP19. Placeholders are included in the documents with references to supporting spreadsheets where data and figures can be easily updated for use in the applications, and options to delete information that is not considered relevant to the specific application. It is considered that for the majority of permits/orders, this generic Area-level document gives the company a solid 'permit ready' grounding to which to add the specifics of the actual permit/order case in question. From its experience of applying for permits/orders in the past, no two permit applications are the same, even if at the same site, because of the nature of all droughts being different. Therefore, the amount of work required to update a generic document would not be much greater than that required to update a site-specific document. · An 'application pack' has been prepared, setting out the documents that would be required for submission of a drought permit/order. These documents are listed below, with those in bold having already been drafted, and others : o Blank WR80 application form; o Schedule cross-referencing the application requirements under Government guidance with the application documents; o Placeholder for Draft Drought Permit document itself; o Generic Statement of Reasons; o Environmental Assessment Report (subject to final revisions), to include Environmental Monitoring and Mitigation Plan; o Generic list of organisations to whom Drought Permit/Order Notices must be served; o Generic notice to be published in local newspapers and sent to statutory and non-statutory bodies; o List of organisations to be pre-consulted for drought permit/order application; and o Placeholder for copy of the relevant Licence. From previous experience of drought permit/order applications, the company considers that the time allowed for in its Drought Plan for preparation of permit/order applications is sufficient to complete the documents, particularly on the basis of the preparatory work it has already completed. The company would prepare the Statement of Reasons in parallel with the Environmental Report for any application, to maximise time efficiency. The programme of events post-submission of the application for the Test Surface Water drought permit have been set out in Annex 2 of the section 20 agreement on the operation of abstractions from the River Itchen, Candover boreholes and River Test. This programme of events will be used as the basis for activities following submission of all drought permit applications. We understand that the Environment Agency will arrange a suitable venue for a drought permit hearing, should one be required. Drought order applications which require a hearing regardless of objections being received(unless the Secretary of State decides that it shouldn't go ahead) will also follow the same timeline, but in these cases, Southern Water will arrange the hearing venue. The availability of appropriate venues will depend upon when hearings are required and other bookings that venues may have at that time, which cannot reasonably be foreseen; however, the company will aim to secure a neutral venue such as a village/school/church hall or a hotel or conference facility in the locality of the permit/order abstraction or compensation release, or a room at its own offices if required. Given the sensitivity of the Hampshire permit/orders and that the Test Surface Water drought permit may be required on a more frequent basis, specific Statements of Reasons and application packs will be prepared for the River Test drought permit no later than October 2018 and for the River Test drought order, Candover drought order and Lower Itchen sources drought order no later than March 2019. The Test Surface Water drought permit will be reviewed 6-monthly thereafter to ensure it remains application ready. This will include specific Statements of Reasons as well as lists of specific consultees and locations where notices will be published, in order that they are fully application ready.	Annex 14 contains a generic statement of reason and application pack for each of the three Areas. As set out in the Section 20 Agreement we will be preparing a Permit ready application for the River Test surface water Drought Permit which will set out the most up to date Exceptional Shortage of Rain statement.
Issue 3.2 Drought Permit 'Application Ready' for the River Test Surface Water source – Exceptional Shortage of Rain.	The company does not include information in its draft drought plan on how it will develop its case for demonstrating exceptional shortage of rain (ESoR). Given the frequency of the River Test drought permit/order it is important this is well established and ready to be presented when required.	There is a risk to security of supply if permits cannot be granted or are delayed because preparatory work has not been completed.	This is specific to the Western area. The company should complete as much of the ESoR case that can be completed in advance as is possible, including which rain gauges will be used and any other aspects it would use, such as winter rainfall and effective rainfall. More information is available in the document "Exceptional shortage of rain (Position statement)" available on the Huddle.	This issue was discussed and agreed at the s20 Inquiry in discussions with the EA.SWS will complete as much of the generic ESOR case that can be completed, as far as possible, including identify rain guages to be used, and other releated rainfall information. SWS agreed with the EA in the s20 agreement that the Test Drought Permit application can be based on forecast ESOR, with SWS providing updated actual ESOR data ahead of the hearing/decision.	To be produced no later than October 2018

Issue 3.3 Drought permit 'Application Ready' for the River Test surface water source – Stakeholder engagement.	The draft drought plan does not include details of stakeholder engagement specific to Western area. This is particularly important given the potential frequency of the Test surface water drought permit/order applications.	There is a risk that if appropriate discussions with stakeholders have not been completed in advance of a drought, then likely objections and suitable mitigation measures will not have been established and prepared beforehand. This could increase the time from trigger to implementation and poses a risk to security of supply.	This recommendation relates to the Western area. We expect the company to include further information on: · Liaison with the EA and Natural England on agreeing monitoring, mitigation and compensation. · Liaison with stakeholders and potential objectors to ensure the requirement of the drought permit/order are understood. · Draft drought permit/order application documents to be produced and reviewed by at least the EA to ensure that the application will present the relevant information to improve the likelihood of the application being successful.	At meeting with EA on 23 May, SWS agreed to include details about stakeholder engagement in updated DP18 and commitment to share the DP application details as per s20 Agreement.	Additional information has been included within Annex 6 (Normal conditions section, Drought communication actions section)
Issue 3.4 Drought permit 'Application Ready' for the River Test surface water source – Environmental assessment.	The River Test surface water drought permit/order could potentially be applied for frequently over the next 10 years whilst the company develop its longer term strategic resources to meet its supply demand balance. Given the frequency of drought permits/orders on designated sites we would expect a comprehensive environmental assessment. The resources used to complete each environmental assessment, including your environmental monitoring plan, should be relative to the overall risk and likelihood of use presented by your action. See Drought plan guideline extra information: Environmental assessment in water company drought plans for further information.	There could be potential risk to the environment, specifically River Test SSSI and River Itchen SAC.	The company must ensure that the detail of the environmental assessments reflects the likelihood and potential environmental damage of the drought permit/order.	We have updated our Plan to take account of the discussions with the Environment Agency, Natural England and other stakeholders as part of the 2018 Public Inquiry into the River Test abstraction licence variation. This includes updating the Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive Assessment (Annexes 11 to 13) to reflect the agreements reached and incorporated into the Section 20 Agreement. In parallel, we have also updated the Environmental Assessment Report (EAR), creating two EARs - one for the Test drought permit and one for the Test drought order. The updated EAR has been issued to the Environment Agency and Natural England for comment. As part of the Section 20 Agreement, the EAR and associated HRA and WFD assessments will be kept up-to-date on a 6 monthly-basis to reflect any new evidence from the agreed baseline monitoring programme and to take account of any relevant changes to statutory requirements. The updated EAR and associated HRA and WFD assessments will be issued to the Environment Agency every 6 months (February and September). The updated EAR includes updated water resources modelling outputs following changes made to some of the hydrological data as agreed at the Public Inquiry. This has enabled an updated assessment of the frequency and duration of requiring the Test drought permit and Test drought order, which in turn has informed the assessment of effects on the environment.	Annexes 11 to 13 of the Drought Plan, and the Drought Plan have been updated to reflect the outcomes from the Hampshire Licence Inquiry and content of the s20 agreement signed by the EA and SWS.

Recommendation 4 – Complete appropriate Environmental Assessment Reports (EARs), monitoring and mitigation plans (linked to Directions 3(c) and (e))				**SWS' Consideration of Response**	**Changes Required to Drought Plan**
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**		
Issue 4.1 Environmental monitoring plan and baseline	The environmental monitoring plan and baseline data does not include sufficient information as to which sites will be used for monitoring before, during and after a drought and the frequency, duration and timing of any monitoring. The monitoring plan does not use appropriate methods for environmental data gathering for INNS and water vole surveys. There are inconsistencies in what monitoring/ surveys are required for the Itchen and Candover. Table 2.1 in annex 5 details a summary of baseline data and evidence gap analysis. It shows that there is no further monitoring necessary for the Candover or Itchen. However, Table 2.2 in annex 5 which details the baseline data and monitoring requirements physical environment and ecology, identifies monitoring for the Candover (macroinvertebrates, macrophytes and fish) and Lower Itchen. The company has noted in Annex 5 that 'Land access is also important to enable monitoring to be carried out with permission of the landowner: this has proven challenging in some rivers in recent years.'	We cannot be assured that the environmental monitoring will provide the evidence to show the impact of the company's actions during a drought. For example; In Western area further environmental monitoring will be beneficial to better understand the factors that influence salmon to enter the Lower Test from the estuary. We cannot be assured that the appropriate methods for gathering INNS and water vole data will be applied. Without adequate monitoring information which can only be obtained if land access is granted (linked to Direction 3c), applications for drought permits may be delayed or rejected. This could put security of supplies at risk and could lead to unnecessary damage to the environment.	The Company should agree with the local area team on a work programme to develop the monitoring plan, in particular the baseline monitoring programme to ensure site location and proposed data collection is adequate. Further clarity is needed on which sites will be used as control sites. In Eastern area, lessons learnt from the recent Bewl drought permit should be used to inform the revised drought plan. For all strategic supply areas, water vole surveys should follow the guidelines set out in 'Water Vole Conservation Handbook - Volume 3'. INNS Surveys are walkover surveys at the appropriate time of year. The revised drought plan should be updated to provide further details on these methods. Further work is required to develop the Company's ecological assessment of the environmental impacts of abstracting below authorised flows under a drought order/permit on the Test, Itchen and Candover. The additional requirements have been recorded in the Section 20 Agreement. The Company should continue to work on the draft monitoring plans which have been developed through the inquiry process and fully incorporate these into the revised drought plan. In the Western area, the Company should continue to work with landowners to agree a procedure to enable access to land to undertake the monitoring required to understand the impacts of its abstraction on the Lower Test (linked to Direction 3c).	Following discussions with the Environment Agency: a) We have updated our plan to include a commitment to a delivery programme for refining the Environmental Monitoring Plan (Annex 5 of the Drought Plan), working with the Environment Agency's local area teams. This programme of refinement will take place between June 2018 and September 2018 as proposed to the Environment Agency, including agreeing the specific sites and control sites to be monitored. b) We will continue to work with the Environment Agency to review the lessons learnt from the 2018 Bewl Water drought permit monitoring plan and delivery. Initial learning will be incorporated into the refinements to the Environmental Monitoring Plan during summer 2018. The lessons learnt review will extend beyond summer 2018 but any relevant findings will be incorporated into a further update of the Environmental Monitoring Plan. c) We have updated the Environmental Monitoring Plan to reference the 'Water Vole Conservation Handbook - Volume 3'. We will work with the Environment Agency local area teams to refine the INNS walkover survey details and methodology as part of the refinement of the monitoring programme during summer 2018. d) We have updated the Environmental Monitoring Plan (Annex 5) to incorporate the agreed monitoring measures set out in the Section 20 Agreement for the Test, Candover and Lower Itchen sources drought permits/orders. These measures have been agreed and signed off by Natural England in June 2018 and are being reviewed by the Environment Agency. We have progressed the implementation programme for this agreed monitoring, which will ideally commence in summmer 2018. The programme is set out in Annex 5. e) We have been progressing discussions on land access to carry out monitoring on the Lower Test. These have not concluded but good progress has been made. f) We have set out a programme for carrying out the agreed baseline monitoring for other drought permit/order sites (see Annex 5). We have proposed to the Environment Agency that this programme will commence in Autumn 2018 for agreed priority sites.	Detailed changes have been made to the Drought Plan Annex 5, as referred to in the response.

Issue 4.2 Mitigation.	The mitigation actions are poorly defined and lack information about what the actions consist of - where, when, how or why. The plan recognises that mitigation measures before a drought are possible options, however there are no further details on these. Annex 5 details a number of possible mitigation and compensation measures. The deliverability of these during a drought is uncertain as they may take longer to implement than has been planned for. Seeking to implement these measures during a drought to mitigate the effects of drought permits/orders, may be too late as the desired benefits may take a while to be realised. For example, other drought orders in Western Area at Lukely Brook, Caul Bourne, Eastern Yar, Shalcombe, and the Test Valley (Wallop Brook) contain no mitigation in advance of drought permits/orders being applied for. Through the public inquiry process SWS agreed to a substantial package of mitigation works, with implementation commencing in 2018, for the Testwood, Itchen and Candover drought permit/orders. The company has not made a commitment to provide appropriate mitigation for the other drought permits/orders in Western Area.	We cannot be assured that the mitigation actions are adequate and will improve the resilience of the environment before a drought and reduce the adverse effects on the environment during and after a drought (linked to Direction 3e). As such, the Environmental Monitoring Plan is not adequate and does not meet our guidance in being application-ready.	This recommendation is relevant to all strategic supply areas. The company should agree with the local area team on a work programme to further identify and develop mitigation activities that will be required before, during and after a drought. The company has outlined a number of in- stream mitigation and compensation measures to be considered and implemented during a drought or post-drought. The deliverability of these is uncertain and to implement them during a drought would be too late (linked to Direction 3e). The company should complete as much work as possible to assess the impact of its drought permits for its final plan. The company should focus its efforts on sites where permits are most likely to be needed and should commit to a timetable to complete any outstanding work at other sites as soon as possible.	Following discussions with the Environment Agency: a) We have updated our plan to include a commitment to a delivery programme for refining the mitigation measures set out in the Environmental Monitoring Plan (Annex 5 of the Drought Plan), working with the Environment Agency's local area teams and, where applicable, with Natural England. This programme of refinement is proposed to take place between July 2018 and September 2018. b) We have updated the Environmental Monitoring Plan (Annex 5) to incorporate the agreed mitigation measures set out in the Section 20 Agreement for the Test, Candover and Lower Itchen sources drought permits/orders. These measures have been agreed and signed off with Natural England in June 2018 and are being reviewed by the Environment Agency. We have progressed the implementation programme for this agreed package of mitigation measures, which will commence ideally in summmer 2018. The programme is set out in Annex 5. c) We have proposed a programme to the Environment Agency for carrying out the agreed upfront mitigation measures for other drought permit/order sites (see Annex 5). The programme will commence in Spring 2019 for agreed priority sites. Land Access Monitoring plays a critical part in informing those decisions that aim to ensure the supply and quality of water is preserved, and the wider natural environment and any vulnerable species is sufficiently protected. Securing Landowner permissions for access to enable activities such as monitoring to take place is recognised by Southern Water as not just essential in practical terms but as a fundamental part of our wider engagement plan. Southern will work with landowners, stakeholders and regulators on securing access rights where needed. Where landowners simply won't give consent, we will look at what alternative options and locations are available, including asking or partnering with other bodies who already have secured access or who are otherwise is a better position to consider undertaking the activities on our behalf. This approach is currently being adopted for the delivery of the monitoring, mitigation and compensation measures developed from the South Hampshire Public Inquiry, although in that scenario the discussions with the landowners in respect of granting land rights are still active. This approach has identified a series of locations which provide sufficient date to assess the state of the environment at the time of making an application.	Detailed changes have been made to the Drought Plan Annex 5, as referred to in the response.
Issue 4.3 Environmental Assessment Reports.	Southern Water's Environmental Assessment Reports (EARs) for its drought permits/orders are currently inadequate; • Not all features have been assigned an appropriate sensitivity to flow/level impacts. • Inadequate data has been used to assign the sensitivity of features and the data may not be the most up to date. For example; - the ecological data used in the Lower Itchen and Gaters Mill EAR is 7 years old and much work has been done to decrease nutrient levels in the Itchen more recently. - It is also stated in the Lower Itchen and Gaters Mill EAR there is limited information on the southern damselfly distribution and status in the river and bounding wetlands. Recent work has been completed on the distribution of the damselfly in the Itchen Valley, therefore more up to date information is available. • The plan does not appropriately consider the impacts of supply- side drought actions to eel passage. • The plan does not sufficiently detail any gaps in understanding or further information required. • Not all in combination effects have been considered, specifically; - the impacts of options on groundwater, how source demands will be balanced against deterioration of water quality and how nitrate and metaldehyde issues will be addressed - In the Lower Itchen EAR, the assessment of the effects of major abstraction on water quality assesses current standards and then assumes that in an extreme 1:500 year drought water quality will remain the same. There is no attempt to consider the changed conditions that the EAR's are supposed to be assessing. The quality of assessment is not adequate Further work is required to understand the impact of the company's drought permits on the environment and to ensure adequate mitigation and monitoring is put in place. See separate issues relating to monitoring and mitigation.	Completing environmental reports for all permits will help the company to assess the potential impacts of the permits on the environment and to ensure that suitable monitoring and mitigation measures are put in place to help minimise adverse impacts (Direction 3e). There could be a potential risk to drought permit implementation as the EAR's are inadequate meaning the company is not 'permit application ready'. This could result in a risk to security of supply if permits cannot be granted or are delayed because preparatory work has not been completed. Applications for drought permits/orders should, where possible, be ready to submit before they are needed. This will help process the permit application more quickly to avoid delays and identify any problems in advance, which could impact customers, the environment and security of supply	The company should carry out as much preparation work as possible in advance of a drought event. The company should refer to the detailed comments we have provided for each EAR and work with local area teams to develop a programme of work and a timeline setting out when and how the EAR's are to be improved addressing the issues detailed in this recommendation.	An updated set of Environmental Assssment Reports (EARs) for each drought permit/order were issued to the Environment Agency alongside the publication of the draft Drought Plan, taking account of the comments made by the Environment Agency on earlier versions issued in 2017. In our updated Drought Plan, we have set out a proposed programme of further Environment Agency review of these updated reports and their subsequent finalisation over the period June 2018 to April 2019, adopting a priortised approach that reflects the likelihood of requring a particular drought permit/order. This programme of review will incorporate the agreements reached on monitoring and mitigation measures with the Environment Agency local teams during June to September 2018. We have already issued the updated EARs for the Test, Candover and Itchen drought permits/orders to the Environment Agency and Natural England alongside the publication of this Statement of Response in June 2018, with the aim of finalising these EARs by mid-July 2018 following review by these regulatory bodies. These EARs incorporate all of the relevant monitoring, mitigation and compensation measures included in the Section 20 Agreement, as well as other changes agreed through the 2018 Public Inquiry process.	SWS has committed to updating the EARs as discussed and agreed with the EA.
Issue 4.4 Testing the drought plan against a wider range of droughts	The company has tested the drought plan against a wider range of droughts, and included a more extreme drought scenario in its plan (1 in 500 year event). The drought actions it has indicated would be required to maintain supplies beyond a 1 in 200 year drought scenario are likely to have a significant effect on the integrity of a Habitats Directive site in its Western supply area. Inclusion of this scenario in the drought plan triggers the legal requirement for a Habitats Regulation Assessment (HRA) to be undertaken for these supply side drought actions. The HRA in the draft drought plan is not adequate to understand the significant effect of these drought actions on the Habitats Directive site in its Western area.	It is a legal requirement for the company to undertake a HRA for drought actions that impact Habitats Directive sites. Without undertaking a HRA the company has not properly assessed the possible environmental impacts of drought actions in a more extreme drought scenario and the actions needed to minimise and mitigate against damage to the environment.	The company should undertake a HRA for any drought actions in its plan that impact on Habitat Directive sites.	This is a helpful clarification and accords with our view that the HRA should continue to include assessment of the Lower Itchen sources drought order in line with the approach we adopted in the HRA of the draft Drought Plan. We have updated the HRA as part of the updated Drought Plan to include the mitigation and compensation measures for the Lower Itchen sources drought order set out in the Section 20 Agreement.	HRA Report has been udpated in light of updates to Itchen EAR and Hampshire Licence Inquiry outcomes, including S20 mitigation and compensation packages.

Recommendation 5 – Confirm that you have secure, accurate and reliable bulk supply arrangement with neighbouring water companies				SWS' Consideration of Response	Changes Required to Drought Plan
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**		
Issue 5.1 The volumes/limit of water that can be transferred from and to other water companies.	The company has a number of bulk supply agreements with neighbouring water companies (Portsmouth Water, South East Water, Affinity Water and Wessex Water) that cover bulk imports and exports (Annex 4 page 7 onwards). The terms and conditions of these transfers are set out in the bulk supply agreements, but the company state under drought conditions the quantities of water available for transfer under an agreement 'may not be appropriate.' The company is in discussions to update some of its existing supply agreements including the addition of drought clauses. It is not clear from the plan what the implications of these discussions might be and whether the bulk supplies can be relied upon during a drought. There are minor discrepancies between information in the volumes stated in Southern Water's draft drought plan and South East Water's plan on bulk supplies and transfer arrangements. There are inconsistencies between Southern Water's draft drought plan and Portsmouth Water's drought plan. There appears to be a difference between the two drought plans in the expected Minimum Residual Flow and available Ml/d for the drought order at Portsmouth Water's Gaters Mill surface water source on the River Itchen. Southern Water refer to a reduction of flow condition from 198 Ml/d to 160 Ml/d, whereas Portsmouth Water states that Southern Water has proposed a relaxation of the flow condition from 194 Ml/d to 150 Ml/d.	Inconsistencies between the two companies' plans could cause issues for drought management if each company is making different assumptions.	We recommend that the company explains what it means by 'may not be appropriate' and clarifies within its drought plan how bulk supplies with other water companies will operate during a drought. This will provide reassurance to customers and regulators that transfers are reliable during drought and if any changes to transfers will affect security of supplies and restrictions to its customers. The company should explain any discrepancies in volumes between its plan and other company plans. Specifically what these are and why they do not align.	Southern Water plans public water supply to be reliable up to and including droughts of severity of 1 in 200 year likelihood of courrence. Source deployable ouputs are estimated in respect of acheiving that reliablity, subject to implementation of water use restrictions and other drought managment measures in line with the company drought plan. Supplies to other companies are based on those deployable outputs. Therefore, in theory, agreements of bulk supplies from Southern Water to other companies should be reliable up to and including 1 in 200 year drought events. However in real time, as droughts develop, it is not known how severe they will become. There is a risk a drought may develop to be an event more severe than 1 in 200 year likelihood. In view of that risk, source outputs ought to be manged so as to ensure some output will remain available if a more severe drought occurs. For this reason it may be neccesary to reduce outputs in droughts less severe than 1 in 200 year likelihood. This would be done in discussion of 'pain share' with bulk supply recipients. This potential reduction of output is why we said that the contracted volumes 'may not be appropriate' as drought escalates.	We have added this text to Annex 4 to ensure clarity (Inter-company bulk transfers section)
		It is not clear how bulk supplies will be operated in the event of a drought. Within the plan the company detail under drought conditions 'the quantities of water available for transfer under an agreement 'may not be appropriate.' This does not provide reassurance that the bulk supplies are reliable options during a drought which may impact security of supply.	The company should make a commitment in the revised plan to update any associated drought actions once the operation of the bulk supply has been agreed with regards to revised contracts with all companies, particularly between South East Water and the R. Medway (Bewl) transfer.	Southern Water already had a committment in place with South East Water to update all shared resource and bulk supply contracts to modernise them and make them fit for the future. This is ongoing, aiming to have final-draft new contracts under review within 2018/19. We do not envisage these will provoke a need to update drought actions in the drought plan but, we do aim to include firmer protocols for discussions and 'pain share' during drought.	Table 2 in Annex 4 has been updated where appropriate to reflect commitment to update contracts
			To ensure the company provides sufficient information on its bulk supplies, we recommend that in its revised plan it:	see below	See below
			· Clearly summarises the operating agreements it has in place for these bulk supplies with other water companies, including the detail of how they will operate during a drought.	We will update the table in our drought plan (in Annex 4) sumarising our current contracts with other companies. However current contracts tend not to be explicit about pain share arrangments. We intend revised modernised contracts that will have clearer protocols included in this respect.	Table 2 in Annex 4 has been updated to ensure accurate reflection of current bulk supply contracts
			· Clearly states how any changes to these agreed transfers will affect security of supplies, the environment and restrictions for its customers.	Up to a drought severity of 1 in 200 year frequency we assume supplies from other companies and our supplies to other companies are reliable and are included in full within the supply-demand balnce of our water resource management plan. For more severe droughts we assume there may be some reduction in deployable output. For example, in agreement with South East Water we assume that our supply from Darwell reservoir may fall from 8 Ml/d (1 in 200 year) to 4 Ml/d (1 in 500 year). We also assume that the supplies to us from Portsmouth Water may half between those two drought severities (15 Ml/d to 7.5 Ml/d in respect of the supplies to Sussex North and Hampshire), even though drought permit or drought order options could be deployed to maintain the full supply. We do not consider it approporiate to set out prescriptive detail in the drought plan for each shared resource or bulk supply contract in respect of exactly how it may vary during severe / extreme drought. We consider it is important to retain flexibility to assess the particular prevailing drought and its impacts on supply availablity and on the environment. For example, some sources may be affected by drought more than others; and some sources may perform better than expected. Also, the impacts of the drought on the environment will only be truly known as the drought develops; from the environmental perspecitve it is also important to retain decision making flexibility. For example, situations could arise where the supply to another company could be maintained by implementing a drought permit or drought order, while the receiving company does not implement such a measure; or, the receiving company could implement a drought permit or drought order so as to reduce its dependency on the incoming supply. If such choice exists, it will be essential that both companies review the situation at the time in disccussion with the EA and other parties. Similarly , scenarios could arise where the imposition of further water use restirctions by one water company may impact on relative environmental impacts. It would be too presumptive to set prescriptive rules around such choices in advance.	No changes are required as a result of this comment.
			· Commits to update any associated drought actions following agreement on these bulk supplies with neighbouring companies.	We have had further discussions with the EA and Portsmouth Water (e.g. joint meeting on 18 May 2018) concerning drought orders and drought permits of joint relevance. We have agreed that should a drought order be required to relax the licensed flow conditon controlling Portsmouth Water's abstraction on the Lower Itchen solely in order for Portsmouth Water to be able to maintain the bulk supply to Southern Water that is dependent on that source, Southern Water will take responsbilities for that drought order. We have also agreed that the monitoring measures committed to within Southern Water's Drought Plan for its North Arundel drought permit option should also be relevant and acceptable in relation to Portsmouth Water's nearby groundwater abstraction drought permit.	Description of Portsmouth Water bulk supply contracts in Table 2 of Annex 4 has been updated
			· Ensures these arrangements are consistent with other relevant water companies' drought plans and communications with these companies are co-ordinated during a drought event.	SWS has checked the reliability of the bulk supplies in drought, consistency with other companies' statements about bulk supplies, and consistency between SWS DP and WRMP.	Table 2 of Annex 4 has been updated where necessary to reflect up to date understanding

Recommendation 6 – Provide further clarity on supply side options				SWS' Consideration of Response	Changes Required to Drought Plan
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**		
Issue 6.1 Recommissioning of unused sources	The company states that it may be feasible to re-commission unused sources during a drought (See page 12 of Annex 4). The company maintain a list of sources that have never been used or have been decommissioned and site plans. During the course of a drought, it would consider options for re-introduction of these sites. The plan lacks detail on; where these sites are, whether they are decommissioned sources or have licences but are not used, what DO they would provide in a drought and the potential deterioration of WFD elements if these were to be considered as options during a drought.	The recommissioning of these sources could be considered as an alternative option before progressing potentially environmentally damaging drought actions. However, without sufficient details on these sources and the environmental impacts we cannot be assured the environment is not at risk. There is potential risk of WFD waterbody status deterioration from insufficient environmental assessment of the company's supply side options.	The company should provide a list and the capacity of potential decommissioned and unused sources in the drought plan, if it plans to consider these options in a drought. It should explain when in a drought these sources would be used and if these options have not been progressed the reason for this. If the company does wish to include recommissioning these sources as drought actions, it must additionally undertake an environmental assessment. This should include consideration of the risk of deterioration to WFD waterbody status. Where potential deterioration is identified appropriate monitoring and/or mitigation should be outlined. The company should include sufficient detail on potential deterioration of WFD elements on all licences which will be used/increased as part of its drought plan.	We have made it clearer in the updated Drought Plan (in particular in Annex 4 and Annex 9) that there are no other sources that we plan to bring back into use beyond those specifically referenced, namely the Test Valley and Stourmouth sources. The Test Valley source would require a drought order to be brought back into supply and we have carried out Water Framework Directive assessments for each of these options, which were presented in the WFD Assessment Report.	Annex 4 (Re-commisioning of unused sources section) and Annex 9 (Appendix A) of the Drought Plan have been updated to clarify this point.

Table 2: Evidence report for improvements

Improvement 1 – Provide further clarity on communications during a drought

Area of issue	Issue and evidence	Implications	Information or changes required	SWS' Consideration of Response	Changes Required to Drought Plan
Issue 1.1 How the water company will encourage customers to help during a drought.	The plan details during 'impending drought' conditions the water company will encourage customers to be more water efficient through media campaigns (See Annex 6 page 14). There is little information in the plan on what the company will encourage customers to do to help during a drought and how it will do this.	How the company will encourage customers to help during a drought and what it will ask them to do is particularly important in Western area. There will be increased reliance on drought permits/orders for the first 10 years of the plan in Western area, therefore TUBs and NEUBs may be implemented more frequently than they would be in the other strategic supply areas. It is important the company has a detailed plan of how it will convey this message to customers in Western area and how it will be asking customers to help.	The Company should detail in the plan the water efficiency measures it will consider encouraging customers to undertake and at what drought status. It should also plan how it will communicate this to customers, in particular, those in Western area who may face restrictions more frequently than customers in Eastern and Central areas.	SWS has updated Annex 6 in light of these comments, and comments submitted from other respondents on the importance of clear and consistent communication in the approach to, during and after a drought. Further details have been included on SWS proposed approach.	Annex 6 (Drought communications actions section) has been updated to reflect the comments and changes required.
Issue 1.2 – Monitor the effectiveness of communication.	The plan does not detail how the effectiveness of communication during a drought will be monitored. (See Annex 6).	If the effectiveness is not being monitored the water company will not know whether communication is reaching the target audience.	The company should monitor and evaluate the effectiveness of its communication activities during a drought, for example through customer feedback, website traffic or a change in demand for water and detail how it will do this in the plan.		
Issue 1.3 – Consider how much time is needed to carry out communications around increasing supply/controlling demand.	The draft drought plan details the timeline from trigger to implementation for supply interventions in Annex 4 table 1 and for demand interventions Annex 3 table 2. However, the communication plan does not consider how much time is needed to carry out communications around both supply and demand actions.	It is not clear when the communication plan would be activated and what triggers the communication plan is linked to.	The company should consider how much time it will need to carry out communications around increasing supply or reducing demand. It should show that its communications plan has considered how long a drought intervention takes to implement and that it has enough time from the triggers to implementation to carry out communications with customers and stakeholders.		

Improvement 2 - Improve Strategic Environmental Assessment (SEA)

Area of issue	Issue and evidence	Implications	Information or changes required	SWS' Consideration of Response	Changes Required to Drought Plan
Issue 2.1 Relationship between the draft drought plan and other plans and programmes.	The Environmental Report considers the interaction between the draft drought plan and other relevant plans, this is detailed in Appendix B of Annex 12. However, this report states that the second generation of Shoreline Management Plans (SMPs) are currently in production and as a result of this, the relevant individual SMPs have not been looked at. The SMP2 cycle is complete and this text is outdated, therefore a review of these should have been undertaken to inform the drought plan.	The cumulative impacts of the drought plan and SMPs has not been adequately conducted. There is a risk that any interactions with or near coastal water bodies have not been adequately considered in the drought plan if the most up to date SMP's have not been reviewed.	The SMPs should be reviewed and referenced to provide a comprehensive overview of the interactions between these plans and the drought plan to sow how they have fed into the cumulative impact assessment.	We have reviewed the public domain versions of the Shoreline Management Plans (as of 30 May 2018) and have carried out assessments for any potential cumulative effects (adverse or beneficial) between these plans and the measures contained in the updated Drought Plan as a result of spatial proximity and/or hydrological and/or hydrographical connectivity. The findings of the assessment have been included in the updated cumulative effects section of the Environmental Report. The Shoreline Management Plans primarily provide a policy context for shoreline/coastal zone management and development; no cumulative effects were identified in respect of the policies set out in the plans and we identified negligible cumulative effects with some of the specific measures contained in several plans. These cumulative effects would need to be further reviewed against the latest version of the relevant Shoreline Management Plan if any of those options were needed in a future drought event, in dialogue with the Environment Agency, local planning authority and/or other relevant statutory bodies and stakeholders.	The SEA Environmental Report has been updated to reflect the content of the SMPs.
Issue 2.2 The link between water resources and groundwater quality	The Environmental Report does not adequately consider the links between water resources and groundwater quality within the EAR's. For example, not just linking deployable output restrictions to water levels and local ecosystems, but linking it to how much can be taken related to groundwater quality. This is particularly important where sources are classed as Safeguard Zones or candidate Safeguard Zones.	We cannot be assured that the risk to groundwater quality from any of the actions in the drought plan has been considered and addressed. This issue was highlighted in our comments on the SEA scoping report. The SEA highlights that the Environmental Assessment Reports will consider these risks where they are applicable as identified through the hydrogeological assessments (Annex 12 appendix A page 50). It is not apparent whether any risks to groundwater quality have been identified.	The main SEA should be updated highlighting any risks to groundwater quality from actions in the drought plan.	Effects on groundwater quality are considered as part of the Environmental Assessment Reports for each of the Drought Permit / Order options where relevant. We have updated the Environmental Report to more explicitly reference the conclusions of these assessments, and highlighting any risks to groundwater quality that the assessments have identified.	The SEA Environmental Report has been updated.
Issue 2.3 Review of options and alternatives	The SEA process has been used to influence the draft drought plan preferred options at various stages of the options appraisal process. Whilst the SEA process is clear, the plan does not show alternatives that have been identified in place of those options where the SEA has shown the environmental impacts are not acceptable. The drought plan could be more transparent as to what alternatives have been considered.	The options appraisal process is not transparent. It is not clear which options are alternatives to options identified as having significant environmental effects and the main differences between the alternatives. Consequently, it is difficult to understand the decision making process behind the preferred options in the draft drought plan.	The revised drought plan should document the alternatives considered in the options appraisal process, and the reasons given for why they were not taken forward. The revised drought plan should provide a narrative around the option appraisal process for transparency.	We have updated the Drought Plan (and particularly Annex 9) to set out more clearly how the SEA (and associated Habitats Regulations Assessment and Water Framework Directive assessments) was used to examine potential options for inclusion in the Drought Plan, and to set out the options that were excluded as a result. We have also provided further details on why some options have been included in the Drought Plan despite the SEA, HRA and WFD asssessments indicating the potential for some major adverse effects.	Annex 9 (The feasible set of drought options section) has been updated to provide the clarifiction and additional information required.

Improvement 3 – Provide further clarity on supply side actions during a drought

Area of issue	Issue and evidence	Implications	Information or changes required	SWS' Consideration of Response	Changes Required to Drought Plan
Issue 1.2 - How much each supply-side action will contribute to maintaining water supply.	The draft drought plan does not show how the estimates for supply- side actions have been derived. (See Annex 4 of the draft WCDP)	The phasing of supply and demand-side actions relies on an accurate estimate of the volumes supply side actions will contribute. We cannot be assured that the volumes associated with supply side actions are accurate and can be relied upon in a drought.	The data and assumptions made for supply-side actions should be detailed in the plan.	A brief explanation has been added of how the benefits of supply-side actions have been derived. Information is also provided in the Environmental Assessment Reports (EARs)	Explanation has been added to Annex 4 (Drought Permits and Orders (supply side) section)

Minor Issues identified

Area of issue	Issue and evidence	Implications	Information or changes required	SWS' Consideration of Response	Changes Required to Drought Plan
Issue 1 - Control curve diagrams to show chosen triggers and levels of operation.	Trigger curve diagram F and G in the draft drought plan are mixed up and F appears to be hidden (See appendix A of Annex 1 of the draft WCDP).		The company should ensure trigger curve diagrams F and G are correct and F can be seen in the plan.	SWS has updated the trigger curve diagrams in revised Annex 2.	Annex 2 has been updated as required.

Issue 2 - Drought management team structure.	The plan details a clear management structure in Annex 6. However, it is not clear if there is a communications lead who will be in charge of carrying out the activities described in the communications plan.		The company should make clear in the plan who the communications lead is.	SWS has updated Annexes 4 and 6 to clarify communications responsibilities.	Annexes 4 and 6 have been updated as required.
Issue 3 - Triggers/indicators to inform the decision that a drought has ended.	The plan should include more information on how it will identify the end of a drought and what indicators/triggers it will use to inform its decision that a drought is over. The plan needs to consider how it will take on board lessons learnt. The plan states that a combination of rainfall, water levels and river flows will be used to determine when the end of a drought has been triggered. But the plan only gives an example of Scotney Castle rainfall gauge. It does not show a worked example of how this combination of triggers and indicators would be used to. (See Annex 7).		The company should include how it will identify the end of a drought including the environmental triggers it will use. It should also detail how it will communicate the end of a drought to customers/stakeholders. A worked example would be useful of when the company would inform customers showing a combination of indicators moving back above the trigger levels.	Further information has been added to Annex 7 to explain how the end of drought will be informed by the full range of triggers that Southern Water uses to inform the drought stage it is in. More information has been provided to show how Southern Water will take on board lessons learnt in its post drought review, and a timetable is included. There is now a direct reference to Annex 2 where examples are included of how drought triggers would be used to track the de-escalation and ending of a drought event.	Annex 7 has been updated as required
Issue 4 – Reduce demand, data and assumptions.	The company have provided a technical note (See Annex 3 appendix A p28) based on analysis of the impacts of the demand restrictions that were applied by Southern Water during the 2005-06 drought. It is not clear whether this analysis has informed the estimates of demand savings detailed in the draft drought plan. It is important that the company clearly explains how it has derived the estimates for demand savings to demonstrate the estimated savings are accurate.		The revised drought plan should clearly reference any work the company has carried out including data analysis that it has used to inform the drought plan.	The analysis presented in Appendix A based on the demand restricitons that were applied during the 2005-06 drought has been used to estimate the demand savings from Temporary Use Bans and None Essential Use Bans in the Drought Plan. Table 2 of Annex 3 has been updated to make tis clear.	Table 2 of Annex 3 updated
Issue 5 – Phasing of drought actions.	Page 16-22 of the Non Technical Summary document details the stages of drought and actions the company will take. At stage 2: Drought, the plan details the company will put its regional drought strategy in place. There are no further details in the plan about the regional drought strategy.		The company should provide further details on its regional drought plan, such as an explanation of what it is and how it links to the drought plan.	The NTS was published as part of the consultation on the Draft Drought Plan. It is not the Drought Plan itself, and the NTS is not being updated and republished as part of the finalisation of the Drought Plan.	No changes required as a result of this comment.
Issue 6 – Testing the plan against a range of alternative drought scenarios.	It is not clear what the titles in the tables below the 'analysis of drought response' graphs in Annex 2 page 23 figures 9 onwards mean – the top column labels read "Jan 4507", "Jan 4508" etc.		Clarify what the column labels "Jan 4507", "Jan 4508" etc. mean.	This number relates to the stochastic drought year being displayed in the figure. The concept of stochastic years is introduced earlier in the text, and the stochastic year included in the figure title.	No further change proposed to the annex.
Issue 7 – SEA quality assurance checklist.	Some of the text in Table E1 in Annex 12 has been cut off mid sentence.		Ensure the text in table E1 of annex 12 can be read in full.	Table E1 of Annex 12 has been updated to ensure the text can be read in full	Table E1 of Annex 12 updated
Issue 8 – The timeline from trigger to implementation for drought permits/orders.	The technical summary of the drought plan (page 42) details the timeline from trigger to implementation for drought permits/orders is up to three months following TUBs (depending on the season). In the Section 20 Agreement the company has committed to a shorter lead in time in Western area. The plan does not detail how the different timelines from drought permit/order trigger to implementation will be communicated to customers. There is the potential for TUBs to be on for a longer period of time in Eastern and Central areas, if the timeline from trigger to implementation of drought permit/orders is longer.		The company should demonstrate it has considered how it will communicate the different timelines from trigger to implementation of drought permits/orders to its customers in different supply areas.	SWS has updated Annexes 4 and 6 to cprovide further explanation of the communications with customers.	Annexes 4 and 6 have been updated as required.

Appendix 5: Natural England representation and our response to the comments

The following table contains the Natural England representation, our response to the issues raised, and highlights how the Drought Plan is proposed to be changes in response.

NATURAL ENGLAND REPRESENTATION ON SWS DRAFT DROUGHT PLAN

Issue no	Summary of Response	SWS' Consideration of Response	Changes Required to Drought Plan
NE1	Significant additional agreement has been reached with regards to drought planning options in Hampshire as part of, and subsequent to, the Itchen, Candover and Testwood Water Abstraction Inquiry, in March 2018 (referred to throughout this response as 'the public inquiry'). This includes proposed material changes to the main Hampshire dDP options and their environmental assessment. Natural England commends Southern Water for its extensive and ongoing dialogue with Natural England during and post the inquiry. Agreement occurred after the publication of the draft Drought Plan (dDP) and therefore cannot be taken into account in Natural England's comments on the dDP consultation	Comments are noted.	Changes have been made to the draft Drought Plan and its Annexes to reflect the outcomes of the Hampshire Licences Inquiry and the related signed s20 agreement with the EA.
1: Habitats Regulations Assessment			
NE2	Regulation 9 of the Conservation of Habitats and Species Regulations 2017 (S.I. 2017/1012) requires every competent authority, in the exercise of any of its functions, to have regard to the requirements of the Habitats Directive. Regulation 10 places a duty on a competent authority, in exercising any function, to use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds. In addition, regulation 63 places obligations on competent authorities in respect of plans or projects likely to have a significant effect on a protected site. Water Companies have a statutory duty to prepare Drought Plans and so they are the Competent Authority for Habitats Regulations Assessment (HRA) of the dDP. In England, as a matter of policy, sites listed or proposed under the "Ramsar Convention on Wetlands of International Importance" receive the same level of protection as European sites. The HRA is presented as a separate document and the process of the assessment is simply and correctly set out in the dDP. The presentation of the screening is clear and each stage of the HRA is set out in separate documents. Generally, with a notable exception, the options for which likely significant effects cannot be excluded are selected for the more severe droughts, prioritising options with lesser environmental affects before those that impact Natura 2000 sites. Despite the documents helpful structure and design there are some significant deficiencies in the content of the HRA which are summarised below: * There must be an appropriate assessment of a plan or project unless, on the basis of objective information, a likely significant effect can be excluded. The HRA has not correctly identified all likely significant effects, therefore there are missing appropriate assessments. * Not all appropriate assessments are sufficiently evidenced to support the conclusions, even at the plan level, and therefore not all adverse effects and uncertainties are sufficiently identified. The language in some appropriate assessments is not always linked to the legislative tests, and in some cases is unclear. * Mitigation is insufficient to be certain to remove all adverse effects. * Evidence on ordering of dDP options does not ensure that less damaging alternatives are selected before options with potentially adverse effects have been selected in all cases. * Those adverse effects that have been identified do not have secured compensatory habitat measures and the compensatory habitat measures proposed within the dDP are insufficient to ensure the coherence of the Natura 2000 network. The influence the HRA has had on the dDP is described in Figure 2.1 (pg 6 HRA) which provides a diagram for the process of how the HRA has influenced the options selection within the dDP. Figure 2.1 states there are a list of options that have been rejected on environmental grounds and that the HRA has influenced the phasing of the options. However the HRA has failed to influence the outcome (options selections and development) fully and sufficiently, this is a result of the deficiencies in the HRA described above. Many, though not all of the above deficiencies, will be addressed by the material changes to the plan required as a result of the agreements made during, and subsequent to, the public inquiry. We will continue to work with Southern Water to help them address the remaining deficiencies in their HRA.	SWS has met with Natural England to discuss the issues raised in its representation, and agreed a series of actions as described in subsequent sections. Since SWS published the draft Drought Plan, many of the issues raised by Natural England have been discussed as part of the Hampshire Abstraction Licences public inquiry (relating to the lower River Test and lower River Itchen, plus the Candover Stream) and agreement reached. The agreed measures have been incorporated into a Section 20 Agreement between Southern Water and the Environment Agency. These discussions and the Section 20 Agreement have clarified a number of points in respect of the draft Drought Plan HRA which Natural England has raised in its representation where these relate to the Candover Drought Order and the Lower Itchen sources Drought Order. As a consequence, we have updated the HRA to reflect these agreements and clarifications. Other issues raised in the representation have been discussed with Natural England and we are continuing this dialogue as part of the Drought Plan process to ensure there is a secured agreement in place on each material issue. We have set out a programme of actions in the updated Drought Plan and HRA Report that we are committed to delivering and we will work closely with Natural England in its delivery.	Changes have been made to the draft Drought Plan and its Annexes to reflect the outcomes of the Hampshire Licences Inquiry and the related signed s20 agreement with the EA. Changes have also been made in response to the NE comments and the further discussion of these following receipt of the comments, as outlined below.
NE3	**1.1 River Itchen SAC** There are two options in the dDP which, in Natural England's view, cannot exclude on the basis of objective evidence a likely significant effect on the River Itchen SAC : * Candover augmentation scheme * Lower Itchen groundwater and surface sources drought order option The Candover augmentation scheme is a groundwater abstraction of up to 27 Ml/d (or 20 Ml/d between May and August) which will then be discharged into the main river Itchen with a small compensatory flow into the Candover stream (2Ml/d). This option was screened out of the HRA as no likely significant effect. Natural England does not agree with this conclusion, in our view a likely significant effect has not been excluded on the basis of scientific evidence and therefore an appropriate assessment must be undertaken. The Candover groundwater abstraction and augmentation discharge has the potential to act, in combination with other extant abstractions, at drought flows, to significantly affect the chalk stream habitats of the Upper Itchen SAC and the supporting habitats for the white-clawed crayfish and Southern damselfly. The Lower Itchen Sources drought order will lower the hands-off-flow at both Allbrook and Highbridge and at Riverside Park enabling continued abstraction at both Southern Water and Portsmouth water's abstractions on the Lower Itchen. Natural England agree with the conclusion in the Lower Itchen Sources appropriate assessment that adverse effects cannot be ruled out. Natural England have significant concerns about the appropriate assessment methodology applied to this assessment which does not have regard to the Favourable Condition Tables (FCTs) which underpin the conservation objectives. Natural England is also concerned about the limited and incorrect quantification of adverse effects included in the dDP HRA. The draft Environmental Assessment Reports (EARS) which were provided to the public inquiry for these options are subject to the same assessment deficiencies and therefore cannot be considered application ready. Much of Natural England's advice on impacts of these two options, and how Natural England believes they should be assessed, is already before the Secretary of State as part of the public inquiry documentation in our statement of case3 and proofs of evidence4. We have therefore not repeated that information here, but are happy to provide a separate note, if requested. The HRA goes on to set out a case that there are no alternatives to these options and that the measures need to go ahead for reasons of imperative overriding public interest (Regulation 64). Then a very short section on suggested compensatory measures is provided. The tests under Regulation 64 are a matter for the Secretary of State. Natural England does provide advice on the adequacy of compensatory habitat measures proposed under Regulation 68.	The issues raised by Natural England in relation to the River Itchen SAC have been extensively discussed as part of the aforementioned Public Inquiry process in spring 2018, and in conjunction with the Environment Agency. We have agreed that it is not possible to conclude with certainty that there is no potential for adverse effects on some of the designated features of the River Itchen SAC if the Candover Drought Order were to be implemented. We have reflected this position in the updated HRA Report through modifications to the screening conclusions and the inclusion of an Appropriate Assessment. We had already reached this conclusion for the Lower Itchen sources Drought Order in the draft Drought Plan. Dialogue with Natural England and the Environment Agency is progressing towards reaching an agreement on securing the compensation measures in respect of the Habitats Regulations for the Lower Itchen sources Drought Order and the Candover Drought Order. Once agreed these will be incorporated into the Section 20 Agreement in the form of detailed implementation timetables. Agreement has similarly been reached on a monitoring programme and a mitigation programme for these two Drought Orders, which are also included in the Section 20 Agreement. The monitoring and mitigation programmes and implementation timetables have been incorporated into the updated Environmental Monitoring Plan (Annex 5), as well as the updated Environmental Assessment Reports. The Appropriate Assessment of the Lower Itchen sources Drought Order option has been updated to include assessments against the relevant favourable condition tables that underpin the conservation objectives and to incorporate the agreed mitigation measures. We have updated the HRA Report in respect of the consideration of alternative options to demonstrate that the "no alternatives" test is met for the duration of the Drought Plan (2018-2023) for both the Lower Itchen sources Drought Order and the Candover Drought Order, cross-referenced to the updated Test Drought Permit and Drought Order and the other options considered in the Drought Plan and the draft Water Resources Management Plan 2019. We have issued the updated EARs for the Candover and Lower Itchen Drought Orders to the Environment Agency and Natural England alongside the publication of this Statement of Response in June 2018, with the aim of finalising these EARs by mid-July 2018 following review by these regulatory bodies. These EARs incorporate all of the relevant monitoring, mitigation and compensation measures included in the Section 20 Agreement, as well as other changes agreed through the 2018 Public Inquiry process.	HRA Report updated to reflect revised conclusions on Candover Drought Order through modifications to the screening conclusions and the inclusion of an Appropriate Assessment. The s20 implementation timetables have been included in the updated HRA Report. Appropriate Assessment of Lower Itchen Drought Order has been updated. HRA Report updated on alternatives. EARs have been updated and issued to the EA and NE alongside the publication of this Statement of Response
	Natural England's advice is the compensatory measures proposed in table 10.1 are insufficient in terms of quantum and are not secured and will therefore not maintain the coherence of the Natura 2000 series. During, and subsequent to, the public inquiry Natural England, the Environment Agency and Southern Water Services agreed that avoidance of an adverse effect on the integrity of the River Itchen SAC was not certain for either the Lower Itchen Sources nor the Candover augmentation scheme dDP options. An appropriate assessment of the Candover augmentation scheme is being undertaken and should be included in an updated HRA of an updated dDP. Compensatory habitat measures are under discussion but are not yet secured for both schemes that affect the River Itchen SAC. If all options remain in the dDP then compensatory measures must be secured, though Natural England has agreed that the implementation of the compensatory measures can be phased or triggered in such a way that the compensatory habitat is functional prior to the impact caused by the dDP options. The timetable and triggers of any phasing of delivery of compensation must be agreed with Natural England. Dialogue between the company, Natural England and the Environment Agency on the mitigation and compensation measures, as well as the emerging appropriate assessment for Candover augmentation scheme, is ongoing. To summarise, the dDP and HRA must be updated as follows: * The appropriate assessment of the Lower Itchen Sources drought order option should be replaced to include reference to the assessments against the relevant favourable condition tables that underpin the conservation objectives. The appropriate assessment methodology should be changed to reflect the more holistic approach to assessment discussed at the public inquiry (see Natural England proofs of evidence). * The dDP should be altered to include the full list of, and extent of, probable adverse effects identified on the River Itchen SAC from the Lower Itchen sources drought order option. This should include the consideration of alternatives and the altered drought order to ensure the no alternatives test is met in line with the agreements signed by the Environment Agency and Southern Water Services at, and subsequent to, the public inquiry. * The conclusions of the HRA should be altered for the Candover augmentation scheme to reflect the likely significant effect, and the emerging appropriate assessment for the Candover option should be included. The extent of any identified adverse effects should be included to inform the emerging compensatory habitat package. * Reference to the compensatory measures agreements should be included and these measures must be secured. * The above are subject to agreement of the SoS to the tests under Regulation 64 have been met and any amendments the SoS makes to the public inquiry agreements.		
NE4	**1.2 Solent Maritime SAC and Solent and Southampton Waters SPA and Ramsar site** Four options have been unable to exclude a likely significant effect, in combination, on the basis of objection evidence, on the Natura 2000 sites in the Solent on the north side of the Isle of Wight: * Lukely Brook WSW Groundwater sources * Caul Bourne WSW Groundwater sources * Shalcombe WSW Groundwater sources * Eastern Yar WSW augmentation scheme surface water source	We have met with Natural England to discuss the issues raised in its representation and have updated the HRA Appropriate Assessments for these drought order options as described below.	HRA Appropriate Assessments have been updated as below.
NE5	**1.2.1 Eastern Yar Augmentation Scheme Drought Order** The drought order option would authorise Southern Water to increase abstraction from the River Medina by reducing the Minimum Residual Flow (MRF) conditions at Shide and at Blackwater. This water is then transferred from the Medina to the River Eastern Yar for re-abstraction downstream near Sandown. This will reduce the freshwater flows from the River Medina into the Medina estuary, the dominant freshwater input, by 41% of the Summer Q95 (drought) flows and by 48% during winter, when flows are average (Q50 flows); these are classified as major impacts on freshwater flows into the estuary in the Strategic Environmental Assessment (SEA). The Medina estuary is the only estuary in the Solent that is co-limited by both nitrogen and phosphorous, meaning increases in either can result in a biological response. The water quality in the estuary is a reason for unfavourable condition for the SSSI that underpins the European and Ramsar sites. The drought order option has a medium risk during the summer/ winter period of increasing water quality impacts resulting from decreased dilution for the phosphorous in the Medina estuary (e.g. Table 6.32 of dDP HRA). The HRA dismisses any changes to the benthic fauna as a result of reduced freshwater flows as minor due to the drought altered baseline and because of the already impacted baseline due to extant water quality impacts. Natural England does not agree with this assertion. The drought order will exacerbate already stressed natural processes (freshwater flows and water quality into an estuary) during drought, which can combine with the effects of the dDP options. In addition this assertion ignores the requirement to promote restoration of favourable conservation status in the conservation objectives against which the appropriate assessment should have been conducted. This restoration requirement has been ignored in the appropriate assessment. The HRA goes on to confirm the major reduction in the freshwater flows may alter the supporting processes on which the SAC and SPA/Ramsar habitats rely but assesses this as 'low magnitude'. Natural England's advice is there is insufficient evidence provided to reach the conclusion on the magnitude of impact and therefore reasonable scientific doubt remains. There is insufficient information to be certain of no adverse effects on integrity for either the SAC or the habitats supporting the SPA/Ramsar site from the combined dDP supply options.	We have updated the Appropriate Assessment to address the comments raised by Natural England. The available Environment Agency data presented in the Environmental Assessment Report indicates that the invertebrate community present is more commonly associated with a marine environment than an estuarine environment, and therefore less reliant on the freshwater flow input which would be reduced by the Drought Order. To support the assessment, we have included further discussion regarding the links between the littoral sediments and their benthic invertebrate communities, and how changes to water density (salinity and/or temperature) and nutrient concentrations can alter these, as well as providing additional details on the drought water quality risks (principally, nitrogen and phosphorus). Following discussions with Natural England, we have incorporated additional mitigation measures to further protect the designated features, along with a timetable for their implementation. This includes catchment management measures (building on the Isle of Wight Catchment Management Plan) to help reduce nitrogen and phosphorus diffuse runoff to the Medina estuary, thereby improving the drought resilience of the designated habitat. We are also carrying out work to reduce phosphorus loading from our wastewater treatment works, and a number of schemes are included in WINEP3 for implementation in AMP7. We are continuing to discuss the updated Appropriate Assessment with Natural England and associated proposals for mitigation measures. As set out in the Draft Drought Plan, further baseline monitoring will also be carried out to support an application-level Appropriate Assessment should it be necessary to apply for the Drought Order, as well as to refine the mitigation package where appropriate.	The Appropriate Assessment has been updated and further information included on mitigation measures following discussions with NE.

NE6	**1.2.2 Shalcombe and Caul Bourne WSW Drought Order Options** Both Shalcombe WSW and Caul Bourne WSW drought order options involve increased and/or prolonged abstraction from the chalk ground water during a severe drought. Caul Bourne reduces the Minimum Residual Flow (MRF) requirement in the Caul Bourne from 4l/s to 2l/s and removes the abstraction constraint that limits the abstraction. Additional groundwater abstraction may reduce flows into the Caul Bourne river, which is the largest freshwater flow input into Newtown Estuary (through Shalfleet Creek). The freshwater flow inputs into the Newtown Estuary via Shalfleet Creek at Q95 (drought flows) are estimated to be reduced by 0.4Ml/d due to the Shalcombe WSW drought order option which is approximately 30% of the already drought-impacted freshwater flows (1.38Ml/d). The freshwater flow inputs from the Shalfleet Creek into the Newtown estuary at Q95 (drought flows) are reduced by 0.61Ml/d due to the Caul Bourne WSW drought order option which is approximately 44% of the already drought impacted freshwater flows (1.38Ml/d). The appropriate assessment states these reductions need to be considered in light of the tidal regime. This is simply not correct. The flow reduction should be compared to the drought flows without the drought order since this is the impact of the drought order rather than the drought itself. The context of the assessment should, as a matter of law, be considered in light of the conservation objectives. Though the combined effects of the concurrent use of these two orders has been assessed no figures are given for the joint reduction in flow in section 6.7 of the HRA, but instead refer to a study that is not included in the HRA. Natural England recommends that the combined reduction in flow of these two drought orders must be provided in any revised HRA of the dDP. There has been an attempt to look at the conservation objectives and use the underpinning information in the conservation advice and to compile the existing data in the appropriate assessment. It is disappointing that the data compilation and modelling on freshwater flow impacts has not been taken further to do a site based assessment. For example, it would have been possible, with the data available, to produce a habitat map showing approximately the wetted area that will be reduced by the combined drought order operation in Shalfleet creek and a description of the structure and function of Shalfleet creek in the saltmarsh creek system as a whole. This would help to substantiate statements on the magnitude of impacts described in tables 6.23 – table 6.24 of the HRA. Statements on magnitude of impact in the HRA are inconsistent with the SEA methodology (Table 4-1) and with those in the SEA Environmental Report (ER). The SEA matrices have identified a moderate adverse effect on the water quality and ecology of the Caul Bourne and on habitats and species in the Newtown Estuary. In the SEA methodology impacts matrix a moderate adverse effect on a sensitive or important receptor should lead to a conclusion of major adverse impacts. These options are identified as not having a major adverse impact nor having an adverse effect upon integrity. Though the baseline evidence gap on Ramsar features presence and distribution in Shalfleet creek is acknowledged (Pg 91, HRA) this is not taken further into the assessment nor are there clear strategies for addressing this baseline gap. Natural England agree there is a need to strengthen the baseline data with monitoring as acknowledged in section 6.4.6 of the HRA. Natural England welcome the limited monitoring suggestions for these drought orders but the monitoring plan is inadequate for filling these gaps. There is no information in the monitoring plan on surveying for baseline Ramsar site features in the impacted downstream locations nor is there information on monitoring for prey availability for birds both before and after drought order use to see if the options are recoverable. Shalfleet Creek is an important area for a number of the SPA and Ramsar birds, this is reflected in the bird count data presented in the HRA. The HRA does not fully recognise the widely accepted importance of freshwater flows to benthic fauna assemblage and to birds feeding. Natural England welcomes the consideration of the interactions of the dDP options effects with other actions in drought (such as mill operation). However these are not in the control of Southern Water and therefore no mitigation measures are suggested for the drought order option impacts.	We have updated the Appropriate Assessment to address the comments raised by Natural England. We have included the flow data presented in the accompanying Environmental Assessment Report into the Appropriate Assessment report, and further explained the reasoning for concluding that there would be no adverse effects on site integrity, incorporating more information on the structure and function of Shalfleet Creek that we considered in carrying out our assessment, and more information as to the spatial nature of the effects within the estuarine system. We have added further details about the relative importance of freshwater and tidal processses to the mudflats and associated benthic fauna assemblage that was previously set out in the Environmental Assessment Report. We have also included further discussion regarding the links between the littoral sediments and their benthic invertebrate communities, and how changes to water density (salinity and/or temperature) and nutrient concentrations can alter these habitats and fauna, and the implications for bird food supply. Following discussions with Natural England, we have incorporated additional mitigation measures to further protect the designated features, along with a timetable for their implementation. This includes catchment management measures (building on the Isle of Wight Catchment Management Plan) to help reduce nitrogen diffuse runoff to the Newtown estuary, thereby improving the drought resilience of the designated habitat. We are continuing to discuss the updated Appropriate Assessment with Natural England and associated proposals for mitigation measures. Mitigation measures were set out in Annex 5 of the Draft Drought Plan and in the Environmental Assessment Report; this included actions to manage the controlled flows to the estuary by the mill operator in dialogue with Natural England and Environment Agency. We have now included all of the mitigation measures into the Appropriate Assessment and set out more clearly the benefits that they would achieve in a drought. As set out in the Draft Drought Plan (Annex 5) and the accompanying Environmental Assessment Report, further baseline monitoring will also be carried out to support an application-level Appropriate Assessment should it be necessary to apply for the Drought Order. This includes a range of estuarine surveys which will enable more site-specific habitat risk mapping to be produced and improved understanding of the benthic fauna population. We also set out the need for additional bird surveys relating to the designated species in the SPA and Ramsar sites. We have now incorporated this monitoring plan information into the HRA Report, rather than referencing other documents. The SEA has been updated to reflect a major adverse effect in respect of the relevant SEA objectives for biodiversity, flora and fauna and for water quality. The HRA legal tests for impacts on site integrity and the SEA methodology for the assessment of residual effects after mitigation measures are different. A conclusion of major adverse residual effect in the SEA does not necessarily imply a conclusion of adverse effects on European site integrity under the HRA; the SEA considers all of the biodiversity, flora and fauna features that may be affected by the drought order whereas the HRA only considers the narrower set of designated features and underpinning habitat. We have made it clearer in the SEA text the key findings of the HRA Appropriate Assessment and how these findings have informed the SEA.	The Appropriate Assessment has been updated, as has the related EAR. Further details of monitoring and mitigation measures have been included in the EAR and Annex 5 of the Drought Plan. The SEA has also been updated to include the additional information.
NE7	**1.2.3 Overall Shalcombe, Caul Bourne, Eastern Yar and Combined effects** The conclusion for the combined effects (section 6.9) simply assumes that, as the two estuaries do not overlap the impacts on the two parts of the European sites cannot combine. The overall reduction in available food sources for the populations of birds in the SPA and Ramsar site which, use both estuaries is acknowledged but it is dismissed as of "low magnitude". There is no attempt to quantify the combined effects on the available food resources, identify the most likely impacted species common to both estuaries, nor to set in the context of food scarcity / relative abundance in the drought baseline. There is no attempt to assess the combined effects of the drought order impacts with the impacted water quality baseline nor how this exacerbates the drought order option impacts. There is no recognition that flying further from a preferred feeding location has an energy cost. Combined with the other missing analysis and interpretation of baseline information Natural England's advice is there is currently insufficient information to be certain there will be no adverse effect upon integrity of the Solent Maritime SAC and Solent and Southampton Waters SPA/Ramsar for these drought order options, in combination. Natural England advises that the baseline is strengthened in line with the monitoring plan, with recommendations made above and also with additional information related to Ramsar features distribution. The combined impact assessment should be updated to include quantified assessment of impacts with maps of habitat likely to be impacted and links to data on bird feeding and prey availability. The HRA and SEA have ruled-out combined effects with other plans or projects as there are no other projects to be delivered in the same timetable as the dDP that affect the Solent European sites. However there are other projects in Southern Water's draft Water Resources Management Plan (dWRMP) that will affect the Hampshire part of the Solent European sites in particular the SPA/Ramsar site, for delivery before 2030. These options will take a number of years to construct, in particular the pipelines and any associated infrastructure and combined effects with the current dDP are therefore theoretically possible. It would be helpful if the construction timetable for the Fawley desalination options and all pipelines in or near the Solent European sites could be provided to confirm no overlap with the dDP timetable. It would also be helpful if a number of the cut and paste errors in the HRA matrices, which refer to the incorrect estuary are corrected in the updated HRA. Natural England recommends additional mitigation of the combined effects of these options is required. This could include catchment measures to help address the underlying water quality issues for the Newtown and Medina estuaries and to help enhance the environments resilience of these estuaries to drought and reduce the exacerbation of drought impacts by dDP options.	Following discussions with Natural England, we have incorporated additional information in relation to the in-combination effects of the three drought orders into the Appropriate Assessment, taking account of the additional information included for each individual drought order (as explained above). We have included the combined monitoring activities in the in-combination effects section of the Appropriate Assessment, which include survey work to enable mapping of habitat risks as recommended by Natural England. We have included information on the assessed cumulative benefits of the identified mitigation measures for each drought order (as set out above) that would further protect the designated features, along with a timetable for their combined implementation. We are continuing to discuss the updated Appropriate Assessment in-combination assessment with Natural England and associated proposals for mitigation measures and monitoring activities in relation to the potential cumulative effects. We have included more information on the cumulative, in-combination effects assessment with the Southern Water draft Water Resources Management Plan 2019 strategy that may affect the designated sites, including the draft timescales for construction of relevant pipelines, coastal desalination and water reuse plants to confirm that there will be no adverse cumulative effects with the drought orders during the period of the Drought Plan (2018-2023). It should however be noted that the draft Water Resources Management Plan 2019 is still in draft form and may change in light of the consultation process that has recently concluded. We have corrected the identified text errors in the updated HRA Report.	The HRA Report has been updated to provide the additional information referred to.
NE8	**1.3 South Wight Maritime SAC** **Sandown emergency desalination** The Sandown emergency desalination plant option discharges into the South Wight Maritime SAC at Sandown bay on the Isle of Wight. This option would require a new abstraction pipeline, a long sea outfall with diffuser, screened intake and pumping station on the coast and temporary supply pipelines. Though in various supporting documents of the dDP it is stated the discharge will be through the existing wastewater treatment works long sea outfall. The intake and the outfall will be within the South Wight Maritime SAC. South Wight Maritime was designated as a SAC in recognition of its pristine sea cave systems and outstanding reef marine habitats including chalk, limestone, sandstone, clay/mudstone, greensand bedrock and boulder reef. South Wight Maritime SAC is also the only known location of subtidal chalk caves in the UK. These sea caves are of ecological importance with many hosting algal communities which are restricted to this type of habitat. The different assessments of this option are inconsistent in their reporting of its impacts. The HRA has identified no likely significant effects of this option on the SAC but in the modelling results (from the Water Framework Directive report) estimates a localised impact on the benthic habitats but acknowledges that further assessment is required. The SEA notes there are potential impacts on the Bembridge recommended MCZ. Since the Bembridge rMCZ is within the SAC Natural England would like clarification of the why the overlapping SAC features are not also significantly affected. It is unclear as to why, with the level of uncertainty on the discharge dispersion, an identified need for further work on modelling, and impacts identified on overlapping designations, how the HRA was able to exclude, on the basis of objective evidence, a likely significant effect on the South Wight Maritime SAC. Natural England's advice is there is insufficient information to exclude on the basis of objective evidence a likely significant effect of this option.	The Marine Conservation Zone (MCZ) assessment, WFD assessment and HRA are aligned in their conclusions and use the same evidence base: whilst there are some potential adverse effects on the marine environment overall within the MCZ, the effects on the designated features of the South Wight Maritime SAC specifically have been assessed (after consideration of the nature of the discharge) as not leading to any likely significant effects on the SAC. We consider that the objective evidence available is of sufficient detail to reach this conclusion, and we have updated the HRA Report with further evidence that we used to support this conclusion. For the HRA Stage 1 screening, we used the details of the existing outfall for the Sandown wastewater treatment works (the desalination plant brine discharge will be blended with the treated effluent of the wastewater treatment works), the dispersal characteristics of the existing outfall and the habitat mapping provided in the Regulation 33 advice for the South Wight Maritime SAC (showing the locations of the offshore habitats covered by the SAC) . We examined the likely radius of the effect of the discharge which concluded that the impacts of the discharge would be limited to ~33m radius from the outfall. Based on this information, and using the habitat mapping provided in the Regulation 33 advice for the South Wight Maritime SAC, it was concluded that the outfall would not be discharging in close proximity to the subtidal faunal turf communities. We will provide the underpinning evidence and discuss these findings further with Natural England.	The HRA Report has been updated with further information to support the conclusion of no likely significant effect.
NE9	**1.4 Arun Valley SAC, SPA and Ramsar site** There are two drought options screened against this suite of sites; North Arundel ground water and Pulborough surface water options. Natural England agrees with the screening of North Arundel option as excluding a likely significant effect on the European sites. The Pulborough surface water options involves a staged reduction in the MRF to allow continued abstraction on the river in summer and winter. The options lower the MRF progressively with more severe droughts. Natural England concurs with the screening of no likely significant effects for the Pulborough option but only for the lifetime of this dDP, as the flood bank management is unlikely to change during the lifetime of the dDP. Any future changes that may come forward as a result of the current review of the flood bank management in the Arun Valley must be taken into account in future drought and resilience planning. Natural England recommends that the importance of the Pulborough schemes in future dDP are reviewed as part of the dWRMP to ensure this option remains sustainable in the long term or to secure an alternative if required.	No changes have been made to the revised Drought Plan, but the comments are noted in respect of the Water Resources Management Plan and future Drought Plans.	none
NE10	**1.5 European Sites along the River Medway** The main cluster of water dependant Natura 2000 sites in the Medway catchment are found at the Estuary and around the mouth of the Estuary including Medway Estuary and Marshes Special Protection Area (SPA) and Ramsar site and Thames Estuary and Marshes SPA and Ramsar site. There are a number of options which influence the River Medway and its tributaries these include: * Weirwood Reservoir Scheme * River Medway Schemes (stages 1 to 4) * Sheerness emergency Desalination Scheme Natural England concurs with the Weirwood dDP option screening of being able to exclude a likely significant effect alone and in combination.	Comments noted in relation to Weir Wood Reservoir. No changes have been made to the revised Drought Plan HRA Report in relation to this Drought Permit option.	none
NE11	**1.5.1 River Medway Scheme** This is a staged option that progressively lowers the MRF that restricts abstraction on the river Medway, the early stage of which are comparatively benign. Abstraction in winter drought is also allowed in these options. The later stages also progressively reduce the amount of water released from the reservoir into the River Medway. From stage 2 onwards reductions in the freshwater flows into the Medway Estuary are detectable becoming moderately adverse by stage 4. The SEA identified moderate magnitude of impact on Medway Estuary and Marshes SPA, SSSI and Ramsar sites and a moderate impact on Elmley NNR and a number of SSSIs in the river Medway and LNRs (see section 2 below) and a moderate impact on the Medway Estuary MCZ. Despite this the HRA has screened the River Medway Scheme as no likely significant effect. The reason given for lack of combined effects are the significant inputs from the creek and freshwater marshes system into the estuary. However in drought the input from the creek system will be very much reduced. It may be the information on modelling was sufficient to show the reductions in freshwater from the River Medway scheme does not stretch to the areas where salinity may be impacted by the Sheerness Emergency desalination option, however this information has not been provided to Natural England. Further information is required to substantiate the screening decision and to support the assumptions made in relation to the combined effects with the Sheerness emergency desalination plant, though the latter may be more likely to impact the Thames Estuary and Marshes SPA and Ramsar site, the precise combined impacts are unclear. In Natural England's view there is insufficient evidence presented to exclude a likely significant effect on the basis of objective evidence of the later stages of this phased option on the Medway Estuary and Marshes SPA and Ramsar site, in combination.	We have updated the HRA Report to provide additional evidence that we used to underpin our conclusions of no likely significant effects on the European sites when the later stages of the phased River Medway Scheme Drought Permit/Order and the Sheerness emergency desalination scheme are considered in-combination. The HRA screening assessment was based on the hydrological and estuarine assessment contained in Appendix B of the Environmental Assessment Report for the River Medway Scheme, and summarised in Appendix A of the HRA Report. The assessment concluded that although there would be a moderate impact to the influx of freshwater at the River Medway tidal limit (Allington Lock), the effects would be most pronounced in the upper estuary, with the effects dissipating downstream such that they would be negligible downstream of Hoo Ness due to the greater influence of the tidal regime from this point. The assessment also concluded that there would be a low risk to water quality in the upper estuary, upstream of Hoo Ness, and a negligible impact on the geomorphological processes. The Sheerness Emergency Desalination option is located ~13km further downstream from Hoo Ness. As the tidal influences are the dominant controlling hydrological process downstream of Hoo Ness, no in-combination likely significant effects on the European sites are anticipated. Elmley National Nature Reserve is adjacent to The Swale waterbody and therefore will not be impacted by the River Medway Scheme - we have made this conclusion clearer in the updated SEA Environmental Report.	The HRA Report has been updated with the additional information referred to.
NE12	**1.5.2 Sheerness emergency desalination plant** The European Union guidance on assessment of plans or projects recommends the first part of an appropriate assessment is a full description of the plan or project being assessed. The precise details of the emergency desalination have not been developed and only outline design assumptions are provided. These assumptions include avoiding disturbance impacts to the SPA and Ramsar site birds but very limited detail for how this will be done, is provided. It is also unclear how offsite use by birds has been considered. The main plant will be within the industrial area but the location of the intake and discharge point are not described and cannot be in the industrial area as this does not include the marine environment all of which is designated (though some as MCZ only see section 2 below). It is assumed (in dDP) the intake would be located towards the mouth of the Medway Estuary near the Port of Sheerness with the brine discharge pipeline located a distance downstream. It is unclear where and in which of the many designations that surround the estuary the hypersaline discharge will be, though it is narrowed down to the Medway Estuary and Marshes SPA and Ramsar site or Thames Estuary SPA and Ramsar sites in table 6.6. of the HRA. Dispersion modelling of the hypersaline discharge (which appears to have been undertaken but is not included in the supporting documents) information on temperature and scour are absent from the dDP. There is insufficient information to be certain of the dDP conclusion of no adverse effect upon integrity. Please also see additional likely effects of this scheme on the Medway Marine Conservation Zone (Section 2.3).	The details of the desalination scheme are provided in accompanying documents to the Draft Drought Plan, but we have updated the HRA Appropriate Assessment to include more information on the scheme and we will provide the more detailed restricted information to Natural England to assist with reviewing our assessment. We have updated the Appropriate Assessment to include details of the evidence used to underpin the assessment and will provide accompanying assessment maps to Natural England as part of the restricted information, showing the plant location and discharge location and the likely dispersal characteristics. We have included more details on the mitigation measures that would be put in place during construction to protect designated bird species.	The HRA Appropriate assessment has been updated to provide more information on the scheme and our assessment of it, and mitigation measures that would be put in place during operation.
2: Strategic Environmental Assessment			
NE13	The European Commission Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" is known as the 'SEA Directive'. It requires "an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment" (EC, 2001; Article 1). The provision is explicitly applied to plans made for "water management". The influence the SEA has had on the plan is described in figure 7.1 (pg 8, SEA) which provides a diagram for the process of how the SEA has influenced the options selection within the dDP. Figure 7.1 states there are a list of options that have been rejected on environmental grounds and that the SEA has influenced the phasing of the options. The assessment of the severity of impacts in relation to sensitive and high value environmental receptors is set out in figure 4-1 of the SEA Environmental report (ER). In this table medium or high magnitude effects on a high value receptors should be classified as major adverse. European sites, SSSI and MCZs are high value receptors, yet some medium magnitude impacts on designated sites have been identified as moderate or even minor adverse. The SEA should be amended so that the outcome tables reflect the significance of effects and the value of the receptor. Most seriously some European sites where some medium adverse effects are identified have been assessed as no likely significant effect (see section 1 above).	We have reviewed the SEA and made some amendments in response to this feedback. The SEA however assesses the overall effects on the environment and there is not necessarily a direct relationship between moderate or major adverse effects on biodiversity, flora and fauna and the HRA screening or Appropriate Assessment conclusions which are only assessing effects on the designated features and supporting habitats of the European site(s) or Ramsar site(s) located within a wider spatial area of affected environment. We have updated the SEA to reflect the latest HRA conclusions and consider the updated significance of effect conclusions in the SEA are consistent with the HRA conclusions.	The SEA has been updated to reflect the HRA Report conclusions

NE14	**Baseline evidence** The recognition in the dDP monitoring plan of the need to fill evidence gaps in relation to designated sites throughout the plan period is welcome. The evidence gaps and uncertainty of the options will make Southern Waters drought plan options less certain than a more well evidenced plan. This lowers the likelihood of obtaining drought orders or permits and therefore lowers the resilience of the plan. Resolving the baseline evidence gaps should be an objective of this drought planning period.	We have set out timetables in Annex 5 of the revised Drought Plan for carrying out baseline monitoring, adopting a prioritised approach taking account of the likelihood of requiring a particular drought plan measure and the effects on the environment and designated sites and features. The HRA also sets out specific timetables for certain European sites. We are committed to working closely with Natural England and other bodies to deliver the monitoring programmes over the coming 5 years of the drought planning period. We will also be carrying out other monitoring programmes within the same locations as part of investigation programmes and catchment management activities over the same timescales.	Additional information on the baseline monitoring has been included in the timetables in Annex 5.
NE15	**2.1 Sites of Special Scientific Interest (SSSIs)** Section 28G of the Wildlife and Countryside Act 1981, as inserted by section 75 of and Schedule 9 to the Countryside and Rights of Way Act 2000, places a duty on public authorities, including water companies, to take reasonable steps consistent with the proper exercise of their functions to further the conservation and enhancement of SSSIs. These duties are mirrored in the general recreational and environmental duties placed on relevant undertakers in the Water Industry Act (1991) as amended. WISER5 (pg 29) sets out the expectations for delivery of these obligations, companies are expected "to contribute to maintaining or achieving SSSI favourable condition both on [companies'] own land and in the catchments [companies] manage or impact on". The rate of improvement going forwards is set out in the Defra 25 Year Environment Plan which aims to restore "75% of our one million hectares of terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term". There are a number of drought plan options that have the potential to impact SSSIs, some of which are described below.	Comments noted.	none
NE16	**2.1.1 River Itchen SSSI** The adverse effects on in-channel features of the River Itchen SSSI are covered in the HRA section 1, above. However the SSSI is significantly larger and has a number of additional features to those within the SAC. Most notably both the Lower Itchen Sources and the Candover augmentation scheme draft DP options have the potential to harm the SSSI wetland habitat that is adjacent to the river, in combination. The SEA has screened the Candover surface water augmentation scheme as minor adverse or minor beneficial effects in the SEA on biodiversity overall which includes the SSSI. The mitigation for this option is described as "best practice construction techniques". Natural England does not agree with this conclusion. In our view the SEA screening does not correctly identify the significant adverse impacts of the Candover augmentation scheme nor the wider impacts of the Lower Itchen Sources supply options on the biodiversity in the Itchen Valley (including the terrestrial wetland sections of the SSSI). The dDP and SEA should be rewritten to include the option description, mitigation and monitoring packages agreed at and subsequent to, the public inquiry for this dDP option.	We have updated the SEA Environmental Report to take account of the agreement reached as part of the Public Inquiry process in respect of the potential effects of the Candover Drought Order and Lower Itchen sources Drought Order and the need for further monitoring to reduce uncertainties surrounding the magnitude of potential effects. The mitigation and monitoring packages for the River Test and River Itchen (including the Candover Stream) agreed as part of the Section 20 Agreement have been incorporated into the Draft Drought Plan (Annex 5) and referenced in the updated SEA Environmental Report. We have issued updated Environmental Assessment Reports for the River Test Drought Permit and River Test Drought Order to Natural England and the Environment Agency for review.	The SEA has been updated to take account of the outcomes of the Hampshire Licence Inquiry and the content of the s20 agreement.
NE17	**2.1.2 River Test SSSI** Test Surface Water Drought Order option This option would allow reduction of the abstraction licence hands-off-flow to 200 Ml/d. The dDP SEA matrices on the River Test surface water abstraction proposed supply options concluded negligible adverse effects and minor beneficial effects on biodiversity flora and fauna and water. Natural England does not agree with these conclusions. The abstraction assessment has referred to velocity and a limited number parameters and has not had regards to Natural England's Common Standards Monitoring Guidance (CSMG) requirements, in particular those on flow. Natural England's advice on impacts of this supply option on the River Test and how Natural England believes these impacts should be assessed is already before the Secretary of State as part of the public inquiry documentation in our statement of case6 and proofs of evidence7. Natural England's advice is that this option is unable to avoid significant harm to the River Test SSSI. The SEA should be rewritten to identify the likely significant adverse effect of this option on the biodiversity flora and fauna and on the water environment. The dDP and SEA should be rewritten to include the option description, mitigation and monitoring packages agreed at, and subsequent to, the public inquiry for this dDP option (which was split into permit and order options during the public inquiry). The draft EAR for this options submitted to the public inquiry should also be rewritten to enable this option to be 'application ready'.		
NE18	**2.1.3 Water Dependant SSSIs in the Medway Catchment** There are three options that could affect the water dependant designated sites in the Medway catchment; Weirwood reservoir, the River Medway surface water scheme and Sheerness emergency desalination plant. The potential combined effects of the Sheerness Emergency desalination plant on designated sites is covered in section 1,above and in 2.3.1, below. It is not covered further here.	No comment required	none
NE19	**Weirwood reservoir surface water source** This option reduces the statutory compensation flow from the reservoir during drought. It only impacts the top of the river Medway, and is relatively benign in its impacts on designated sites compared to other options within the dDP.	Comment noted. No changes have been made to the revised Drought Plan.	none
NE20	**The River Medway Surface Water Scheme** This River Medway surface water scheme and its combined impacts on the European sites in the Medway Estuary (and their underpinning SSSIs) is described in section 1.5 above. However not all water dependant designated sites or their features are part of the European site complex. Stage 4 of the scheme would have a moderate magnitude of impact on Elmley NNR, and a number of SSSIs and LNRs including Holborough to Burham Marshes SSSI and River Beult SSSI based on the SEA matrix assessment. The impacts on the freshwater and transitional biodiversity in the Medway catchment begin as early as stage 2 of the drought option including impacts on lamprey and European eel with brown trout and bullhead impacted by stage 4. The SEA matrices identifies a residual major adverse impact of this scheme on biodiversity flora and fauna (including designated sites).	No comment required	none
NE21	**Holborough to Burham Marshes SSSI** This SSSI lies along the flood plain of the transitional waters of the River Medway. The site includes: standing open water and canals, reedbeds and lowland neutral grassland. A reduction in freshwater from the River Medway scheme may cause effects for this transitional site but the extent of the connectivity with the main river channel is unclear. Natural England recommends that the baseline monitoring for this option includes clarification of the extent of the connection and reliance upon freshwater from the main channel for this SSSI to help clarify the likely impacts of the River Medway Surface water scheme.	The Environmental Monitoring Plan (Annex 5) of the Drought Plan includes the need to carry out this monitoring to improve the baseline understanding of the connectivity of the SSSI to the main river channel. We will work with Natural England staff in carrying out the monitoring and to discuss the operational management of the site.	none
NE22	**River Beult SSSI** This river SSSI is notified as a clay river and for a number of aquatic and riparian macrophytes. Stage 1 of this drought option will result in an extension of low flows in the SSSI and a slight reduction in the wetted with but impacts on the minimum flow are considered unlikely. The potential effects of the later stages of this option are unclear and may, when the option is used in the summer months, be significantly adverse. Not only could the later stages of this drought option extend the period of low flows but could also decrease the wetted width and increase sedimentation The impacts on the macrophyte community associated with the channel and the submerged macrophytes have the potential to be greater as a result of the impact of decreased flow in combination with potential water quality related impacts. Natural England recommends that the baseline information for the likely impacts of the later stages of this option is improved during the dDP period. Mitigation options for the later dDP options could include catchment schemes in the River Beult or river restoration to help improve the resilience of this SSSI to drought and reduce exacerbation of drought and water quality impacts by these dDP options.	We have proposed a timetable in the revised Drought Plan for carrying out baseline monitoring of the River Beult and SSSI which we will discuss and agree with Natural England and the Environment Agency. Similarly we have set out a timetable in the revised Drought Plan for further developing and agreeing mitigation measures set out in Annex 5 of the Drought Plan, including in relation to River Beult SSSI.	Updated information and timetable included within Annex 5 of the Drought Plan.
NE23	**2.2 Impacts on landscape** Relevant Authorities (including water companies as a Statutory Undertaker) are to have regard to the purposes of National Parks (Section 11A (2) of the 1949 Act) and the similar duties towards Areas of Outstanding Natural Beauty (AONBs) (Section 85 of the Countryside and Rights of Way Act 2000) and the Broads (Section 17A of the Norfolk and Suffolk Broads Act 1988). Duties to further the natural beauty and rural amenity are also included within the general recreational and environmental duties placed on relevant undertakers in the Water Industry Act (1991) (as amended). The supply options in the Southern Water Services' dDP alone have a limited potential to permanently impact on protected landscapes and offer little or no opportunities to enhance the landscape. Most supply side options have temporary, sometimes significant impacts on recreation which is often linked to protected landscapes. However, in combination with options in other plans, most notably the companies draft Water Resources Management Plans (dWRMP), some options have the potential to impact protected landscapes (AONBs and National Parks) should they go forward. Cumulative landscape impacts should be assessed before the final plan is submitted to ensure mitigation is possible, and mitigation should not be left to a piecemeal approach at the project stage. Natural England recommends that Southern Water Services works with neighbouring companies and with Protected Landscape Officers to produce a cohesive Protected Landscape Mitigation Strategy for each AONB and/ or National Park which could be affected by multiple schemes in the lifetime of the dDP and dWRMP. These should be completed before implementation of the plans, and should address any cumulative landscape impacts which could occur.	We have updated the SEA Environmental Report cumulative effects section to include further commentary on cumulative landscape effects. However, the measures contained in the Draft Drought Plan do not lead to the permanent construction of any assets - all assets required are temporary in nature and therefore would not have permanent landscape or visual amenity effects. We have identified a small number of potential cumulative effects, but these would only materialise if a drought arises over the 5 year period covered by the Drought Plan (2018-2023). We agree that the revised Water Resources Management Plan (WRMP) 2019 should consider further the cumulative effects on the landscape between Southern Water's WRMP schemes and those included in neighbouring water company plans; we will also discuss this with our neighbouring water companies through the Water Resources South East (WRSE) group .	SEA has been updated to reflect the information referred to.
NE24	**2.3 Marine Conservation Zones** Section 125 of the Marine and Coastal Access Act (MCAA) (2009) applies a general duty to public authorities to exercise their functions in a way that best furthers the conservation objectives of a Marine Conservation Zone (MCZ) or, where that is not possible, least hinders them. There is also an obligation to notify Natural England where a public authority's function might significantly hinder the MCZ's conservation objectives or significantly affect an MCZ. The relevant public authorities must take account of this duty in the assessment of the water company statutory plans including the dDP. The Defra 25 Year Environment Plan states "We will achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife this includes[...] * Reversing the loss of marine biodiversity and, where practicable, restoring it, [....] * Increasing the proportion of protected and well-managed seas, and better managing existing protected sites." The marine and coastal environment is disproportionately impacted by the proposed dDP supply options, in particular the emergency desalination options but also the reduction of freshwater flows to estuaries, saltmarshes and mudflats (see designated sites impacts above). There is very little mitigation proposed for the marine environment and there is no separate or distinctive marine coastal monitoring strategy (see section 2.6 below). Natural England's advice is the dDP should be updated to improve the assessment, mitigation and monitoring on the marine and coastal environment.	Annex 5 of the Drought Plan sets out a series of monitoring and mitigation measures, including for estuarine and coastal environments that may be affected by the Drought Plan measures. We will discuss the details with Natural England further as we refine the monitoring and mitigations in line with our proposed timetable during summer 2018, and in dialogue with the Environment Agency.	none
NE25	**2.3.1 Medway Estuary MCZ** The Medway Estuary MCZ is an inshore site located on the Kent coast. The MCZ boundary begins near Rochester and extends seawards into the mouth between the Isle of Grain and Sheerness encompassing everything up to mean high water. This fertile environment is particularly important for invertebrates, fish and birds. The tentacled lagoon-worm, estuarine rocky habitats and intertidal rock features were noted during the selection of the site for designation as being relatively rare within the South East. The nationally scarce tentacled lagoon-worm (Alkmaria romijni) is a tiny bristleworm (<5mm) and is particularly sensitive to entrainment and changes in salinity. It is a protected species and a project that affects it would require a protected species licence in addition to any licence from the marine management organisation for any infrastructure below mean high water. There are two options with the potential to impact the Medway Estuary MCZ features in the dDP * Sheerness Isle of Sheppey emergency desalination. * River Medway scheme (later stages only). These schemes are described in section 1.5 above. For the Sheerness Isle of Sheppey emergency desalination the MCZ surrounds the port and covers the main channel, so the intake and discharge will be within the MCZ. The SEA identifies moderate adverse effects on the Medway MCZ. It is essential that the further information is provided on the citing of the discharge, and that further work on dispersion, scour and temperature of the hypersaline discharge is conducted to determine if this option can go ahead without hindering the conservation objectives for the MCZ. The SEA matrices have identified that stage 4 of the River Medway scheme has a moderate impact on the Medway Estuary but it is not clear if this also affects the MCZ. It is unclear if the two options will combine to impact the MCZ. Further information is required on the combined effects on the Medway Estuary MCZ.	The details of the desalination scheme are provided in accompanying documents to the Draft Drought Plan and we will provide the more detailed restricted information to Natural England to assist with reviewing our assessment. We have updated the SEA Environmental Report to include a specific Marine Conservation Zone (MCZ) assessment section to provide greater clarity on the assessment of effects on the MCZ and included details of the evidence used to underpin the assessment. We will provide accompanying assessment maps to Natural England as part of the restricted information, showing the plant location and discharge location and the likely dispersal characteristics. We have included more details on the mitigation measures that would be put in place during construction to protect relevant sensitive features of the MCZ that might be affected by the desalination plant. We have also similarly included more details of the effects of the River Medway Scheme Drought Permits/Orders in updated the SEA Environmental Report in a new MCZ assessment section. We have provided in the new MCZ section of the SEA Environmental Report the evidence that we used to underpin our assessment of the cumulative effects on the MCZ of the later stages of the phased River Medway Scheme Drought Permit/Order and the Sheerness emergency desalination scheme. The cumulative assessment was based on the hydrological and estuarine assessment contained in Appendix B of the Environmental Assessment Report for the River Medway Scheme, and summarised in Appendix A of the HRA Report. The assessment concluded that although there would be a moderate impact to the influx of freshwater at the River Medway tidal limit (Allington Lock), the effects would be most pronounced in the upper estuary, with the effects dissipating downstream such that they would be negligible downstream of Hoo Ness due to the greater influence of the tidal regime from this point. The assessment also concluded that there would be a low risk to water quality in the upper estuary, upstream of Hoo Ness, and a negligible impact on the geomorphological processes. The Sheerness Emergency Desalination option is located ~13km further downstream from Hoo Ness and the tidal influences are the dominant controlling hydrological process downstream of this point.	SEA has been updated to include MCZ assessment information

NE26	**2.3.2 Littlehampton emergency desalination plant.** This scheme is to install a modular desalination plant adjacent to the WwTW near Littlehampton which would produce up to 10Ml/d. It would be connected into supply via a 10km temporary pipeline lain over ground. The screened intake would be to the Arun estuary coast. The hypersaline waste could be discharged via the existing long sea outfall and mixed with the effluent stream but locations for intake and discharge have not been confirmed. Kingmere MCZ is between 5 and 10 km off the coast of Littlehampton. Kingmere MCZ contains excellent examples of rocky habitat and subtidal chalk outcropping reef systems. These rocky habitats support a wide range of marine life. This site is one of the most well-known for spawning black seabream and may be one of the most important spawning sites within UK waters. Natural England has assumed this is too far away from the long sea outfall to be impacted by this dDP option, however no information on the location of the dispersion plume from the option has been provided. Considerable uncertain remains on the design and mitigation of this option with regards to wider marine and coastal biodiversity (outside the MCZ). The discharge point will be located approximately 1 km east of Mussel Beds (Modiolus modiolus, Mytilus edulis & others). A further 350m NW of the mussel bed habitat, there is a mapped area of subtidal kelp bed habitat on subtidal rock reef (dDP WFD assessment). Natural England requires further information to fully understand the potential impacts of the option on the marine environment. Natural England would like to see the dispersion modelling of the discharge plume, with temperature, scour and any salinity impacts modelled in relation to marine wildlife.	The details of the desalination scheme are provided in accompanying documents to the Draft Drought Plan and we will provide the more detailed restricted information to Natural England to assist with reviewing our assessment. We have updated the SEA Environmental Report to provide greater clarity on the assessment of effects of the scheme nd included details of the evidence used to underpin the assessment. We will provide accompanying assessment maps to Natural England as part of the restricted information, showing the plant location and discharge location and the likely dispersal characteristics. We have included more details on the mitigation measures that would be put in place during construction to protect relevant sensitive features that might be affected by the desalination plant.	SEA has been updated to include more information on the scheme and our assessment of it.
NE27	**2.3.3 Bembridge recommended MCZ** Bembridge recommended Marine Conservation Zone (rMCZ) lies adjacent to the east coast of the Isle of Wight, encompassing the intertidal area (including Sandown Bay and Bembridge Harbour) and the subtidal area. The site was recommended for designation to fill gaps in the network for maerl beds, sea pens and burrowing megafauna and stalked jellyfish. The site has an exceptionally diverse range of habitats and species including both long-snouted and short-snouted seahorse the reef-building ross worm, native oysters and seagrass beds. The Sandown emergency desalination plant, described in section 1 above, will discharge into and abstract from the Bembridge recommended MCZ, which is coincident with the area of the South Maritime SAC in Sandown Bay. The SEA identifies a moderate adverse effect on the Bembridge recommended MCZ after mitigation. Despite mixing with an extant effluent stream the discharge is expected to be more saline than the surrounding seawater in the Bay. Further information is required on the citing of the abstraction and discharge for this option. Further work is required on dispersion, scour, temperature and salinity of the discharge to determine if this option can go ahead without hindering the conservation objectives for the rMCZ.	The details of the desalination scheme are provided in accompanying documents to the Draft Drought Plan and we will provide the more detailed restricted information to Natural England to assist with reviewing our assessment. We have updated the SEA Environmental Report to include a specific Marine Conservation Zone (MCZ) assessment section to provide greater clarity on the assessment of effects on the Recommended MCZ (rMCZ) and included details of the evidence used to underpin the assessment. We will provide accompanying assessment maps to Natural England as part of the restricted information, showing the plant location and discharge location and the likely dispersal characteristics. We have included more details on the mitigation measures that would be put in place during construction to protect relevant sensitive features of the rMCZ that might be affected by the desalination plant. We used the details of the existing outfall for the Sandown wastewater treatment works (the desalination plant brine discharge will be blended with the treated effluent of the wastewater treatment works), the dispersal characteristics of the existing outfall and available habitat information pertaining to the rMCZ. . We examined the likely radius of the effect of the discharge which concluded that the impacts of the discharge would be limited to ~33m radius from the outfall with high dispersal characteristics. The volume of the brine discharge relative to the wastewater treatment works dry weather flow is low, such that the salinity concentration of the combined effluent stream is diluted. We will provide the underpinning evidence and discuss these findings further with Natural England.	SEA has been updated to include MCZ assessment information
NE28	**2.4 Biodiversity** Under Section 40 of the Natural Environment and Rural Communities Act 2006, every public authority, including water companies, must in the exercise of its functions have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Conserving biodiversity in this context includes restoring or enhancing a population or habitat. WISER (pg 30) states water companies are expected "to develop measures during the price review to contribute to biodiversity priorities and obligations on [companies'] own land or in the catchments [companies] influence and operate in". The Defra 25 Year Environment Plan states "We will achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife this includes[…] creating or restoring 500,000 hectares of wildlife-rich habitat outside the protected site network, focusing on priority habitats as part of a wider set of land management changes providing extensive benefits." The dDP contains several options with a net adverse impact on biodiversity including priority habitats and species8 both inside and outside of designated sites. Though opportunities in the dDP process to improve biodiversity are limited, the impact on biodiversity should be assessed, acknowledged, mitigated where possible and monitored. The wider biodiversity impacts of options that also impact designated sites are mentioned above and are not repeated here. In general the SEA underestimates the significant effects on biodiversity flora and fauna. There is an over reliance on very generic mitigation such as 'best practice construction techniques' for mitigation with little recognition that extremely sensitive biodiversity in Southern Water's supply area and in the areas affected by dDP supply options requires bespoke mitigation. This has resulted in an underestimate in the residual impacts in the SEA. The SEA matrices include a number of questions related to priority habitats and species against which each drought supply side option has been assessed. The matrices do not list the answers to these questions so the impacts on biodiversity of the dDP are unclear. Natural England recommends that the assessment matrices are rewritten to clearly set out the answers to the questions agreed at the scoping stage.	The SEA detailed assessment matrices are set out in Appendix D of the Environmental Report which provide detailed commentary of the assessment against each of the SEA objectives and taking account of the indicator questions as set out in SEA Scoping Report. We have provided this Appendix to Natural England and we will be happy to discuss the assessment findings further in respect of the biodiversity SEA objectives. The SEA has taken account of specific as well as industry best-practice mitigation measures as set out for each drought plan measure as referenced in the detailed assessment matrices in Appendix D . The specific as well as generic mitigation measures are also set out in Annex 5 of the Drought Plan. We have provided a timetable in the revised Drought Plan for further refining the mitigation measures in dialogue with Natural England and the Environment Agency during summer 2018. We will work constructively with Natural England to assess whether any additional mitigation measures may be required.	We have met Natural England after the Drought Plan consultation ended to share updated information that supports the assessments.
NE29	**Darwell – reduce MRF** This drought option would reduce the MRF on the River Rother (Eastern) at different times of year to different amounts (depending on the severity of drought) to allow continued abstraction to fill Darwell reservoir. This proposed drought order option would reduce flow in the River Rother decreasing in effect downstream to the Rye Estuary though the HRA excluded a significant effect on Dungeness, Romney Marsh and Rye Bay SPA and Ramsar site and on the Dungeness SAC. The spring 30Ml/d version of this option is expected to result in a moderate to major adverse effects on aquatic ecology in the freshwater river as well as moderate adverse effect on visual amenity, recreation and navigation. There are minor to moderate adverse effects on priority species including brown trout, European eel, lamprey species, bullhead, water crowfoot and water vole. The effects include reduction in wetted width and water quality reduction	No comment required	none
NE30	**Powdermill reservoir** This option proposes to reduce the MRF controlling abstraction from the River Brede to refill Powdermill reservoir. A major adverse effect on flows in the River Brede have been identified in the SEA but only minor effects on the flows in the River Rother. Moderate adverse effects on the aquatic ecology of the River Brede are expected though the impacts are not expected to reach the Dungeness, Romney Marsh and Rye Bay SPA or Ramsar site (a likely significant effect has been excluded). Natural England recommends that consideration is given to catchment measures and river restoration to help improve the environments resilience to drought and to help mitigate some of the impacts of the dDP options on the River Brede and the River Rother.	We have provided a timetable in the revised Drought Plan for further refining the mitigation measures for the Drought Permit/Orders (set out in Annex 5 of the Drought Plan) in dialogue with Natural England and the Environment Agency during summer 2018, including in relation to the major adverse effects on flows in the River Brede arising from the Powdermill Reservoir drought permit. We will work constructively with Natural England to assess whether any additional mitigation measures may be required.	Annex 5 of the Drought Plan has been updated with the revised timetable.
NE31	**2.4.1 Biodiversity adaption to climate change** The SEA assessment matrix questions include the question will an option promote the ability of wildlife to adapt to climate change? There is little evidence of what the answer to this question is in relation to supply options assessments in the matrices. Drought Plans offer limited opportunity for enhancement (unless catchment measures are included as mitigation) but can significantly undermine a species or habitats ability to adapt to climate change by exacerbating the impacts of drought which, as an extreme event, may be more frequent or severe as the climate changes. This does not appear to have been recognised in the assessment matrices. Natural England recommends that the assessment matrices are rewritten to clearly set out the answers to the questions agreed at the scoping stage.	The SEA detailed assessment matrices are set out in Appendix D of the Environmental Report which provide detailed commentary of the assessment against each of the SEA objectives and taking account of the indicator questions as set out in SEA Scoping Report. We have provided this Appendix to Natural England and we will be happy to discuss the assessment findings further in relation to this SEA objective.	We have met Natural England after the Drought Plan consultation ended to share updated information that supports the assessments.
NE32	**2.5 Water Framework Directive** The Water Framework Directive9 sets specific objectives for the protection of the water environment which include for surface water bodies the prevention of deterioration and achievement of good ecological status/potential. For groundwater bodies the objectives are to prevent deterioration and achieve good chemical and quantitative status. The Defra 25 Year Environment Plan has ambitions to achieve a clean and plentiful water supply including "improving at least three quarters of our waters to be close to their natural state as soon as is practicable". Natural England defer to the Environment Agency on matters related to the Water Framework Directive (WFD) outside of designated sites. Drought supply options do not generally offer opportunities to enhance ecological status or potential but they should avoid resulting in deterioration. Natural England notes that the draft drought order proposal as proposed in the dDP on the River Test SSSI risks deterioration. Currently the mitigation and frequency of likely application for this option is too high to avoid the risk of deterioration. The dDP should be updated to reflect amendments agreed at, and subsequent to, the public inquiry to reduce the risk of deterioration.	The revised Drought Plan has been updated to incorporate the agreed monitoring and mitigation packages (see Annex 5) for the Test Drought Permit and Test Drought Order that were agreed as part of the Public Inquiry process. As detailed below, the frequency of requiring the implementation of the Drought Permit has reduced since we published the Draft Drought Plan following further assessment of the drought risks to water supplies in our Western Area.	Changes have been made to the draft Drought Plan and its Annexes to reflect the outcomes of the Hampshire Licences Inquiry and the related signed s20 agreement with the EA.
NE33	**2.6 Protected Species** Natural England Standing Advice for Protected Species is available on our website to help local planning authorities and others including water companies better understand the impact of development on protected or BAP species should they be identified as an issue at particular developments or plans. This also sets out when, following receipt of survey information, the authority (or the undertaker in regards of the exercise of permitted development rights) should undertake further consultation with Natural England. Protected species are potentially significantly impacted by a number of drought plan supply options including those that affect designated sites (listed above). To be 'application ready' the drought plan Environmental Assessment Reports (EARS) should include clear, timetabled approach to monitoring and mitigating any protected species potentially affected by options.	The Environmental Monitoring Plan (Annex 5) of the Drought Plan sets out our proposals for baseline and "in drought" monitoring, including monitoring of identified Protected Species where required. We have set out a timetable in Annex 5 for discussing and refining the monitoring plan with Natural England and the Environment Agency, and this will provide a further opportunity to discuss the proposed Protected Species monitoring activities.	Annex 5 of the Drought Plan has been updated with the revised timetable.
NE34	**2.7 Monitoring Strategy** The monitoring strategy is inadequate with respect to the application readiness of drought plan permit and order options. Negotiation is ongoing and in most cases is close to agreement between Southern Water Services Natural England and the Environment Agency for detailed monitoring of: * Effects of Lower Itchen, Candover and Test Surface water drought orders/ permit application options. * Efficacy of mitigation of these options * Efficacy of compensatory habitat of these options The monitoring plan should be updated to reflect agreement during, and subsequent to the public inquiry on these options. The monitoring plan appears to focus mainly on issues related to, and monitored for, the Water Framework Directive. This is good for fish, in-channel invertebrates and macrophytes but poor for all other biodiversity related impacts. Of particular note are lack of monitoring of impacts on bird and prey available to birds. In addition the monitoring plan is relatively weak on impacts on riparian wetland habitats and species including riparian macroinvertebrates. Monitoring plans for the marine and coastal environment are also much weaker than the proposals for the freshwater environment. The monitoring plan acknowledges the need to improve baseline for designated sites impacts of options but is not clear how or what will be monitored. The monitoring plan (and details in the Environmental Assessment Reports, EARS) should be updated in consultation with Natural England, to include the following: * Monitoring to improve the baseline, in particular with regards to Ramsar site features but generally for designated sites in areas affected by dDP options. * Monitoring of any residual significant effects identified on designated sites, in line with the requirements of the relevant common standards monitoring guidance parameters for those features identified. * Monitoring of any residual impacts on priority habitats and species identified in the SEA. * Monitoring features of designated sites and priority habitats and species which would have been significantly affected prior to mitigation, to ensure the efficacy of mitigation measures is assessed. * Monitoring of recovery of designated and priority habitats and species where no significant effect was assumed to occur due to recoverability of a species or habitat. This is to confirm assumptions on recoverability.	The Environmental Monitoring Plan (Annex 5) has been updated in the revised Drought Plan to incorporate the agreed monitoring packages for the Test, Lower Itchen sources and Candover Drought Orders/Permits. The Environmental Assessment Reports for these Drought Permit/Orders have also been updated accordingly. Monitoring plans are detailed in Annex 5 of the Drought Plan and include baseline monitoring, "in drought" monitoring and monitoring post-implementation of Drought Plan measures to assess the recovery of the environment. The Environmental Monitoring Plan does include wider monitoring requirements beyond those related to the Water Framework Directive, including surveys for birds, benthic fauna and other relevant bird food/prey sources in estuaries, walkover surveys for assessing riparian wetland habitats, and specific flora, fauna and habitat surveys (e.g. CSMG surveys) for specific features of designated sites (particularly where there is currently a paucity of monitoring activity by the site owners/managers). We have set out a timetable for review and refinement of each of the specific monitoring plans for each Drought Order/Permit with Natural England and the Environment Agency during summer 2018 and we will be happy to discuss the basis of our proposed plans with relevant Natural England staff.	Changes have been made to the draft Drought Plan and its Annexes to reflect the outcomes of the Hampshire Licences Inquiry and the related signed s20 agreement with the EA.
3: Draft Drought Plan 2018 (dWRMP)			
NE35	**3.1 Order of Drought Options and Levels of Service** The prioritisation of drought options use should take account of impact on the environment and should be ordered with the least potentially harmful options selected before those with potential environmental impacts. Where there is a choice, options with lesser environmental impacts are selected first in the plan but based on the identified impacts. Since the environmental impact assessment is insufficiently robust in some cases, and severity of option impacts on the environment has not always been adequately identified or mitigated, there is insufficient justification of the options selection prioritisation. Drought actions, including application for drought permits or orders, are more frequent in Hampshire and Isle of Wight than in Sussex and Kent in the dDP. Applications for drought permit or orders will be once in every 20 years on average for Sussex and Kent but as frequently as once or twice in every 10 years in Hampshire and Isle of Wight, on average. The frequency of likely applications for drought order and permits in Hampshire and Isle of Wight is too high and there are likely to be very significant impacts on the environment from these options (as set out in the response to the environmental appraisals above). Natural England understands this is proposed as an interim measure to reflect the time required, whilst the long term water resources solution (in the dWRMP) is put in place. Natural England would like the company to explore in their updated plan whether this likely frequency of permit application can be reduced following the implementation of the material changes to the plan described above.	We have updated our assessment of the frequency of requiring to implement Drought Permits/Orders in the River Test and River Itchen. This demonstrates an improvement to the position set out in the draft Drought Plan with the following frequencies now reported in our updated plan: - Test Drought Permit: 1 in 10-20 years - Test Drought Order: 1 in 150-180 years - Candover Drought Order: 1 in 60-80 years - Lower Itchen Drought Order: 1 in 200-300 years The above implementation frequencies imply we would have to apply for a River Test Drought Permit and a Candover Drought Order more frequently than our level of service for applying for Drought permits and Orders of from 1 in 20 years. As Natural England notes, our draft Water Resources Management Plan 2019 sets out the measures we propose to deliver to improve drought resilience for Hampshire and the Isle of Wight (as well as Kent and Sussex) which will enable a substantial reduction to the frequency of requiring these Drought Permits/Orders.	The Drought Plan annexes have been updated to reflect updated frequency of requiring to apply for and implement Drought Permits and Orders on the River Test and Itchen including Annex 1 (Figure 20), Annex 3 (Levels of Service section), Annex 4 (Table 1), Annex 11 and Annex 12.

NE36	**3.2 Putting People at the Heart of Decision Making (Demand management)** Natural England's Conservation 21 seeks to drive a fundamental change in mind-set, to make a healthy natural environment a central part of health, wealth and prosperity. This includes encouraging the public to value the water they use. Defra's 25 Year Environment Plan aspires to reduce the risks of drought to the public by: * Ensuring interruptions to water supplies are minimised during prolonged dry weather and drought. * Boosting the long-term resilience of our homes, businesses and infrastructure. Empowering people to efficiently use their water and providing good quality information on both impending drought but also, on the environmental impacts of drought, are opportunities to both increase resilience of homes and businesses but also influence peoples understanding of the value of water. Although most demand management options will be included within the dWRMP, demand management is particularly important in drought and in the pre-drought period. Influencing a reduction in water demand by voluntary changes by those who can reduce water consumption in the pre-drought period is essential in order to delay the application for drought permits or orders that may damage the environment but also to delay the need to apply for mandatory restrictions such as temporary use bans (TUBs). Since mandatory restrictions can have effects on peoples enjoyment of the countryside, recreation and the economy it is important that their implementation is delayed by encouraging voluntary water use reduction in the pre-drought period. Section 82 of the Water Act 2003 places an environmental duty on the water undertakers 'to further water conservation', in addition to duties in the Water Industry Act (section 3(2)(a) 1991) to promote efficient use of water by its customers. The dDP demonstrates evidence that this duty has been taken into account. We strongly support the following demand management options in the dDP : Increasing leakage reduction in impending drought. * Promoting saving water and water efficiency advice and products in impending drought. * Media campaign and awareness raising in impending drought . * Partnership working. The frequency of application for mandatory demand restrictions varies across the supply area; temporary use bans (TUBS) applications will be 1 in every 10 years in Sussex and Kent whilst up to every two or three years in Hants and IoW on average. None essential use bans (NEUBs) will be applied for once in every 20 years on average for Sussex and Kent but as frequently as once or twice every 10 years in Hampshire and Isle of Wight. Given the significant environmental effects of some of the drought permit and order options and the high frequency of these and of TUBS applications in Hampshire and Isle of Wight area; pre-drought awareness work should be increased above that proposed in the dDP. Southern water should consider specific, extra awareness raising, help and support for demand management targeted at Hampshire and Isle of Wight customers. Southern Water should commit to an education programme to make the link between the water use and impacts on the environment clear to customers across their entire supply area but in particular in the Hampshire and Isle of Wight area.	We have updated the level of service for our customers in Hampshire in the updated Drought Plan. Our revised analysis demonstrates that the frequency of water use restrictions for customers in Hampshire will be the same as that for our customers in Kent and Sussex: Temporary Use Bans would be implemented in Hampshire on average once every 10 years whilst a Non-Essential Use Ban Drought Order would be implemented in Hampshire on average once every 20 years. Nevertheless, although we have been able to improve the level of service, we acknowledge the importance of communicating to our customers in Hampshire about the sensitive nature of the water environment from which their water supplies are sourced, helping our customers to make the link between their water use and the impact of water abstraction on the environment. This is equally the case in other parts of our supply area in Kent and Sussex.	Annex 3 (Levels of service section) updated to reflect updated level of service for customers in Hampshire
NE37	**3.3 Resilient Landscapes and Seas** **3.3.1 Climate Change** The Climate Change Act 2008 sets the legal framework for adaptation policy in the UK, preparing for the likely impacts of climate change. The 2nd Climate Change Risk Assessment (2017), identifies risks to water supply, and natural capital, including coastal communities, marine and freshwater ecosystems and biodiversity, as among the highest future risks for the UK relevant to the water industry. In addition to improving the natural capital including enhancing biodiversity (covered in the SEA and HRA above) the Defra 25 Year Environment Plan aspires to "take all possible action to mitigate climate change, while adapting to reduce its impact". WISER (pg 54) states "a priority for all should be to work together to build an evidence-based understanding of the likely effects of climate change and identifying and implementing low carbon solutions that address any negative environmental impacts that may arise". The plan provides evidence that Southern Water Services has worked with others to build an evidence-based understanding of climate change on their assets and in the scenarios for their dDP. However the supply options in the dDP do very little to implement low carbon solutions and are dominated by high energy consuming options such as desalination. Desalination, using currently readily available technology, has high energy consumption, which generally is from traditional high carbon energy generation. Significant opportunity to access lower carbon energy sources is, or soon will be, available in the Southern Water supply area. Natural England recommends Southern Water gives a commitment to securing low carbon sources for all the drought options that require significant energy consumption from long distance pipelines pumping (for inter-company transfer options) to emergency desalination proposals.	Desalination is a last resort option for severe drought situations and would only be used on a temporary basis to maintain supplies. Whilst the current high energy demands of desalination schemes and long distance transfers is acknowledged the company is committed to using renewable energy wherever possible for all its operations. Southern Water is forecast to reach 21% renewable energy self-production by 2019 and this will rise to 23% following investment in PR19. The company is also exploring alternative funding methods for solar and battery storage schemes which will help it reach 27%. Furthermore the company from whom we import most of our energy from generates more than 90% of its energy from renewable sources.	No changes considered necessary
NE38	**3.3.2 Natural Capital and Ecosystem services** Defra's 25 Year Environment Plan encourages the growth in natural capital and measurement of ecosystem services. Wiser recommends that companies consider how natural capital accounting can inform water industry planning. WISER recommends that companies trial natural capital asset accounts (including quantity and condition) and ecosystem service assessments (including qualitative and quantitative assessments) to help companies better understand the flow of benefits. Natural England recognise that the ability to enhance Natural Capital and promote options that deliver significant ecosystem services is limited in the drought planning process (compared to the dWRMP or business planning process for example). However, the dDP does not appear to use natural capital accounting, even in the SEA where a question on enhancement of natural capital appears in the SEA matrices but no data on how this has been assessed are provided. Overall the plan does not enhance the resilience of the environment to drought and does not contribute to government aspirations and statutory objectives to conserve and enhance biodiversity, even on designated sites. Given the significant impacts of many of the dDP supply options, in addition to the changes to the dDP recommended throughout this response the company must include options in their dWRMP and business plan that address or remove the most serious environmental impacts of dDP options in the long term and improve the environments' resilience to drought in the longer term.	We have not applied Natural Capital Accounting (NCA) in the development of our Drought Plan as the methodologies required to robustly apply NCA to drought and water resources planning are still in development through collaborative UK water industry research activities. We have considered the effects on Natural Capital assets/resources as part of the Strategic Environmental Assessment (SEA) in a qualitative manner taking account of the findings of the detailed Environmental Assessment Reports, Habitats Regulations Assessment and Water Framework Directive assessments, and we have included more detail in the updated Environmental Report against that specific SEA objective. We are currently developing a Natural Capital asset baseline to help to identify and subsequently protect specific Natural Capital assets relating to our operational activities. Current development of this baseline will provide a robust evidence base against which we can assess the risks of Natural Capital asset deterioration and identify opportunities for enhancing Natural Capital assets. This will then inform future drought and water resource planning, providing a more quantitative assessment of the effects on Natural Capital assets than the qualitative approach we have adopted for the current Drought Plan and Water Resources Management Plan through the SEA process. Our draft Water Resources Management Plan 2019 sets out our strategy for improving drought resilience across Kent, Sussex and Hampshire in order to substantially reduce the likelihood of requiring Drought Permits/Orders and thereby significantly reduce the risk of significant environmental effects in drought. This includes specific measures to enhance environmental resilience to drought in the River Test and River Itchen. We will continue to actively engage with Natural England as we work to finalise the Water Resources Management Plan.	Qualitative information has been added to the SEA Environmental Report

Appendix 6: Other representations and our response to the comments

The following table contains the other written representations that we received, from

- Arun District Council (comments in addition to the online questionnaire)
- Portsmouth Water Ltd
- Hampshire County Council
- Hampshire and Isle of Wight Wildlife Trust
- West Sussex County Council
- Little River Management / Barker Mills Estate

The table identifies the representations received, our response to the issues raised, and highlights how the Drought Plan is proposed to be changed in response.

<table>
<tr><th>Respondent</th><th>Issue no</th><th>Summary of Response</th><th>SWS' Consideration of Response</th><th>Changes Required to Drought Plan</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="5">Hampshire County Council
(Chris Murray)</td><td>HCC1</td><td>Hampshire County Council welcomes the opportunity to respond to Southern Water's consultation on its Drought Plan 2018.
The plan sets Southern Water's approach to drought planning in a clear and understandable style.</td><td>Comment is noted and welcomed.</td><td>none</td></tr>
<tr><td>HCC2</td><td>Whilst it has been 42 years (1976) since the last hosepipe ban was required in Hampshire, it is noted that based on possible future rain pattern scenarios tested by Southern Water, it is likely that there will be a need to introduce restrictions more often in Hampshire, at least until 2027, because of the need to develop new water sources due to changes to abstraction licences. As the plan indicates, some 23% of the water supply comes from rivers, including from the environmentally important chalk Rivers Test and Itchen in Hampshire.</td><td>Comments are noted.</td><td>none</td></tr>
<tr><td>HCC3</td><td>Proposed changes to the abstraction licences for the Test, Itchen and Candover Stream were the subject of a recent public inquiry. At the opening of the inquiry, however, it was announced that agreement in principle had been reached between Southern Water and the Environment Agency, and a water resource management scheme would be entered into by the parties. A decision from the inspector is expected in due course. The inquiry highlighted the delicate balance required in ensuring public water supplies are maintained during times of drought whilst at the same time ensuring that any impacts on the environment are mitigated.</td><td>Comments are noted. The Draft Drought Plan has been updated to reflect the agreed outcomes from the recent public inquiry, and the content of the section 20 operating agreement signed by the EA and SWS.</td><td>The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.</td></tr>
<tr><td>HCC4</td><td>From a public health perspective, it is noted that in emergency drought conditions an emergency drought order may need to be sought from the government. This would allow the introduction of emergency restrictions such as standpipes (water pipes in streets) or rota cuts where water is only available for a few hours each day. Emergency restrictions or rota cuts could adversely affect the most vulnerable individuals, such as older people, people with disabilities and children and has the potential to impact on hydration, hygiene and spread of disease. We therefore agree that this be an option of last resort to emergency drought, as part of a hierarchy of interventions, as detailed in the plan. In such circumstances there should be suitable mechanisms to identify and communicate to vulnerable groups (working with other agencies as necessary), so that additional support can be offered to them, subject and prioritised according to assessment of risk and need.</td><td>The Drought Plan identifies that an emergency drought order, and potential rota cuts, would be a very rare occurrence, beyond the environmental conditions that the Drought plan seeks to cover. The concerns expressed by the respondent about potential effects on the most vulnerable users are noted. In the event that emergency measures were required to be undertaken, SWS would work closely with the local authorities and other partners to ensure that particularly vulnerable groups in society receive the support they require.</td><td>none</td></tr>
<tr><td>HCC5</td><td>Finally, the intention to work with local councils and others to raise awareness during drought conditions is both welcomed and supported.</td><td>Comment is noted and welcomed.</td><td>none</td></tr>
<tr><td>Arun District Council
(Charlotte Hardy)</td><td>ADC1</td><td>Having noted points in the paper version of the questionnaire for responding to Southern Water's Drought Plan, I then went to transfer them into the online questionnaire and found there some variance. In particular the comment box for what was identified as Q2 in the paper copy – What do you think the best way for us to tell customers about a drought and restrictions – was unavailable in the online questionnaire. The following comment is therefore what I would otherwise have provided:

"Though all bar phoning would be useful, TV; radio; newspapers; email and letters should be the main methods. We are commonly told verbally or in responses on consultations about the fact that there are a reasonable and likely to be increasing proportion of the population of the District who are vulnerable and elderly that either do not have (including access to) or feel comfortable with electronic forms of communication."

In addition to Q2 this can also be applied to Q4 of the paper questionnaire as well – Do you agree with the phases in which we would introduce restrictions as water becomes more scarce during a drought? (our aim is to protect jobs and economy by focusing on homes and gardens first before introducing them to businesses)</td><td></td><td></td></tr>
<tr><td rowspan="4">Portsmouth Water Ltd
(Neville Smith)</td><td>PW1</td><td>Levels of Service
Southern Water and Portsmouth Water have adopted different levels of service for their Drought Plans:<table><tr><th>Level of Service</th><th>Portsmouth Water</th><th>Southern Water</th></tr><tr><td>Hosepipe Bans</td><td>1 in 20</td><td>1 in 10</td></tr><tr><td>Non-Essential Use Bans</td><td>1 in 80</td><td>1 in 20</td></tr><tr><td>Drought Permits</td><td>1 in 125</td><td>1 in 200</td></tr><tr><td>Emergency Drought Orders</td><td>> 1 in 200</td><td>1 in 500</td></tr></table>Although Southern Water appear to have a higher level of service for Drought Permits this will not apply in their Southampton East Zone until after 2027. In general, when Portsmouth Water apply for a restriction, Southern Water will already have one in place.</td><td>The differences between the levels of services between the two water companies are noted. SWS has set its levels of service following extensive customer research and consideration of the availability of supplies under potential environmental conditions. SWS will continue to liaise closely with Portsmouth Water and other companies to ensure that information on available resources under different design conditions is shared between them.</td><td>none</td></tr>
<tr><td>PW2</td><td>Lower Itchen Drought Orders
Until 2027 Southern Water are planning to apply for drought orders on the River Itchen if required. This will include an order for our licence on the Lower Itchen near Southampton. This order is necessary to allow abstraction below the current licensed Minimum Residual Flow (MRF) to allow the current bulk supply to continue in a drought. Portsmouth Water are aware of the details of the Drought Order and the revised MRF conditions. The Drought Order is required to meet Southern Water's obligations and is not part of Portsmouth Water's Drought Plan. The bulk supply will be available in a drought but it is not guaranteed to the 1 in 500 year standard that Southern Water are working to. In extreme droughts there will be very large reductions in demand and Portsmouth Water may still have a surplus to export. The reference level of service for extreme droughts is 1 in 200.</td><td>SWS has liaised closely with Portsmouth Water over the potential need for Drought Orders on the River Itchen under different environmental conditions.</td><td>none</td></tr>
<tr><td>PW3</td><td>North Arundel Drought Permit
The North Arundel Drought Permit is described in Annex 4 of Southern Water's Draft Drought Plan and covered by Annex 5 the Environmental Monitoring Plan. Portsmouth Water have an abstraction upstream from North Arundel and we have discussed joint modelling and monitoring initiatives. Portsmouth Water's Draft Drought Plan covers this in Section 5.2.1 but Southern Water's Plan does not mention Portsmouth Water or the other source works at Arundel.</td><td>SWS has committed to work with PW and the EA to improve understanding of the potential impact of a SWS and PW Drought Permit in the vicinity of Arundel. This will inform a monitoring and mitigation plan for both permit options.</td><td>Annexes 5 and 6 have been updated to highlight commitment to work with PW and the EA to improve understanding of these Drought Permits / Orders</td></tr>
<tr><td>PW4</td><td>Working Together
Southern Water mentions the bulk supplies from Portsmouth Water to their West Sussex area and to South Hampshire. This is an example of water companies working together to reduce the risk of drought in the South East. Portsmouth Water will consider the provision of water during an extreme event (1 in 500) on a case by case basis.</td><td>Comment is noted. SWS will continue to liaise closely with Portsmouth Water and other companies to ensure that information on available resources under different design conditions is shared between them.</td><td>none</td></tr>
<tr><td></td><td>HIWWT1</td><td>Proposed reductions to abstraction licenses on the Test, Itchen and Candover rivers were the subject of a Public Inquiry held in March 2018. Southern Water's acceptance of the licence changes proposed by EA means that abstraction will be reduced from these sources, requiring the company to apply for Drought Permits / Orders to continue abstracting in the event of a drought. This recognises Drought Permits / Orders as the correct mechanism for managing abstraction during times of low flow and drought, and sets out measures to provide a reasonable level of confidence that the environmental impacts of abstraction to deliver public water supply in times of drought can be minimised and offset. HIWWT welcomed this development, which in environmental terms is far preferable than the alternative of abstraction continuing under licence (with no requirement to compensate for any environmental damage). We believe that this represents the most favourable outcome that could have been expected from the inquiry. This provision will apply for an interim period until the company can secure alternative long-term supplies via the Water Resource Management Plan process, and is referred to as an 'interim abstraction scheme'. A Section 20 Agreement that will commit the two parties to this route is being developed, accompanied by plans setting out the monitoring, mitigation and compensation that will be put in place / secured to enable any necessary drought Permits / Orders to be applied for. We were pleased to have been invited to contribute to the development of some of the draft plans and packages that will, when finalised, set out the environmental enhancements and protections that will be funded by Southern Water.</td><td>Comments are noted and welcomed.</td><td>The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.</td></tr>
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Hampshire and Isle of Wight Wildlife Trust (Ali Morse)	**HIWWT2**	However we feel that it is crucial, not only to secure the environmental protection promised by this approach, but also to ensure that the trust and support of stakeholders within the catchment is not lost, that the company's Drought Plan (or accompanying documents) is therefore re-written to reflect the above processes. Aspects that we suggest need to be committed to / completed, either in the Drought Plan, supporting documents such as the Environmental Monitoring Plan, or in other legal documents that relate to the outcome of the inquiry, include: • that a comprehensive programme of monitoring, mitigation and compensation is agreed-upon that is sufficient to enable sign-off by Natural England and the Environment Agency in relation to the requirements of the relevant environmental legislation (e.g. IROPI compensation required under the Habitats Directive). The proposed works described in the Environmental Monitoring Plan published as part of this drought plan consultation predate more detailed discussions on the requirements of a monitoring scheme that would meet these requirements, and will need to be updated as a result. Similarly the details agreed by the company and the regulators regarding mitigation and compensation need to be formalised and captured / referred to in these plans • that a realistic funding package, with in-built contingencies, is allocated to these works by Southern Water, informed by the expertise of the Environment Agency, to ensure that constrained budgets do not put at risk the scale of enhancements and protections that can be achieved. Allocating insufficient funds, and finding that the delivered works fall short as a result, could potentially leave Southern Water unable to obtain the Drought Permits / Orders required to supply society with water. Given that the above interim abstraction scheme is likely to operate for a period of around 10 years, these commitments must be included not only in the company's final Drought Plan for 2018 to 2023, but also in any subsequent Drought Plans that cover the period during which the interim scheme is still in operation.	Comments are noted. The Draft Drought Plan has been updated to reflect the agreed outcomes from the recent public inquiry, and the content of the section 20 operating agreement signed by the EA and SWS. Further, detailed information on the monitoring, mitigation and compensation commitments contained within the section 20 agreement and its related plans are also included within the updated Drought Plan and its annexes. SWS is committed to the s20 agreement and the plans that have been prepared to cover the period of the interim abstraction scheme.	The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.
	HIWWT3	Q3. Do you think the different stages of drought we use are easy to understand? Yes, impending drought, drought and severe drought are logical descriptions that customers should understand, and are the same terms used by some other water companies operating in the area.	Comment is noted and welcomed.	none
	HIWWT4	Q5. Do you understand the restrictions we can introduce under Temporary Use Bans and Drought Orders? In relation to TUBs, most of the restrictions relate to the use of hosepipes. It would be useful to promote more widely uses of water that are not excluded in order to encourage uptake of such measures; e.g. "It's fine to use rainwater from a water butt or other rainwater harvesting system". We also suggest that at the point of TUBs being issued, Southern Water should look to coordinate activities and messaging with neighbouring water companies – particularly since many customers may live in an area supplied by one water company but work in an area supplied by another, it will be confusing if some companies are talking about drought whilst others are not.	SWS recognises the importance of communications with customers in relation to a drought, not just in relation to the potential demand management measures that SWS can employ but also to encourage more efficient use of water. SWS works closely with other companies across the South East to ensure the consistency and clarity of messaging to customers during Drought.	none
	HIWWT5	Q6. Do you agree with the phases in which we would introduce restrictions as water becomes more scarce during a drought? We strongly support placing demand reduction as the first port of call – Ofwat has made it clear that companies need to go much further and faster on leakage reduction and on demand management. Southern Water's metering programme has achieved high meter penetration and has resulted in a significant reduction in water usage across metered customers. This programme, along with trials of reward tariffs already undertaken by the company, lays the foundation for the development of tariffs which incentivise customers and communities to reduce consumption during dry periods. We suggest that companies in the south east are best placed to develop and implement such measures given the potential scale of supply-demand deficits that may be faced in this area in the future. We welcome the phased introduction of various TUBs and drought order restrictions. Communication with customers should be a feature throughout this process, and should highlight that compliance with initial measures may help to lessen the impacts of a drought and even stave off further drought measures. We welcome the mention in the drought plan summary of the action needed to protect the environment during a drought – it is important that customers are informed of the potential environmental impacts of abstracting water during a drought, and we suggest that this element should feature in communication with customers. Customers should also be made aware that drought restrictions may need to remain in place to allow the environment to recover after a drought. We would like to see the company working in partnership with local deliverers in order to implement environmental monitoring and mitigation measures that are required as a result of the issuing of Drought Permits / Orders.	SWS welcomes the support expressed, and the recognition that the Company has made significant progress through its Universal Metering programme, delivering significant demand reductions. The HIWWT comments relating to Tariffs are relevant to the WRMP rather than the Drought Plan. SWS has a detailed Drought communications plan which sets out responsibilities and actions that will be taken in advance of, during and after a drought. Clear communication with customers is vital and SWS works closely with other water companies and the EA in such situations to co-ordinate media and direct communications. SWS works closely with local partners, and has committed, through the s20 agreement, to joint working and funding the implementation of various monitoring and mitigation measures by those partners.	none The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.
	HIWWT6	Q7. Do you think the balance between the actions we take to supply water and those we take to reduce demand for water is right? We believe that for drought planning, as for water resources planning, a twin-track approach (delivering both demand reduction and supply measures) is necessary, with demand reduction featuring strongly and featuring from the start of any programme. Whilst we welcome the demand reduction options to be employed (TUBs etc.) we suggest that incentives rather than instructions also have a role to play here; these can be both financial (reward tariffs) and ethical – water saving schemes delivered by Action for the River Kennet in partnership with Thames Water have demonstrated that messages around the environmental impacts of water wastage can be effective in reducing demand.	The comments are noted. SWS is committed to a twin track approach and has identified measures within its drought plan to deliver demand reduction and to secure appropriate water resources during a Drought. Measures including tariffs are being considered through SWS's WRMP.	none
	HIWWT7	Q8. Do you agree with the exemptions from TUBs, which are agreed by all water companies in the UK? We would like to see stronger guidance provided to companies that use irrigation / hose pipes as part of their operations encouraging them to look at options for harvesting and re-using water.	The comments are noted. Through its WRMP SWS is committing to undertaking water efficiency measures as part of its Target 100 initiative. It will also continue to provide business water audits and advice. SWS also works closely with other water companies through the Water Resources in the South East group, and liaises closely with Defra and the EA. it is considered that these mechanisms can be used to push for clearer guidance as suggested.	none
	HIWWT8	Q9 & Q10. Which of the optional exemptions for TUBs do you think we should consider during a drought, and which ones should we not consider? Which of the exemptions from a drought order do you think we should apply in a severe drought? We suggest that the optional exemptions from TUBs / Drought Orders based on water usage (watering turf, plants, food crops, etc.) could be offered to those using harvested or recycled water.	The use of harvested rainwater or recycled water for any purpose will not be subject to Temporary Use Ban or NEUB restrictions because the water has not been directly sourced from the company's supply network. We encourage customers to consider such sources of supplies to reduce the demand for potable water from our network and as they will not be impacted by restrictions during drought events.	none
	HIWWT9	Q11. Do you support the drought permits and drought orders we have explained to increase supplies or are there others we should consider? The Drought Permit and Drought Order options included in Table 5 of Annex 4 to the draft Drought Plan need to be updated to reflect the outcomes of the public inquiry into licence reductions in the Hampshire Water Resources Zones, as we understand that the sequence in which the company plans to implement various drought options, and whether some of these may be able to be concurrent as opposed to consecutive, is still under discussion. The draft sequence contained in a document circulated at the opening of the Inquiry attracted significant comment from stakeholders, and the final order settled-on should be clearly justified if it is going to receive the support of partners and stakeholders. In particular, we suggest that the company could commit to implementing some level of media campaigning as part of the first step in the process (whatever that step may be, in the final agreed sequence), as by this point, conditions should be such that public messaging should reach a receptive audience.	Comments are noted. The Draft Drought Plan has been updated to reflect the agreed outcomes from the recent public inquiry, and the content of the section 20 operating agreement signed by the EA and SWS. This includes the agreed sequencing of actions. Drought communications plans include provision for customer and wider media activities in advance of a drought, co-ordinated with other water companies in the south east.	The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.
	HIWWT10	Q12. Do you think we have balanced the need to supply water with the need to protect the environment during a drought? In addition to the comments made against Q6, we also feel that it will be important to ensure that environmental messages feature strongly in any communications around drought. Publicising the plight of the environment could be an important additional driver encouraging people to be less wasteful in times of water shortage, and would chime well with the 'resilience duty' which should see companies taking action to further the protection of the environments upon which they depend for their water supplies. The Resilience Duty provides a driver for looking towards measures which support rather than impact environmental resilience, and we welcome moves to introduce schemes through the WRMP which may lessen the likelihood of needing drought permits in future.	SWS seeks to ensure that its Drought communications clearly identify the environmental benefits that will arise from demand reductions. The support for WRMP proposals is welcomed.	none

	HIWWT11	Q13. Do you think it is ever ok to introduce emergency restrictions such as standpipes or rota cuts? Whilst these measures may be unpalatable to some customers, it is important to recognise that water is not an infinite resource and that with a changing climate and increasing demand, it may not always be possible to ensure 100% reliable supplies, at an acceptable cost to customers. It is also important to recognise that the balance that needs to be struck is not just to protect the environment for its own sake, but because the environment is the source of our water supplies, and a damaged environment may be less able to provide us with those supplies in future.	The comments are noted. SWS is seeking to ensure its supplies are resilient to a range of potential drought conditions, linked to the draft WRMP proposals to significantly invest in securing long term sustainable water resources. The importance of environmental protection, mitigation and enhancement is recognised in the detailed proposals in SWS drought plan.	none
	HIWWT12	Q14. Do you think there is anything else we should include in our drought plan? The plan should link to water efficiency advice, which although an important step in the Drought Hierarchy, should be a permanent consideration and not just a measure thought about by customers during times of shortage. As well as 'generic' householder advice (water butts, etc.) attention should be given to providing bespoke advice & assistance to those businesses which are heavy users of water. Recognising the separation of the retail market, this would need to be done in conjunction with retailers, and could be a model for other Water Industry Initiatives	The comments are noted. Through its WRMP SWS is committing to undertaking water efficiency measures as part of its Target 100 initiative. It will also continue to provide business water audits and advice. SWS also works closely with other water companies through the Water Resources in the South East group, and liaises closely with Defra and the EA.	none
West Sussex County Council (Catherine Cannon)	**WSCC1**	Thank you for the opportunity to read and respond to the Southern Water consultation on the Drought Plan 2018. We are pleased to see the level of commitment to ensuring water supplies are protected for the residents of West Sussex. It is reassuring to see Southern Water has considered a number of different drought scenarios within this plan, and that the plan considers climate change with a great emphasis on resilience.	Comment is noted and welcomed.	none
	WSCC2	The different stages of drought presented are straightforward to understand. It would be helpful if on page ten, the colours of the different types of drought matched the restrictions applied in past droughts, or else used the logos. For example, was the drought in 1995 due to one dry winter (coloured yellow) or one dry summer (coloured orange). This would help customers to understand more clearly the impact of the different droughts on their water restrictions. I note particularly Portsmouth Water has resilient water sources and has not needed water restrictions since 1976. This message is sometimes confusing for our residents of West Sussex, many of whom receive water and wastewater services from different companies, and therefore receive conflicting messages over water scarcity. A reference to this would be informative. The use of the phrase 'They can arrive very quickly' on page 5 is misleading – a drought doesn't just 'happen' and could undermines the long term planning needed, and steps that customers and water companies can take.	The comments on the presentation of information in the draft Drought Plan, and the way different companies present their proposals are helpful. SWS has reviewed its wording and sought to make it as clear as possible for its customers and stakeholders, and to use language consistent with other companies. SWS recognises the potential for different messaging for customers of different companies and works closely with neighbouring water companies in advance of and during a drought.	no specific changes as a result of this comment, however clarity of messaging and wording in the Draft drought plan has been reviewed.
	WSCC3	To tell customers about a drought and restrictions, as wide a variety of means as possible should be used. All the eight methods proposed should be utilised, to reach as many customers across West Sussex as possible. It is noted in the Drought Plan Technical Annex 8 (engagement and consultation) that customers generally preferred messages through the TV, press and door to door literature. This feedback should be considered in the context of an ever-increasing shift to digital messaging.	The comments are noted. SWS is committed to utilising a variety of media for drought communications, including electronic and more traditional forms of communication. Whilst electronic media enables rapid communications, SWS recognises that this is not the most appropriate media for all its customers.	none
	WSCC4	In times of drought, as mentioned above, residents in West Sussex can receive conflicting messages between, for example, Southern Water and Portsmouth Water over the need, or not, for water conservation. A commitment in your Drought Plan to clearer messages at the time of drought restrictions would help our residents and businesses to understand when this is the case. A single message is stronger, and our communications team would be able to support this, using our multi-media communications channels.	SWS recognises the potential for different messaging for customers of different companies and works closely with neighbouring water companies in advance of and during a drought. The offer that WSCC communications team could be able to assist with communications during a drought is welcomed.	none, although offer of closer working with WSCC communications team welcomed.
	WSCC5	It would be reassuring to customers to be able to read about some of the wider on-going work of Southern Water to reduce demand and therefore reduce the impact of any potential drought situation. There is little reference to this in the Drought Plan (some cross reference/appendix may be useful). Beyond the specific planning for a drought, residents like to be reassured that Southern Water is actively managing demand, if they themselves may potentially be asked to reduce their water consumption. It is pleasing to note that Southern Water has almost 90% of properties metered, and to hear of the commitment and ambition on increasing metered properties and reducing demand. With the potential to reduce resident's bills, both for water and for energy, this commitment to 'Target 100' may help some of our more vulnerable residents in our County.	The comments are noted. The wider demand reduction and water efficiency work undertaken by SWS forms part of its WRMP, but the potential benefit for customers to be regularly reminded of this through the drought plan and wider communications is clear.	no specific changes as a result of this comment, however clarity of messaging and wording in the Draft drought plan has been reviewed.
	WSCC6	Increased water metering and putting residents in control of their water consumption would complement initiatives such as Your Energy Sussex, our council-supported energy supplier. Through Your Energy Sussex, we are working to encourage more residents to compare their energy consumption and costs regularly and to switch and save money. Your Energy Sussex offers competitively-priced gas and electricity and is run on a not-for-profit basis. Income is used to combat fuel poverty. The County Council has also re-launched its successful Affordable Warmth scheme, funded through the Government's Energy Companies Obligation, providing energy efficient heating upgrades and insulation for resident on low incomes and certain benefits.	The comments are noted. Through its WRMP SWS is committing to undertaking water efficiency measures as part of its Target 100 initiative. It will also continue to provide business water audits and advice. SWS works closely with local authorities and other partners in implementing water efficiency measures, and would be pleased to further discuss this with WSCC.	none, although offer of closer working with WSCC on joint messaging and resource efficiency campaigning welcomed.
	WSCC7	The list of restrictions Southern Water can introduce under Temporary Use Bans and drought orders is clearly presented. It would be helpful in the customer questionnaire if it referred to the page number (e.g. 24) where the list of restrictions could be found, as this would make it easier for customers to complete the form.	The comments are noted.	none
	WSCC8	The phases in which Southern Water would introduce restrictions as water becomes more scarce during a drought are clearly set out. The balance Southern Water takes to supply water and to reduce demand for water is about right. There is evidently a lot of work already underway to reduce demand, and this is explored separately in the 50 year Water Resources Business Plan (for which a separate response will be provided). The exemptions from Temporary Use Bans are clearly set out and we agreed with them. The list of optional exemptions for Temporary Use Bans is clearly set out. The one that should be considered during a drought is that which applies to customers on your Vulnerable Persons List with mobility issues. Any customers on your Vulnerable Persons List should be supported during a temporary use ban. We'd be keen to work with Southern Water to ensure all our vulnerable residents in West Sussex (to whom you are the water supplier) are supported. There is no reason for the other activities listed (watering newly-bought plants for 14 days, watering food crops at home or on allotments, watering newly-laid turf for 28 days, removing graffiti or filling paddling pools) to be supported. It is noted that Southern Water has adopted the common exemptions agreed by all water companies following publication of the UKWIR document "Managing through Drought: Code of Practice and Guidance for Water Companies on Water Use Restrictions 2013". We agree with the exemptions proposed.	The comments relating to option exceptions are noted. SWS would work closely with the local authorities and other partners to ensure that particularly vulnerable groups in society receive the support they require.	none
	WSCC9	It is reassuring to read that in the event of a drought, Southern Water will aim to protect businesses, the economy and jobs for as long as possible. This aligns with the aim in our West Sussex Plan to be a Prosperous Place. For optional exemptions for Temporary Use Bans, it would be worth considering exceptions for businesses whose only work is using water to produce food. Exceptions for businesses who remove graffiti or grow plants should not necessarily be considered. We note that those businesses should be supported to take steps to save water wherever possible. In a severe drought, exceptions should be considered for those businesses whose only work is using water to produce food. It is noted that the Drought Plan Technical Annex 8 (engagement and consultation) states businesses felt the impact of drought on their ability to trade was so infrequent that it was not an area to invest significantly in the future. This feedback suggests that businesses across the supply area, many of whom are small to medium enterprises, may not fully understand, or not be giving sufficient thought, to the impact of drought and other extreme weather events on their ability to trade. This is an area where Southern Water could usefully support such businesses in the future.	Businesses using water to produce food are recognised as a group that could be particularly affected by drought restrictions. SWS is committed to continuing its engagement with the food and wider business sectors to increase its awareness of the potential impacts of droughts, and to encourage water efficiency and resilience measures within those businesses.	none
	WSCC10	The drought permits and drought orders explained in the consultation to increase supplies seem sufficient and others need not be proposed.	The comments are noted.	none
	WSCC11	It is reassuring to read that in the event of a drought, Southern Water will aim to protect the environment. This aligns with the aim in our West Sussex Plan to be a Strong, Safe and Sustainable Place. On the latter, we are pleased to note the demonstrated commitment to protect and improve the environment, taking into account the potential impacts of climate change. It is noted that Southern Water has undertaken detailed environmental assessments for all their Drought Permit and Order options, working closely with the Environment Agency and Natural England. The need to supply water with the need to protect the environment during a drought seems to have been carefully considered and is well balanced.	The comments are noted and welcomed.	none

	WSCC12	Regarding emergency planning, it would be worth strengthening your commitments in the Emergency Plan section, to make reference to your statutory responsibility under the Civil Contingencies Act 2004 to cooperate and share information as needed with Category 1 responders. This should link in with the Local Resilience Forum Lead. As a Category 2 responder you do already feed into the Sussex Resilience Forum. Severe Weather (which does include drought) is identified as a current (2018) risk on the Community Risk Register produced by the Sussex Resilience Forum	The Drought Plan is not intended to cover detailed emergency planning, but the intention of the comments is accepted by SWS.	Refererence to the company's duty under the Civil Contingencies Act has been added to Annex 6
	WSCC13	With the County Council's Cabinet acting as the Fire Authority, it is responsible for making sure that the West Sussex Fire & Rescue Service performs efficiently and in the best interest of the public and community it serves, delivering a combination of prevention, protection and emergency response activities. Working as part of the Communities and Public Protection Directorate, there is a strategic commitment that both our communities and our businesses will be Safer Stronger and more Resilient. It is pleasing to note therefore that Southern Water will take all reasonable measures to secure adequate supplies of water for the Authority's use in the event of fire. It is reassuring to read that Fire Authorities will be consulted closely during all stages of a given drought event (not just when considering Emergency Drought Orders) and will be made aware of the implications that any measures taken by the company might have on the availability of adequate supplies for firefighting.	The comments are noted and welcomed.	
	WSCC14	Our residents would like the reassurance that the water company is doing all it can to minimise the need to introduce emergency restrictions such as standpipes or rota cuts, and that action would have been taken considerably earlier before this would be needed. It is noted that, due to the investments that have been made since then, if similar conditions to those experienced in 1976 were to occur again, there would not actually be the need for such drought actions.	The comments are noted and welcomed.	none
	WSCC15	Aside from the issues raised above, one area highlighted by colleagues in our role as Lead Local Flood Authority states: There could be a slight 'indirect relationship' (potential for overland flow/erroneous infiltration locations/capacity etc.) when considering land use, composition and antecedent ground conditions coming into/out of (or in) a drought period. Possibly, a long drought period followed by a flash storm (2hr) with a subsequent long period could contribute to elevating flood risk potential however likely to be negligible on a wider catchment scale. There could be a perceived increase in 'localised flood risk'.	The comments are noted, but do not require any response.	none
Little River Management	**LRM ME HT 1**	The proposed Environmental Monitoring Plan and proposed mitigation measures for the drought plan are NOT fit for purpose. In fact, the proposed environmental monitoring is woefully inadequate for the lower river Test south of the M27 (Ref. Annex 5 Environmental Monitoring Plan table 6.1.8 p92-95). The proposals do not directly address the potential environmental damage to the lower river Test, specifically the reach most impacted by drought immediately downstream of Southern Water Testwood abstraction point. LRM wishes to accommodate the monitoring and mitigation plans and indeed to contribute to them in the areas in which they are currently deficient.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. SWS has updated the environmental monitoring and mitigation plans relating to the River Test to reflect the agreements reached with the EA at the Hampshire Licences Inquiry and the content of the signed s20 agreement. SWS does not accept that they are woefully inadequate or deficient.	The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.
	LRM ME HT 2	This section of the lower river Test is of high ecological importance as show in Dominic Longley's (Environment Agency) Paper of Evidence submitted to the recent Public Inquiry on Southern Water's (SWS) appeal against the Environment Agency's abstraction licence proposals. For example, it is habitat for rare species such as sea lamprey and Atlantic salmon. This reach is most important for monitoring of Fish Distress with triggers and response plans as this is the reach where the majority of Atlantic salmon will be and the most impacted by abstraction. There are several fish passes on this fishery. The construction of these passes means they do not work in low water conditions as noted in the 1976 drought for example. The reengineering of these fish passes should be included in the drought mitigation package. Salinity monitoring need to be installed at Testwood Pool. We have witnessed saline ingress here during high tides and low river conditions.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. SWS has recognised the environmental sensitivity and importance of the River Test SSSI, and has assessed the potential environmental effects of its proposed drought plan measures in the Drought Plan and its related annexes. These have been updated to reflect the outcomes of the Hampshire Licences Inquiry and the signed s20 agreement and related plans. The landowner and lessee has not yet given its agreement for the monitoring or mitigation measures identified in its response. SWS has, through the s20 agreement, reached agreement with the EA on the monitoring and mitigation measures that are necessary as part of the proposed Drought Permit and Drought Order applications. These do not require the agreement of the lower test landowners/lessees as that consent is currently withheld. To the extent that agreement is reached and additional monitoring and mitigation is implemented, this is considered additional to that necessary for the Drought permit and Drought Order applications. SWS continues to seek to reach agreement to enable this to take place.	The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.
	LRM ME HT 3	The proposed Monitoring plans are not sufficient as they need to include improved fish counters and flow meters on the lower river Test. For example, here the river splits into two arms – the Great Test and the Little Test. Currently only the Little Test has a flow meter and only the Great Test has a fish counter. In order to collate accurate data both arms require both flow meters and fish counters. While the abstraction is from the Great Test salmon and sea trout migrate using both arms of the river depending on the flow and temperature conditions they are met with so it is important to gather data from the Little Test as well.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. SWS would welcome the implementation of additional monitoring on the Lower Test, however to date agreement has not been reached with the landowners/lessees on its implementation. SWS continues to seek to reach agreement to enable this to take place.	The Drought Plan has been updated to reflect the Hampshire Licences Inquiry outcomes and content of the section 20 agreement signed by the EA and SWS.

Barker Mill Estates **Howard Taylor**	**LRM ME HT 4**	Following the Public Inquiry, we (LRM and BME) are working with SWS to try and get a Consent and Compensation Agreement in place which will address the concerns we are raising about the current inadequacies of the Monitoring and Mitigation plans which form part of the Drought Plan, but progress is slow and we can't be confident at this stage that an agreement will be reached.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. During and subsequent to the Hampshire Licenses Inquiry, SWS has continued to negotiate with the landowners/lessees. SWS provided draft agreements to them during the consultation period on the draft Drought Plan, but at the time of drafting this Statement of Response, no substantive response had been received by SWS.	none
	LRM ME HT 5	The Monitoring plans cannot be implemented without our agreement to allow access. SWS need to agree the proposed Consent and Compensation Agreement in order to cover the loss of income and increased costs in order to protect our fishery business and our employees. Similarly no mitigation work can be undertaken on the lower river Test without our agreement. Again this depends on finalising the Consent and Compensation Agreement. The proposed mitigation plans with other NGOs farther upstream might be an 'easy fix' but it is not properly addressing the definition within the SEA and is not properly mitigating the most potentially impacted areas of the lower river and therefore fails to protect the most important habitats and critical first stages of salmon and sea trout migration impacted by drought and compounded by additional abstraction below the normal Hands of Flow.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. The landowner and lessee has not yet given its agreement for the monitoring or mitigation measures identified in its response.	none
	LRM ME HT 6	At the Public Inquiry, in its Statement of Case LRM referred to the potential operational and commercial risks to its business, and the consequential environmental risks, of any monitoring plans and restoration works. See attached Monitoring Plan Submission. [*A copy of the Little River Management Limited (LRM) Monitoring plan submission (19th March 2018) to the Hampshire Licences Inquiry was submitted in support of the drought plan representation]* .	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. The monitoring plan submission to the Inquiry was considered at the Inquiry, and has informed ongoing negotiations between SWS and the landowners / lessees. As noted above, draft agreements have been provided to the landowners / lessees by SWS but no substantive response had been received by the time of drafting this Statement of Response.	none
	LRM ME HT 7	We would urge Southern Water to initiate a thorough and fit for purpose monitoring and mitigation plan by continuing to engage with us to ensure a fair and reasonable Agreement is put in place to address our legitimate concerns and allow our input with local knowledge of the river to work with Southern Water and the Environment Agency to initiate a comprehensive monitoring and mitigation plan for the lower river Test rather than the box ticking quick fix plans included in this Drought Plan that circumvent the real issues.	The Section 20 Agreement with the EA sets out the monitoring, mitigation and monitoring packages necessary to support the Drought Permits and Orders on the Rivers Test, Itchen and Candover. Any additional monitoring that could be undertaken in the Great Test would be additional to those requirements to be Drought Permit / Order ready and whilst they would be welcomed they would not prevent the permit being determined if access has not been possible. SWS would welcome the implementation of additional monitoring on the Lower Test, however to date agreement has not been reached with the landowners/lessees on its implementation. SWS continues to seek to reach agreement to enable this to take place.	none

Appendix 7: Summary of the proposed changes to the Drought Plan Annexes

A summary of the proposed changes to the Drought Plan Annexes is provided below. The full revised Annexes are being published as part of the Revised Draft Drought Plan.

Annex 1 Drought Monitoring and Triggers

Annex 1 has been updated to reflect the new flow triggers developed for the Rivers Test and Itchen following the inquiry. These triggers have been developed to honour the ordering of drought actions set out in the s20 agreement and to reflect Southern Water's level of service targets. The control curves are presented for the Rivers Test and Itchen with the key Hands off Flows (HoF) and example drought recessions. [Note, Southern Water has also updated Annex 1 to provide additional information on their drought dashboard]

Annex 2 Scenarios and What ifs

Using the new flow triggers for the Rivers Test and Itchen set out in Annex 1, the company's ability to respond during a drought in their Western area has been tested. The output from this assessment for three historical periods and two stochastic periods has been presented in Annex 2, as agreed with the Environment Agency on 23 May 2018. In addition, the figures in Annex 2 depicting the historical periods (for all areas) have been updated to include annotations as to when drought interventions would have taken place

Annex 3 Demand Interventions

- Table 2 – Updated demand savings figures, added footnotes *, ** and ***
- Pg7 Western area – updated to reflect Inquiry outcomes
- Page 12 (just above Table 4) – updated table references
- Page 21, moved table 5 below the Drought Order to restrict water use section

Annex 4 Supply Interventions

- Table 1 – updated DO for enhancing abstraction at existing sources and added *
- Table 2 – updated information included in the Table
- Table 5 – Updated table to set out Test Drought Permit and separate Drought Order and other minor updates
- Added ## on Bewl Water / River Medway Scheme to highlight response to EA
- Table 5 Darwell option 1 removed and renamed 2 and 3 accordingly

Annex 5 Environmental Monitoring Plan

Annex 5 has been revised to include updated monitoring and mitigation information in relation to the Eastern Yar, Shalcombe and Caul Bourne drought orders following discussions with Natural England. We have included details on the mitigation measures that would be put in place to protect designated bird species in relation to the construction of the Sheerness emergency desalination plant option. Additionally, we have included more details on the mitigation measures to protect relevant sensitive features of Marine Conservation Zones that might be affected by the emergency desalination plant options.

We have updated the monitoring requirements for the Holborough to Burham Marshes SSSI relating to the Bewl Water reservoir / River Medway Scheme Drought Permit, as well as the wider monitoring information in respect of this Drought Permit following the application for this Drought Permit in early 2018.

We have provided new information pertaining to the outcomes and agreement reached following the Hampshire Licences Public Inquiry with the Environment Agency, including separating out the Test Surface Water Drought Order into two stages: a Drought Permit to allow abstraction to take place if river flows are at or above 265Ml/d and a Drought Order to allow abstraction to take place if river flows are at or above 200Ml/d. The annex has been updated to reference the relevant provisions of the Section 20 Agreement that was agreed between Southern Water and the Environment Agency as part of the Public Inquiry process, in particular to incorporate the agreed monitoring and mitigation packages and associated implementation programme for the Test Surface Water Drought Order and Drought Permit, Candover Augmentation Scheme Drought Order and Lower Itchen sources Drought Order. The Annex also references the requirement of the Section 20 Agreement for monitoring during severe drought conditions to inform the decisions on the precise sequencing of Drought Order implementation.

We have included information on the developments with securing land access to carry out monitoring of the lower River Test in support of the implementing the agreed Monitoring Package for the Test Surface Water Drought Order, together with the provisions of the Section 20 Agreement that set out how this issue is to be addressed in respect of any future Drought Permit application.

We have set out a timetable for further developing and agreeing the monitoring and mitigation measures for all other Drought Permits and Drought Orders in dialogue with the Environment Agency (and Natural England, where appropriate) during summer 2018, together with implementation timescales for baseline monitoring and relevant mitigation measures. The implementation timescales reflect the likelihood of requiring the Drought Permit/Order and/or the potential magnitude of environmental effects. Baseline monitoring for higher priority Drought Permits/Orders will commence in autumn 2018.

We have updated the reference to the latest water vole monitoring methodology handbook. We will work with Environment Agency to agree the survey methods for invasive non-native species as part of the process for agreeing the detailed monitoring plans during summer 2018.

Reference to the Darwell Reservoir 'freshet' Drought Permit has been removed as this is no longer a required option in the Drought Plan.

Annex 6 Management and communications

Annex 6 has been updated to provide further detail on the timing, content, delivery mechanisms and monitoring of water-saving and drought communications. More detail has been added on how these actions align with the drought triggers and guides given for the time required to prepare and implement actions. To assist this, the company's Internal Drought Plan has been included as Annex 15 for regulators to view. (Note: this internal plan will be updated to reflect this latest revised Drought Plan when approved for publication). In addition, Annex 6 includes information about stakeholder engagement specifically related to the Western area, in advance of droughts and applications for permits and orders, and in relation to monitoring, mitigation and compensation, as agreed at the recent public inquiry.

Annex 7 Post Drought Actions

Annex 7 has been updated to provide further details of how the company will monitor the de-escalation and end of a drought. Information has also been added as to how this process may differ in Western area following the conclusion of the Hampshire Abstraction Licence Inquiry

Annex 8 Engagement and consultation

Annex 8 has been updated to include information about engagement during the eight-week public consultation on the draft Drought Plan during March and April. This includes details of the materials and channels used during the consultation (with customers, stakeholders, regulators and employees), the measurement of the engagement and an overview of some of the feedback.

Annex 9 Option Appraisal

- Pg 7 – 9, revision to feasible set of drought options
- Pg 20, spelling mistake corrected on separate
- Annex B fact files updated as below

The factfile appendix to Annex 9 has been updated to reflect the new position in Hampshire. There are now factfiles for each of the Test Surface Water drought order and permit, and minor changes have been made to the Portsmouth Water drought order factfile. In addition, references to the option to remove the freshet release requirement from Darwell reservoir have been omitted as the licence no longer as this condition. The summary table in Annex 9 has also been updated to reflect these changes in the fact files.

Annex 10 Restriction FAQs

No change

Annex 11 HRA

We have updated Annex 11 Habitats Regulations Assessment (HRA) report to reflect various changes that have occurred since we published the draft Drought Plan, as summarised below.

We have updated the report to incorporate the recent (April 2018) Court of Justice of the European Union (CJEU) judgment which ruled that Article 6(3) of the Habitats Directive must be interpreted as meaning that mitigation measures should be assessed within the framework of an Appropriate Assessment and that it is not permissible to take account of mitigation measures at the screening stage. Updated text has been included as necessary to reflect this judgment in dialogue with Natural England.

We have provided new information pertaining to the outcomes and agreement reached following the Hampshire Abstraction Licences Public Inquiry with the Environment Agency, including separating out the Test Surface Water Drought Order into two stages: a Drought Permit to allow abstraction to take place if river flows are at or above 265 Ml/d and a Drought Order to allow abstraction to take place if river flows are at or above 200 Ml/d. The HRA includes references to relevant provisions of the Section 20 Agreement that was agreed between Southern Water and the Environment Agency as part of the Public Inquiry process, in particular monitoring and mitigation measures for the Test Surface Water Drought Order and Drought Permit, Candover Augmentation Scheme Drought Order and Lower Itchen sources Drought Order.

We have included an Appropriate Assessment of the Candover Augmentation Scheme Drought Order having revised our original screening decision set out in the draft Drought Plan following

dialogue as part of the Public Inquiry process. The conclusions of the Appropriate Assessment are that there remains some uncertainty in respect of the potential for adverse effects on certain designated features of the River Itchen SAC. As a consequence, the HRA Report sets out the evidence relating to the legal tests around reasonable alternative options and demonstrating Imperative Reasons of Over-riding Public Interest in respect of this Drought Order. The Annex also includes the agreed compensation package relating to this Drought Order that is required to be secured under the Habitats Regulations.

We have updated the information relating to the Lower Itchen sources Drought Order in light of the Public Inquiry dialogue and Section 20 Agreement. In particular, we have included the agreed Compensation Package required to be secured under the Habitats Regulations for this Drought Order.

We have updated the Appropriate Assessments relating to the Caul Bourne, Shalcombe and Eastern Yar Augmentation Scheme Drought Orders (Isle of Wight) following dialogue with Natural England. We have provided further details of the evidence used to inform the assessments and, following dialogue with Natural England, we have set out additional mitigation measures (and associated pre-requisite survey work) to protect relevant designated features of the various European sites that cover the Newtown and Medina estuaries. A timetable for implementation of the surveys and mitigation measures is also presented.

We have updated the Appropriate Assessments relating to the Sheerness temporary emergency desalination option to provided further evidence on the construction works, discharge arrangements and salinity assessment to support our conclusion of no adverse effects on the Medway Estuary and Marshes SPA and Ramsar site and the Thames Estuary and Marshes SPA and Ramsar site. We have included more information on the mitigation measures to protect these European sites from any adverse effects. We have also provided further evidence in support of our findings of no adverse effect on the European sites when considering the in-combination implementation of the Bewl Water reservoir / River Medway Scheme Drought Permit Stage 3/Stage 4 with the desalination option.

We have provided further evidence, including hyper-saline discharge modelling data and more information on the construction works, in support of our screening decision of no likely significant effects on the South Wight Maritime SAC in respect of the Sandown temporary emergency desalination option.

Reference to the Darwell Reservoir “freshet” Drought Permit has been removed as this is no longer a required option in the Drought Plan.

Annex 12 SEA

We have amended Annex 12 to take account of the conclusions of the groundwater quality assessments in the Environmental Assessment Reports.

We have provided further details in the SEA of the mitigation measures that we have taken into account for each Drought Plan option in assessing the residual effects on the environment, cross-referencing to the details provided in Annex 5 of the Drought Plan.

We have updated the option and cumulative effects assessments to reflect the updated HRA and WFD assessment conclusions (Annex 11 and Annex 13) for the Candover Augmentation Scheme, Test Surface Water, Lower Itchen sources, Caul Bourne, Shalcombe and Eastern Yar Augmentation Scheme Drought Permits / Orders.

We have added further information relating to the potential effects on the River Beult SSSI and the Holborough to Burham Marshes SSSI as a result of implementing the Bewl Water Reservoir/River

Medway Scheme Drought Permit, drawing on the Environmental Assessment Report findings for this Drought Permit option.

We have provided new information pertaining to the outcomes and agreement reached following the Hampshire Licences Public Inquiry with the Environment Agency, including separating out the Test Surface Water Drought Order into two stages: a Drought Permit to allow abstraction to take place if river flows are at or above 265 Ml/d and a Drought Order to allow abstraction to take place if river flows are at or above 200 Ml/d. The SEA also now includes references to relevant provisions of the Section 20 Agreement that was agreed between Southern Water and the Environment Agency as part of the Public Inquiry process, in particular monitoring and mitigation measures for the Test Surface Water Drought Order and Drought Permit, Candover Augmentation Scheme Drought Order and Lower Itchen sources Drought Order. We have updated the residual effects assessment for these Drought Order/Permit options to reflect the agreed mitigation measures and referenced the need for further monitoring to reduce uncertainties surrounding the magnitude of potential residual effects.

We have included a specific new section setting out our specific assessments of the individual and cumulative effects of relevant Drought Permits/Orders and/or temporary desalination plants on the Medway Estuary and Kingsmere Marine Conservation Zones and the Bembridge Recommended Marine Conservation Zone in line with guidance issued by Natural England. This includes further details of the temporary desalination schemes that may affect these zones, the evidence used to underpin the assessments and more details on the mitigation measures that would be put in place to protect relevant sensitive marine features.

We have updated the Annex to include an additional section on the potential cumulative effects (adverse or beneficial) between relevant Shoreline Management Plans and the measures contained in the updated Drought Plan.

We have amended the in-combination effects assessment to reflect the exclusion of Sedlescombe Drought Permit/Order from South East Water's updated draft Drought Plan.

We have updated the cumulative effects section to include further commentary on cumulative landscape effects.

Reference to the Darwell Reservoir "freshet" Drought Permit has been removed as this is no longer a required option in the Drought Plan.

Annex 13 WFD

We have updated Annex 13 WFD assessment report to reflect the uncertainty related to the Candover Augmentation Scheme Drought Order in relation to potential adverse effects on a Protected Area (River Itchen SAC) as described in the updated Annex 11 (Habitats Regulations Assessment).

We have amended the in-combination WFD impact assessment to reflect the exclusion of Sedlescombe Drought Permit/Order from South East Water's updated draft Drought Plan.

Reference to the Darwell Reservoir "freshet" Drought Permit has been removed as this is no longer a required option in the Drought Plan.

We have inserted information pertaining to the agreement reached following the Hampshire Licences Public Inquiry with the Environment Agency, and included in the Section 20 Agreement, in relation to the Test Surface Water Drought Permit. This includes separating out the Test Surface Water Drought Order into two stages: a Drought Permit to allow abstraction to take place if river flows are

at or above 265 Ml/d and a Drought Order to allow abstraction to take place if river flows are at or above 200 Ml/d.

Under the Section 20 Agreement, if monitoring of the Lower River Test concludes that the Drought Permit implementation may lead to a temporary deterioration in the Water Framework Directive status of the River Test, then it is agreed in principle within the Section 20 Agreement, that the provisions of Article 4(6) of the Water Framework Directive, can be used to enable the grant of a Test Surface Water Drought Permit authorising abstraction below 355 Ml/d and that low flows on the River Test between 355Ml/d and 265 Ml/d are also capable of constituting exceptional circumstances for the purpose of Article 4(6) of the Water Framework Directive.

Annex 14 Draft Drought Permit

Annex 14 has been updated to incorporate lessons learned from the recent Bewl Drought Permit application.

Each area has a generic 'Statement of Reasons' and 'application pack', which can be taken 'off the shelf' and adapted to the specifics of the Drought Permit / Order application in question. This is separate to the Hampshire Permit / Orders draft documentation.

A table has been included showing potential venues and addresses that could be used for hearings for each of the named Drought Permits / Orders

Annex 15 Internal Drought Plan

No change