

The Sizewell C Project

8.4 Planning Statement Appendix 8.4K Site Water Supply Strategy

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APPENDIX 8.4K: SITE WATER SUPPLY STRATEGY



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1	Site Water Supply Strategy1
1.1	Introduction1
1.2	Forecast water demand
1.3	Water supply options3
1.4	Options carried forward for further consideration10
1.5	Water supply strategy17
1.6	Ongoing work
Tables	S
Table 1	.1: Summary of all potential water supply options4
Plates	
	.1: Indicative potable and non-potable water demand throughout the construction
Plate 1.	2: Proposed approximate location of Water Storage Area14

Figures

None provided.

Annexes

None provided.



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1 Site Water Supply Strategy

1.1 Introduction

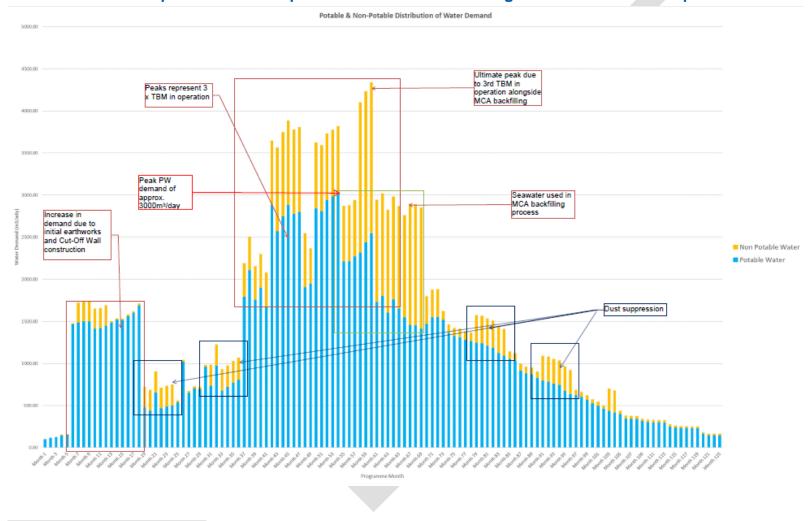
- 1.1.1. Construction of the Sizewell C Project will entail many activities that will require water supply, both potable and non-potable. SZC Co. has developed a water supply strategy by engaging with stakeholders including the Environment Agency, Essex & Suffolk Water and Anglian Water to discuss and assess potential sources for this water supply. The principal supply for the Sizewell C Project will come from mains water, provided by Essex and Suffolk Water. Sizewell C is located within the Blyth Water Resource Zone (WRZ).
- 1.1.2. In order to provide security of supply, and to ensure that all the water requirements of the project can be met, SZC Co. has worked with stakeholders to assess additional water supply options. This document summarises these options and outlines the delivery approach and characteristics of those that have been shortlisted.
- 1.1.3. In the long-term, the required water supply during operation will be considerably lower than during construction. SZC Co. anticipates that some of the water supply options established during construction will remain in place longer term to provide resilience in water supply to the local area and benefit local communities and landowners.

1.2 Forecast water demand

- 1.2.1. SZC Co. has estimated likely water supply requirements during construction based on experience at Hinkley Point C. Average demand throughout the works is estimated, based on current design assumptions, at approximately 1.8Ml/d.
- 1.2.2. Plate 1.1 provides an illustration of the indicative demand profile for both potable and non-potable water throughout the construction period. During the enabling works water demand peaks at 1.8Ml/d for 14 months. This is related to the construction of the cut-off wall. During the main construction phase, water demand is predicted to peak between 2.5Ml/d and 3.5Ml/d for a period of 20 months during tunnelling works. This assumes no recycling of water by the tunnel boring machines, which would reduce demand. After the completion of the tunnelling, forecast demand falls below 1.8Ml/d and then gradually decreases through the remainder of the construction period to around 0.5Ml/d. The demand during operation is expected to be significantly lower than that during construction, at approximately 0.5Ml/d.

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Plate 1.1: Indicative potable and non-potable water demand throughout the construction period





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- 1.2.3. The forecast demand profile for the Sizewell C Project will continue to be reviewed in response to any changes to the proposed design and construction techniques to be employed. SZC Co. considers that these estimates are considered reasonable and robust for the purposes of planning.
- 1.2.4. The required water supply at the Sizewell C Project can be split between domestic/welfare demand and construction/process demand. Domestic/welfare demand is a significant proportion of total demand and typically includes activities such as toilet flushing, washing, showering and drinking. Key water-consuming construction activities include concrete production, tunnelling and dust suppression.
- 1.2.5. SZC Co. is committed to reducing demand wherever possible, and water efficiency measures are an important part of the water supply strategy for the project.
- 1.3 Water supply options
- 1.3.1. SZC Co. has considered three categories of water supply solutions in developing a water supply strategy:
 - New resources options to capture, store and supply water to Sizewell C, either directly or indirectly.
 - Water company potable water transfers moving water into the Sizewell area from outside the Blyth WRZ.
 - Local demand management options opportunities to reduce consumption on-site as well as reducing the reliance on mains potable water.
- **Table 1.1** summarises all of the water supply options that SZC Co. has considered during the water strategy development process.

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Table 1.1: Summary of all potential water supply options

Option	Description	Benefits	Limitations	
New resource options	New resource options			
Benacre pumping station	The pumping station is 23 km north of Sizewell C. It currently pumps flood water from Kessingland Levels to the sea.	Water not currently being utilised. Water could be used to provide supply to local farmers after construction, potentially reducing groundwater abstraction demand.	Water quality unknown. No existing surface water treatment works nearby. Storage required to allow supply during dry periods. Extensive pipeline construction required.	
Minsmere Sluice	Water currently discharged to the sea from Minsmere Sluice, immediately north of the Sizewell C site. If a new pumping station were constructed this water could be used for supply.	Water not currently being utilised – could provide non-potable supply. Potential that a new water storage area could be constructed to provide supply reliability. Following construction of Sizewell C this could be offered to local farmers for winter storage.	Water quality unknown. No existing surface water treatment works nearby.	
Aldeburgh sewage treatment works (STW) effluent reuse	Anglian Water's STW close to Thorpeness currently discharges to sea. Either pipe this effluent to Sizewell C or discharge it into the Hundred River and abstract from the river.	Effluent not currently being utilised. Environment Agency has indicated that discharging to the Hundred River may help achieve "good" status under the Water Framework Directive (WFD).	Additional treatment likely to be required. Costs may be high depending on treatment required.	
Sizewell B effluent reuse	Use output from existing Sizewell B sewage treatment works, either potable or non-potable source depending on treatment options.	Effluent not currently being utilised. Location would mean no transport/ limited additional infrastructure required.	Additional treatment likely to be required.	



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Option	Description	Benefits	Limitations
		Could combine with an on-site greywater system.	
Desalination	Install modular desalination plant and abstract seawater for treatment.	Potentially-short lead time: equipment can be hired. May be useful for temporary top-up during periods of high demand or drought.	Brine waste product would need disposal. Desalinated water can be aggressive in pipe network and may require remineralisation.
Ship tankering	Tanker filled with water elsewhere (e.g. North-East England). Water pumped to the site while ship moored nearby. Water likely to be non-potable.		Additional treatment may be needed. Volumes may be limited.
Licence trading with local abstractors	SZC Co. would broker a licence trade between local abstractors and Essex & Suffolk Water to enable Essex & Suffolk Water to increase volumes they can abstract from existing groundwater sources. Alternatively, SZC Co. may take on a licence from nearby abstractors via a trade directly where practicable.	Existing licence holders would be offered compensation to construct winter storage reservoirs to replace existing licensed supply. May benefit local abstractors — negotiating short-term trades may enable them to retain licences in the longer term. New storage infrastructure would be retained in long-term increasing their supply resilience.	Restrictions around licence trading, e.g. the traded licences must be abstracting from the same water body i.e. the same aquifer or the same reach of a river. Licence trading would be based on actual use for the period 2007-2012, not on fully licensed volumes. Time required to secure trading agreements. Traded water would be non-potable if not traded through Essex & Suffolk Water. Where SZC Co. takes on the trade, new infrastructure such as mains, treatment and storage would be required to allow water to be transported from abstraction to Sizewell C.



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Option	Description	Benefits	Limitations
Compensation discharges	A range of ongoing activities by the Environment Agency which may release water from the environment to allow increased abstraction, e.g. changes to licensing as a result of increased winter storage, improved monitoring, habitat enhancements to increase resilience to low flows.	Multiple wider environmental benefits.	Further discussion with the Environment Agency needed to understand ongoing work, opportunities and benefits.
Flood water storage	Capturing and storing flood water during times of surplus by constructing a water storage area.	A water storage area could link to other sources such as Minsmere Sluice.	Challenging to predict when water will be available which would impact on reliability of resource.
Additional water storage area	Construction of a new water storage area in the northern part of the site could be used to provide additional storage of water from Minsmere Sluice, collated greywater from site, or effluent.	Improve reliability of supply. Additional storage may facilitate use of water efficiency measures such as rainwater harvesting or greywater reuse.	The volume of water storage would be dependent on any restrictions on depth and the existing ground conditions.
Leiston STW	Divert discharge from Anglian Water's Leiston STW to Sizewell C for reuse.	Local source.	Likely to be unfeasible as discharge known to be important for maintaining inflow into Sizewell Marshes SSSI.
Potable water transfers			
National Framework option	This a long-term strategy considering balancing water resources across the country, e.g. transferring water from north to south.	Wider environmental benefits and increased supply resilience.	Unlikely to be delivered within project timescales.
Regional Strategy option	Water Resources East is a multi-sector project to improve water management across the East of England. Options would	Wider environmental benefits and increased supply resilience.	Unlikely to be delivered within project timescales.



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Option	Description	Benefits	Limitations
	include construction of a new strategic reservoir and transfers across the region.		
Anglian Water Strategic Pipeline	Anglian Water are constructing a new strategic pipeline transferring surplus potable water from North Lincolnshire to Cambridgeshire and Suffolk. To supply Sizewell C, two new mains would need to be constructed to provide additional capacity locally.	Wider environmental benefits and increased supply resilience.	Awaiting approval from Ofwat for some parts of the project. Cost of new pipelines would be significant. Programme is challenging but achievable.
Essex & Suffolk Water transfer from Northern/Central WRZ	Transfer surplus water from Northern/Central WRZ into Blyth WRZ via a new main/upgrade of existing main.	Wider environmental benefits and increased supply resilience.	Uncertainty around potential impacts of future licence reductions.
Essex & Suffolk Water transfer from Essex WRZ	New main to transfer surplus water from Essex & Suffolk Water's Essex WRZ into Blyth WRZ.	Wider environmental benefits and increased supply resilience.	Additional pipeline required.
Local demand management options			
Use of dewatering water	Use water abstracted during dewatering rather than discharging to sea. Flows of 21Ml/d available for first 2 months of enabling works, then 2.5Ml/d for the majority of the construction period.	Water could be used for firefighting provision even if salinity too high for other uses.	Water likely to be brackish and become more saline over time. Likely to require blending or treatment, or only be used for certain activities.
			Storage required which would require space and may affect construction sequencing.
Rainwater harvesting	Various options including a water storage area or tanks and using recycled roof runoff.	Potential to use rainwater for toilet flushing or dust suppression.	Reliability of rainwater not guaranteed, difficult to include definite volumes in water balance planning.



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Option	Description	Benefits	Limitations
			Use of non-potable sources within welfare facilities would increase complexity of plumbing, which may not be possible in prefabricated buildings.
Re-using concrete wash water	Providing technology to minimise losses from the batching plant	Recycling and reuse of water reduces net demand	
Enable tunnel boring machines to use water management zone (WMZ) supply	The tunnel boring machines (TBMs) use water for cooling and lubrication. Adapting the equipment could enable alternatives to mains supply to be used.	Reduces demand from mains supply.	Would depend on whether filtration system can be incorporated into TBM train. WMZ supply limited as rainwater is generally required to infiltrate to ground to recharge the ground water table.
Greywater reuse	Collection and reuse of greywater (e.g. waste from sinks, showers, baths)	Sustainable water supply.	Energy-use and health/hygiene risks to be considered – treatment may be required and likely restricted to certain uses only. Use of modular prefabricated accommodation units may limit opportunities to incorporate non-potable systems.
Effluent reuse	Adaptation of foul water system to provide additional treatment and reuse on site.	May be able to be combined with Sizewell B effluent reuse.	Additional treatment required and effluent may only be appropriate for certain uses.
Use of water efficient fixtures and fittings	Welfare facilities would be fitted with water efficient fixtures and fittings.	Reducing consumption.	
Use of water efficient practices on site	Multiple examples, such as provision of wheel washes instead of spraying and	Reducing consumption.	



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Option	Description	Benefits	Limitations
	sweeping, or use of sealants or geotextiles on stockpiled material instead of spraying.		
Water storage (tank storage)	Provision of on-site storage to smooth out demand peaks.	Improve reliability of supply.	
Programme works to avoid periods of highest 'water stress'	Schedule on-site works so that high consumption activities avoid summer months when public water consumption is typically higher and environment is under greater stress.	Reduces overall water demand in region.	Challenging to change construction sequences – multiple other limitations affect sequence. High costs associated with project delays. Uncertainty around weather – no guarantee that summer is driest period.



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1.4 Options carried forward for further consideration

- 1.4.1. SZC Co. has appraised all of the options in **Table 1.1** with the input of key stakeholders, including Essex & Suffolk Water, Anglian Water and the Environment Agency. The options were assessed on grounds of: suitability and reliability; whether the option would be achievable within delivery timescales; complexity and constructability; whether any third-party approvals or permissions would be required; environmental impact; legacy and wider benefits; cost; and potential risk and uncertainty.
- 1.4.2. Following this appraisal, 16 options were shortlisted, with four more long-listed and five options eliminated. The eliminated options were:
 - the National Framework and Regional Strategy options, because they would not be achievable within the required timescales;
 - transfer of surplus water from the Essex WRZ, because it would be considerably more expensive than other transfer options;
 - enabling the TBMs to use water from the WMZs because using water from the WMZs would reduce potential infiltration to groundwater and the supply is not likely to be suitable; and
 - programming works to avoid periods of highest water stress due to concerns over cost and potential project risk.
- 1.4.3. The four long-listed options have not been discounted but are not currently being pursued by SZC Co. as they would be less suitable, or more complex or costly to implement than the short-listed options, or have greater environmental impacts or greater risk associated with them. The long-listed options are as follows:
 - Benacre pumping station;
 - Flood water storage;
 - Leiston STW; and
 - Effluent reuse from Sizewell C.
- 1.4.4. The remaining short-listed options were carried forward for further investigation by SZC Co. and key stakeholders. The detail around likely delivery and potential environmental impacts of each of these options is discussed in more detail in this section.
- 1.4.5. These options are all being considered in addition to the supply that will be provided by Essex & Suffolk Water from within the Blyth WRZ. The



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Environment Agency has carried out an initial scoping study to investigate whether compensation discharges into surface water from groundwater could be an effective way of mitigating additional abstraction within the Blyth WRZ. The initial findings of these studies were positive.

1.4.6. Many of the options discussed in this section are for non-potable sources of supply. These would require treatment either on site at Sizwell C or where, appropriate, at existing off-site treatment works operated by Essex & Suffolk Water.

a) Minsmere Sluice

- 1.4.7. Minsmere Sluice is a pressure-controlled sluice which allows discharge of water from Sizewell Belts to the sea during periods of low tide. Constructing a pumping station at the sluice would allow this water to be utilised by the site as a non-potable supply. An associated water storage area would likely need to be constructed in order to improve the reliability of the source.
- 1.4.8. As water from Minsmere Sluice already discharges to the sea there should be minimal environmental impacts from abstracting water, as the water has already discharged from the Sizewell Marshes SSSI and Minsmere-Walberswick Heaths and Marshes SSSI, particularly during the winter, when water levels within the wetlands are high. Any works at Minsmere Sluice would be designed to minimise impacts to the surrounding environment and in co-ordination with the Environment Agency who would manage and control any abstraction licence, the internal drainage board who operate the sluice, and the RSPB, who manage the adjacent Minsmere Levels.
- 1.4.9. Water abstracted from Minsmere Sluice could be stored in the water storage area over winter to be used in summer (see option j).
 - b) Aldeburgh sewage treatment works effluent reuse
- 1.4.10. Aldeburgh STW currently discharges to the sea. The effluent could instead be transported to the main development site directly or discharged into the Hundred River, allowing for abstraction from the river. Both would provide a source of non-potable supply requiring treatment.
- 1.4.11. The Environment Agency is supportive of discharge to the Hundred River as the river is currently failing to achieve WFD targets and the increased flow may help to achieve "good" status, which would offer an environmental benefit.
- 1.4.12. SZC Co. is working with Anglian Water and the Environment Agency to understand the likely treatment required and potential yield from this source.



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c) Sizewell B effluent reuse

- 1.4.13. Sizewell B has an on-site sewage treatment works. The effluent could be used as a non-potable water supply.
- 1.4.14. The benefit of this source is that it would be immediately adjacent to the main development site and would require little in terms of pipeline construction or transport.
 - d) Desalination
- 1.4.15. Historically desalination has not been looked upon favourably in the UK given perceived environmental impacts associated with high energy demand and associated operational expenditure. Given Sizewell C's location immediately adjacent to the coast, and the opportunity to use power from Sizewell B, the environmental impacts in this scenario may be lower than previously thought.
- 1.4.16. The desalination plant would be installed within the main development site. A modular plant could be hired in for periods when water demand was high or in periods of drought as a temporary "top-up" to supply.
- 1.4.17. The key environmental concern associated with desalination would be the disposal of the brine waste product.
 - e) Ship tankering
- 1.4.18. Tankering could provide a source of non-potable water from outside the region.
- 1.4.19. There would likely be some environmental impacts associated with tankering, particularly in terms of emissions, depending on the distance of transport required.
 - f) Licence trading with local abstractors
- 1.4.20. SZC Co. has been in discussion with the Environment Agency regarding licence trading. The Environment Agency allows all or part of existing abstraction licences to be traded from the licence holder to another party on a temporary or permanent basis. This means that in areas where the Environment Agency Catchment Abstraction Management Strategy states that there is restricted water, or no water, available for licensing, that existing licences can be traded between landowners.
- 1.4.21. The Environment Agency has stated that licence trading would be a viable water supply option, but that only a portion of the licensed volume of existing



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licences could be traded, up to the recent actual abstraction volumes, to ensure that the actual abstracted volumes do not increase following a trade.

- 1.4.22. Most abstractions close to the main development site are held by local farmers. SZC Co. would negotiate a temporary licence trade during the construction period. SZC Co. would provide compensation to these farmers to allow them to build winter storage reservoirs which would provide them with supply in place of the abstraction licence. Constructing winter storage reservoirs would provide a long-term environmental benefit as they would allow licenced abstraction volumes to be reduced once the construction period has finished.
- 1.4.23. Licences can generally only be traded for "like-for-like" sources, i.e. within the same aquifer or within the same reach of a river. Where possible, SZC Co. would broker a trade between the existing licence holder and Essex & Suffolk Water so that Essex & Suffolk Water could increase their licensed abstraction volumes in the area close to the main development site. If this is not feasible, SZC Co. may take on operation of existing licensed abstractions, or look to construct new abstraction and supply infrastructure, where this can be negotiated with the existing licence holder.
- 1.4.24. SZC Co. has requested details of local abstractors and likely available volumes from the Environment Agency based on records of actual abstraction volumes between 2007 and 2012 and is working with the Environment Agency and Essex & Suffolk Water to progress this option.
- 1.4.25. Where additional water from licence trading comes via Essex & Suffolk Water it would be a potable supply. If SZC Co. were to take on existing abstractions themselves the water would be non-potable and would require treatment prior to use.
 - g) Compensation discharges
- 1.4.26. SZC Co. is working with the Environment Agency to understand how the use of compensation discharges may support water supply for the Sizewell C Project.
- 1.4.27. Compensation discharge arrangements are already in place in some catchments close to the main development site and allow surface water flows to be augmented by abstraction from groundwater, for example on the River Alde and River Hundred. These discharges are only triggered at periods of severe low flow.
- 1.4.28. The Environment Agency have carried out an initial scoping exercise to understand how operating the compensation discharges may act as a benefit



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to support abstraction associated with water supply for the Sizewell C Project.

h) Additional water storage area

1.4.29. SZC Co. is proposing to construct a water storage area in the north of the main development site. The area was formerly designated for flood storage, but flood risk assessment has shown it is no longer required for this purpose.

APPROXIMATE LOCATION OF CONTROL O

Plate 1.2: Proposed approximate location of Water Storage Area

1.4.30. The Storage Area would hold a maximum volume of less than 25,000m³ of non potable water for use in the construction process and would provide the ability to store water over the winter period for use during the summer months. SZC Co. is currently exploring a range of options for the source of water and will continue discussions with relevant stakeholders. Water would be stored above groundwater level to ensure it is hydrologically separate and does not cause adverse effects to groundwater levels on-or off-site.



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i) Anglian Water Strategic Pipeline

- 1.4.31. Anglian Water's Strategic Pipeline is an existing project planned by Anglian Water to join up their supply network across the Anglian region to increase resilience.
- 1.4.32. Environmental impacts of the strategic pipeline would be managed and mitigated by Anglian Water, who are undertaking the project and facilitating the additional supply. Water being transferred would be surplus and therefore should not cause additional strain on water supply elsewhere.
- 1.4.33. SZC Co. has been working with Essex & Suffolk Water and Anglian Water to understand what would be required in addition to the existing plans in order to provide supply to the main development site as part of this scheme. At present the strategic pipeline is planned to reach Stowmarket by 2023. Supplying the main development site would require additional pipeline to be constructed from Stowmarket to Woodbridge and new mains by Essex & Suffolk Water from Pettistree to Benhall. This work would release capacity in the area which could supply the main development site. SZC Co. has been in communication with both water companies to understand the required level of investment for this project.
- 1.4.34. Achieving this project within the timescales required for the Sizewell C Project would be challenging and this constraint may mean that this option may not be available in time to supply water to the project.
 - i) Essex & Suffolk Water transfer from Northern/Central WRZ
- 1.4.35. Essex & Suffolk Water have been investigating the potential for increasing the connectivity between the Blyth WRZ and the Northern/Central WRZ in order to provide additional mains supply to the main development site. Essex & Suffolk Water have carried out initial scoping studies which demonstrate that additional water could be supplied from an existing treatment works within the Northern/Central WRZ. Sections of new and replacement water mains would be required to transfer this water into the Blyth WRZ and to the main development site, as well as a new pumping station, process plant and storage reservoir to increase capacity at the existing treatment works.
- 1.4.36. Essex & Suffolk Water are working with the Environment Agency to understand whether any future abstraction licence reductions could affect this supply.
- 1.4.37. Potential environmental impacts of this option would be managed by Essex & Suffolk Water who would be responsible for ensuring they remained within their licensed volumes and were able to adhere to any future licence reductions.



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- 1.4.38. Linking of Essex & Suffolk Water's WRZs will help provide more resilience in their network in future, which would be a long-term benefit to the local community.
 - k) Use of dewatering water
- 1.4.39. Dewatering will be taking place following the completion of the cut-off wall and continuing throughout the construction period. At present this water would be discharged to the sea. However, it would be possible to use this water on-site as a non-potable supply.
- 1.4.40. Volumes available from dewatering would be significantly greater during the first 3 months of dewatering operations (approximately 21Ml/d) and then decrease to approximately 2.5Ml/d throughout the construction period.
- 1.4.41. The abstracted water would likely be saline, and salinity may increase with time. As such, the water would require treatment on-site or blending with other sources. If it was not treated, its potential uses may be restricted, or it could be blended with another source of supply. Treatment of dewatered water could also be combined with desalination.
- 1.4.42. The advantage of this supply is that it is being produced on-site. However, storage of the water would be a challenge, particularly during the early phase of the dewatering when large volumes are produced. It may not be feasible to store this volume of water on-site due to space constraints. SZC Co. is currently exploring likely available areas for storage. Stored dewatering water could be used to augment supply during periods of high demand. Alternatively, dewatering water could be used as a "top-up" supply and its treatment combined with temporary desalination.
 - I) Water efficiency measures
- 1.4.43. Multiple water efficiency measures would be implemented by SZC Co. during construction and operation of Sizewell C in order to reduce overall water demand. Of those included in **Table 1.1**, the following have been shortlisted:
 - Rainwater harvesting;
 - Re-using concrete wash water;
 - Greywater re-use;
 - Water efficient practices; and
 - Water efficient fixtures and fittings.



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- 1.4.44. SZC Co. is committed to reducing water demand during every stage of the project and is progressing all of these measures. Some, such as using water efficient fixtures and fittings, are straightforward to deliver, whereas others, such as rainwater harvesting and greywater re-use, would affect design and would be incorporated into detailed design decisions.
- 1.4.45. Current estimates are that wash water recycling at the concrete batching plant could reduce demand from the plant by approximately 30%, equivalent to more than 250m³/d at the peak of concrete production. Using non-potable water for activities such as irrigation, dust suppression and plant wheel washing could reduce demand by approximately 225m³/d and using non-potable water for toilet flushing could reduce the total welfare demand by 30%. The use of water efficient fixtures and fittings could reduce the demand in welfare and accommodation facilities by approximately 20%.

1.5 Water supply strategy

- 1.5.1. The principal potable water supply for the project will be from mains water, supplied by Essex & Suffolk Water from within the Blyth WRZ. However, in order to provide a robust and sustainable water supply, SZC Co. has chosen to carry forward four of the options summarised in **section 1.4** of this document. Using a combination of water supply options will ensure security of supply and help to reduce the demand for potable water from mains supply.
- 1.5.2. The primary components of the sustainable water supply strategy for the main development site are:
 - Mains water supply provided by Essex and Suffolk Water from within the Blyth WRZ;
 - Mains water supply provided by Essex and Suffolk Water from within the Northern/Central WRZ via new pipeline transfer connection to the Blyth WRZ;
 - Additional potential mains water supply enabled by licence trading with local licence holders;
 - Storage of non-potable water in the proposed water storage area in the north of the main development site. Water may be derived from a number of sources including water pumped from a new pumping station at Minsmere Sluice, effluent from Sizewell B or Sizewell C, or greywater from Sizewell C; and



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- Water efficiency measures to reduce the demand from mains supply (e.g. using water efficient fixtures and fittings, rainwater harvesting and greywater reuse).
- 1.5.3. All of these measures are consistent with the assessment of likely significant project effects set out in the Environmental Statement.
- 1.5.4. SZC Co. recognise that water demands in the local region may change over the period of the project. The water supply strategy has been developed to ensure that the Sizewell C Project has more than sufficient supply secured and a supply that would be adaptable and robust in the event of local shortages in water availability or periods of drought, including consideration of multiple sources of non-potable water.
- 1.5.5. SZC Co. is aware that other projects in the region may also create demand on the water infrastructure in future. Future demands on regional water supply from domestic use are captured within Essex & Suffolk Water's Water Resource Management Plans. SZC Co. have taken a pro-active approach, engaging early with regulators and water companies, to produce a robust, sustainable supply strategy. When developing the water supply strategy for Sizewell C other demands on regional water supply have been accounted for and adequate surplus provision has been included.

1.6 Ongoing work

- 1.6.1. SZC Co. is continuing to engage with the Environment Agency, Essex & Suffolk Water and Anglian Water to advance the water supply strategy and carry out confirmatory assessments on the shortlisted options.
- 1.6.2. Key tasks that SZC Co. is undertaking to progress the water supply strategy include:
 - The completion of modelling work undertaken by Essex and Suffolk Water and the Environment Agency to confirm the volume of potable water that can be supplied from the Blyth Water Resource Zone (WRZ) for Sizewell C.
 - Continued engagement with the Essex and Suffolk Water and the Environment Agency regarding the potential to transfer mains water from within the Northern/Central WRZ via new pipeline transfer connection to the Blyth WRZ.
 - An initial review of local licensed abstractions, to shortlist potential abstractions for trading, and understand available volumes from these licences.