Written evidence submitted by Water Resources South East (WRSE)

Water Resources South East (WRSE) is an alliance of the six water companies operating in the south east of England. The water companies involved include Affinity Water, Portsmouth Water, South East Water, SES Water, Southern Water and Thames Water. Together they serve 19 million customers and provide 6 billion litres of water per day. It also involves a number of stakeholders including Defra, the Environment Agency, Ofwat and CCWater.

WRSE is responding to this inquiry to highlight the link between invasive species and water transfers and to highlight why clarity around the standards associated with the management of invasive species is critical to enabling water companies to identify and deliver water transfers that will increase the resilience of the region’s water supplies.

WRSE background and purpose

WRSE was originally formed in 1996 following a recommendation from the Monopolies and Mergers Commission which suggested there should be better regional co-operation when it came to sharing water. Since then it has developed a series of regional strategies which have informed the individual companies’ Water Resource Management Plans (WRMPs) and identified how water could be shared and moved around. More information on WRSE can be found at [www.wrse.org.uk](http://www.wrse.org.uk).


It identified that the south east region alone is facing a potential public water supply deficit of between 1,000 million and 2,600 million litres of water per day by 2080. This broadly aligns with the National Infrastructure Commission’s (NIC) National Infrastructure Assessment, which recommended that 4,000 million per day of water needs to be made available across England by 2050 to provide resilience against severe drought – with the South East and East regions needing the greatest amount of additional capacity under all scenarios.

The NIC recommended that a triple track approach of leakage reduction, per capita consumption reduction and the development of new water resource infrastructure - including transfers both within and between regions - is taken to increase resilience. At present, transfers make up only 4% of the proportion of total water supplied. In the south east region, WRSE has supported the development of an enhanced water grid with around 100 million litres of water being shared between the six companies, however a range of studies have found a positive-cost benefit case for greater transfers and water trading.

Work is already underway to develop plans for new strategic transfers between water companies including a transfer between United Utilities, Severn Trent and Thames Water; and transfers from Thames Water to Affinity Water and Southern Water. Alongside this WRSE is developing a regional multi-sector resilience plan that will inform the next round of company WRMPs in 2024 and will consider which transfers should be progressed.

Invasive species and water trading

There are number of potential barriers to increasing water trading, one of which is the risk of transferring invasive non-native species between water catchments. The top 10 invasive non-native
species that water companies will be investigating through the Water Industry National Environment Programme during the 2020 to 2025 Business Plan period include:

1 Quagga mussel
2 Zebra mussel
3 Killer and Demon shrimp
4 Signal crayfish
5 Round Goby
6 Himalayan balsam
7 Japanese knotweed
8 New Zealand pigmy weed
9 Floating pennywort
10 Giant hogweed

Initially, treatment solutions were put in place for some non-native species to try and control the spread from one catchment to another. However, with the detection of invasive non-native species in some donor catchments, schemes are now being put in place to convert existing raw water transfers between catchments to raw or treated water transfers between treatment works – with additional costs being incurred.

When the industry looks a transfer options there are a wide range of variations including:

- Straightforward raw water transfers between two catchments;
- More complex raw water transfers between catchments and canal systems;
- Treated raw water transfers and drinking water standard transfers.

Each type of transfer will require different infrastructure and permissions to operate it.

To enable WRSE and its member companies to identify new water transfers, clarity and certainty is needed over the standards required and what, if any, mitigation measures are acceptable to prevent the spread of for invasive non-native species (INNS). This advice / guidance is essential. Without clear and consistent standards, companies are at risk of progressing transfer schemes which ultimately are not feasible, wasting customers’ money and risking timely critical resilience. Given how long these transfers could be in place it is important that consideration is given to both the risks we are aware of now and how they might develop under different climate change scenarios.

The assessment and guidance on INNS are needed early in the option screening process so that schemes which risk the transfer of invasive species and cannot be reasonably mitigated can be discounted and alternative options identified. This would be at the early stage of going from an unconstrained list of options to a constrained list; or from the constrained list of options to a feasible list of options. This should not be subject to change unless driven either by new science and/or legislative changes and any changes must be signalled as early as possible to avoid schemes being progressed if they are no longer feasible.

The guidance and standards that are set must be practical, clear and based on the most up to date evidence base using the best available science. They must not be overly reliant on the precautionary principle and take into account of the current and past projects that have been put in place to control or eradicate the species.

Assessment of future INNS risks should help inform where infrastructure projects should modify their designs to be able to adapt to the risk should it materialise. To achieve this, it is vitally
important that a continued assessment of invasive species in the South East is collected, made available to organisations to use and published on websites to allow the data to be incorporated into screening assessment tools. At present it is available on request, but we believe it should be made publicly available, in line with the aspirations of the 25 Year Environment Plan, providing any GDPR are addressed.

When considering future strategies for the South East it will be important to understand the future risks from non-native species and invasive non-native species. The national INNS working group has carried out considerable work to understand that current risk we face and identify future risks. However, WRSE is planning for a 60 year time horizon so developing a better understanding of future risks and the impact they will have is essential for long-term water resource planning and promotion of a high quality and resilient water environment. The multi-sector regional resilience plan that WRSE will develop will put resilience at its heart to identify and deliver solutions that will provide best value for customers, the environment and wider society.

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