

#### Coping with an uncertain future and evolving challenges to build a stronger and more resilient business

Capital programme delays

Risk profile swings by type and geography

Increase in blockages, flooding & pollution

Alternative design parameters in networks & treatment

Changes in water demand by quantity and location

Changes in loads and patterns at WwTW

Ability to respond, investigate & resolve

**Expert insight and industry** leading remote capabilities

The right technical resources to meet the changing demands regionally and locally

Analysis and foresight of shifting population and demand patterns

**STANTEC** SUPPORTING OUR CLIENTS IN A CHANGING WORLD

# Expert Insight when and where you need it most through established remote working practice

Stantec's staff and systems are well versed in remote working, as part of our standard practice of pulling in the best technical and professional services to meet a particular need. For the last decade we have routinely practiced remote working, with our teams across the UK serving clients on their doorstep and beyond. We also routinely operate integrated global working with our teams in Pune, India and pull in expertise from the Stantec global enterprise.

The working practices to enable this are now second nature to us, and accordingly, 98% of our UK Water staff successfully transitioned to working from home because of our infrastructure choices. Our systems and use of technology allows us to support you in your short term challenges and future ways of working, which are particularly impacting travel and physical site work.

of our staff successfully working remotely

technical support communities

Through our Industry connectivity across the UK and globally, we can help enable collaboration to solve problems and share data. For example, this may be through refining design parameters, sharing development risk and testing alternative strategies to common areas of challenge such as flooding other causes, P-removal etc.

Alternatively our experts may bring experience from outside of the sectors to plan and enable virtual engagement with stakeholders and communities, or bring the evidence together for key water processes, such as Direct Procurement for Customers. We can achieve this all through virtual working.

You can utilise our Global Water Industry Expertise at the right time almost instantly:

- Connect with over 100 of our established global Yammer support communities to access expert advice
- Access our experts to triage key challenges bring expert domain knowledge and innovative thinking
- Work with you to shape and host virtual round tables for major focus areas.
- Use video call technology to see and assess problems through linking with a local presence (client's staff or local Stantec staff).
- Combine our experience from non-water sectors like urban and natural environments and community development, with our un-rivalled domain knowledge of the water industry, to create integrated strategies and solutions.



# Flexibility in resources to support you with changing staff demands regionally and locally

We recognise the direct impacts of Covid-19 on the health and responsibilities of staff and their dependents. Variable work hours and the evolving changes (now and in the future) result in shifting asset performance. Our people are here to provide the flexible support across the business, whether in asset strategy and planning, capital delivery and operational support. For example:

- Where process scientist staff levels are impacted, our troubleshooting experts can provide targeted advice on sites with compliance concerns. For example rapid root cause analysis of escalating compliance parameters such as ammonia, can lead to timely intervention of operational parameters such as desludge rates to ensure a site remains within its permits.
- Freeing up client's internal resources for targeted deployment by extending existing support. For example providing greater support with Drainage and Wastewater Management Plans from modelling to problem characterisation through to stakeholder engagement.
- 'Rapid response' teams that can be mobilised to deal with specific water resource and water quality issues (connecting with our remote teams as well), including:
  - Pollution response
  - Water quality investigations (as part of DWI compliance)
  - Water resource stress events (drought, demand peaks)
- The virtual application of our resources to support the development and delivery of capital programmes. Whether that's helping to reprioritise or shape programmes based on risk, developing scopes or starting design work, our teams have the flexibility and the connection to our experts to provide the tailored support you ask for.
- Bringing our Catchment and Water Resources expertise to support you develop strategic plans and priorities for AMP7. For example the implementation of schemes that maximise benefits measured through the 6 capitals.



# Analysis and foresight of shifting population and demand patterns

The necessary response to Covid-19 has transformed much of daily life in the UK, with school and workplace closures, high levels of home working, a heightened focus on the environment and the temporary shut down of some industrial activities, alongside unprecedented demand by others. We recognise that we may see change within regions in the future to cope with fluctuations in the virus.

The changes to societal, industrial and economic patters can provide both challenges and opportunities, and with growing expectation that this will result in longer term trends of change, this has both short and long term implications. Stantec is ready to tackle these changes using our domain knowledge and understanding of the water sector.

- Increased working from home and changes in industry activity can place new pressures on certain asset bases. Some clients are reporting strain on smaller works and infrastructure that services highly residential areas. Blockages in the network are increasing as a result of more people at home
- In some locations there can be opportunities created by this current shift in domestic and trade demand to gain insights into asset performance and demand criteria that are notoriously hard to quantify or locate: leakage, infiltration, DWF etc.
- There is significant data available that can be maximised to gain insight to changes in trends, asset performance, potential impacts on natural systems and avoid problems occurring in the first place – all achievable through off-site analysis.



- Our data analysts and system architects working closely with our subject matter experts can help analyse changes in trends quickly, utilising various statistical approaches through to creating digital twins to predict future implications. These can be used in the short term for operational planning but also in creating resilient designs for the future and more resilient design standards to cope with alternative patterns and loads.
- Our Stantec Insight Analytics tool can utilise and access the huge amounts of data available in client systems such as Pi and can enable daily trend identification and predictions to generate the associated intervention recommendations
- Stantec water experts can provide advice on maintaining resilient service levels and compliance through this unprecedented period. Furthermore, we can support you to consider the changing future scenarios during and beyond this pandemic, and it's resulting influence on societal patterns.

#### Contacts

Our experts are on hand to support you and can be contacted directly. They will connect you with the expertise and people you need; from within the UK...and beyond.



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#### Ensuring tomorrow forms part of today

Covid-19 has tested our societal resilience in coping with a significant threat. Its impact has highlighted the importance of planning for the future, whatever that future may bring. As we face the climate emergency, adopt low carbon solutions and become more community focused; we can continue to shift our approach as water stewards, at an accelerated rate.

Stantec can not only assist you in your response to the ongoing challenges of the pandemic, but can also support the shift in thinking and delivery needed for what will follow; identifying both the challenges and opportunities to exceed the plans and ambitions set out for AMP7.

For us this starts at home. We are focused on our behaviours as an organisation, building on the approaches we have employed to work more remotely for years, but continually evolving and improving those capabilities. All this, whilst not compromising on the delivery of our promises, or ceasing to be a values-led organisation for our staff.

We have set ambitious targets to reduce our travel, changing our practice beyond the necessities of pandemic response. Enabled by technology and training, this is committing us to a massive step change in reducing our carbon and safety-risk levels, whilst enhancing the wellbeing of our employees as they balance work and home lives successfully.

Behaviours apply to what we do and how we think. The passion that starts at home, extends to thought leadership from our experts on how the water industry can similarly harness the possibilities raised by this current crisis, to bring about the evolutionary leap forward.

We work closely with our clients to support their move to more adaptive management approaches both within their asset estate, but also through the wider community and environment, to achieve better outcomes. Our commitment is to:

- Focus on multiple benefits generated through catchment and community solutions that bring together the water cycle management
- Evaluate solutions through a TOTEX hierarchy and multi-capital approach
- Walk with you, on the journey and transition to create SMART networks that embrace the pillars of resilience

The world started 2020 more aware than ever of the pressing climate emergency and the necessity of ambitions for zero net carbon. Covid-19 has tested our societies further still and has been negotiated at heavy cost. However, the changes in behaviour and the increased appetite for the adoption of community-based solutions, could also provide new pathways to tackle wider, global challenges and transform the delivery and utilisation of water services.

Whether it's from the national or global stage, we will bring our deep domain knowledge that connects water, wastewater, the environment and wider infrastructure when you need it, as you walk those new paths.



Design with community in mind

