

## OFWAT

### **Towards Water 2020 – Meeting the challenge for water and wastewater services in England and Wales - Water resources response**

#### Background to CIWEM

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent comment on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.

CIWEM welcomes the opportunity to respond to the Ofwat consultation on *Water 2020 - Meeting the challenge for water and wastewater services in England and Wales*. This response has been formulated with the assistance of our Water Resources Panel of technical members. CIWEM has also submitted a response on a market for sludge as a separate response.

#### Summary

Much of the substantive content of the consultation document is strongly focused on economic, financial and regulatory issues and matters, and hence bears only tangentially on the interests and expertise of water resources practitioners. But the topic of water resources governance and management, and the key need to deliver reliable, affordable and appropriately resilient water services to people and businesses whilst providing for the proper maintenance and enhancement of natural water resources and ecosystems, now and in the future, on both counts, lies at the very core of our work.

We have concerns that the entire Ofwat strategy is based on the view that 'markets have a greater role to play'. There is very little evidence to show that this works in other markets and nothing to show that it will work in the water industry or that it will protect the environment.

We trust that our comments on the consultation document will inform your thinking on the regulatory processes that are applied to water resources, particularly where and when water is scarce and in need of careful control. Our central concern with the various policy proposals presented in the consultation document is whether sufficient attention and design has been applied to the management of water resources in dry and drought periods, as opposed to in the general, everyday circumstance.

We urge recognition of the need for, and the benefit of, a focus on managing and regulating for dry events, which are set to occur more often, and with greater impact on the health and welfare of people, business and the environment. It is to those challenges to which market-based and other solutions need to be addressed and tuned, not to everyday supply-demand-cost questions. The water resources problem is the drought event management problem, and the key issue is how to provide the deployable output required to meet the real needs of

people, business and agriculture in those conditions, when both they and the environment need best-possible balance in the use of scarce resources.

We welcome the development of enablers for the innovative and sustainable provision, use and non-use of water resources at such times, and at such places as they are most needed. It is the infrequency of the need that poses the challenge for effective solutions (even if that infrequency is falling). That is where attention and action is needed. From a resilience perspective we also suggest greater integration of planning on water resources with wastewater, flooding, catchment management and longer term asset management.

We set out key comments below, as overview observations. We also respond to specific consultation questions that are relevant to our work, interests and concerns.

### **Areas of support**

Overall the Water 2020 approach continues to build on the changes in PR14 leading to more sustainable water management. CIWEM supports:

- Continuation of (bill-paying) customer-focussed challenge groups.
- The view that independent representatives, and those drawn from charities, should be appropriately funded by the water companies who benefit from the work they do.
- Greater clarity on incentives regarding water trading and a common database.
- Long-term focus balanced against short-term availability as a stated aim.
- The consideration of other stakeholder such as farmers who exert an influence over the water environment. For example, the catchment approach offers opportunities for different sectors to work together towards meeting environmental objectives.
- We agree that increased trading of water between wholesalers could help to secure long term supplies for customers and may have indirect benefits for other abstractors such as farmers and growers.
- Better coordination through engagement and partnerships that may help improve the resilience not only of the public water supply but also other sector such as agriculture.
- The view of water trading in that the primary market will be between incumbent water companies. Also the opportunity to trade via displacement from A – B and then B – C so that C gets more water via trading even though it is not the same physical water traded by A. And the recognition that trading is needed to remove the spatial variation in water scarcity, so the general direction of trades will be from the west/north to the South East.

### **Areas of concern**

- The entire Ofwat strategy is based on the view that 'markets have a greater role to play'. There is very little evidence to show that this works in other markets and nothing to show that it will work in the water industry or that it will protect the environment.
- There is a need for more direct input from water management professionals in development of the business planning process. Water 2020 has clearly been written from an economics perspective, however the wider implications and sustainability/resilience responsibilities of Ofwat could be supported by editorial review from

technical experts in other disciplines. Additionally, customer and stakeholder engagement by Ofwat on business planning suggests a clearer form of communication.

- We have concerns on the ability of new entrants to be able to provide reliable supplies of new water in dry and drought spells, from both reliability of resource and business continuity/survivability perspectives.
- There is a need for a holistic consideration of changes. For example, trading of water could relieve pressure on over abstracted water bodies but pumping water long distances will increase energy use and carbon emissions.
- Opening up the market to greater trading assumes that there is wider availability of good quality water in locations that are close to major towns/ cities. However, further evidence is required to support this. Where large abstractions licences are available but unused these may be reduced as we transition to a new permit based system.
- Short vs long-term cost challenges made are often top-down based, rather than through robust asset considerations linking to the environment and customers. It is important to consider affordability, but we need to ensure that it is not done in a way that just defers expenditure to future bill payers and results in longer-term increases in cost.
- The proposals look like they could overcome some/ most of the financial and informational barriers, but core physical issues such as water quality and security of supply will need to be overcome.
- Ensuring Water Resource Management Plans (WRMPs) are not expected to be reopened based on new information continually. This is a complex process and accounts for long-term uncertainty, and if it is expected that they are constantly reappraised based on new options added to database, there is a danger of inertia as it plagues other UK infrastructure.
- The proposed changes to trading of bulk water between water companies and third party access also needs to be considered within the context of an evolving water resources planning process. New approaches to decision making based on best value/ robustness may enable greater trading but could be limited if regulation remains focussed on least cost solutions.
- The source view of the price control needs to be recognised as an inherently narrow view of water resources compared to the system view of the WRMPs. This is important to ensure plans work, to recognise the wider remit of the WRMP in considering a range of options, and not to distort incentives (e.g. supply vs demand options, new sources vs greater system integration).
- The current misalignment of WRMP and business plan timescales makes transitions to new approaches harder. It is essential that the timescales for the two processes are formally aligned in regulatory deadlines.
- An issue may be reconciling the clear need for more resilience in the water supply network with the principles of greater competition in the marketplace for water company services as intended with introduction of upstream reform. Accountability and reporting responsibility around markets will have to be clear.

## Where we think the proposals could be improved

- More of a focus on dry and drought event solutions
- More consideration of environmental needs, alongside those of bill-paying customer needs.
- More consideration of the environmental externalities (not included) in water prices
- Greater recognition/attention to the (time, space) variable value of water, and to consideration of time, space variation in the price of water to those who demand it.
- More consideration of the need for or value of a system operator for cross-company transfers of water, particularly during droughts.
- Greater recognition of the pressure on water companies to produce 'scenario forecasts' rather than real demand forecasts, during recent review periods.
- We support the continuation of (bill-paying) customer-focussed challenge groups, but we think that there should be an equivalent separate group to represent the interests of the environment. Experience to date suggests that environmental perspectives form an all-too-small part of most customer challenge groups, with the result that the perspective is often lost. A separate body may provide a better and more valuable input.
- More consideration about implications of where the split in price controls for water resources is drawn. A line has to be drawn somewhere, but the current one puts some water resources raw water assets clearly into Network+, which seems odd.
- Greater consideration about the risks around material change of WRMPs.
- A clear timescale for implementation, and considered realistically against the current business planning and WRMP round. When would we implement a database and it be expected to influence plans?
- Abstraction reform interactions could reduce the potential for incumbents with 'paper' surpluses to trade, if these spare licence volumes are removed, though this could allow new entrants potentially. Abstraction reform should result in simpler licences and a clearer view of available resources in a catchment (by aligning hands off flows and removing seasonal licences, for example), so this could also allow more trading, subject to specific hydrological/ecological constraints.

## Responses to specific questions

### Water Trading

Q7 Do you agree with our proposal to have a separate binding price control for water resources?

We do not think that a separate price control is essential for promoting markets, improving availability of information, and setting incentives, but the proposals are still complementary/consistent with achieving these objectives. Supply side options in the WRMP may include enhanced connectivity or capability of assets within the Network+ business (e.g. treatment capacity, Large Diameter Trunk Mains) to improve deployment to the part of the zone where it is most needed in future (e.g. to implement new sustainability reductions), rather than just

new sources of water. This suggests that separating price controls could have negative impacts on resilience within water company areas.

As we address resilience considerations in the next round of business planning there is a risk that separation of price controls for water resources from options in other parts of business planning may have a perverse impact on water company plans. For example, trade-offs between costs and benefits of water reuse options and wastewater/ flood risk could be affected by separate price controls. Better integration across water companies can be facilitated through economic regulation and by incentivising outcomes that deliver across multiple elements of these price controls.

However, the consultation makes a strong case for this separate binding price control. A separate price control can provide clear price signals and transparency around the cost of water resources and may encourage new entrants to engage with the market. This can reveal the cost of providing, maintaining and developing new water resources. It should also help to increase transparency in water resources planning and optioneering.

**Q8 Do you agree with our proposal to implement an offset mechanism to ensure that entrants can recover the cost of new resources appropriately, while also ensuring that prices reflect average costs?**

The incentive mechanism could enable a more level playing field for new entrants and incumbent companies. There should be a mechanism to encourage new entrants to participate in the market. The guidance for assessing bids (alongside other supply/ demand options) needs to incorporate appropriate consideration of the short and long term impacts on customer's bills. This is essential to achieve the objectives of providing the right economic incentives for efficient entry, protecting customers and meeting the commitment on remunerating historic investment.

**Q9 Do you agree with our proposals to create a market information database and bid assessment framework to allow for the 'bidding in' of third party resource options on an ongoing basis – as set out in the Deloitte report?**

We support this proposal as it is an essential prerequisite for the creation of an upstream water market. The lack of market information currently potentially discourages investigation of options. The proposal to establish a marketing information database and bid assessment framework can address these issues.

Although the process should allow for bids to be submitted at any time, there needs to be some limit on the extent to which bids can be assessed between WRMPs. The WRMP is an holistic appraisal of water resources system risks and need (not just related to the assets in the price control), and covers wider qualitative considerations including feedback through the statutory consultation process. The source to system level benefit is frequently non-linear (hence use of systems like Aquator) so enabling options may need to be considered to deploy new resources and it is not a simple financial appraisal exercise. There is a real danger that it is expected that if a new option is deemed to be cheaper than a current option set, that the plan is reappraised or current implementation of options delayed, bringing about abortive costs. This is an even greater risk as the WRMP guidance is moving away from the

economics of balancing supply and demand least-cost approaches to those which select investment portfolios based on the robustness of options (see Water UK project).

If a new proposal is received, then a full evaluation would require assessment of how this would be incorporated into the plan, including changes to company proposed schemes and how the input would be integrated into the deployment of resources within a zone. Given the scale of the WRMP process, especially with improved UKWIR methods, this would not be a trivial exercise.

It may sometimes be possible to retain some flexibility in a WRMP by setting alternative pathways and trigger points for schemes. This fits with a real options appraisal process that is being considered by UKWIR, the Environment Agency and water companies for application in WRMP19. This approach has also been applied in water resources planning in Australia. However, in general it would be better for bids to be considered as part of the WRMP process and the appropriate planning cycles.

We support the principle that the information contained in the database should be consistent with the WRMPs and not an unnecessary burden on participating companies. If one of the aims is to increase transparency, we support the publication of information of bids (whether successful or not) and that there is a mandatory disclosure of bids.

**Q10 Do you agree that a third party organisation may be best placed to manage the information database?**

We agree that a third party organisation is the most suitable approach, provided the purpose and design brief is good, and the rewards and penalties for effective implementation and operation are good. This organisation also needs sufficient technical knowledge to ensure consistency of data and of approaches to issues such as reliability of sources, i.e. vetting information to ensure can be used for WRMPs. The approach needs to be subject to cost benefit review.

The proposal for encouraging bidding in of resources will help to encourage a wider approach to optimisation. The planning and operation of water resource inputs is an integral part of a water company's functions and separating them into a different organisation would increase costs and potentially reduce deployable output/ resilience.

**Q11 Do you agree that measures should be introduced to increase transparency and certainty around security of supply for water trading? How can this objective best be achieved?**

Yes, this is a prerequisite for success. Those buying need to have unconditional confidence that water will be provided when, where and in the quantities they require; else they will not buy.

Transparency and security of supply are key points to ensure companies are able to continue to provide the reliable and safe water supply that customers expect. We support the premise that the exporting company must be able to demonstrate that it can provide resilient supplies without counting on the exported water. As a result, this should be reflected in the trading arrangements. We would be concerned if companies were to compromise the resilience and reliability of their water service in order to participate in the market.

Consideration should be given to how the market is explained and communicated to customers. Trust in the industry and what it aims to achieve with the market for water resources could be undermined if customers do not understand the potential benefits or mistrust the motivations of their water supplier.

We should also recognised that much of this information is all readily available from the current WRMP process. Although there is uncertainty around "security of supply" for trading, this represents inherent uncertainties that plans must be developed under (e.g. climate change). It would be useful to drive greater consistency in WRMP methods regarding what risks are planned for (e.g. probability of occurrence of design events over duration of the plan), but this would need to be specified by the regulators. Articulating a profile of risk is complex, but use simply of existing supply-demand balance alone is misleading and hides true risks of supply failure, environmental impacts etc.

Programmes such as Water Resources South East, Water Resources East Anglia and the Water UK Long Term Planning Framework project can benefit from this data. As we move towards new decision making methods, Robust Decision Making has been proposed as an example to help address conflict in water trading. When applied in North Carolina there were benefits to water companies being able to see how a combination of demand reduction and water trading could ensure financial and wider drivers are met.

There may be some future enthusiasm amongst farmers to build reservoirs for storing surplus water for trading outside the sector, but we suspect that this will remain a low priority for them for some time. Notwithstanding licence trading opportunities to be made available through abstraction reform, there are still fiscal and planning barriers to overcome before such trading becomes financially viable.

## Customer engagement

Q46 What does good customer engagement look like? What are your views on the principles outlined above? How could companies draw on good practice from within and outside the sector? How can companies make use of revealed preference techniques and information obtained in their day-to-day interactions with customers to develop a richer set of evidence of customers' needs and requirements?

Based on our experience, good customer engagement should include:

- large sample sizes
- segmented experimental design and analysis
- varied approaches
- incentives to consider different solutions
- continuous engagement
- establishing the value that customers place on aspects of service to support CBA
- involving customers / stakeholders where they can contribute to more effective delivery
- ensuring that the needs and priorities of all groups of customers are considered
- engaging customers on long-term issues
- considering risks (LL-HC issues) rather than just things that can be tracked using current service measures (arguably HL-LC)

- local engagement on projects (can support more integrated water management approaches with stakeholders also)
- engagement with the potential to change the plan substantially or reflecting back to customers where they have made a difference (e.g. the focus on water efficiency and how this has driven investment for Thames Water in AMP6)
- transparency and weightings to support use of multi-criteria analysis approaches in water resources planning

Revealed preference data is more limited for water resources given the long timescales between events (less market data), so improved willingness to pay and acceptability testing (i.e. using choice experiments) should explore the complexities of water resource planning choices with customers. Without this exercise customers will not be alert to risks and challenges. However, not everything can be based on customer preference, we have a duty to provide a certain level of professional protection to society and environment given the high consequence of water resources failure. One way to address this would be to appropriately weight the views of customers and other stakeholders as part of multi-criteria analysis in addition to least cost economic balance of supply and demand and robust decision making approaches in WRMP19.

Q47 What are your views in relation to our proposals on future CCG remit; scope; timetable; governance arrangements; and membership? In relation to the quality of a company's customer engagement, do you agree with the above list of issues that should be covered by the CCG report? What are your views on the division of responsibilities between CCGs and Ofwat?

We support the continuation customer-focused customer challenge groups (CCGs). A suggested improvement would be adding an environmental (ECG) into the mix, too. We support the proposals for future CCG remit and agree that clarification of roles was needed. We agree that it would not be appropriate to task CCGs with the remit of representing customers. The CCG role could be stronger in determining the outcomes of the price review process (i.e. if clear support for approach and plans based on customer preferences, this should have stronger sway in determining the final determination). There is a danger that shorter term bill considerations may override these more evidenced based processes.

Ofwat has recognised issues such as access to independent information, lack of technical expertise of 'layman' delegates, etc with a view to making improvements to the process for PR19. We note with interest the potential for using alternatives to 'willingness to pay' research, which we welcome. We do not think that the remit or membership of CCGs should be too prescriptive, and we agree that CCGs should be responsive to local geography and customer demographics. We agree that CCGs would find it beneficial to be provided with some benchmarking of water company performance as part of the engagement process.

We also think that there is an important role for wider customer engagement beyond the CCG; they must not be perceived as a substitute for this wider engagement. This will be particularly important for customer engagement with the new market for non-household water customers. Additionally, long term engagement through customer focus panels has been useful in developing water resources options and responding to issues of drought in Australia.

Q48 What are your views on our proposal to facilitate more collaboration between CCGs? What are your views on our aspiration to publish information on the WACC and outcome RoRE ranges early? Without inserting ourselves between companies and their customers, what else could we do to incentivise and encourage good quality customer engagement?

The local perspective is the essence of CCGs. Some dialogue between groups would help, perhaps using a rotating representative approach, rather than say just a meeting of Chairs. This could be extended to Outcome Delivery Incentives (ODIs) related to company trust / engagement.