



Overcoming Global Barriers to Reuse as Part of an Integrated Water Portfolio

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Introduction

- Climate change, dwindling resources and population growth, among other pressing challenges, create a mandate for the water industry to overcome barriers to water reuse in order to secure an adequate and sustainable future water supply.
- During a series of six B&V-hosted roundtables through 2009-10, the views of about 75 water industry leaders, representing 13 countries, sought to delve deeper into this complex issue.

Introduction

- Discussions revealed broad, far-reaching challenges, as well as compelling commonalities.
- Four key recommendations emerged for water utilities and other industry leaders to consider.



Key recommendations

1. Work together to overcome existing public misconceptions through clear, consistent and continuous communications about water reuse and its place within an integrated water portfolio.
2. Emphasize the value of recycled water as a sustainable resource that will help meet future demands on the water supply.
3. Take a more integrated and open-minded approach to portfolio management when developing water resources for customers.
4. Call for more streamlined regulations and clearer guidelines around standards in order to improve industry knowledge of the impact of water reuse.



Key Recommendation #1

Work together to overcome existing public misconceptions through clear, consistent and continuous communications about water reuse and its place within an integrated water portfolio.

“Tell it like it is” to build community trust

- Direct, honest communication with consumers is deemed to be an essential skill for utility leaders.
- One of the most difficult situations for a utility leader to communicate is when circumstances change and a decision needs to be reversed.
- It is important to educate customers early and often to overcome potential misconceptions.

“Sometimes we have to go back to consumers with new data and say, ‘But now we know more.’”

Start early

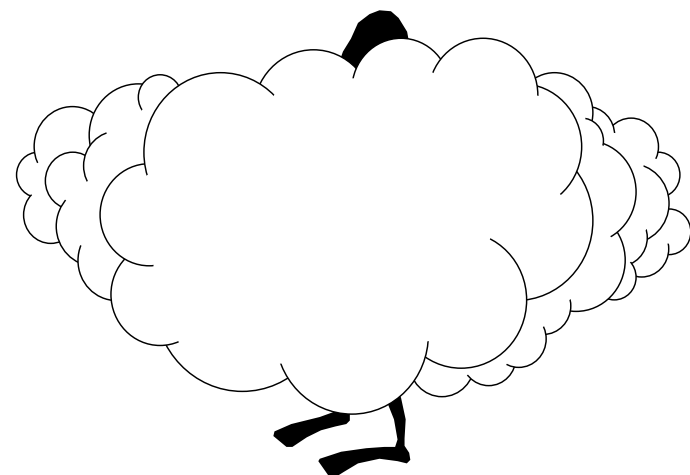
- Instigating strong programs of public education in schools about water reuse should carry messages from children to parents.
- Sometimes consumers wear two hats when considering reuse topics – those concerned about the public good who also may be concerned about the personal impact of potable reuse.

“The most valuable asset a water utility has is the trust of the community.”

Start early

- When comparing and contrasting reuse with other alternatives, there may be tradeoffs; the public needs to be made aware of the options.
- If the option of reuse is selected, it must be introduced with confidence.

**“We have to believe it can work
– and then make it work –
because any uncertainty
from industry leaders
clouds the issue.”**



Focus on the true value of water

- Consumers often believe that because water falls from the sky, having access to it is their human right. They fail to consider factors like the treatment process and conveyance.
- Educating consumers about the true value of water is of paramount importance in changing the perception of reused water.

Compare and contrast

- A simple comparison to other household costs can be a persuasive argument for public acceptance of reuse. However, ultimately everyone is wondering, “How much do I pay?”
- Whether water is reused, recycled, desalted, native water, or anything else, the public wants to know what will be the cost at the end of the day and the utility will need to make its case.

Be prepared for a crisis

- Crisis situations offer an opportunity to educate consumers about the true value of water and alternatives for tackling water security.
- The strength of the message can be eroded and public acceptance for alternative approaches may change once a crisis situation returns to normal.

“A crisis is a terrible thing to waste.”

Remember your audience

- When water reuse isn't a necessity, it's not easy to overcome the barrier of public acceptance.
- The term “reused water” can imply that water is being returned to the system without treatment.
- Alternative terms of “refreshed,” “renewed” or “recycled” water may help encourage public acceptance. Another approach would be to combine reused water with other water supplies.

Remember your audience

- A third-party advocate could be seen as more of a trusted adviser to the public who provides a balanced point of view on the subject of reuse.
- It is important to find credible water advocates who can push the reuse message, even in the local marketplace.

Think local

- The local aspect is crucial. Knowing some communities are comfortable using reclaimed water does not mean others would accept the same.
- Public outreach and communication approaches should be tailored to the local situation.
- To convince the public, you need a successfully operating project with a local application.

Lead from the front

- The water industry needs to present a united front to consumers about the environmental benefits of reused water and its place within an integrated water portfolio.
- Utility leaders should emphasise that, in order to meet future demand in areas of scarcity, perceptions of reuse must shift toward being a critical part of an integrated portfolio.

“To be good stewards, we need to adopt the mindset that there is no wastewater, only wasted water.”

Key Recommendation #2

Emphasize the value of recycled water
as a sustainable resource
that will help meet future demands
on the water supply.

Be a myth buster

- Helping the public understand that recycled water is a sustainable resource is key to the future success of reuse.
- Utility leaders need to work with local communities to gauge public acceptance of reuse.

“It’s important that your grassroots efforts tie water reuse to water security, environmental benefits and sustainability.”

Be a myth buster

- Communities may be more open to reuse as an alternative supply for industrial, agricultural and recreational applications.



Anticipate changing needs

- Paint a longer-term picture of water needs that demonstrates the unpredictability of factors that influence the water supply.

“The time for the debate is now, even if it is raining. A period of five years of adequate rainfall can be followed by a decade or more of rainfall below normal levels.”

Anticipate changing needs

- Whatever decision about reuse is made today, unpredictable environmental factors mean utilities may need to adapt in the future. Solutions to current problems should be flexible enough to address tomorrow's issues.





Key Recommendation #3

Take a more integrated and open-minded approach to portfolio management when developing water resources for customers.

Play well with others

- Issues arise when separate agencies are responsible for different elements of the water treatment process; the industry needs a cooperative approach to water management if reuse is going to find its place within the portfolio.



Key Recommendation #4

Call for more streamlined regulations and clearer guidelines around standards in order to improve industry knowledge of the impact of water reuse.

Set reasonable targets

- Communities considering reuse need to agree on what is suitable for them at a local level in terms of the levels of compounds and microconstituents in reused water.



Gather real-time data

- Now is the time to start gathering and sharing long-term data that proves water reuse is safe, environmentally sound and cost effective.



Build an economic database

- The costs of producing highly treated reused water are often higher than traditional alternatives so there is a disconnect among price, cost and value.
- An analysis of all viable alternatives would show why reuse should be included in a water portfolio and how it weighs in against all other options.
- The analysis needs to consider the environmental costs of identifying another water source if reuse is deemed not to be an option.

Make sure the price is right

- Recycled water sources are being priced at a discount from potable sources at about 60 percent to 75 percent. These prices are neither cost-based nor linked to the “avoided cost” of developing other sources. They’re a way of promoting a market.

“If reused water is to be taken seriously as a sustainable water source for the future, it needs to be priced realistically.”

Conclusion

Roundtable participants agreed that adequate future water supply hinges on intelligent recovery and reuse.

Advancing reuse requires new ways of thinking

- Break down silos that inhibit greater cooperation and interaction among agencies involved with water and wastewater.
- Better controls, data monitoring, public education and portfolio management are needed.
- Continuously learn from global best-management practices and models.