

# Barossa Water Security Strategy

## Workshop process description



### Strategic Foresight Planning

The process proposed is a first of its kind in South Australia. It integrates strategic foresight and resilience-based planning. This process provides a way to consider the challenges society will face over the next 30 years, including the impacts of climate change, energy transition, digitalization of society and automation, changing markets and new economies.

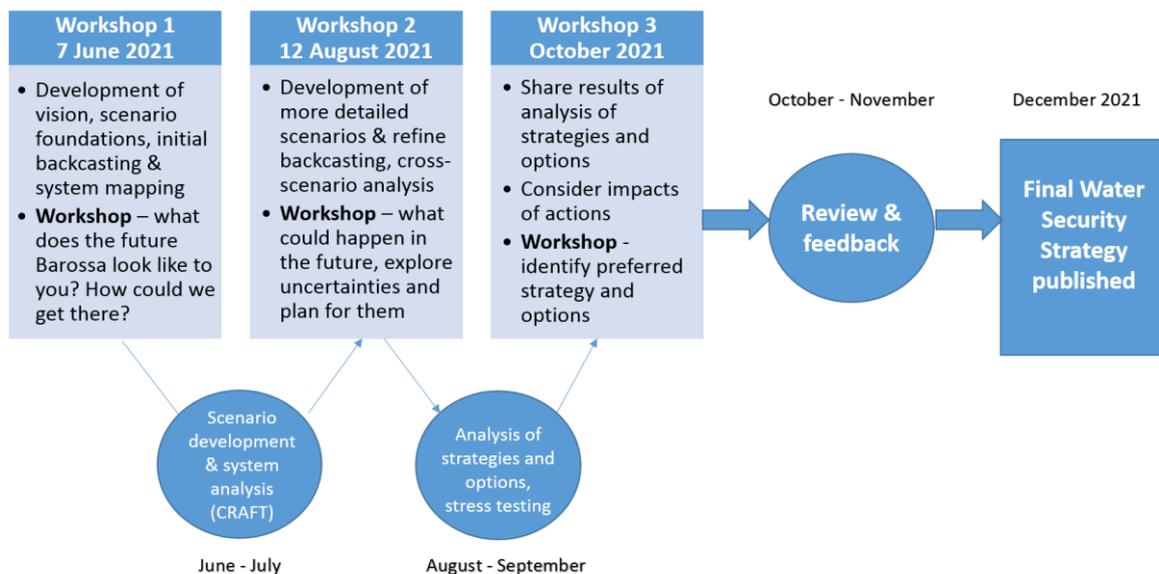
This approach has been utilised in many other strategic planning processes around Australia and the world and has a strong track record of developing strategies that help to build future resilience and prepare for uncertain futures.

DEW is consciously investing in water security planning across the state as regions adapt to a changing climate and increasing demands for water. The approach is being undertaken in the Barossa first in recognition that native water sources are already declining due to climate change and there are opportunities to harness alternative water sources to underpin existing demand and to open up opportunities for further expansion.

A workshop-based approach will enable the deep expertise of Barossa stakeholders to be drawn upon and for the Barossa community to feel ownership of any outcomes. Three workshops will be held to develop:

- A shared vision of the future of the Barossa
- Plausible future scenarios and incorporation of uncertainties, challenges and opportunities within each
- Options and actions to achieve the shared vision under the range of future scenarios

Assessment of options and actions will be undertaken and reviewed and discussed. The outcomes of the three workshops will form the content of a Water Security Strategy.



## Detailed workshop description

### Workshop 1 – Co-develop vision, scenario foundations and initial backcasting

*The primary difference between resilience and risk-based planning is a focus on stewarding towards a future we actually want, rather than merely avoiding negatives.*

The first step in this process is the development of a coherent vision for the future of the region and an exploration of what this means for water demand.

The second step is the development of a coherent set of steps to achieving the desired vision, weaving in existing options, through back-casting. A preliminary consideration of the key uncertainties impacting the success or failure of the strategy will be undertaken during the first workshop.

The final stage in the first workshop is the development of system maps, which will be used to inform subsequent qualitative and quantitative analysis of the effectiveness of different water security actions.

### Workshop 2 – Co-develop more detailed scenarios and refine backcasting/adaptive strategies

*In the process of designing a car, the performance of the car isn't only tested on a straight country road because that is probably the average place it will be driven. Designers have a responsibility to test it across the range of conditions it could plausibly be subjected to. Exploratory scenarios are this kind of testing for our longer term strategies and plans. We can't afford to assume the future will behave like the past; and we can't afford to only consider one dimension of change.*

In the first workshop we asked, "What are all of the things that matter that could change/are changing; and what are the different ways they could go in the future?" In the time between the first and second workshops, the project team will analyse all key uncertainties identified by workshop participants, and the four most diverse plausible futures will be selected. The first step in the second workshop is to develop these into four very different future scenarios. These scenarios are potential contexts in which our strategy may be implemented.

The second step in the workshop is to consider if the initial strategy is still fit for purpose. By figuring out what will and won't work in each scenario, and thinking about what we would need to do instead in each case, we simultaneously address risks and sensitivities as well as explore innovation and generating new ways of achieving desired outcomes.

The third step is to compare the pathways generated in each scenario. We look for options which work across all scenarios and with careful consideration develop a strategy which is as effective as possible across the range of future uncertainties considered in the scenarios (i.e it is robust).

### Workshop 3 – Identify preferred strategy/options

In between workshops, a range of further qualitative and quantitative analyses will be conducted to develop the most robust possible strategy. A team from the University of Adelaide will support this step by testing the performance of key components of the strategy under climate extremes.

The results of all analysis will be presented in the third workshop. Participants will be invited to examine the results, ask questions and further refine the strategy. The final stage of the third workshop is endorsement of the key elements of the strategy by workshop participants. It will then be brought together as a draft 2050 Barossa Water Security Strategy.

### Final steps

The draft Water Security Strategy will be made available for public consultation and then finalised subject to any comments.

## Linkages to other projects underway

The Barossa Water Security Strategy will be developed alongside other projects. The infrastructure projects underway will continue, with these forming an integral part of the discussion within the strategy development process.

DEW has engaged the University of Adelaide to use the Climate Resilience Analysis Framework (CRAFT) to explore the impacts of climate change on water in the Barossa. The options and actions that arise from the workshop process will be analysed to determine which options will build the most resilience in a changing climate.

