

Exploring alternative development futures for the Fitzroy catchment through participatory scenario planning

Scenario planning info sheet

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There are various development plans for the Fitzroy River catchment. Proposals for new developments include irrigated agriculture, increasing livestock production, payment for ecosystem services (e.g. carbon farming), extraction of mineral resources, tourism and many others. But how do we balance increased productivity, traditional uses and nature conservation? We are in an intersection where major decisions (from local to national levels) will be made regarding the future use of land and water resources. A conversation is thus needed to ensure the sustainable development of the region.

Making good decisions requires exploring possible development options and having a better understanding of their social, economic and environmental outcomes. It also requires identifying the broader social, economic and political environment that could facilitate or hamper different development options.

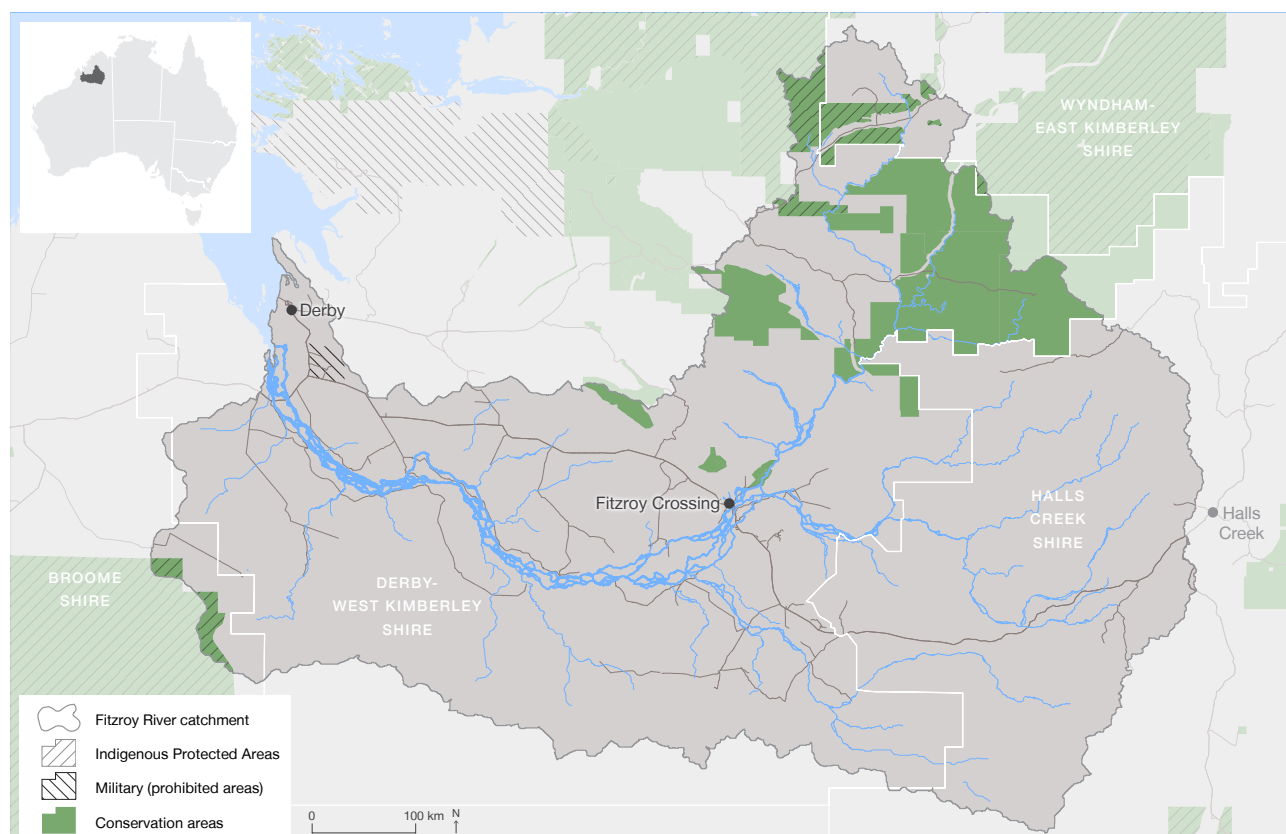
A critical examination of the possible futures of the region is needed to support effective planning

for development and conservation of the region's nationally and globally significant cultural and natural values.

To support these discussions, our project is guiding a participatory scenario planning exercise to construct and assess the outcomes of alternative development scenarios. Major components of this exercise include exchanging views about development, imagining possible futures and exploring their potential outcomes. This information sheet explains key aspects of the scenario planning process and anticipated outputs.

Goal of scenario planning

The scenario planning exercise aims to create a shared space for constructive and objective conversations about the future development of the Fitzroy River catchment. Through this process we aim to develop common understandings about different development options for the region and systematically explore the possibilities, as well as the potential outcomes of different development trajectories.



Fitzroy River catchment, Kimberley region, Western Australia.



Michael Douglas.

What are scenarios?

Scenarios are narratives or stories that consider how alternative futures may unfold. They allow people to consider and discuss their perceptions and aspirations for the future, as well as exploring opportunities and risks associated with decisions – for example, the environmental, social and economic outcomes associated with alternative types of development. The main goal of scenarios is helping understand key uncertainties about the future, but can play an important role in opening up thinking to the need for change.¹

Why scenario planning?

Constructing scenarios allows people with diverging opinions to see the world from the point of view of those with different perspectives. They allow people to think not only about scenarios that they accept, but those that they reject. The process may help to change understandings and intentions, create empathy and build trust, which together can lead to changes in individual and collective actions that will shape the future.

Participatory scenario planning can be useful when different people and organisations see the situation they are in as unacceptable, unstable or unsustainable (now or in the future), but disagree over what the future should look like. In these situations, individual groups cannot transform the situation on their own or by working only with allies or like-minded people. Finally, the broader social, economic and political system is too complex, has too many interest groups and is highly unpredictable for a single group or individual to understand and shape.

Through scenarios people can see possible futures they are not willing to accept because they continue an unacceptable present, destroy an acceptable present, or fail to realize the potential of the present.²



Michael Douglas.



Who will participate in the scenario planning activities?

Following the identification of key interest groups in the Fitzroy catchment and discussions with local organisations, researchers assembled a scenario planning team. The team includes people with varied backgrounds who understand the perspectives of one or more key groups and organisations with a stake in the region. It also includes people from organisations making or influencing decisions about land use and management in the catchment. The team includes people with expertise in areas such as land-use planning, agriculture, water management, conservation, tourism, mineral resources, enterprise planning, and service provision, among others. The team must be small enough to allow effective discussions, thus is constrained to 35–40 people, including a small group of researchers.

What is the timeline and expected commitments for team members?

Initially, researchers will interview each team member (~2 hrs) to gather information about their main concerns and aspirations around development in the region, as well as to discuss expectations, perceptions and suggestions regarding the research process. Following that, team members will participate in three workshops. Each workshop will involve two full days of work, plus travelling time to the venue. Dates and venues will be discussed and agreed by the team.



Michael Douglas

Throughout the process, researchers will communicate with team members, via email and phone, to provide updates and ask for feedback when preparing reports and outputs from workshops. Team members will also be provided with summary information in preparation for workshops.

What are the stages and outputs of scenario planning activities?

The scenario planning process includes sharing views on development, exploring alternative development options, creating narratives of possible futures, creating maps that represent these narratives, and assessing their potential outcomes. The process will provide opportunities to share knowledge and ideas, including with people with potentially diverging perspectives.

Creating shared understandings of the situation

The first step involves creating a shared understanding about main concerns and issues around development in the region. This work will build on a review of existing planning exercises and relevant literature, as well as on the interviews to team members. Researchers will present a summary of their findings as a starting point for conversations during the first workshop.

During the first workshop, participants will build a shared understanding of what is happening in the social-ecological system they are part of and which they want to shape. It intends to expand the views of participants to see more of the whole situation. It will also help create a 'common language' to discuss what development in the region could mean.

Exploring and understanding development options

Also during the first workshop, the team will aim to have a better understanding of current and future development options in the region. To achieve this, participants will share their diverse knowledge, views and interpretations about what different development options have to offer, and about their requirements and associated changes in the landscape.

Participants will also identify the driving forces that can cause major shifts in development trajectories in the region. For example, what events or decisions (policies, economic conditions) and processes (ways of thinking, alliances) could trigger, enable or constrain different development options.



There are many options for development in the Fitzroy River catchment.

Creating stories about the future

During the second workshop, the team will build on outputs from the first workshop to develop clear and convincing narratives describing possible futures for the region. Narratives describe what could happen in and around the system that will shape development.

Developing the narratives will require identifying certainties (what is happening and will continue to occur) and uncertainties (things that can move in very different directions) about the driving forces. Certainties will be part of all scenarios and uncertainties will describe the main differences among scenarios. This exercise will be facilitated by examining available evidence, including those from past and present development projects in the region.

Scenarios can be illustrated to present them to the broader community and convey key

messages, highlighting changes associated with different choices and events. For example, the four scenarios of the Doñana scenario planning exercise were illustrated to describe the main characteristics of each scenario and the main land uses in that region (see back page).³

Shared stories can open up thinking and possibly shape future decisions.

1. Peterson et al. 2003. Scenario planning: a tool for conservation in an uncertain world. *Conservation Biology* 17(2): 358-366
2. Kahane. 2012. Transformative scenario planning: Working together to change the future. Berrett-Koehler.
3. Palomo et al. 2011. Participatory scenario planning for protected areas management under the ecosystem services framework: the Doñana social-ecological system in southwestern Spain. *Ecology and Society* 16(1): 23.



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Mapping, comparing and assessing the outcomes of scenarios

Based on the narratives created by the team, researchers will work with available information, including maps and computer mapping tools, to create maps representing each scenario. This will be informed and guided by team members and other organisations. **During the third workshop**, the maps and the process followed to create them will be presented to discuss improvements. The team will also discuss possible landscape changes under alternative scenarios and assess their broad environmental and socio-economic implications.

While the scenario planning team will lead the development of scenarios, the results will be shared and discussed with the broader community through meetings with local organisations and public forums. This will provide opportunities for others to contribute to refining the scenarios and to assess their outcomes. Ultimately, scenarios will provide a reference that can help inform discussions around development options in the region and northern Australia.



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Important information about scenario planning

- Participants won't talk about what they predict will happen or what they believe should happen, only about what they think could happen.
- Participants do not need to agree on creating a shared vision about the future development of the Fitzroy catchment.
- Participants need to think not only about futures that they accept, but those that they reject.
- The process aims to facilitate seeing development from the point of view of others that may have opposite or diverging perspectives and thus can be a learning process for everyone.
- Throughout the process, participants will become aware of and critically review the way they think about the past, present and future of development in the region.
- Participating in the process does not preclude participants from undertaking, supporting or opposing activities or projects related to developments in the region.
- Participants will not have to negotiate or compromise their own interests or the goals of their organisation, community or sector.
- Ultimately, participatory scenario planning is about working together cooperatively and creatively to have a better understanding of how alternative futures may unfold.

Disclaimer: Researchers took great care in designing the project to ensure that scenario planning activities are as inclusive as possible, actors with different views are included and the process is not driven by or for the benefits of any one organisation, party or sector.

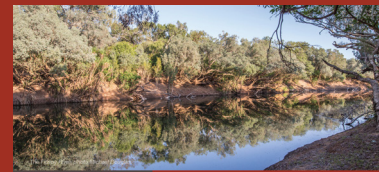


Four scenarios for Doñana, southwestern Spain: (a) Global Knowledge: evolution and implementation of technologies; (b) Trademark: intensified agriculture and tourism, as well as social conflicts; (c) Arid: lack of water due to climate change, NGOs try to maintain social cohesion; and (d) Wet and Creative: a mosaic of uses compatible with sustainability. Illustrations by Antonio Ojea reproduced with permission from the authors. Copyright © 2011 by Palomo et al 2011.

Further information

Contact project leaders, Jorge Álvarez-Romero, jorge.alvarezromero@jcu.edu.au or Bob Pressey, bob.pressey@jcu.edu.au

For further information and updates, visit the project webpage at nеспnorthern.edu.au/projects/nесп/multi-objective-planning-northern-australia



Multi-objective planning in northern Australia
Start-up factsheet

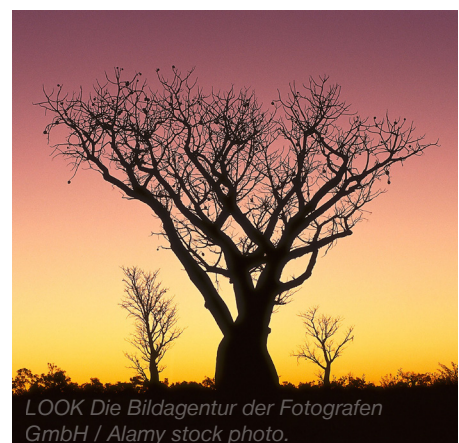
The challenge

There are ambitious plans for an economic boom in Australia's largely unpopulated tropical north. But how do we balance increased productivity, traditional uses, and nature conservation? The diversity of available planning tools and the complexity and lack of accessibility of some of these tools constrains their use by decision-makers. This report first government agencies, Natural Resource Management groups, Indigenous peoples, and other stakeholders commonly make decisions based on inadequate information. Furthermore, decisions are currently made with one objective in mind, such as agricultural development or biodiversity conservation. However, this focus on single objectives limits our capacity to consider the full range of environmental, social and economic outcomes of proposed developments and their implications for different stakeholders. It also hinders our understanding of the potential for co-benefits and trade-offs between different objectives. Considering multiple objectives is therefore critical to support future planning of northern Australia's nationally and globally significant natural and cultural values.

land and water, while maintaining environmental and cultural values. The toolkit will provide a roadmap to assess the potential impacts of current and future development and management regimes on biodiversity, ecosystem services and the access to land use of land and water resources by different stakeholder groups. Specifically, the project will demonstrate how to put participatory, multi-objective catchment planning into action. In other stakeholders to construct and assess the outcomes of alternative development and management scenarios. The toolkit will also facilitate assessment of the benefits and costs of implementing different management interventions to mitigate threats to biodiversity associated with different land and water uses. The toolkit will be designed for one case study area, but can also be used in other areas in northern Australia.

How will this research help?

This research will create a toolkit to guide planning and management that supports multiple uses of



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