Consultation Summary

Western Davenport Water Allocation Plan 2024–2027

NORTHERN TERRITORY GOVERNMENT

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1.1	14 July 2023	Water Resources	Review and provide responses
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1.3	January 2024	External consultant	Redraft from committee feedback
1.4	February 2024	Water Resources	Review and provide responses
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Acronyms	Full form
CLC	Central Land Council
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DEPWS	Department Environment, Parks and Water Security
ESY	estimated sustainable yield
GDEs	groundwater dependent ecosystems
GL	gigalitres
ML	megalitres
NT	Northern Territory
NTG	Northern Territory Government
NWI	National Water Initiative

Acknowledgement of Country

The Department of Environment, Parks and Water Security respectfully and proudly acknowledges the Northern Territory's Aboriginal people and their rich cultures. We pay respect to Elders past and present.

We acknowledge Alyawarr, Kaytetye, Warumungu and Warlpiri peoples as the Traditional Owners and custodians of the lands and waters of the Western Davenport Water Control District. We recognise the intrinsic connection of Traditional Owners to Country and value their ongoing contribution to managing the lands and waters.

We support the need for genuine and lasting partnerships with Traditional Owners to better understand cultural connections, and we will work to establish lasting partnerships to manage water together, now and into the future.

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1. Overview

This summary provides an overview of the consultation undertaken and the feedback received and how these were considered and/or resolved to finalise the Western Davenport Water Allocation Plan 2024–2027, and for future planning in this and other regions of the Territory.

Consultation occurred through:

- advice from the Western Davenport and Ti Tree water advisory committee (committee) during October 2021 to April 2024
- direct stakeholder engagement and information provided during 2021 to 2024
- public comment received between 23 March and 14 May 2023, while the draft Western Davenport Water Allocation Plan 2023-2033 and the associated background report and implementation actions were released on Have Your Say Northern Territory.

The feedback during consultation has been reviewed and collated. The following key themes were heard:

- deficiencies in the process to develop the plan
- allocating too much water
- fails to protect the environment
- fails to protect Aboriginal sacred sites and cultural values
- lack of trust in the science
- departure from 'good' practice water management.

In response to the feedback, the department made the following changes to the plan:

Water allocation plan

- the objectives of the plan have been refined in consideration of advice from the committee
- the proposed estimated sustainable yield was reduced from 87,700 ML in the Central Plains Management Zone per year to 81,500 ML per year in consideration of advice from the committee and feedback during stakeholder engagement
- the plan introduces a new trigger for the review of the plan once water that has been allocated reaches a certain level of use in response to advice from the committee.

Associated documents: background report and implementation actions

- added detail to explain the adaptive management and risk assessment process to the implementation actions in response to advice from the committee
- revised the current residual risk ratings in the implementation actions that considered salinity, cultural and economic impacts in consideration of public comments
- revised the information and summary overview information in the background report to respond to key issues raised during public comments.

The common themes identified through the consultation were informed by a detailed assessment of the feedback, provided in Schedule 2. This feedback has been used to finalise the plan and used to inform improvements in planning, beyond this plan. Table 1-1. summarises these themes and responses.

The draft plan differs from the declared plan in two ways; 1) the ESY is reduced from 87, 700 to 67,700 ML, and 2) the plan term is reduced from ten years to three years. The difference reflects the Minister's determination of community views and providing the opportunity to review and reset the plan ahead of the five year statutory review period.

Table 1-1. Overview of consultation themes from feedback and the how these were resolved

Theme	Feedback	Resolution
Deficiencies in the process to develop the plan	This theme revolved around the view that the planning process involving reverse engineering, stakeholder views being disregarded during the development of the plan, and the withholding of important information to stakeholders by the department.	The department recognises the need to improve consultation to enable greater engagement in water resource management. The department commits to progressively establishing Water Advisory Committees throughout the entire plan cycle, with greater representation of Aboriginal people. This will commence with the Ti Tree plan area. The department is establishing staff with specific engagement skills to improve direct stakeholder engagement processes and continues to ensure that publicly available information is accessible, including resources being translated to language and other methods to improve understanding. However to date, there has been limited progress between the department and CLC to establish an appropriate mechanism to improve Aboriginal involvement in the planning process.
Allocating too much water	This theme covered concerns the estimated sustainable yield (ESY) was unsustainable as it is too high, constitutes water mining and is incompatible with the goal of sustaining long-term development of the water resource. Concern was also raised in changes in the description of the resource and the exclusions of some resources in the plan area.	The ESY was reduced from the previous plan and additional triggers were introduced for review of the plan based on water use. These provisions are supported by staging the volume of water that can be taken under water extraction licences, which can only increase if the licence conditions are met and the Controller approves moving to the next stage. Staged release of water under current licences will mean that over the next three years of the plan, less than 50% of the ESY can be released.
Fails to protect the environment	This theme covered concerns around the weakening of objectives for environmental protection, concerns around risk of damage to groundwater dependent ecosystems (GDEs) and increased salinity risks due to expanded irrigated agriculture in the area.	The plan has six objectives and in order to achieve all of the plan's objectives equally, water extraction will have an impact on GDEs because they occur across the plan area. The plan refers to the GDE Guideline that ensures 70% GDEs are protected from impact of extraction. The department recognises that the development of the Guideline did not provide opportunity for consultation which has affected its acceptability. The implementation actions have been strengthened to provide additional description of the risks and their basis, especially in relation to salinisation, water movement and time scale. Public reporting on the status of this and other water resources has been formalised as key performance indicator for the department starting in 2023–2024.
Fails to protect Aboriginal sacred sites and cultural values	This theme covered concerns raised around the mechanisms for the protection of Aboriginal cultural values not being strong enough and with no specific actions on how cultural values will be protected, damage to GDEs and the follow-on impacts to cultural values, and risks to the landscape that have cultural significance.	It is acknowledged that cultural values are not currently reflected adequately in the plan. The work to define cultural sites that need to be protected has not yet been completed, however once these sites are defined there remain mechanisms for their protection through policy and guidance considered in licence decision-making processes and through the review of the plan. The department commits to doing this work through the implementation actions.

Theme	Feedback	Resolution
Lack of trust in the science	This theme covered concerns of a view that there are deficiencies in the groundwater modelling used, the way the ESY was calculated, risks and deficiencies in the GDE Guideline and the response to GDE's to the proposed ESY and how salinity impacts have been dismissed in the plan.	Extensive scientific work has been carried out in the plan area that is appropriate for the level of development to date. The department commits to continuing to build the understanding of the resource through delivery of the implementation actions, including the state of the resource reporting. Since the plan was drafted there has been completed science projects in the region, new investigative drilling undertaken and an uncertainty analysis of the groundwater model in line with the agreed implementation actions. In addition, the department will accelerate its existing water science program to support 'good practice water resource management' and sustainable development through the Territory Water Plan.
Departure from 'good' practice water management	This theme covered concerns related to the minimisation of information presented and the structure of the plan, and to the implementation actions, including the risk assessment, being problematic.	The department has completed a review of its water allocation planning against the National Water Initiative, which found that water planning in the Territory is consistent with good practice and fit-for-purpose. The consultation process on this plan and its development further highlighted the gap between community expectations of water management and the legislative responsibilities of the Act relative to plans. The Territory Water Plan commits to developing new legislation to replace the Act that provides the opportunity to consider the purpose and requirements of water allocation plans.

Finally the department thanks the committee and those who provided feedback and submissions through the consultation process, which has contributed to improvements to the next iteration the water allocation plan for the Western Davenport area.

2. Introduction

Water allocation plans set out the water than must be protected to support the ecological functions and environmental requirements in the plan area. The plan also defines how much water can be sustainably allocated for drinking water and for regional economic opportunities, this is known as the estimated sustainable yield (ESY). It also sets out management rules for water use, and for trade.

The plan applies to the whole Western Davenport water control district (the district). The district is situated approximately 150 km south of Tennant Creek and covers an area of about 24,500 km^2. Groundwater resources within the district are separated into three water management zones including the Central Plains water management zone, the Davenport Ranges water management zone and the Southern Ranges water management zone. The Central Plains water management zone overlays a number of large aquifers that hold significant volumes of water that are high yielding and good quality. The aquifers are mostly recharged by rainfall runoff from the adjacent ranges.

A water allocation plan in the district was first declared in 2011 with a number of reviews. This plan replaces the Western Davenport Water Allocation Plan 2021-2022, which expired on 6 December 2022. The plan will remain in effect for three years from date of declaration by the Minister for Environment, Climate Change and Water Security (Minister) by Gazette notice.

While all plans attract controversy, the Western Davenport water allocation planning process has been overshadowed by the contentious decision to grant the water extraction licence for Singleton Station. The water licence was the first in the Territory of that magnitude for a single development, which has triggered a range of concerns and issues within a litigious environment.

2.1. Water Act

The *Water Act 1992* (Act) sets out the statutory requirements of water allocation plans. The Act requires the Minister for Environment, Climate Change and Water Security (the Minister) to ensure:

- water is allocated within the ESY to beneficial uses, including an allocation to the environment and an Aboriginal water reserve
- the total water use for all beneficial uses is less than the sum of allocations to each beneficial use
- the right to take water under a licence is able to be traded.

Consistent with the Act, water allocation plans comprise of three core documents:

- Background report – collates the data and knowledge regarding the district at the time it is made
- Water allocation plan – the statutory document required to be gazetted; describes the estimated sustainable yield for the water resources of the district and apportions water for particular uses
- Implementation actions – outlines the continuous program for the assessment of water resources including investigating, collecting, collating and analysing water resource information.

As part of the regulatory framework, the Controller of Water Resources (Controller) is responsible for granting surface water and groundwater extraction licences. The Department of Environment, Parks and Water Security (the department) is responsible for the administration of the Act.

2.2. Water engagement

Effective engagement is the keystone of 'good' practice principles in contemporary water resource management. The department is committed to successful engagement, and as a result, has adopted the well regarded, tried and tested International Association for Public Participation model (IAP2 Spectrum) for its engagement activities. The IAP2 Spectrum identifies the five differing levels of participation, outlined in table 2-1.

Table 2-1 Overview the definition of the public participation for engagement activities

IAP2 Spectrum	Inform	Consult	Involve	Collaborate	Empower
Goal of engagement*	Community members are well informed	Community members are well informed and give feedback that government considers	Community members are well informed and actively contribute to government decisions		
			Some say	High level or equal say	Total say

*Remote engagement and coordination strategy

3. Consultation process

There were three key pathways for consultation during the development of the replacement the plan:

- water advisory committee
- stakeholder engagement
- public comment period.

3.1. Water advisory committee

The Western Davenport and Ti Tree water advisory committee (the committee) was formed in October 2021. The committee has diverse membership representing community interests including Traditional Owners, the horticultural industry, environment and remote community water supply. The committee provides advice on the review and implementation of the plan.

Specifically, the committee's role is to:

- identify issues relevant to the implementation, review and preparation of water allocation plans
- provide advice on opportunities for sustainable water resource development in the region.

The department has met with the committee on eleven occasions in the development of the plan. Detailed minutes from these meetings can be accessed here and summary provided in Table 3-1.

Table 3-1 Summary of the Western Davenport and Ti Tree Water Advisory Committee information and feedback

Meeting	Date	Number of attendees	Key information	Feedback and outcomes
Meeting 1	8 December 2021	13	Induction, workplan and timelines Commenced review of the 2021-2022 water allocation plan Committee support for communications and engagement	• Terms of reference, 5 year work plans and induction matters outlined by the department. • Concerns raised by the committee that the continual issuing of water licences during the plan review puts the water available for the Aboriginal water reserve at extreme risk. • Concerns raised by the committee around the ESY and potential for over allocation of the resource. • Department staff committed to providing the committee with an update on monitoring in the district. • Committee requested more information about how the regolith is represented in the current model and suggested that it is critical to the function of the committee that members understand how the ESY is determined.
Meeting 2	23 and 24 February 2022	17	Understanding the knowledge base for the plan Key matters for drafting the plan	• The department provided briefings on the science underpinning the plan, including the hydrogeology, the groundwater model and ecological mapping in the region. • The committee was briefed on the allocation of water to various beneficial uses and the extent of actual water use in comparison to the amount of water under licence. This raised questions about the ESY and highlighted the importance of an adaptive management approach with well determined and understood management triggers. • The committee considers that engaging Traditional Owners and seeking their input into decision-making is important to the success of the plan. • The committee discussed the need for the plan to be explicit about trade-offs and mechanisms to determine and manage risks. • The committee reviewed the objectives of the 2021-2022 plan and made recommendations to improve upon the accountability of these objectives.
Meeting 3	27 and 28 April 2022	18	Objectives and performance measures for the plan Advice on the limits of change for the environment and cultural values Refined logic for the ESY	• An updated natural water balance for the plan area was provided. • The committee considered proposed objectives for the plan, advising on their suitability and appropriate measures of success. • The committee considered proposed refinements to the GDE Guideline and highlighted the need for culturally significant sites to be considered in these arrangements. • The department presented information on the process and logic for determining the ESY, including information on the regolith.

Meeting	Date	Number of attendees	Key information	Feedback and outcomes
Meeting 4	28 July 2022	16	Visited the plan area with Traditional Owners and community members ESY settings and management arrangements Adaptive management arrangements and triggers	• The committee undertook a field visit and on country meetings with Local Authority members at Ali Curung and community members and Traditional Owners and managers. • The committee supported the proposal by the department to establish an Aboriginal Reference Group (ARG) in partnership with CLC. However, details about the approach to be taken remained to be confirmed. • The committee sought additional modelling related to the ESY.
Meeting 5	23 August 2022	11	Discussion about the objectives of the plan, the limits of acceptable change and the ESY	• Advice provided by the committee to the Controller and department on the effectiveness of the plan in maximising economic and social benefits within ecological constraints will be used to inform the drafting of the plan. • Consultation on the plan will start with the session in partnership with CLC in Tennant Creak on the 14 September.
Meeting 6	3 October 2022	12	Advice on the plan documents prior to their release for public consultation	• The new water planning process was presented to the committee. • The committee resolved to raise various concerns with the Controller as quickly as possible while further developing more formal comments during the public consultation process. • Requested that CLC prepare initial information on appropriate members to be on the ARG and work with the department to begin to develop the terms of reference for the group.
Out of session 1	12 October 2022	10	The Controller meets with the committee concerning the plan	• Development of the plan will be delayed allowing the Controller time to meet with the committee and hear their concerns. • The department will look at the acceptability of adopting a staged ESY. The committee have concerns around the staged release not allowing adequate time for any effects to be realised. • The department has refocused its commitment to separating out GDEs and cultural values from broader environmental values. • The committee was concerned the new format of the plan would mean not enough detail is presented to provide confidence that environmental and cultural values were adequately protected. • The department will attempt to determine what criteria the Controller can adopt to ensure future use is within acceptable limits.

Meeting	Date	Number of attendees	Key information	Feedback and outcomes
Out of session 2	26 October 2022	13	Addressing the feedback provided by the committee during the consultation process	• The department confirmed that a staged release of water through licences and will adopt an additional review trigger at 70% of use. • It was proposed that the department develop a standalone policy which would be complementary to the NT Allocation Planning Framework in decision making relating to cultural and environmental values. • The department confirmed that protection of GDEs is reflected in the plan through reference to the current 2020 guideline. Met by mixed views by the committee as the review is not complete and cannot be referenced in the plan and recent monitoring data is not yet available. • It was acknowledged that cultural values are not adequately reflected within the plan. • The department has in principle agreement for the establishment of the ARG, who will assist in providing advice on cultural values. • Some committee members were concerned that the plan did not contain a risk assessment. This was taken on notice by the department. • The committee recognised that the department whether successfully or not has tried to address the issues raised by them but more than likely some members would not be able to support the plan.
Meeting 7	24 January 2023	11	Agreeing to release the plan documents for public consultation through 'Have Your Say'	• It was noted that the committee have disparate views and are not supportive of the plan in its current form. • The committee have varied views and concerns. Examples of these concerns include a reduction in risk mitigation and the proposed structure of the plan. • A majority of the committee supported the plan going out for public consultation. A consultation period of 8 weeks was agreed upon. • It is expected that there will be a final meeting to consider the consultation summary reports and the final plan, with the committee then providing the final advice to the Controller and Minister.
Meeting 8	14 December 2023	10	Committee feedback on the draft consultation summary	• Meeting facilitated by Water Trust Australia (vacant chair role). • Consultant presented overview of the process to develop the consultation summary in line with the scope of work. • Committee provided feedback on the summary and the department agreed to undertake further work with the consultants to add detail. • Department provided an update on reporting and engagement activities for the region.

Meeting	Date	Number of attendees	Key information	Feedback and outcomes
				• Further steps were agree with Water Trust Australia between the meetings.
Meeting 9	4 April			

3.2. Stakeholder engagement

Stakeholder engagement in the region during the development of the plan is outlined in the table 3-2.

Table 3-2 Summary of the Western Davenport stakeholder engagement during 2021 - 2024

Engagement	Purpose	Information and feedback
23 and 24 February 2021 Central Land Council (CLC) meeting in Tennant Creek	Meeting with 60 – 80 Traditional Owners, native title holders and residents of Ali Curung to discuss their concerns with management processes in the district and prepare a response to the Northern Territory Government. An interpreter was present who translated key parts of the discussion.	The CLC collated questions and concerns during the meeting. The department responded to questions and provided information (including factsheets) on: • science behind the plan • how water is allocated to different uses under the plan, focusing on how the GDE Guidelines are applied • water licence application process and the adaptive management framework for large licences granted under the plan. The key concerns raised were: • development should happen more slowly, a single application of 40,000 mega litres per year is too big • too much uncertainty the science need to be done before the water is taken • lack of trust in government managing and monitoring the resource and want to see results of monitoring • greater involvement of Aboriginal people in the planning and licencing processes.
26 July 2022 Prior to regional Local Authority meeting in Ali Curung	The committee attended the meeting with 10 – 12 members of the local authority and residents of Ali Curung to provide information and receive feedback on the development of the plan.	Department provided information on the water planning process, the development of the draft plan and role of the committee: • introduced the committee and what they have been doing to contribute to the development of the plan • how the Act works in terms of managing the water resources • demonstration of how much water is allocated through the plan and what happens as the water is taken. Key questions and concerns raised were: • Ali Curung water supply isn't protected and too much water gong to development as well as questions about the quality • no recognition of Aboriginal knowledge or cultural values in the planning process • discussed that water has been contentious/ important in the past that has defined the area • concerns that there weren't protections of the environment for future generations • wanting to meet Fortune and to talk about the Singleton project.
26 to 28 July 2022	Committee, Traditional Owners and residents of Ali Curung visited environmental and	Traditional Owners shared their values, important areas and history, including soaks, areas where water important areas. Discussed how some of these are reliant

Engagement	Purpose	Information and feedback
Committee regional site visit in region	cultural sites as well as visiting community water treatment plant, drill rig operations, demonstration of water monitoring and irrigated agricultural projects in the area.	on water through inundation (water on the surface) and how the trees rely on groundwater (GDEs) in some areas. Discussed and visited public water supply, existing/proposed irrigated agriculture projects and the department's drilling monitoring bores and how water monitoring occurs. Discussed how the GDE Guidelines work to protect 70%, clearing and development means that everything can't be protected.
14 and 15 September 2022 Central Land Council meeting in Tennant Creek	To provide an opportunity for more than 20 Aboriginal Traditional Owners and residents of the region to understand the water planning and allocation process, the key features of the plan and provide feedback on it. It was also the opportunity to agree how the department can work more closely in the region in future.	Department provided information and addressed questions and concerns on: • the Act and planning in the district • current science and understanding of the water resources, monitoring, climate change and impacts of taking water • overview of the plan and draft objectives • amount of water proposed to be taken (ESY) • detailed discussion on GDEs and modelling • how the Aboriginal water reserve is calculated and how much water is available to support Aboriginal economic development. Feedback that the information should have been in language and CLC will create key terms in language to assist in communication the plan. The group are interested and want to be a part of the planning process and the Aboriginal reference group and CLC will draft terms of reference. The department would run the group with support of the CLC or vice versa. The Central Land Council provided updated advice in May 2023, after the follow up consultation requested by Traditional Owners held in Tennant Creek on the 26th of April 2023. The updated advice upon release of the draft plan stated that traditional owners did not agree to forming an ARG and wanted to be part of the statutory WAC.
25 September 2023 Barkley Regional Council Local Authority meeting in Ali Curung	Provided an opportunity for 8 Local Authority members to hear key messages, main features and timeframe with declaring the plan and listen to members concerns for water.	Members discussed their concerns for water, specifically around groundwater and surface water, water allocation, water supply & security, water quality, cultural water, sacred sites and ground water dependant ecosystems and sites. Members requested information be bought back on all water licenses in the area, how much water each water license has and who and how much more water, water license holders have applied for.
25 September 2023 Community consultation post Local Authority meeting	Further discussion and feedback following the Local Authority meeting with 15 people including some Local Authority members and families.	Traditional Owners want more engagement opportunities. Traditional Owners requested to discuss their connection to the area and raised concerns over how much water may being taken, impacts to sacred sites and the need to talk to government.

Engagement	Purpose	Information and feedback
27 September 2023 Central Land Council Traditional Owner Ranger Advisory Committee (TORAC) in Tennant Creek	Provided an opportunity for 20 TORAC members to hear information reported to Ali Curung Local Authority and listen to their concerns around water.	Traditional Owners discussed the best way to consult, barriers to engagement and what we can learn from past engagement. TORAC members discussed examples of collaboration, proposed workshops and requested a partner project, bore monitoring and discussed employment opportunities.
27 September 2023 Barkley Regional Council Ordinary Council meeting in Tennant creek	Provided an opportunity for 6 Ordinary Council members to hear information reported to the Ali Curung Local Authority.	Ordinary Council members requested information be bought back on the following: Bore reports for local communities, governing bodies for water infrastructure, delivery, policies and plans, water controller and water security updates; maps of surface water and ground water and water advisory committee meeting outcomes.
20 February 2024 community consultation in Ali Curung	Provided an opportunity to 4 Traditional Owners and family for an update on the plan, discuss forming Aboriginal Reference Groups, and listen to members about their concerns for water.	Community members request updates on the plan and more information on forming Aboriginal Reference Groups.

In 2017 the Northern Territory Government approved the Strategic Aboriginal Water Reserves Policy Framework to provide Aboriginal people with increased opportunity to access water resources for their economic benefit; and in doing so, contribute to addressing the disadvantage faced by Aboriginal people in relation to economic opportunities and development.

In 2020 amendments to the Act embedded key elements of the reserve policy into the legislation. The Act defines the Aboriginal water reserve, eligible land and eligible Aboriginal people, creates an Aboriginal economic development beneficial use and the criteria for identifying eligible land. Specifically section 4B provides a meaning for eligible land and section 22C(2) of the Act requires that the Minister consults with the relevant land council before declaring a plan that designated eligible land.

Consistent with the Act the Central Land Council was consulted through the following process:

- 5 September 2022 Minister commenced consultation
- 14 July 2023 Central Land Council and Minister completed consultation.

3.3. Public comment

The plan was released for public consultation on 23 March 2023. The documents were published on the Northern Territory Government's 'Have Your Say' website with submissions sought by 14 May 2023.

The department received a total of 51 responses to the plan. These were made up of 22 survey responses, 12 template responses and 17 unique written submissions.

A full list of the comments raised by each submission during the public consultation is provided in Schedule 1. A detailed assessment of the comments, department response and how these are resolved in finalising the plan is provided in Schedule 2. The written submissions included detailed feedback from the following organisations and individuals:

- Central Land Council
- Arid Lands Environment Centre
- Dr Andrew Gunn.

The written submissions also included a collection of letters written by year seven students at St Philip's College, Mparntwe. The results of the survey responses is provided in Schedule 3.

4. Summary of feedback and resolution

While there was some positive feedback received on the plan, the feedback was predominately negative covering the range of themes outlined below.

The common themes identified through the consultation were informed by the detailed assessment of the feedback, provided in Schedule 2, which have been resolved in the finalisation of the plan and used to inform improvements beyond the plan.

4.1. Deficiencies in the development of the plan

Many submissions identified that the committee and the Traditional Owners and custodians have not endorsed the plan. They noted that the views of the Traditional Owners and other stakeholders were disregarded during the development of the plan. Submissions also noted that documents requested by the committee were either not forthcoming or not provided in a timely manner.

Submissions also criticised a lack of consultation and engagement with the public.

Two submissions noted that the planning process precluded proper consultation as key aspects of the plan were constrained by prior decisions that were not open to negotiation. This lead one submission to label the planning process as a case of reverse engineering.

4.1.1. Addressing feedback

- The department is committed to engage with the committee, the Traditional Owners and custodians and the broader community in the development of the plan. This was the purpose behind the release of the plan for public consultation prior to its finalisation. This process ensures all interested stakeholders can offer their perspective and for changes to be made prior to the declaration of the plan.
- The formation of an Aboriginal Reference Group is a concept that has been contemplated across water planning throughout the Territory and was agreed in September 2022 at a meeting in Tennant Creek between the CLC, Traditional Owners, and residents of the of Western Davenport area. The intent of group is to provide Traditional Owners and other members the opportunity to contribute their perspectives to water management in the region throughout the next three years.
- The department and the CLC, Traditional Owners and residents of the district will continue working together to establish an Aboriginal Reference Group or other appropriate mechanism for Aboriginal people to be engaged and participate in water management. This is outlined in the implementation actions, however has not progressed since the meeting.
- The committee will consider the public feedback received through the consultation process and provide advice to the Minister on the plan.
- The committee provided advice throughout the development of the plan. As a result of this the department made a number of changes to the plan that was released for broader consultation.

- The department acknowledges that the timing and availability of supporting documents has been inconsistent, especially with the committee. The department is actively working to recruit staff, to strengthen processes and overhaul the website to provide ongoing improvements to the accessibility of publicly available information to address this issue.

After considering the feedback received the department recognises the need to improve consultation to enable greater engagement in water resource management. The department commits to progressively establishing Water Advisory Committees throughout the entire plan cycle, with greater representation of Aboriginal people. This will commence with the Ti Tree plan area. The department is establishing staff with specific engagement skills to improve direct stakeholder engagement processes and continues to ensure that publically available information is accessible, including resources being translated to language and other methods to improve understanding. However to date, there has been limited progress between the department and CLC to establish an appropriate mechanism to improve Aboriginal involvement in the planning process.

4.2. Allocating too much water

Many submissions commented that the estimated sustainable yield (ESY) was too high. Submissions frequently noted that the ESY exceeds the net recharge rate and therefore the ESY must be based on the depletion of groundwater storage. A few submissions stated that the ESY represented the utilisation of non-renewable groundwater resources. This was labelled as water mining, which was considered incompatible with the goal of determining a sustainable yield. Some concluded that the ESY was thereby based on extraction rather than the resource's sustainable capacity. This was consistent with the feedback form the committee, which was provided at the first meeting.

Submissions also suggested that ESY should be based on the water flows to and from the aquifer and not storage volume. These submissions identified that extracting from storage can have significant water cycle consequences. Many pointed to the apparent drawdowns that the ESY will cause. Namely, lowering the groundwater table over 50 years by 5 m across a 100 km stretch and by 20 m across a 40 km stretch. Several submissions suggested that the ESY should coincide with the water requirements of groundwater dependent ecosystems (GDEs). There was concern that water mining, as encapsulated within the ESY, would result in desertification and land subsidence and that groundwater recharge did not adequately consider the changing climate.

Some submissions called for a precautionary approach to be adopted in calculating the ESY, particularly in relation to the Central Plains Management Zone. Other submissions said that groundwater hydrology in the district was not sufficiently categorised to define an ESY and that the regolith resource was not accounted for in the plan, as it was in the previous plan.

One submission noted that the regolith resource was not accounted for in the plan, as it was in the previous plan. Similarly, one submission stated that it was unacceptable that water from the Hanson River paleo valley aquifer was not considered in calculating the ESY.

4.2.1. Addressing feedback

- In arid regions like Western Davenport where rainfall is low, unpredictable and recharge to water resources is infrequent, underground aquifers must be relied upon to sustain life. It is necessary to use aquifer storage to balance infrequent recharge with a continuous demand for water. Relying on actual stored water available is a more precautious approach than relying recharge, as it doesn't rely on uncertainty of climate variability.

- The Central Plains water management zone has a large regional aquifer that is high yielding and better quality (lower salinity) than other aquifers in the district. The aquifer is made up of a number of rock formations that store extensive volumes of water. Currently this aquifer holds a minimum of 137,986,000ML. If you take the ESY of 81,500 ML every year for 100 years, 94 % of the current holding remains stored underground without relying on any replenishment that will occur during the period.

- The plan has been set for three years, so the actual impact on the water resource will be updated based on what occurs. During this time the department and licence holders in the region have sufficient time to report and monitor the resource to ensure it is tracking as expected and make any necessary adjustments through adaptive management.
- The ESY of 87,700 ML per year is less than in the previous plan, which had an ESY of 138,405 ML per year. In the Central Plains water management zone, the ESY is 81,500 ML per year, which is a reduction of 6,200 ML per year from the previous plan.
- The entire ESY cannot be taken all at once, the actual volume of water that can be taken each year is much less and can only increase if the licence conditions are met and the Controller approves moving to the next stage.
- The staged release of water under current licencing decisions means that over the next three years of the plan, less than 50 % of the ESY will be allowed to be taken before the next review process. In addition, a review of the plan will be triggered if 70 % of the water is used, including considerations of different beneficial use categories outlined in the plan.
- This staging of water licences in the district provides:
  - a tool to manage how much of the ESY may be taken at any given time
  - ensures sufficient time to establish regional monitoring as well as site specific monitoring of the resource before more water is released
  - ensures the effects of actual water use are clearly understood before the next level of extraction is approved.
- In determining the volume for the ESY, the impact of taking increasing volumes of water on GDEs was mapped at a regional scale to indicate the relative impact. Finer scale mapping and modelling is carried out at property level based on actual water extraction volumes and locations through licence decisions and conditions.
- More important than the total volume of the ESY is where the water is taken from, as the resource is spatially variable and impacts will depend on what is in proximity. This is appropriately managed through licence decisions and conditions that are assessed and set based on the specific amount and location of water extraction.
- Licence conditions and regulatory compliance protect ecosystems that rely on groundwater as well as establishing suitable management practices locally. Licence conditions require the licence holder to monitor and report the water resource to help understand how the water resource, GDEs and cultural values respond to taking water from the groundwater in the district.
- The department regularly monitors the resource and continues to refine understanding of how it responds to water extraction. The plan includes an updated natural water balance for the district that includes the most recent monitoring and climatic data from the previous plan. This revised approach accounts for the water previously identified in the regolith, which is considered and included within the total aquifer storage (upper part).
- The Hanson River paleo valley aquifer is poor quality limited resource that is not connected the other resources managed in the plan and therefore was not included in the departments model or the plan.

Feedback received through the committee was to ensure a precautionary ESY. The ESY was reduced from the previous plan and additional triggers were introduced for review of the plan based on water use. These provisions are supported by staging the volume of water that can be taken under water extraction licences, which can only increase if the licence conditions are met and the Controller approves moving to the next stage. Staged release of water under current licences will mean that over the next three years of the plan, less than 50% of the ESY can be released.

4.3. Fails to protect the environment

It was a common thread among submissions that water allocation as defined by the plan will damage and/or destroy terrestrial, aquatic and subterranean GDEs. Many submissions argued that changes to the groundwater table will cause widespread destruction to groundwater dependent trees, soaks, springs and wetlands. They identified that shallow groundwater was one of the most reliable sources of water for vegetation in the district.

Most submissions made comment about the GDEs. The reliance on the Guideline: Limits of acceptable change to groundwater dependent vegetation in the Western Davenport Water Control District[1] (Guideline) and scientific robustness of the Guideline was frequently criticised. It was argued that the Guideline is based on land clearing research in the Daly region of the Top-End savannah and land retention thresholds in south/eastern Australia, leaving it with little relevance to semi-arid landscapes and GDEs. Moreover, many respondents questioned how the Guideline was developed, including the thoroughness and appropriateness of the review process. Lastly, it was noted that the Guideline does not account for the relative value of GDEs, meaning that the most important GDEs may be destroyed even if destruction of GDEs remains within the acceptable limit of 30 %.

Submissions suggested that the Guideline allows for the destruction of 30 % of the groundwater dependent trees in the region. Submissions stated that this level of destruction was too high without justification of the acceptability of the quantum of impact. Respondents also noted concern about the lack of attention given to GDEs' significance in semi-arid environments and their role as habitat refugia in a changing climate. They said that groundwater dependent vegetation provides refuges from drought and quality habitat for ground dwellers, and there was concern about these follow-on effects of vegetation loss. The habitat function of groundwater dependent vegetation was considered particularly important in light of a changing climate. One submission noted that there was no attempt to characterise the sensitivity of the environment to changes in the groundwater table.

In addition, a few submissions highlighted that the impact on aquatic and subterranean GDEs was likely to be major and irreversible and that species extinctions may occur, accompanied by a loss of ecosystem services.

Moreover, identifying a risk of salinisation, submissions noted that native groundwater dependent vegetation was not likely to survive if the groundwater was salinised. They argued that areas with a high risk of salinity are generally those areas with shallow water tables. As a result, they contended that GDEs were most at risk of salinisation. Additionally, it was thought that salinisation could have significant implications for the long-term viability of horticulture within the district.

A few submissions referred to the negative impacts that the plan will have on non-Indigenous communities. It was thought that a reduction in the availability of water would impair the commercial value of the land. Other submissions felt that the plan contradicted their desire to protect the environment and that the development of Singleton Station will account for most if not all the allowable destruction of GDEs leaving little room for other infrastructure projects, including those pursued by the Traditional Owners.

The risk assessment in the implementation actions was considered problematic. Submissions disagreed with the downgrading of the consequences of risks from the 2021-2022 version of the water allocation plan. They argued that ecological risks should have higher consequence ratings.

[1] https://nt.gov.au/environment/water/management-security/water-control-districts/western-davenport/western-davenport-water-allocation-plan

4.3.1. Addressing feedback

- The department has undertaken extensive work to establish the extent and location of GDEs within the district using remote sensing techniques combined with field verification to produce a predictive map of GDEs in the central part of the Central Plains water management zone. The project showed that GDEs were far more extensive than previously understood, especially where the groundwater table is within 15 m of the land surface. It identified important thresholds for vegetation in shallow groundwater (up to 10 m below ground level) and vegetation characteristics associated with very shallow groundwater (0-5 m below ground level).
- In order to achieve all of the objectives of sharing equally, water extraction will have an impact on GDEs because they occur extensively across the plan area. The impact of extraction varies spatially throughout the area and impacts on the water table are not universal, it is greatest at the site of bore extraction and lessens the further away from development, also monitoring shows that once pumping stops the water levels increase again. This necessitated specific guidelines on how to balance the impact of extraction in the development that is already occurring and is planned for the region.
- The Guideline tries to find a balance between maintaining biodiversity and reasonable development to provide economic opportunity for the region. The region already produces significant food and fodder crops from irrigation. A farm training centre has been established at Ali Curung to support workforce development. A significant agriculture precinct could potentially develop over the next 10 to 15 years with up to 10,000 ha under irrigation providing other economic opportunities developing support infrastructure services that would grow and benefit the local community.
- The Guideline (including revised limits of acceptable change) represents an improvement to the limits of acceptable change contained in the 2018-2021 water allocation plan. The revised limits in the Guideline respond to new scientific understanding of GDEs and recognise the significance of shallow groundwater systems (0-10 m below ground) and the need to protect species diversity across different landforms. The Guideline has been developed with a focus on the Central Plains water management zone as this is where development is occurring and most likely to occur.
- The GDE Guideline protects 70 % GDEs at regional and property scale by considering thresholds that are relevant to groundwater depth and managing the rate of change. It is important to recognise the Guideline's 70 % threshold includes consideration of the:
  - cumulative GDE impacts, including those that are a result of proposed land clearing and other activity for the development
  - additional principles to enhance the protection of ecological values associated with GDEs that meet additional thresholds
  - protection of all GDEs that are known to support significant populations of threatened species.
- The water licencing framework has conditions for significant water extraction licences, defined as more than 500 ML per year, that sets out additional requirements for:
  - property scale identification, mapping and baseline assessment of GDEs and prioritisation of key GDEs to be protected from water extraction on the property
  - monitoring of GDE condition
  - identification and protection of key Aboriginal cultural sites
  - ongoing water quality and water level monitoring to demonstrate impact of property scale extraction (i.e. local scale scenario modelling to determine GDE impact)
  - staging the extraction of water with the progression from one stage to the next dependent on the response of the water resource and meeting the limits of acceptable change.

- The department recognises that the development of the Guideline did not provide opportunity for consultation which has impacted acceptability. The department is commitment to early and ongoing engagement with stakeholders and will ensure that research informs knowledge and decisions are communicated, understood, accepted and actioned.

- Further work will be undertaken to verify and expand current understanding of GDEs within the district as outlined in the implementation actions. This work will provide valuable information on the water requirements of wetlands such as Thring Swamp. As a result of the feedback, consultation on the development of guidelines has been added to the implementation actions as well as further research into aquatic and subterranean GDEs.

- As part of the implementation of ongoing activities to investigate and understand salinity have progressed. National Centre for Groundwater Research and Training (NCGRT) located at Flinders University was engaged to develop a simple regional scale model of the Central Plains water management zone to provide a high-level indication of the salinity risks in the region from irrigated agriculture Territory Stories - The Risk of Salinity due to Irrigation Developments in the Western Davenport Basin, Northern Territory

- Since the previous plan, the risk management, adaptive management and implementation actions were redefined to more clearly link to the objectives and outcomes of sharing water. This has resulted in representation of the current residual risks (with controls) and target risks (following the completion of additional actions) and no longer includes inherent risks, which are higher as there were no controls. This process, as well as the continued monitoring and management of the resource has enabled the risks to reflect the current understanding and level of water use in the district.

After considering the feedback received the implementation actions have been strengthened to provide additional description of the risks and their basis, especially in relation to salinisation, water movement and time scale. Public reporting on the status of this and other water resources has been formalised as key performance indicator for the department starting in 2023–2024.

4.4. Fails to protect Aboriginal sacred sites and cultural values

Most submissions stated that water allocations and use under the plan threatened to destroy significant Aboriginal cultural values. It was identified that cultural values and sacred sites are heavily concentrated in areas with access to groundwater. Aquatic GDEs are heavily referenced in artwork and cultural descriptions. Accordingly, it was suggested that the destruction of GDEs would subsequently damage areas of cultural significance. A few submissions noted that the loss of sacred sites as a result of the plan's allocation of water would, in the respondents' view, be inconsistent with the requirements of the *Northern Territory Aboriginal Sacred Sites Act 1989*[2].

Submissions also noted that the ESY and the plan's management of ecological values demonstrated a disregard for Aboriginal perspectives and cultural values. One submission said the loss of cultural values was for Aboriginal people akin to the loss of kin members. Another submission argued that the destruction of cultural values could adversely affect the health and wellbeing of the Traditional Owners and custodians of the land.

The implementation actions were criticised for merely providing for the identification, documenting, monitoring and assessing of cultural values, rather than providing a mechanism for their protection. Related to this were comments advocating against the creation of a separate non-statutory Aboriginal Reference Group. These commentators advised that they would prefer the continued engagement of the committee throughout the life of the plan. The committee, they argued, should be composed of a majority of Traditional Owners and custodians.

Several submissions noted that the landscape has broad community significance which is threatened by the plan.

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2 https://legislation.nt.gov.au/Legislation/NORTHERN-TERRITORY-ABORIGINAL-SACRED-SITES-ACT-1989

4.4.1. Addressing feedback

- The plan recognises the importance of identifying cultural heritage values and measures to safeguard these in a culturally appropriate way. Improved understanding of cultural values and monitoring of cultural sites throughout the life of the plan will ensure safeguards that are appropriate to the Traditional Owners and custodians and the ecological values of the district are implemented.
- In September 2022 at a meeting in Tennant Creek between the CLC, Traditional Owners, residents of the district and the department it was agreed to establish an Aboriginal Reference Group (ARG). Over the coming years the department will work with the ARG or appropriate mechanism to ensure that Aboriginal cultural values and knowledge are understood, key groundwater dependent sites are defined and specific cultural protections are developed for inclusion in future water allocation plans. This work is identified in the implementation actions.
- The department is committed to improving Aboriginal involvement in the planning processes and if this is more appropriate through the water advisory committee then the implementation actions will be updated to reflect this in collaboration with Central Land Council.
- It is acknowledged that cultural values are not currently reflected adequately in the plan. The work to define cultural sites that need to be protected has not yet been completed, however once these sites are defined there remain mechanisms for their protection through policy and guidance considered in licence decision making processes and through the review of the plan.

After considering the feedback received it is acknowledged that cultural values are not currently reflected adequately in the plan. The work to define cultural sites that need to be protected has not yet been completed, however once these sites are defined there remain mechanisms for their protection through policy and guidance considered in licence decision making processes and through the review of the plan. The department commits to doing this work through the implementation actions.

4.5. Lack of trust in the science

Many submissions raised concerns about the scientific merit of the plan. Particular concerns were noted about deficiencies with the groundwater model, concluding that due to these deficiencies the groundwater of the district is not sufficiently characterised to set the proposed ESY and allocations.

Submissions also criticised the calculation of the ESY. It was argued that the ESY should be based on the water flows to and from the aquifer and not storage volume as extracting from storage can have significant water cycle consequences. There was also concern that the ESY had not considered salinity risks and groundwater recharge in a changing climate.

Most submissions criticised the scientific robustness of the GDE Guideline. It was argued that the GDE Guideline is based on land clearing research in the Daly region of the Top-End savannah and land retention thresholds in south-eastern Australia, leaving it with little relevance to semi-arid landscapes and GDEs. Moreover, many respondents questioned how the GDE Guideline was developed, including the thoroughness and appropriateness of the review process. Lastly, it was noted that the GDE Guideline does not account for the relative value of GDEs, meaning that the most important GDEs may be destroyed even if destruction of GDEs remains within the acceptable limit of 30 %.

Respondents noted the lack of attention given to GDEs' significance in semi-arid environments and their role as habitat refugia in a changing climate. One submission contended that the work required to properly identify GDEs and measure and restrict impacts has not been completed.

Concern that salinity risks had been disregarded was also common among the submissions.

4.5.1. Addressing feedback

- Improved scientific research, monitoring and field investigations underpin the management of water resources in water allocation plan areas.
- To date, the understanding of the resources in the region was improved through a number of key investigations conducted during 2018-2022 by the department, Geoscience Australia (GA), the National Water Grid Authority (NWGA) and other private companies. Data acquisition for these investigations included:
  - an airborne electromagnetic (AEM) geophysical survey
  - 3D geological modelling
  - landform mapping
  - water bore drilling and construction
  - downhole geophysical surveys
  - groundwater level monitoring
  - groundwater quality sampling events.
- In addition, the NWGA has provided more than $3 million (starting in 2021) to refine hydrogeological processes and conceptualisations including aquifer storage volume, aquifer connectivity, groundwater flow, recharge and discharge mechanisms/rates. The project will be completed in 2025 and provide further scientific input to the model recalibration project.
- At a regional scale the department's model is considered fit-for-purpose for estimating groundwater availability. The model uses the facts about the geology, groundwater levels and hydrogeological processes and climate data, including actual data obtained from investigation bores and bore reports, which has been calibrated using groundwater monitoring information collected by the department.
- Independent reviews are conducted as part of ongoing scientific advancement within the department. Most recently, considerable work was carried out to test the model parameters by running over 1,000 simulations. This testing confirmed the model was fit for purpose. The model has simulated actual data sets collected from several bore sites in the Central Plains water management zone with considerable accuracy. The department acknowledges the paucity of bore data in the remaining zones and the far eastern and western parts of the Central Plains.
  - An uncertainty analysis of the model concluded that the model parameters are acceptable. The independent review shows that the model meets industry standards as a Class 2 model at the basin scale with some individual parameters considered to be at Class 3 level. Based on this, the department considers the model adequate for water allocation planning.
  - Improvements, including data from new monitoring sites and recommendations from an independent review of the model, will be included in the next update of the model scheduled prior to the review of the plan.
  - The ability of the model to confidently predict significant drawdown will be tested as drawdown occurs.
- The monitoring data collected builds understanding of hydrological processes and enables better assessment of the impacts of water extraction proposed under licence applications. Data collected is checked and then made available on the NT Water Data Portal.
- Drawdown modelling and field monitoring enables timely detection of drawdown and if it is occurring as predicted. The department will continue this work during the implementation of the plan to ensure decision making is scientifically robust and responds quickly to unforeseen changes to the environment.

- The plan will undergo a mid-term review during which it will be enhanced according to the outcomes of monitoring and as more evidence is gathered about the effects of climate change.

After considering the feedback received the department commits to continuing to build the understanding of the resource through delivery of the implementation actions, including the state of the resource reporting. Since the plan was drafted there has been completed science projects in the region, new investigative drilling undertaken and an uncertainty analysis of the groundwater model in line with the agreed implementation actions. In addition, the department will accelerate its existing water science program to support 'good practice water resource management' and sustainable development through the Territory Water Plan.

4.6. Departure from 'good' practice water management

The structure of the plan attracted substantial criticism. Submissions pointed out that the background report and implementation actions had been separated from the water allocation plan itself, which is the only document to be gazetted (termed the statutory water allocation plan or 'statutory plan). This means that the Controller does not need to consider the background report and implementation actions when making water licencing decisions. Accordingly, respondents were concerned that key elements necessary to effectively manage water usage and respond to impacts were not included in the statutory plan and would not be mandatory in water licencing.

Respondents were also concerned that the omission of these elements from statutory requirements would prevent decisions from being legally reviewed or appealed. The implementation actions, including the risk assessment and adaptive management approach, were frequently described as problematic. Submissions disagreed with the downgrading of the consequences of risks from the 2021-2022 version of the water allocation plan.

The structure of the plan, the omissions of stronger ecological and cultural protections, its lack of transparency and the failure to ensure the inclusion of Indigenous representation were among several reasons given for why the plan is not compliant with best practice as defined by the National Water Initiative (NWI).

4.6.1. Addressing feedback

- The plan has been structured to be consistent with the regulatory requirements of a water allocation plan in the Act. The Act requires that:
  - estimated sustainable yield is determined
  - water within estimated sustainable yield is allocated to beneficial uses and cannot be exceeded
  - eligible land is designated for the allocation to the Aboriginal water reserve
  - water granted under a licence granted can be traded.
- The content and process for water allocation planning are consistent with the NWI guidelines. The department engaged a consultant to review the NTG's implementation of the NWI in relation to water planning concluding that NTG's water planning processes are consistent with the provisions of the NWI and subsequent guideline documents.
- The structure of the plan seeks to improve clarity and readability of the plan by separating the content into three separate documents covering background information, regulatory and management requirements (the allocation rules) and the implementation and operational functions of managing the resource and implementing the plan. These changes were undertaken in response to issues raised by the community, including by the committee, to align the documents with their purpose and to ensure that adaptive management of the resource is the key focus of activities.

- The Controller can consider all three documents. In deciding about a water extraction licence, section 90 of the Act directs the Controller to consider any of the specified factors that are relevant to the decision. These include factors relating to water availability, water allocation plans and adverse effects likely to be caused by the activity on the supply of water to other water users. In deciding, the Controller will take advice from several key documents: the statutory plan as well as any other relevant policies, guidelines or core documents.
- The department will deliver the implementation actions to ensure that the water resources in the district are managed in accordance with the plan. The actions committed have been resourced and a work plan developed to ensure this occurs. This means the department will:
  - deliver the department's water monitoring program, which is reviewed annually
  - produce an annual report for the water resources in the district starting in 2023-2024
  - support the delivery of online reporting of the water use
  - continue to strengthen compliance and enforcement activities through the compliance enforcement priorities 2021-2026 and annual reporting.
- Part of the improvement process to the plan is to not restate things that are said in policy or guidelines, as over time there is the potential for contradiction, which accounts for much of the removal of detail compared to previous water allocation plans.
- In considering advice from the committee, additional triggers to review the plan based on actual water use and relevant amendments to the Act are included in the plan. These provisions are consistent with the principles of adaptive management.
- The plan priorities public water supply ensuring that allocations consider growth requirements over time. First and foremost the majority of the water is retained to meet the environmental and cultural needs. After this the amount of water that will be taken is allocated in priority:

  1. Stock and domestic needs
  2. Public water supply
  3. Aboriginal economic development
  4. Other economic development.

After considering the feedback received the department has completed a review of its water allocation planning against the National Water Initiative, which found that water planning in the Territory is consistent with good practice and fit-for-purpose. The consultation process on this plan and its development further highlighted the gap between community expectations of water management and the legislative responsibilities of the Act relative to plans. The Territory Water Plan commits to developing new legislation to replace the Act that provides the opportunity to consider the purpose and requirements of water allocation plans.

Schedule 1: Alignment of submissions to themes

No.	Comment	Discussion Schedule 2
1	The planning process was lacking, which meant that the concerns of the committee were not addressed. This is evidenced by the fact that the committee did not endorse the plan.	1a, 1b and 1c
	The committee do not accept that the plan increases protection for groundwater dependent ecosystems (GDEs) relative to the conditions negotiated during the planning process.	3a and 3b
	The committee are not satisfied that the plan can deliver the necessary adaptive management to guarantee that water resources are managed sustainably over the long term.	6b
2	Strongly objects to the minimisation of the contents of the plan, including the proposed structure.	6a
	The Northern Territory Government (NTG) appears to have minimised the information in the plan to protect its own interests with no regard for the negative impact this would have on the quality of decision making about water allocation in the district.	6a
	In developing the plan, the NTG disregarded the views of Traditional Owners, the Central Land Council (CLC) and the committee.	1b
	The plan fails to protect Aboriginal sacred sites and other cultural values.	4a
	Establishing an Aboriginal Reference Group (ARG) will not result in the protection of Aboriginal cultural values.	4b
	Traditional Owners do not want to form a separate, non-statutory ARG. The NTG must establish a WAC for the entire term of the plan. Traditional Owners must make up the majority of the members of the WAC.	1d and 1e
	The plan fails to protect the environment.	3a, 3b and 3c
	The plan should include all water resources in the district.	2b
	The estimated sustainable yield (ESY) contained in the plan is inherently unsustainable.	2a
	The NTG has not provided any substantive or satisfactory updates from previous modelling deficiencies for the district and has limited baseline data for a reliable groundwater model.	5a
	The NTG has failed to provide or has not provided in a timely manner critical information requested by the CLC.	1c
	Rejects the draft plan's inclusion of the GDE Guideline.	5c
	The draft plan must classify the risk of irreversible damage to sacred sites and fragile ecosystems as high.	6b
	The draft implementation actions are deficient. These deficiencies will not mitigate risks to the environment, GDEs, cultural values and groundwater resources.	6b
	The plan does not comply with national standards set by the National Water Initiative (NWI).	6c
3	The committee did not endorse the plan. Traditional Owners and Custodians do not support the plan.	1b
	There was a lack of consultation and engagement with the public.	1b
	The ESY is too high and constitutes water mining. As a result, the ESY cannot be considered a sustainable yield.	2a
	The ESY should not be based on the depletion of groundwater storage and should assure the continued availability of water for environmental discharges.	2a and 5b
	The 30,000 ML regolith has disappeared from the plan.	2c
	The ESY has not considered groundwater recharge in a changing climate.	5b
	The environmental objective will not protect the environment.	3a
	Terrestrial and aquatic GDEs and stygofauna will not be protected.	3b
	The role of GDEs in a changing climate has not been considered but must be.	5d
	Salinity impacts have been misrepresented and ignored.	3c and 5e

No.	Comment	Discussion Schedule 2
	Aboriginal cultural values are not protected.	4a and 4b
	The GDE Guideline has no scientific basis and the process for the development of the GDE Guideline was unacceptable and in conflict with commitments arising from public consultation on the previous plan, which sought to preserve GDEs.	5c
	The plan has been gutted of meaningful content.	6a
	The document restructure is anti-democratic and prevents future opportunity for litigation.	6a
	The draft plan does not comply with the NWI.	6c
	The risk assessment in the implementation plan is highly problematic.	6b
4	The ESY is too high.	2a
	GDEs will be impacted by the drawdown of the water table.	3b
	There are deficiencies with the groundwater modelling.	5a
	The risk ratings are too low in relation to salinity and the impact on sacred sites.	6b
5	The ESY is too high and water table drawdown will mean that groundwater dependent vegetation cannot access groundwater.	2a
	GDEs will be damaged by the drawdown of the water table.	3b
	The plan threatens Aboriginal sacred sites.	4a and 4b
	The plan threatens GDEs which have broad community significance.	4c
	Opposes the sale of water to foreign companies.	6e
6	The definition of GDEs that is adopted by the plan potentially excludes some GDEs, putting these GDEs at greater risk.	3b
	Impacts to water dependent Aboriginal sacred sites will have significant implications for the Aboriginal community and individuals who are responsible for the care of these sites.	4b
	There is insufficient explanation in respect of the groundwater modelling.	5a
	Supports the staging of large, licenced volumes.	6f
	Supports the implementation actions relating to water monitoring, improving knowledge of aquifer interconnectivity and the mapping of Aboriginal sacred sites.	6b
7	Traditional Owners and Custodians do not support the plan.	1b
	Development of the plan should be grounded in the democratic principles of consultation and negotiation.	1a, 1b and 1c
	Critical groundwork relating to GDEs has not been completed undermining community confidence that the environment and Aboriginal sacred sites are protected.	5d
8	Opposes the allocation of unsustainable water rights.	2a
	The plan will result in irreversible ecological destruction.	3a, 3b and 3c
	Opposes the development of large-scale horticultural operations on unsuitable land in the district.	6e
9	Allocation of water should be fair, appropriate to the existing environment and social and cultural needs, transparent and sustainable.	2a
	The plan ignores science and local input.	1b, 5a, 5b, 5c, 5d and 5e
10	The plan ignores the clearly expressed concerns of local Aboriginal leaders.	1b
	Critical ecological considerations that were identified by experts are being ignored.	1b
	Condemns the secretive nature of the plan's development.	1a, 1b and 1c
	Not opposed to long-term utilisation of the water resource but without the proposed extreme exploitation.	2a and 6e

No.	Comment	Discussion Schedule 2
11	A reduction in the ESY will put pending groundwater extraction applications in doubt.	10a
	Requests that existing and future development and water extraction licences be amended to reflect why the Strategic Aboriginal Water Reserve of 25,671 ML/year was created.	10a
	Requests that current and pending applications be considered on their merits while still encouraging and meeting Aboriginal economic aspirations.	10a
12	The committee did not agree with the plan.	1b
	Concerned that the plan will allow serious damage to the environment due to allocating too much water and the lack of relevant scientific evidence relied upon.	2a, 5a, 5b, 5c, 5d and 5e
	The loss of GDEs will have serious impacts on Aboriginal peoples' health and wellbeing.	4b
	The plan will prevent future litigation, preventing residents from challenging water allocation.	6a
13	The plan was not endorsed by the committee, which is comprised of a diverse array of stakeholders.	1b
	The ESY is too large.	2a
	The proposed 30 % destruction of ecological values is unsustainable and has no scientific basis.	3b and 5c
	The rich ecological heritage and values of the arid landscape of central Australia and the Barkly region are under threat from unsustainable development.	3a, 3b and 3c
	The plan has little meaningful content and is undemocratic.	6a
14	The plan was not endorsed by the committee.	1b
	Aboriginal communities are opposed to the plan based on the potential destruction of cultural values.	1b
	The ESY in the Central Plains Management Zone should be substantially reduced.	2a
	The plan has weakened environmental protections for water.	3a
	The plan will result in catastrophic regional environmental outcomes.	3b and 3c
	Water allocations need to be based on the best possible science.	5a, 5b, 5c, 5d and 5e
	The three-part structure has weakened citizen rights and reduced opportunities to challenge the plan legally	6a
	The risk of increased salinity has been dismissed despite the department's own report indicating that it is a high risk that could threaten agriculture in the district.	3c and 5e
	The plan does not comply with best practice water resource management.	6b and 6c
15	Opposes the Fortune Agribusiness groundwater lease.	6e
16	Traditional Owners, the CLC, environmental groups, ALEC, residents and experts do not support the plan.	1b
	Opposes the Fortune Agribusiness groundwater lease.	6e
17	The plan was not endorsed by the committee.	1b
	Destroying 30% of groundwater dependent trees has no scientific basis and is counter to the community's desire to protect the environment.	5c
	Concerned about the administrative law implications of the plan.	6a
	The plan represents a radical departure from sustainable water resource management.	6b and 6c
18-29*	The plan was not endorsed by the committee. The plan should be supported by the committee.	1b
	The ESY is too high and allocates too much water.	2a
	The plan poses a significant and unacceptable impact to the environment. Groundwater dependant trees, soaks, springs and swamps will be destroyed. The plan should not sacrifice GDEs.	3a, 3b and 3c

No.	Comment	Discussion Schedule 2
	The plan threatens to destroy significant cultural values.	4b
	The plan is based on bad science. The plan should be based on evidence. This includes the GDE Guideline which is highly problematic and must be scrapped altogether.	5a, 5b, 5c, 5d and 5e
	The plan is a radical departure from effective water resource management.	6b and 6c
	The three-part structure should be scrapped. As it stands the plan is anti-democratic and prevents future opportunity for litigation. The plan should be enforceable.	6a
	The plan threatens the land which underpins the identity, health, welfare and history of the whole community.	4c
	The Singleton water licence is unsuitable for the NT.	6e
	The plan displays a reckless attitude towards the rights of Custodians to protect their sacred sites.	4b
	The plan does not adequately consider the role of groundwater dependent trees in the face of a changing climate.	5a, 5b, 5c, 5d and 5e
	Despite the department's own report highlighting a risk of salinity impacts, the plan dismisses salinity concerns entirely, endangering the future viability of agriculture in the region.	3c and 5e
	The plan should be led and supported by Traditional Owners. The plan should acknowledge Traditional Owner's concerns that the plan will destroy Country.	1b
	The plan should reinstate the objective from the previous plan relating to protection of the environment, which was to 'meet the environmental water requirements of water-dependent ecosystems.'	3a
30-51^	The plan should be supported by the committee, Traditional Owners and Custodians, scientists and lawyers.	1b
	It is not clear within background report that the committee did not endorse the plan.	1b
	The plan disregards community sentiment, precautionary principles and science.	1b, 2a, 5a, 5b, 5c, 5d and 5e
	The ESY is too high and allocates too much water.	2a
	The ESY as defined in the plan does not appear to be a sustainable yield. There is a strong risk of overallocation in the district and this should be considered in the ESY.	2a
	The ESY in the Central Plains Management Zone should be substantially reduced so that the water requirements of all GDEs can be met and water is available for future generations.	2a
	The ESY is fundamentally unsustainable as the predicted drawdown will result in GDEs not being able to access sufficient water over vast areas under the most likely extraction scenarios.	2a
	Allocating 80% of water to the environment and 20% for domestic and other uses is consistent with international standards as it maintains ecosystem and community health. Moreover, community and Aboriginal water users should be considered before large commercial users.	2a and 9a
	Too much water is being allocated to commercial interests at the expense of the interests of Traditional Owners and the environment.	2a, 3a, 4a and 9a
	GDEs and cultural values should be fully protected and this can be achieved while still allocating a sustainable amount of water for extraction.	2a, 3a and 4a
	The background report demonstrates that the plan will be devastating to the district.	3b, 3c, 4b, 4c
	Concerned that Traditional Owners and the CLC feel that the plan will fail to protect sacred sites and groundwater ecosystems.	3a and 4a
	Destroying 30% of groundwater dependent trees is disastrous for the whole ecosystem.	3b
	The 2018 plan's environmental objective should be reinstated.	3a
	There will be serious and irreversible impacts to GDEs because of the proposed allocations.	3b

No.	Comment	Discussion Schedule 2
	The plan should not sacrifice GDEs.	3a and 3b
	Drawing down the water table will harm groundwater dependent vegetation. It is not acceptable to destroy 30% of GDEs for financial gain. This level of destruction will have catastrophic consequences for the environment and culture.	3b
	The plan risks polluting the aquifer with salt.	3c
	The impacts of salinity have not been considered.	3c and 5e
	The plan does not protect ecological or cultural values.	3a and 4a
	The plan's outcomes do not appear capable of achieving the stated objectives. Moreover, the use of the phrase 'where appropriate' in the framing of the plan's objectives and outcomes, and in reference to the establishment of a WAC, appears to indicate that the objectives are not always applicable; phrases used in the objectives need to be well-defined. Lastly, the objective relating to environmental values is confusing and concerning, particularly in its use of the qualifier 'key environmental values'.	3a, 1d and 6d
	The plan is based on bad science.	5a, 5b, 5c, 5d and 5e
	There is insufficient knowledge of the environment to go ahead with the plan. The hydrology of the district is not sufficiently characterised to make the proposed changes to water allocation. There is no attempt to characterise the environment's sensitivity to water budget change. The treatment of climate change is flawed. Impacts to the water resource should be predicted with high confidence and measured but this is not currently the case.	5a, 5b, 5d and 6b
	None of the data in the background report had error bars or confidence intervals and that information had been excluded.	5f
	Maps relating to groundwater drawdown should use finer contours to more clearly show the extent of GDEs that will be impacted.	5f
	The GDE Guideline has no scientific basis.	5c
	The department's report relating to salinity should be considered.	5e
	The background report should have provided further clarification about model assumptions and the calculations of recharge rates.	5a
	The groundwater model assumptions are overly optimistic.	5a
	The plan should be based on evidence. The GDE Guideline does not have a relevant scientific basis.	5a, 5b, 5c, 5d and 5e
	The NTG has not completed the work required to properly identify GDEs, measure impacts and restrict destruction to 30 % of GDEs.	5d
	The background report had technical errors relating to climate change, drawdown modelling, maps and salinity.	5a, 5d, 5e and 5f
	It appears that statements in one document appeared to be disregarded in another.	6a
	The background report should be used in conjunction with the other two documents making up the plan as it lacks pertinent details provided in the other documents.	6a
	Importance guidance has been included in the background report whereas it should be included in a more accessible place, such as supporting information relating to the limits of acceptable change.	6a
	The statutory WAP did not include enough information. For instance, there was no information about risks.	6a
	The plan should be enforceable.	6a
	The statutory WAP has been gutted of any real substance. The implementation actions and risk assessment must be included in the plan otherwise they have no weight.	6a
	The administrative law implications of the plan are concerning.	6a
	The implementation actions and the risk assessment are flawed.	6b
	A clearer commitment to the implementation actions is needed. The implementation actions need to be linked with the risk assessment and that the risk assessment should be reviewed	6b

No.	Comment	Discussion Schedule 2
	externally to ensure accuracy. An annual report should be produced that describes monitoring results along with analysis of trends.	
	The implementation actions fail to consider uncertainty relating to model assumptions. Furthermore, the plan's adaptive management is lacking.	6b
	The implementation actions should include a commitment that the annual report will provide an update about the status of the limits of acceptable change in respect of GDEs and water extraction licences.	6b
	Monitoring cannot be implemented when the baseline data and understanding is poor.	6b
	The annual report should be made public.	6b
	The risk assessment adopts risk ratings that are too low and is substantially reduced from the previous plan.	6b
	The plan is at odds with the NWI.	6c
	The economic benefits of mining natural resources should not be prioritised over other needs.	6e
	The plan benefits commercial interests such as Fortune Agribusiness rather than the wider community or the environment.	6e
	The water licence portal is difficult to navigate.	6f

*Submissions 18-29 represent the templated responses to the plan. These responses presented a consistent array of comments that have been grouped together here.

^Submissions 30-51 represent the survey responses to the plan. These comments should be read in conjunction with the demographic responses and feedback described in Schedule 3.

Schedule 2: Discussion of themes and resolution

Theme		Summary of the submissions	Response	Resolution
1. Deficiencies in the development of the plan	1a. The planning process involved reverse engineering	The planning process was a case of reverse engineering: • key conditions of the plan were constrained by prior decisions that were not open to negotiation, such as the 'limits of acceptable change' • the risk assessment was conducted at the end of the process with no input from the committee. By developing the risk assessment at the end of the planning process and after water had already been allocated to beneficial uses, the Northern Territory Government (NTG) defies best practice water management.	Planning is an iterative process and this was the third plan in place for the district. Previous plans and guidelines that have been developed are relevant in developing the plan. This includes previous risk assessment process and the GDE Guidelines. The committee (meeting 3) discussed the guideline and potential refinements to the guideline. However as the science continues the current guideline reflects the most up to date understanding of GDE in the area and is referred to in the plan.	The department acknowledge better communication of the planning process will improve understanding and address the concerns raised. Relevant improvements in the implementation actions: • risk assessment at Schedule G linked to implementation actions • further GDE work in 4.1.3, 4.1.4, 4.1.6, 4.1.7, 4.1.9. • improved communication in 4.1.10, 4.3.3,4.4.3.
	1b. The views of stakeholders were disregarded	During the development of the plan the NTG disregarded the views and recommendations of Traditional Owners, Custodians and the committee. For instance, at a meeting held in September 2022 attended by a large group of Traditional Owners, the Traditional Owners expressed the importance of protecting Aboriginal cultural values. Instead of listening to the Traditional Owners the NTG has removed the objective of protecting Aboriginal cultural values from the plan. The committee is comprised of members representing Aboriginal, horticultural, environmental, remote community water supply, independent scientists and community interests, and included a Northern Territory Farmers	The department held information sessions and received feedback as outlined in section 3.2 Stakeholder engagement. The department acknowledged that these activities need to be strengthen in improve consultation. The committee provided advice throughout the development of the plan. As a result of this the department made a number of changes to the plan that was released for broader consultation. Major stakeholders are represented by the committee who are very well informed and have had input into the plan. Throughout the planning development period, members of the committee will have communicated water planning processes and plans to stakeholders and	This consultation summary demonstrates that the views of stakeholders were not disregarded. Consideration of advice from the committee resulted in additional content being included in the plan to ensure that the release of water would enable sufficient time to monitor the resource before all the water was released. This included the introduction of a trigger to review the plan based on actual water use in the plan and relevant amendment to the *Water Act* rather than merely a 5-year timeframe. These provisions are all consistent with the principles of adaptive management.

Theme		Summary of the submissions	Response	Resolution
		representative, the Central Land Council (CLC) and Arid Lands Environment Centre. The objectives supported by the committee were fundamentally compromised and the concerns held by the committee were not addressed. For these reasons a majority of the committee explicitly did not endorse the plan. The background report indicates the plan was developed with input from the committee, which is misleading given the lack of endorsement. The NTG failed to consult with or engage the public beyond the survey published to the Have Your Say portal. Moreover, the survey asked largely irrelevant questions.	the broader community to keep them informed of environmentally sustainable use and management of the resource, as per the committee's terms of reference. The role of the committee is to provide advice on the effectiveness of the previous plan to inform the development of a new plan, not to endorse the plan.	The department recognises the need to improve consultation to enable greater engagement in water resource management. The department commits to progressively establishing Water Advisory Committees throughout the entire plan cycle, with greater representation of Aboriginal people, which will start with the Ti Tree plan area. The department is continuing to improve engagement progresses, including working with Watertrust, exploring the use of decision charters, and developing guidelines.
	1c. Necessary information was not provided	The NTG failed to provide in a timely manner critical information requested by the committee and the CLC, particularly in relation to the scientific basis of the background report and the hydrogeological modelling. Failure to provide such information prevented stakeholders from assessing the research underpinning the plan during the development process.	Groves 2022 is a technical note to capture key areas of the water plan, i.e. the water model and water monitoring and was provided internally to support input and content to the background and implementation documents. The relevant contents of this technical note can be found in these water plan documents and was provided to the CLC. Tickell et al 2022 technical report remains in press (not published) as part of another suite of reporting intended for Mapping the Future. The relevant contents from these reports are reflected in the background report, however these technical investigations also inform broader understanding and knowledge. These were provided to the CLC.	Department reports are produced on an ongoing basis to support planning, protection and regulatory functions. Requested scientific documents have been provided to committee members/stakeholders. The department acknowledges these issues and is working to rectify and improve the processes for completion of work and the time and way that these are made available for the public.

Theme		Summary of the submissions	Response	Resolution
	1d. The committee will be established 'where appropriate'	The plan states that the committee will be established 'where appropriate'. Given the importance of managing water resources in the district, it is necessary for the committee to be established for the entire term of this plan and any future water allocation plans.	In the Act, appointment of the committee and its members is at the Minister pleasure.	The department recognises there is opportunity improve consultation to enable greater engagement in water resource management. The department commits to progressively establishing Water Advisory Committees throughout the entire plan cycle, with greater representation of Aboriginal people, which will start with the Ti Tree plan area.
	1e. Traditional Owners do not want to form an Aboriginal Reference Group	Traditional Owners do not want to form a separate non-statutory ARG. They want majority representation on the committee. They want male and female representatives from all estate groups in the district. Traditional Owners must be able to choose their representatives and will be assisted in doing so by the CLC.	The formation of an ARG is a concept that has been contemplated across water planning throughout the Territory and was agreed in September 2022 at a meeting in Tennant Creek between the CLC, Traditional Owners, and residents of the Western Davenport area. The intent of group is to provide Traditional Owners and other members the opportunity to contribute their perspectives to water management in the region throughout the next three years.	The department and the CLC, Traditional Owners and residents of the district will continue working together to establish a water advisory committee for Aboriginal people to be engaged and participate in water management. This is outlined in the implementation actions. However to date, there has been limited progress between the department and CLC to establish an appropriate mechanism to improve Aboriginal involvement in the planning process. It is anticipated that this group will work with the committee to ensure Aboriginal interests are appropriately recognised in future water allocation planning decision making processes.
2. Allocating too much water	2a. The ESY is unsustainable	The ESY for the Central Plains Management Zone is nearly twice the average annual net recharge for that area. Moreover, it represents approximately twice the amount of water used in Darwin each year. This ESY constitutes water mining. Water mining and the sustained	The ESY is based on actual stored water available now, which is extensive and conservatively estimated to hold a minimum of 137,986,000 ML. The plan reduces the ESY for the Central Plains water management zone from 87,720 ML/year to 81,500ML/year.	The ESY was reduced in consideration of the committee's advice. More important than the total volume of the ESY is where the water is taken from, as the resource is spatially variable and impacts will depend on what is in proximity. This is

Theme		Summary of the submissions	Response	Resolution
		lowering of the groundwater table is incompatible with the goal of sustaining long term development of the water resource. The department's modelling shows that after 50 years more than 100 km of the groundwater table will be lowered by 5m and across a 40 km stretch a 20 m drop will occur. The 2011 plan recommended a far lower ESY of 27 GL/year for the Central Plains Management Zone. Given uncertainty surrounding the groundwater modelling and climate change scenarios, Dr Andrew Gunn recommends that an ESY of <12.5 GL/year would be suitable for the Central Plains Management Zone, noting that this is 10 times larger than the current usage of water in that area. The NTG must acknowledge that they are proposing to make a permanent change to the environment and that the current water supplies will not be available for future use.	Taking the ESY of 81,500 ML every year for 100 years, 94 % remains stored underground without relying on any recharge. In arid regions like Western Davenport where rainfall is low, unpredictable and recharge to water resources is infrequent, underground aquifers must be relied upon to sustain life. It is necessary to use aquifer storage to balance infrequent recharge with a continuous demand for water. Relying on actual stored water available is a more precautious approach than relying recharge, as it doesn't rely on uncertainty of climate variability. The plan has been set for 10 years with a review at three years, so the actual water available will be updated based on what occurs. During this time the department and licence holders in the region have sufficient time to report and monitor the resource to ensure it is tracking as expected and make any necessary adjustments through adaptive management.	appropriately managed through licence decisions and conditions that are assessed and set based on the specific amount and location of water extraction. During the next 5 years implementing the plan, the resource will continue to be monitored to inform if there is any evidence to inform a further change to the ESY.
	2b. Hanson River paleo valley aquifer	The CLC stated that it is unacceptable that water from the Hanson River paleo valley aquifer was not considered in calculating the ESY and that take from the aquifer is not considered within the cap on water use defined under the ESY. The plan must cover all water resources in the district.	The Hanson River Paleo Channel is a scientifically separate resource. While it is within the plan area it is not connected to the water resources managed through the plan. Therefore it has not been included in the model or the ESY, which is explicitly stated in the plan.	The plan clearly identifies the water resources that are managed through the plan. This is not all the water resources in the plan area, in most other plan areas relate to only a single water resource.
	2c. The 30,000 ML regolith	The previous plan included 30 GL/year that was outside of and additional to the modelled resource. This regolith	The consideration of the regolith was updated based on the most contemporary understanding of the resource, this was discussed with the committee (meeting 3).	At replacement or review of a plan the natural water balance will be updated to the most up to date understanding

Theme		Summary of the submissions	Response	Resolution
		component is now considered part of the total aquifer storage. Instead of lowering the ESY when the regolith water was discounted as per the adaptive management approach outlined in the previous plan. The current plan has increased its predictions of recharge by using a shorter climate record, reduced the assessment period to only 50 years and allowed a greater level of aquifer drawdown to make a case for retaining a similar ESY.	It remains considered but is not separately defined as previously. The utilisation 50 years of water data is consistent with what was used previously and is used for all scientific assessment for water resources for the department. This has been selected, as this is when the evapotranspiration data became available across the Territory.	of the water resource to ensure the continuous improvement. Ongoing science investigations are continuing and the understanding of the resource and response to changes will continue to improve. Ongoing relevant improvements in the implementation actions: • science 4.1.1, 4.1.2, 4.6.1
3. Fails to protect the environment	3a. Weakened the objective for environmental protection	The 2018 plan's environmental objective was to 'meet the environmental water requirements of water dependent ecosystems.' The only objective in the current plan relating to environmental values is 'balancing the retention and preservation of key environmental values dependent on water with the overall benefits provided by the water resource.' The preservation of environmental values should not be balanced with economic and social benefits. GDEs and other environmental values should be protected in their own right and all detrimental impacts to water dependent ecosystems must be avoided as far as possible. In addition, what constitutes a 'key' environmental value should be defined. Moreover, the plan does not contain specific protections for ecosystem health or GDEs. The plan includes only vague knowledge gathering exercises that obfuscate from the responsibility of environmental protection. This lack of substantive implementation actions highlights how preservation of	The department will deliver the implementation actions to ensure that the water resources in the district are managed to meet all six objectives of the plan. The actions committed have been resourced and work plan developed to ensure this occurs. This means the department will: • deliver the department's water monitoring program, which is reviewed annually • produce an annual report for the water resources in the district starting in 2023-2024 • support the delivery of online reporting of the water use • continue to strengthen compliance and enforcement activities through the compliance enforcement priorities 2021-2026 and annual reporting. Water allocation plans are one of a number of tools used to manage water resources.	The implementation actions 4.1.1-4.1.10 are associated with continuing to improve the understanding of the water resource and its associated environmental values; GDEs; and improved ability to account for these values in water use and planning decisions. Licence conditions and regulatory compliance protect ecosystems that rely on groundwater as well as establishing suitable management practices locally. Licence conditions require the licence holder to monitor and report the water resource to help understand how the water resource, GDEs and cultural values respond to taking water from the groundwater in the district.

Theme		Summary of the submissions	Response	Resolution
		environmental values is not a priority for the NTG. There is no clear requirement for protection and the environmental objective is far weaker than the 2018 plan.		
	3b. GDEs will be damaged or destroyed	Allocating too much water through the ESY and embedding the GDE Guideline into the plan is a catastrophic approach to the management of GDEs. The lowering of the water table will result in groundwater dependent trees, soaks, springs and wetlands across a 100km stretch being damaged and destroyed. The impact of a drop in the water table on subterranean ecosystems and stygofauna is likely to be major and irreversible. Species extinctions may occur accompanied by a loss of ecosystem services.	In order to achieve all of the objectives of sharing equally, water extraction will have an impact on GDEs because they occur extensively across the plan area. The impact of extraction varies spatially throughout the area and impacts on the water table are not universal. It is greatest at the site of bore extraction and lessens the further away from development. Also, monitoring shows that once pumping stops the water levels increase again. The department released the GDE Guideline to provide guidance to applicants for water extraction licences in the district, protecting 70% of GDEs. The plan requires licence holders and licence applicants to demonstrate that the water taken or proposed to be taken under a groundwater extraction licence will not affect GDEs in a manner that exceeds the limits of acceptable change as set out in the current GDE Guideline.	New developments in the region including developments on Warrabri Land Trust (Desert Springs Farm) and Illyarne Land Trust (Centerfarm) could not progress without the application of the GDE Guideline. Implementation Actions 4.1.4 -4.1.9 improve understanding of types and locations, as well as management of GDEs within the plan area. Licence conditions and regulatory compliance protect ecosystems that rely on groundwater as well as establishing suitable management practices locally. Licence conditions require the licence holder to monitor and report the water resource to help understand how the water resource, GDEs and cultural values respond to taking water from the groundwater in the district.
	3c. Salinity risks	Irrigated agricultural may cause salinity across the district to increase. This could impact the structure of the soil and render the land unsuitable for future agricultural use. It could also impact public water supplies. Moreover, as areas with shallow water tables are generally at higher risk from increased salinity, GDEs could be some of the worst affected.	As part of the implementation of ongoing activities to investigate and understand salinity have progressed. National Centre for Groundwater Research and Training (NCGRT) located at Flinders University was engaged to develop a simple regional scale model of the Central Plains water management zone to provide a high-level indication of the salinity risks in the region from irrigated agriculture.	Implementation actions 4.6.6-4.6.9 have been developed to ensure appropriate management of salinity risks in the area. Further activities are planned to conduct further on-site investigation to confirm pre-development soil salinity levels from the soil surface to standing water levels. Carrying out water quality (salinity) monitoring of

Theme		Summary of the submissions	Response	Resolution
		These risks associated with salinity are poorly understood and the statutory WAP offers no commentary or guidelines that the Controller can consider when making water licence decisions.	The report is a regional desktop assessment with a relatively high level of uncertainty that is intended to guide more detailed on-site field investigations where impacts are more likely. The report does not predict salinity risks for individual developments; however, the report provides important information for licence holders in the area to inform more detailed investigations and monitoring of salinity levels that are a requirement of licence conditions. Territory Stories - The Risk of Salinity due to Irrigation Developments in the Western Davenport Basin, Northern Territory	groundwater to understand the natural variability across the region. Working with new and individual developments to ensure that irrigation is separated from extraction as much a practical, especially where the water table is shallow. Integration of the data and reporting from individual developments as part of licence conditions.
4. Fails to protect Aboriginal sacred sites and cultural values	4a. Mechanisms for the protection of Aboriginal cultural values	The implementation actions are concerned only with 'identifying', 'documenting', 'monitoring' and 'assessing'. The only reference to 'protection' occurs in relation to 'other cultural values,' and not Aboriginal cultural values. It is not enough to 'monitor' Aboriginal cultural sites and account for potential impacts. Moreover, the protection of Aboriginal cultural values associated with water should not be balanced with the overall benefits provided by the water resource. Section 5.2 of the background report purports to address 'considerations for protection of cultural uses' but contains no specific actions on how cultural values will be protected. Damaging Aboriginal sacred sites is unlawful under the *Northern Territory Aboriginal Sacred Sites Act 1989* (NT) (*Sacred Sites Act*). The plan must clearly state that one of its objectives is the protection of Aboriginal cultural values and that this protection is not limited or	The plan recognises the importance of identifying cultural heritage values and measures to safeguard these in a culturally appropriate way, details are addressed through licence requirements. The work to define cultural sites that need to be protected has not yet been completed, however once these sites are defined there remain mechanisms for their protection through policy and guidance considered in licence decision making processes and through the review of the plan. The CLC through the committee confirmed that cultural values should be identified as part of a water licence application process rather than at the scale of a water allocation plan, due mainly to confidentiality and consent issues. CLC's decades of sacred site protection work has confirmed that surveys need to be related to specific impacts to be robust.	There are seven implementation actions associated with the protection of Aboriginal cultural values within the plan area that are intended to address these concerns: 4.2.1-4.2.7 and 4.2.9. Following the earlier steps another action for the management and protection of key Aboriginal cultural sites. In September 2022 at a meeting in Tennant Creek between the CLC, Traditional Owners, residents of the district and the department it was agreed to work with the department. However to date, there has been limited progress between the department and CLC to establish an appropriate mechanism to improve Aboriginal involvement in the planning process. Over the coming years the department will work to establish

Theme		Summary of the submissions	Response	Resolution
		diminished by qualifiers such as 'key' or 'significant'. Moreover, the plan should include specific actions for the protection of Aboriginal cultural values. The establishment of an Aboriginal Reference Group (ARG) that would only 'document cultural water values' is not the appropriate mechanism to protect Aboriginal cultural values. The appropriate mechanism is undertaking an assessment of Aboriginal cultural values and sacred sites before licence approval. These assessments must involve the CLC and Traditional Owners.	The larger the area, the less likely that cultural impacts will be properly identified in the absence of information about predicted impacts. Improved understanding of cultural values and monitoring of cultural sites throughout the life of the plan will ensure safeguards that are appropriate to the Traditional Owners and Custodians and the ecological values of the district are implemented.	appropriate water advisory committees and processes to ensure that Aboriginal cultural values and knowledge are understood, key groundwater dependent sites are defined and specific cultural protections are developed for inclusion in future water allocation plans.
	4b. Aboriginal cultural values associated with GDEs	The plan will result in damage or destruction to GDEs which often carry significant cultural values. Impacts to water dependent Aboriginal cultural values will have significant implications for the Aboriginal community and individuals who are responsible for the care of sacred sites.	The GDE have been mapped regionally and are known to occur across the plan area. The plan ensures 70% GDEs are not impacted through the GDE Guidelines. Licence conditions ensure that significant extraction meets thresholds to change set in the GDE Guidelines.	There are seven implementation actions associated with the protection of aboriginal cultural values within the plan area that are intended to address these concerns: 4.1.1-4.1.7 and 4.1.9.
	4c. Other cultural values	The arid landscape of the district and its GDEs have broad community significance. This landscape shapes the identity, health, welfare and history of the whole community. The plan puts this landscape at risk.	The GDE have been mapped regionally and are known to occur across the plan area. The plan ensures 70% GDEs are not impacted through the GDE Guidelines. Licence conditions ensure that significant extraction meets thresholds to change set in the GDE Guidelines.	Implementation action on GDE 4.1.6-4.1.9 and monitoring impact and conditions 4.2.6-4.2.7 directly addresses these concerns.
5. Lack of trust in the science	5a. Modelling deficiencies	The groundwater modelling is deficient for the following reasons: • there have not been any substantive updates from previous modelling undertaken	At a regional scale the department's model is considered fit-for-purpose for estimating groundwater availability. The model uses the facts about the geology, groundwater levels and hydrogeological processes and climate data, including actual data obtained from investigation	Improved scientific research, monitoring and field investigations underpin the management of water resources in water allocation plan areas.

Theme		Summary of the submissions	Response	Resolution
		• groundwater model estimates for recharge and evaporation are significantly different to those described in previous plans without explanation • there is limited baseline data for a reliable groundwater model • the groundwater bores are not adequate to provide an overall understanding of the characteristics of the main aquifers • neither the water table drawdown predictions nor the model predictions of pre-impact groundwater levels utilise predictive uncertainty and sensitivity analysis. Failing to put these predictions in context with their uncertainty is out of step with Australian groundwater modelling guidelines • the groundwater model is graded as Class 2, however some elements of the model are closer to Class 1 (lowest reliability and sophistication). The model must be of Class 3 grade. Because of these modelling deficiencies the groundwater of the district is not sufficiently characterised to set the proposed ESY and allocations.	bores and bore reports, which has been calibrated using groundwater monitoring information collected by the department. Independent reviews are conducted as part of ongoing scientific advancement within the department. Most recently, considerable work was carried out to test the model parameters by running over 1,000 simulations. This testing confirmed the model was fit-for-purpose. The model has simulated actual data sets collected from several bore sites in the Central Plains water management zone with considerable accuracy. It is acknowledged there is a paucity of bore data in the remaining zones and the far eastern and western parts. The uncertainty analysis of the model concluded that the model parameters are acceptable. The independent review shows that the model meets industry standards as a Class 2 model at the basin scale with some individual parameters considered to be at Class 3 level. Based on this, the department considers the model adequate for water allocation planning.	To date, the understanding of the resources in the region was improved through a number of key investigations conducted during 2018-2022 by the department, Geoscience Australia (GA), the National Water Grid Authority (NWGA) and other private companies. Data acquisition for these investigations included airborne electromagnetic (AEM) geophysical survey, 3D geological modelling, landform mapping, water bore drilling and construction, downhole geophysical surveys, groundwater level monitoring and quality sampling events. The department will continue to improve science and modelling. This is demonstrated where the NWGA has provided more than $3 million (starting in 2021) to refine hydrogeological processes and conceptualisations including aquifer storage volume, aquifer connectivity, groundwater flow, recharge and discharge mechanisms/rates. The project will be completed in 2025 and provide further scientific input to the model recalibration project that is also underway. Improvements, including data from new monitoring sites and recommendations from an independent review of the model, will be included in the next update of the model scheduled prior to the review of the plan.

Theme		Summary of the submissions	Response	Resolution
	5b. The ESY was miscalculated	The ESY should not be based on storage depletion. The ESY should be based on inflows and outflows to the aquifer. By basing the ESY on storage depletion the NTG risks significance water cycle consequences and serious harm to water users and the environment. In addition, the ESY calculation has overestimated recharge by considering a short climate record. Moreover, the ESY has not considered groundwater recharge in a changing climate. Predictions of a hotter and drier climate are linked to decreasing net recharge and uncertainty about the frequency of very wet years. The ESY calculation should have considered a range of climate scenarios, including a worst-case scenario. The plan has relied upon Köppen climate classification which is a simplistic approach.	The ESY is based on actual stored water available now, which is extensive and conservatively estimated to hold a minimum of 137,986,000 ML. The plan reduces the ESY for the Central Plains Management Zone from 87,720 ML/year to 81,500 ML/year. Taking the ESY of 81,500 ML every year for 100 years, 94 % remains stored underground without relying on any recharge. In arid regions like Western Davenport where rainfall is low, unpredictable and recharge to water resources is infrequent, underground aquifers must be relied upon to sustain life. It is necessary to use aquifer storage to balance infrequent recharge with a continuous demand for water. Relying on actual stored water available is a more precautious approach than relying recharge, as it does not rely on uncertainty of climate variability.	The ESY was reduced from the previous plan and additional triggers introduced for review of the plan based on water use. These provisions are supported by staging the volume of water that can be taken under water extraction licences, which can only increase if the licence conditions are met and the Controller approves moving to the next stage. Staged release of water under current licences will mean that over the next three years of the plan, less than 50 % of the ESY can be released.
	5c. The GDE Guideline	The GDE Guideline, which permits 30% of GDEs to be destroyed, has the following deficiencies: • it relies on land clearing guidelines for the Daly region in the Top-End savanna and land retention thresholds in southeastern Australia, neither of which have any relevance to semi-arid environments and GDEs • it does not take into account the relative value of GDEs, which means the most	The department has undertaken extensive work to establish the extent and location of GDEs within the district using remote sensing techniques combined with field verification to produce a predictive map of GDEs in the central part of the Central Plains Management Zone. The project showed that GDEs were far more extensive than previously understood, especially where the groundwater table is within 15 m of the land surface. It identified important thresholds for vegetation in shallow groundwater (up to	The plan, through the GDE Guideline protects 70% GDEs at regional and property scale by considering thresholds that are relevant to groundwater depth and managing the rate of change. The GDE Guideline's 70% threshold includes consideration of the: • cumulative GDE impacts, including those that are a result of proposed land clearing and other activity for the development

Theme		Summary of the submissions	Response	Resolution
		ecologically and culturally significant GDEs may be degraded or destroyed • it was largely developed in one week in February 2020 during which time no draft was produced • it was based on a brief Google search • it was deliberately not put to the committee for consideration • it was only scrutinised by one stakeholder, Fortune Agribusiness, who would benefit from its development • it was finalised five months before it was made publicly available on the department's website • no consultation or engagement with Traditional Owners, the CLC or the public occurred. This top-down approach lacks transparency and undermines public confidence that decisions are being made in the public interest.	10 m below ground level) and vegetation characteristics associated with very shallow groundwater (0-5 m below ground level). The GDE Guideline (including revised limits of acceptable change) represents an improvement to the limits of acceptable change contained in the 2018-2021 water allocation plan. The department recognises that the development of the GDE Guideline did not provide opportunity for consultation which has impacted acceptability.	• additional principles to enhance the protection of ecological values associated with GDEs that meet additional thresholds • protection of all GDEs that are known to support significant populations of threatened species. Implementation Actions 4.1.4 -4.1.9 address scientific understanding, management and improved mapping of GDEs in the plan area. The department is commitment to early and ongoing engagement with stakeholders and will ensure that research informs knowledge and decisions are communicated, understood, accepted and actioned.
	5d. Analysis of GDEs	The role that GDEs play in a changing climate has not been considered. GDEs will play an essential role as refugia during climate change driven droughts. In addition, GDEs contain large amounts of stored carbon in woody vegetation. Due to the high variability of rainfall, vegetation and other environmental factors will be extremely sensitive to the proposed annual withdrawals from the water budget. However, there is no attempt to characterise the environment's sensitivity to water budget change. Rather, the report is largely focused on static or annual-mean properties. This	The plan requires licence holders and licence applicants to demonstrate that the water taken or proposed to be taken under a groundwater extraction licence will not affect GDEs in a manner that exceeds the limits of acceptable change as set out in the current GDE Guideline. The water licencing framework is based on an adaptive framework that responds to a changing climate. This has conditions for significant water extraction licences (>500 ML per year), that sets out additional requirements for:	Staging the volume of water that can be taken under water extraction licences, which can only increase if the licence conditions are met and the Controller approves moving to the next stage. This means changes in the climate can be included in how water is release over time based on the response of the resource. Improved scientific research, monitoring and field investigations underpin the management of water resources in water allocation plan areas.

Theme		Summary of the submissions	Response	Resolution
		highlights the further issue that the NTG has not yet completed the work required to properly identify GDEs and measure and restrict impacts. Moreover, the plan uses a measurement of 10m depth to water table to define GDEs which represents a change from the 20m depth to water table measurement previously used. This reduces the area considered to be covered by GDEs meaning groundwater drawdown rules will be less restrictive across a larger area of the district. This puts GDEs that do not fall within the 10m depth to water table definition at greater risk.	• property scale identification, mapping and baseline assessment of GDEs and prioritisation of key GDEs to be protected from water extraction on the property • monitoring of GDE condition • identification and protection of key Aboriginal cultural sites • ongoing water quality and water level monitoring to demonstrate impact of property scale extraction (i.e. local scale scenario modelling to determine GDE impact).	Implementation Actions 4.1.4 -4.1.9 address scientific understanding, management and improved mapping of GDEs in the plan area.
	5e. Salinity	Salinity impacts have been dismissed despite the department's own report concluding there is a high risk of salinity impacts, threatening GDEs, the public water supply and the future viability of agriculture in the district.	As part of the implementation of ongoing activities to investigate and understand salinity have progressed. National Centre for Groundwater Research and Training (NCGRT) located at Flinders University was engaged to develop a simple regional scale model of the Central Plains water management zone to provide a high-level indication of the salinity risks in the region from irrigated agriculture. The report is a regional desktop assessment with a relatively high level of uncertainty that is intended to guide more detailed on-site field investigations where impacts are more likely. The report does not predict salinity risks for individual developments; however, the report provides important information for licence holders in the area to inform more detailed investigations and monitoring of salinity levels that are a requirement of licence conditions.	Implementation actions 4.6.6-4.6.9 have been developed to ensure appropriate management of salinity risks in the area as development occurs.

Theme		Summary of the submissions	Response	Resolution
			Territory Stories - The Risk of Salinity due to Irrigation Developments in the Western Davenport Basin, Northern Territory	
	5f. Further issues with the presentation of data	Other issues that were raised relating to the presentation of data include: • all data should be presented with an indication of uncertainty. For instance, error bars should be included on graphs • maps showing modelled drawdown should use finer contours to more clearly show the extent of GDEs that will be affected.	The department is continuing to improve the presentation of scientific data, generally data is represented as averages to avoid the need for standard variations. Where appropriate error bars are included.	Implementation Action 4.1.5 (data maps); 4.1.10, 4.2.9, 4.3.3, 4.4.3, 4.5.1 (appropriate development and communication of materials) have been developed to improve this issue. Work has also started on changing the way the information is presented and results of this are contained in some of the first productions created in language to assist Aboriginal people to understand how we manage water under existing legislation (available here). The department acknowledges data management is the foundation and has an improvement program to continue to build and improve data management and presentation.
6. Departure from good practice water management	6a. Minimisation of information and the structure of the plan	The plan proposes a three-document structure: the statutory WAP, the background report and the implementation actions. The statutory WAP is the only document which will be gazetted meaning that this is the only document that the Controller is obliged under the *Water Act 1992* (NT) (the Act) to consider. The statutory WAP has been gutted of meaningful content. It does not include objectives that protect ecological and cultural values. Considerations of risk and uncertainty, implementation and monitoring plans and the adaptive	The plan has been structured to be consistent with the regulatory requirements of a water allocation plan as required by the Act. The structure of the plan seeks to improve clarity and readability of the plan by separating the content into three separate documents: • background report that outlines understanding of the water resource and community expectations for water • a statutory WAP that defines regulatory and management requirements (the allocation rules)	Part of the improvement process to the plan documents is to not restate things that are said in policy or guidelines, as over time there is the potential for contradiction, which accounts for much of the removal of detail compared to previous plan documents. These changes align the documents with their purpose and to ensure that adaptive management of the resource is the key focus of activities (implementation actions). The Controller is able to consider all three documents. In making a decision

Theme		Summary of the submissions	Response	Resolution
		management framework have all been removed from the statutory WAP. This minimisation of information and the structure of the plan is undemocratic. Taking key safeguards out of the statutory WAP removes grounds for legal challenge. The NTG has been explicit that this approach is intended to prevent future opportunities for litigation.	• implementation actions that outline the department's commitment to the ongoing actions it will implement to support water resource management in line with its obligations to investigate and manage water resources under the Act (s34) in accordance with a water allocation plan.	about a water extraction licence, section 90 of the Act directs the Controller to take into account any of the specified factors that are relevant to the decision. In making a decision the Controller will take advice from a number of key documents: the statutory WAP as well as any other relevant policies, guidelines or core documents.
	6b. The implementation actions, including the risk assessment, are problematic	The risk assessment downplays many high and extreme risks (e.g. relating to the lowering of the water table, GDEs and salinity) and overstates the effectiveness of proposed mitigations. The risk assessment should be realistic and evidence-based and should not seek to minimise risk levels, particularly given the lack of knowledge underpinning the plan, the uncertainty relating to the groundwater model and the importance of the ecological and cultural values. Monitoring and mapping are important, however the monitoring program has several issues. For instance, it should contain details of exact locations, the frequency of water levels and water quality monitoring. Some of this information is missing from the implementation actions. In addition, the baseline data is currently insufficient for monitoring to commence. Lastly, monitoring results should be reported annually. This annual report should also contain updates about the status of various elements of the plan, including	Since the previous plan, the risk management, adaptive management and implementation actions were redefined to more clearly link to the objectives and outcomes of sharing water. This has resulted in representation of the current residual risks (with controls) and target risks (following the completion of additional actions) and no longer includes inherent risks, which are higher as there were no controls. This process, as well as the continued monitoring and management of the resource has enabled the risks to reflect the current understanding and level of water use in the district. The information on the water monitoring program is more extensive than the previous plan, and the results of monitoring are provided through other sources. The monitoring is informed by the risk assessment process and underpins the adaptive management to maintain the health and productivity of natural ecosystems and human communities. This monitoring is complemented by monitoring undertaken by licence holders.	The department has a continuous monitoring program to manage the water resources in the district. This monitoring network includes both discrete and time-series data from a series of groundwater monitoring bores, as well as surface water gauging sites for when water flows during significant rainfall events. Data collected under the monitoring program is available on the department's Water Data Portal. The department will produce a report annually for the district which summarises: • an overview of the water resources • key monitoring results • regulatory performance • progress on implementation actions. Public reporting on the status of water resource been formalised as key performance indicator for the department starting in 2023–2024,

Theme		Summary of the submissions	Response	Resolution
		GDEs and the limits of acceptable change. The annual report should be made public. The NTG has set out actions relating to key environmental issues, however the proposed timing of a number of these actions are problematic. As an example, a regional scale map of key environmental values associated with water is proposed to be completed by 2033. This map needs to be completed now to ensure the protection of these values. Impacts to the water resource should be predicted and measured with high confidence before the plan goes ahead. There are concerns that the implementation actions are designed to favour commercial interests over Traditional Owners, the environment and the wider community. The implementation actions should be subject to review by an independent expert.	The department regularly engages independent expert reviews and acknowledges that understanding and accessibility of these need to improve.	which will be reported in the department annual report. The department will continue to improve how and when independent expert reviews are carried out and communicated.
	6c. Does not comply with the National Water Initiative (NWI)	The plan does not comply with the NWI to which the Northern Territory is a signatory. • The plan does not provide for consumptive pool share entitlements as understood from the general NWI context as it provides only for a static volume in ESY. • The plan does not provide adequately for secure environmental outcomes because the statutory plan does not contain protections for environmental and cultural values and because the plan relies on the incorporation of the external GDE Guideline.	The content and process for water allocation planning are consistent with the NWI guidelines. The department engaged a consultant to review the NTG's implementation of the NWI in relation to water planning. In summary, the Northern Territory is consistent with the NWI. While there are areas for improvement, the challenges faced by the Northern Territory are unique. However, the Northern Territory's commitment to NWI will ensure the importance placed on water in the north continues to reflect its social, cultural, economic and environmental significance to Territorians.	Water planning is a cyclical process. It's subject to continual evaluation and refinement that ensures existing needs are being met through contemporary best practice, and emerging needs are proactively identified. The review identified 7 focus areas for future improvement. The department has identified the following actions to guide ongoing improvements to water planning processes over the coming years.

Theme		Summary of the submissions	Response	Resolution
		• NTG failed to consult effectively with Traditional Owners and failed to ensure the 'inclusion of Indigenous representation in water planning wherever possible'. • NTG failed to maintain the key NWI objective of 'transparent, statutory-based water planning' by limiting the contents of the statutory WAP. • NTG removed considerations of risk and uncertainty, implementation and monitoring and plans and the adaptive management framework from the statutory WAP.	National Water Initiative | NT.GOV.AU	More information on this can be found here Water planning process | NT.GOV.AU The Territory Water Plan the commits to developing new legislation to replace the Act and provide a regulatory regime that supports sustainable development through contemporary water resource management for the future.
	6d. Issues raised with the plan's objectives and outcomes	The following issues were raised with the plan's objectives and outcomes: • the use of the phrase 'where appropriate' in defining the objectives of the plan appears to indicate that the objectives are not always applicable • the outcomes listed under each objective do not appear capable of achieving their associated objective • phrases used, such as 'for the benefit of the region', need to be better defined.	The objectives were discussed with the committee (meeting 2, 3 and 5) and are part of the continuous improvement through the review and replacements of plans over time. Since the previous plan, the risk management, adaptive management and implementation actions were redefined to more clearly link to the objectives and outcomes of sharing water.	Though the development of three plans for the district the objectives have continued to be refined and updated as a result of feedback. This is expected to continue.
	6e. Issues raised concerning land development and economic impacts	The following issues were raised in relation to land development and economic impacts: • economic benefits should not be prioritised over community needs: – a number of communities that are dependent on access to groundwater are experiencing stress due to poor water quality and are facing severely limited groundwater supply	The plan priorities public water supply ensuring that allocations consider growth requirements over time. First and foremost the majority of the water is retained to meet the environmental and cultural needs. After this the amount of water that will be taken is allocated in priority: 1. Stock and domestic needs	Implementation actions 4.3.1 – 4.3.3 and 4.4.1-4.4.3 are linked to water supply and water quality for domestic and public water supply. Actions 4.6.5-4.6.7 have been developed to ensure that appropriate regional development occurs on land with suitable characteristics and soils.

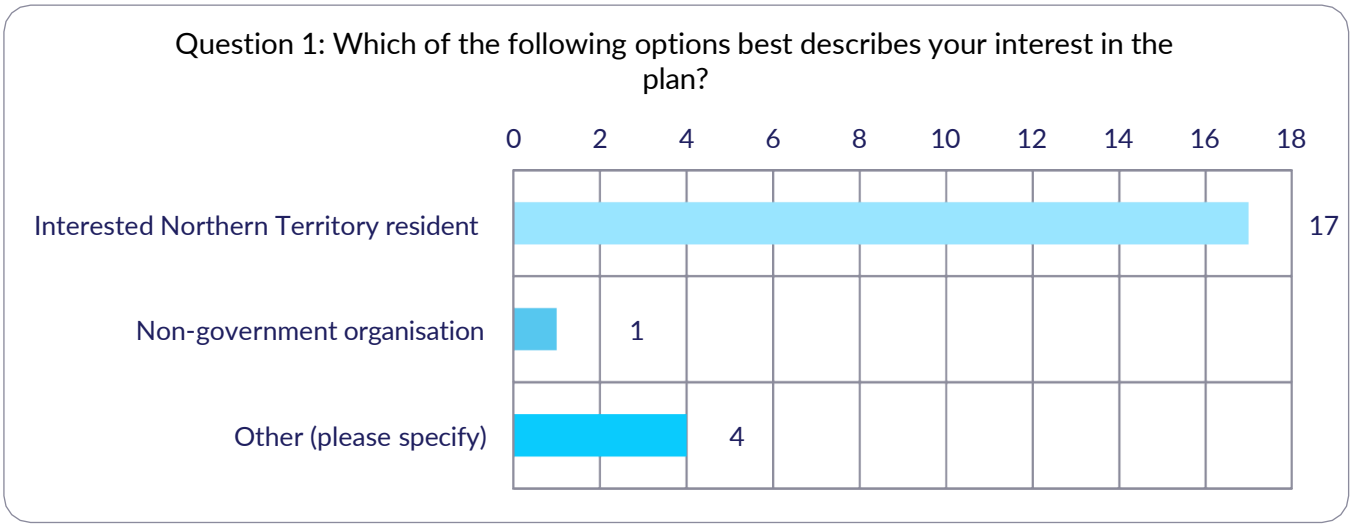
Theme		Summary of the submissions	Response	Resolution
		– housing and other infrastructure are not being developed due to concerns about the limited water available • the land in the district is unsuitable for large-scale horticultural operations • extracted groundwater should not be sold to foreign companies • long term utilisation of the resource should not involve extreme exploitation.	2. Public water supply 3. Aboriginal economic development 4. Other economic development.	
	16f. Feedback received relating to water licencing	The following feedback was received relating to water licencing: • support for the staging of large licenced volumes • concern that the reduction in ESY would put pending groundwater extraction applications in doubt • improve information on the Aboriginal Water Reserve of 25,671 ML/year that is for Aboriginal economic development • a request that current and pending applications be considered on their merits while still encouraging and meeting Aboriginal economic aspirations • advice that the water licence portal is difficult to navigate.	Water resource management involves balancing the water that remains for environmental and cultural purposes and the water that is taken to meet people's water needs. The water licence portal is undergoing continuous improvement and the department will work to improve its useability.	The Territory Water Plan the commits to developing new legislation to replace the Act and provide a regulatory regime that supports sustainable development through contemporary water resource management for the future.

Schedule 3: Survey responses

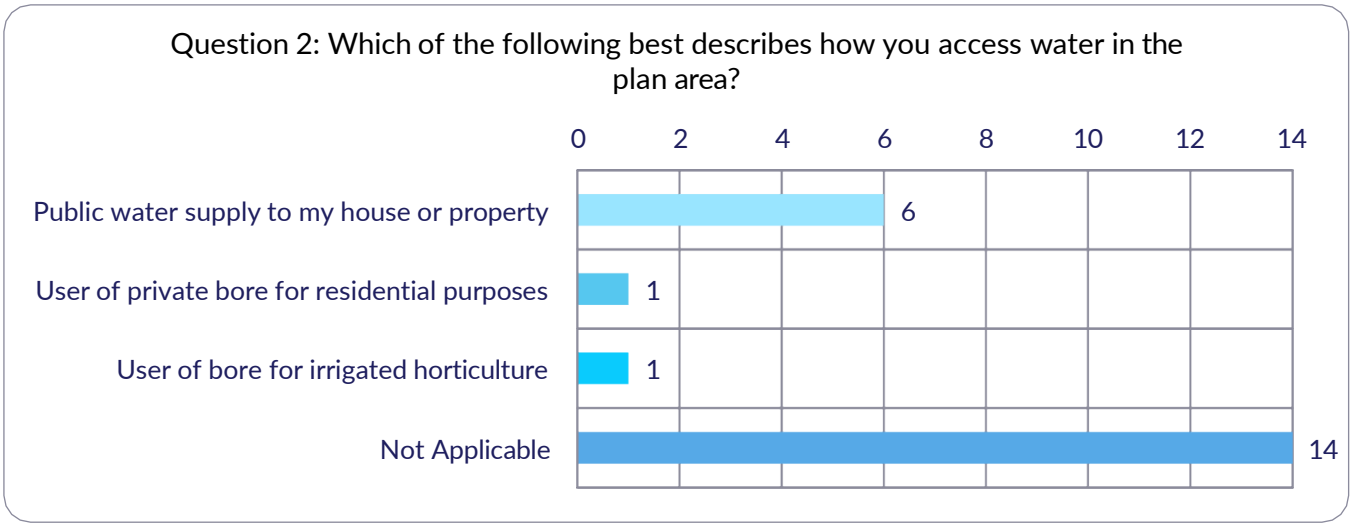
An overview of the 22 survey responses is provided below. Responses to the survey were also incorporated into the summaries of feedback themes above.

Demographic responses

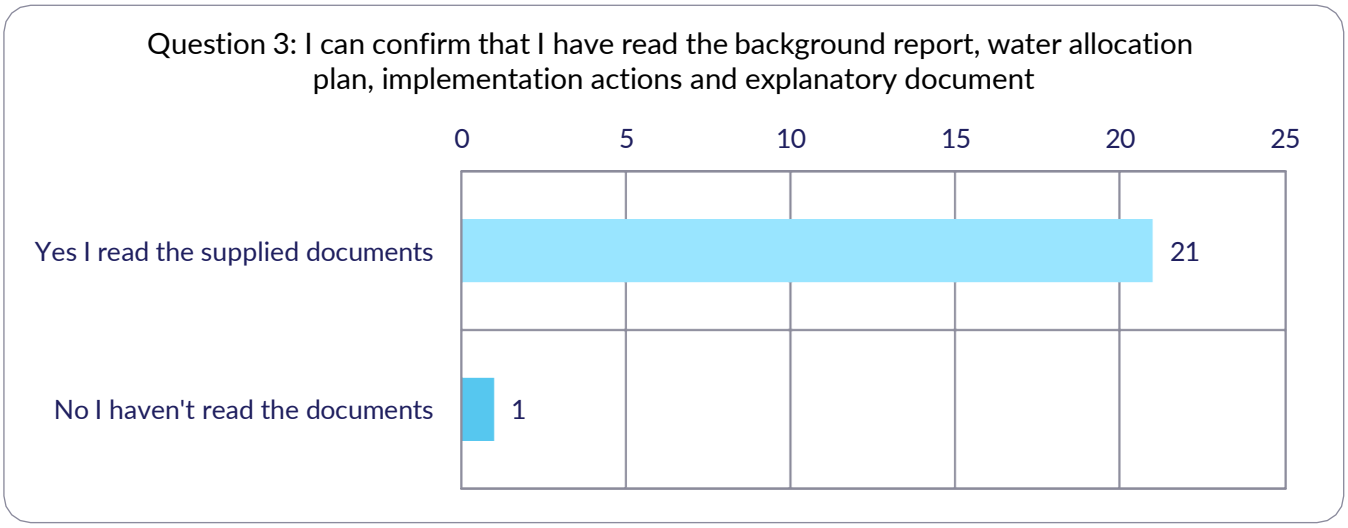
The Have Your Say survey reached 22 responses. Of the survey participants, 17 were interested in the plan because they reside in the Northern Territory (NT). One participant was interested in the plan in its capacity as a non-government organisation. The four other participants were interested in the plan in the following capacities: as a supporter of Aboriginal community issues, as a concerned person, as a concerned NT rural resident who relies on groundwater and as a lecturer of physical geography at Monash University the family of whom reside in the NT (**Question 1**).



Most participants advised that the question asking for a description of their access to water in the plan area was not applicable (14). Six participants advised that they access water via public water supply to their house or property. One participant answered that they access water as a user of private bores for residential purposes. One participant said they access water as a user of bores for irrigated horticulture (**Question 2**).

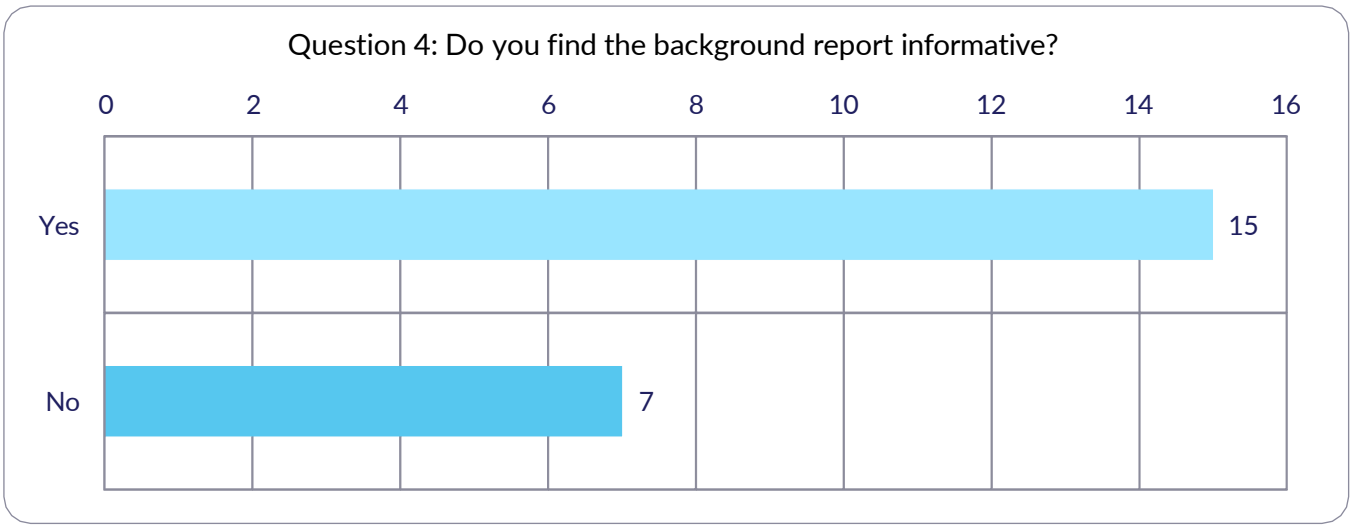


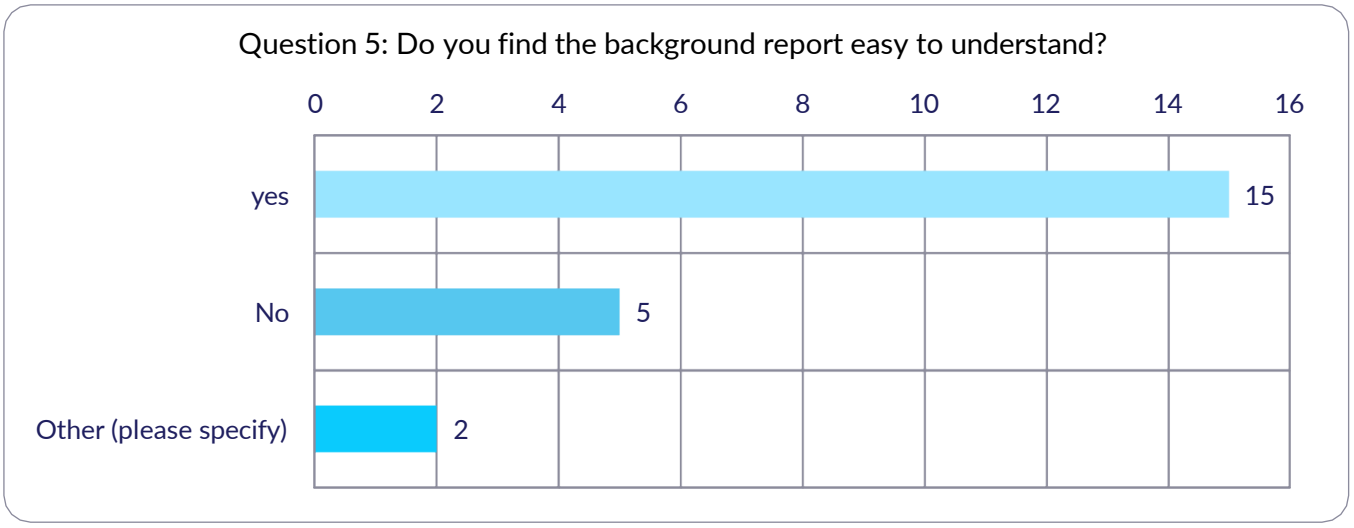
Nearly all the participants read the background report, water allocation plan, implementation actions and explanatory document (21). One participant did not read the documents (**Question 3**).



Feedback about the plan

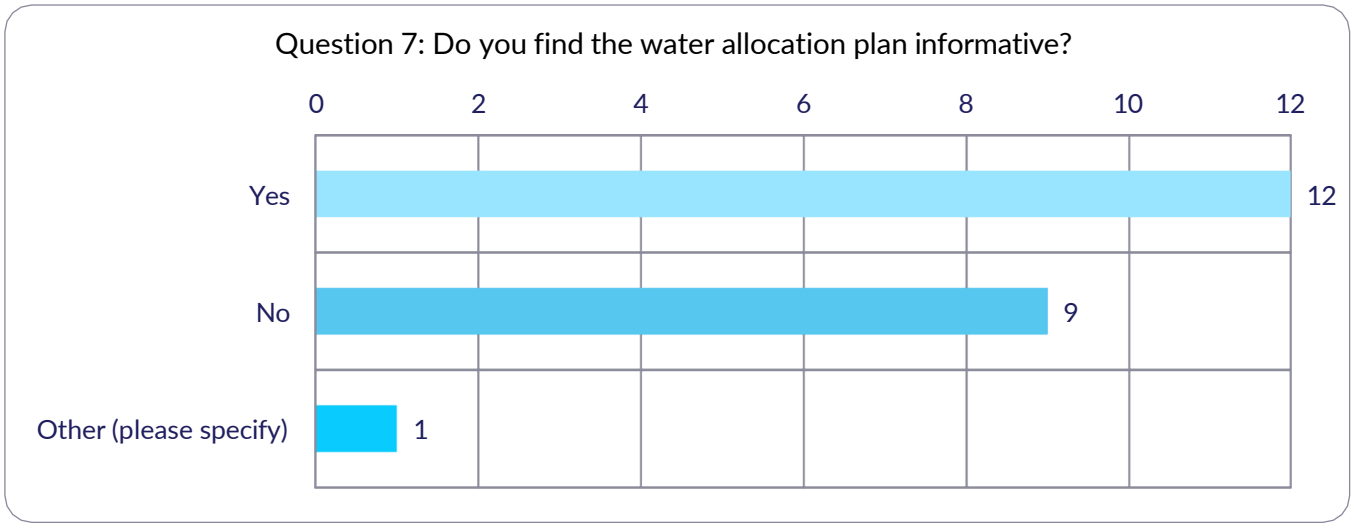
Most participants found the background report informative (15) and easy to understand (15) (**Questions 4 and 5**).

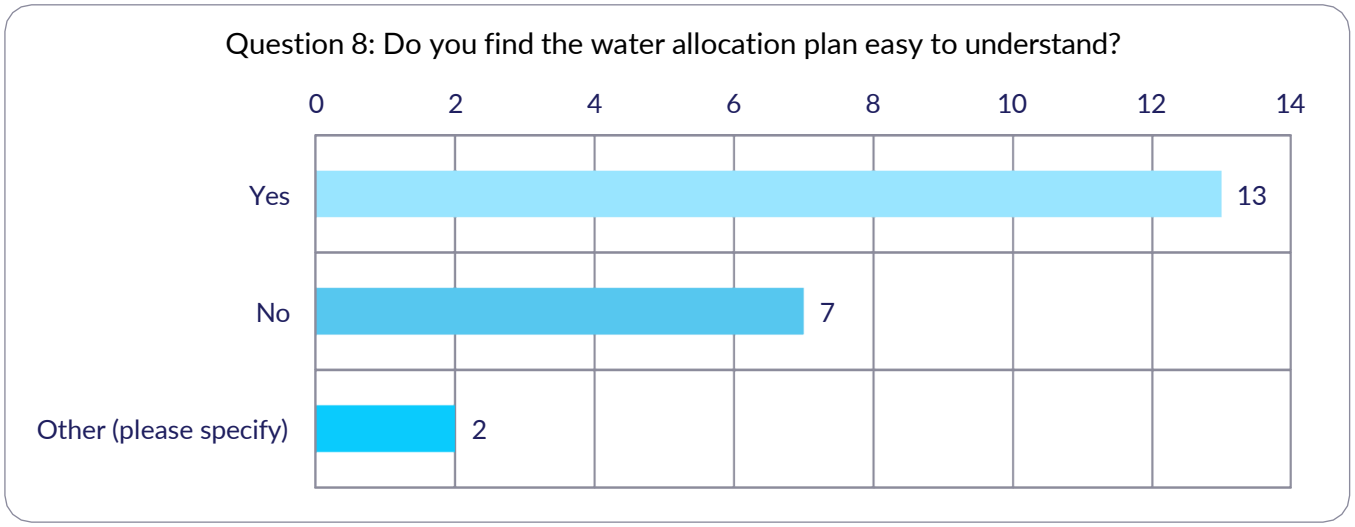


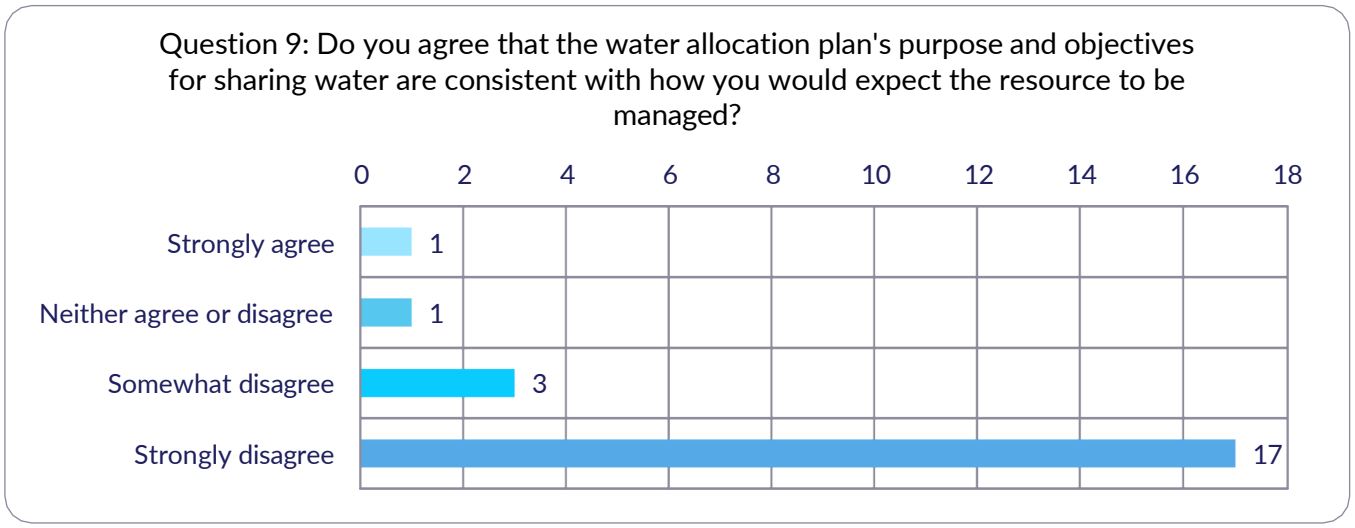


Question 6 asked if participants had any other feedback to offer about the background report. The comments included concern about the protection of the district's ecological and cultural assets and the scientific merit of the information presented in the background report. One participant noted that the hydrology of the district was not sufficiently characterised to justify the proposed water allocations.

Most participants found the water allocation plan informative (12) and easy to understand (13) (**Questions 7 and 8**). Most participants strongly disagreed that the water allocation plan's purpose and objectives for sharing water are consistent with how they would expect the resource to be managed (17). Three participants somewhat disagreed, one neither agreed or disagreed and one strongly agreed (**Question 9**).

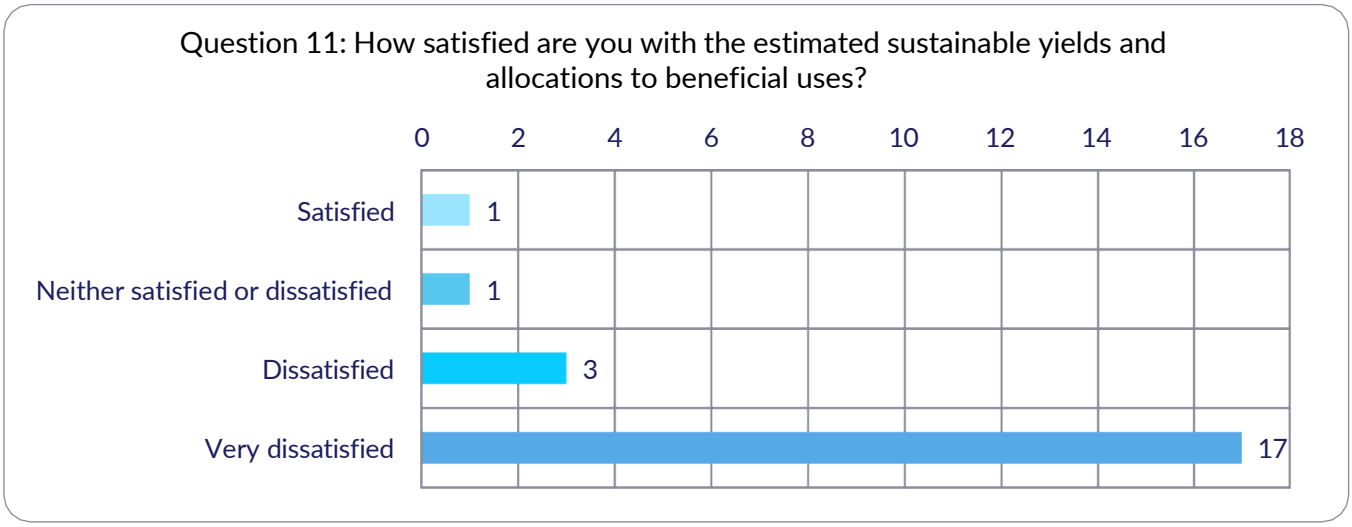






Question 10 gave participants an opportunity to comment about the purpose and objectives of sharing water. Several participants commented that the objectives fail to protect ecological and cultural assets. Six participants advised that the plan should be supported by the committee and the Traditional Owners and custodians.

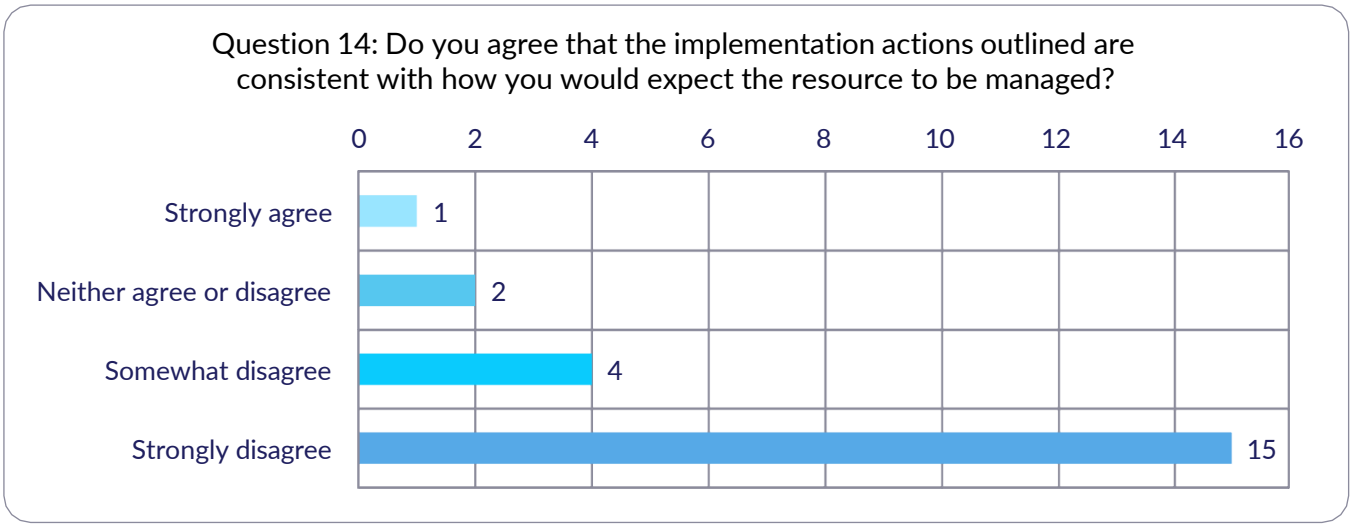
Most participants were very dissatisfied with the estimated sustainable yields and allocations to beneficial uses (17). Three were dissatisfied, one was neither satisfied or dissatisfied and one was satisfied (**Question 11**).



Question 12 asked if participants had any comments about the ESY and allocations to beneficial uses. About half the participants commented that the ESY was too high, particularly for the Central Plains Management Zone. Several participants advised that the ESY should coincide with the water requirements of GDEs.

Question 13 asked if there was anything else that the participants wanted to tell the department about the water allocation plan to improve it. Several participants argued that the plan was lacking in scientific merit, particularly concerning the Guideline and salinity. Other participants reiterated that the plan failed to protect ecological and cultural assets. Two participants criticised the structure of the plan on the basis that it may hamper the ability to undertake legal challenges in future decision making.

Most participants strongly disagreed that the implementation actions outlined were consistent with how they would expect the resource to be managed (15). Four somewhat disagreed, two neither agreed or disagreed and one strongly agreed (**Question 14**).



Question 15 asked if participants had any other suggestions to improve the implementation actions. Three participants asked for the risk assessment to be revised, claiming that it has been reduced from the previous water allocation plan. Other participants called for further information about annual monitoring and reporting to be included in the plan.