

Review of Northern Territory Water Law **Environmental Defender's Office, May 2005**

Summary of Full report

The Northern Territory comprises some of the most pristine and undeveloped riverine ecosystems in Australia. However, as populations and pressures for the expansion of agriculture and industry increase, those water resources will be put under pressure by parties seeking to develop them. It is therefore critical to ensure that all of the Territory's Rivers are managed in accordance with principles of ecologically sustainable development and that high conservation value rivers are given additional protection. The Environmental Defender's Office Ltd (NSW) ("EDO") has been commissioned to (1) review the existing legal and policy framework for water management in the Territory and to (2) make recommendations as to how to ensure that water resources are managed to ensure the health and integrity of surface and groundwater ecosystems are maintained and areas with significant ecological values are protected.

This summary is divided into four parts:

- 1. Background to Northern Territory Water Resources**
- 2. The current regulatory system in the Northern Territory**
- 3. Implications of CoAG and the National Water Initiative**
- 4. Recommendations for the Northern Territory (drawing on best practice regulation by other states)**

1. BACKGROUND TO NORTHERN TERRITORY WATER RESOURCES

Overview of the resource

The Northern Territory is unique in terms of Australian water management for two reasons. First, many of its surface and groundwater systems have not been subject to over-extraction and exploitation. Therefore, there is an opportunity to put in place a policy framework that protects the resource and manages it in a sustainable fashion, rather than a framework that is reactive and designed to remedy existing degradation. Second, the tropical climate of the Northern Territory means that large volumes of rainfall are received during the summer monsoon months and this rainfall provides the recharge for many of the Territory's aquifers. However, unlike the southern rivers of the Murray Darling Basin the Territory's surface waters flow on an intermittent basis and therefore cannot be relied upon to provide a secure year round water supply.

The Northern Territory covers an area of 1,352,212 square kilometres, representing 17% of the Australian landmass. The Territory has a low population density, with only 199,900 people¹, living primarily in the urban centres of Darwin and Katherine. A further important feature is the landholding pattern. Approximately 44% of land in the Territory is Aboriginal freehold land under the *Aboriginal Land Rights Northern Territory Act 1979* and approximately 46% is Crown Land. Of the Crown land, less than 4% is included in the Territory's reserve system as national parks or indigenous protected areas. Much of the Crown land, approximately 619,000 square kilometres, is subject to pastoral leases for cattle grazing and remains covered by native vegetation and grasses. These features are important, as they explain the largely unexploited nature of water resources in the Territory. However, in the Darwin, Katherine, Douglas-Daly and Ti Tree regions the scale of horticulture and agricultural activities (such as irrigated cropping) are beginning to increase.

There are 39 river basins within the Territory.² Compared with rivers elsewhere in Australia, the surface waters of the Territory are largely unmodified or regulated by dams, weirs, off-takes or diversions. As such, many of the rivers meet the criteria set by the Commonwealth Government's *Wild Rivers Policy 1992* for designation as wild rivers or high conservation rivers. Many conservation groups have called for these rivers to be maintained in their pristine state and accorded protection through either a reserve system or stringent management regime.

As a result of the high variability and seasonality in flows in the Territory's surface waters, year round water use, particularly for town water, domestic, stock and industrial purposes, is reliant on the Territory's extensive groundwater systems. The Territory comprises sixteen main groundwater resource provinces, seven in the Top End and nine in the Centre. Many of these groundwater basins have large storage capacities and remain viable in the long term due to the fact that they are largely recharged by rainfall. This notwithstanding, groundwater resources face a number of threats due to the lack of knowledge about their sustainable yield and the extent to which other ecosystems are dependent upon them and require guaranteed environmental flows.

Another significant feature of the Northern Territory's water resources is the extensive number of wetlands of international and national significance.

The Department of Infrastructure, Planning and Environment ("DIPE") is responsible for managing the Territory's water resources. DIPE estimates that over 99% of the annual flow remains intact for environmental and cultural uses in 24 of the Territory's 31 rivers in the Top End. Furthermore, it estimates that over 90% of

¹ This was the population calculated at the end of June 2004, recorded in ABS Cat. No. 3101.0.

² River basins are the catchment areas of major rivers. See <http://www.ipe.nt.gov.au/whatwedo/water-resources/surface/basics/index.html>.

average annual recharge to ten of the Territory's 16 ground water provinces are considered to be available to sustain environmental and cultural values³.

Current levels of demand

The Draft *Integrated Natural Resource Plan for the Northern Territory 2004* ("Draft NRM Plan") details the current levels of flow in the major catchments in the Territory. It states that the total mean flow to the coastline from the 31 major catchments in the Top End is 71,000,000ML per year. The total mean flow from the nine major catchments in the arid centre is 4,300,000ML per year. On average, groundwater resources in the Top End receive 11,500,000ML of recharge per year and in the arid centre, the groundwater systems receive 1,200,000ML of recharge per year⁴.

In terms of current extraction, the annual volume of surface water used in the Territory is approximately 50,000ML, mostly to provide town water supply in Darwin and Katherine. This amount represents less than 0.5% of what the Draft NRM plan term "theoretical diverted flows". As at December 2004, 56 licences had been issued for surface water extraction (52 licences, representing 6 gigalitres, being held by small scale irrigators and the others 4 licences representing 38 gigalitres being held by the Power and Water Corporation). 88 ground water extraction licences have also been issued in the Territory. Of those, Power and Water hold 10 licences, representing 31 gigalitres and private irrigators hold 78 licences which represent extraction of a further 47 gigalitres⁵.

Future demand and challenges

Notwithstanding the low levels of overall extraction, there are a number of threats to the quality and sustainability of the Territory's water resources and their dependent ecosystems. These threats include:

- the lack of information assessing the condition and extent of water resources;
- the absence of information assessing the impacts of activities ranging from agriculture to recreation on the water resources;
- the absence of coordinated and sustained monitoring regimes;
- pollution;
- impacts of changed hydrological regimes as a result of increased extraction;
- damage to wetlands and riparian areas, in particular through clearing and the introduction of noxious weeds and pest species⁶; and
- climate change affecting rainfall patterns.

³ Draft NRM Report p.45.

⁴ Draft NRM Report p.42 – 43.

⁵ National Competition Council 2004, *Assessment of governments' progress in implementing the National Competition Policy and related reforms: Volume 2: Water*, Melbourne ("NCC Assessment Report 2004") p.92.

⁶ Draft NRM Report p.44.

Gathering and analysis of scientific baseline data about all of the Territory's water resources is imperative before making long term decisions about future allocation and extraction. In the absence of comprehensive data, there is debate over the true state of the resource. For example, in Response to the Draft NRM Plan, WWF Australia lodged a submission that raised concerns about over-allocation in some of the Territory's water sources, for example, the Katherine River and Tindall aquifer, and the threat of long-term environmental degradation due to this overallocation. The threats to long-term sustainability and ecological integrity identified above should be considered when strategic decisions are being made about future water planning.

2 CURRENT SYSTEM OF WATER MANAGEMENT IN THE TERRITORY

The Northern Territory manages its water resources through a regulatory framework that includes the *Water Act* (as in force at 14 January 2004), the *Water Regulations* (as in force at 13 February 2002) and a series of water allocation plans that are currently being developed. The DIPE states that the Northern Territory's policy framework focuses on a water allocation system at a regional scale to manage inland water use within assessed sustainable yield. This policy has been developed largely in response to the requirements of the 1994 Council of Australian Government ("CoAG") water reform agenda.

Water Act 2004

The overarching statement governing the *Water Act 2004* is that it operates as an Act to provide for the investigation, allocation, use, control, protection, management and administration of water resources, and for related purposes. The *Water Act* vests the right to the use and control of all water in the Territory in the Government⁷. It then provides a framework to address the following matters relating to water management:

- **Preliminary issues** – Part 1 of the Act sets out definitions for various terms such as ground water⁸, water⁹ and waterways¹⁰. In particular, the term

⁷*Water Act 2004* (NT) s.9(2).

⁸ "...water occurring or obtained from below the surface of the ground (other than water contained in works, not being a bore, for the distribution, reticulation, transportation, storage or treatment of water or waste) and includes water occurring in or obtained from a bore or aquifer."

⁹ "...water, whether or not it contains impurities."

¹⁰ Includes a river, creek, stream or watercourse, natural or altered channels, lakes, lagoons, swamps and marshes, land on which water collects and land which is intermittently covered by water.

“beneficial uses of water” is expressed to include: agriculture, aquaculture, public water supply, environment, cultural, industry, rural stock and domestic uses. The concept of beneficial uses is important in the *Water Act*, as it provides the context in which decisions relating to management planning and the issuance of licences and approvals are made. However, it is important to note that there is no prioritisation of the beneficial uses, and the environment is just one of a number of uses for which water can be allocated. The Minister for Lands and Planning (“Minister”) though the Controller of Water Resources (“Controller”) is primarily responsible for the implementation of the Act. The Minister or the Controller may, by writing, delegate any of their powers and functions under the Act to persons and bodies, including a municipal council or community government¹¹.

- **General provisions relating to rights to water and pollution** – Part 2 of the Act clarifies owner/occupier and public rights to take water for domestic purposes or for watering travelling stock from any waterway within the Territory. The Act provides offence provisions relating to the pollution, obstruction or interference with waterways; and provides defences relating to a person being authorised to carry out the activity resulting in the interference or pollution. It is interesting to note that the penalties for these offences range from between \$2,000 to \$10,000 depending on whether the offence results in serious or material environmental harm and whether or not it is a first or subsequent offence. These penalties can be contrasted with the significantly higher penalties for environmental offences in other States’ legislation.
- **Administration** – Part 3 establishes a number of regulatory bodies to assist the Minister in the implementation of the Act, namely, the Water Controller, Advisory Committee, and the Water Resources review Panel. One of the key administrative functions under the *Water Act* is the declaration by the Minister, by notice in the Gazette, of water control districts. To date 6 water control districts have been declared. These cover the following regions: Ti-Tree, Darwin Rural Area, Alice Springs, Gove Peninsula, Katherine and Tennant Creek.¹² Part 3 of the *Water Act* also provides for the preparation of water allocation plans.
- **Resource investigation** – In Part 4, the legislation places an obligation upon the Controller to continuously investigate, monitor, and analyse the use of water resources and other matters relating to flow and quality and analyse those results, which is vital for the proper management of surface and ground water systems.

¹¹ *Water Act 2004* (NT) s.19.

¹² The DIPE website provides maps of the six water control districts: <http://www.ipe.nt.gov.au/whatwedo/water-resources/was/water-maps.html>.

- **Surface water management** – Part 5 provisions enable the Controller to grant a person a permit to construct or alter a dam, water storage or water control structure (which may be subject to various terms or conditions); and creates the offence of carrying out unauthorised works (with a penalty range of \$2,000-10,000). The Act includes significant exemptions, for example, that rural dams with earthworks that are less than three metres high and have a catchment area of less than five square kilometres do not need a permit.¹³ The Act also enables the controller to grant a person a licence to take or use water. Such a licence can be granted for a period not exceeding 10 years and may also be subject to terms and conditions as specified in the licence. The Act creates an offence of taking surface water, except in accordance with a licence. Similar penalties to those referred to for unauthorised works apply.
- **Ground water management** – Part 6 of the Act sets out similar licence and offence provisions to groundwater for works and extraction as apply for surface water. Section 48 creates the offence of carrying out works relating to drilling or constructing, deepening or enlarging bores without a licence (with a penalty range of \$5,000-\$10,000), and wide powers for the Controller to give directions to persons in relation to the use or management of ground water resources). Extraction licences may be granted for a period not exceeding 10 years. The Act requires notification of bores to the Controller, and that bores of lesser pumping capacity than 15 litres/second do not require an extraction licence unless they are located within a water control district¹⁴. The Act also deals with pollution of aquifers (with penalties between \$200 - \$2,000 and a directions power).
- **Water quality** – Part 7 of the Act enables the Administrator¹⁵ to declare the beneficial uses, quality standards, criteria or objectives which apply in relation to any class of waste or water. The categories of beneficial uses are: agricultural, cultural, aquaculture, public water supply, environment, manufacturing and riparian.¹⁶ The Act also provides for the grant of waste discharge licences (which may have monitoring conditions attached)¹⁷.

¹³ Water resources fact sheet: Northern Territory Water Act – DIPE website:

<http://www.ipe.nt.gov.au/whatwedo/water-resources/facts/pdf/NTWaterAct.pdf>.

¹⁴ The intent behind this exemption is that pumping at such rates is not usually for irrigation purposes, rather it is to maintain stock and domestic flows. However, that said, it is still possible to keep pumps running for a long time to extract large volumes of water.

¹⁵ The Administrator is appointed by the Governor-General and is charged with the duty of administering the government of the Northern Territory. The Administrator's role and responsibilities are essentially the same as those of a State Governor. See <http://www.nt.gov.au/administrator/>.

¹⁶ The Administrator has declared a number of Beneficial Uses pursuant to the *Water Act*. As at 28 February 2003, 31 declarations had been made in relation to specific areas including Mt Bundy Creek (Stockwater), Copperfield Creek and Tributaries (Drinking Water), Katherine River (Aquatic Ecosystem Protection and Recreational Water Quality and Aesthetics) and Mearthur River Catchment Area (Environmental, Cultural and Riparian).

¹⁷ *Water Act 2004* (NT) s.74.

- **Water resource development** - Part 8 of the *Water Act* deals with water resource development and enables the Minister to arrange for the acquisition or construction, maintenance, repair, alteration, operation or removal of such works as the Minister thinks fit in relation to: investigating, observing, measuring or assessing waste or water; conserving water or protecting or enhancing its quality; for irrigating or draining land; for the use of water for recreation purposes; for controlling flooding; or in connection with the administration of the Act¹⁸. The effect of these powers is that the Minister may make arrangements for new water infrastructure, which could include the construction and operation of new dams, should the Minister consider such a project necessary.

The *Water Act* contains a number of general provisions¹⁹ relating to the circumstances in which compensation will be payable as a result of the exercise of powers or functions under the Act; record keeping; false and misleading information and additional licensing provisions. The latter includes: the keeping of a register of all licences prescribed under the Act; matters that the Controller may take into account when deciding whether to grant, amend or modify a permit licence or consent; and Ministerial power to give notice and limit the right to take water in emergency circumstances. Division 3 of Part 10 relates to offences and penalties and lists a number of other offences such as: interfering with, damaging or destroying works constructed or used in pursuance to a licence; interfering with the taking of water, the discharge or disposal of water or waste or the drainage of land in pursuance to a licence; prohibition of waste; obstruction of officers; and offences against the Act. As noted previously, the maximum penalties for offences under the Act are low compared to other States. We note that the *Water Act* contains a definition of serious environmental harm, which includes environmental harm that either involves damage in excess of \$50,000 or circumstances where an aspect of the environment that is of high conservation value or of special significance, or is irreversible or otherwise of high impact or on a wide scale²⁰.

Water Regulations

The Act also provides for certain matters to be dealt with by regulation. The Northern Territory Government has made Regulations to give effect to a number of provisions in the *Water Act*. The types of matters dealt with by the Regulations include provisions relating to reviewing the action or decision of the Controller, the conditions and considerations for the granting of permits and licences and drilling licences, and also the process for renewing permits or licences and registering permits and licences. Ultimately, the matters dealt with by the Regulations do not cover all of the matters that could be addressed as a result of section 108 of the *Water Act* and consequently leave regulatory gaps relating to important issues such as classification of water, qualifications of licensees, notification of applications and lodging objections.

¹⁸ *Water Act 2004* (NT) s.79.

¹⁹ See *Water Act 2004* (NT) sections 87, 88, 89, Part 10 Division 2, 98, 99, 100, 101, and 102.

²⁰ *Water Act 2004* (NT) s.4.

Management Planning

Section 22B of the *Water Act* enables the Minister to declare a water allocation plan in respect of a water control district. There are six declared water control districts and to date, one allocation plan has been finalized (Ti-Tree) and three others (Darwin Rural Area, Alice Springs and the Daly Region which encompasses the Katherine water control district) have been prepared in draft form²¹. Several concerns have been raised regarding the Ti-Tree Region Water Resources Strategy including that: the plan is very general and lacks rigorous scientific underpinning (for example, it is unclear the extent to which modelling has been reliably used to identify sustainable yields); the Strategy assumes that regional groundwaters have no cultural significance and that there are no ecosystems reliant on shallow groundwater aquifers; the Plan does not provide an express environmental allocation for the aquifers within the region; there are no clear “rules” for allocation of water to various identified beneficial uses; and as noted by the NCC, “*the strategy provides no public information on the hydrology modelling, consulters to the process, stakeholder comments or the committee’s response to any comments received... the absence of information has made it difficult to determine whether the strategy is based on the best available science and whether this has affected the robustness of the community consultation processes*”²².

Interaction with other Planning and Environmental laws

There is no clear relationship between the *Water Act* and other environmental or planning laws in the Territory (for example, environmental assessment under the *Environmental Assessment Act 1994* and declaration of parks, reserves, sanctuaries or essential habitat under the *Territory Parks and Wildlife Conservation Act 2000*). In this regard, there does not appear to be any formal requirement for consultation between different Departments or agencies, nor are plans made under the *Water Act* integrated with other natural resource plans.

3. COAG AND THE NATIONAL WATER INITIATIVE

For the past 10 years the Council of Australian Governments (“COAG”) have been working on a Strategic Framework for Water Reform. The COAG Communiqué of 25 June 2004 identifies the following outcomes that the National Water Initiative (NWI) seeks to achieve:

- *expansion of permanent trade in water bringing about more profitable use of water and more cost effective and flexible recovery of water to achieve environmental outcomes;*

²¹ Water allocation plans for the remaining two districts (Tenant Creek and Gove Peninsula) are not anticipated.

²² National Competition Council Assessment Report 2004 p.916.

- *more confidence for those investing in the water industry due to more secure water access entitlements, better and more compatible registry arrangements, better monitoring, reporting and accounting of water use, and improved public access to information;*
- *more sophisticated, transparent and comprehensive water planning that deals with key issues such as the major interception of water, the interaction between surface and groundwater systems, and the provision of water to meet specific environmental outcomes;*
- *a commitment to addressing overallocated systems as quickly as possible, in consultation with affected stakeholders, addressing significant adjustment issues where appropriate; and*
- *better and more efficient management of water in urban environments, for example through the increased use of recycled water and stormwater.*

To achieve these results the States and Territory governments must introduce a number of legal mechanisms that represent a significant change to current management practice. Many of these have already been processed under the CoAG water reform agenda. One such mechanism is the creation of water access entitlements that are comparable with a proprietary interest granted in perpetuity. Associated with improving the health of rivers is the requirement that States and Territories give statutory recognition to environmental water. The NWI requires environmental water to be allocated with at least the same security as water for consumptive uses and improve accountability for the use of that water.

An *Inter-governmental Agreement on a National Water Initiative* (“IGA”) has been drafted by the federal Government, and includes provisions relating to:

- **Access and Entitlements** – which are separate from land, to be described as a perpetual or open-ended share of the consumptive pool of a specified water resource, as determined by the relevant water plan²³
- **Plan Making** – which must secure ecological outcomes and resource security outcomes.
- **Environmental Water** – to ensure that water is provided for environmental purposes is a central component of the NWI, and is to be given statutory recognition and have at least the same degree of security as water access entitlements for consumptive use and be fully accounted for.
- **Water Trading** - the NWI seeks the following broad outcome in relation to water trading: to facilitate the operation of efficient water markets and the opportunities for trading, within and between States and Territories, where water systems are physically shared or hydrologic connections and water supply considerations will permit water trading.²⁴ (At present, there is little, if any, demand for water trading in the Northern Territory and there has been no trade in licence water entitlements).
- **High conservation values** - the IGA states that the Parties agree that, once initiated, their water access entitlements and planning frameworks will “...

²³ *Draft Inter-governmental Agreement on a National Water Initiative* (“IGA”) cl.28.

²⁴ IGA cl.58.

identify and acknowledge surface and groundwater systems of high conservation value, and manage these systems to protect and enhance those values.” To date, there are no express provisions in the Northern Territory *Water Act* that provide for high conservation ground or surface waters.

In summary, the current arrangements adopted by the Northern Territory Government through the *Water Act* and associated water resource strategies have gone part of the way to meeting the requirements of the NWI. However, there appears to be considerable reliance by both the Northern Territory Government and the bodies that have reviewed performance under CoAG and the NWI on the fact that the Territory’s water resources are what those bodies term “under-developed”. In our opinion, a better description of the Territory’s water resources is that they currently retain significant natural values. The result of this reliance is that the rigorous investigation and modelling that is being used by other States to determine sustainable yield or flows required for environmental purposes has not been carried out with the same level of detail in the Territory.

The Northern Territory legislative reform process appears to meet what we would call minimum standards in the NWI, however, in our opinion, proper management of water resources requires a considerably more detailed framework based on the recommendations below.

4 BEST PRACTICE WATER MANAGEMENT & RECOMMENDATIONS FOR REFORM

Our full report details the way in which New South Wales, Victoria and Queensland have or are intending to reform their water management regimes by reference to the core areas of: administration; sustainability and environmental outcomes; water management planning; licences for access to and use of surface and ground water; water trading; approvals for water use and water management works; enforcement; and protection of high conservation rivers.

Notwithstanding the differences between the States and the Northern Territory, there are some important aspects of the New South Wales, Victorian and Queensland legislative models that may be instructive to the Northern Territory, particularly when considering broad compliance with the directives being set by the NWI. These matters include:

1. The need to set a clear object or purpose for the operation of the Act, having regard to broader environmental consideration such as the implementation of principles of ESD.
2. Designing management plans in a way that identifies environmental constraints and values and seeks to achieve sustainable outcomes in terms of both water use and environmental protection.

3. Regulating the extraction of water in a manner that recognizes the need to allocate water to the environment (as a priority) and ensuring that decisions about future consumptive allocations are made in a framework that has express criteria for decision making by the appropriate authority.
4. Regulating the approval of applications to construct or operate works or use water in a framework that sets clear criteria for decision making by appropriate regulatory authorities, in particular, ensuring decisions are consistent with promoting environmentally sound outcomes.
5. Ensuring there are adequate opportunities for public participation at key stages in the decision making process for water issues, such as the development of management plans and the consideration of applications for water entitlements and the use of water.
6. Creating appropriate offences for unauthorized taking and use of water or unauthorized works and setting monetary or other penalties at levels which operate as true deterrents to other persons.
7. Recognising the importance of conserving the environmental values of high conservation rivers, in particular maintaining natural flows in largely undeveloped river systems through a process of classification, regulation of activities within the catchments of those areas, and where appropriate, establishing protected or reserved areas.

Specific recommendations around each of these issues are set out below:

Purpose of Legislation

Recommendation 1: The *Water Act* should include a clear statement of purpose or an objects clause that includes matters such as:

- the sustainable management of the resource,
- application of principles of ESD,
- protection of water sources and their dependent ecosystems and ecological processes,
- utilizing the best available scientific information to inform decisions relating to water management,
- providing benefits to the environment, and
- providing benefits to Aboriginal people.

Management Principles could also be developed to provide support for these objectives.

Recommendation 2: Terms such as sustainable management and the principles of ESD should be defined in the *Water Act*.

Recommendation 3: The *Water Act* should give clear top priority to the use of water for the protection of the health of aquatic ecosystems.

Recommendation 4: There should be a duty upon decision makers under the *Water Act* to act in accordance with the objectives of the Act.

Recommendation 5: Where persons are applying for entitlements to a share or use of water for consumptive purposes, the onus of proof should be borne by the applicant to demonstrate that the use will not damage the health of water sources and their dependent ecosystems.

Recommendation 6: Decision makers should be required to utilize appropriate technical expertise and the best science available to inform decision making.

Management Planning

Recommendation 7: The *Water Act* should provide guidance as to the types of water management plans that may be made under the Act and the contents of such plans.

Recommendation 8: The Minister should take advantage of local expertise in formulating plans, through the formal establishment of community consultative committees made up of representatives from land owners, industry, local government and other appropriate government agencies, relevant aboriginal groups and conservation groups.

Recommendation 9: The process for making a water management plan should be clearly set out with mandatory requirements for public exhibition of a draft plan, calls for public submissions within appropriate timeframes and a clear outline of the matters that the Minister must consider when deciding whether or not to make a plan.

Recommendation 10: The *Water Act* should provide greater detail as to the content of (various types of) management plans, for example the need to identify objectives for the plan, strategies to meet the objective and mechanisms to provide for the measurement of success of the plan over its life, such as performance indicators or standards. Providing clear requirements for monitoring aspects of the water resource is critical to this process.

Recommendation 11: Where a plan is dealing with allocations of water between consumptive and environmental purposes, the *Water Act* should make it clear that appropriate rules be developed to provide certainty and transparency in relation to the processes of allocation, extraction and any alterations that may be anticipated as part of an adaptive management regime.

Recommendation 12: Water management plans should be considered in light of other natural resource initiatives in the Territory. In this regard, the *Water Act* should provide for consideration of draft plans by other appropriate Ministers, such as the Minister for the Environment. Furthermore, if provisions of a water

management plan will affect other aspects of natural resource management, then there should be attempt to achieve some form of compatibility or consistency between various planning instruments.

Recommendation 13: Water management plans should be reviewed on a regular basis, by default after a specified period of time or otherwise by reference to triggering events related to the results of ongoing monitoring.

Recommendation 14: The Minister or the Controller should be required to regularly report (eg: on an annual basis) to the public on the performance of water management plans in achieving the objectives of the plan.

Water Extraction

Recommendation 15: Types of water entitlements, such as different categories of licences for certain purposes, should be clearly specified in the *Water Act*.

Recommendation 16: If the *Water Act* is to establish additional licence categories, then it should consider a hierarchy in relation to the security of each type of entitlement.

Recommendation 17: The matters for consideration for the grant of a licence in section 90 of the *Water Act* should be mandatory considerations, not discretionary. Additional considerations relating to the impact of the proposed entitlement upon the sustainability of the system and upon ecosystem health and whether or not an applicant is a fit and proper person to hold a licence should be incorporated into that section.

Recommendation 18: A mandatory process of public consultation should be engaged in for the grant of new licences. This process should involve notification of neighbours and the public more generally, inviting and considering submissions and an opportunity for an objector to appeal against the grant of a licence.

Recommendation 19: The Minister or Controller should be required to publish reasons relating to decisions for the grant or refusal of an application for a licence.

Recommendation 19A: The Minister or Controller should be required to consult with and obtain the concurrence of the Minister for the Environment in relation to any applications for licence or works approvals that are likely to have a significant impact upon the environment.

Recommendation 20: Licences should continue to be granted for a maximum 10 year period.

Works and use of water

Recommendation 21: The matters for consideration for the grant of a works or use approval in section 90 of the *Water Act* should be mandatory considerations, not discretionary. Additional considerations relating to the impact of the proposed entitlement upon the sustainability of the system and upon ecosystem health and whether or not an applicant is a fit and proper person to hold a licence should be incorporated into that section.

Recommendation 22: The *Water Act* should identify the types of environmental impact assessment documentation required to be submitted with application for works or use approvals, triggered by either the significance of the environmental impact or alternatively the size of the development.

Recommendation 23: A mandatory process of public consultation should be engaged in for the grant of new works or use approvals. This process should involve notification of neighbours and the public more generally, inviting and considering submissions and an opportunity for an objector to appeal against the merits of the grant of a licence.

Recommendation 24: The Minister or Controller should be required to publish reasons relating to decisions for the grant or refusal of an application for a new works or use approval.

Public Participation

Recommendation 25: The *Water Act* needs to promote information flows. Whilst a public register of licences and dealings is kept, it must also be published, for example on the internet. In addition, there is a need for information surrounding decision making, such as applications and supporting documentation, to be made available for inspection as part of the plan making and licence application processes.

Recommendation 26: The *Water Act* should allow - both formally and in substantive terms - for people to be able to challenge and/or enforce the laws. Therefore, provisions relating to such aspects as open standing to challenge both decisions of the minister or Controller in exercising functions of the Act and to remedy or restrain other breaches of the Act should be incorporated.

Water Trading

Recommendation 27: The *Water Act* should provide more clarity in relation to the circumstances in which the Minister will approve a trade in an entitlement, for example through the development of standardised water trading rules either through management plans or other instruments.

Recommendation 28: The trading rules should clearly be linked to the environmental impacts of the transfer in the entitlement. In this regard, the

Minister or Controller must be satisfied that the transfer will either maintain or improve the existing condition of the resource.

Enforcement

Recommendation 29: Offences under the *Water Act* should be subject to significantly higher penalties, including imprisonment, to act as a significant deterrent against such offences.

Recommendation 30: Innovative penalties, such as debiting water accounts or suspending licences in circumstances where offences have occurred should also be incorporated into the *Water Act*.

Wild river protection

Recommendation 31: The *Water Act* should provide for investigation of the conservation values of the Territory's rivers and should provide a framework for classifying those rivers by reference to their pristineness or other significant natural values.

Recommendation 32: Rivers that are classified as having significant natural values should be afforded protection through the development of conservation or other appropriate management plans.

Recommendation 33: The *Water Act* should provide limitations upon the ability of the Minister or the Controller to issue licences for extraction or to carry out works within the catchment of a high conservation value river.

Recommendation 34: Very high penalties should be imposed for activities that adversely affect those rivers.