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Christina Jackson Water Resources Division DPIWE GPO Box 44 Hobart TAS 7001

By e-mail: Christina.Jackson@dpiwe.tas.gov.au

Dear Ms Jackson

Review of the Water Management Act 1999

Thank you for the opportunity to participate in the review of the *Water Management Act* 1999 (the Act).

The Environmental Defenders Office (*EDO*) is a non-profit, community legal centre specialising in public interest environmental and planning law. We provide legal representation and advice, take an active role in law reform and policy formulation and offer education programs designed to facilitate public participation in environmental decision-making.

We have reviewed the *Report on the Operation of the Water Management Act 1999* (*the Report*). Our submission addresses a number of matters we believe should be addressed in order to ensure that the Act achieves its objectives and provides for the sustainable use of Tasmania's freshwater resources.

As a general comment, we note that the *State Policy on Water Quality Management 1997* and the *Water for Ecosystems Policy* are to be reviewed later this year. It may have been useful to consider these high level policy documents initially, to set the policy framework in which the legislation was reviewed.

Summary of Recommendations

- Include a conservation representative on the Assessment Committee for Dam Construction (*ACDC*)
- Allow a delegate to refer a dam application back to the ACDC if she or he is satisfied that the dam may have an adverse impact or cause environmental harm
- Allow the ACDC to ask for further information regarding the economic properties of a proposed dam
- Declare a moratorium on water allocation / dam applications while a water management plan is prepared
- Introduce incentives for construction of off-stream dams

- Investigate land-use management options in catchments with poor water quality
- Allow water allocations to be amended to account for climate change
- Ensure monitoring programs incorporate groundwater resources
- Require toxicity testing at all gauging stations
- Undertake regular, comprehensive chemical audits for each catchment
- Clearly identify investigation, management and enforcement responsibilities for water quality issues. This could be done as part of the Partnership Agreement program.
- Develop economic measures to ensure relevant externalities are included in water prices

1. Assessment and Approval of Dam Projects

Membership of the Assessment Committee for Dam Construction

Section 139 provides that the ACDC is to include 6 members, nominated by the Minister, the TFGA, the LGAT and the TCCI. The members are required to collectively have expertise in managing, using and developing water resources, engineering and safety matters, integrated natural resource management and best practice environmental management. However, there is currently no position for an independent conservation representative on the ACDC.

The ACDC has access to departmental resources and expertise and a Technical Advisory Committee to provide information and advice regarding a range of impacts associated with dam construction and operation. However, given the importance of ecological issues in achieving the objectives of the Act, we believe that a conservation representative should be involved at the decision making stage.

Recommendation: Amend section 139 to provide for membership of the ACDC to include a person nominated by the Tasmanian Conservation Trust.

Delegations

Pursuant to section 144, the ACDC may delegate the consideration of an application for a dam permit and its grant or refusal to specified officers. No delegation can be made where the dam may have a significant adverse impact on another person or may cause material or serious environmental harm.

In some cases, potential impacts will be apparent from the size or location of the proposed dam. However, in other cases, potential adverse impacts will only become apparent as part of the consideration of the application. In situations where a delegate considers that a proposed dam has potential to cause environmental harm or an adverse impact on another person, the delegate should refer the application back to the ACDC for full consideration.

Recommendation: Amend section 151 to read:

A person to whom the Assessment Committee has delegated approval for the granting of permits under <u>section 144</u> must not exercise that delegation if:

(a) a representation has been made under <u>section 149</u>;

- (b) the delegate considers that the dam:
 - (i) may have a significant adverse impact on another person; or
 - (ii) may cause material or serious environmental harm

It is also critical that the cumulative environmental impact of small dams is adequately considered. When considering applications for small dams, delegates **must** have regard to the cumulative effect of reduced downstream flow.

Economic Issues

In its recent decision *Tasmanian Conservation Trust v Assessment Committee for Dam Construction & Glamorgan Spring Bay Council* [2004] TASRMPAT 251, the Tribunal determined that the particular economic qualities of particular dams were not relevant considerations under the Act. The Tribunal considered that the ACDC was only required to consider broader macroeconomic issues.

The ACDC (or its delegate) is entitled to have regard to the economic benefits of the dam in terms of improvements to irrigation and agricultural production. In our view, to further the objectives of the Act it is also appropriate to undertake an economic assessment of a particular dam, including a cost/benefit analysis of alternatives and consideration of the potential loss of valuable ecosystem services as a consequence of the construction and operation of the dam.

Recommendation: Insert a new paragraph at section 155:

(gb) matters relating to the economic properties of the proposed dam, including without limitation a financial analysis of the alternatives to the proposed dam and any loss of ecosystem services.

Sustainable allocation limits

Water management plans are intended to identify the capacity of existing water resources to meet future demands and to ensure that adequate environmental flows are maintained. Without the baseline provided by a water management plan, there is significant potential for over allocation leading to degradation of riverine ecology.

The Guidelines to Assess Applications for New Water Allocations from Watercourses During Winter recognise that, ideally, catchment scale sustainable water allocation limits should be established before new water allocations are made. However, the Guidelines state that such a moratorium would have a "significant adverse impact on economic growth" and adopt the interim criteria "total available yield" as a precautionary approach to setting limits on development of water resources.

In our view, approving applications for dam construction and water allocations before the ecological capacity of a catchment has been quantified is not consistent with the objectives of the Act regarding sustainable use and development of water resources and maintenance of ecological processes. Development of water management plans should be accelerated through the adoption of the *Generic Principles for Water Management Planning*. Therefore, we consider it is now appropriate to declare a moratorium on

further dam and licence applications for any catchment where a water management plan is being prepared.

Recommendation: Insert a new section 19 allowing the Secretary to publish a moratorium notice stating that applications under <u>Part 6</u> or <u>Part 8</u> will not be accepted from the date of the notice until notice is given under <u>section 30</u> that the draft water management plan has been adopted.

Incentives for Off-stream dams

Table 3 on page 15 of the Report demonstrates that the vast majority of dams approved in Tasmania are on-stream dams. It is widely recognised that on-stream dams have considerably higher ecological impacts than off-stream structures. However, there are currently no incentives to encourage applicants to build off-stream structures.

We recommend that the Department consider introducing financial incentives to encourage proponents to choose off-stream structures. At the very least, applicants should be required to provide an economic assessment of the costs of off-stream alternatives. The financial implications should be considered in light of potential loss of ecosystem services as a consequence of on-stream dam structures.

Safety Issues

We support the ongoing management of dam safety issues and the maintenance of the Prescribed Dams register. However, we are concerned that only 70 safety surveillance reports have been submitted in response to **218** notices. There should be more active enforcement of the requirement to prepare a surveillance report to ensure safety issues are identified and managed.

2. Maximising Water Availability

Water Trading

As noted in the Report, water trading is in its infancy in Tasmania. As trading increases, care should be taken to apply the precautionary principle and to learn from the experiences in other jurisdictions. Water trading rules must prevent trade that will result in adverse impacts on the health of natural ecosystems.

Measures should also be adopted to ensure that the availability of water within a catchment (including environmental flows) is considered by authorities in the assessment of any proposed water-intensive developments such as horticulture enterprises and forestry operations.

Education

We support the continuation of projects such as Irrigation Partnerships and the Water Use Efficiency Project to encourage the adoption of best practice irrigation techniques in Tasmania. Reusing and recycling water should also be encouraged through distribution of information and introduction of incentives.

3. Maintaining Ecological Processes

Development of Water Management Plans

Section 20 requires the Secretary to have regard to the consistency of a draft water management plan with relevant State policies, environmental agreements, planning schemes, health guidelines and other plans, policies or guidelines prescribed by regulations (currently none).

In practice, and as noted in the *Generic Principles for Water Management Planning*, the objectives of water management plans are established with regard to:

- Protected Environmental Values and Water Quality Objectives established under the State Policy on Water Quality Management 1997
- Resource Condition Targets under regional Natural Resource Management Strategies
- Conservation priorities established by the Conservation of Freshwater Ecosystems Values Project
- River health information.

The number, scope and status of policy documents dealing with water quality and quantity issues can be confusing. We recommend that the main issues to which the Secretary must have regard when preparing a draft water management plan be listed in the Act (or Regulations).

Recommendation: Insert a new section 20:

20 Matters the Secretary must consider when preparing draft water management plan

When preparing a draft water management plan, the Secretary must consider the following issues:

- (a) the volume and quality of water available in the area covered by the plan
- (b) the objectives of this Act
- (c) the duration, frequency, size and timing of water flows necessary to support natural ecosystems
- (d) groundwater levels and recharge processes necessary to support natural ecosystems
- (e) any taking of water authorised under section 48
- (f) existing water entitlements
- (g) future water requirements, including cultural, economic, environmental, health and social requirements
- (h) the effect that taking or interfering with water not covered by the draft water management plan will have on water covered by the draft water management plan
- (i) protected environmental values established under the State Policy on Water Quality Management 1997
- (j) natural resource management strategies

(k) the public interest

As is noted at page 33 of the Report, current knowledge of estuarine environmental flow requirements is limited. We commend the efforts of the Little Swanport catchment study to investigate this issue. As noted above, we consider it is premature to grant water allocations without this background information.

Clearly, the time required to establish appropriate background data for a water management plan is substantial. However, the water management plan forms the basis for securing water entitlements for both ecological and consumptive uses. Therefore, we believe it is appropriate to firmly establish environmental flows necessary to maintain ecosystems prior to issuing any further water allocations or dam permits.

It is also important that, where environmental values are already degraded, the water management plan provides for restoration and enhancement of the environment, not just protection of the current status of the water resource.

Groundwater

Recent amendments have improved the capacity of the Act to deal with groundwater. However, surface water remains the primary focus of water management under the Act. The Report notes that a licensing system is currently being developed to be implemented "where groundwater resources are under stress or need to be managed in a fully coordinated way with surface water."

In our view, groundwater **always** needs to be managed in a fully coordinated way with surface water – complete catchment management requires an understanding of subsurface water resources. The Report acknowledges that the better management of groundwater-surface water interactions is a key issue to be addressed in the short to medium term.

In the interim, quality and quantity of groundwater supplies should be monitored in conjunction with other surface water monitoring and data collection programs (such as Partnership agreements with local governments and the centralized database for community based monitoring programs).

Implications of Land Use

Holistic and sustainable water management requires attention to the impacts of all land uses within the catchment. The Report identifies management of the impacts of water interception activities such as conversion of farming land to plantation as a key issue. Failing to account for interception effects has the potential to significantly distort water management regimes. Therefore, adopting measures to address this complex issue should be a priority.

Greater emphasis should also be placed on managing land uses which result in diffuse pollution. The recently released Waterways Monitoring Report indicates that 10 river sites were severely or significantly impaired under the AusRivAS classification system. Minister for Primary Industries and Water, the Honourable Steve Kons, has noted that this provides good information to help target NRM projects.

In our view, the results should trigger an investigation into the land use practices that have given rise to poor water quality in these areas. Efforts should be made to restore the environment and to adopt measures to mitigate the impacts of surrounding land uses.

Recommendation:

- Where a catchment has been identified as having poor water quality, fund investigations into the impact of land uses in the area;
- Wherever practicable, require landowners to adopt land and water management plans for agricultural and forestry activities that have the potential to degrade water quality in the catchment area.

Effect of Climate Change

Protection of water supplies also depends on a management regime which accounts for climate change. Water management plans should provide for water entitlements to be modified (without compensation) where evidence shows that changing climate conditions have resulted in greater environmental flow requirements.

Recommendation: Require water management plans to include provisions allowing an allocation to be amended pursuant to <u>section 88</u> to reflect changing environmental flow requirements as a result of changing climatic conditions

Monitoring River Health

We support the continuation of the various monitoring programs currently overseen by DPIWE. We also support the development of a centralised website for water information. Information on the website must be presented in an accessible, user-friendly format to promote better understanding of water quality and quantity issues amongst community members.

However, in our view, recent concerns regarding the health of the Georges River highlight the need for more coordinated, comprehensive and independent monitoring in respect of pesticides and other chemicals. It is also critical that the results of monitoring programs are used to guide management programs.

Recommendation:

- That monitoring programs incorporate groundwater resources
- That toxicity testing (which is relatively simple and inexpensive) be carried out at each of the gauging stations. In the event that these tests indicate some level of contamination, further tests can be carried out to identify the actual pollutant
- That regular, comprehensive chemical audits be undertaken for each catchment area
- That the results of all monitoring programs are publicly available
- In the event that a water quality concern is identified (either through a government monitoring program or by a third party), the matter is investigated and measures are taken to identify the source of the contaminant, restore the environment and manage the future use of the contaminant

 Responsibility for investigation and enforcement should be clarified. It may be appropriate to set out these responsibilities in Partnership Agreements with local government

Water Balance Models

As noted above, hydrological models should always have regard to the interaction between surface and groundwater resources.

4. Water Metering Devices

One of the key elements of the National Water Initiative is the implementation of full-cost recovery pricing for water in both urban and rural sectors. To achieve this aim, and the objectives of the Act, the EDO strongly supports the installation of water metering devices. More should be done to encourage (or require) urban councils to implement appropriate water-pricing and metering policies.

We note at page 69 of the Report the comment that it is not feasible to fully include the cost of externalities of water use. However, we believe that the achievement of full-cost recovery demands that externalities such as resource management, loss of ecosystem services (such as mitigation of pollution and ecosystem health), regulatory enforcement and provision of infrastructure be included in the price of water. Acknowledging the full value of water will encourage efforts to improve efficiency.

Recommendation:

- Encourage councils to implement water meters and appropriate pricing policies
- Develop economic measures to ensure relevant externalities are included in the cost of water

5. Enforcement

Effective enforcement is vital to maintaining public confidence in the management of water resources in Tasmania. We support the Enforcement Policy recently adopted in respect of the Act. However, there appears to be neither sufficient resources available for enforcement activities nor an active enforcement culture amongst councils and DPIWE. We recommend that further resources be committed to enforcement to ensure that the sustainable development objectives of the Act are achieved.

The Environmental Defenders Office appreciates the opportunity to make these comments. Please do not hesitate to contact us if you wish to discuss anything raised in this submission.

Kind regards,

Environmental Defenders Office (Tas) Inc

Per:

Jessica Feehely Principal Lawyer