

Northern Victoria Irrigation Renewal Project – Expert Review Panel

August 11, 2009

The Hon. Tim Holding
Minister for Water
Department of Sustainability & Environment
8 Nicholson Street
East Melbourne VIC 3002

Dear Minister

The Minister for Environment and Climate Change endorsed the Northern Victoria Irrigation Renewal Project (NVIRP) Expert Review Panel (ERP) with the responsibility to provide advice to NVIRP, the Minister for Water and the Secretary, Department of Sustainability and Environment (DSE) in relation to the relevant conditions in the decision of the Minister for Planning that an Environmental Effects Statement (EES) is not required for the NVIRP. The ERP is Denis Flett (Chair), Jane Roberts and Terry Hillman and are all independent consultants experienced in the ecological relationships to hydrological changes.

The ERP has taken an active role in assisting the NVIRP and their consultants in finalising documentation in relation to the conditions in the decision of the Minister for Planning. The ERP has met for ten days to assess the adequacy of the documentation, the appropriateness of the process, the content of the documentation and the likely outcomes from application of the final documents. Our critique and suggestions were welcomed in a collaborative spirit, and we trust that NVIRP and DSE have benefited from this external perspective.

With all documentation which is currently required now in place, we are pleased to place on record our advice on the *NVIRP Water Change Management Framework (WCMF)*, *Johnson Swamp Environmental Watering Plan (EWP)*, *Loddon River Interim EWP*, *Campaspe River Interim EWP*, *Lake Elizabeth Interim EWP* and *Lake Murphy Interim EWP*. The documented advice is summarised within Table 1 of this letter. Detailed advice is provided within enclosed stand-alone documents for the WCMF and in the text of this letter for the remaining documents.

Conditions over the past five years in the Goulburn Murray Irrigation District (GMID) have been affected by the continuing drought. This has meant that already water constrained environments are further stressed from continual low hydrologic flows. NVIRP has been established at a time when the demands on the water resources in the area are at their historical peak. To manage these demands many changes have been implemented in the GMID that have resulted in reduced flows to the wetlands and waterways that are connected in some way to the irrigation system.

The impact of the NVIRP in reducing inflows to waterways and wetlands needs to be separated from the cumulative impacts of drought, drought-related management practices and existing system demands. As such, the documents referred to ERP were assessed from a perspective

which takes account of the influencing factors beyond the responsibility of NVIRP which have changed and are changing the hydrologic connections between wetlands and waterways and the irrigation system, as well as associated management of environmental water.

The ERP supports the conclusion in the EWP that no mitigation water is required for Johnson Swamp based on the understanding that the hydrological connection between the outfall and environmental values existing in the wetland is such that removing any reliance on the connection would not increase the risk to the environmental values. It is understood that Johnson Swamp is not considered a significant drought refuge from a regional perspective (it is currently dry) and that recharge from the channel outfall is dissipated before reaching the deep central area under dry conditions.

The decision that an Interim EWP is required for the Loddon River is considered appropriate. Only one of the Loddon River reaches and only one of the outfalls in that reach will be affected in the coming irrigation season. The conclusion in the Interim EWP that no mitigation water needs to be provided within the season, supported by monitoring that targets the specific risks that may trigger an emergency action, is considered appropriate for the 2009-2010 irrigation season. The EWP to be prepared will consider all outfalls and all reaches and is to be prepared in time for the 2010-2011 irrigation season.

Similarly, the decision that an interim EWP is required for the Campaspe River is also considered appropriate. The hydrological connections of the Campaspe River to the irrigation system are complex and modelling may be required along with the collection of further data and information to quantify and adequately assess these hydrological connections. Currently, the NVIRP works only affect a sub-set of the total outfalls into the Campaspe River. The conclusion in the Interim EWP that no mitigation water needs to be provided in the 2009-2010 irrigation season for Campaspe River, supported by monitoring that targets the specific risks that may trigger an emergency action, is considered appropriate.

The Lake Elizabeth and Lake Murphy EWPs were formulated as full EWPs but now have been designated as Interim EWPs. This decision was taken because the methods for defining the attributes of mitigation water have not been adequately developed at this time. The process for establishing the requirement for mitigation water in the WCMF and the guidance for how this is to be done in EWPs would also benefit from some review and clarification.

This designation as interim means that the Lake Elizabeth and Lake Murphy (Interim) EWPs have not specifically addressed how to manage potential risks in the 2009-2010 irrigation season. In the case of Lake Murphy, there will be no changes to the hydrological connection, in this case leakages, due to the operation of NVIRP works. Therefore any dependent ecological values will not be adversely affected in the interim. In the case of Lake Elizabeth, however, the following contingency measure was suggested to the ERP:

- an interim mitigation water provision or contingency be agreed between NVIRP and the North Central Catchment Management Authority (NCCMA), to be estimated based on the principles set out in the Water Savings Protocol and adjusting in accordance with the allocations for the 2009-2010 irrigation season; and
- the resulting volume be set aside and used to protect the recognised environmental values.

Subject to this contingency measure, the ERP is supportive of the interim arrangements to apply in relation to Lake Elizabeth and Lake Murphy, including the designation of the EWP as Interim EWP.

Table 1: Expert Review Panel Advice Summary

Document Reviewed	Concluding Advice	Detailed Advice
Water Change Management Framework	The ERP believes that the WCMF package (including the documents within it) does adequately address the primary aim which is “protection of aquatic and riparian values through management of water allocations and flows within the modified GMID system”. Further refinement in defining mitigation water, accounting for all hydrological threats from NVIRP modernisation, and in establishing strong feedback loops as part of a monitoring program will continue to strengthen this position.	Enclosed
Johnson Swamp EWP	The conclusion that no mitigation water is required within the Johnson Swamp EWP is supported.	Not considered necessary
Loddon River Interim EWP	The Interim EWP is a satisfactory measure to manage potential risks within the 2009-2010 GMID irrigation season, pending preparation of the EWP.	Not considered necessary
Campaspe River Interim EWP	The Interim EWP is a satisfactory measure to manage potential risks within the 2009-2010 GMID irrigation season, pending preparation of the EWP.	Not considered necessary
Lake Elizabeth Interim EWP	The Interim EWP was deemed necessary because the supporting methods relating to mitigation water have not been adequately developed. The proposed interim arrangements put to the ERP for the 2009-2010 irrigation season are appropriate. The development of an EWP is expected before the 2010-2011 irrigation season.	Not considered necessary
Lake Murphy Interim EWP	The Interim EWP was deemed necessary because the supporting methods relating to mitigation water have not been adequately developed. There will be no changes to the hydrological connection, in this case leakage, in the coming irrigation season, therefore any dependent ecological values will not be adversely affected in the interim. The development of an EWP is expected before the 2010-2011 irrigation season.	Not considered necessary

The Minister’s conditions were received by NVIRP on the 20th April 2009. The timeline for the approval of these documents (by 15th August 2009) was tight, and in some cases compromised the level of scrutiny and detail provided within the documentation. The ERP commends NVIRP, their consultants (including the NCCMA) and DSE for the amount of work completed in the short time available to them.

It is the advice of the ERP that the documentation that has been prepared by NVIRP is acceptable and warrants being approved.

In addition the ERP advises that the key priorities for development, before the 2010-2011 irrigation season, should be:

- Establishment of the methods for defining the attributes (sourcing and allocation) of mitigation water and incorporation into the Water Savings Protocol. It is recognised by the ERP that this responsibility lies with DSE rather than NVIRP.
- Completion of revisions to the WCMF and ensuring that the WCMF is ready to use.
- Initiation of the scoping and outlining of the process for undertaking the Regional Environmental Assessment.
- Finalisation of the Groundwater Assessment Report. Findings and implications relating to wetlands, waterways and groundwater-dependent ecosystems, are to be drawn out and ready to be activated.
- Updating of the short-lists of wetlands and waterways in response to the Groundwater Assessment Report including any update of methods.
- Development of a process or provisional methods for the assessment of the groundwater or seepage dependent ecosystems.

Notwithstanding the requirements for future work, the NVIRP documents provide an adequate response outlining the means by which the NVIRP will protect aquatic and riparian ecological values through management of water allocations and flows that may be impacted by the operation of the modernisation works undertaken by NVIRP in the GMID within the 2009-2010 irrigation season. The ERP believe that the Management Review provisions outlined in the WCMF are appropriate in ensuring continual improvement.

The ERP is pleased to have had the opportunity to support NVIRP in progressing the environmentally responsible operation of the modernised irrigation system for which NVIRP has responsibility.

Yours Sincerely,



Denis Flett

Chair

Northern Victoria Irrigation Renewal Project Expert Review Panel

Copy To:

Peter Harris, Secretary of the Department of Sustainability & Environment

Murray Smith, Chief Executive Officer of the Northern Victoria Irrigation Renewal Project