

METROPOLITAN WATER INDEPENDENT REVIEW PANEL

Morris Iemma
Premier of NSW
Level 40
Governor Macquarie Tower
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Sydney
NSW 2000

8 December 2006

Dear Premier

I am pleased to report that the Metropolitan Water Independent Review Panel recently met to consider the Metropolitan Plan in the context of current unprecedented low rainfall.

The Plan contains a diverse range of measures, including managing demand through community engagement; significantly increasing recycling of effluent for industry, agriculture, the environment and use in homes through dual reticulation; accessing previously inaccessible deep water in the major dams; developing groundwater sources as a drought response; and being ready to construct a desalination plant if the total dam storage capacity were to fall to around 30%.

We can now report that we confirm that the diverse range of measures contained in the Plan provide a robust approach to managing Sydney's drinking water supply. In particular, the Plan's "drought readiness strategies" of groundwater and desalination becoming available at predetermined trigger levels as the dams deplete provide confidence that despite continuing dry weather the city will not run out of water.

The Panel has noted the measures under way to accelerate access to ground water sources since the 40% trigger level was recently reached, consistent with the Plan. The more water that can be added to the dam storage system from this source over the next two years the more confident the community can be that the Plan provides the protections for which this measure was designed. We understand there are some practical difficulties with accelerating this work, primarily from a shortage of skilled staff and contract drilling equipment. Nevertheless it is important that the water supply be augmented from this groundwater source and we urge you to encourage further acceleration of this measure.

We note, however, that Sydney's storage levels have dropped further. As of the week ending 1 December the storage levels have dropped to 38% and, if current rainfall and inflow levels continue, the trigger point of 30% for commencing construction of the desalination plant may soon be reached.

The Panel would like to put this development into some perspective. All Panel members feel that the growing evidence about rainfall patterns may well indicate that Eastern Australia may be experiencing a significant climate shift earlier than forecast.

For your information we are attaching a graph that illustrates the rainfall patterns and inflows received into the wider Sydney catchment area between about 1910 and 2006. It is our view that this graph indicates that there has been a noticeable downward shift of rainfall and inflows in the period since about 1990. Although this period is somewhat similar to the period from about 1910-1950, there is a marked drop from even the previous prolonged dry period.

It is significant that planning for Sydney's water future has been based on the average rainfall and inflow record over the full historical record. The average of the entire period is raised significantly by the middle wet period (about 1950 to 1990) and masks the lower rainfall and inflow data from both the earlier and the current dry periods. In other words, it now appears that planning may have been unduly influenced by what now, with the benefit of hindsight, seems to be a period of aberration. No one could have anticipated the downward shift we have witnessed over the past fifteen years, but it is an important precautionary principle that your Government's water planning should be based on the best current data.

The climate change research projects underway, including those being undertaken by your Government, will provide evidence on the relationship between the current drought and climate change. However, the final conclusions of such research projects will not be available for several years.

The Panel believes that in the interim, it would be prudent for the Government to take a precautionary approach to ensuring that Sydney is adequately supplied with water, by proceeding on the assumption that the trends indicating basic climate change will continue and need now to be factored into the Government's implementation of the Plan.

Considering the current dam storage levels, together with the poor outlook for significant rain in the Sydney catchment, the Panel's very strong view is that the Government must continue to take all the necessary steps to ensure that construction of a desalination plant could commence at around 30% of dam storage levels.

The Panel notes the various concerns that have been expressed about desalination. The Government's commitment to offset 100% of the plant's greenhouse emissions and to minimise the local ecological impacts of the plant are strongly supported. We note community concerns about nuisance impacts during the construction phase, but believe these must be accepted if the security of the city's water supply is to be ensured.

Nevertheless, the Panel strongly recommends that desalination must remain a central part of the Government's Water Plan for Sydney and that planning should continue so that a plant could be built in a timely way as it is likely that the current extreme conditions may well persist for some time.

The Panel would like to emphasize the importance of sticking with the Plan. The Plan is based on sound projections which depend on the trigger points for groundwater commencement (at around 40%) and desalination construction (at around 30%) being implemented when they are reached. The Panel supports those actions being taken at these specified dam storage levels because we have concluded that Sydney's water security could be significantly eroded if the Plan is not implemented completely and in the way it has been designed.

Therefore we are of the view that every effort should be undertaken to ensure that the desalination plant will be ready on the pre-determined timetable to produce water for Sydney if needed. To that end, the Panel advises that the necessary preparatory steps should now commence. The final decision to proceed will still be made by the Government when the trigger point of 30% is reached, but preparatory work should be completed before this time so as to enable an immediate start.

This is especially important because of increased international and domestic demand for desalination materials and construction expertise, and we are concerned about possible construction delays.

Lastly, the Panel recommends that the Government devise a clear public message to the community as Sydney Water prepares to commence construction of the desalination plant.

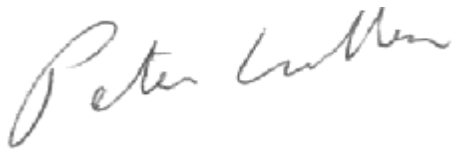
As Sydney approaches what is likely to be a hot summer with reduced rainfall, it is almost certain that dam levels will deplete further and public concern will rise. We advise that the Government should clearly communicate to the public that:

- these preparations are part of a well thought-through and long-predetermined plan;
- proceeding with the desalination plant is an essential part of the Government's Plan which secures Sydney's current and future water needs;
- preparations to build a desalination plant do not mean that the community or industry can relax their water conservation measures;
- other key elements of the Plan, especially recycling, are still central and are being actively and vigorously pursued.

The Panel has also discussed its role in assisting to communicate these messages to the wider community and I would be happy to meet with you at a convenient time to both discuss our views and to explore ways in the community can be engaged on this important issue.

I would also request that you agree that the Panel can make this report available to the Leader of the NSW Opposition at an appropriate time in the near future.

Yours sincerely



Professor Peter Cullen

Chairman of the Metropolitan Water Independent Review Panel
Commissioner, National Water Commission

On behalf of all members, Metropolitan Water Independent Review Panel:

Dr Ronnie Harding

Assistant Commissioner
NSW Natural Resources Commission

Blair Nancarrow

Director, CSIRO Land and Water

Professor John Langford

Director, Melbourne
Water Resources Centre
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Ross Chapman

Economist

Chris Davis

Chief Executive Officer
Australian Water Association

Inflows to, and representative rainfall for, the catchments of Sydney's current drinking water dams, 1909-2006

