



Ref: GP/tw

17 May 2002

Project Manager – VRHS  
Catchment and Water Division  
Department of Natural Resources & Environment  
PO Box 500  
EAST MELBOURNE VIC 3002

Dear Sir/Madam

**Draft Victorian River Health Strategy (2002)**

Thank you for providing the North Central Catchment Management Authority (NCCMA) with the opportunity to comment on the above-mentioned document.

The NCCMA applauds the Department of Natural Resources and Environment's leadership in protecting and rehabilitating river health throughout Victoria.

It is noted that the NCCMA has a nominated representative river (Avoca) and that this will assist in undertaking works and potentially gaining funds. However, we are concerned about the support for the other three catchments in our region. Will there be enough support for these river systems? Will this impact on future funding bids for the Loddon, Campaspe and Avon Richardson? Maybe, it needs to be stressed that the rivers not selected as heritage or representative are still important and that funding for these catchments will not be impacted due to the listing of other river basins.

The attached two tables are comments relating to the draft Victorian River Health Strategy (VRHS) (2002). The first table notes points of clarification whereas the second table provides editorial comment. All comments provided relate to Chapters 1 through 13 of the VRHS only. No review has been undertaken of the Executive Summary, Appendices, Glossary, References or Acronyms.

Yours sincerely

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**Chief Executive Officer**

Enc.

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# North Central Catchment Management Authority

## Comments Relating to the Draft Victorian River Health Strategy (2002)

**Table 1 - Points of Clarification**

Page 16 paragraph 2	Rivers do not provide safe drinking water - maybe change sentence to read Rivers provide water to quench the thirst of 4 million Victorians
Page 27 Table 2.1	Change “grazing banks” to “overgrazing banks”. It is a common and misleading statement. Controlled grazing may be beneficial to the riparian zone in more ways than just weed management. In Holistic Management (Allan Savory 1999) points out that ‘relatively high numbers of heavy, herding animals, concentrated and moving as they once did naturally in the presence of predators, support the health of the very lands we thought they destroyed.’ Therefore it is about ‘timing’ of grazing rather than removal.
Page 27	Low level releases on storages - reduced primary productivity. The term ‘primary production’ could be misinterpreted as farming.
Page 31 Figure 2.3	The figure does not show any results.
Page 32 Figure 3.1	Remove “Current Level of Surface Water Development” map as it is not a <b>condition</b> . Then only one legend box is required for all three maps. Change first (top left) map heading to Overall Stream Condition.
Page 33 paragraph 2	Remove reference to CALP, this is confusing. Need a map at the beginning of the Strategy that shows the various regions (CMA and CALP).
Page 33 paragraph 2	Refer to salinity rather than EC
Page 34 Figure 3.3	Not very effective visually
Page 38 last sentence	All business must operate under TBL. It is unreasonable and unworkable for river managers to consider regional economies in decision-making but economists not to think of the environment when setting economic targets.
Page 42	Statewide targets should start with 2005 then 2011 then 2021, not the other way around.
Page 49, Table 5.1	North West uplands. It would seem logical to have the entire Avoca listed and not part.
Page 51	Salinity Management Plans - Change 2 <sup>nd</sup> row ‘Scale’ to <u>Catchment/Sub-catchment</u> . There are four Dryland Salinity/Land and Water Management Plans in the North Central Region – one for each <b>catchment</b> .
Page 51 Table 5.2	Water Quality section - Stormwater Management Plans are a component of Nutrient Management Plans/Strategies (as a priority action) and should not be separated out.
Page 54 point 4	Will the cost benefit analysis be based on a standardised assessment process eg rapid appraisal methodology?

Page 55 Last paragraph	The term 'overall regional improvement' would indicate that rehabilitation of degraded areas for the purposes of water quality improvement would be a component of the Regional River Health Strategy. This needs to be clearly specified.
Page 57 Box 5.2	10 Year Resource Condition Target Areas Dot points 3 & 5 Reduction in nutrient and sediment loads at key sites. Why not aim to reduce nutrient concentrations and sediment loads?
Page 57 Box 5.2 Dot point 20	... level of protection from flooding <u>and/or erosion</u> .
Page 63 Table 6.2	Row - Large regulating weirs, third column, last dot point – phragmites is not an exotic specie.
Page 65 paragraph 3, last sentence.	Specific policy direction on how these issues should be dealt with within the water allocation process is provided – seems a bit open ended as a statement. Provided where?
Page 66 paragraph 6	Second last line – reference to 82% seems to be very accurate. Would be better to say '... in more than 80% of these negotiations ...'
Page 72 paragraph 2	Second line, change <b>should</b> to <b>will</b>
Page 72, Sect 6.3.2, 1 <sup>st</sup> paragraph, last sentence	Not quite correct in saying that there is a BE for the environment for the Kerang Lakes, I believe it is for a broader group of wetlands, need to talk to Merryn Kelly, NRE Bendigo to confirm details.
Page 73 Box 6.2	Last dot point. I am not aware of the Executive Director, Parks Flora and Fauna consulting with the CMA on any part of bulk entitlements for the Kerang Lakes area.
Page 84 Last paragraph	What does 'the real' influence of whole of catchment activities mean?
Page 85 Last paragraph	First sentence. Current management arrangements may <b>appear</b> to be misaligned/not integrated largely as a result of the difference in, for example, river health versus nutrient management objectives – protection versus management of high nutrient contribution sites. However, the result can often be quite complimentary.
Page 85 & 86	There needs to be a dot point relating to community input into the management arrangements. Catchment activities require a partnership approach.
Page 86 Fourth dot point	Isn't this a water quality management objective also?
Page 86 Last dot point	Improving our scientific understanding and ability to identify <u>current and</u> emerging water quality issues.
Page 86	Add extra dot point. Improve our understanding of the benefits derived by implementing various nutrient management activities ie BMP's, rehabilitation works on stream banks etc and quantify these in terms of improvements in water quality.
Page 87	Table 7.2 – No reference to Land and Water Management Plans (Dryland Salinity Management Plans) that have components relating to water quality improvement.
Page 89	Will the CWQAP's encompass surface and groundwater water quality management issues.

Page 89 paragraph 1	<p>Why are Catchment Nutrient Management Plans to be expanded over the next five years to address a range of water quality issues <b>except</b> for salinity? If we are intending to look at <b>all</b> the issues relating to water quality, salinity must be included. In that way we are addressing landscape management/landscape change in a holistic way.</p> <p>How will priorities for management of water quality be developed through the Regional RHS – the issue of philosophical difference needs to be addressed before this can be undertaken. How will nutrient management and salinity management objectives related to water quality be incorporated into the Regional RHS?</p>
Page 89 3 <sup>rd</sup> Paragraph	Is it suggested that regional water quality targets will be set before/as a precursor to targets for river health?
Page 89 Last paragraph	There will need to be guidance to assist regions to be consistent in its priority setting for the management of water quality and river health asset protection - this issue stems from the difference philosophical viewpoints/objectives mentioned previously.
Page 90 Last paragraph	The lack of documentation on benefits derived through water quality protection and/or restoration actions is difficult to quantify largely due to benefits not being realised over long timeframes. Few investigations have been undertaken to try and quantify these and therefore remains a significant research gap.
Page 91 Actions box	CMA's do not directly implement Salinity Management Plans, this is the role of NRE. Therefore reporting is through DNRE regionally.
Page 91 Actions box	If salinity is not to be included in the proposed Catchment Water Quality Action Plans, then an <b>explanation</b> is required within the VRHS.
Page 91 Actions box	<p>'CMAs will'</p> <p>Dot point 1 - 'other multiple benefits' – how does NRE propose CMAs document/quantify all other multiple benefits? What parameters are NRE referring to?</p> <p>Dot point 2 - Consideration needs to be given within the CWQAP's to address potential impacts on water quality from imported water from areas outside of CMA boundaries.</p>
Page 91 Bottom Statement	Will DNRE develop a process for facilitating the adoption of water quality priorities and targets into Municipal Strategic Statements? As it stands in this statement, it just states that CMAs will do it with no direction on how it can/will be done.
Page 92 First box	Codes of Practice should set minimum standard and should increase the standard on a regular basis. Best Management Practice guidelines related to each Code of Practice should be an ongoing/working document.
Page 93	The Water Quality chapter requires a section on increasing community awareness to facilitate change. There is a need to highlight the linkages between improvements in land management practices and ultimate environmental outcomes eg water quality.
Page 96 Section 8.3.1	The goals listed in the LCC report are not currently being met on crown water frontages. This acknowledgement needs to be included in the VRHS.

Page 97 last paragraph	In terms of priorities between the River Health Strategy and the Native Vegetation Plan, more importantly than 'instream values' the River Health Strategies will include Riparian Management for <b>water quality improvements</b> , which may drastically conflict with priorities under the Native Vegetation Plan ie highly degraded frontages may be a target.
Page 98 First paragraph	Half way through the last sentence '... and CMAs will ensure that management addresses the values identified in both programs.' I don't understand that in the context of priorities identified within only one Plan.
Page 98 Box 1	Relating to implementation '... regardless of the tenure of riparian land.' What are the protocols if a high priority parcel of land for fencing (say) is unlicensed crown land with a condition that the landholder should be erecting a fence if he/she is not going to take up the license? Would government assist in fencing costs? What about weed management?
Page 98 paragraph 3	Will NRE be developing formal management agreement guidelines or proformas for the protection or restoration of riparian lands?
Page 98 Last paragraph	Relating to caretakers of riparian land. Does the role given to the CMA as caretaker of riparian land imply that activities to be undertaken on riparian land through (say) Bushcare initiatives, Parks Victoria, Land Victoria etc. must be known to the CMA ie. that the various agencies should be informing the CMA of these activities.
Page 99	Reference to the Code of Forest Practice. Whilst the idea of 10-40m filter strips maybe OK in regard to saving some vegetation there are still questions regarding whether that width is appropriate in some of the steeper ground for water quality protection.
Page 99	What funds would be made available for CMAs to develop Recreational Plans for riparian areas of high value with heavy recreational pressure? What guidelines are available for the development of these Recreational Plans? Does the development of Recreational Plans still apply to the CMA if is relating to land under, for example, Parks Victoria management responsibility?
Page 99 Last sentence	Who within the CMAs is currently using fire as a management tool for riparian zones?
Page 100 Box 8.1	Second last dot point – change <b>exclude stock</b> to <b>manage stock</b>
Page 100 Box 8.1	Last dot point – consider changing from <b>remove exotics</b> to <b>manage exotics</b> .
Page 100 Last paragraph	Referring to Rural Water Authority providing a domestic and stock diversion license without charge. This is relating to the boundary between freehold land and the crown water frontage – something needs to be stated for land that is 'riparian right' up to the top of bank. Also it would be worth considering somewhere in the Management of Riparian Land section about discussing the changeover of land tenure from the late 1800's to today. There are still a lot of issues regarding who owns to the centre of the river etc.

Page 101 First paragraph	It is inferred that controlled grazing for pest and weed management is potentially (to some level) a detriment to ecological health of riparian areas. This is probably misleading in that we don't actually know at this stage whether controlled stock grazing can actually improve the ecological health of riparian zones. We have always had animals in this country that grazed areas, so no grazing of certain plant species can be a negative, eg some species of native grass require grazing to reduce dead growth and allow new grasses to grow. Need to change this sentence to properly illustrate that grazing is an unknown (either positively or negatively). What we don't understand is when should we allow grazing and for how long.
Page 101 Second last paragraph	Above the box referring to crown water frontages last sentence. However there are a number of practical, <u>financial</u> and legislative issues to be resolved.
Page 101 Bottom box	What are we going to do with crown water frontages in urban land? It is inferred that someone in the region is managing it. While there are Committees of Management for certain sections of crown land in urban areas, there are a lot that aren't. It seems to be falling onto CMAs to manage those lands on behalf of Land Vic, purely from the community value placed on urban areas for aesthetics and/or flooding.
Page 101 Bottom box second line	NRE will work with CMAs to resolve the practical, <u>financial</u> and legislative issues.
Page 102 paragraph 1	Relating to the management of riparian land, it is not clear as to who has the responsibility for the management of weeds on riparian lands. Is it one that the landholder is responsible for totally? Do they get funding assistance? Is the funding assistance from DNRE, from the CMAs, etc? Why is it seen as acceptable for the CMAs to fund the management of willows but questionable if they are managing blackberries? It needs to be clearly defined as to who should be doing what in the role of weed management along riparian areas.
Page 106 Section 9.3.3	Restoration activities – Dot point 3 Still unclear as to who has the responsibility for this, particularly with reference to aquatic flora eg a current outbreak of Parrots Feather in Campbells Creek near Castlemaine - who is responsible?
Page 107 Fish passage	Paragraph 1 Last sentence In addition, fish passage can be inhibited by poor water quality, such as a stream of unnaturally cold water occurring as a result of dam releases or water quantity problems such as insufficient or untimely flows.
Page 109	Control of non-indigenous fish – First paragraph 'As well as exotic species such as carp, goldfish, <u>trout</u> and gambusia ...'. The reason for documenting specifically that trout is an exotic specie is that it is now so common that it is often seen as a native fish.
Page 109 & 110	'Investigations into carp ecology and means of control are underway in Victoria '. Does this also imply that we are looking at the habitat manipulation, appropriate flows, etc in an attempt to make river condition more suited to native fish rather than carp?

Page 118 Box 11.1	Regional Resource Managers and Local Government - both of their responsibilities talk about ' <i>undertaking all activities that can potentially impact on rivers to best management practice</i> '. Whereas when we refer to Industry it's ' <i>minimise their impact on the environment</i> '. This sends a message that Regional Resource Managers and Local Government don't have an impact on the environment but industry automatically does. It would be better if the "Industry Row" was changed so that it read the same as Local Government and Regional Resource Managers that is, "undertake all activities that can potentially impact on rivers to best management practice".
Page 120	The bottom 2 dot points relate to further consolidation of the CMA's role and what the Government would pass on in relation to transfer and management of crown frontages and responsibility for coordination and implementation of heritage rivers. If this is true, it should be spelt out a lot clearer than a couple of dot points in a paragraph. It needs to be boxed and in blue the same as the rest of the document for key actions. The same rule applies that if transfer of management of crown water frontages is brought across to the CMAs they have to be <b>appropriately resourced</b> to take on that responsibility.
Page 123 Section 11.2.3	Regional Resource Managers. There appears to be no emphasis placed on the local Catchment and Agricultural Services arm of NRE. This is critical in pest plant and animal management and also in soil health, particularly with land-based erosion.
Page 124, Sect 11.3.2	This section seems to imply that the current funding arrangements are adequate. In reality, current funding levels only allow us to 'scratch the surface'. Regional RHSs are the driving force behind achieving the gains outlined in the Strategy. This section needs to discuss the goals of the Strategy relative to resourcing levels. Unless resourcing levels match the realistic cost of implementing the Strategy, the whole document would appear hollow.
Page 127 Sect 11.3.4	It might be worth having a list of all the CMA's within the state including contact details. May also want to include the regions and catchments they cover. Could probably include a list of the RWA's as well.
Page 135 Section 13.1.1	The ISC is a great overall benchmarker but it's effectiveness as a 5 year monitoring tool is not clear Will it pick up shifts in integrated river health and instream and riparian condition over that time (particularly with random site selection)? A reporting framework from each CMA with scope of works, success and outputs achieved would give a better 5 year picture to feed back into the VRHS. The VWQMN & ISC could then pick the long term trends over 10 to 30 years.
Page 136	Who will pay for the monitoring of macroinvertebrates?
Page 137	Monitoring of fish communities. Suggest NRE look at the work undertaken by Steve Saddler (ARI) regarding native fish populations, percentage of native versus exotic, observed versus expected etc.

**Table 2 - Editorial Comments**

<b>Page reference</b>	<b>Comment</b>
Page 16 paragraph 2	... irrigated agricultural production <u>annually</u>
Page 16 paragraph 3	... situated on or near a river <u>or creek</u> to provide ...
Page 16 paragraph 4	... to the State economy <u>annually</u> .
Page 16 paragraph 6	Delete last sentence, "Others such as ..."
Page 18 Last paragraph, last dot point	... development may <u>still</u> be ...
Page 19 paragraph 3	... will make <del>these</del> <u>the</u> decisions ...
Page 20 paragraph 3	dot points - replace commas with semicolons
Page 20 paragraph 5	... management plans and <del>wetlands</del> <u>wetland</u> management ...
Page 20 paragraph 6	... (SEPP)_(Waters of Victoria) ...
Page 24	Use larger font for text in boxes of Figure 2.1
Page 28 paragraph 3	... MDB Integrated Catchment Management <u>Strategy</u> ...
Page 28 Figure 2.2	Make fonts bigger
Page 33 paragraph 1 last sentence	<u>With regard to surface water</u> , the majority of catchments ...
Page 33 paragraph 2	... a decline in pH ( <u>ie increase in acidity</u> ), a slight ...
Page 43 Decision making process – last dot point	Change <b>practicable</b> to <b>possible</b> .
Page 45	Change commas to semicolons.
Page 45, dot point 3	Change <b>through</b> to <b>by</b> .
Page 50 paragraph 1	If reference to CALP is removed from Page 33, then non abbreviated term will be required here.
Page 50 paragraph 4	Missing dot on second dot point starting as 'has its own set ...'
Page 53 5.2.2 Last paragraph	What does 'vertically integrated' mean? and how do you propose to do this? Will there be any guidance from the State?
Page 55 Figure 5.1	Increase font.
Page 56 Box 5.1	Inconsistent spacing of dot points, last dot point in first row. Also remove the word <b>Recreation</b> from after Ecologically healthy river.
Page 61 Table 6.1	Overbank Flow Component, under Channel Flow Characteristics - Flow extends to floodplain <u>surface</u> flows.
Page 61 Table 6.1	Overbank Flow Component, under Frequency - move the word <b>annual</b> to second line.
Page 61, Table 6.1	Reference at bottom of table not in the list of references in back of report. (NRE et al., 2001?)
Page 62 paragraph 2	Change second last sentence to '... such as disturbing the longitudinal continuity of a river by creating barriers <u>to fish migration</u> .'
Page 62 paragraph 3, third sentence	As these environmental effects started to become apparent, there was a dawning realisation that not only are we <del>are</del> dealing with ...

Page 63 Table 6.2	Row - Large regulating weirs, third column, dot point missing from 'erosion of river banks ... '
Page 63 Table 6.2	Row - Diversion/Irrigation channels, third column - dot point missing from 'transport of native species ... '
Page 64 Continuation of Table 6.2	First column - twice there is a noting of an asterisk (*) against mean annual runoff. Asterisk footnote is not very obvious and should be reworked so that the footnote is obvious. Remove footnote from Very large dams column and place beneath table.
Page 65	Should continue on from the 3 <sup>rd</sup> paragraph on Page 62 and not started on a whole new page.
Page 66 paragraph 2	... the Water Act <u>1989</u> ...
Page 66 paragraph 3	Dot point 2 - ... unregulated <del>river</del> <u>systems</u> ; and
Page 66	Heading 6.2.1 Bulk Entitlements in Regulated <del>Rivers</del> <u>Systems</u>
Page 66 Last paragraph	Unregulated systems are those that do not have large structures <del>which</del> <u>to</u> provide ...
Page 69 6.2.3 Groundwater Management Third paragraph	Second dot point 'between landholders' is continuation of first dot point. Therefore, remove dot point from line 2.
Page 70 First paragraph	The Water Act <u>1989</u> ...
Page 70 last paragraph	Dot point 2 - The Water Act <u>1989</u> ...
Page 71 paragraph 2	After dot point 4 'protecting river systems by:', the next two dot points should be indented
Page 71 Bottom box	Dot points 3 and 4 should be indented
Page 72	First sentence starting with 'To ensure ... – just make one complete sentence.
Page 72 last dot point	'Where water for the environment is provided through conditions on other users, those <del>users are</del> responsible for providing this water <del>and</del> must report on an annual basis ...'
Page 77 First line	'... flow regime in <del>the</del> both the Murray ...'
Page 79 Second sentence	'... allowed for under the catchment SDL or <del>in</del> within an SFMP.'
Page 79 paragraph 3	'... Water Act <u>1989</u> ...'
Page 79 Third last paragraph	'... rior to the investigation of <u>a</u> new source of surface water.'
Page 80 paragraph 1	'... Water Act <u>1989</u> ...'
Page 81 Third last and second last paragraphs	Should these be dot points instead of paragraphs?
Page 86 Dot point 2	Shouldn't be a dot point – continuation of dot point 1
Page 88	Contents on page 88 should continue on from Page 86
Page 88	Highlighted box third dot point – 'a process for auditing progress towards regional <u>targets</u> .'
Page 94 paragraph 1 Line 5	Change <b>1770</b> to <b>1750</b>
Page 97 second box	Priorities for riparian protection and restoration will be established <u>through</u> assessment of multiple benefits.

Page 100 Box 8.1	Dot point 4 - 'provide a natural structure consistent with a <u>pre 1750 EVC condition ...</u> '
Page 102 First paragraph	Change 'Whilst <b>a lot</b> of community ...' to 'Whilst <b>a great deal</b> of community ...'
Page 104 paragraph 3	'Whilst there is still a <del>major</del> need ...'
Page 105 Section 9.2	The point – relative importance of asset protection and restoration activities – does not have a dash (-) at the front. I assume also that this is relating to whether we should be putting investment into asset protection or restoration activities – it is a little bit lost in the dot point.
Page 107 Box 9.1	Dot point 4 '... benefit is highest <u>at</u> the lower end ...'
Page 109 Second last paragraph	'... Fisheries Act <u>1995</u> ...'
Page 111 First box	Third dot point – isn't a dot point.
Page 115 Table 10.1	Column 1, third row - <u>Plains</u> Terminal Lakes
Page 120 Section 11.1.2	Dot point 3 – "... <u>Victorian</u> Flood Management Strategy"
Page 124 Section 11.3.2	Should be another dot point being <ul style="list-style-type: none"> <li>• Nutrient Management Initiative</li> </ul>
Page 124 Last paragraph	'... Water Act <u>1989</u> .'
Page 136 Second last dot point	Water Quality and Quantity isn't a dot point, it is part of the previous dot point.
Page 136 First box	'The current investment in water quality and quantity monitoring for Statewide requirements will, <u>at a minimum</u> , be maintained, <del>at a minimum</del> , and will be increased where there is a clear requirement.'
Page 139 Table 13.1	First row, second column, '... components of the flow <del>health</del> regime ...'