# Wetlands Research Association Inc.

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Australian Government
Department of Environment
Public Affairs,
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9th June 2014

**Comments on the National Heritage Strategy**

Incorporated in 1999, the Wetland Research Association Inc. (WRA) is an Executive Committee chaired by Barrister and Solicitor Toby Nisbet. Committee members consist of experienced land care managers and professional scientists involved in wetlands and geoheritage, with a vast experience in facilitating community management of natural resources in all aspects of the Natural World. They are experienced in education, and as internationally renowned wetland and geoheritage scientists. There is a combined experience in geoheritage, wetland ecology, hydrology, soils, and vegetation that can be focused on education, research, wetland, geoheritage, and environmental protection policy development and assisting community groups, which they have carried out since *circa* 1985.

Following a review of the National Heritage Strategy, WRA makes the comments outlined below. They are largely comments critical of the National Heritage Strategy because WRA is of the conviction that Australia holds a unique and important place in the World from a Geoheritage and Biodiversity perspective and, as the largest island continent in the World separated from the other continents for tens of millions of years, and following its own geological history, its diverse natural heritage needs protection.

1. There are three arena of heritage: natural world heritage (involving geoheritage and biodiversity), Indigenous People heritage, and European (post Caucasian-settlement) heritage; the National Heritage Strategy does not adequately address natural world heritage, and in particular geological heritage.

2. There appears to have been little review of overseas literature and even local literature to derive this Strategy in relationship to the natural world. Clearly, there are models globally that deal with strategies for preserving and 'celebrating' heritage. For instance, the United Kingdom leads the World in Geoheritage and is replete with literature and model on how to deal with Geoheritage.

3. Geoheritage is missing in the framework of the National Heritage Strategy. I have included references to matters of geoheritage (attached as PDFs), and how to identify and assess sites of geoheritage significance; these references are:

i. Semeniuk V, Semeniuk C A, Tauss C, Unno J & Brocx M 2011 Walpole and Nornalup Inlets: landforms, stratigraphy, evolution, hydrology, water quality, biota, and geoheritage. Western Australian Museum, Perth (Monograph). 584 p. ISBN 978-1-920843-37-3.
ii. Semeniuk V & Brocx M 2011 King Sound and the tide-dominated delta of the Fitzroy River: their geoheritage values. Journal of the Royal Society of Western Australia 94: 151-160.
iii. Brocx M & Semeniuk V 2011 The global geoheritage significance of the Kimberley Coast, Western Australia. Journal of the Royal Society of Western Australia 94: 57-88.
iv. Brocx M & Semeniuk V 2011 Assessing geoheritage values: a case study using Leschenault Peninsula and its estuarine lagoon, south-western Australia. Proceedings of the Linnaean Society of New South Wales 132: 115-130.
v. Brocx M & Semeniuk V 2010 The geoheritage significance of crystals. Geology Today 26: 216-225.
vi. Brocx M & V Semeniuk 2010 Coastal geoheritage: a hierarchical approach to classifying coastal types as a basis for identifying diversity and sites of significance in Western Australia. Journal of the Royal Society of Western Australia 93: 81-113.
vii. Brocx M & Semeniuk V 2009 Coastal geoheritage: encompassing physical, chemical, and biological processes, shoreline landforms and other geological features in the coastal zone. Journal of the Royal Society of Western Australia 92: 243-260.
iii. Brocx M & Semeniuk V 2009 Developing a tool-kit for geoheritage and geoconservation in Western Australia. ProGeo News 2009 (1): 5-9.
ix. Brocx M & Semeniuk V 2007 Geoheritage and geoconservation – history, definition, scope and scale. Journal of the Royal Society of Western Australia 90: 53-87.

4. The Geological Society of Australia, a major player in the field of Geoheritage, is not mentioned at all as a stakeholder in the National Heritage Strategy document. This signals a major problem with the document that it is not a well researched and comprehensive in matters of natural heritage.

5. Geoheritage is that aspect of geology and heritage that recognises the value of geological features (including landscape) for reference and type locations, for culture and history, for standards to decipher Earth history, and as modern settings/models where modern Earth processes are extant and operating.

6. Geoheritage is linked to sister disciplines of Geodiversity, Geoconservation, and GeoEducation, and Geotourism.

7. Geoheritage, the recognition of geodiversity, the practice of geoconservation, and use of geoheritage for geotourism is well underway in Europe and many parts of the World (*e.g.*, China, has 241 National Geoparks where geology and geodiversity is recognised as national assets and inscribed in national parks); in this context, Australia lags the World in matters of Geoheritage, and this National Heritage Strategy ensures that Australia will remain lagging.

8. The European Union has a strong geoheritage following, with an organisation of Geoheritage practitioners (ProGEO), and a suite of geoparks.

9. Britain, as the birth place of the Science of Geology, leads the world in concepts of geoconservation and geoheritage.

10. Geoheritage is important in the heritage of a nation and for Geotourism, Science and Education.

**Focusing now on Western Australia:**

11. Western Australia hosts a range of internationally significant geological features, from very small scale to very large scale, such as the Jack Hills zircon crystals (sand sized), Precambrian digitate stromatolites in the Pilbara, 100,000 year old fossilised limestone rocky shore sequences, the largest macrotidal tide-dominated delta in the World, globally the largest and best preserved ria coastline in the Kimberley, and a unique array of linear dunes and associated swale wetlands in the Great sandy Desert (see Brocx & Semeniuk 2007, 2011, and Semeniuk & Brocx 2011).

12. In Western Australia, Margaret Brocx and myself have been developing schema and techniques, e.g., the Geoheritage Tool-kit whereby regions, geosites, and smaller scale features of geoheritage significance can be systematically identified, complied into an inventory, and progressed towards geoconservation as geosites or as geoparks (see Brocx & Semeniuk 2009, 2010, 2011; Semeniuk & Brocx 2011; Semeniuk et al 2011). WRA would suggest that the Geoheritage Tool-kit be adopted as a technique within the National Heritage Strategy so that regions, geosites, and smaller scale features of geoheritage significance are systematically identified, and progressed towards geoconservation for geotourism, Science and Education, and outdoor museum assets of the Nation's geological history.

13. Addressing and documenting geodiversity also is a major step to understanding the nature of Australia's biodiversity, and helping managing and stemming the loss of its biodiversity.

Additional points WRA would like to make in relation to this National Heritage Strategy are:

A large amount of work has been already carried out, much with Federal funding, with regards to identifying sites of natural heritage significance as listed in the Register of the National Estate. Priority needs to be given to accessing the Register to assess from the list what is of National significance. Otherwise the current approach will be 're-inventing the wheel' in relation to natural heritage.

In regards to Geoheritage, there have been sites identified, for instance in Western Australia, by Lemmon et al (1979) and Carter (1987), in Victoria by White et al (2003), and in NSW by Osborne (1998), and by others in South Australia and Tasmania.

The Australian Government heritage division should make partnership contacts with the major scientific societies and NGOs in geology, biology and ecology to plan how to identify and deal with issues of abiotic and biotic heritage. These societies include: Geological Society of Australia (GSA), Australian Maine Science Association (AMSA), Ecological Society of Australia (ESA), and of course the Wetlands Research Association (WRA).

I trust the above is to your satisfaction.

Yours sincerely,

Dr Vic Semeniuk