

Article V. WETLAND CONSERVATION INCENTIVES

The Wetlands Policy of the Commonwealth of the Government of Australia adopted in 1997 mandated the commissioning of a report³¹ by Whitten et. al. which basically aims to conserve and prevent damage to wetlands and to consider incentives such as taxation measures which remove barriers to retaining wetlands and reward the repair of damaged wetlands.

Valuation of wetlands	Total value	Total global flow value
	US\$ per hectare per year	US\$ per year
Estuaries	22,382	4,100,000,000,000
Seagrass/algae beds	19,004	3,801,000,000,000
Coral reefs	6,075	375,000,000,000
Tidal marsh/mangroves	9,990	1,648,000,000,000
Swamps/floodplains	19,580	3,231,000,000,000
Lakes/rivers	8,498	1,700,000,000,000

**This excludes the study's "continental shelf" category since only part of this would be defined as wetland under the Ramsar Convention.*

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1) ECONOMIC VALUE

It has not been recognised by many that wetlands have an economic value. In the past wetlands have been used for cropping or grazing when drained. However cropping has been limited on Evergreen due probably to the (not formally or previously recognised) paucity of agricultural soil in the presence of disturbed acid sulfate soil. This disturbance was caused in the past by the digging of drains. At times the peat fires that burn expose these soils to oxidation and also disturb acid sulfate soil³³. Land subsidence can be an outcome of these events.

- ✓ Each hectare of an Australian Estuary is worth about \$41,000 per year.
- ✓ Giving a dollar value to estuaries allows the community and the decision makers to relate to them in terms they can appreciate.
- ✓ 6 estuaries on the south coast NSW contribute \$532 million to the economy.*

³¹Whitten, S. et al. loc. cit.

³²Constanza et al. 1997. The value of the world's ecosystem services and natural capital *Nature* 387: pp 253- 260

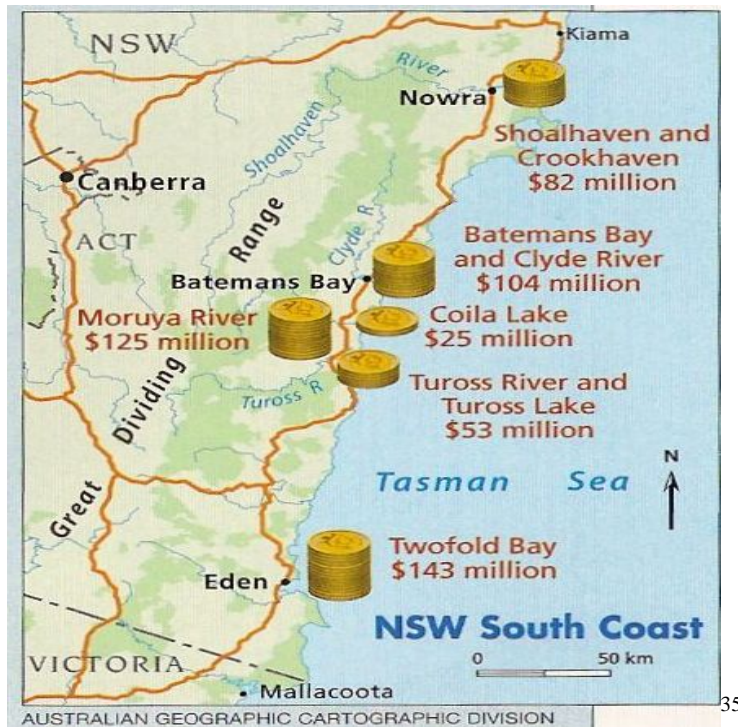
http://www.google.com/search?q=cache:pqdi1WCp2IJ:www.uvm.edu/giee/publications/Nature_Paper.pdf+constanza++Nature&hl=en&gl=au&ct=clnk&cd=

³³ Appendix I EPA Melzer D. 2004 Peat Fire on Evergreen 10 – 18 April 2002 .

- ✓ 30,000 hectares = 1.6 billion dollars.³⁴
- ✓ Anderson Inlet = 2,400 hectares.

*

The diagram below demonstrates the relative values of the 6 NSW Estuaries.



6 NSW Estuaries total contribution to the economy \$523 million

2) WETLANDS AND WATER MANAGEMENT.

Kidneys of the Waterways:

- ✓ Floodplain wetlands operate like sponges absorbing and storing floodwaters.
- ✓ The last places to dry out during periods of drought or low rainfall.
- ✓ Wildlife also relies on these 'oases'.
- ✓ Sediments nutrients and some industrial and urban pollutants are trapped or deposited.
- ✓ Recharging groundwater.
- ✓ The capacity to store and clean water.

Wetlands recreation and eco tourism

- ✓ Boating swimming fishing camping bird watching enjoying nature.
- ✓ Vital fish nurseries and breeding grounds.
- ✓ Tranquility and beauty appreciated by artists and others.

Wetlands and Wildlife

³⁴ The Journal of the Australian Geographic Society 2005 *Australian Geographic* Mar-June p 25

³⁵ *ibid*



© P. McClure Royal Spoonbills on Venus Bay Wetlands

3) ATTRIBUTING DOLLAR VALUES TO THE SERVICES PROVIDED:

The amounts people were willing to pay quoted below were averages based on statistical data from surveys of for example duck shooters and visitors to wetlands.

Recreational values

Willingness to pay varied from \$3.37 to \$54.00 by visitors to Sale Victoria; South Australia; Barmah Forest Vic

Nonuse values - enjoyment

Willingness to pay ranged from \$36.20 in the Barmah Forest Victoria \$40.00 to save wetlands in Perth and \$43.00 for Metropolitan wetlands which included improvements and management.

Other wetland valuation studies

Insect control by Ibises to pastures returned an annual cost saving to farmers of \$675,000 over 100,000 acres.

Fish and crustacean production, mosquito reduction riparian filtering, nutrient filtering and short term flood storage.

Debates about public versus private good in the management of wetlands include for example:

Public Good = carbon sink, flood mitigation; water and vegetation, fishing, education opportunities.

Private Good = Tourism brings accommodation use, use of local food services, grazing, fish agistment.

4) POLICY FRAMEWORKS TO SUPPORT INCENTIVE MEASURES include:

- ✓ Government purchases or by direct coercion to influence wetland owners to manage wetlands and produce what the community desires. This might include direct payment to wetland owners.
- ✓ A market framework that encourages wetlands owners to seek the highest valued use with no incentives.
- ✓ A mixed framework may work out to be the Government monitoring the management of protection of the wetlands or the farmer protecting waterfowl and then providing access to duck hunters.

If Duck hunting is banned then the incentive is skewed. Wetlands may be developed for duck hunting purposes and if too few are developed for conservation, then conservation is skewed.

5) OTHER INCENTIVES

There are other incentive schemes which seek to facilitate changes in wetland management practices which are wide ranging in jurisdiction but mostly involve all Governments - Local State/Territory and Commonwealth. These include the following excerpts from recommendations cited in Whitten, S et al:

Changing Wetland management practices.

- ✓ Land for Wildlife Schemes³⁶.
- ✓ Conservation Covenants for example with the Victorian Trust for Nature.
- ✓ Capacity building NGO's (Non Governmental Organisations) - financially and skill wise without interfering with autonomy.
- ✓ Recognition and ranking of important sites e.g. Ramsar.
- ✓ Community preferences for ecology and local social factors.
- ✓ Allocation of government funds.
- ✓ Resources for management.³⁷

Wildlife Ranching³⁸

- ✓ Conservation and knowledge about suitable wetland-dependent species.

Eco-tourism promotion and infra-structure developments

- ✓ Wetland promotion of tourism including Ramsar sites
- ✓ Facilitation of wetland based tourism on private land
- ✓ Gippsland has very few such available sites
- ✓ Public and Private investment encouraged
- ✓ More resources such as the provision of an officer to facilitate desired outcomes
- ✓ Development of training modules for rural landholder farm management

³⁶ Whitten, S et al. p 103

³⁷ Ibid p 104

³⁸ loc cit

In the following section labeled “Incentive Options” the numbers in brackets E.g. (8) apply to a specific recommendation. No. 8 = **Rates rebates/concessions**. More detailed explanations are included in the document.³⁹

Incentive Options

- ✓ (8) = **Rates rebates/concessions**. Local and regional rate rebating schemes
- ✓ (10 & 11 12) = **Direct and devolved grant schemes E.g. ‘bush tenders’**. Grant programs and ongoing management payments
- ✓ (13&14) = **Removal of perverse tax incentives – Commonwealth and State**. Taxation arrangements include removal of perverse incentives offering improved tax concessions or incentives
- ✓ (15,16,17) = **Providing tax incentives for NGO’s, fee and tax breaks** 3 ways of offering improved tax concessions or incentives
- ✓ (20,21) = **Facilitating change of ownership – voluntary or compulsory** Mechanisms to facilitate the transfer of ownership of wetlands into the hands of those willing to see them managed for conservation and sustainability.⁴⁰

6) THE VENUS BAY WETLANDS PROJECT

The Venus Bay Wetlands Project given the above economic benefits has a vision which has substance. Once a feasibility study with experts has been instigated and a Management Trust established, a wide range of donations to eligible conservation organizations can be utilised by many and deducted from income or business taxes as applicable. The cost to individuals of donating to such organisations is offset while the community benefits from their actions in enhancing nature conservation efforts.

- ✓ **Example 1.** A landowner sells a wetland to a conservation organisation at half the full market value. The landowners are currently unable to deduct the loss made on the sale from tax.
- ✓ **Example 2** A landowner donates a conservation covenant that reduces the property value by a significant amount. The value of this donation is tax deductible and donation reduces future capital gains tax liability.

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QUESTION 29

Would you support initiatives from the community and/or local and state government to improve on the environmental qualities of the area e.g. wetland restoration, planting for wildlife corridors, feral animal control, road kill prevention, the declaration of 'no go' areas?

YES 85% Undecided 9% No 4% No response 2%

³⁹ Whitten, S et al. pp 106-111.

⁴⁰ Whitten, S et. al. al 2002 pp 101 -110

● **RECOMMENDATIONS**

- ✓ Actively support initiatives, financially and in kind, in order to facilitate the Venus Bay Wetland Project
- ✓ Examine and report in concert with TLVBA Inc to the South Gippsland Shire and the Coastal Ward on the economic benefits of ecotourism associated with the Venus Bay Wetlands Project
- ✓ Work together with various government agencies, philanthropic organisations such as Trust for Nature, TLVBA Inc. and the community to set up a Management Trust Fund for the sole purpose of achieving the Venus Bay Wetlands Project
- ✓ Encourage the owner of the rural property⁴¹ to take advantage of tax benefits by implementing a conservation covenant.

Article VI. FLOOD MAPS

- 1) Woorayl Shire Planning Scheme Flood Maps were still available. We sighted them which confirmed that the floods seen with the naked eye on Evergreen had been incorporated on previous South Gippsland Planning Scheme Map 24 ES06
 - a) We viewed the current maps in 2003 held at the Shire Offices. On the subject of flooding on the Evergreen property the flood map stopped in a straight line on the North post and wire fence line.
 - b) Suspicion was aroused as normally flood waters settle according to the terrain. ES06 flood Overlay was revealed to be *absent* from the Evergreen Property on South Gippsland Shire Council Planning Scheme in 2003.^{42 43}

2) West Gippsland Catchment Authority Map

(a)The map below demonstrates, according to the Floodplain and Rural Drainage Manager that Evergreen is subject to Lower Hazard Flooding. The lighter grey area is the flood plain area, the black section is Tarwin River and Anderson Inlet.⁴⁴

(b) The reply to a question put in 15.10 2003 SGSC stated:

“Council is aware of inconsistencies between flood-related controls in the South Gippsland Planning Scheme and recent flood maps for the area. Council will, in conjunction with the **West Gippsland Catchment Management Authority**, seek to amend

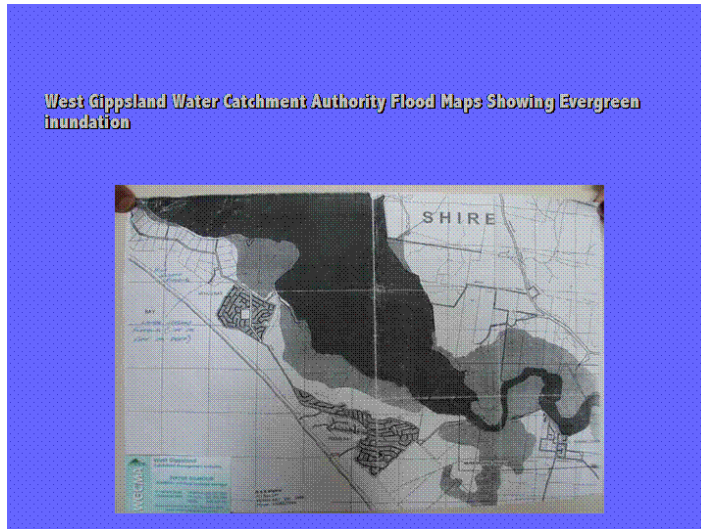
⁴¹ See reference to rural property Evergreen on pages 6-8 this submission)

⁴² South Gippsland Shire Council Planning Scheme [SGSC] 2003 Maps No 24ESO3 Map 23 24ESO6

⁴³ A version of this map is page 37 of the Connell Wagner Settlement Paper stated to be from the DSE Planning Website.

⁴⁴ SGSC 2002 *South Gippsland Shire Council Planning Scheme* Maps no 24ESO3 and Map 23 24ESO6

the Planning Scheme to include the most up-to-date flood information available. Should any development proposals be received by Council for assessment prior to the Planning Scheme being amended (**that is, in areas suspect to be subject to flooding, but not as such indicated on the Planning Scheme Maps**), such proposals will be referred to the West Gippsland Catchment Management Authority for their comment and input.⁴⁵



- a) While we are satisfied that the flood mapping has been restored to the Evergreen property at least on Figure 5 of the Connell Wagner Draft Plan,⁴⁶ we are still concerned that the mapping did not include the area at the Jetty end. The following photos demonstrate the evidence required to address this omission from the maps.
- b) NB Photos of this flooding on Evergreen are absent in the Settlement Papers although a request to any of the local weekend or permanent residents would have resulted in their provision.

The following photos reveal storm surges and flooding of the jetty car park and Evergreen.

⁴⁵ South Gippsland Shire Minutes 15.10.2003.

⁴⁶ South Gippsland Coastal Urban Design Frameworks Newsletter and Feedback Venus Bay Brochure Figure 5



© S. Zaitsev Flooding on Evergreen 2001 over the car park and beyond

2) Establish Extent Of Liability

“A question should be put to the South Gippsland Shire Council and to potential developers and the State Government about establishing the extent of liability. Who is liable for damage resulting from inappropriate development on flood plains? ⁴⁷

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Question 9

Would you support new subdivisions on areas surrounding Tarwin Lower and Venus Bay that are known to be susceptible to flooding? (Designated floodplains – (ESO6)

Yes 9% Undecided 6% NO 83 % No response 2%

• RECOMMENDATIONS

- ✓ Ensure that the SGSC Planning Scheme shows the return of the ESO6 Overlay to the Evergreen Property
- ✓ Identify future predictions of the effects of climate change by using the photos.

⁴⁷ Sumner and Harley 1990 Sumner, S. Harley, C. 1990, p25 *The Greenhouse Effect: Implications of sea level rise for land use suitability of low lying areas surrounding Anderson Inlet*. Carlton: Melbourne University