

Environmental Protection Act 1986

SHIRE OF BUSSELTON

Appellant

and

ENVIRONMENTAL PROTECTION AUTHORITY

Respondent

**RECOMMENDATION OF THE APPEALS COMMITTEE APPOINTED
BY THE HONOURABLE THE MINISTER FOR THE ENVIRONMENT
PURSUANT TO SECTION 108 OF THE ENVIRONMENTAL PROTECTION ACT**

The Parties

1. The Appellant is a local government incorporated under the *Local Government Act 1995* and the Respondent is a statutory entity created by the *Environmental Protection Act 1986* ("the Act") charged with the assessment of proposals falling within the scope of that Act.

The Proposal

2. The Appellant proposes to construct a made road across the Vasse Estuary within its district on the alignment of Ford Road. That proposal encompasses the construction of a roadway and associated infrastructure across the Vasse Estuary to the east of the Busselton Central Business District, linking Bussell Highway and Causeway Road south of the Estuary with Peel Terrace and Layman Road to the north. From north to south the proposed road would pass through approximately 300 metres of estuarine vegetation, including the main channel of the upper Vasse Estuary, and approximately 900 metres of open pasture ("the Proposal").
3. There is an existing gazetted roadway in place, the northern-most portion of which has been formed and filled to a distance of approximately 250 metres. The Proposal contemplates filling and sealing the balance of the road, together with the construction of a bridge with a span of some 75 metres. Other than the northern portion, the road is at present unformed,

unsealed and apparently subject to inundation during winter months, which makes it untrafficable.

4. The present road reserve is fenced on either side and has a 22 kV overhead power line aligned along its entire boundary.
5. The physical appearance and general specifications of the Proposal are set out in Annexure A.

The Appeal

6. It is relevant to establish the jurisdiction of the Appeals Committee and the process by which this appeal comes to be considered by it.
7. In June 1999 the Respondent published its report on the Proposal (Bulletin 940) which identified relevant factors and concluded that the Proposal was environmentally unacceptable.
8. The Respondent was requested to re-assess its report and, subsequently, published Bulletin 975, which effectively reiterated the conclusion reached in Bulletin 940.
9. On or about 12 May 2000 the Appellant sought to appeal against Bulletin 975 to the Minister and, by a process not clear, then sought to withdraw that appeal. It is not the province of the Appeals Committee to determine what occurred in relation to the first appeal or any subsequent reconvening of it.
10. Subsequently, the Appellant requested that the Minister appoint the Appeals Committee in accordance with the requirements of section 45(3) of the Act.
11. The scheme of the Act in this context is as follows:-
 - (a) the Respondent prepares a report pursuant to section 44(1);

- (b) Bulletins 940 and 975 constituted reports for the purposes of that section;
 - (c) the relevant Bulletin is provided to the proponent (the Appellant);
 - (d) after the publication of the relevant report the Minister is required to consult the relevant decision making authority and agree upon the terms of the report as to whether or not the Proposal may be implemented;
 - (e) by section 45(3) if there is no agreement following that consultation the Minister appoints an Appeals Committee "to consider and report to him on the matter or matters in dispute";
 - (f) by section 45(4), sections 106 to 110 inclusive apply to a matter referred to an Appeals Committee as if that matter were the subject of an appeal from a decision of the Minister.
12. It is possible to make sense of this procedure in this context only if the Appellant is considered as the decision making authority for the purposes of section 45(1)(b) of the Act. The term "decision making authority" is defined to mean a public authority empowered under, *inter alia*, a written law to make a decision in respect of any proposal.
13. The importation by section 45(4) of the Act of sections 106 and following sections includes section 109(3), which provides that an Appeals Committee shall report to the Minister on its findings and recommendations. The Minister allows or dismisses the appeal either in accordance with that finding and recommendation (if the appeal is from a decision of the Minister) or having regard to that finding or recommendation if the appeal is from a decision other than a decision of the Minister.
14. Having regard to section 45(4), in this case the decision of the Minister must accord with the recommendations of the Appeals Committee.

15. Pursuant to section 109, the Appeals Committee is obliged to consult with the Chief Executive Officer and the Appellant and is entitled to consult with such other persons as it considers necessary. It is authorised to conduct its enquiries in whatever manner it considers appropriate but, pursuant to section 109(4), it is not able to make any recommendation "that conflicts with any approved policy or with any standard prescribed by or under the Act".
16. The Appeals Committee sought information from each of the Appellant, Respondent and CALM and received a presentation from the Respondent. The Committee was also provided with the various documents referred to in this recommendation by one or more of the Minister's Appeals Convenor, the Appellant or the Respondent.

History of the Proposal

17. In or about 1991 the Appellant produced a drainage concept plan for Ford Road which appeared to contemplate the construction of the relevant section of roadway and the accommodation of the estuarine waters by slab linked box culverts.
18. The proposal was the subject of a press release and concurrent advertising.
19. In February 1993 the Council of the Appellant considered the results of a survey of the residents of its East Urban ward. The extrapolated data indicated an estimated average daily traffic movement of 1,000 vehicles on the road, but with a number of objections referring to the perceived effect on wildlife.
20. In April 1993 additional data was made available to the public by the Appellant, expressed to be the final phase of a public consultation program suggested by the Respondent in December 1991. The additional data indicated:-
 - (a) the reasons why the Appellant sought to construct the road;
 - (b) the reasons for not proceeding;

- (c) comments on certain precautionary measures to be taken to address perceived difficulties.

21. The reasons advanced by the Appellant to re-establish the road were:-

- (a) to provide a more direct and safer traffic route between East Busselton and the Bussell Highway/Vasse Highway;
- (b) the existence of an historic road reserve;
- (c) the need to cater for increased traffic flow into the east side urban area;
- (d) the reduction of town traffic flows.

In support of the Proposal, it was stated that the road could be constructed to "*lie softly on the landscape*", the road would not interfere with the application of the Ramsar wetlands agreement and the river formation to the west of Ford Road differs to that found to the east.

22. The reasons for not proceeding were expressed to be :-

- (a) the road is not necessary;
- (b) the road will cross a wetland/estuary/river;
- (c) the road would pollute the wetland with oils and vehicle emissions;
- (d) the road could be constructed elsewhere.

23. Rebuttal of the reasons for not proceeding was included in the summary. It is also apparent, from the nature of the material appended to that letter, that the project did not then encompass the bridge now understood to form part of the Proposal but, rather, consisted of oversize and overheight box culverts some 1.8m².

24. In April 1993 the East Busselton Traffic Management Ford Road Concept Plan was produced by the Appellant which outlined:-

- (a) the reasons why the Appellant needed to provide additional road access to East Busselton;
- (b) the reasons for the selection of Ford Road;
- (c) the alternatives to the construction of Ford Road;
- (d) the reasons put forward for not proceeding with the project.

25. Appended to the Ford Road Concept Plan was an environmental assessment report dated 21 April 1993 produced by LeProvost Environmental Consultants ("the Consultants"). The conclusion drawn by the Consultants (at page 9) is that:-

"Recommendations have been made which either resolve identified concerns, eg flooding, or ensure that potential adverse impacts are minimised, eg the visual presence of the road, inevitable fauna casualties and effect on breeding in proximity to the road

As a result of the adoption of these recommendations, the identified impacts can be reduced to manageable levels according to the criteria which have been used by the authorities in recent assessments. The EPA report and recommendations on the proposed extension of the Kwinana Freeway between Forrest and Thomas Roads is a relevant example. This road, which crosses a number of wetlands and groundwater protection areas, shares many of the potential impacts which are associated with Ford Road, although in the case of Ford Road the predicted traffic volumes are much smaller."

26. The Concept Plan appended a submission or petition signed by a significant number of people, apparently supporters of the project.

27. Following advertising in June 1993 by the Respondent, the Respondent provided a summary to the Appellant of the submissions received by it on the project on 30 July 1993. A number of concerns were raised in the response, being:-

- (a) the Concept Plan did not address the question of possible environmentally deleterious effects on the estuary circulation patterns upstream of the proposed Ford Road extension and the management strategies to ameliorate them;
- (b) the Concept Plan did not adequately address alternatives to the construction of Ford Road;
- (c) the area has high conservation status;
- (d) no attempt had been made to enhance the conservation values of the wetlands system;
- (e) there was insufficient information in relation to possible affected bird species;
- (f) fauna habitat may be compromised;
- (g) there was insufficient detail on the landscape design;
- (h) the traffic study undertaken by the Appellant was inadequate;
- (i) there was insufficient detail as to the construction of the road.

28. By an undated 8 page document the Appellant prepared a response to those submissions outlined by the Respondent. That response can be summarised as follows:-

- (a) estuary circulation patterns: it was estimated that no constriction of flow would occur;
- (b) alternatives: other options are unsatisfactory;

- (c) conservation status: the conservation status of the area is recognised and will be protected;
- (d) enhancement of conservation values: the Appellant is committed to sound planning and management of the estuary;
- (e) waterbird use: there is little data on waterbird breeding for the estuary and the Ford Road area lies outside the relevant study data area. The perceived impact was described as manageable;
- (f) bird disturbance and protection measures: it was acknowledged that there may be some disruption to breeding by some species in the immediate vicinity of the road reserve but there was no sufficient data to assess the magnitude of impact. A perceived low rate of bird deaths had occurred in comparable areas. It was acknowledged that it is not possible to prevent all traffic deaths;
- (g) fauna habitat: the perceived impact by road construction was estimated to be minimal;
- (h) landscape: further work needed to be done to finalise landscape design and the term *"lie softly on the landscape"* was used to indicate that high road embankments would not be constructed;
- (i) traffic study: the perceived need for Ford Road will increase. This was expressed to be not so much a need for Ford Road but the need to reduce traffic in central Busselton. The construction of Ford Road was stated as having been identified *"as having less impact on the social environment (of central Busselton) than a major reconstruction of the road network through the town centre, and less environmental impact than the construction of the new road and bridges through other parts of the Estuary."*;

- (j) road design: the estimated highest fill was to 1.45m AHD with the 40m long floodway section located between the two channels at 1.25m AHD.

At this stage, it is apparent that the project still encompassed the use of box culverts rather than a bridge and, therefore, did not conform to the details of the Proposal outlined in paragraphs 2 and 3 of this Recommendation.

- 29. In April 1997 the Consultants produced the Ford Road Environmental Study. The study was expressed to include:-

- (a) fauna assessment;
- (b) flora assessment;
- (c) hydrology.

- 30. When dealing with fauna, the study noted that five surveys had been undertaken during the winter, spring and early summer of 1996. It was noted that none of the waterbirds observed were of special conservation significance, defined as "*rare and endangered or otherwise listed as threatened*". The study noted, however, that the list of birds observed included "*several species which are unusual close to an urban area.*".

- 31. In its study findings, the Consultants made the following assertions:-

- (a) **Hydrology:** a number of adverse impacts of culverted structure were identified which would require additional culverts or a bridging structure. It was concluded that a bridging structure would reduce the hydrological impacts more than culverts and consequently culverts were considered to be at best a compromise solution.
- (b) **Flora:** a weed control program would need to be instituted in conjunction with any construction work, there being an existing degraded area downstream of the

northern (partially constructed) portion of the road alignment perceived to be as a consequence of reduced water flow.

- (c) **Fauna:** upstream of Ford Road is an important area for breeding with many birds and broods travelling both upstream and downstream of the proposed alignment.
- (d) **Design and Management Considerations:** the existing filling of the northern end of the road reserve has impeded surface flow which will be required to be improved.

32. The main potential impact of upgrading Ford Road was said to be through the alteration of flow rates and the disruption of movement of birds along the watercourse. The potential aspects were expressed to include:-

- (a) some habitat loss;
- (b) disruption of movement of waterbirds, including broods of young;
- (c) flooding of nests upstream of the road due to restriction of water flow;
- (d) alteration of foraging habitats downstream of the road due to increased flow rate;
- (e) increased mortality of waterbirds due to collision with vehicles; and
- (f) collisions with overhead power lines.

33. These impacts were expressed to be capable of management, including:-

- (a) minimising habitat loss by avoiding intrusion of fill into wetland areas;
- (b) designing bridge/culvert structures so that there is no alteration to the rate of flow of water;
- (c) making provision for bird life to pass under the road;

- (d) making it difficult for water fowl to access the road surface by fencing;
 - (e) encouraging fly water fowl to fly above the height of traffic on the road by screen planting of the verges;
 - (f) bridge railing used to minimise impacts with motor vehicles on bridged sections; and
 - (g) power lines placed under the road through exposed (unplanted) areas.
34. The Consultants indicated that the ideal road upgrade would be a bridge spanning the channel at the road alignment of a distance of some 50 to 75 metres. It should also be of a height sufficient to allow unimpeded movement of larger waterbirds under the structure. It was also noted that the road should not provide increased uncontrolled access to the area by dogs, children and other potentially disruptive sources.
35. The bridge design included as Annexure A to this Recommendation appears as an appendix to the Consultant's study and is described in the text of the study as "a conceptual design" which would meet the criteria set out in the study.
36. On 25 September 1997 the Department of Conservation and Land Management ("CALM") expressed its view to the Appellant that Ford Road should be closed and the landfill placed on the alignment on the northern side of the Vasse Estuary should be removed. Amongst other comments made by CALM were:-
- (a) the wetlands in the vicinity of Ford Road provide a very valuable wildlife habitat, especially for waterbirds;
 - (b) the suggested bridge width of 50 to 75 metres is insufficient;
 - (c) to prevent constrictions on water flow, the bridge span would need to be in the order of 130 metres;

- (d) the study does not address issues of stormwater runoff and pollution containment.
37. It is apparent, by this stage, that the bridge detail contained in Annexure A had been adopted by the Appellant as the preferred means of construction (ie as a replacement for the box culverts). The inclusion of the plan in Annexure A as part of subsequent Bulletins produced by the Respondent, together with further clarification of the specifications of that bridge, indicates that the Proposal had undergone an evolution, at least to that extent, as a consequence of the input of the Consultants and consideration given by CALM and others. This view was confirmed by Messrs Bettink and Swift, officers of the Appellant, on behalf of the Appellant in advice given to the Appeals Committee.
38. In a chronological sense, the next development was the publication by the Respondent of Bulletin 940 in June 1999. Although identifying a number of environmental factors, the report focused only upon waterbird habitat and recommended to the Minister that the Proposal not be implemented. The bridge design suggested by the Consultants was included in this Bulletin as Figure 4.
39. Subsequently, the Respondent was asked to re-assess the Proposal and in May 2000 Bulletin 975 was published which:-
- (a) made reference to Bulletin 940;
 - (b) appeared to have been prepared in response to the appeal and the requirement by the Minister for further assessment;
 - (c) recommended that the western boundary of the Ramsar site should be extended to include additional wetlands of importance;
 - (d) acknowledged that the proposed road could be designed to minimise direct impacts and ongoing risks but even with best design would still "*present a degree*

of risk to waterbirds, particularly from traffic movement and potential for water quality degradation";

- (e) considered that subjecting a Ramsar listed wetland to such risks would be inappropriate;
- (f) noted the then pending operation of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* ("EPBC Act").

40. By letter dated 12 May 2000 the Appellant resolved to appeal against Bulletin 975 on the basis that:-

- (a) the significant impacts identified by Bulletin 975 were overstated;
- (b) there is minimal impact upon wetland vegetation;
- (c) measures are able to be put into place for stormwater and pollutant spill trapping and treatment;
- (d) the Proposal, if implemented, would reduce the use of fossil fuels;
- (e) there is an advantage in providing alternative emergency access and evacuation routes for the central Busselton area.

41. The letter notes that the waterbird issue "*would be addressed by using a bridge construction instead of culverts to accommodate waterbirds walking, wading and swimming*" and that:-

- (a) stormwater, nutrient and pollutant traps would be constructed;
- (b) no natural vegetation would be affected by the Proposal;
- (c) unless the road is constructed there will be no incentive for the Appellant to improve the area;

- (d) community need for the road and consequential economic benefit has been demonstrated.
42. The appeal papers also go on to note that there would be no significant impact as referred to in the EPBC Act.
43. By a letter dated 26 May 2000 the Appellant noted that spills and treatment of stormwater would be managed by longitudinal swale drains constructed along the road alignment which would also service existing stormwater drains, which discharge into the Estuary at present.
44. The Department of Environmental Protection advised the Minister pursuant to section 106(a) of the Act. All of the appeal points raised by the Appellant were recommended to be dismissed.
45. By letter dated 8 June 2000 CALM advised the Minister that:-
- (a) if an accidental oil spill occurred it would have an impact upon fringing wetland vegetation in addition to water quality;
 - (b) there are no existing safety measures which would limit the extent of damage from an oil spill downstream;
 - (c) the existing traffic management study is outdated.
46. By letter undated but received by the Appellant on 23 January 2001 the Regional Manager of CALM noted concern in relation to raised water levels in times of peak flow due to constriction of flow and that this was only one of several concerns raised by CALM. CALM indicated that water levels would not be a significant issue in determining whether a bridge span would need to be 75 metres or 130 metres but that advice from the Water & Rivers Commission confirms the suggestion of CALM that a 130 metre bridge span will be required to ensure a dry shoreline for fauna movement under a bridge.

Ramsar Site

47. Immediately to the east of the present Ford Road alignment is a Ramsar wetland. Bulletin 975 of the Respondent, at page 6, indicates that it is intended to progressively include wetland areas to the west of the proposed road within the conservation and reserve system and, thereafter, recommend that this land be included within the declared Ramsar site.
48. Information provided by the Respondent to the Committee at the request of the Committee indicates the present status of the Vasse-Wonnerup Ramsar site. At present, the site extends to the eastern boundary of the Ford Road road reserve and it is proposed to expand upon that site by the creation of an extension (nominated in 2000) which sits to the north of the existing area but does not extend westward to the road alignment (if, indeed, such expansion has not already been finalised).
49. The EPBC Act is now in effect. On 19 July 2000 the Commonwealth Minister for the Environment gave notice as required under section 45(3) of the EPBC Act that he intended to develop a draft bilateral agreement with the State of Western Australia under Division 2 of Part 5 of the EPBC Act.
50. To date, however, the State of Western Australia has not entered into a bilateral agreement with the Federal Government and, as a consequence, any proposal which triggers the EPBC Act will be required to be dealt with by Environment Australia under the provisions of the EPBC Act.
51. At section 16 of the EPBC Act there is a requirement for approval of activities with a significant impact on a declared Ramsar wetland. In particular, a person must not take any action that:-
- (a) has or will have a significant impact on the ecological character of a declared Ramsar wetland; or

- (b) is likely to have a significant impact on the ecological character of a declared Ramsar wetland.

52. At section 16(2) a list of exceptions to those requirements is set out. None of those exceptions apply in the present circumstances.

53. Environment Australia has published '*EPBC Administrative Guidelines on Significance*', July 2000. The Guidelines were produced to determine whether an action has or will have or is likely to have a significant impact on a matter of national environmental significance under the terms of the EPBC Act.

54. The criteria specified in the Guidelines note that an action has or will have or is likely to have a significant impact on the ecological character of a declared Ramsar wetland if it does, will or is likely to result in:-

- (a) areas of the wetland being destroyed or substantially modified, or
- (b) a substantial and measurable change in the hydrological regime of the wetland - for example, a substantial change to the volume, timing, duration and frequency of ground and surface water flows to and within the wetland, or
- (c) the habitat or life cycle of native species dependent upon the wetland being seriously affected, or
- (d) a substantial and measurable change in the physico chemical status of the wetland - for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland, or water temperature which may adversely impact on biodiversity, ecological integrity, social amenity or human health, or
- (e) an invasive species that is harmful to the ecological character of the wetland being established in the wetland.

55. In the context of local government, the Guidelines note that a proposed new road through a World Heritage Area or Ramsar site should be referred. No specific reference is made to circumstances such as that under consideration at present.

Relevant Issues

56. The concerns of the Committee when reviewing the material and taking advice from the Appellant and the Respondent can be summarised as follows:-
- (a) design specifications;
 - (b) manner and extent of public consultation;
 - (c) continuation of existing position;
 - (d) currency of available research data;
 - (e) relevance of non-environmental factors;
 - (f) interpretation of the term "significant effect" and application of the precautionary principle.

Design Specification

57. Comment was made earlier in this paper about the process by which the Proposal was refined from an original design encompassing box culverts to the present form, including a bridge with a span of some 75 metres and a standard clearance above mean water height of 2 metres.
58. While it may be argued that the Proposal now under consideration is:-
- (a) in many respects quite different to the Proposal originally formulated; and
 - (b) still short of relevant detail, such as drainage specifications,

the Committee has preferred to consider the Proposal on the basis that it is a proposal to construct the roadway on the Ford Road alignment, with the actual method and means of construction to be the subject of review and, where appropriate, the imposition of conditions. The Committee has preferred not to view this change in the nature of the Proposal as establishing a new proposal.

59. Had the Proposal remained in the form of a road serviced by box culverts then there is little doubt that the Committee would not support the Proposal. The weight of objection to a proposal of that nature from a range of entities, including the Consultants, would be fatal to such a proposal.
60. There is a lack of unanimity, however, as to the required minimum specifications for the Proposal in its present form. The Appellant believes that a bridge span of 75 metres will be sufficient to ensure:-
- (a) water circulation;
 - (b) protection of fringing vegetation;
 - (c) 'dry land' movement of waterbirds.
61. However, from discussions with Messrs Bettink and Swift it also appears that the distance of 75 metres has been arrived at, at least in part, as a consequence of a cost benefit analysis. The methodology underpinning the cost benefit analysis was not demonstrated to the Committee but in any event appears to be of marginal relevance for the purposes of the Committee.
62. There is a suggestion in the correspondence that each of the Water & Rivers Commission and CALM believe that a 130 metre bridge span would be required to ensure dry shore line for fauna movement under a bridge (refer letter received by the Appellant from CALM,

23 January 2001). This in turn relates back to correspondence from CALM to the Appellant in 1997 where it was stated that:-

"The Busselton Regional Flood Study (Water Authority of Western Australia, 1987; Maps AF08-4-6 and AF08-16-2) show the Vasse River Channel to be 120 metres at Ford Road. This is supported by photographs of typical winter levels taken in June 1996 and from field observation. The report on page 6, refers to water flowing over about 150 metres of the Ford Road alignment."

63. In response to this assertion, Messrs Bettink and Swift advised the Committee that whilst the width of the water body at Ford Road at times of peak flow is of that magnitude, the water does not in fact flow but is at the same level on both sides of the Ford Road alignment. Further, it was stated by them that there have been instances of 'reverse flow' (ie water flowing upstream as a consequence of high tides and increased volumes of water from a number of sources in the estuary).
64. It is difficult for a layperson to accept that, at least at some stage, a water body of some 150 metres in width of this nature and in this location will not flow in one or other direction at some stage and that a bridge span of less than maximum width will not have a constricting effect to a greater or lesser extent.
65. However, there is no evidence of conclusive research and analysis of river flow or the consequences of constriction to a greater or lesser extent upon a range of factors, including waterbirds, vegetation and water quality.
66. Indeed, the absence of precise and current information in this and a number of other respects is a matter commented on later.

67. With respect to the height of the bridge, the advice received from Mr Bettink is that the height is estimated to be 2 metres from the height of the waterbed with a clearance of some 0.5 of a metre between the anticipated 100 year flood level and the bridge.
68. The Committee was also advised by Mr Bettink that a bridge of the length suggested by CALM or any increase of any significance in the height of the bridge would make the exercise uneconomic.
69. As noted in paragraph 43, spills and treatment of stormwater would be managed by drains, the details of which are not yet in existence.
70. Although it is apparent that some planning has been made to accommodate drainage generally, there is a lack of specificity as to the placement of the drains and, in particular, the design parameters of the road and bridge in the event of a major incident leading to a spill of contaminant.

Public Consultation

71. There appears to have been only a modest level of public consultation in relation to this proposal. In the view of the Committee this is not fatal to the Proposal because of the active role undertaken by the Respondent, the Water & Rivers Commission and CALM in relation to relevant aspects of the Proposal.
72. The only significant public consultation which appears to have been effected by the Appellant was that in relation to the Ford Road Concept Plan in 1993. In the view of the Committee, a proposal such as this ought to receive a more widespread degree of public consultation.

Continuation of Existing Position

73. The Committee was advised by Messrs Bettink and Swift that the existing power lines will remain *in situ* indefinitely and will be required to be serviced. Further, it is unlikely, at

present, that the existing partial construction and fill at the northern extension of the road alignment will be rectified or that there will be any diminution of the occasional traffic using the road alignment, especially during drier months. On undertaking a view of the site it was apparent that, in addition to the partial construction of the road alignment at its northern extension, there has been apparent unauthorised dumping of fill and evidence of additional human activity, especially at the northern extension of the road alignment.

74. If the Proposal does not proceed, there is unlikely to be any significant improvement in the short to mid term in the current state of affairs.

Currency of Available Research Data

75. The traffic study made available to the Committee is now some eight years old. Although the demand for road construction is neither the sole nor dominant concern of the Committee, the perceived need for the road may be a factor to be taken into account by the Committee when determining the competing factors affecting this appeal, subject to the constraints noted below at paragraph 79.
76. In advice provided to the Committee by Messrs Bettink and Swift, it was indicated that not dissimilar exercises have been undertaken elsewhere within the district of the Appellant (in the locality of Broadwater) with no apparent deleterious effects.
77. It is the view of the Committee that this work may have produced additional studies in relation to the effect on fringing vegetation and fauna in this area which may be of assistance.
78. It is also possible that additional extrinsic research has been undertaken in recent years on relevant issues such as water circulation, water quality and fauna in this area which may be of assistance.

Relevance of Non-Environmental Factors

79. This appeal concerns itself with the jurisdiction of the Minister under the provisions of the Act. In *Coastal Waters Alliance of Western Australia (Inc.) v Environmental Protection Authority* (1996) 90 LGERA 136 the Full Court of the Supreme Court of Western Australia considered a proposal said to have a significant effect on the environment and the extent to which economic and commercial considerations were relevant when considering that proposal.
80. In that case, a proposal for sand dredging was referred to the Respondent, which did not consider the proposal to be environmentally acceptable but decided to change its approach to resolving the conflict between the need for shell sand resource and protecting the environment.
81. The Court held that:-
- (a) the conditions and procedures as to implementation of the proposal and any recommendations made in the report prepared by the respondent were to be directed to environmental protection;
 - (b) the meaning of the term "environmental" as drawn from the Act can only be applied to living things as they exist in a place, which place has surroundings. The surroundings to be taken into account are the physical, biological and social surroundings (which last, in the case of "man", are aesthetic, cultural, economic and social) and the interactions between all of those, that is, of the living things and the nominated surroundings;
 - (c) economic loss and extraneous commercial considerations are not relevant environmental factors. Such factors as the State's obligations and the proponent's rights under relevant legislation, the proponent's desire for access to mine shell sand resources to fulfil its contractual obligations, the employment opportunities

of its workforce and the State's obligations to provide an alternative supply of shell sand to the proponent did not form part of the relevant "surroundings" of any living thing in the place the subject of the proposal and so were not relevant to a report on environmental factors;

- (d) by taking into account commercial considerations and not limiting its report to "environmental factors" the EPA had exceeded its powers, objectives and functions under the Act;
- (e) the report of the EPA was fundamentally flawed in so far as it attempted to find a political or commercial compromise of a kind which the relevant Ministers themselves should be responsible for finding with the assistance of other advisers, having received a report on environmental factors;
- (f) the Minister's statement that the proposal may be implemented was also flawed to the extent that it relied upon such a report.

82. Here, as the Committee is effectively the decision maker, it is not open to find a compromise of the kind referred to in the *Coastal Waters Alliance* case and it is the view of the Committee that the Committee must make its determination on environmental factors. The need or otherwise for the road will be relevant, in the view of the Committee, only if a road must be built and there will be an environmental impact regardless of where that road must be built. The fact that this is the preferred option to relieve traffic congestion in the Central Business District of Busselton and that it may be supported by residents of the East Wards of the Appellant does not of itself allow the Committee to deviate from its role to consider environmental considerations as that term is referred to in *Coastal Waters Alliance*.

Significant Effect of Proposal

83. The language of both the Act and the EPBC Act refer to the term "significant effect" (see, for example, section 38(1) of the Act). The term "significant effect on the environment" has not been analysed judicially in Western Australia in any detail. However, in *Chapple v Environmental Protection Authority* (Unreported, Western Australian Supreme Court (Full Court) 1879 of 1994, 27th April 1994) the term was interpreted to mean that the proposal is likely to cause some change in the environment.
84. In *Booth v Bosworth* [2001] FCA 1453 the Federal Court granted an injunction under the EPBC Act to restrain the mass culling of flying foxes by a large electric grid protecting an agricultural enterprise. In granting the injunction the Court made a number of findings in relation to the effect of the operation of the grid and, in particular, that its operation had a significant impact on the population of flying foxes in the area. The Court found that the probable impact of the operation of the grid, if allowed to continue on an annual basis during future seasons, would be an ongoing dramatic decline in the flying fox population leading to a halving of the population in less than five years and causing it to become an endangered species in that area. As a consequence, the continued operation of the grid was found to have or be likely to have a significant impact on the world heritage values of the area. The Court also analysed the meaning of the term "world heritage values", finding that an action taken outside a world heritage area can be regulated under the EPBC Act if it has, will have or is likely to have a significant impact on world heritage values. This aspect would be likely to apply to Ramsar wetlands.
85. However, having regard to the manner in which the term was considered in *Booth v Bosworth*, the Committee doubts that the implementation of the Proposal would have a significant impact on the Ramsar wetland, subject to the qualifications and conditions noted later.

Precautionary Principle

86. The precautionary principle is a well known and generally understood principle applicable in environmental evaluation. It means that measures to prevent or to forestall damage to the environment *"should not be postponed merely because of the lack of full scientific certainty as to the need for such measures. That is, when assessing a development proposal as to which a relevant authority has an incomplete understanding of the risks to the environment, it is appropriate to have regard to such risks, and especially long term risks, when assessing the proposal even though it is not known that they will eventuate. Relevant risks include the risk of medium or longer term harm emerging as a result of consequences of the development that are not presently known. In such a case the risk of harm from impacts not presently known must be carefully evaluated. In other words, one should proceed with care when the environmental impacts of a proposal are not all known. It is appropriate to take measures that will forestall or prevent the risk of damage to the environment from impacts that are not presently known or not fully understood."* (See *Tuna Boat Owners Association v DAC* [2000] SASC 238).
87. Reliance on the precautionary principle by each of CALM and the Respondent is apparent from the manner in which the responses have been formulated. For example, notwithstanding that a number of issues have been addressed as between CALM and the Appellant, CALM's most recent pronouncement on the subject is expressed in general terms, namely:-

"..... it remains CALM's view that the best option for protection of the conservation values for the Vasse-Wonnerup Wetland System is that Ford Road should be closed and that the landfill placed on the alignment on the northern side of the Vasse Estuary should be removed."

Summary

88. In essence, the position of the Committee can be summarised as follows:-

- (a) it is satisfied that the terms of the Proposal are as generally set out in Bulletin 975, a position accepted by the Appellant;
- (b) as the Proposal is to effect a means of constructing a road along the Ford Road alignment, the process by which that outcome is to be achieved (ie by roads, bridges or culverts and drainage facilities) may form part of this appeal.
- (c) there is incomplete detail on a number of relevant aspects of the Proposal, in an environmental sense, namely:-
 - (i) the correlation between likely peak water flows, the length of the bridge proposed to be constructed, the constriction of water flow which may eventuate, both upstream and downstream and the retention of dry land crossing between the eastern and western portions of the Estuary;
 - (ii) the interrelationship of fauna activity, particularly waterbirds, between that portion of the Estuary lying to the west of the Ford Road alignment and that portion lying to the east of it, including the Ramsar wetland;
 - (iii) the detail required to be developed in relation to:-
 - (1) minimisation of adverse impacts during construction,
 - (2) contaminant entrapment and treatment;
 - (3) the remediation of the existing unauthorised fill; and
 - (4) limitations on access, as foreshadowed in paragraph 34.

89. There are additional residual concerns held by Dr Davis that, notwithstanding one or more of the discrete elements of risk identified during the process being addressed, the cumulative effect of a range of issues (in conjunction with such extrinsic matters as the prospect of climate change, the cumulative effect of increased urbanisation and the dearth

of recent research) may produce mid to long term consequences not presently capable of identification and addressing. This is, in effect, a reservation based on the precautionary principle.

90. The protection of the Ramsar wetland and the sensitive wetland which lies to the west of the Ford Road alignment is of paramount concern to the Committee.
91. Having regard to the concerns expressed above, the application of the precautionary principle (which appears to underpin the position adopted by the Respondent and CALM) would indicate that the appeal be refused.
92. However, against that is the fact that the existing state of affairs with respect to the partial construction of Ford Road and intermittent access to and use of the road reserve is most unsatisfactory. At least in part, the existing portion of constructed roadway and unauthorised fill appears, on the findings of the Consultants, to be responsible for the degradation of fringing vegetation and decrease in water quality. Necessary movement on the road alignment (for example, the servicing of the existing power lines) together with unregulated intermittent public access to and use of the road reserve is likely to be damaging to that environment and carries with it the risk of further pollution and consequential concerns in the future. These issues will be ameliorated by a co-ordinated and comprehensive approach to the construction of the road and associated remediation and treatment works.
93. The issue, therefore, is whether the Proposal ought to be approved but subject to a range of conditions addressing these concerns (expressed as conditions precedent, failure to satisfy which will lead to the Proposal not proceeding) or, alternatively, to refuse the appeal on the basis that there are too many issues left to be determined and which are presently incapable of formulation as appropriate conditions. In other words, to require the Proposal to be approached afresh.

94. It is the view of the Committee (acknowledging the serious reservations held by Dr Davis) that the Proposal should be approved but subject to a number of conditions precedent, addressing the issues generally noted above. The matter is finely balanced and it has not been easy to achieve a resolution of the problem. Had there been no existing road reserve, partial construction, fill or power lines then it is most likely that the Proposal would not be recommended to proceed. The existence of those factors, however, tips the balance but only on the basis that the concerns enumerated in paragraph 88(c) are adequately addressed.
95. It is important to note the basis upon which the Committee has reached this view. First, the proposal has undergone a number of alterations over the course of its history. The Committee on balance has taken the view that the essential issue is whether or not there ought to be any form of road crossing the estuary on this alignment, not the particular aspects of it. To reject the proposal on the basis that it would be preferable for the entire exercise to be undertaken again may be to do no more than bring the matter back before the Minister in essentially the same position at some time in the future.
96. Secondly, the Committee has been unable to determine the appropriate technical specifications that ought to be applied to the road and bridge structure. There is insufficient information contained within the papers made available to the Committee to reach a definitive view. What is clear is that the original proposal of box culverts is unacceptable. What is acceptable is a form of bridge structure which accommodates the matters raised in paragraph 88(c).
97. The indicative length of the bridge suggested by the Appellant was some 75 metres in length with a minimum clearance of 0.5 metre above 100 year flood levels. The Respondent, on the advice of CALM, took the view that a bridge of some 130 metres would be appropriate. The underlying rationale for those positions is not clear. The Committee takes the view that determining the length of the bridge on a cost benefit analysis basis is inappropriate in these circumstances. It takes the view that the length of the bridge and its

height above relevant flood levels should be determined on a proper scientific basis having regard to the concerns noted above.

98. Accordingly, the Committee:-

- (a) recommends that the appeal be allowed;
- (b) recommends that the following conditions be imposed upon the grant of an approval, namely:
 - (i) the proposed road and bridge must not produce an afflux greater than 0.03 metre during a 1 in 100 year flow;
 - (ii) the level of the road and bridge must be a minimum of 1.95 metres AHD;
 - (iii) the span of the bridge should ensure the retention of a minimum area of dry shoreline (being not less than 0.50 metres) on both sides of the estuary when calculated on a 1 in 25 storm level;
 - (iv) the design shall incorporate best management practices to deal with stormwater and potential pollutant run off;
 - (v) the capacity of the bridge must be such as to restrict the carriage of bulk goods and signage should be installed to prohibit the carriage of bulk petroleum products, pesticides, herbicides, fertilisers or bulk chemicals;
 - (vi) the preparation and implementation of a comprehensive site management and rehabilitation plan addressing:
 - (1) impacts upon vegetation;
 - (2) proposed rehabilitation;
 - (3) removal of existing spoil and placement of new fill;

(4) rehabilitation of existing adverse impacts;

(5) monitoring of waterbirds;

(vii) except to the extent specifically dealt with above, the implementation of construction guidelines in accordance with section 5.50 of the Le Provost Dames & Moore report.

99. In the event that any of these issues cannot be satisfactorily resolved as between the Appellant and the Respondent within sixty (60) days of the date of determination by the Minister, the parties may have recourse to the Committee for a determination.

100. The Committee also wishes to record its concern that there appears to have been a lack of systematic public consultation in relation to the Proposal as it has evolved over time. It is also of concern that the Bulletins published by the EPA did not deal with the whole of the issues raised by the Proposal (including recommendations in relation to appropriate conditions should the appeal be approved at first instance).

Dated this 22nd day of July 2002.

Mr Michael Hardy
Chairman