

WHAT FUTURE FOR JERVIS BAY ?

INTRODUCTION

In 1973 a special issue of the Australian Littoral Society's journal *Operculum* was produced entitled "Jervis Bay - the Future?" Today, more than a decade later, the question mark remains.

At the present time attention is focused on the Bay by various proposals for relocation of Naval facilities from Sydney. However, even if these plans do not reach fruition, it has to be recognised that the Bay and its hinterland is still likely to come under increasing pressure for a wide variety of reasons.

Jervis Bay has long been the subject of development proposals - the more grandiose of them thankfully never becoming reality. Nevertheless, the patterns of subdivision and land tenure around the Bay are to a large extent a legacy of these earlier plans, and it is these patterns which will be a major factor in determining future developments. It is appropriate in this introduction to outline some of the development history of the area.

HISTORICAL BACKGROUND

Between 1827 and 1840 a number of land grants were made in the area, with sites for townships being reserved. With the development of the Limestone Plains to Jervis Bay Road (now Trunk Road 92) in the 1830's, ships increasingly used the Bay to collect wool cargoes. In the same period the private town of South Huskisson and the government town of Huskisson came into being. This served as a catalyst for competition in land dealings, with other towns also being laid out, including Jervistown, Central Jervistown and New Bristol.

Despite all the land subdivision and confidence in the future commercial and industrial development of the Bay, the five towns did not grow. As early as 1873, the Government was urged to survey a line for a railway link from Bomaderry to the Bay. By 1875 the lands along the proposed route were reserved from sale in readiness for construction.

At this time much was made of the Bay's potential as a site for a port for coal exports. Also by the mid 1880's Huskisson was important for ship building. Spotted gum was used for sailing vessels and pine for steamers. There was also some export of timber to New Zealand. Land speculation on Jervis Bay again increased in the 1890's. This accelerated with the ceding of the south side of the Bay to the Commonwealth in 1915 for use as the port for the Australian Capital Territory. However, the various proposals, which included major urban or industrial development, failed to eventuate.

The villages of Currarong, Callala Bay, Callala Beach, Woollamia, Myola, Huskisson, Vincentia and Hyams Beach have developed mainly since the Second World War. Callala Bay, Callala Beach and Vincentia, together with the neighbouring areas of Culburra and St. Georges Basin, have largely developed in the last two decades.

In 1964 the then Shire of Shoalhaven gazetted its first major planning controls which legally defined these villages as "urban". The remainder of the land was zoned "non-urban", including large areas of the earlier "urban" subdivisions that had remained completely undeveloped.

In the late 1960's proposals for major industrial development were mooted. These plans were the catalyst for the 1973 special issue of *Operculum* and their possible impacts were discussed in that volume.

By the mid 1970's a change in Federal Government and the world-wide economic climate saw a collapse of these major development proposals. The House of Representatives Standing Committee on Environment and Conservation examined the development pressures and issued a report in 1975. The findings of that report suggested that although Jervis Bay had potential as a deep water port, its primary value as a national resource lay in its potential for recreation and scientific reference purposes, with sound management planning being required to safeguard the environment and retain the natural landscape and atmosphere.

During this period the major portion of Beecroft Peninsula was leased to the Commonwealth by the State Government. Subsequently, the Commonwealth gained ownership of this land, including some former recreation reserves. The Shoalhaven Shire Council also started to acquire land from individual owners of the old subdivision in the rural areas around Vincentia and Callala Bay.

During the late 1970's there was also a swing towards greater emphasis on the environmental and recreational potential of Jervis Bay. The National Trust of Australia (N.S.W.) classified the environs of Jervis Bay for scenic conservation and the then Department of the Capital Territory published a draft management plan for the Commonwealth Territory of Jervis Bay which placed great emphasis on its conservation.

In 1978 Shoalhaven Shire Council adopted a development strategy for the urban areas of Jervis Bay. This strategy identified Callala Bay for expansion, but the major urban area on Jervis Bay was proposed to be Vincentia, with an expansion along the Wool Road. This strategy also nominated Huskisson as the main tourist development area.

At that time the Public Works Department carried out feasibility studies for the location of a combined recreational boating/fishing boat harbour in the Bay.

POPULATION GROWTH

Many major development proposals have come and gone (or at least entered hibernation). These grand designs have diverted attention from the more gradual changes in residential and recreational use around the Bay. The City of Shoalhaven has sustained continuous growth for the last 30 years. In the last 20 years the annual growth rate has been consistently high at about 4.5%. While this growth rate may slow (assuming no major development goes ahead) it is expected that there will be a continuing growth in the area and with this there will be a demand for (and expectation of) improved services.

During the 1970's the coastal villages grew not only at a faster rate but also in larger absolute numbers than the major urban centre of Nowra/Bomaderry. A major part of this growth has been from migration, particularly of retirees. Many of the new residents have moved from the south and southwestern sectors of Sydney. While many retirees have moved to the villages around Jervis Bay, these population centres also serve as a residential area for commuters to the Nowra/Bomaderry centre.

The main growth centre has been Vincentia. While the 15.1% growth rate for Vincentia (1976-1981) was below the 20% experienced between 1971 and 1976, it still remains by far the main residential growth area. These very high growth rates should be assessed against the small original base population of the village. The predominance of Vincentia not only reflects its favoured location but also the availability of land. In the years 1980 and 1981 Shoalhaven City Council approved nearly 230 dwellings. This was one third more than the dwellings approved for the Callala Bay/Beach area, which is the second largest population growth area.

The other two main growth areas in this period were Callala Bay/Beach and Hyams Beach, for which there are no separate census figures available.

Currarong and Huskisson have limited areas available for single residential development, which in the past has been the most favoured form of housing for the retirement populations.

Shoalhaven City Council in its Report "Jervis Bay Situation Paper" estimated that the permanent population in the Jervis Bay area in 1985 was 5,100, based upon the mid-year census. In the adjacent areas of St. Georges Basin and Culburra, both with growing populations, the population in 1985 was estimated at 4,600 and 2,500 respectively.

More important in the longer term is the population capacity of the areas already committed to development. The Council indicates that at present there exists the potential for approximately 7,000 dwellings in the Bay area. In the adjoining areas of St. Georges Basin and Culburra there is an existing potential for 8,000 and 2,800 dwellings, respectively.

At the present average occupancy rate of just over 2.5 persons/dwelling, the respective population capacities are approximately 17,000, 20,000 and 7,000. This gives a total population capacity of 44,000, which is an almost four-fold increase on the existing permanent population.

In addition, Shoalhaven City Council is considering plans which would substantially increase the population capacity of Culburra.

HOUSING AND DEVELOPMENT

In addition to these pressures, a group of development companies has a large holding in the area. This group has, since 1970, proposed a major expansion of Vincentia. In 1982, on behalf of this group, consultants Gutteridge, Haskins and Davey submitted to Shoalhaven City Council a "Vincentia Strategy Plan and Environmental Assessment Report". This proposal has a capacity of approximately 8,100 single lots and spans the Naval College Road ridge, linking Vincentia to Erowal Bay and Old Erowal Bay. This would bring the population capacity of Vincentia, if fully occupied at present occupancy rates, to 26,000.

On the southern side of Vincentia there exists a pre-1918 subdivision of some 1,800 lots called "Pacific City". Council has, since the late 1960's, acquired 1,700 of these lots.

In 1982, Council resolved to consider the development of the area for recreational and residential use. Consideration was also to be given to the extension of the Vincentia Golf Course.

However, the future of most of the site remains in abeyance until the preparation of a plan covering the whole of Vincentia.

The same private development group also owns a major part of the land contained in the recent expansion of Callala Bay, and the first 100 lot subdivision has just been approved in the area. Council in its situation paper has indicated that when the present area is occupied, a further extension to the Callala Beach area of approximately 550 lots could be considered.

Of particular concern is the fact that most of the area east of Callala Bay, between Jervis Bay and Lake Wollumboola, consists of more than 1,400 separate residential size lots - the legacy of former development proposals. Although this land is not currently zoned to permit residential development there is the potential for sale of individual lots and pressure being brought to bear on Council to re-zone the area (such events have already occurred in the Port Stephens area).

Because of the land tenure around the Bay, there has been little pressure for rural residential development. An area bounded by Currumbene Creek in the north, Huskisson in the east, Tomerong State Forest in the south and

the Princes Highway was subdivided, mostly prior to 1930, and contains approximately 650 lots, generally ranging in size from 2 to 10 hectares. Council's past policy has recognised this as a rural residential area and its major Local Environmental Plan has placed rural residential zones in this location.

More recently, Council has approved a subdivision proposal for 10 rural lots along the southern shores of Currumbene Creek, on land formerly owned by the Australian Steel and Mining Corporation (ARMCO). This proposal concentrates concessional lots in groups on the higher ground with frontage to the creek.

At present the existing coastal villages contain little in terms of support facilities. Obviously, with the growth in population there will be demand for improved facilities and services.

An aspect that has caused concern is the provision of sewerage to the area. At present only Huskisson and the existing residential areas of Vincentia are serviced and the capacity of the licenced outfall at Plantation Point is for a population of 8,000.

While this effluent receives tertiary treatment, any further increase would also require nutrient removal. Council is giving consideration to servicing Callala Beach/Bay and has held a public meeting on the matter. This meeting was also informed that Council was investigating an ocean outfall off the Jervis Bay Territory.

BOATING AND DIVING

The great expansion of the use of the Bay for boating and recreational diving has been a phenomenon of the last decade or so. Although it could not be classed as a sheltered waterbody, it does offer a higher degree of protection than the open sea and this, together with its numerous bays, beaches and fishing grounds, has made it very popular for all classes of boats. Trailer-borne boats have access at a number of points. However, provision of safe moorings for larger craft presents a problem which cannot be solved without the expenditure of large amounts of money.

Anchorage such as Callala Bay are safe from strong winds in most quarters, but remain vulnerable to gales from certain directions. The only mooring area which is safe under virtually all conditions is Currumbene Creek, but a bar across the mouth restricts the size of the craft which can enter. There is also the problem of mooring space within the creek itself. One of the prime concerns of larger-boat users is the maintenance of freedom of access within the Bay, particularly to certain anchorages which provide shelter under particular conditions.

The Navy proposals would obviously lessen the boating opportunities in the bay, but it is not known to what extent at this time. Council has indicated that it is still considering ways of providing mooring facilities in the Bay. The Boat Harbour project is currently the subject of an Environmental Study being carried out by consultants to the Public Works Department.

Recreational diving is another activity which has assumed considerable economic importance to the local community during the past decade, with over \$1.3 million being spent locally on this activity by the 30-35,000 divers estimated to have visited the area during 1983-84 (see the article by Leadbitter & Pollard in this issue).

EXTRACTIVE INDUSTRY

There are limited resources available for extractive industry in the area. These include sand resources in the Myola and Hare Bay areas which could be suitable for high grade domestic glassware and are estimated at approximately 2,000,000 and 1,000,000 tonnes respectively. This assessment has yet to be verified and Council has stated that no proposals for mining have been received to date.

Shoalhaven City Council has purchased a large area of land at Comberton Grange (on the ARMCO site), where studies have identified an intrusion of igneous rock into the overlying sandstone formation. Total reserves of dolerite are estimated to be in excess of 9 million tonnes, with reserves of 500,000 cubic metres of sandstone. Studies are presently underway to prove the feasibility of the extraction. This resource appears to be the only source of concrete aggregate between Milton and Kiama. The council itself has a considerable on-going requirement for this material.

Road construction material, both gravel and sandstone, has been extracted from the Hyams Beach/Vincentia Hill area for 20 to 40 years. The considerable areas of historic extraction have to some extent become re-vegetated. Since 1977, only sandstone material has been won from previously worked areas. Council's requirements in the area are estimated to be in the order of 80,000 cubic metres over a fifteen year period. Alternate sources of material are estimated by Council to add 60% -100% to the material cost of Council's works programmes in the area.

POWER STATION DEVELOPMENT

The development proposals noted in the early 1970's included the possibility of two power stations, one or both of which may have been nuclear powered. The smaller of these, the 500 MW nuclear facility proposed for Murrays Beach, was almost proceeded with and the site remains unrehabilitated. While political and public opinion has now moved firmly against construction of nuclear fuelled generators, so that no such proposal seems conceivable for many years, we are aware of increasing public pressure for relocation of the Lucas Heights reactor and persistent rumours that Murrays Beach may be under consideration for such a move.

The Atomic Energy Commission's desire to retain the option to relocate the facility to Murrays Beach was indicated in an annex to the Fleet Base Relocation Study Report tabled in Federal Parliament in February 1987. This annex also canvassed the possibility of ship-based, nuclear reactor maintenance facilities for visiting Naval vessels.

However, Red Point still appears to be regarded as a potential site for a coal-fired power station. The Electricity Commission of NSW has investigated coal resources over a considerable area to the north of Jervis Bay and while the coal seam (Uarrunga Measure) is apparently very variable in thickness, it may have the potential to support a power station. Elcom has not announced any intention to develop on the site but neither do they appear to have totally ruled out this possibility at some time in the future.

NAVAL FACILITIES

The major problem in discussing the relocation of naval facilities has been uncertainty in knowing what is, or might be, proposed.

However, the Minister for Defence has partly clarified the situation with his announcement in February 1987 of the acceptance, as part of the defence strategy of a "two ocean navy", with half the fleet to be based in Western Australia and half at Jervis Bay. There are at least two components to the Navy's proposals:

- closure of the Newington armaments facility in Sydney and construction of a munitions depot and a wharf and associated facilities at Jervis Bay, and
- relocation of the fleet base from Garden Island.

The proposals for the fleet base are discussed in the Jervis Bay Fleet Base Relocation Study Report released at the time of the Minister's statement in February. The actual details of the proposed base facilities will be determined after further detailed studies.

Either proposal would increase the population pressure on the area (in the case of the fleet base proposal, very considerably) and would alienate parts of the Bay and its surrounds from other users. Either proposal would involve substantial expenditure.

The public perception of the proposals is that a decision has been made to move from Sydney and that Jervis Bay is the inevitable destination. The reasons for the move and why Jervis Bay has been chosen have not, however, been adequately justified.

The House of Representatives Standing Committee on Environment and Planning recently suggested that: ".....the proposed Environmental Impact Study for naval development at Jervis Bay should be undertaken only when a comprehensive planning study and public review of naval facility requirements and alternative sites demonstrates that relocation to Jervis Bay is necessary"; and

"the proposed Environmental Impact Study for naval development at Jervis Bay be considered and planned in the context of the overall proposal for Fleet facilities and bases around Australia".

In view of the great environmental values of Jervis Bay (and the enormous cost to the taxpayer of any developments) we believe that it is essential that these recommendations be accepted by the Federal Government.

DISCUSSION

Whatever the future of the Navy's proposals, planning for the long term future of the Jervis Bay region will not be easy.

From the point of view of the Shoalhaven City Council it has to be recognised that, although the Council area is very extensive, various constraints (such as the existence of National Parks, State Forests and flood-prone lands) severely limit the number of sites available for development. The pattern of separate population centres means that provision of services will be expensive so that Council will be under pressure to increase its ratings base in order to satisfy demands. In addition, a substantial proportion of the population will be elderly and on fixed incomes, creating additional demands for services. Tourist development clearly has the potential to generate considerable economic return; however, in order to compete with other areas there will be continuing demand for what are perceived as more or better facilities.

Jervis Bay is an area of outstanding natural beauty and contains resources of great conservation and scientific interest. The Society has long urged that substantial reserves, both terrestrial and aquatic, are necessary for the long-term protection of these resources.

It is these natural attributes of the area which are one of its major attractions, both for those taking up residence and for tourists. Conservation is therefore not just the concern of a minority but a vital necessity for the long term economic benefit of the region. However, if reserves are established then this further constrains opportunities for development. In addition increased access to many areas may threaten their long term survival.

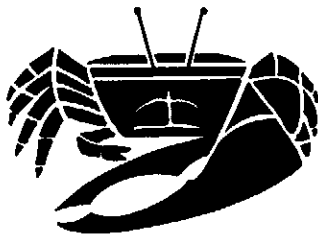
Careful management will be required to prevent the degradation which has occurred at so many other coastal localities in the State.

Inevitably, conflicts will continue to arise - over the siting of facilities, over access and management, over control of off-road vehicles, between amateur and professional fishermen. While unanimity is a utopian dream, we would hope that the vast majority would accept that the long-term aim in resolving conflict is to avoid any actions which will reduce the value of the natural resources of the Bay. Jervis Bay is a national resource, one in which all Australians should have an interest. As such, it is appropriate to suggest that the burden of protecting the area should not fall unduly on the local community but should be shared by all levels of government.

In this issue of *Wetlands* the papers presented discuss various aspects of the environment of Jervis Bay. It is not a comprehensive resource inventory of the area - the research to compile such a document is still required. Nevertheless, it is the intention to demonstrate some of the reasons why Jervis Bay is special and why its future should be of concern to all of us. Some topics discussed in the 1973 *Operculum* are not covered again, this is intentional so as to avoid repetition, and the present coverage reflects the availability (and willingness) of authors and the amount of research conducted in recent years. The absence of any discussion on some issues should not be construed as indicating that these matters are unimportant, rather it is a measure of how much there is still to learn about Jervis Bay.

The special issue of *Operculum* (Jervis Bay, the future, *Operculum* 3., 1-64) published in 1973 has long been out of print. Much of the information in the issue is still relevant today. As many readers of this issue of *Wetlands* may not have seen the *Operculum* issue, its contents page is reproduced below.

For the fish and the snail, the operculum is a protective covering. . . .
OPERCULUM is a magazine for the protection of the environment.



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JERVIS BAY

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