

DEPARTMENT OF MINES AND ENERGY

SOUTH AUSTRALIA



OPEN FILE ENVELOPE SERIES

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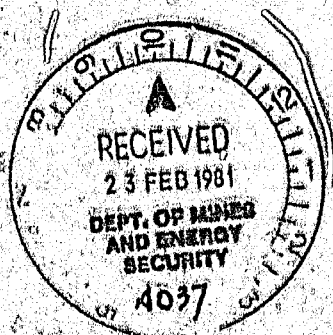
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DRAFT

LAKE BONNEY

MANAGEMENT PLAN



D R A F TLAKE BONNEY MANAGEMENT PLAN

- A management agreement between the District Council of Barmera
and the Department of Lands -

Members of the
Lake Bonney Management Project Advisory Committee

Brain Caddy	(Councillor, District Council of Barmera)
Peter Day	(Land Resource Officer, Department of Lands)
Colin Harris	(Senior Environmental Officer, Projects, Department for the Environment)
Chris Kaufmann	(Manager, Urban Projects, Department of Lands)
Michael Moore	(Sector Manager, Murraylands, Department of Urban and Regional Affairs)
Des Spurway	(Regional Manager, Riverland, Department of Lands)

Department of Lands
(Land Resource Management Division)

December, 1980.

Management Philosophy

To manage the land along realistic multi-use principles and to ensure that the lands capability to be used in such a manner is maintained. This management is to be achieved by ensuring that different land units are used for purposes compatible with their social and physical environments, and so that when viewed comprehensively the different units (and their uses) are consistent with a homogeneous scheme.

Discussion

When considering the whole of the Lake Bonney area, different zones (or land units) should be used for a variety of different purposes (consistent with their social and physical environments) although the use made of one area should not be allowed to reduce another areas potential for an alternative use. In some cases a number of different uses may be made of the one area, although periods of different usage may need to be temporally separated.

No matter what the use/uses made of an area are, it is important that the land be managed so that it can sustain those uses for as long as possible - i.e. not only for this generation, but for future ones also. Thus, as an example, natural settings used for the benefits they yield to recreation should be managed so that they do not detract from the amenity of these natural sites.

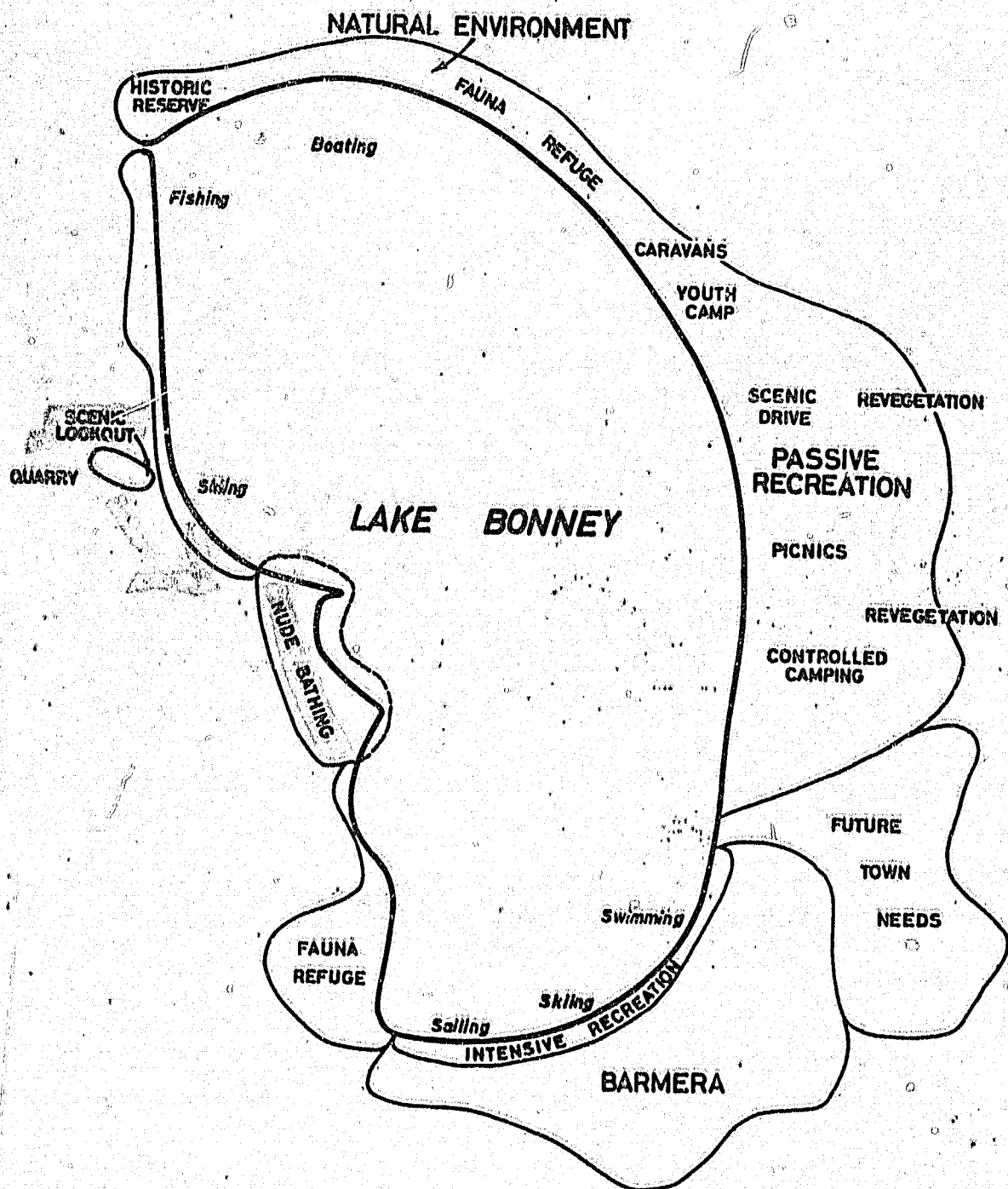
Summary

After considering the physical environment around Lake Bonney and the uses people currently make, and expect to make, of the area, it is considered that the environs of Lake Bonney should be managed as a major public recreational resource with heavy emphasis on maintaining the area's natural character and charm. Maintaining this "character and charm" will entail keeping the lake's foreshore open to the public, providing areas for intensive recreational use, and others for passive recreation in a natural environment.

Care will need to be taken to protect the natural environment as well as the safety of users and the livelihoods and lifestyles of nearby residents and landholders. The Lake Bonney Management Plan establishes management guidelines towards this end.

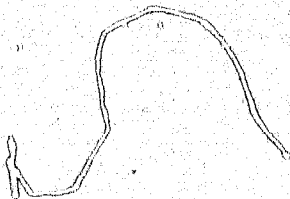
CONCEPT DIAGRAM

006



SCALE 1:40 000

OBJECTIVES

- A. TO MAINTAIN A DIVERSITY OF RECREATIONAL ACTIVITIES AROUND LAKE BONNEY FOR THE BENEFIT OF THE GENERAL PUBLIC (INCLUDING LOCALS AND TOURISTS) BOTH NOW AND IN THE FUTURE.
 - B. TO ENSURE THAT FUTURE DEVELOPMENT AROUND LAKE BONNEY IS NOT DETRIMENTAL TO THE SOCIAL OR PHYSICAL ENVIRONMENT, AND MAKES USE OF, YET MAINTAINS, THE ASSET OF LAKE BONNEY.
 - C. TO CONSERVE THE SOIL, WATER, INDIGENOUS FLORA AND FAUNA, AND OTHER NATURAL RESOURCES OF LAKE BONNEY AND ITS ENVIRONS.
 - D. TO IMPLEMENT AND MAINTAIN THE LAKE BONNEY MANAGEMENT PLAN.
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OBJECTIVE A

TO MAINTAIN A DIVERSITY OF RECREATIONAL ACTIVITIES AROUND LAKE BONNEY FOR THE BENEFIT OF THE GENERAL PUBLIC (INCLUDING LOCALS & TOURISTS) BOTH NOW AND IN THE FUTURE.

POLICIESAllocation of Land Uses - Council

- A1 Public access to the water's edge, and as much of the foreshore as possible, is to be maintained around all of Lake Bonney, unless such access is causing significant environmental damage.
- A2 Boats are to be prohibited from parts of the town Foreshore Reserve (Section 538) to protect family groups and to provide safe swimming areas.
- A3 Camping and other forms of passive recreation are to be permitted in designated areas at east and north Lake Bonney, (Sections 416 and 792) as long as such uses do not cause significant environmental damage. *See also Sec. 411 & 476 — A10*
- A4 Reserves may be leased, via the Local Government Act, when consistent with Policy B2.
- A5 Facilities in the area, and particularly on the foreshore, are to provide for a variety of activities, but with regard to the scenic appeal of the area, the conservation of features of local historic interest, and the needs and safety of family groups.
- A6 Reserves between Foot Avenue, Dean Drive, Nookamka Terrace and Whitmore Avenue (Sections 148, 149, 150, 151, 153, 172, 472, 473, 539 and 541) are to be used for intensive recreational and sporting purposes.
- A7 Future sport and recreation facilities which are not reliant on access to Lake Bonney are to be directed to reserves away from the lake.

Allocation of Land Uses - Department of Lands

- A8 The land around Lake Bonney (Sections 538, 416, 415, 610, 623, 791, 792, 419, 147 & 475) is to remain open to the public, preferably as dedicated or reserved land.
- A9 Pelican Point (Sections 617, 618, 608 and 609) is to remain as a reserve for clad and unclad bathing.
- A10 Greenwood Park and Camp Kedron (Sections 611 and 476) are to continue as a Caravan Park and Youth Camp, open to the public, and run by charitable organisations.
- A11 Land in the Lake Bonney Zone (see Fig. E1-1 & 2) may be given any tenure, provided that such tenure is consistent with the objectives and policies of this plan, that the Lake Bonney Advisory Committee had been consulted (see objective D) and that adequate consideration has been given to the resultant impact on the physical and social environment.

OBJECTIVE B

TO ENSURE THAT FUTURE DEVELOPMENT AROUND LAKE BONNEY IS NOT DETRIMENTAL TO THE SOCIAL OR PHYSICAL ENVIRONMENT, AND MAKES USE OF, YET MAINTAINS, THE ASSET OF LAKE BONNEY.

POLICIESDevelopment Control - Council

- B1 Reserves near the town foreshore (Sections 538, 475 & 147) are to be maintained as a scenic open space for intensive recreational use, and hence, building will only be permitted on Section 538, and then only when consistent with Policy B2.
- B2 Reserves may be leased by Council only after consultation with the Lake Bonney Advisory Committee and when the facility to be thus provided:
 - a. is necessary
 - b. is consistent with the reservation
 - c. could not operate successfully unless sited on the reserve
 - d. will increase public use of the area
 - e. does not bar public access to the waterfront, and
 - f. is not expected to harm the social or physical environment.
- B3 No boat ramps or buildings, apart from toilets, are to be built at east Lake Bonney (Sections 416, 599 & 792) and any toilets erected must be designed to blend in with the natural features of the landscape, and to comply with all the requirements of the District Council of Barmera, the Health Commission of S.A., and the Engineering and Water Supply Department.
- B4 Land uses which are not compatible with the conservation of the environmental, scenic, historic, scientific and educational features of east and north Lake Bonney (Sections 416, 419, 792 & 599) will not be permitted.
- B5 West Lake Bonney is to be open for public use, as long as such use is not in conflict with other policies or objectives.
- B6 All developments in the Lake Bonney Zone are to be consistent with the Authorised Development Plan for the area, and all land uses and activities must be consistent with all relevant Acts.

Management - Barmera Council & Department of Lands

- B7 Vehicles may be prohibited from any area where their use is causing significant environmental or social disturbance.
- B8 A diverse range of native species of plants (preferably local) are to be given priority for use on reserves & Crown Lands in the area.
- B9 The Lake Bonney Advisory Committee must be consulted before any land use in the Lake Bonney Zone is altered.

Land Development - Department of Lands

- B10 Subject to the provisions of Policy A9, land under the authority of the Dept. of Lands may be given any tenure, or managed in any way, to achieve the objectives of this plan - e.g. subdividing land for residential or holiday accommodation purposes when consistent with objective B.
- B11 If land is to be made available for industrial or waste disposal purposes, it is to be sited so that it does not impair the environment of Lake Bonney by visual, air or water pollution.
- B12 If necessary, sections of land may be resumed or acquired to fulfill the objectives and policies of this plan.

OBJECTIVE C

TO CONSERVE THE SOIL, WATER, INDIGENOUS FLORA AND FAUNA, AND OTHER NATURAL RESOURCES OF LAKE BONNEY AND ITS ENVIRONS

POLICIESMaintenance Procedures - Barmera Council

- C1 Local regulations are to be used to support the protection of indigenous flora and fauna, and to prevent the chopping or removal of timber.
- C2 All vehicles are to be kept to made roads or parking bays at east and north Lake Bonney (Sections 416, 599 and 792).
- C3 Littering is to be discouraged, and rubbish disposal facilities are to be provided.

Land Management - Barmera Council and Department of Lands

- C4 Rehabilitation works to prevent soil erosion, to reduce water run off, and to aid revegetation, are to be performed, especially at east Lake Bonney (Sections 416, 599, 792, 598 and 546).
- C5 The foreshore and inland areas, particularly those of east and north Lake Bonney (Sections 416, 599, 792, 598 and 546) are to be revegetated, preferably with a diverse range of locally occuring native plants.
- C6 Camping and picnic sites are to be developed at east and north Lake Bonney (Sections 416 and 419).
- C7 Pest plants and animals are to be controlled.

Quarrying - Department of Mines and Energy

- C8 The removal of sand, rubble, or any other construction materials is to be prohibited from the lake shore and east Lake Bonney (Sections 538, 415, 416, 610, 617, 599, 608, 598, 792 & 546) as is the case with all lands exempted from the Mining Act.
- C9 Development and rehabilitation plans as provided for by the Mines and Works Inspection Act, are to be drawn up for any mining/quarry operations within the Lake Bonney Zone. *see Head any. C93*

Water Quality - Engineering and Water Supply Department

- C10 Efforts are to be made to ensure that no major nutrients or ground water inflows enter Lake Bonney, and that the flood regime is maintained as nearly as possible to that which would be expected under natural conditions.

Conservation - Department of Lands

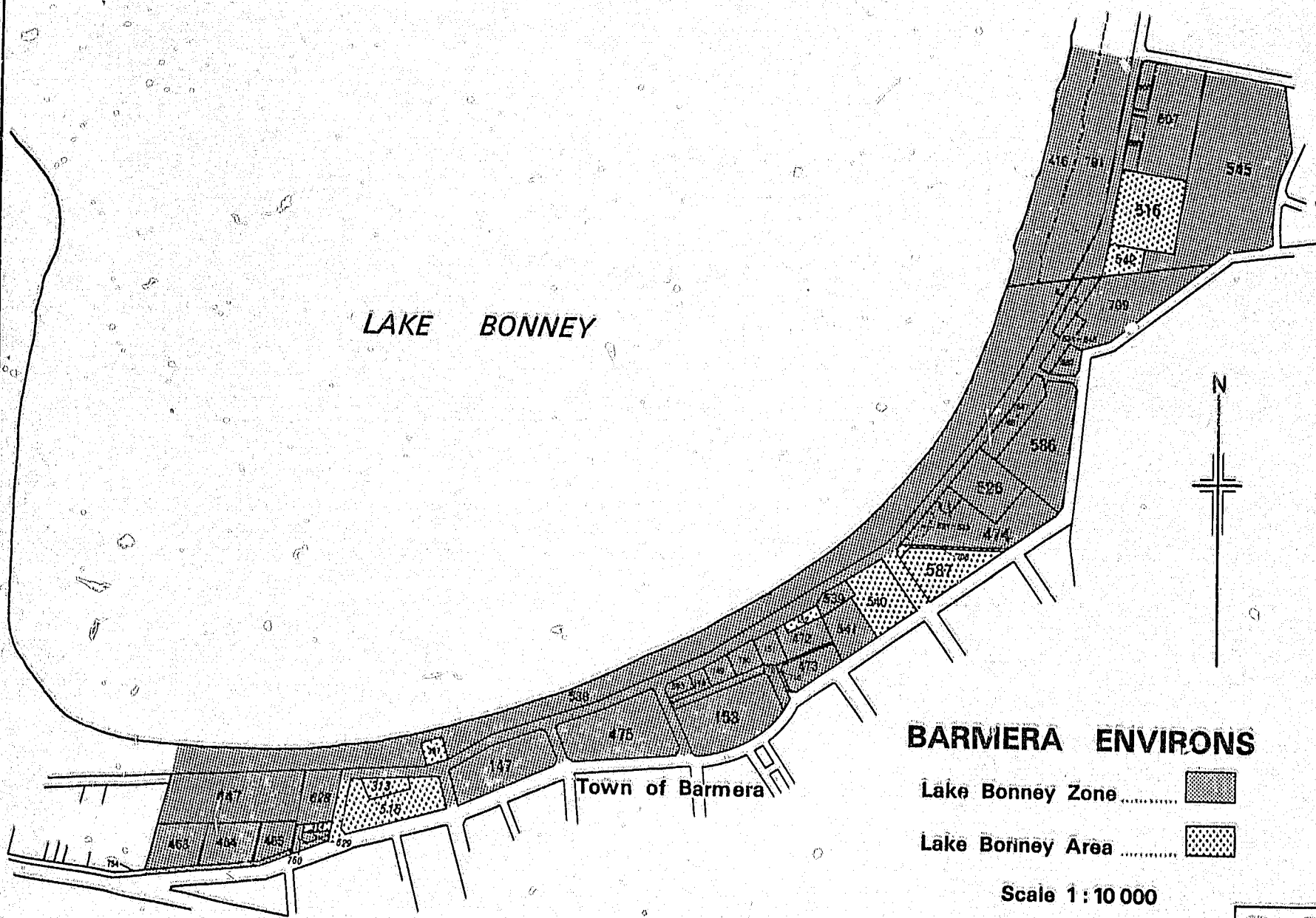
- C11 When consistent with the other objectives and policies of this plan, land in the Lake Bonney Zone may be managed in any way to achieve Objective C.

OBJECTIVE DTO IMPLEMENT AND MAINTAIN THE LAKE BONNEY MANAGEMENT PLANPOLICIESLake Bonney Advisory Committee - Barmera Council & Dept. of Lands

- D1 A committee (to be known as the Lake Bonney Advisory Committee) is to be jointly appointed by the District Council of Barmera and the Department of Lands, who are to consult with it on all matters coming within the Committee's "Terms of Reference".
- D2 The "Terms of Reference" of the Lake Bonney Advisory Committee (L.B.A.C.) are to:
- advise the District Council of Barmera and the Department of Lands on management techniques for land within the Lake Bonney Zone (see plan 1).
 - liaise between Council, Government Departments, and the general public.
 - seek ways and means to implement and maintain the Lake Bonney Management Plan.
 - comment on all proposed alterations to land use in the Lake Bonney Zone.
 - comment on tenure and land allocation in the Lake Bonney Zone.
 - comment on land uses in the Lake Bonney Area (see plan 1) likely to influence land use in the Lake Bonney Zone.
 - promote, and seek support for, the Lake Bonney Management Plan.
 - promote the activities of the Lake Bonney Advisory Committee.
 - increase public awareness of features concerning Lake Bonney.
 - produce an annual report.
 - review the Lake Bonney Management Plan at five yearly intervals.
 - advise the Council and Department on any matters as the L.B.A.C. sees fit, or on any matters as directed by the Department or Council.
- D3 The Lake Bonney Zone is to consist of the Crown land, reserves, and land held under terminating tenure in the vicinity of Lake Bonney. Its current extent, and that of the Lake Bonney Area, are as depicted in Figures E1-1 and E1-2.
- D4 The Lake Bonney Advisory Committee is to consist of one representative from the District Council of Barmera, one from the Department of Lands, and from three to five representatives from the local community. Members are to be appointed for terms of either 2 or 3 years, and may be reappointed after that time. Resigning or retiring members will be replaced by members appointed in the same manner as the original committee.

Implementation and Maintenance - Barmera Council and Dept. of Lands

- D5 Regulations to implement and maintain the Lake Bonney Management Plan are to be drawn up and enforced.
- D6 The status of the social and physical environments is to be monitored.



BARMIERA ENVIRONS

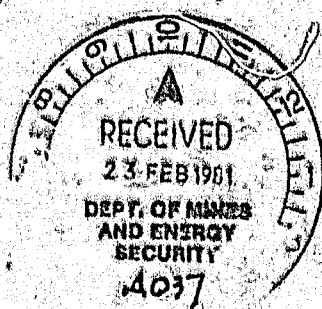
- Lake Bonney Zone
- Lake Bonney Area

Scale 1 : 10 000

Fig. E1-1

MANAGEMENT TECHNIQUES

Draft Lake Bonney Management Plan



LAKE BONNEY MANAGEMENT PLAN

- MANAGEMENT TECHNIQUES -

The following comments are suggested management techniques, included to demonstrate how the policies of the plan may be actually implemented, and also to show how the philosophy behind the plan may work in practise.

Some of the techniques are recommendations of what should happen, but others are merely suggestions as to what could be done. In any event, these management techniques are only recommendations and suggestions, they are not binding on either the Department of Lands, or the District Council of Barmera, as are the Objectives and policies of the plan.

- MANAGEMENT TECHNIQUES -

- A1 - No leases (via policy B2) should be issued to the waters edge, unless unrestricted public access is maintained.
- If peoples activities on the foreshore are causing significant environmental damage, then their access could be prohibited.
- A2 - The foreshore should be zoned, via the Boating Act, into boating and non-boating areas. Speed boats and yachts could also be directed to specific areas of the foreshore.
- Plan 1 is enclosed as a suggested zoning, and should be considered with policy A5.
- It may one day become necessary to also zone the water surface, not just parts of the waters edge.
- A3 - Specific areas should be allocated for picnics, camping, and possibly caravans.
- Plan 2 is enclosed as a possible site allocation, and should be considered with policy C6.
- A4 - Reserves may be let to private individuals at a fair market rental, and the monies thus received used to manage other parts of reserves which do not generate finance.
- At Council's discretion, reserves may also be let on a peppercorn basis, e.g. to charitable organisations.
- A5 - Consistent with policy A2:- non-boating areas could be enhanced by confining vehicles to car parks, and developing an adventure playground designed for 4-12 year olds.
- the present swimming enclosure could be upgraded, and made more exciting for older children by the provision of slippery dips, and "tarzan ropes" etc.
- Many of the dead trees should be left in the water so that sections of the foreshore are protected from speed boats, and the speed boat operators can clearly see the hazards. If attempts were made to remove the trees, and the results of this difficult task were incomplete, then root tips would be left below the surface, creating a hazard to boats and swimmers.
- A fun run and/or sweat track could be established, making use of existing tracks around east lake. Such a scheme could be promoted as an off-peak season attraction in the Riverland.
- The eastern end of Stoney Ridge (part of Section 415) could be made a geological reserve and scenic lookout, and then incorporated in the scenic drive around Lake Bonney.
- Low trees and shrubs, to 4-5 metres, could be planted on the northern side of the Sturt Highway between English Road and Barmera, to make the entrance to the town more attractive.
- The sites of the two former pumping stations in Barmera could be sign posted, and a "vandal-proof" display of features of the area's early history developed at that site.
- More "1956 Flood Level" signs could be placed around the foreshore.

See the
unit 1 book
for
reference

- A booklet commenting on, among other things, the variety of features around Lake Bonney, could be produced.
 - It could be submitted to the Geographical Names Board that the creek between Chamber's Creek and the River Murray at Cobdogla be named Hawker's Creek, the name originally given to Chambers Creek by Captain Charles Sturt in the 1840's.
 - The presence of the drowned canoe tree at north Lake Bonney, and the numerous aboriginal burial sites at north and west lake, should be recorded, but drawing public attention to these features may result in vandalism.
- A6 - As these reserves are almost fully utilised already, care will need to be taken if new facilities are to be provided, especially with regard to the standard of the facility and views within, to, and from the area.
- A7 - Efforts may need to be made to ensure that policy B1 is followed, and that sports facilities do not "overflow" onto Sections 475 and 147.
- If the dog track was relocated, that area (Sections 292, 293 and 302) could be developed as a large turfed area to be used for a variety of sports, and even for winter sporting carnivals.
- A8 - Sections 538, 416, 415 and 610 should be maintained as foreshore reserve.
- Sections 623, 791 and 792 should be reserved as foreshore reserve, or else amalgamated with Section 416.
 - Section 419 should be kept as a reserve for the purposes of the National Trust.
 - Sections 147 and 475 should be maintained as a plantation and recreation reserve and as parklands (see policy B1).
- A9 - Sections 517, 618, 608 and 609 should be rededicated as a reserve for clad and unclad bathing under the care, control and management of the District Council of Barmera, as the Minister for the Environment has no local representatives to maintain the reserve.
- To protect the environment, and to reduce disturbance to the users, vehicles should be confined to made roads and car parks, preferably in a cul-de-sac arrangement, as shown in plan 3.
 - The boundaries of the reserve should be marked for the benefit of the users and nearby landholders.
 - Further tree planting could be conducted in the area (e.g. eucalyptus camaldulensis, E largiflorens and acacia stenophylla) and board walks could be established where needed.
 - It may become necessary to one day prohibit caravans, or to restrict campers to specific sites, to protect the amenity of the area.
- A10 - Short term (e.g. 5 years) Miscellaneous Leases should be given over Sections 611 and 476, and among the conditions should be that the leases are not transferable, and that public access is maintained.
- It should be pointed out to the lessees that they have no greater right over the Foreshore Reserve than any other member of the public.
- A11 - Sections 148, 149 and 150 should remain as recreation reserves.
- Section 541 should remain a recreation reserve.
 - Section 151 should remain as a Trust Grant for recreation.
 - Section 392 should remain a stone reserve. *stone is stone left. remaining in woodlands may be.*

- Section 526 should remain a youth hostel reserve.
- Sections 3, 437, 447, 463 and 465 Cobdogla I.A. and Allotment 628 and 629 in the Town of Barmera, should remain as a caravan park and holiday cabin reserve.
- Sections 605 and 606 should remain as plantation reserve.
- Section 825 should be proclaimed a stone reserve.
- Section 710 should be proclaimed a recreation reserve.
- Sections 153, 172, 472 and 539 should be rededicated as a recreation reserve.
- Sections 598 and 599 should be held as Crown Land and rehabilitated.
- Section 693 should be held as Crown land for quarrying within the guidelines of policy C9, and for revegetation next to the road.
- Section 545, 546, 586, 607 and 620 and 682 should be held as Crown land, pending subdivision and allocation of parts of the sections for residential and accommodation purposes.
- Sections 474 and 709 should be held as Crown Land as open space and for natural storm water disposal.
- Sections 335, 336, 340 and 724 could be held as Crown Land as a fauna refuge.
- Sections 478, 795 and 796 could be held as Crown Land for conservation and public use.
- The annual licences over Sections 477 and 704 should remain for the present, but no better tenure should be issued pending future public requirements.
- The annual licence to the Gun Club over part of Section 599 should remain, and could be extended slightly for safety reasons, but no better tenure should be issued unless future demands on the adjoining land make it preferable to relocate the club site.
- The annual licence over the Rifle Range (Section 790) should remain for the present, but no better tenure should be issued unless future demands on the adjoining land make it preferable to relocate the range. The unused portion of 790 (bound by Section 684) should be incorporated in Section 684.
- The airstrip on part of Section 546, and an access track to McBride Street should be licensed to the District Council of Barmera, until a better landing site is available. No structures or equipment should be erected or left in the area.
- The Miscellaneous Lease over Section 593 should remain as is.
- The Miscellaneous Leases over Sections 624-678 and 681 should be handled under the shack site policy.
- Section 521 should be incorporated in Section 691 and hence Irrigation Perpetual Lease 2403.
- The portion of Section 760 between Sections 465 and 629 should be placed under the control of the Barmera and District War Memorial Community Centre.

- B1 - No buildings of any kind should be constructed on Sections 147 and 475.
 - Section 538 could be grassed in front of the shacks, and the possibility of obtaining a diversial licence to water the lawns with lake water should be investigated.
 - More seepage drains could be installed in Section 538.
 - Phragmites growing on the foreshore near Foot Avenue, should be controlled.
- B2 - The Lake Bonney Advisory Committee must be given the chance to comment on all proposals to lease reserves, and their comments should then be given due consideration.
- B3 - The conditions of this policy should be incorporated in a Supplementary Development Plan for the area.
 - The suggested bodies should be given the opportunity to comment on any proposed toilet blocks.
- B4 - Techniques such as location and standard of roads, and the types of facilities provided, could be used to manipulate the number and type of people using specific areas and also the activities performed at any particular site.
 - If unacceptable activities persist, regulations should be produced, and enforced, to prohibit them.
- B5 - Public ownership of, and access to, the foreshore should not be abandoned, except for significant environmental reasons.
 - Certain activities (e.g. camping) and vehicular traffic could be prohibited from specific areas (e.g. to protect the interests of adjoining landholders) but pedestrian movement should not be.
 - The present leasing of the Ski Club site should continue, but the public's right of access needs to be remembered.
- B6 - Some Acts to be observed are the;

Water Resources Act, 1976-79, which requires that a works permit be obtained before any "works" are performed on land below the 1956 flood level and prohibits the unlicensed diversion of water from the River Murray, the drilling of any well without a permit and, the discharge of any waste into waters when such action is likely to impair the quality of the water.

National Parks and Wildlife Act, 1972-78, which protects certain native plants (e.g. Eremophila longifolia, Heterodendron oleifolium, Pittosporum phillyreoides and Myoporum platycarpum) on reserves, Crown Lands and roads, and also protects all native birds, mammals and reptiles, except certain listed species and others which may be shot under licence at certain times.

Planning and Development Act, 1966-78, which provides for the production of Development Plan, Supplementary Development Plans, and Planning Regulations, which may govern land use.

The Riverland Planning Area Development Plan comments that no permanent structures should be erected on flood prone land, and that care should be taken over the waterfront (generally taken as land within 100 metres of pool level).

Local Government Act, 1954-79, which permits the leasing of reserves, the production of regulations to manage land under the control of Councils, and the appointment of "constables" to enforce such regulations.

Crown Lands Act, 1929-78, which details certain activities (e.g. injuring trees and removing timber) which if performed on Crown Land, or reserves, without authority, are liable to prosecution.

Mining Act, 1971-78, which permits the exemption of certain areas from mining activities.

Mines and Works Inspection Act, 1920-78, which permits miners to produce a development plan for their mining activities, detailing how the land is to be restored when mining ceases.

Harbours Act, 1936-78, which permits the zoning of water uses.

Aboriginal Heritage Act, 1979, which provides for the protection of features of significance to the Aboriginal people.

South Australian Heritage Act, 1978-79, which penalises any unauthorised alterations to items registered as State Heritage Items.

Country Fires Act, 1976, which restricts the lighting of fires in the open during the fire danger season.

- B7 - If vehicles are not wanted in a certain area, no form of access should be provided to the area. If such access already exists, it could be barred by using natural features (e.g. fallen trees) ditches and earth mounds, or by fencing and ripping.
- If the above measures fail, regulations may be produced and enforced, restricting vehicles to certain areas, and imposing on the spot fines for breaches of the regulations.
- B8 - Native plants should be given priority so that management costs are contained, and the whole area has a set "character".
- A diversity of species should be used to create a diversity of habitats for birds etc.
- A diversity of landscapes should be produced (e.g. from open woodland to areas of dense shrubs) to further increase the diversity of habitats available, as well as increasing the variety of uses which people can make of the area, and the visual attraction of the area.
- Tree planting should be an ongoing process to upgrade certain priority areas, and to replace dying trees.
- B9 - Both the Department of Lands and the District Council of Barmera must submit all proposals to alter land uses in the Lake Bonney Zone, to the Lake Bonney Advisory Committee.
- B10 - As is currently planned, Section 620 should be progressively subdivided for Town extensions, making use of views of Lake Bonney, and using lower areas for storm water disposal, and as parts, plantation belts, or natural play areas.
- Section 607 should be held as Crown land, pending future application for holiday accommodation purposes.
- Sections 586 and 682 could be subdivided for holiday accommodation purposes, and administered via the Shack Site Policy. A plantation strip should be established between these sections and the road bordering the golf course.

- Fire breaks could be made around Section 620, to protect the Town of Barmera.
- Before approval is given to any change in land use or tenure, adequate consideration should be given to the resultant impact on the social and physical environment (e.g. the impact on lessees and other land users, as well as on features of environmental, scenic, historic, scientific, archeological, educational, economic or recreational importance). In particular, the visual impact of any proposed new buildings (especially those viewed from east Lake Bonney) should be considered before approval is given.

B11 - The full impact of any proposed industrial or waste disposal activities should be assessed before any such land uses are approved. 1453

- The rubbish dump in Section 620 should be relocated, when feasible.

B12 - Section 686 could be acquired for possible future industrial sites, rubbish disposal and relocation of the dog track.

- Section 684 could be acquired for possible future relocation of the airstrip, trail bike useage, industrial sites, and in the long term, holiday accommodation.

- Section 337 could be acquired to make the Crown Land in that vicinity a more manageable shape.

- The licence over Section 477 could be cancelled if public demand for the land increased.

- C1 - Regulations could be produced imposing on the spot fines for cutting or injuring any live timber, or injuring or shooting any protected fauna.
- Firewood could be supplied near sites allocated for camping to reduce the pressure on timber in the area.
 - Dead trees could occasionally be used to block vehicular access; but this technique should not be used widely as it removes another fauna habitat from the environment. *Use dead trees.* !!!
- C2 - Car parks with vehicle barriers should be established to attract people to certain sites. The size and shape of the parking bays will help govern the number of people using the area, and whether they use caravans or tents.
- Fences will be needed in certain locations to prevent cars from leaving made roads.
 - The road between Nappers Bridge and Greenwood Park should be surveyed along a course to be recommended by an officer of the Highways Department.
 - All roads should be constructed with adequate provision for surface water drainage.
- C3 - People should be encouraged to take their rubbish home, thus reducing the cost of maintenance work. Such encouragement could be via signs (e.g. "Keep Lake Bonney Beautiful. Take Your Rubbish Home") or educational pamphlets.
- Where rubbish bins are provided (e.g. at the entrance to some car parks) they should be of good construction (e.g. as are those in Highway parking bays) and emptied regularly.
 - A parking bay and "litter target" for people to throw their rubbish at, could be one way of reducing the number of rubbish bins provided.
 - KESAB could be contacted for specific information and advice.
- C4 - Sections 599, 598 and parts of 546 should be contour ripped, following consultation with officers from the Department of Agriculture.
- If, after ripping and subsequent re-establishment of vegetation, significant amounts of water still flow down the "creeks" at east Lake Bonney, those diversion dams that need it could be repaired to promote tree growth.
 - Vehicles, and pedestrians also in some cases, should be prohibited from sections of the foreshore at east and north Lake Bonney (Sections 416 and 792).
- C5 - Native plants should eventually revegetate areas of east Lake Bonney that have been contour ripped. *Maireana pyramidata* is likely to provide the most abundant source of seed locally, and thus this species may eventually dominate the area.
- A range of shrubs (e.g. various Eremophilas) could be planted in the diversion dams, and some dryland species (e.g. Olearia pimeliodes, Eremophila Sturtii, E. longifolia, and Acacia oswoldii) could be tried in higher areas.

- The front of the foreshore dune at east Lake Bonney should be stabilised with grasses and sedges, and this is likely to happen, due to local seed sources, if vehicles are kept from such areas. The ground cover could also be improved in some places by planting species such as creeping boobialla (*Mgoporum parvifolium*)
 - Once the foreshore has been stabilised, a new tree line should be created, replacing dead and dying trees, by planting species such as Eucalyptus camaldulensis, E largiflorens, Acacia stenophylla and Malaleuca lanceolata.
 - An officer from the Botanic Gardens could be asked if additional specific information or suggestions were required.
- C6 - Officers from the National Parks and Wildlife Service, and the Department of Recreation and Sport, should be asked to help in drawing up plans to develop specific sites for camping (tents only) camping (caravans and tents) and picnics (no camping).
- Concrete, or log, tables and chairs could be used to enhance specific picnic sites.
- C7 - In consultation with the Vertebrate Pests Control Authority, rabbit populations should be reduced by controlled poisoning, ripping, and fumigating of warrens, at times of low rabbit numbers. !!!
- Control over rabbit numbers should be maintained by follow-up inspections, and subsequent fumigation and warren closure.
 - In consultation with a local Pest Plants Officer, scheduled weeds should be controlled.
 - Many annual weeds invade highly disturbed areas and, provided they are not disturbed stabilize the soil. Once the soil is stable perennial plants can become established, and thus care should be taken when deciding on weed management.
- C8 - Attempts should be made to have the ^{white} listed sections exempted from the Mining Act, on the grounds that there are no economically significant materials in the area, and that any disturbance to the land would be inconsistent with the present and desired future uses made of the area. ()
- C9 - Development and rehabilitation plans should be produced for the quarries on Section 693, 392 and 825. 686, 82, 123, 684, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000
- The rubble pits on Section 693 should be battered after use, and topsoil respread over the pit.
 - Trees and bushes should be planted along the road in Section 825, and the sides of Stoney Ridge should be terraced to reduce erosion.
- C10 - Because it is thought that nitrogen availability is currently limiting algal growth in Lake Bonney, no sewage effluent should be allowed to enter the lake by either surface or ground water in flow.
- No wells greater than 2.5 metres in depth should be allowed in areas where it is likely that saline ground water is confined below the clay deposits of a former lake or river system (see plan 4).
 - If wiers etc. are ever proposed for Chamber's Creek, the impact of the proposal on the movements of boats and fish etc. should be fully assessed before any such proposal is accepted.

- Similarly, the impact of any such proposals on the frequency and extent of flooding should also be considered, as flooding leads to a reduction of the salinity of lake water and also enhances the germination of many native species of flora and fauna.

C11 - Vehicular access to Section 724 should be limited to protect this fauna refuge and tortoise laying area.

- Access to the north western portion of the lake should be limited, and the lessee of Section 692 should be given an annual licence for grazing and cultivation over part of Sections 416 and 599, as the present fence line keeps people from this fauna refuge area.

- Some of the soil remnants at east Lake Bonney could be fenced to preserve these educational features.

- The eastern portion of Stoney Ridge (Section 825) should be retained as an educational feature and geological reserve (see also policy A5).

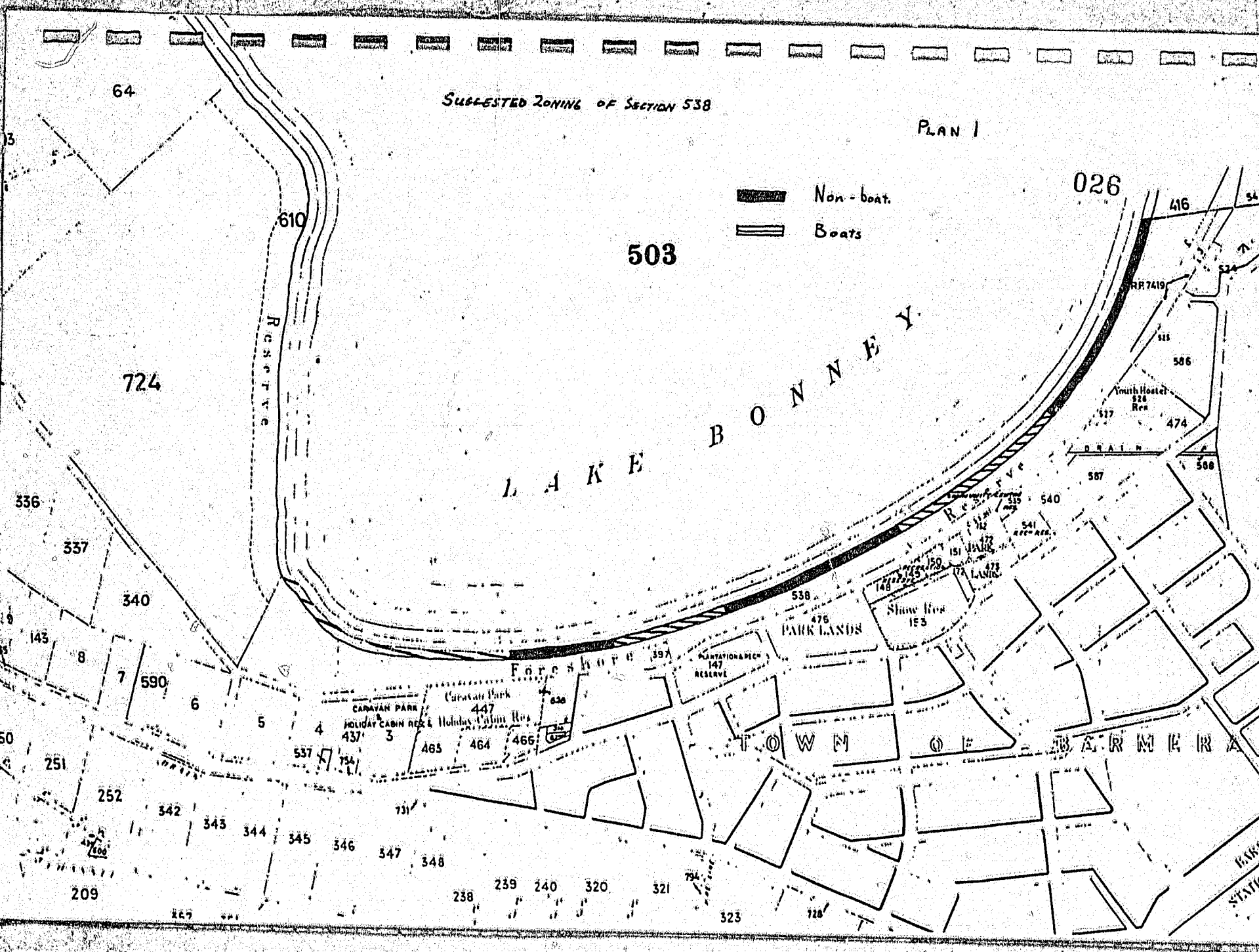
- D1 - The Department of Lands (via the Regional Manager) and the District Council of Barmera should appoint the Lake Bonney Advisory Committee as soon as possible after ratification of the Lake Bonney Management Plan.
- The Department and the Council must consult the Committee on all matters coming within the Committee's terms of reference (i.e. any proposed changes in land use or tenure in the Lake Bonney Zone, and any changes in land use in the Lake Bonney Area which are likely to affect the Lake Bonney Zone). Furthermore, the Committee's comments should then be given due consideration.
 - The Department and Council should provide back-up to the Committee in the way of typing etc.
- D2 - The Lake Bonney Advisory Committee (L.B.A.C.) should endeavour to build a close liaison between themselves, the local press, different groups within the community, and the District Council and the Department of Lands.
- The L.B.A.C. should submit proposals to Council and the Department, of what could be done to implement and maintain the Lake Bonney Management Plan, how it could be done, and by whom.
 - Members of the L.B.A.C. should help oversee and co-ordinate the implementation of approved management techniques.
 - The L.B.A.C. should seek help from local individuals and organisations, or (via the Department of Lands) relevant public service expertise, whenever necessary.
 - Students at Colleges of Advanced Education and local schools could be used for special projects around the lake.
 - Any proposals submitted to the L.B.A.C. for comment, (by either the Council or the Department) should be given full and careful consideration, and treated as strictly confidential.
 - The L.B.A.C. could organise the production of a pamphlet about Lake Bonney, dealing with features such as management of the area, history, sites of significance, recommended activities, rules and regulations, water safety, and camping and picnic sites.
 - Members of the L.B.A.C. should be prepared to speak at schools and public meetings.
 - The L.B.A.C. should support groups with similar objectives to those of the Lake Bonney Management Plan.
 - If the need arises, the L.B.A.C. should make recommendations to Council and the Department as to how the Lake Bonney Management Plan may be modified.
 - The L.B.A.C. should co-ordinate any applications for funds, materials and manpower made to various organisations.
- D3 - If any sections of land in the Lake Bonney Zone are given permanent tenure, they should then be (by agreement between Council and the Department) transferred to the Lake Bonney Area.
- If it is considered that any non permanently tenured land in the Lake Bonney Area should be in the Lake Bonney Zone, then Council and the Department could jointly agree to modify Figures E1-1 and E1-2.

- 11 -

- D4 - The members of the L.B.A.C. should be allowed to decide;
- how they run their meetings,
 - when and where they meet,
 - how to meet their terms of reference as detailed in policy D2, and
 - how to prepare and submit proposals and comments to Council or the Department.
- Council and the Department should give as much help and information to the L.B.A.C. as possible. *but no. orders.*
- D5 - Through the Local Government Act, 1934-79, the District Council of Barmera should produce regulations to prohibit;
- the cutting or injury of any live tree,
 - camping (in tents or caravans) from nominated areas,
 - vehicles from nominated areas,
 - littering, and
 - the removal of sand from nominated areas.
- Non compliance with any regulations should incur an on the spot fine.
- "Constables" should be appointed (via the Local Government Act) to enforce the regulations, and these "constables" should be selected officers of the Department of Lands. The members of the L.B.A.C. could also be appointed as "constables".
- Regulations should always be explained in an attempt to educate offenders, rather than just using them for "strong arm" enforcement.
- New regulations, and the reasons for them, should be given wide publicity prior to their introduction.
- Enforcement is needed primarily on long weekends, and Department of Lands officers could work at those times, on a time off in lieu basis.
- Regulations under the Crown Lands Act (e.g. regarding unlicensed cutting of timber) could also be enforced by Departmental officers.
- D6 - Photo points should be established around Lake Bonney, to record the status of the environment.
- Regular inspections should be made to ensure rabbit warrens are not re-opened.
 - Recreation patterns should be monitored (e.g. by plotting the location of campers etc., and recording the number of cars at boat ramps, or the number of caravans and tents in certain areas) and trends analysed.
 - Officers from the Department of Recreation and Sport or the Department of Tourism, together with students from Colleges of Advanced Education or schools, could help in this process.
 - Information on certain parameters of the Lake Bonney water could be occasionally sought from the Engineering and Water Supply Department.
 - The number and variety of land use applications made to the Council, Lands Department, and State Planning Authority, could be used as an indicator of some community desires.

SUGGESTED ZONING OF SECTION 538

PLAN 1



KEY

PICNIC

TENTS

TENTS & CARAVANS.



POSSIBLE
CAMPING AND PICNIC
SITES.

OUT

OF

Road

COUNTY

OF

HAMLEY

622

Foreshore Reserve

Lake Bonney

503

599

Rifle Range

598

K

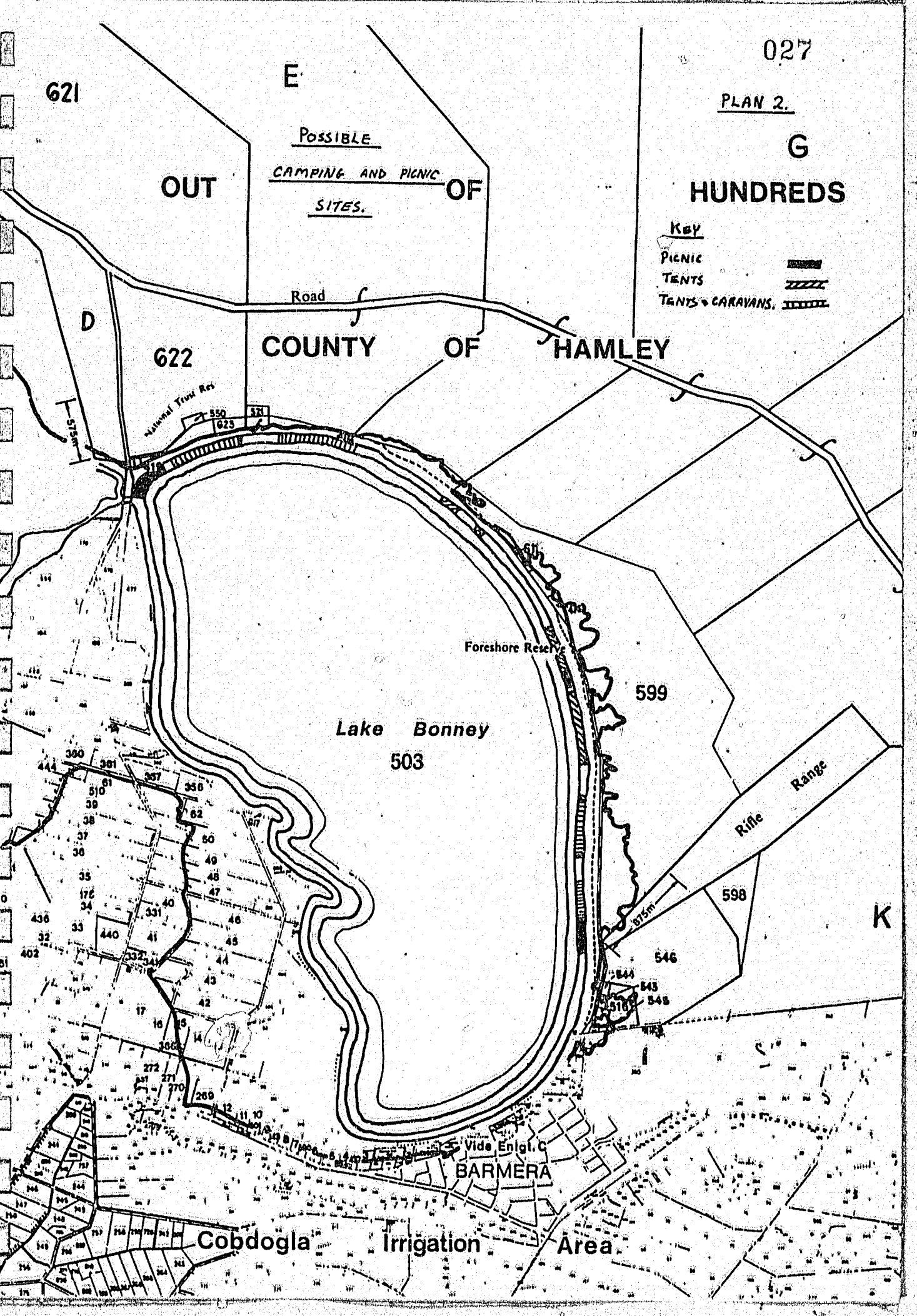
Vide Engr. C

BARMERA

Cobdogla

Irrigation

Area

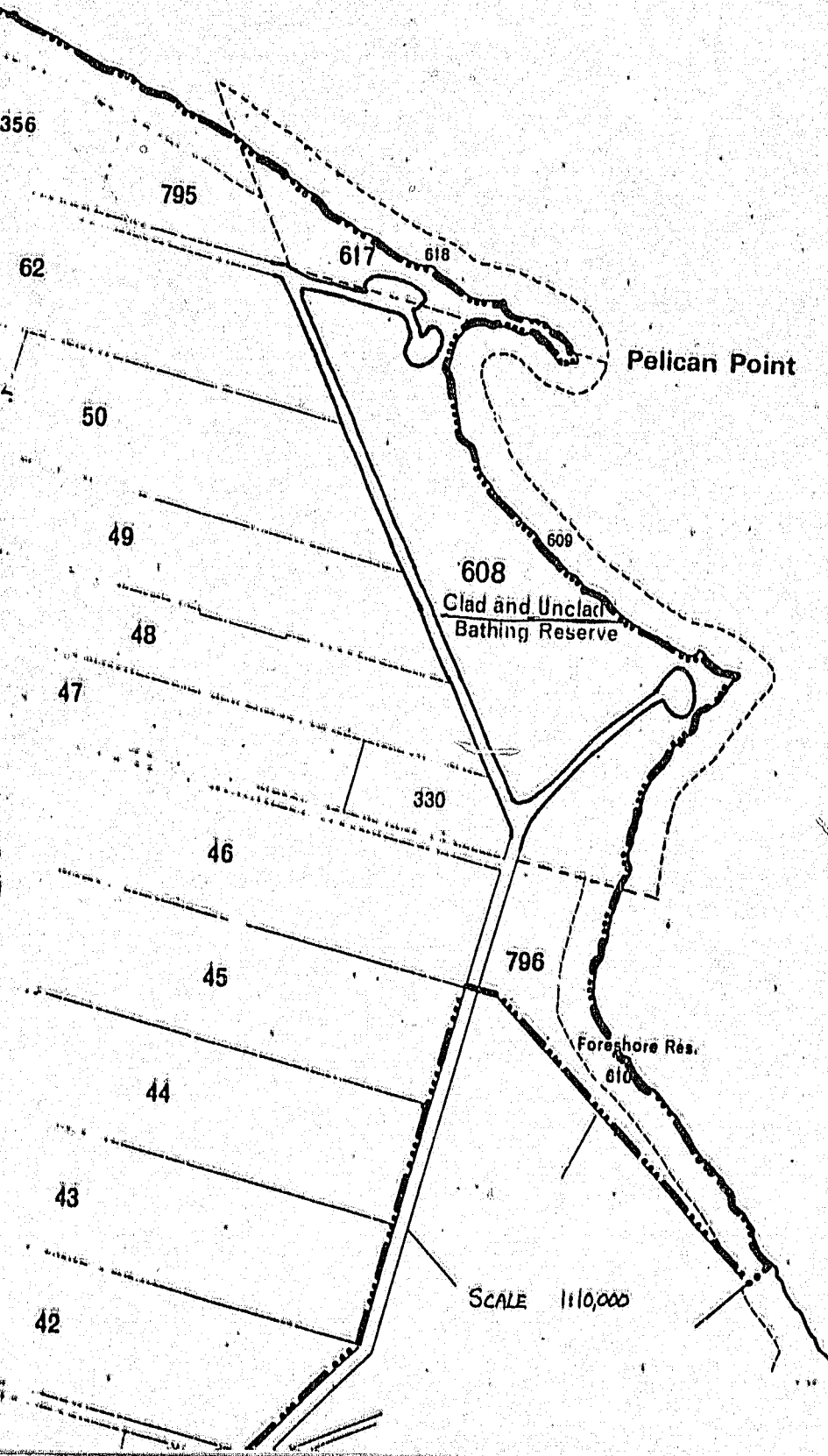


PLAN 3

PROPOSED ROAD DESIGN

- PELICAN POINT -

LAKE BONNEY



SUGGESTED DRILLING RESTRICTION AREA

Road

D

622

COUNTY

OF

HAMLEY

National Trust Res

Foreshore Reserve

Lake Bonney

503

598

596

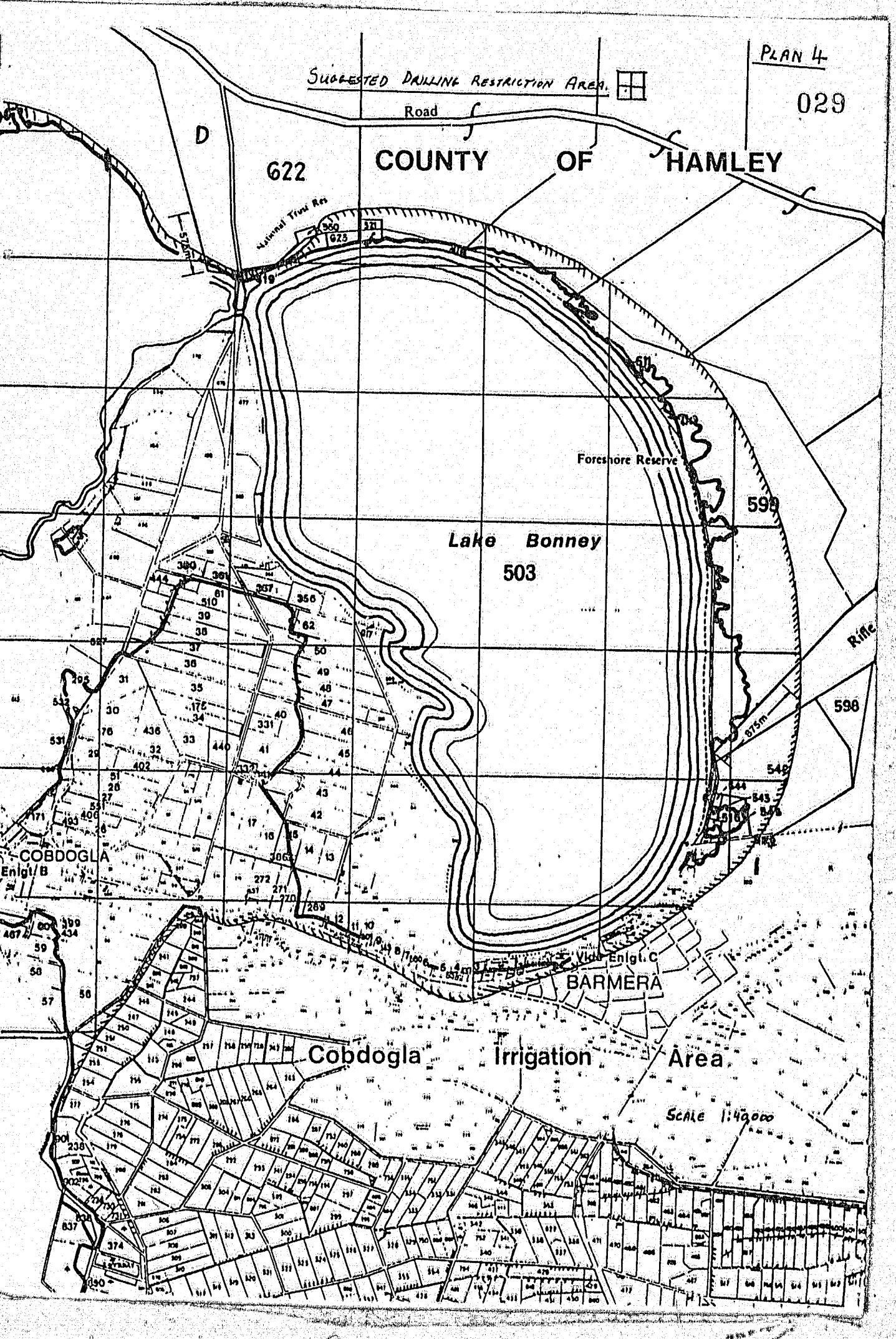
Rifle

COBDOGLA
Engr. B

Vide Engr. C
BARMERA

Cobdogla Irrigation Area

Scale 1:40,000

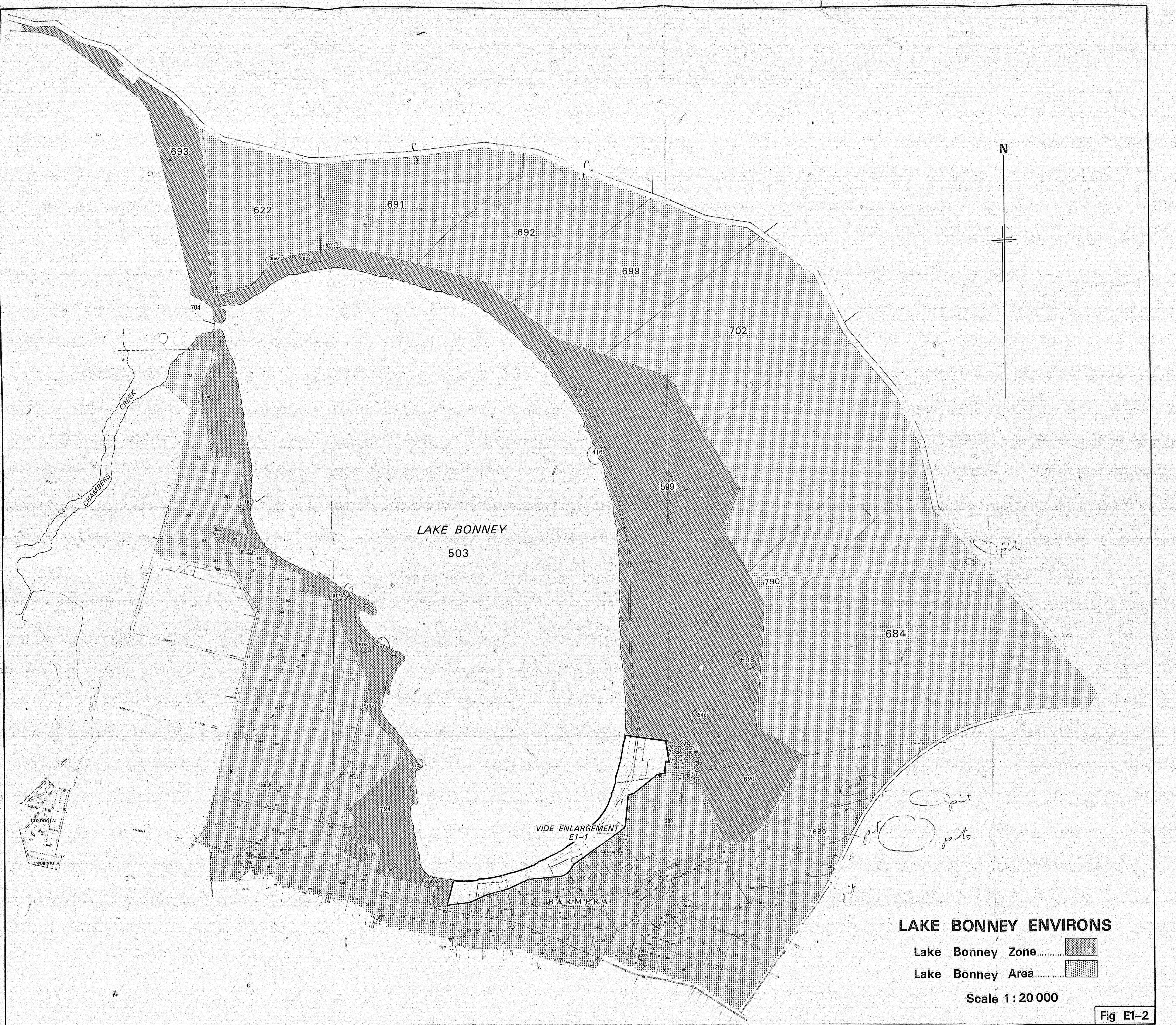




489

064

030



LAKE BONNEY ENVIRONS

Lake Bonney Zone.....
Lake Bonney Area.....

Scale 1:20 000