

DRAFT

HAMELIN POOL COMMON

MANAGEMENT PLAN

FEBRUARY 1999

Referred by the Shire of Shark Bay and CALM
Following Matiske Consulting presenting a revised draft document in early 1998.
Supported in principle by the Shire of Shark Bay

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1. OVERVIEW

Hamelin Pool Common, reserve 658, is located on the coast at the southern most point of Hamelin Pool in Shark Bay. The reserve is 46km by road from the junction of the North West Coastal Highway and the Shark Bay Road and only 5 km off the Shark Bay Road.

The reserve lies within the boundary of the Shark Bay World Heritage Property (Map1) and is administered by the Shire of Shark Bay. Public access to the stromatolites, one of the nominated World Heritage values of Shark Bay is provided via a public road through the reserve.

Two reserves (37963, quarry 4 ha and 28786, water supply 4269m²) and the private property Murchison location 161 are enclaves surrounded reserve 658. Murchison location 161, zoned Special Use, is managed as a tourist development and includes the historic Hamelin Telegraph Station and a small caravan park.

Due to the proximity of the stromatolite features and tourist development to the main road leading to Denham the Hamelin Pool Common is often the first stopping place for visitors entering the Shark Bay World Heritage Property and hence there is a need for the area to be well presented and managed. The Shark Bay Regional Strategy (1997) included the following recommendation in its Summary of Actions:

“Prepare a management plan for the Hamelin Common, to be implemented by the Shire of Shark Bay, for environmental protection, heritage and recreation.”

This action has been achieved with this Management Plan which provides the basis for ongoing management of the Hamelin Pool Common for a period of 10 years.

2. GENERAL MANAGEMENT GOALS

The Shire of Shark Bay’s management goals for the Hamelin Pool Common are:

Management of the Natural Environment

Conserve biological, physical, cultural and landscape resources

Recreation and Tourism

Facilitate recreation and tourism in the reserve consistent with conservation goals.

Community Relations

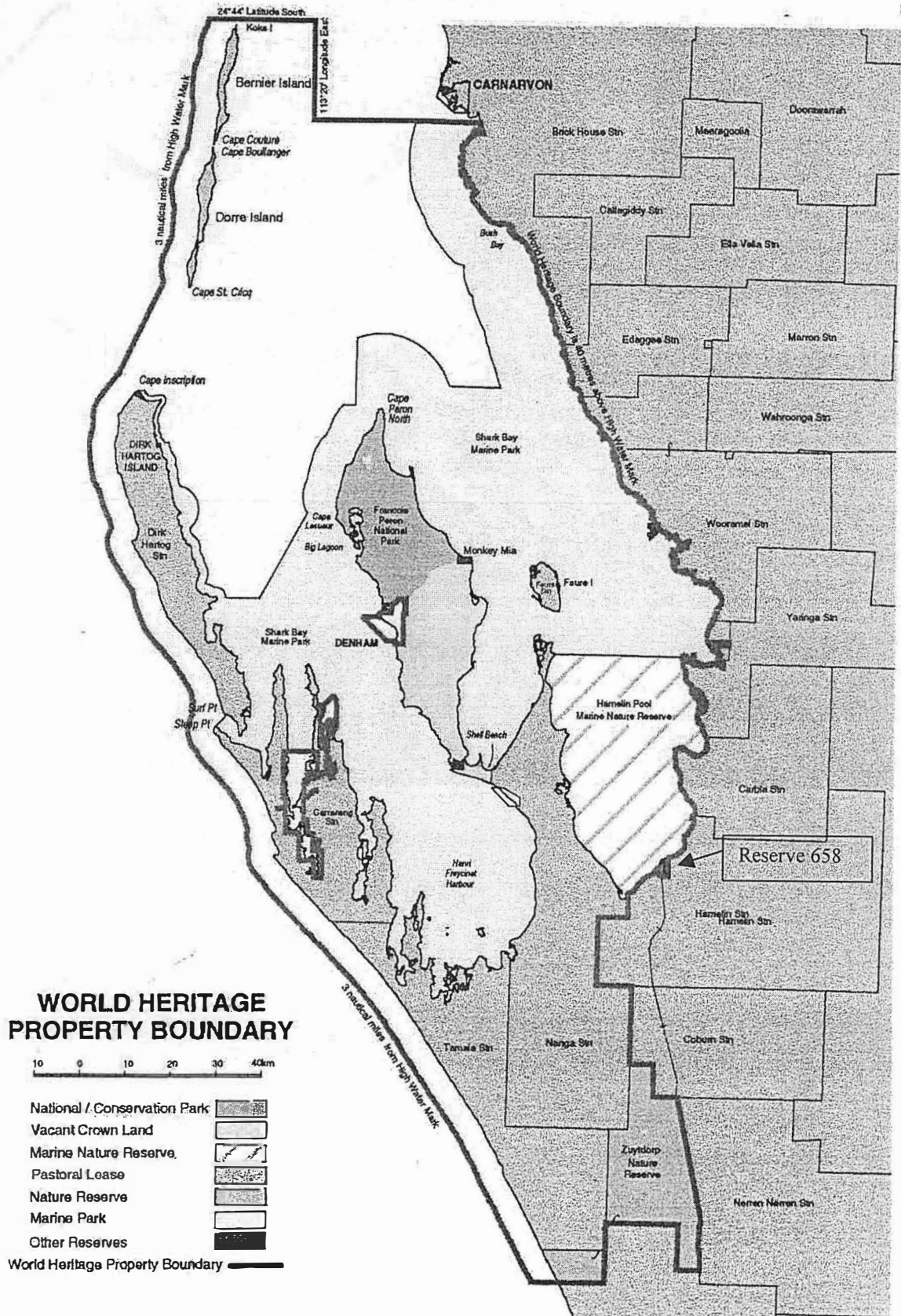
Facilitate liaison with adjoining land owners about the management of the reserve.

Commercial and Other Uses

Manage commercial and other uses in a manner that minimises impact on the reserves values.

Tenure and Location

Secure tenure and uniform purpose for the Hamelin Pool Common



Map 1 – Shark Bay World Heritage Property showing location of Reserve 658

3. BACKGROUND

3.1 WORLD HERITAGE

The term “World Heritage” is applied to sites of outstanding universal natural and cultural significance which are included in the World Heritage List.

Australia has an international obligation to protect and conserve World Heritage values of properties included on the World heritage List.

3.1.1 Criteria for World Heritage Listing

Shark Bay was included in the World Heritage List in December 1991 on the basis of its “Natural heritage” values. At the time of listing Shark Bay was one of only eleven out of eighty four sites worldwide which met all four natural criteria. The four natural criteria at the time of listing were that the site contain:

1. outstanding examples representing the major stages of the earth’s evolutionary history; or
2. outstanding examples representing significant ongoing geological process, biological evolution and human interaction with the natural environment; or
3. superlative natural phenomena, formation or feature (for example outstanding examples of the most important ecosystems, areas of exceptional natural beauty or exceptional combinations of natural and cultural elements); or
4. the most important and significant habitats where threatened species of animals or plants of outstanding universal value from the point of view of science and conservation still survive.

3.1.2 World Heritage Values of Hamelin Pool Common

As Hamelin Pool Common is a site many visitors view on their arrival or departure from Shark Bay are it provides a lasting impression of the natural scenic features and beauty of the area. For example, the arid landscapes of Shark Bay, combined with the marine environment, create a great diversity of landscapes with some exceptional coastal scenery. In addition, the richness of the flora contributes to an extensive wildflower display each spring.

The outstanding feature of Shark Bay is the steep gradient in salinities and hydrological structure that has a marked effect on the distribution and abundance of marine organisms. Nowhere better in the Bay is this illustrated than in the waters off Hamelin Pool Common where hypersaline conditions have led to a number of significant geological and biological features. Outstanding among these are stromatolites and other benthic microbial communities, and the vast deposits of *Fragum erugatum* shells forming white beaches and coquinas, (or sedimentary rocks formed from compacted shells, as seen in the Shell Block Quarry).

Stromatolites are amongst the oldest form of life on Earth. Hamelin Pool is one of only a few places in the world with a range of stromatolite forms comparable to fossils in ancient rocks. The Hamelin Pool Common provides the main public access to view these structures.

Shark Bay is of great botanical and zoological significance primarily as the habitat of many species at the end of their range. This is because Shark Bay represents a meeting point of three major climatic regions and formed a transition zone between two major botanical provinces –

the South West dominated by the Eucalyptus species and the Ermean dominated by the Acacia species. There are also a large number of species endemic to the Shark Bay region.

While the Common is known to only contain a small number of priority (3) and declared rare (1) flora the variability of vegetation within the reserve provides a rich flora experience for visitors in the spring time.

3.2 ABORIGINAL HERITAGE

Archaeological research in Shark Bay is limited but suggests a sequence of Aboriginal occupation from at least 18,000 to 25,000 years before present (CALM, 1998). Numerous sites provide evidence of occupation within the past 6,000 years. The Bay's warm shallow waters are highly productive and Aborigines would have harvested turtles, dugong, fish, molluscs and other invertebrates. A considerable number of midden sites have been found, especially on Peron Peninsula and Dirk Hartog Island, which contain evidence of some of the foods gathered from the waters and nearby land areas. The lack of surface fresh water may have limited Aboriginal people to periodic visits to the area, but there is some evidence that the climate was wetter up until 4,000 year BC which could have favoured permanent residence.

There are no identified Aboriginal sites in the Hamelin Pool Common. Primary responsibility for Aboriginal heritage matters lies with the Aboriginal Affairs Department (under the Aboriginal Heritage Act 1972).

ACTION 1: Protect any Aboriginal sites that may be identified in the reserve.

3.3 CULTURAL HERITAGE

The Hamelin Pool telegraph station was opened on the 21st April 1884. When H S. Carey (the Director of Public Works) surveyed the area on 1st January 1884 for the telegraph station, he selected the area for several reasons, possibly the most important being that fresh water was available. He called the reserve Flint Cliff after the prominent white cliffs 5 km to the north. The Flint Cliff Reserve was 1,500 acres (608 ha) and was gazetted on the 1st April 1884. The telegraph line was maintained by horsemen and the line construction team used camels for transport so the size of the reserve allowed these animals to graze.

The telegraph station recorded weather and was responsible for the distribution of mail taken by ship to Carnarvon and then by "lighter" to the Hamelin Pool. With the opening of the telegraph station many pastoral stations opened. In 1904-1905 the telegraph equipment was upgraded to transmit 300 miles instead of the previous 150 miles resulting in Hamelin Pool remitting direct to Carnarvon. Also, effective from 1st July 1904 the Telegraph Station was upgraded to a Post and Telegraph Station and remained so for the next 49 years.

In 1953 a communications channel to Carnarvon was opened via Mullewa and Gascoyne Junction, which replaced the old coastal telegraph via Hamelin Pool. The Hamelin Pool post office closed on 1st July 1971 and the weather station on 30th April 1980 when it was moved to Nanga station.

In 1993, ML 161 was re zoned from Parks and Recreation Reserve to Special Use zone (Historic Place and Tourist Accommodation).

Murchison location 161 containing the station has been sold twice since the original purchase and is now operated as a small (20 bay) caravan park and tourist site with the old station now being used very effectively as a museum and interpretation centre for the history of the area.

The original flagpole for the Telegraph Station was used as a lookout tower and navigation aid during early operational days. The structure is probably the only one of its type and is in urgent need of restoration.

3.4 VEGETATION¹

Hamelin Pool Common is included in the Carnarvon region of the Eremaean Botanical Province (Beard, 1990). From the south, the Carnarvon Region is entered on crossing the boundary of the Southwest Province that runs diagonally from SW to NE across the Toolong Plateau, between the Murchison River and Shark Bay. Hamelin Pool Common is therefore close to the boundary between the Southwest Botanical Province and the Eremaean Botanical Province.

3.4.1 Vegetation Associations

The landforms and soils on the Hamelin Common are extremely variable due to the influences of a series of foredune deposits and relict drainage systems. Vegetation associations are closely linked to the Commons landforms and soils. A survey was undertaken by a botanist from Mattiske Consulting Pty Ltd (1998) to record the vegetation associations in the reserve and to provide a list of the flora from the area. Due to the timing of the survey very few annual species were collected, including weeds and no orchids were recorded.

Woodlands

- Low Open Woodland of *Acacia drepanophylla* to 6m over an understorey dominated by *Atriplex cinerea* and *Atriplex paludosa* on pinkish sand with scattered coquina shells. It occurred as a narrow belt on the western edge of the Common.
- Low Open Woodland dominated by *Acacia drepanophylla* to 3m over an open understorey dominated by *Ptilotus obovatus* and *Atriplex vesicaria* subsp. *incompta* on a sandy loam soil with scattered to dense limestone rocks. This association was common to the southeast of the drainage line.
- Very Open Low Woodland of *Acacia tetragonophylla* to 2.5m over an understorey dominated by *Ptilotus obovatus* and *Cephalopterum drummondii* on red sandy loam with limestone pebbles. This association was common on the north east of the drainage line.
- Very Open Low Woodland of *Acacia grasbyi* to 3m over an understorey dominated by *Atriplex paludosa*, *Ptilotus obovatus* and *Cephalopterum drummondii*.

Shrublands

- Tall Open Shrubland of mixed species with emergent *Melaleuca eleuterostachya* and *Acacia sclerosperma*. This association was common behind the foredunes.
- Open Shrubland dominated by *Rhagodia latifolia* subsp. *latifolia* with emergent clumps of *Acacia synchronica* and *Acacia drepanophylla* on red loam with scattered chert. This association was limited at Hamelin Pool Common and included the Priority 1 species, *Tetragona coronata*.

¹ Vegetation refers to plant communities and their structure while flora refers to plant species.

- Very Open Shrubland dominated by *Scaevola crassifolia* with occasional emergent *Acacia sclerosperma* on white sand with dense coquina shells. This association occurred on the eastern coastline of the Common.

Halophytic Complex

- Dense Halophytic Complex of *Halosarcia* spp and *Atriplex* spp with emergent taller shrubs of *Acacia sclerosperma* and *Acacia synchronica* on red silty sand scattered to dense fossiliferous limestone. This association occurred around the perimeter of the old drainage line.
- Dense Halophytic Complex of *Halosarcia* spp and *Samolus* sp. “Shark Bay” on pink silty loam. This association occurred on the western margin of the old drainage line.
- Dense Halophytic Complex of *Halosarcia indica* subsp. *leiotachya* on fine powdery, pinkish brown silt. This association occurred in the centre of the old drainage line. Many of the plants were dead.
- Dense to Open Halophytic Complex of *Halosarcia* spp above the high water line on the edge of Hamelin Pool.

3.4.2 Rare and Priority Vascular Plant Species

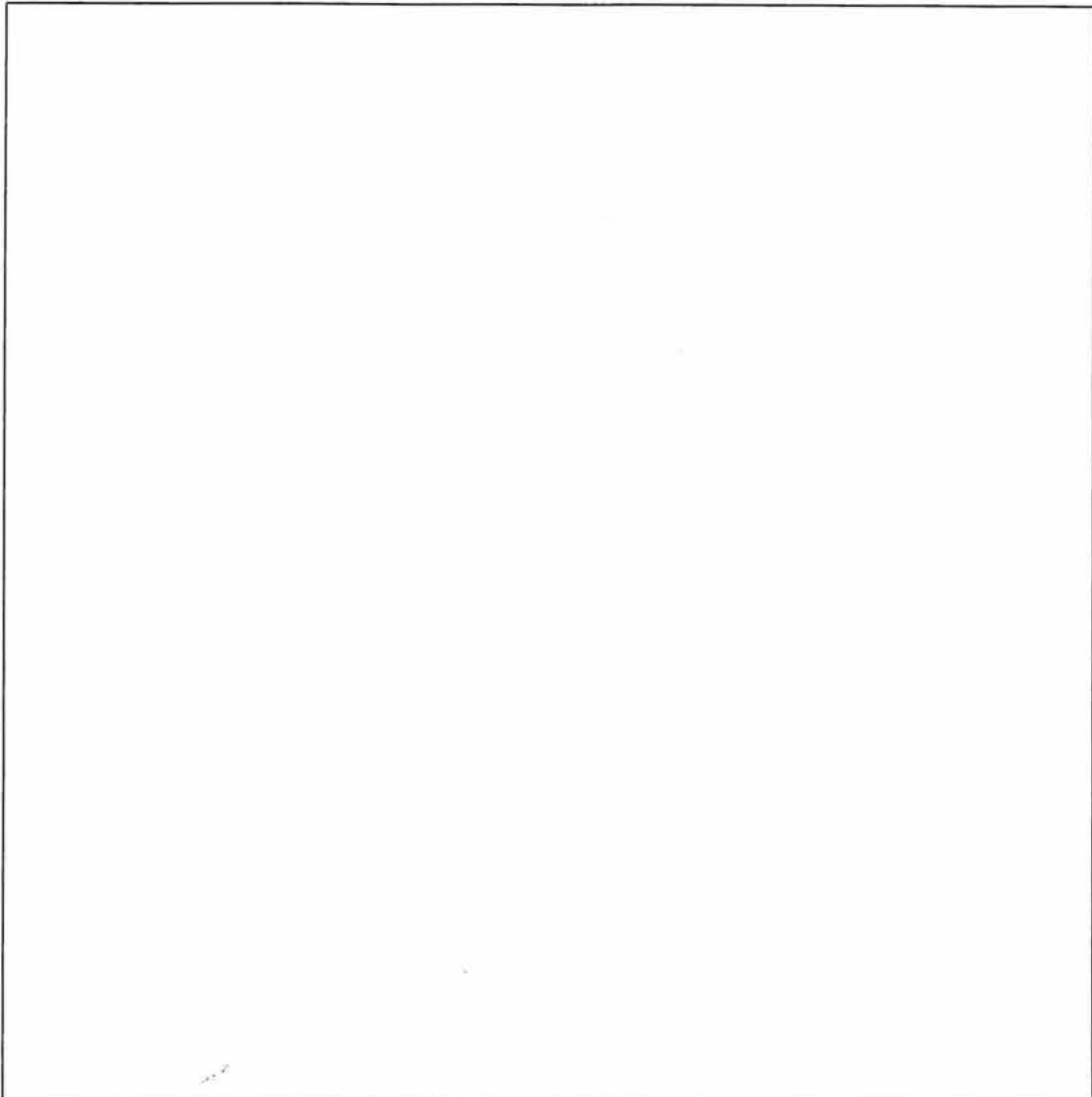
No declared rare flora² were located in the Hamelin Pool Common. Three Priority³ flora species, as defined by the Department of Conservation and Land Management (1997), were located in the Hamelin Pool Common. *Chthenocephalus spathulatus* a Priority 1 species, a very small daisy is recorded from two associations and *Tetragona coronata*, also a Priority 1 species, was only recorded from the chert area. *Acacia drepanophylla* a Priority 3 species is a shrub which is a dominant *Acacia* species in several vegetation associations. Every care should be taken to ensure no damage occurs to these plants.

² The term “declared rare flora” is used to mean any plant species that is threatened with extinction and declared by the Minister for the Environment under the Wildlife Conservation Act (1950) as ‘rare flora’.

³ Priority 1 species are defined as “Taxa which are known from one or a few (generally <5) populations which are under threat”. Priority 3 species are defined as “Taxa which are known from several populations, at least some of which are not believed to be under immediate threat”. These taxa are under consideration for declaration as “rare flora” but are in urgent need of further study.

4. TENURE AND LOCATION

The location of Hamelin Pool Common and enclave reserves in relation to surrounding land is shown on Map 2.



Map 2 – Location of Hamelin Pool Common and enclave reserves

4.1 HAMELIN POOL COMMON RESERVE N^o 658

Hamelin Pool Common is located on the southern most edge of Hamelin Pool and Reserve 658 was originally gazetted for the Flint Cliff Telegraph Station on the 18th April 1884. On the 14th August 1941 the area was vested in the Shire of Shark Bay for the purpose of “Common”.

The Shire will have ongoing management responsibilities under the Local Government Act 1995 – Legislative functions of local governments – Local laws section 3.5.

Division 2 – Legislative functions of local governments

Subdivision 1 – local laws made under this Act

Legislative power of Local Governments

- 3.5 (1) A Local Government may make Local laws under this Act prescribing all matters that are required or permitted to be prescribed by a Local Law, or are necessary

or convenient to be so prescribed, for it to perform any of its function under this Act.

- (2) A Local Law made under this Act does not apply outside the Local Government's district unless it is made to apply outside the district under section 3.6.

4.2 SHELL BLOCK QUARRY RESERVE N^o 37963

The 4ha Shell Block Quarry Reserve N^o 37963 was vested in the Shire of Shark Bay on 28th of September 1982. This reserve has in the past been source of shell block for building in Shark Bay, particularly in Denham.

4.3 WATER SUPPLY RESERVE N^o 28786

The small (0.4ha) Water Supply Reserve N^o 28786 near the new boardwalk was the original site for the PWD storage shed. There are no structures remaining on this Reserve and it cannot be easily distinguished from the Common.

4.4 ROAD RESERVE

The Hamelin Pool Road has been realigned in recent years. The Department of Land Administration has resurveyed the new alignment and is presently in the process of gazetting the new road and degazetting the old alignment as requested by the Local Authority.

4.5 HAMELIN POOL MARINE NATURE RESEVE

The Hamelin Pool Nature Reserve (Marine Reserve N^o 6) was gazetted on 25 May 1990. It was vested in the National Parks and Nature Conservation Authority (NPNCA). The vesting was changed to the Marine Parks and Reserves Authority (MPRA) in 1996 under the Conservation and Land Management Act (1984). This Reserve extends to the high water mark leaving a 40 metre strip of vacant Crown Land between high water mark and Hamelin Pool Common which visitors must cross. The Shark Bay Marine Reserves Management Plan 1996-2006 (CALM 1996) recommends this strip be vested in the NPNCA (now the MPRA) and incorporated into the marine reserve.

4.6 ADJOINING FREEHOLD LAND AND LANDOWNERS

4.6.1 Murchison Location 161 – Hamelin Telegraph Station

The 2.0235 ha Murchison location 161 became private property in 1964. In 1993 the location was rezoned from Parks and Recreation Reserve to Special Use Zone (Historic Place and and Tourist Accommodation). The Telegraph Station is now owned and managed by D and J Tayler as a tourist destination with a 20 site caravan camping area and a museum and café. The Telegraph Station is a highly significant historical precinct with three of the original buildings still in place.

4.6.2 Hamelin Pool Pastoral Lease

The Western Australian Year Book 1993-94 identified Hamelin Pool Sheep Station. This Station was originally called Boolagoorda. It was later renamed Hamelin Station and more recently Hamelin Pool Station. The Station surrounds the Common on three sides. The current lessees have been present since 1978.

- ACTION 2:** Continue to manage the Hamelin Pool Common as a Common vested with the Shire of Shark Bay
- ACTION 3:** Seek to have the reserve officially titled the “Hamelin Pool Common”.
- ACTION 4:** Incorporate water supply Reserve N^o 28786 into Reserve 658.
- ACTION 5:** Support Murchison Location 161 remaining freehold.
- ACTION 6:** Support the incorporation of the strip of Vacant Crown land between the Common and high watermark into the Hamelin Pool Marine Nature reserve as recommended in the Shark Bay Marine Reserves Management Plan 1996-2006 (CALM 1996).

5. RECREATION AND TOURISM MANAGEMENT

5.1 VEHICLE ACCESS AND CAR PARKING

Objective - Provide and maintain a high standard of visitor facilities in the reserve

The Shire of Shark Bay with Commonwealth-State funding realigned the road into Hamelin Pool so it now bypasses Hamelin Pool Station homestead. The new road was sealed from the Highway to Hamelin Pool Station entrance in 1996. The Department of Conservation and Land Management has constructed a carpark that caters for car, caravan and bus parking. A walk trail leads from the carpark to the stromatolites and swimming beach. About 20,000 vehicles travelled into Hamelin Pool during 1997 and it is anticipated that visitor numbers will continue to increase.

During the holiday season the carpark is often fully utilised and with additional visitors it will become necessary to seal the carpark surface in association with a redesign of the site. It is intended to complete the sealing of the road and possibly including into the visitor carpark during 1999/2000.

ACTION 7: In consultation with the Department of Conservation and Land Management review the current design to allow for expansion of parking facilities and improved bus access.

ACTION 8: Complete the sealing of the access road through Hamelin Pool Common and associated carpark.

5.2 PEDESTRIAN ACCESS TO STROMATOLITES

Objective - Provide well designed and maintained pedestrian access in the reserve

A path leads from the Hamelin Pool Common carpark to the boardwalk provided for viewing of the stromatolites. The original stromatolite viewing location, a site north of the old Nilemah homestead, was closed in 1989 due to the extensive damage occurring to the stromatolite structures. The Hamelin Pool Common was selected as the new visitor site on the basis of the diversity of stromatolite features, the relatively higher stability of the structures and the existing road and other facilities.

The Department of Conservation and Land Management (CALM) commissioned Dr P Playford in 1993 to prepare a report on tourism access to stromatolites and shell deposits at Hamelin Pool Common. The boardwalk suggested by Dr Playford was constructed by CALM with funding from the Commonwealth Government.

ACTION 9: Continue to implement the following recommendation from Playford (1993) associated with tourist access to the stromatolites on the reserve and the Shell Block Quarry.

ACTION 10: Continue to maintain the pedestrian access in reserve 658 to provide a safe and comfortable walking surface.

5.3 BOOLAGOORDA WALK TRAIL

Objective – To enhance the visitors experience at Hamelin Pool Common

This walk trail commences from behind the old telegraph station and ends at the information shelter at the boardwalk carpark. It passes the shell block quarry, shell deposits and flagpole on the Hamelin Pool Common.

The Boolagoorda Walk Trail was developed by CALM in conjunction with the stromatolite boardwalk. The walk trail provides an additional activity for visitors that come primarily to view the stromatolites. The interpretation for the trail was designed to be consistent with the boardwalk interpretation.

A return circuit from the telegraph station would enhance the visitor experience to the common and associated sites.

Playford (1990) recommended that the wool shed on Reserve 28786, (its original site) be rebuilt following the original design and incorporated into the trail. This structure as well as being historic could serve as a shade area for visitors as it would be located at a site overlooking the boardwalk and at the current commencement of the Boolagoorda Walk Trail. Attempts should be made to retrieve the camel wagon which was housed in the shed until the early 1960's.

Water was always a problem for staff at the Telegraph Station. One of the original fresh water wells in the coquina ridges should be redeveloped and included in the trail. Consideration should also be given to building a water tank as an example of those that were located every 10 miles along the telegraph line when the line was serviced by horsemen. Photographs of these are available at the Telegraph Station museum.

The original flagpole structure that is featured on the trail was used as a lookout tower and navigation aid during early operational days of the telegraph station. Lighters were sent ashore to collect wool and sandalwood and unload provision at Flint Cliff. The structure is probably the only one of its type still standing. It is in urgent need of restoration for historical and safety reasons as many of the timbers are rotten. It should remain as an integral part of the interpretation associated with the trail.

ACTION 11: Maintain the path and signage along the Boolagoorda Walk Trail.

ACTION 12: Consider the recommendations by Playford (1990) for the reconstruction of the wool shed on reserve 28786.

ACTION 13: In consultation with Department of Conservation and Land Management seek funds and undertake the following projects associated with the Boolagoorda Walk Trail:

- **Development of a return trail from the telegraph Station to the carpark**
- **Redevelopment of a freshwater well on the coquina ridge**
- **Construction of a water tank**
- **Restoration of the flagpole**
- **Upgrade signage and information as required**

ACTION 14: Seek to have the camel wagon housed in the original wool shed to be obtained for exhibition in conjunction with construction of a replacement wool shed.

ACTION 15: In consultation with Department of Conservation and Land Management identify and construct a new section of the Walk Trail from the telegraph station to the carpark to complete a return walk.

5.4 NON-SURFACED ACCESS TRACKS

Objective – Maintain a strategic system of management tracks in the Hamelin Pool Common

There are currently many tracks that criss cross the common and the samphire flats. Some are accessible from the Caravan Park and run along the beach front and/or across the coquina ridges though none have direct access to the stromatolites. There is a need for rationalisation of the track system and the closure and rehabilitation of non essential tracks.

ACTION 16: In conjunction with the Department of Conservation and Land Management and identify access tracks in the Common to enable essential management access.

ACTION 17: Close all non essential tracks and rehabilitate with species endemic to the local vegetation association.

5.5 INTERPRETATION AND SIGNAGE

Interpretation on the path to the Boardwalk and along the Boolagoorda Walk Trail was designed to be consistent with the style and content of the information provided on the Boardwalk for interpretation of the stromatolites.

As this area often provides a first introduction to Shark Bay for visitors the information provided on site should be effective, well presented and up to date.

ACTION 18: Maintain interpretative and directional signage

ACTION 19: Review signage and information annually and update as necessary.

6. PRIVATELY OWNED AND OCCUPIED LAND

6.1 TELEGRAPH STATION MURCHISON LOCATION 161

Objective - Facilitate the development of the tourist potential of the Telegraph Station in a manner compatible with the management objectives of reserve 658.

The Telegraph Station is an important tourist destination in Shark Bay. The museum displays present unique insight into the history of the area's heritage. Three of the original buildings are still standing. The Postmasters' Quarters is used as the shop, the Telegraph Station as the museum and the Cart Harness and Chaff shed for storage. In addition an ablution block has been built using coquina shell block, a new fibro residence in keeping with the old style has been built for the manager and some new sheds erected. The postmaster's and linesman's quarters are kept in good repair and the harness and chaff shed could be readily upgraded to form part of the museum.

There is potential for expanded tourist development of the Common in association with the existing historical precinct. As this area is under private lease hold, assistance may need to be provided by the Shire of Shark Bay to improve the museum and recognition of the area for its heritage value.

There are a number of concerns including sewerage and rubbish disposal as associated with the current and possible future development of the Telegraph Station precinct and 20 bay Caravan Park.

The issue of ground water pollution affecting the Caravan Park and stromatolites has been raised in comments on a preliminary draft of this plan. Town Planning Scheme N^o 2 amendment 37 has provided for the Caravan Park and therefore any issues relating to management of sewerage will be dealt with by the Shire in the first instance. Sewerage is currently managed by the use of septic tanks. Although to date the occupancy rate of the Caravan Park has been low the potential discharge from these tanks together with the artesian water entering the Common should be monitored to ensure no damage occurs to the stromatolites. An approved sewerage system is required for the Caravan Park.

Previously rubbish was dumped in a pit on Hamelin Pool Station but is now being dumped in the road material extraction pit on the Common. Hamelin Pool Station also uses the rubbish disposal site on the Common. The rubbish site is managed in accordance with Health Department and Local Government requirements.

The Common also contains a small unfenced sink dam created alongside the boundary of Murchison location 161. This was placed to contain the artesian bore and desalination plant overflow. The surveyed boundary of the Telegraph Station and the associated Caravan Park is not clearly defined. Large entrance gates to the precinct greet the visitor but there is no boundary fence. Both the sink dam and the surveyed boundary of the Telegraph Station precinct should be fenced by the owners of Murchison location 161

ACTION 20: The surveyed boundary of Murchison location 161 and the pond created by overflow from the telegraph desalination plant must be perimeter fenced by the owners of the Telegraph Station. The fences are to be maintained by the owners and built in a style appropriate to the area but not of coquinite.

ACTION 21: Designate and maintain a long term rubbish disposal site on the Common at the present location. The rubbish site to be managed in accordance

with Health Department and Local Government requirements. The pit should be progressively rehabilitated.

ACTION 22: The Telegraph Station proprietors plan and install a sewerage disposal pond no less than 500 meters from the main built-up area by the end of 1999. The effluent would be pumped or gravitated to a "Oxidation/stabilisation" leach drain on the Common. The sewerage disposal plan will be carried out under supervision of the Council's Environmental Health Officer in accordance with the Public Health Act. The completed works must have no adverse visual impact. All trenches for pipe work to be levelled and rehabilitated.

ACTION 23: Monitor ground water to determine any leakage from the sewerage system and the rubbish disposal site on the stromatolites. In the event that contamination is identified, review the system and make necessary changes to the management of the system.

ACTION 24: Review the design of the facility if the Caravan park utilisation is 50% occupied for the duration of the tourist season.

6.2 HAMELIN POOL PASTORAL STATION

Objective - Seek to ensure the management of Hamelin Pool Station does not adversely impact the values of Hamelin Pool Common.

This station surrounds the Common on three sides. The Common had a history of use by Hamelin Pool Station for grazing purposes. Agriculture WA reports for the area describe the stocking rate on the Common as 10-19 ha per sheep unit. If the Common size was taken into account, this would only rate the reserve capacity at 40-50 sheep units per annum. The Common was refenced by the Shire of Shark Bay in 1995 and this has been electrified.

The current lessee wishes to continue grazing stock on the Common. Consistent grazing of the Common is not consistent with the objectives of this Plan.

ACTION 25 In collaboration with the lessee of Hamelin Pool Station maintain the boundary fence around the Common.

ACTION 26: In consultation with the lessee of Hamelin Pool Station determine a time frame to cease grazing of domestic stock within the Common.

7. SHELL BLOCK QUARRY AND BASIC RAW MATERIALS

7.1 SHELL BLOCK QUARRY

Objective - To continue to feature and interpret the geologically interesting structure to visitors

Continue the cutting of the shell block on a limited licence.

The 4 ha Shell Block Quarry Reserve N^o 37963 was vested in the Shire of Shark Bay on 28th September 1982. Shell blocks from this quarry have not been widely used because of their low load bearing ability. The Carbla Shell Block Quarry to the north (on Carbla Station) was more widely used due to its higher load bearing characteristic.

The demand for shell block has decreased gradually over the past 50 years, because of increased labour and transport costs and cyclone ratings for buildings being enforced. Structures built using shell block require internal structure support to conform to building by-laws. In recent years shell block has been in demand for repair work and additions to existing buildings.

The quarry has become an important visitor destination. The Department of Conservation and Land Management has upgraded the information and defined pedestrian access to the quarry site on the Boolagoorda Walk Trail. The area has been substantially cleared of accumulated rubbish and broken glass. Additional interpretative signage, outlining management guidelines, particularly the cutting of blocks, would be of interest to visitors.

Some defacing of the quarry walls has occurred in the past however there has only been minor damage since the quarry walls were refaced some years ago. In order to maintain the integrity of the site, guidelines and administrative procedures for the on going management of the quarry needs to be formalised. This includes limits on extraction and identification of approved uses for which the block can be obtained.

ACTION 27: Under section 3.5 of the Local Government Act 1995 the Shire will make Local Laws, which will establish set guidelines for the extraction and cutting of blocks. These will include:

- Cutting of blocks to be approved only for repair or reinstatement of existing buildings in the Shire and/or create moderate additions.
- No shell block will be available to establish new buildings or large structures unless they are for community or cultural purposes.
- No shell block to be exported from the Shire for building purposes.

ACTION 28: Royalty to be reviewed under the Local Government Act. Procedures to be implemented for obtaining permits, payment of royalty and the Shire to officially appoint the owner of Hamelin Pool Station and the owner of the Telegraph Station to supervise shell block extraction.

ACTION 29: Local Laws under the new Local Government Act will be initiated which will provide penalties for defacing the Quarry Reserve.

ACTION 30: Maintain the quarry walls free of any defacing to discourage inappropriate visitor behaviour.

7.2 LOOSE SHELL, GRAVEL AND SAND EXTRACTION

Objective - To prevent the removal of basic raw materials from the Hamelin Pool Common.

Provide for the extraction of basic raw material for works on the reserve.

Limit the removal of basic raw material from Hamelin Pool Common for works outside of the Common.

Playford (1993) recommended that “Pits left from the extraction of loose shell beside the beach near Flagpole Landing should be filled-in and the ground restored, and no further extraction of loose shell should be authorised”. With the closure of the Flagpole Landing loose shell pits there is a requirement for an alternative source for use by the owners of Hamelin Pool Station and Telegraph Station.

Additional road base material was required to construct the access road into Hamelin Pool Station in October 1994. As road base is difficult to locate in the Shire of Shark Bay and only occurs in pockets over the peninsula, an area that met with Main Roads WA standards for road construction was located and utilised on the Common. The alternative site was 20 km from the road construction and would have incurred additional costs. Two pits were created 250 metres long by 11-13 metres wide and a 4 metre section left between the pits to allow for rehabilitation. The pit site is located behind a slight rise to the east of the Telegraph Station and cannot be seen from the visitor area or the public road.

The surfacing of the access road should be completed in 1999/2000. This will require additional pits of a similar size to be opened next to the current pits.

ACTION 31: Close and rehabilitate the Flagpole Landing loose shell grit quarry.

ACTION 32: Establish a new extraction site in the north-eastern corner of the Common. Set conditions of use and a maximum tonnage to be extracted. The lessees of Hamelin Pool pastoral lease and the manager of Murchison location 161 are the only permitted users of the pit for use on their respective properties. The pits are to be progressively reinstated.

ACTION 33: Prepare a progressive rehabilitation plan for any new extraction sites.

ACTION 34: For proposed works outside the Common ensure that alternative sources of basic raw materials are considered before providing access to sites on the Common.

8. MANAGEMENT OF THE NATURAL ENVIRONMENT

8.1 PROTECTION OF FLORA AND FAUNA

Objective - Protect the flora and fauna of Reserve 658

The vegetation of the Hamelin Pool Common contains some very interesting plant and associations including priority vascular plant species. A plant species list for the area has been prepared although due to the timing of survey work in the area no annuals or orchids were identified.

The Common has been and still is grazed by stock from Hamelin Pool Station. This is inconsistent with the objectives of the reserve and with the rich floral display in the spring. The diversity of vegetation in the reserves provides an opportunity for an interpretative walk for visitors taking in the samphire areas, coastal systems and *Acacia* shrublands. The *Acacia grasbyi* shrublands, where the mini ritchi bark is a feature are particularly interesting.

No survey of fauna in the reserve has been conducted. Kangaroos, emus, monitors and smaller reptiles are frequently seen. In addition many birds species inhabit the area, due to the varying habitat from intertidal zone to inland.

ACTION 35: In consultation with the lessee cease grazing of the Common by stock from the Hamelin Pool Station.

ACTION 36: In consultation with Department of Conservation and Land Management investigate and develop if practical an additional loop to the Boolagoorda Walk Trail to interpret some of the unique environment of Hamelin Pool Common.

8.2 WEEDS

Objective – Prevent the introduction of invasive and declared weed species.

There are many weed species present in the Common as a result of the historic use of the surrounding area and the presence, both past and current, of domestic and feral grazers in the reserve. The most common weed species are prickly turnip, doublegees, calthrop. Although no declared weed species are currently known from the reserve, eradication of any infestation is required. The highly invasive boxthorn should be controlled if detected.

ACTION 37: Monitor disturbed and key visitor areas for the presence of declared weeds and eradicate if detected.

8.3 CONTROL OF FERAL ANIMALS

Objective - To remove all feral animals from the Hamelin Pool Common.

Goats and rabbits have been observed in the Common. These impact on the vegetation by disturbance of the soil and eating and trampling the vegetation. Historically stock from the adjoining pastoral lease have been permitted to graze on the Common. From the commencement of the Telegraph Station both horses and camels also grazed on the Common. All of these feral and domestic animals have impacted on vegetation of the Common to varying degrees with the most damage evident in the *Halosarcia* communities.

Feral cats and foxes have a devastating affect on the wildlife, especially birds and small mammals and reptiles.

ACTION 38: In collaboration with the lessee from Hamelin Pool station remove feral goats from the reserve.

ACTION 39: Support and seek to include reserve 658 in any local Land Conservation District Committee feral animal control programs.

8.4 REHABILITATION

Objective - To rehabilitate all disturbed areas with the appropriate native plant species.

This plan has identified that rehabilitation is required for non essential tracks, basic raw materials extraction and other disturbed or degraded sites. Native plant species associated with the area should be utilised for rehabilitation.

ACTION 40: Develop in conjunction with the Department of Conservation and Land Management a plan for the rehabilitation of all disturbed areas.

ACTION 41 Rehabilitation prescriptions should be prepared addressing method, species required and techniques for collection/treatment of seeds/seedlings.

8.5 FIRE MANAGEMENT

Objectives - Manage fire to protect people, property and conservation values.

There is no evidence of recent wildfires in the area though the risk could increase with additional tourist pressure. Fire is a natural, though infrequent, phenomenon in Shark Bay because of summer drought and lightening storms. Currently a fire break is maintained around the perimeter of the Common and the road through the Common is also an effective barrier to fire. Access tracks need to be maintained and mutual aid established with the pastoralist on Hamelin Pool Station for response to fire and for the protection of his property from a fire commencing on the Common.

Similarly access to the pastoralists' property must be maintained to allow protection of the Common should a fire commence on Hamelin Pool Station. The road through the Common should also act as a fire break and access point.

The owner of the Telegraph Station must comply with the requirements of the Bush Fire Act (1950) and be made aware of the importance of keeping Murchison location 161 in a safe condition with regard to fire.

ACTION 42: Maintain fire breaks in the reserve

ACTION 43: In conjunction with the Hamelin Pool Station lessee and the owner of the Telegraph Station develop and implement a fire prevention and fire fighting plan. This plan should include priorities for protection, mutual aid arrangements and access requirements.

ACTION 44: Ensure that the owner/manager/lessee of Murchison location 161 complies with the Shire of Shark Bay fire break orders and other relevant provisions of the Bush Fire Act (1950).

8.6 LITTER REMOVAL

Objective – Maintain the Common litter free.

Although a considerable amount of the rubbish that accumulated from over 100 years use of the area was cleared from the proximity of Boolagoorda Walk Trail there is still a large amount remaining in several areas. This is mainly broken glass and old cans.

The high number of visitors to the area can often lead to the accumulation of unsightly litter.

ACTION 45: Remove the accumulation of old litter/rubbish from the areas used by visitors.

ACTION 46: Consider the removal of all rubbish bins from the reserve. If this is implemented then appropriately worded signage asking visitors to take their rubbish to a nominated receptacle at a central location (i.e. Telegraph Station) should be provided.

9. FORMATION OF A MANAGEMENT ADVISORY COMMITTEE

The Management Plan is to be implemented through a Management Advisory Committee established by the Shire of Shark Bay. The Committee membership should consist of the Hamelin Pool Pastoral lease owner, Hamelin Pool Telegraph Station owner, a representative from the Shire of Shark Bay staff, the Department of Conservation and Land Management and a Shire of Shark Bay Councilor and should be chaired by the Shire of Shark Bay staff member.

ACTION 47: A management Advisory Committee be formed to advise the Shire of Shark Bay on implementation of the Hamelin Pool Common Management Plan.

10. PUBLIC CONSULTATION

The Management Plan has been formulated to take into account the needs and desires of the public. The initial Draft Plan was advertised for public comment in May 1996. Comments were also sought directly from affected pastoralists and land holders, as well as the Conservation Council of Australia.

The Department of Conservation and Land Management was involved in the drafting of the Plan.

Environment Australia, World Heritage Unit (Canberra) provided further comment. Mattiske Consultants also reviewed an early draft.

The final draft has been advertised for public comment in XXXX.

11. REFERENCES