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Summary document for the Shark Bay World Heritage Property Strategic Plan 2008–2020



Australian Government
Department of the Environment,
Water, Heritage and the Arts



Department of
Environment and Conservation
Our environment, our future 

Shark Bay is a place where World Heritage values are respected by the local community and visitors, where people enjoy their experience, retain an appreciation of the natural and cultural heritage and scientific significance of the property, and understand the need to protect the natural and cultural values for present and future generations, through cooperative management and community involvement, while allowing for ecologically sustainable activities.



Cover (main) Big Lagoon, Francois Peron National Park; insets (*left to right*) dugong feeding on seagrass; everlasting wildflower; stromatolites in Hamelin Pool; Eagle Bluff; canoeing in Shark Bay; woylie.

These pages (main) Stromatolites in Hamelin Pool; (right) wildflowers in Shark Bay; (insets left to right) recreational fishing at Steep Point; Shark Bay daisy; Dirk Hartog Island black and white fairy-wren; coastal landscape; flowering Acacia.



INTRODUCTION

The spectacular 22,000-square km Shark Bay World Heritage Property, on Australia's most westerly point 800 km north of Perth, is one of the world's most outstanding marine and semi-arid terrestrial areas. The property is located in the Gascoyne Region, which includes the shires of Shark Bay and Carnarvon. Sixty-six per cent of the property is marine with some 1500 km of coastline.

Because of its outstanding natural heritage values, Shark Bay was inscribed on the World Heritage List on 13 December 1991, becoming Australia's tenth and Western Australia's first, World Heritage Property. Including Shark Bay, there are currently 17 Australian World Heritage sites.

AMONG THE WORLD'S WONDERS

At the time of its World Heritage listing, Shark Bay was one of just 11 places globally to satisfy all four of the natural criteria. Other similarly qualified places include the Great Barrier Reef, the Galapagos Islands (Ecuador), Mt Cook and Fiordland National Parks (New Zealand), plus Yellowstone, the Grand Canyon and the Great Smoky Mountains National Parks (USA).

A STRATEGIC PLAN SUMMARY

This document provides a summary of the comprehensive strategic plan for the Shark Bay World Heritage Property. The strategic plan outlines the goals, objectives and strategies that all levels of government and the community have supported for the property's future over the next 12 years. It also provides management direction and guidance for agencies, organisations, committees and individuals.

The strategic plan provides a planning framework for managing the Shark Bay World Heritage Property and meeting international, national and state obligations. It outlines World Heritage Convention requirements and the legislative framework across the property. The aim of the plan is to help land and marine managers, World Heritage Property committees and community members understand the value of World Heritage and their roles and responsibilities related to it.



(Left) Shark Bay World Heritage Discovery Centre; (below insets left to right) Shark Bay is enjoyed by tourists and locals; fish and cabbage coral; loggerhead turtle; dugong; thick billed grasswren.

COMMITTED AND INVOLVED COMMUNITY

A key consideration for future management is that, while World Heritage values are conserved, the community benefits socially and economically from World Heritage listing and is proud of what is achieved. The desired future for Shark Bay is for the local community and visitors to the area to be informed, involved, supportive and committed to helping meet Australia's international World Heritage obligations. All levels of the community, government, industry and landholders need to work together for the area's protection and enhancement.

THE COMMUNITY VISION

People living and working in the area have helped develop this vision statement:

Shark Bay is a place where World Heritage values are respected by the local community and visitors, where people enjoy their experience, retain an appreciation of the natural and cultural heritage and scientific significance of the property, and understand the need to protect the natural and cultural values for present and future generations, through cooperative management and community involvement, while allowing for ecologically sustainable activities.

WHAT IS WORLD HERITAGE?

Adopted by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1972, the World Heritage Convention promotes international cooperation to protect natural and cultural heritage which is of such universal value, that its conservation is a concern for all people. A key element of the UNESCO World Heritage mission is to encourage participation of the local population in the preservation of their cultural and natural heritage.

In 1974, Australia became one of the first countries to ratify the World Heritage Convention and remains a strong supporter of its aims.



(Main image right) Rugged and spectacular Zuytdorp Cliffs; (insets left to right) boodie; migrating humpback whale; commercial beach seine fishing in Shark Bay; Eremophila sp.



Five of Australia's 26 endangered mammal species have their only, or major, populations in Shark Bay. It is home for 12 threatened reptile species, 35 migratory bird species and expansive and diverse areas of seagrass meadows, hypersaline environments and microbial communities. The area is home to dugong and loggerhead turtles and is also a staging point for humpback whales.



SHARK BAY'S WORLD HERITAGE VALUES

Shark Bay is a complex marine and terrestrial ecosystem containing many important features that contribute to the property meeting all four natural criteria for World Heritage listing.

The Earth's evolutionary history

Shark Bay has outstanding examples of the Earth's evolutionary history with its microbial communities, including the living stromatolites – the oldest form of life on earth – and microbial mats of Hamelin Pool.

Geological process and biological evolution

Significant ongoing geological and biological processes continue in Shark Bay, such as the evolution of the bay's hydrologic system and the ongoing evolution, succession and creation of exclusive habitats. The bay's hydrological structure, altered by the Faure Sill and a high evaporation rate, has produced one of world's few areas where marine waters are hypersaline – almost twice that of normal seawater. Shark Bay is one of the few marine areas in the world dominated by carbonate deposition. Being at the transition between temperate and tropical marine environments, Shark Bay's waters have some 323 fish species, 218 bivalves and 80 coral species.

Superlative natural phenomena or features

The 1,030-sq km Wooramel seagrass bank contains the world's largest seagrass meadows. Other significant features include Faure Sill (and its associated unique hydrologic structure), the Zuytdorp cliffs, the peninsulas and prongs, and the area's abundance of marine fauna including 10,000 dugongs (12.5 per cent of the world population), dolphins, sharks, rays, green and loggerhead turtles and fish.

Secure habitats for threatened species

Five of Australia's 26 endangered mammal species have their only, or major, populations in Shark Bay. It is home to 12 threatened reptile species and 35 migratory bird species and is a staging point for humpback whales. Shark Bay has 15 species of rare or threatened plants. The property offers the opportunity to maintain refuges on islands and some peninsulas for species that are threatened or extinct elsewhere on the mainland.

Other values

Shark Bay has other significant Aboriginal and European cultural values, plus important social and economic aspects. Cultural and historic sites of significance include Aboriginal midden sites, shipwreck sites and associated land camps, pearling camps, guano establishments and military camps.

(Far right) Coastline of the Zuytdorp Cliffs;
(right) Shell Beach.



A RANGE OF LAND TENURES

Some highly modified enclaves are excluded from the Shark Bay World Heritage Property, namely the town of Denham and environs, Useless Loop saltworks and the gypsum leases on Edel Land. Administered under State statutes, the Shark Bay World Heritage Property has land tenures including freehold, pastoral lease and conservation reserve, for a range of land uses.

World Heritage listing does not:

- alter land tenure, but may have some effect on land use activities;
- affect ownership rights or control – Federal, State and local laws continue to apply; or
- automatically mean that properties placed on the World Heritage List become Commonwealth properties. However, the Commonwealth Government does have an international obligation to protect and conserve World Heritage values. This is reflected in legislation and the 1997 State–Commonwealth agreement.

WORLD HERITAGE ADMINISTRATION

In September 1997, the Western Australian and Commonwealth governments signed an agreement on administrative arrangements for the Shark Bay World Heritage Property. This provides for on-ground management, operational support and administrative structures run by the WA Government, in accordance with Australia's World Heritage Convention obligations.

The organisational structure and reporting relationships of the various committees representing the world heritage properties across Australia and the relevant State and Commonwealth ministers is undergoing a review. An Environment Protection Heritage Council has been established to deal with all national, strategic or cross-cutting issues with regard to world heritage properties. Other site specific matters will be dealt with on a bilateral basis by relevant State and Commonwealth ministers. The responsibilities of the previous Ministerial Council will be dealt with by correspondence between ministers where they do not fall within the ambit of the Environment Protection Heritage Council.

The 1997 State–Commonwealth agreement established a Community Consultative Committee and Scientific Advisory Committee for the Shark Bay World Heritage Property. The role of these committees will continue to be to provide advice to the Environment Protection Heritage Council and State and Commonwealth ministers as required.



(Left) Landscapes and seascapes of Peron Peninsula;
(insets) aquaculture in Shark Bay Marine Park;
Pileanthus sp.



Responsible agencies

The strategic plan identifies the responsibilities and actions required of agencies in relation to managing World Heritage values. Often agencies or authorities will carry out these actions under their existing programs. Resources are unlikely to be available to achieve all actions immediately; many will be ongoing. Initially, agencies are likely to commit available resources to high priority, or ongoing, actions. The plan's priorities may also be varied due to new knowledge, developments or issues. The Environment Protection Heritage Council and State and Commonwealth ministers will provide direction in identifying priority actions for implementation, with advice from the Community Consultative Committee and the Scientific Advisory Committee.

At the end of the strategic plan's term, a new plan will be produced for approval of State and Commonwealth ministers. Amendments can occur within the life of the strategic plan, but these will only be made after a public consultation process and with approval of State and Commonwealth ministers.

THE PRIMARY GOAL

The strategic plan's primary goal is, in accordance with Australia's obligations under the World Heritage Convention, to identify, protect, conserve, present and transmit to future generations and, if appropriate, rehabilitate Shark Bay's World Heritage values.

In achieving this primary goal, proper regard will be given to:

- allowing for the provision of essential services to communities;
- allowing for uses of the area which do not threaten the World Heritage values and integrity;
- recognising the role of management agencies in the protection of the area's values; and
- involving the local Shark Bay community in the planning and management of the Shark Bay World Heritage Property.

IDENTIFICATION

Further biological research and surveys of Shark Bay's terrestrial and marine environments will be comprehensively documented to record areas of outstanding universal value. Over much of Shark Bay, the World Heritage values can be effectively managed consistent with existing tenure and land use. However, in some areas, changes in tenure may produce improved World Heritage value protection and management. In liaison with the community, including leaseholders, tenure and land use requirements will be reviewed to identify any such areas. Effective community consultation and efficient administration will work to develop community support for any appropriate amendments in tenure. Economic and social values also need to be taken into account when any tenure changes are considered.

PROTECTION

Appropriate legislation, regulatory and institutional arrangements are needed to protect and manage the property and to generate widespread community support. The goal is to protect Shark Bay's World Heritage values through effective legislation and integrated management. For this to happen, everyone involved must be aware of the implications of World Heritage listing, their responsibilities for protecting World Heritage values and have procedures and processes in place to ensure their protection. Regular and effective communication between agencies and relevant authorities will ensure that World Heritage values are actively considered in their activities and actions. The priorities for the protection of World Heritage values will be identified and reviewed regularly, through community and interagency consultation.

World Heritage values must not be degraded by activities or developments within or adjacent to the Shark Bay World Heritage Property. All such proposals will be subject to an environmental assessment process, in accordance with State and Commonwealth legislation and the State-Commonwealth agreement.

CONSERVATION

A key focus of the majority of the recommended actions in the strategic plan is to conserve Shark Bay's World Heritage values by managing threatening processes such as fire, introduced plants and animals, plant and animal diseases, pollution, impacts from human activities and competing land uses.

Management, research and monitoring programs will assist in the understanding, control and management of such threats to enable as many self-sustaining natural areas as possible to thrive. Through broad consultation, a research and monitoring program will be developed to prioritise needs and knowledge gaps.

Through community collaboration, human-induced disturbances to the integrity of World Heritage values will be minimised. Community involvement will also help, with any restoration and rehabilitation required, to enhance World Heritage values.

Species richness

To conserve the values of the property, management aims to maintain species richness and genetic diversity, so the populations of threatened species remain viable, and to maintain opportunities for the area's continued natural evolution. A key action will be to support the preparation and implementation of recovery plans for all threatened flora and fauna in the Shark Bay World Heritage Property.

Flora

The Shark Bay World Heritage Property is located at the transition zone of two botanical provinces – South West and Eremaean – so many flora species are located at the northern and southern limits of their geographical range. Shark Bay contains two rare species of flora and 63 priority listed species. Further knowledge is required on the distribution, biology, threatening processes and management requirements of threatened flora species and others of special conservation interest. Priorities need to be set for the conservation of species within the area.

Fauna

An important fauna management strategy is to re-establish populations of threatened species in areas where they formerly occurred. This has been undertaken on Heirisson Prong (including the boodie, western barred bandicoot and Shark Bay mouse) as part of the Useless Loop Community Biosphere Project (ULCBP) and Peron Peninsula (including the malleefowl, woylie and bilby) as part of the Department of Environment and Conservation's Project Eden. On Salutation Island, the greater stick-nest rat has been successfully established to protect the species, although it did not previously occur there. More recently Shark Bay mice, boodies, banded hare-wallabies, western barred bandicoots and greater stick-nest rats have been released on Faure Island in association with the Australian Wildlife Conservancy.

A key action in the strategic plan is to support the preparation and implementation of recovery plans for all of Shark Bay's threatened flora and fauna.

Marine formations and landforms

Marine formations (including the stromatolites, Faure Sill and the Wooramel Seagrass Bank) and landforms (including Zuytdorp Cliffs, Dirk Hartog Island dunes, shell deposits of L'haridon Bight and Hamelin Pool, plus Peron Peninsula) must be managed so human activities and threatening processes do not degrade them. Through consultation, research and monitoring will be encouraged to avoid or minimise any such threats.

Any potential impacts on the significant visual resource value of Shark Bay's seascapes and landscapes will be considered in the environmental assessment process for proposed developments and activities.

Cultural heritage

Although listed because of its natural values, Shark Bay also has Aboriginal and European cultural heritage of local and national significance. A key action will be to identify and document such sites and artifacts, where appropriate, to properly protect them and to increase community and visitor awareness, appreciation and understanding of cultural values.

Pollution

A range of potential pollution sources could impact on Shark Bay's World Heritage values, particularly in the marine environment. Action will be taken to research, monitor and control such sources, including shipping movements and ballast discharge, and nutrient inputs to groundwater. Through inter-agency collaboration, a contingency plan has been prepared for emergency pollution and oil spills.

Introduced plants

Weeds can displace native flora species, destroy habitat, reduce pastoral production and degrade aesthetic and recreational values. A weed management strategy will be developed and implemented to prevent the introduction of, and to manage the spread of, unwanted terrestrial and marine plants. Through consultation, priorities will be documented for the control of introduced plants and action plans developed with land managers to prevent additional infestations.

Introduced animals

Some of the most significant threats to World Heritage values are from cats, foxes, rabbits and goats. The status and distribution of introduced animals will be investigated, priorities established, control programs implemented and monitoring undertaken in collaboration with land managers. To prevent the introduction and spread of exotic marine animals, similar procedures and a monitoring program will be developed for the marine environment.

This page (insets left to right) Malleefowl; birrida on Peron Peninsula; commercial fishing; nudibranch egg mass; Monkey Mia tourists with bottlenose dolphins.

Opposite page Coastal landscapes in Shark Bay.



Through community collaboration, human-induced disturbances to the integrity of World Heritage values will be minimised.



Fire

To ensure appropriate fire management, inter-agency support will be coordinated to contain wildfires to the smallest possible area, so World Heritage values are protected. When appropriate for vegetation management, fire will be used to protect and enhance the habitat for threatened species. To ensure consistent policies for fire management, liaison will be facilitated between landholders, managers and local authorities.

Recreation

Shark Bay's most popular recreation sites include Monkey Mia, Francois Peron National Park, Shell Beach Conservation Park, Hamelin Pool and Steep Point. Viewing the dolphins at Monkey Mia rates as the most popular activity, followed by sightseeing, photography and picnicking. Water-based activities, including boating, canoeing, sea kayaking, diving, snorkelling and fishing are also popular. The plan's objective is to encourage local communities and visitors to enjoy the values of Shark Bay by providing diverse and sustainable activities that do not adversely impact on World Heritage values. In consultation with the community and key organisations, appropriate planned recreation opportunities will be facilitated. Degraded recreation sites will be identified and prioritised for rehabilitation.

Nature-based tourism

The property's diverse range of natural values and features represents a major resource for expansion of nature-based tourism. Through collaboration with the tourism industry and relevant agencies, the strategic plan aims to develop nature-based tourism opportunities and visitor experiences that support the protection of World Heritage values. Programs will be developed and implemented to ensure that tour operators remain well informed about World Heritage values and management proposals.

Nature-based tourism is a major regional economic industry for Shark Bay. Interacting with wildlife is an increasingly popular activity for tourists who visit each year. Such wildlife must have the appropriate legislative protection and management. The strategic plan works to encourage those wildlife interactions that maximise educational opportunities, foster support for wildlife conservation and have no adverse impact on fauna populations.

Access

A key objective is to provide appropriate road, air and water access to Shark Bay that addresses everyone's needs, without compromising World Heritage values. Key actions will include improving access where appropriate, rehabilitating disused tracks and working with the community to restore degraded sites.



(Above) Seagrass meadows in Shark Bay Marine Park; (insets left, left to right) Bernier Island in Shark Bay; landscapes and seascapes of Shark Bay; Useless Loop solar salt production; (insets right, left to right) bottlenose dolphin; Tamala rose; Shark Bay mouse; rugged western coastline of proposed Dirk Hartog Island National Park; (below right) Hamelin Pool.

CONSERVATION (continued...)

Climate change

Climate change is likely to impact on WA's North-West through increased warming, changed rainfall patterns and more extreme weather events. To minimise climate change impacts on World Heritage values in Shark Bay, management practices will be adapted as new knowledge is acquired. A key action will be to ensure that adequate areas are set aside to protect flora and fauna, to rehabilitate vegetation and to reduce overgrazing by native and introduced herbivores.

Mineral resource development

World Heritage listing requires any proposed developments to be carefully evaluated to ensure they do not degrade World Heritage values. Proposals for mineral exploration and development in and adjacent to Shark Bay will be assessed and evaluated to ensure they do not impact on World Heritage values and the integrity of the property. The environmental impacts of mineral exploration and development will be closely monitored and reported.

Petroleum resource development

Proposals for petroleum exploration and extraction activities in and adjacent to Shark Bay will be assessed and evaluated under existing legislation and Government policies to ensure they do not impact on World Heritage values or the environmental integrity of the property.

Salt production

Salt production is expected to continue in Shark Bay, but with ongoing controls and monitoring, to avoid or minimise impacts on World Heritage values. Through effective consultation, mine operators will be encouraged to ensure protection of these values is considered in the management and control of solar salt operations.

Basic raw material use

The extraction of basic raw materials such as gravel, sand, limestone, gypsum and shell grit for construction can degrade natural values including the visual landscape. Through inter-agency consultation, extraction of each resource will be planned, to address resource availability and demand. Research will be undertaken to improve the understanding of ecological processes associated with shell being deposited in L'haridon Bight.

Fisheries

Commercial and recreational fishing are important economic and social components of Shark Bay. Fisheries in the area will be managed in line with existing plans, plus State and Federal legislation. The status of targeted fish species will be regularly monitored and reported. Aquaculture proposals will be assessed under existing legislation and Government policies to ensure they do not impact on World Heritage values.

Pastoral use

Pastoralists are resource managers in the property. Agencies will liaise with pastoralists on those management activities that relate to maintaining World Heritage values. Pastoral lease conditions will be appropriately evaluated and applied, to protect and conserve these values.

Other uses

The strategic plan also addresses factors such as horticultural use, other resource use, including resource use by Aboriginal people, and the impact of the provision of services and infrastructure on Shark Bay's World Heritage values.

Proposals for mineral exploration and development in and adjacent to Shark Bay will be assessed and evaluated to ensure they do not impact on World Heritage values and the integrity of the property. The environmental impacts of mineral exploration and development will be closely monitored and reported.



PRESENTATION

There is an obligation to provide information, education and interpretation to local, national and international visitors and communities. The goal is to create greater awareness and understanding of Shark Bay's universal values, while engendering support and respect for the property.

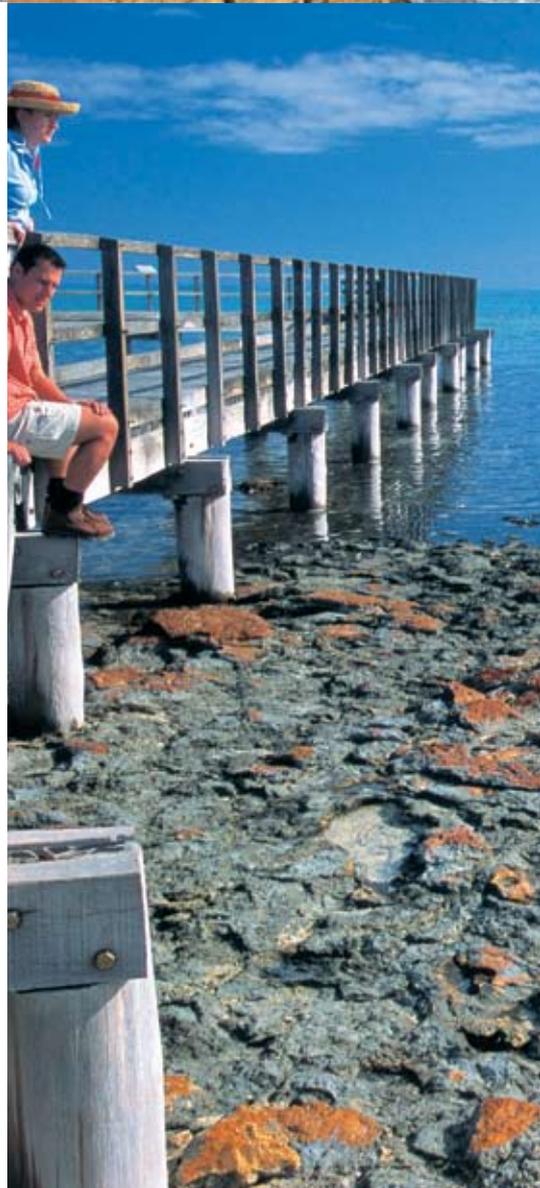
To create a greater appreciation for these outstanding universal values, relevant agencies will monitor the implementation of the Shark Bay World Heritage Communication Strategy and Interpretation Action Plan. This provides the blueprint for developing a wide range of interpretive products to promote understanding of World Heritage values and responsible visitor behaviour. The Shark Bay World Heritage Discovery Centre was opened in 2006 and provides outstanding interpretive displays that present the World Heritage values of the property.

REHABILITATION

There is an obligation to restore and manage degraded areas caused by unmanaged threatening processes. Changes to natural functioning ecosystems can cause degradation. The introduction of weeds and feral animals, plant and animal diseases, fire, pollution, human activities and competing land uses can also degrade areas of the property. These require some form of rehabilitation to ensure that Shark Bay's World Heritage values are maintained. Through inter-agency consultation, an inventory of any degraded sites will be developed. Rehabilitation requirements will be identified, documented and prioritised. Disturbed areas will be rehabilitated based on these priorities and community involvement will be encouraged.

MONITORING

The overall condition of the Shark Bay area will be monitored annually and reports prepared every six years, to keep the community informed about the state of the conservation of the Shark Bay World Heritage Property and to meet UNESCO and Commonwealth requirements.





MORE INFORMATION ON THE STRATEGIC PLAN

More information can be found at the Department of Environment and Conservation's website www.naturebase.net and at the Shark Bay World Heritage website www.sharkbay.org.

Information can also be obtained by from:

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