

**HOUSE OF ASSEMBLY
LAID ON THE TABLE**

27 Oct 2015

Adelaide Dolphin Sanctuary Act 2005

ANNUAL REPORT

1 July 2014 to 30 June 2015



**Government
of South Australia**

Adelaide Dolphin Sanctuary Act 2005 Annual Report 2014-15

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ADELAIDE DOLPHIN SANCTUARY ACT 2005

This report is for the financial year 1 July 2014 to 30 June 2015 and is presented to fulfil the requirements of section 26 of the *Adelaide Dolphin Sanctuary Act 2005* (the Act).

OBJECTS AND OBJECTIVES OF THE ADELAIDE DOLPHIN SANCTUARY ACT

Section 7 of the Act defines the objects of the Act as:

- (a) to protect the dolphin population of the Port Adelaide River estuary and Barker Inlet; and
- (b) to protect the natural habitat of that population.

These objects are to be accomplished by the achievement of the following six objectives, as defined under section 8(1) of the Act:

- (a) the protection of the dolphin population of the Port Adelaide River estuary and Barker Inlet from direct physical harm is to be maintained and improved;
- (b) the key habitat features in the Port Adelaide River estuary and Barker Inlet that are necessary to sustain the dolphin population are to be maintained, protected and restored;
- (c) water quality within the Port Adelaide River estuary and Barker Inlet should be improved to a level that sustains the ecological processes, environmental values and productive capacity of the Port Adelaide River estuary and Barker Inlet;
- (d) the interests of the community are to be taken into account by recognising indigenous and other cultural, and historical, relationships with the Port Adelaide River estuary and Barker Inlet and surrounding areas, and by ensuring appropriate participation in processes associated with the management of the Port Adelaide River estuary and Barker Inlet;
- (e) public awareness of the importance of a healthy Port Adelaide River estuary and Barker Inlet to the economic, social and cultural prosperities of the local communities, and the community more generally, is to be promoted;
- (f) the principles of ecological sustainable development in relation to the use and management of the Port Adelaide River estuary and Barker Inlet are to be promoted.

For the purposes of subsection 8(1)(f) above, the Act declares the following as principles of ecologically sustainable development:

- (a) that the use, development and protection of the environment should be managed in a way, and at a rate, that will enable people and communities to provide for their economic, social and physical well-being and for their health and safety while—
 - (i) sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations; and
 - (ii) safeguarding the life-supporting capacity of air, water, land and ecosystems; and
 - (iii) avoiding, remedying or mitigating any adverse effects of activities on the environment;
- (b) that proper weight should be given to both long and short term economic, environmental, social and equity considerations in deciding all matters relating to environmental protection, restoration and enhancement;

- (c) that, if there are threats of serious or irreversible environmental harm, lack of full scientific certainty should not be taken to justify the postponement of decisions or measures to prevent the environmental harm.

ADMINISTRATION OF THE ACT

The Minister for Sustainability, Environment and Conservation (the Minister) is responsible for administering the Act. The Department of Environment, Water and Natural Resources (DEWNR) is responsible for day-to-day management of the Adelaide Dolphin Sanctuary (ADS).

ACHIEVEMENT OF SOUTH AUSTRALIA'S STRATEGIC PLAN

In 2005, the *Adelaide Dolphin Sanctuary Act 2005* was proclaimed and the Adelaide Dolphin Sanctuary was established to address community concerns about the safety of the dolphins living in the Port Adelaide River and Barker Inlet. During 2014-15 DEWNR staff undertook actions outlined in the draft ADS Management Plan and Annual Implementation Program. These actions support the following targets of South Australia's Strategic Plan (SASP):

- T3.1 Biodiversity - Lose no species. Resource protection activities were conducted within the ADS, Port Gawler, Backland Park and Torrens Island Conservation Parks to manage significant existing threats to biodiversity conservation, including action to conserve threatened species and communities.

ADELAIDE DOLPHIN SANCTUARY MANAGEMENT PLAN

The Act requires the Minister to prepare and implement a Management Plan for the Sanctuary. The adopted ADS Management Plan was launched by the Minister on 26 September 2008.

The ADS Management Plan sets out the South Australian Government's plans to achieve the objects and objectives of the Act. It broadly charts the direction for Government and stakeholders to pursue in managing the local dolphin population and their environment. The Management Plan covers a seven year period, and actions will be progressed in stages over this time.

The plan is structured around the achievement of each of the six ADS Act objectives. For each objective, the plan:

- Describes issues to support its achievement;
- Defines a strategic direction;
- Makes a priority assessment;
- Identifies government agency responsibilities; and
- Proposes actions to fulfil the strategy.

DEWNR is working with the other agencies responsible for furthering the objects and objectives of the Act to implement the actions outlined in the plan.

Supporting documents

The Management Plan is supported by four companion documents:

- **Three reference papers** which compile specific information about the three main environmental objectives – Dolphins, Key Habitat Features and Water Quality. The papers

provide a summary of the information that has informed the Plan. These may be updated as new scientific research becomes available and new initiatives begin.

- An **Annual Implementation Program** which forms part of the Minister's Report to Parliament. This Implementation Program sets specific annual targets and tasks for the coming year, how these will achieve the actions established by the management plan and assess the achievement of the previous year's program.

ADELAIDE DOLPHIN SANCTUARY FUND

In accordance with section 22 of the Act, the ADS Fund was established to receive monies from grants, gifts, bequests, proceeds of sales or any other means to further the Act's objects and objectives.

No deposits were made to the fund in the 2014-15 financial year and no fund monies were expended.

AUTHORISED OFFICERS

Section 28 of the Act provides for the appointment of officers authorised under the Act. No new officers were appointed during the reporting period.

PREPARATION OF THE ANNUAL REPORT

Section 26 of the Act defines the following requirements relating to the Annual Report:

- (1) The Minister must on or before 30 September in each year prepare a report on the operation of this Act for the financial year ending on the preceding 30 June.
- (2) The annual report must include—
 - (a) information on the extent to which the objects and objectives of this Act are being achieved; and
 - (b) reports on the following matters for the preceding financial year:
 - (i) the referral of matters to the Minister under any related operational Act; and
 - (ii) the enforcement of the general duty of care; and
 - (iii) action taken by the Minister or authorised officers under Part 6; and
 - (c) a program setting out the Minister's proposals for the implementation of the ADS Management Plan during the current financial year.
- (3) The Minister must cause a copy of the report to be laid before both Houses of Parliament within 12 sitting days after the report is prepared.

ACHIEVEMENT OF THE ADS OBJECT AND OBJECTIVES

IMPLEMENTATION OF THE ACT

Actions undertaken aim to ensure the objectives of the ADS Act are achieved. The actions undertaken during 2014-15 are detailed below.

OBJECTIVE 1 - PROTECTION OF THE DOLPHINS

A key aim of the Adelaide Dolphin Sanctuary (ADS) is to maintain and improve the protection of the resident dolphin population from direct and physical harm.

The AMLR NRM Board has facilitated analysis of Dr Mike Bossley's long term data set on Port River estuary dolphins. This has involved review by cetacean researchers and a biostatistician, to enter and analyse data from 1988 to 2012 (10 521 sightings). The study seeks to provide an insight into habitat use, mark recapture analysis, social structure and characteristics of the dolphin population, and assess potential changes in use of the area by dolphins. Initial analysis indicates a significant annual increase over this time of over 6% in the number of dolphins sighted during surveys in the inner estuary. The number of dolphins in the outer parts remained constant. Increased sightings probably signify improved biodiversity across the local ecosystem. The increases may reflect improved water quality, augmented by surveillance and education arising from the proclamation of the area as a dolphin sanctuary. The combination of greater dolphin presence and human activities is likely to result in an increased probability of human interactions and possible impacts (harassment, illegal provisioning, boat strike and entanglement). Therefore, the success of increasing dolphin numbers will require a new set of management responses.

During the reporting period a deceased mature female dolphin was found close to Port Gawler within the boundary of the ADS. During a routine necropsy of this animal undertaken by the SA Museum, initial pathology found a total of four shotgun pellets were discovered in the animal close to its fluke. Additional information may be obtained after the carcass has been fully 'skeletonised,'. DEWNR notified SAPOL and publically called for anyone with further information regarding the incident to come forward. The animal was identified as a long term resident of the ADS. This has been the first known shooting incident of an ADS animal since the establishment of the Sanctuary. Investigations into this incident failed to result in any persons of interest being identified.

Pathological examination of dolphins stranded in the Adelaide and Mt Lofty Ranges Natural Resources Management area is undertaken by the South Australian Museum, supported by funding from the Adelaide and Mt Lofty Ranges Natural Resource Management Board (AMLR NRM Board).



Image 1: Deceased dolphin with 4 pellets in tailstock



Image 2: Deceased dolphin where it was found

A further six dolphin deaths were recorded within the ADS during the reporting period and are listed in Table 1.

Table 1: Dolphin deaths recorded in the Adelaide Dolphin Sanctuary 2014-15

No.	Date	Species/Sex/Age	Location	Necropsy Findings (cause of death)
1.	10/09/14	Bottlenose Dolphin (<i>Tursiops aduncus</i>), neonate calf	Garden Island	Body could not be retrieved
2.	21/12/14	Bottlenose Dolphin (<i>Tursiops aduncus</i>), mature female	Barker Inlet, Port Gawler	Circumstance of death intentional shooting (shotgun pellets found in tail stock). There was evidence of disease that may or may not have been related to being shot.
3.	16/01/15	Bottlenose Dolphin (<i>Tursiops aduncus</i>), neonate calf	Barker Inlet	Body could not be retrieved
4.	10/02/15	Bottlenose Dolphin (<i>Tursiops aduncus</i>), adult male	Torrens Island, ASC	Disease (possibly infectious disease, severe blunt trauma). Slightly emaciated. Multiple skin lesions.
5.	10/02/15	Bottlenose Dolphin (<i>Tursiops aduncus</i>), neonate calf	ASC	Carcass was quite decomposed when recovered, difficult to determine cause of death
6.	16/04/15	Short Beaked common dolphin (<i>Delphinus delphis</i>)	Torrens Island Food market	Cause of death: disease; serious blunt trauma and severe parasite infection in pancreas and liver
7.		Bottlenose Dolphin (<i>Tursiops aduncus</i>), mature female		Carcass was never found but animal hasn't been seen since November 2014 and it is presumably dead.

Regular patrols and observations of resident dolphin population were undertaken by staff to observe any notable changes in behaviour of the population. Staff were assisted by ADS Action Group volunteers who undertook regular observations of the dolphin population, monitoring individual resident dolphins to increase the knowledge about the ADS dolphins.

A resident ADS calf was reported entangled in fishing gear in two different incidents during the reporting period. In both cases the animal freed himself of the entanglement and the animal's health wasn't affected.

To ensure compliance with the legislation to protect dolphins, habitat and water quality staff completed over 50 water patrols. Staff investigated, recorded and reported all incidents of speeding vessels, harassment and feeding of dolphins. All reported offences under Section 68 of the *National Parks and Wildlife Act 1972* and *National Parks and Wildlife (Protected Animals - Marine Mammals) Regulations 2010* were investigated. All reported offences and outcomes are summarised in table 2.

Table 2: Offences and compliance effort in the Adelaide Dolphin Sanctuary 2014-15

Offence and legislation	Number of reports received and investigated	Compliance effort
Feeding a marine mammal and disposing of any material into the water if a marine mammal is present or likely to eat the material.	1	Official verbal warning
Approaching within 50m of a dolphin or within 150m of distressed dolphin or a calf	7	One case still under investigation
Approach head or tail, anchor and position vessel between dolphins		
Intentionally swimming closer than 30m to any marine mammal	1	Official verbal warning
Touching marine mammals		
Intentionally harassing a marine mammal	1	Still under investigation
Intentionally harming, injuring or killing a marine mammal	1	Investigations into this incident failed to result in any persons of interest being identified
Failure to comply with permit conditions	3	One on-spot fine issued

OBJECTIVE 2 - PROTECTION OF KEY HABITAT FEATURES

The ADS contains mangroves, seagrass, saltmarsh, tidal flats, tidal creeks and estuarine rivers which all combine to provide habitat for the ADS dolphins and for their food resources. The *Adelaide Dolphin Sanctuary Act 2005* requires that key habitat features in the Port River and Barker Inlet are necessary to sustain the dolphin population and are to be maintained, protected and restored.

The following actions in table 3 were undertaken by Natural Resources, Adelaide and Mt Lofty Ranges (NR, AMLR) staff to address threats to specific vegetation communities within the ADS. Works were undertaken to assess and improve the vegetation condition with priority for the control of declared weeds in highest conservation priority areas as identified in the *Metropolitan Adelaide and Northern Coastal Action Plan 2009*. Funding has also been provided by the Australian Government via an AMLR NRM Board Sapphire Coast Icon Project, which aims to improve biodiversity conservation of saltmarsh and shorebird habitats and increase community awareness of the conservation significance of coastal habitats in the Northern Adelaide area.

Table 3: Habitat protection and restoration works within the ADS

Location	Investment	works
Mutton Cove	\$21 500 (Samphire Coast Biodiversity Fund)	Weed control (Bridal Creeper, Boxthorn, Olive, False Caper, Onion Weed, Galenia, weedy grasses etc) site preparation for revegetation Revegetation with 1110 seedlings.
Port Gawler Conservation Park	\$13 865 (Samphire Coast Biodiversity Fund) \$3790 (AMLR NRM Board) \$2000 (DC Mallala In-kind)	Bridal creeper, Calomba Daisy control Revegetation (1000 plants) Rubbish Collection
Buckland Park	\$36 000 (NRM Land Management Program) \$4000 (DEWNR funding) \$2328 (AMLR NRM Board) \$16 760 (Samphire Coast Biodiversity Fund)	Weed control (<i>Casuarina glauca</i> , African Boxthorn, Artichoke, <i>Juncus acutus</i>) Weed control (boxthorn, Euphorbia, Bridal Creeper, Horehound Sharp Rush) Gahnia plantings
Torrens Island Conservation Park	\$10 630 (Samphire Coast Biodiversity Fund)	Weed control (Bridal Creeper, Boxthorn, Pyp Grass, etc) Revegetation – supply of 500 seedlings for planting day with Kurna community
St Kilda	\$150 (AMLR NRM Board) \$800 (Samphire Coast Biodiversity Fund)	Revegetation Weed control
Bird Island	\$14 240 (AMLR NRM Board)	Rat Control Boxthorn Control
Salisbury Wetlands	\$13 300 (Samphire Coast Biodiversity Fund)	Yellow Sedge skipper Gahnia plantings
TOTAL	\$ 139 363	

The AMLR NRM Board funded the Torrens Island Biodiversity Action Plan. The purpose of the Biodiversity Action Plan is to assist managers in their efforts to protect and conserve the coastal, estuarine and marine ecological values of Torrens Island Conservation Park. The Plan documents the key biodiversity values and threats on Torrens Island and prioritises the management of the threats for effective biodiversity conservation.

Feral deer in the northern coastal areas of the ADS have been observed impacting upon the coastal habitats. The Samphire Coast Icon Project funded an assessment and report prepared by Bushcare and Beyond 'An assessment of the presence of feral Fallow Deer (*Dama dama*) and environmental damage in the Gawler River delta: using motion-sensitive trail cameras and opportunistic ground search'. The assessment determined that the abundance of feral deer

were significantly impacting upon sensitive northern coastal habitats within and adjacent to the ADS. The results of the surveys have been crucial in determining the level of hazard posed by feral deer on public and private land in the area. Based on the information gathered during this process, an assessment will be made by NR AMLR of the need for a feral deer control program along the northern coastal plain, and then implement a program if required.

The AMLR NRM Board has funded the development of an on-ground works action plan for Bird Island/Section Bank and NR AMLR has developed a memorandum of understanding with Department of Planning, Transport and Infrastructure (DPTI) and Flinders Ports for collaborative management of this significant conservation area.

In 2014, the Government committed \$1.675 million over four years, for the establishment of the Adelaide International Bird Sanctuary. This sanctuary will protect vital habitat for internationally significant migratory shorebirds that visit South Australia from the Northern hemisphere each summer, travelling along a major migratory route called the East Asian-Australasian Flyway.

The Adelaide International Bird Sanctuary will stretch from Dry Creek in the south, to Parham at its northern extent. From Port Gawler Conservation Park to Dry Creek, the coastal crown land proposed to be included in the bird sanctuary lies within or adjacent to the Adelaide Dolphin Sanctuary.

The goals of the establishment phase are to:

- Protect the Adelaide hub of the East Asian-Australasian Flyway by establishing the Bird Sanctuary along a 60 kilometre stretch of the Gulf St Vincent coastline north of Adelaide.
- Create a more liveable and sustainable city by developing a network of natural green spaces on the fringes of the northern Adelaide Plains that will allow stormwater recycling, absorb carbon dioxide and enhance the amenity and attractiveness of the region, while also providing a natural buffer against the impacts of sea level rise.
- Provide opportunities for new and unique tourism experiences and natural spaces for interacting with nature across the northern parts of Adelaide, reaching and boosting the economic and intrinsic value of the area.

Protection of the saltmarsh, mangrove and tidal flat coastal ecosystems of the gulf will equally benefit the Adelaide Dolphin Sanctuary population.

OBJECTIVE 3 - IMPROVEMENT OF WATER QUALITY

The South Australian Environment Protection Authority (EPA) is the lead agency in monitoring coastal, estuarine and marine water quality off the Adelaide coastline and for Gulf St Vincent. They are identified as a key agency under this objective in the ADS Management Plan.

The Port River and Barker Inlet Estuary has large areas of shallow, warm waters with restricted flushing from the Gulf waters. The Port River and Barker Inlet waters tend to retain poorer quality water, maintain favourable conditions for algal growth, and have an increased risk of environmental impacts.

ADS continued to work with the EPA regarding water quality issues in the ADS waters. The EPA investigated and provided information to the ADS and the community on the compliance of water-based industrial activities and instances of fuel spills throughout the Port River.

During the reporting period the Port Adelaide Enfield Council undertook the following activities to improve stormwater quality entering the ADS in accordance with the Barker Inlet, Magazine Creek and Range Wetlands Management and Maintenance Plans and AMLRNM Board:

- Commissioned a project to plant aquatic plant species within the Magazine Creek Wetland.
- Commissioned a project to build bunds to prevent Carp from entering and breeding in the Barker Inlet wetlands.

The Port Adelaide Enfield Council also developed a series of plans for the proactive planning for stormwater management and climate change for the area, including:

- The initiation and preparation of the Lefevre Peninsula Stormwater Management Plan with the AMLR NRM Board and the SA Stormwater Management Authority, including a major focus on improving the quality of stormwater discharged to the Port River and coasts from intensely developed areas.
- Progressing the preparation of the Western Adelaide Region Climate Change Adaptation Plan, which includes identification of the projected impacts of climate change on the region's vulnerable coastal environments and ecological assets, including marine waters and species.

Other actions:

- Four Aquatic Licences referred to the ADS under the *Harbors and Navigation Act 1993* were assessed for their potential to cause turbidity.
- New developments and activities referred to ADS were assessed for their potential impact on sediment disturbance and that appropriate actions were recommended to minimised any disturbance.
- ADS staff continued to remove and document floating marine debris while on patrol
- ADS staff and volunteers organised a clean-up Australia day at St Kilda Boat ramp to remove rubbish and discharged fishing line from the area.

OBJECTIVE 4 - RECOGNITION OF LOCAL INTERESTS AND PARTICIPATION IN MANAGEMENT PROCESSES

There are significant indigenous and other cultural and historical relationships within the Port Adelaide River estuary and Barker Inlet which must be considered in the management of the ADS environment. Without the support of all the diverse users of the ADS environment, it would not be possible to achieve the ADS Act objectives of protecting the dolphins and their habitat.

The ADS Action Group, established in 2012, has over 50 registered volunteers who contributed over 3000 volunteer hours a year supporting the achievement of the ADS management plan objectives through on-water and land-based patrols, administration tasks and community outreach projects.

ADS staff delivered several training programs for volunteers including dolphin identification, introduction to the ADS and marine safety training in conjunction with DPTI Marine Safety Officers.

ADS staff provided executive support for the Adelaide Dolphin Sanctuary Advisory Board who met twice during the reporting period providing advice to the Minister as required on matters pertaining to the Act.

In accordance with the objectives of the recent review and reform of all boards and committees within South Australia, it was recommended that the Adelaide Dolphin Sanctuary Advisory Board be merged with the Wilderness Advisory Committee, the National Parks and Wildlife Council, the Marine Parks Scientific Working Group and the Marine Parks Council to form a new Parks and Wilderness Council.

The Board prepared a legacy report for the new Parks and Wilderness Council with major recommendations for the continuation of its functions.

ADS staff assessed four referrals for aquatic activity licences (issued under section 26 of the *Harbours and Navigation Act 1993*) and worked with licensed and unlicensed recreational users to ensure best practices are undertaken. Assessments of referrals included sailing, rowing, and speed boat events.

ADS staff provided advice and conducted assessments for new and existing ADS Commercial Tour Operators permit applications issued under the Tour Operator Licensing and Permitting Policy in support of the *National Parks and Wildlife (Protected Animals - Marine Mammals) Regulations 2010*.

ADS staff ran a training session for one of the local tour operators to help its staff learn about the sanctuary, the dolphins and marine mammal regulations, and issued an on-spot fine to another tour operator for breaching their permit conditions.

ADS staff, supported by the ADS Action Group and the AMLR NRM Board, developed an ADS Users Guide to provide specific information about the ADS dolphins and their habitats, and highlight the importance of the Port River and Barker Inlet environs for SA. The booklet has been distributed throughout community engagement and outreach outlets throughout the ADS.

OBJECTIVE 5 - PROMOTION OF PUBLIC AWARENESS OF ECOLOGICAL IMPORTANCE OF THE AREA

ADS staff and volunteers delivered a third edition of Dolphin Day on Saturday 11 April 2015. The event attracted up to 7000 people and was a collaborative effort with many government and non-government organisations participating on the day. The event was sponsored by the AMLR NRM Board, Landcare, Port Adelaide Enfield Council and Renewal SA, and provided an opportunity to raise awareness of the sanctuary by engaging with the wider public of South Australia and promoting the environmental importance of the area.



Photo 3: Volunteers and children attending Dolphin Day 2015

All activities aimed to raise the profile of the ADS within the community and encourage users of the ADS waters to understand and appreciate the unique resident dolphin population and supporting habitats within the Sanctuary.

The ADS Management Plan aims and objectives were promoted to the community through presenting information to community groups and public forums including:

- Wild at Hart markets in late August 2014 at the new and redeveloped Hart's Mill precinct in Port Adelaide.
- Marine Fun day on 1 October 2014 held at the SA Museum to promote the new Marine Parks network.
- North Haven Primary School Junior Dolphin Ranger annual training day, SA Maritime Museum, 27 February 2015.
- Regular community engagement days at boat ramps within the ADS.
- Dolphin Day community event, Port Adelaide 11 April 2015.
- Adelaide Boat Show June 2015.

At these events staff and volunteers promote opportunities for community to get involved and understand the environmental importance of the ADS through the activities of the ADS Action Group.

The 3rd International Conference on Marine Mammal Protected Areas was held between 9 and 11 November 2014 at the Stamford Grand Adelaide Australia. ADS staff attended and delivered several presentations throughout the conference, which was supported by the AMLR NRM Board. A public talk on the ADS was also given as part of the conference.

The AMLR NRM Board's Australian Government funded Samphire Coast Icon Project seeks to conserve and rehabilitate nationally threatened samphire species and migratory shorebird habitats around the Adelaide Dolphin Sanctuary. Actions include on-ground conservation works, community awareness and planning opportunities for habitat retreat with increasing sea level rise. Saltmarsh and shorebird workshops assisted with public awareness of important areas within the Adelaide Dolphin Sanctuary including:

- Saltmarsh Restoration Forum and Field Trip on 15 and 16 April 2015.

- Five community training sessions on shorebird and ecological values of Upper Gulf St Vincent.
- Four community training sessions on Red-capped Plover ecology and monitoring in the Samphire Coast/Upper Gulf St Vincent.
- Presentation to Birds SA members on the Ecological Values of Upper Gulf St Vincent.
- Shorebird awareness talk and field trip to St Kilda with the Angle Vale Primary School students and parents.
- Vertebrate fauna surveys at sites around the Adelaide Dolphin Sanctuary.

OBJECTIVE 6 - PROMOTION OF THE PRINCIPLES OF ECOLOGICAL SUSTAINABLE DEVELOPMENT

ADS worked with new and existing industries to support the achievement of ecological sustainable development principles. The Act aims to protect and improve the environment of the Port River and Barker Inlet ecosystems including the habitat of the resident dolphin population; it recognises that a wide range of multiple uses of the area will continue and identifies provisions aimed at preventing or minimising environmental impact of these activities and of new developments. Through the referral process DEWNR has continued to assess development proposals under the Act's 'general duty of care' ensuring that all reasonable measures to prevent or minimise any harm to the Sanctuary have been identified in their actions or activities.

ENFORCEMENT OF GENERAL DUTY OF CARE

There were no reported instances when the general duty of care was breached.

ISSUANCE OF PROTECTION OR OTHER ORDERS

No protection or reparation orders/authorisations were issued.

ANNUAL IMPLEMENTATION PROGRAM FOR MANAGEMENT PLAN

Section 26(2)(c) of the Act requires the preparation of a program setting out the Minister's proposals for the implementation of the ADS Management Plan for the current financial year. The Management Plan is a seven-year document and includes a broad description of activities to be considered over this time period.

The Annual Implementation Program provides a means for addressing specific actions that will be undertaken and can be updated annually. It allows for incorporation of unexpected events and is an annual accountability mechanism.

The Annual Implementation Program for 2015-16 is attached as Appendix 1 and has been prepared in line with the strategies and actions outlined in the ADS Management Plan.

APPENDIX 1- ADS ANNUAL IMPLEMENTATION PROGRAM 2015-16

The following actions will be undertaken by staff in Natural Resources, Adelaide & Mt Lofty Ranges and supporting agencies during 2014-15 to achieve the objectives of the *Adelaide Dolphin Sanctuary Act 2005* and strategies outlined in the ADS Management Plan 2008.

Objective 1 - 'The protection of the dolphin population of the Port Adelaide River estuary and Barker Inlet from direct and physical harm is to be maintained and improved' Adelaide Dolphin Sanctuary Act Section 8(1)(a)

Issue 1.1 Lack of scientific knowledge about ADS dolphins

ACTIONS:

- Support on-going research into ADS dolphins and other South Australian dolphins where relevant and appropriate, and seek partnerships with local and interstate universities, the SA Museum and other researchers to explore possibilities for collaborative and low impact, non-invasive research in the ADS.
- Continue the collection of dead dolphins for examination by the SA Museum's Dolphin Trauma Group to inform the ADS dolphin research and monitoring program.

Issue 1.2 Vessel strike (commercial shipping, fishing and recreational vessels)

ACTIONS:

- DEWNR and DPTI to implement preventative measures as required.

Issue 1.3 Entanglement in vessel and fishing gear

ACTIONS

- Work with existing community education programs and undertake specific education programs to increase awareness of the impacts of litter on dolphins and their habitat.

Issue 1.4 Intentional harm

ACTIONS

- Continue regular land and sea patrols of the ADS to ensure compliance.
- ADS education programs will increase awareness of dolphins and support members of the public who report observations of any actual or potential incidents.

Issue 1.5 Impacts from human interaction

ACTIONS

- Maintain regular observation of resident animals to observe any major behavioural changes.
- DEWNR will maintain an overview of Australian and international studies of impacts of human interactions on dolphins to review findings that may be applicable to the ADS.

Objective 2 - 'The key habitat features in the Port Adelaide River estuary and Barker Inlet that are necessary to sustain the dolphin population are to be maintained, protected and restored' Adelaide Dolphin Sanctuary Act Section 8(1)(b)

Issue 2.1 Food Supply

ACTIONS

- Support research to determine specific prey species of ADS dolphins.

Issue 2.2 Loss of vegetation: seagrass, mangroves and supporting species

ACTIONS

- Building on existing work, undertake surveys of seagrasses, mangroves and supporting vegetation (including saltmarsh) in the ADS to determine overall health and possible areas for rehabilitation action; and to monitor possible impacts of climate change.
- Support government agency, local council and community group efforts to rehabilitate and re-establish vegetation.
- Support ongoing seagrass research and rehabilitation programs undertaken by SARDI, Adelaide Coastal Waters Study and the Coast Protection Board.

Issue 2.3 New developments

ACTIONS

- Continue to work with proponents of new and existing developments to ensure that ADS objectives are appropriately considered.
- DEWNR will work with DPTI and local councils to develop performance guidelines to support achievement of ADS objectives.

Issue 2.4 Marine pests: *Caulerpa taxifolia*, *Caulerpa racemosa* and others

ACTIONS

- Support PIRSA initiatives and research in identifying and controlling introduced species.

Objective 3 - 'Water quality within the Port Adelaide River estuary and Barker Inlet should be improved to a level that sustains the ecological processes, environmental values and productive capacity of the Port Adelaide River estuary and Barker Inlet' Adelaide Dolphin Sanctuary Act Section 8(1)(c)

Issue 3.1 Discharges - nutrients

ACTIONS

- Work with the EPA to implement the Port Waterways Water Quality Improvement Plan and address recommendations outlined in the Adelaide Coastal Waters Study which are relevant to the ADS.
- Support research efforts into the effect of excess nutrients, particularly as they relate to prey species, vegetation health and pest species.

Issue 3.2 Discharges - pollutants

ACTIONS

- Provide information to support the use of the world's best practice methods for any new dredging and other sediment disturbance activities to minimise distribution of possibly contaminated sediments and introduced species such as *Caulerpa taxifolia*.

- Support research efforts into the effects of thermal pollution, particularly as it relates to prey species, vegetation health and pest species.
- ADS staff will maintain litter management activities in the ADS.

Issue 3.3 Turbidity and release of toxins from sediment

ACTIONS

- Undertake work on vegetation protection to support stabilisation of sediments.
- Ensure aquatic licence assessments address activities with the potential to cause turbidity.

Objective 4 - 'The interests of the community are to be taken into account by recognising indigenous and other cultural, and historical, relationships with the Port Adelaide River estuary and Barker Inlet and surrounding areas, and by ensuring appropriate participation in processes associated with the management of the Port Adelaide River estuary and Barker Inlet' Adelaide Dolphin Sanctuary Act Section 8(1)(d)

Issue 4.1 Inclusion of all stakeholders

ACTIONS

- Public consultation on any ADS Management Plan amendments will follow statutory process.
- The Minister for Sustainability, Environment and Conservation's Annual Report and Annual Implementation Program will be made available to all stakeholders.

Issue 4.2 Support of recreational users

ACTIONS

- DEWNR will continue ongoing assessment of referrals for aquatic licences (under section 26 of *Harbors and Navigation Act 1993*).

Issue 4.3 Support of industry interests

ACTIONS

- DENWR will investigate establishment of an industry stewardship program for the ADS area to provide opportunities to best achieve ecologically sustainable development in collaboration with each other and with government.

Issue 4.4 Protection of indigenous values in the area

ACTIONS

- Work with ADS Advisory Board Kurna members and other Kurna people to ensure ADS information reflects Kurna culture accurately and appropriately.

Issue 4.5 Support for tourism activities

ACTIONS

- Liaise with existing operators to assess the current cumulative impact of activities and work with operators to develop appropriate ADS interpretative material.

- Work with operators and the public to ensure understanding of the *National Parks and Wildlife (Protected Animals - Marine Mammals) Regulations 2010* and support compliance with these Regulations.

Objective 5 - 'Public awareness of the importance of a healthy Port Adelaide River estuary and Barker Inlet to the economic, social and cultural prosperities of the local communities, and the community more generally, is to be promoted' *Adelaide Dolphin Sanctuary Act Section 8(1)(e)*

Issue 5.1 Supply of informative, timely and accessible information about the ADS

ACTIONS

- Compile an ADS communications strategy, including an assessment of existing information, and ensure the strategy includes appropriate actions to support implementation of the plan.
- DEWNR will work with relevant government agencies, including PIRSA Fisheries, DPTI and EPA, to ensure a consistent delivery of messages.
- DEWNR will continue to support and distribute the ADS Education Resource kit.

Objective 6 - 'The principles of ecological sustainable development in relation to the use and management of the Port Adelaide River estuary and Barker Inlet are to be promoted' *Adelaide Dolphin Sanctuary Act Section 8(1)(f)*

Issue 6.1 Promote the implementation of economically sustainable development (ESD) principles with local industries and new developments

ACTIONS

- In conjunction with other agencies, DEWNR will work with new and existing industries to support the achievement of ESD principles.
- DEWNR will investigate interest and level of support for the establishment of an industry stewardship program for the ADS area to provide opportunities to best achieve ESD in collaboration with each other and with government.