Casuarina Coastal Reserve is Darwin’s premier urban reserve, attracting over 935,000 visits annually. The reserve is in the northern suburbs of Darwin, about 15 km from Darwin city. It encompasses about 1360 hectares, including Buffalo Creek Management Area, and protects Top End woodland, monsoon vine forest and an 8km strip of stunning coastline and offshore marine area.

The reserve is used mainly by locals as an area to exercise, walk with the dog, cycle or escape to the bush or beach. Although the reserve is set aside primarily for recreation, it protects natural and cultural values that are important to the people of Darwin and provides excellent education opportunities. The natural values are significant at a local level, where habitat is diminishing rapidly. They include the most significant seagrass meadows in Darwin Harbour, habitat for migratory waders and shorebirds, and a nesting site for Flatback, Olive Ridley and Green turtles.

Because the reserve is in the heart of the northern suburbs, the community plays an active role in its management. Many community groups use the reserve, one of the most active being the Casuarina Coastal Reserve Landcare Group.

The Larrakia Aboriginal people speak for the area and maintain links with the land and its sacred sites. The reserve also contains many important World War II sites including Sandy Creek Observation Post.

NT parks and reserves have been assessed and classified for their visitor and biodiversity values. Casuarina Coastal Reserve is rated as one of the Territory’s most valuable parks for visitors, having been classified as a Class 1 Visitor park and a Class 3 Biodiversity park.

By the numbers in 2014

- 1361 hectares
- 935,000 visits
- 3.2 rangers
- 425 hectares per ranger
- 292,200 visitors per ranger
The most significant changes in the past 2 years

• A new management team has given greater focus to community engagement.

The most important actions in the next 2 years

• Implement the new management plan.
• Submit the 5 year Experience Development Plan.
• Implement the Memorandum of Understanding with the Casuarina Coastal Reserve Landcare Group.
• Install traffic counters to gain a better understanding of visitor activity in the reserve.

How to interpret our tables

<table>
<thead>
<tr>
<th>Situation</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great with no need to improve</td>
<td>Green</td>
</tr>
<tr>
<td>Acceptable with room to improve</td>
<td>Yellow</td>
</tr>
<tr>
<td>Unacceptable with improvement needed</td>
<td>Orange</td>
</tr>
<tr>
<td>Critical with improvement urgent</td>
<td>Red</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trend</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🆆</td>
<td>Improving</td>
</tr>
<tr>
<td>↔</td>
<td>Stable / No change</td>
</tr>
<tr>
<td>⬇</td>
<td>Declining</td>
</tr>
<tr>
<td>N/A</td>
<td>Not rated / Not applicable</td>
</tr>
<tr>
<td>✓</td>
<td>Occurred / In place</td>
</tr>
<tr>
<td>✗</td>
<td>Did not occur / Not in place</td>
</tr>
<tr>
<td>?</td>
<td>Unknown</td>
</tr>
</tbody>
</table>
Planning for the reserve

The current management plan for Casuarina Coastal Reserve came into operation in 2002. This plan is now out of date and a new plan is being prepared. The new plan should become operational in 2015 and will provide clear direction for management.

The Casuarina Coastal Reserve Statement of Management Intent is current and is designed to provide an overview of the key values, associated threats and responses, and present key management actions and monitoring requirements. The document is used by park staff.

Rangers use annual operational action plans to assist them to manage fire and weeds and support visitor enjoyment of the reserve.

How is ranger time invested in reserve programs?

There are 7 ranger positions assigned to Casuarina Coastal Reserve. These rangers also manage Holmes Jungle Nature Park, Charles Darwin National Park, Knuckey Lagoon Conservation Reserve and Nightcliff Rainforest Conservation Area.

The Casuarina Coastal Reserve rangers are responsible for the care, control and management of the reserve. They are responsible for protecting the reserve’s natural values and cultural sites from threats, including fire and weeds. Their key role, however, is supporting visitor safety and enjoyment including maintaining visitor facilities, managing activities and administrative functions. There is also a strong commitment to engage with stakeholders and work with the interests of the broader community.

Managing for visitor safety and enjoyment

Casuarina Coastal Reserve is the most visited park or reserve in the Northern Territory. The reserve received over 764 000 visits to Dripstone Cliffs and over 171 000 to Lee Point in 2014. Visitor use is not being properly measured and visitor numbers are extrapolated from figures recorded when counters were operating several years ago. In 2014–15 new traffic counters will be installed, improving our understanding of visitor numbers and pressures.

A community survey in 2012 showed 43% of visitors were very satisfied and 52% were satisfied with their visit.

Rangers are well trained and confident in carrying out all functions associated with supporting visitor safety and enjoyment.
Many of the reserve’s facilities are becoming tired and would benefit from replacement or upgrading. A 5 year experience development plan has been prepared. It considers future recreational needs of visitors including measures to ensure the reserve can continue to deliver a high quality visitor experience with increasing visitor numbers.

Over the past 2 years $400 000 worth of new works were completed including:
- upgrades to the pedestrian/ cycle path along the Dripstone Cliffs ($320 000)
- upgrades to pedestrian path at Lee Point ($60 000)
- installation of back-flow prevention valves ($20 000).

Changes over the next 2 years will include:
- construction of a new toilet block in the car park near the Free Beach ($400 000)
- upgrade to irrigation at Dripstone Cliffs
- upgrades to the Surf Life Saving Club boat ramp
- upgrades to paths at Lee Point
- continuation of upgrades to pedestrian paths.

<table>
<thead>
<tr>
<th>Visitor Satisfaction (%)</th>
<th>Dissatisfied</th>
<th>Satisfied</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>43%</td>
<td>52%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ranger Time - Visitor Programs (%)</th>
<th>Stakeholder engagement</th>
<th>Facility maintenance</th>
<th>Interpretation</th>
<th>Patrons / surveillance</th>
<th>Visitor monitoring /reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5%</td>
<td>10%</td>
<td>15%</td>
<td>65%</td>
<td></td>
</tr>
</tbody>
</table>

Visitor management at a glance

- The park has an annual action plan to support visitor safety and enjoyment ✓
- The achievement of high priority actions stated in the annual visitor action plan (%) 50-70%
- Knowledge of visitor numbers, profiles, behaviours, expectations and satisfaction levels ↔
- Estimated visitor satisfaction with access, facilities and services ↔
Engaging with the community

The reserve has many stakeholders including locals, neighbours, the community and sporting groups. Community involvement in the reserve is important to the Parks and Wildlife Commission. The new management team is giving a greater focus to community engagement.

The reserve is enjoyed by a wide variety of user groups and is an important part of the local community. Community activities in 2013–14 included:

- 7 public turtle hatchling releases, during which over 1100 people assisted with releasing turtle hatchlings to the ocean
- Territory Day on Casuarina Beach, where visitors had picnics and barbecues and let off fireworks
- ‘Welcome to the Waders’ in October 2013, with bird watching specialists talking to visitors about the arrival of migratory waders and shorebirds and the significance of this site
- monthly bird counts at Lee Point and Sandy Creek by a local bird enthusiast group
- Casuarina Coastal Reserve Landcare Group’s regular working bees, planting days and activities through the Corridors of Green project.

Permits are required for special access and activities including functions or commercial activity. 48 permits were issued in 2013–14 for events including:

- orienteering
- triathlons
- rogaining activities
- mountain bike riding events
- St Hans Bonfire Night, a Nordic tradition attended by about 400 people
- inter-school cross country events
- 20 weddings.
- A sky diving company has a concession to land sky divers at Lee Point.

The Casuarina Coastal Reserve Landcare Group is a group of committed local residents who volunteer their time to assist the Parks and Wildlife Commission to protect and enhance the natural values of the reserve. A Memorandum of Understanding has been prepared outlining the key projects the group will undertake, the support the Parks and Wildlife Commission will provide, and key priorities to maintain a positive and robust relationship.

Casuarina Coastal Reserve Advisory Committee has been running since 2011 and comprises members of the local community and key stakeholders. The committee has been assisting in the preparation of the draft management plan for the reserve. The committee met twice in 2013–14.

The Parks and Wildlife Commission is also engaging with the community through the project Connecting the Corridors of Green: A United Urban and Peri-Urban Landcare Approach to Darwin Harbour. This project has been running in the reserve since 2011 and is a successful partnership between the Casuarina Coastal Reserve Landcare Group, Conservation Volunteers Australia, Greening Australia and the Parks and Wildlife Commission.
Knowledge of the reserve’s flora and fauna

Casuarina Coastal Reserve protects an 8 km strip of coastline and adjoining offshore marine area. The marine area includes the most significant seagrass meadows in the Darwin Harbour, which provide habitat and a food source for marine fauna including dugongs. Lee Point, Sandy Creek and Buffalo Creek are recognised as important sites for migratory waders and shorebirds. Sections of Casuarina Beach are also used as turtle nesting grounds for 3 species of marine turtle.

Rangers undertake basic fire and weed management; however, managing for visitor safety and enjoyment takes precedence over managing for biodiversity.

The natural values of the reserve are reasonably well known. Research and monitoring in 2013–14 included:

- sea grass monitoring and a small mammal survey by scientists with the Department of Land Resource Management
- research into vocalisation of great bowerbirds by a non-government scientist
- collection of plants species for undergraduate students.

Research and monitoring also occurs through the Connecting the Corridors of Green project. A 10.6 hectare site is being managed for fire and weeds and being planted with \textit{Croton habrophyllus} and \textit{Litsea glutinosa} to encourage the re-introduction of the Atlas moth. The Atlas moth is listed as endangered under Northern Territory legislation.

Feral animals are not presently managed in the reserve. Cats and cane toads are a threat to natural values; however, there are no effective means of controlling cats and cane toads.
Managing fire
Managing fire in Casuarina Coastal Reserve is difficult. Controlled burns for select areas are planned annually; however, often arsonists light wildfires before controlled burns can be carried out. This leads to more of the reserve being burnt annually than is desirable. Because the reserve is in suburbia, the threat from wildfire will continue to be a concern.

The rangers work closely with Fire and Emergency Services when undertaking any controlled burns and when wildfires occur in the reserve.

Rangers are well trained in carrying out fire management; however, not all planned burning was able to be completed.

Managing weeds
Rangers prioritise weed management and weeds recognised as Weeds of National Significance (e.g. gamba grass), weeds located around infrastructure and those that negatively impact on visitor enjoyment are managed.

Fire management at a glance

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The park has an annual action plan for fire management that directs annual fire action</td>
<td>✔</td>
</tr>
<tr>
<td>The achievement of high priority actions in the annual fire action plan (%)</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>The capacity of the park’s ranger team to manage fire programs effectively</td>
<td>↔</td>
</tr>
<tr>
<td>Change in team capacity to manage fire programs over the past 2 years</td>
<td>↔</td>
</tr>
<tr>
<td>The level of threat to the park’s biodiversity values presented by wildfire this year / now</td>
<td>↔</td>
</tr>
</tbody>
</table>

Weed management at a glance

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The park has an annual action plan for weed management that effectively directs action</td>
<td>✔</td>
</tr>
<tr>
<td>The achievement of high priority actions stated in the annual weed action plan (%)</td>
<td>&lt;50%</td>
</tr>
<tr>
<td>The level of threat to the park’s biodiversity values presented by weeds this year / now</td>
<td>↔</td>
</tr>
</tbody>
</table>
Managing cultural heritage

The reserve contains sites of cultural significance to the Larrakia people and numerous important World War II sites. Knowledge of cultural sites in the reserve is good. There was no change in the level of knowledge of cultural values and no improvement is needed.

The rangers do not have an annual action plan for managing cultural sites in the reserve. The Department of Lands, Planning and the Environment, specifically the Heritage Branch, has prepared a heritage plan for the Sandy Creek Observation Post.

Cultural heritage management at a glance

| Knowledge of cultural values | ⇆ ⇆ |
| Change in knowledge of cultural values | ⇆ ⇆ |
| The reserve has an annual action plan for cultural values that effectively directs action | N/A |