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Foreword

I had the great pleasure of visiting the West Kimberley earlier this month, where in partnership with the Yawuru people, we released the draft management plans for the Yawuru Nagulagun/Roebuck

Bay Marine Park and the Yawuru Birragun Conservation Park.

These plans were the culmination of collaboration with the Yawuru people, highlighting the State Government's commitment to jointly managing conservation areas with traditional owners.

I saw first-hand the tremendous work being done by Yawuru Rangers on the ground and accompanied them on a marine patrol of Dampier Creek, where I was fortunate enough to see the varied wildlife and vegetation of this tropical paradise in our State's far north.

I also visited Cable Beach Primary School to launch a cane toad education resource for Year 1-6 and where the students got to meet Reggie the cane toad sniffer dog.

The students were given an insight into the work being done to combat the spread of cane toads and how they could help.

I also recently visited Windjana Gorge and Tunnel Creek national parks, areas of great beauty that are experiencing growing numbers of visitors.

Strong outcomes are being achieved under the State Government's *Kimberley Science and Conservation Strategy*. From biological research projects, improving cultural and tourism opportunities, to working on land management and training opportunities with traditional owners, and engaging with the community there is a lot being done.

We are well on the way to achieving our vision for the Kimberley, to retain and enhance the high biodiversity and landscape values of the region, and ensure it continues to be a world renowned visitor destination now and into the future.

Environment Minister
Albert Jacob MLA



- The \$81.5m *Kimberley Science and Conservation Strategy* is the largest ever targeted investment in the Kimberley, creating WA's biggest system of marine and terrestrial parks and providing opportunities for nature-based tourism and Aboriginal employment.
- The Strategy takes a landscape approach to conservation, and delivers increased resources to manage threats caused by fire, feral animals and weeds.
- Central to the Strategy are opportunities for Aboriginal involvement and employment in land management.
- The Government's vision for the Kimberley is being delivered through partnerships with traditional owners, landholders, industry and non-government organisations.

Top left: Turtle Reef. *Photo – Kimberley Media* **Top right:** Olive python. *Photo – Andrew Rethus* **Above:** Environment Minister Albert Jacob and Director General Parks and Wildlife Jim Sharp with Yawuru traditional owners. *Photo – Parks and Wildlife*

Have your say on Roebuck Bay

Draft management plans for two of Broome's natural jewels—the Proposed Yawuru Nagulagun / Roebuck Bay Marine Park, which covers most of the bay itself, and the Yawuru Birragun Conservation Park, which fringes much of the bay's shores—have been released for public comment.



Above: Heron and ibis in Roebuck Bay. *Photo – Tourism WA*

Right: Agile wallaby. *Photo – Dave and Fiona Harvey, Naturalist Volunteers.*

Draft management plans for two of Broome's natural jewels—the Proposed Yawuru Nagulagun / Roebuck Bay Marine Park, which covers most of the bay itself, and the Yawuru Birragun Conservation Park, which fringes much of the bay's shores—have been released for public comment.

These two areas will be jointly managed by Parks and Wildlife and the Yawuru native title holders and form part of the Yawuru conservation estate. The proposed marine park will be one of five marine parks to be created by the State Government under its *Kimberley Science and Conservation Strategy*.

Broome is an internationally renowned tourist destination and gateway for tourists to explore the Kimberley. The Yawuru conservation estate's natural rugged beauty, spectacular turquoise waters and abundant wildlife offer a variety of attractions and opportunities for cultural and nature-based tourism.

Roebuck Bay is a wetland of international significance under the Ramsar Convention and a renowned destination for bird enthusiasts. The bay has the greatest diversity of shorebird species on the planet.

Each year around 300,000 migratory shorebirds arrive here from the northern hemisphere to feed on some of the richest tropical intertidal flats in the world, teeming with small invertebrates.

A range of wetlands in the Yawuru conservation estate also have great cultural importance to Yawuru people, and support a wide range of plants and animals.

The southern beaches in the proposed marine park are important nesting areas for threatened flatback turtles. Other threatened animals that occur in the Yawuru conservation estate include the bilby, Airlie Island ctenotus (a lizard) and 10 species of bird including the Australian painted snipe.

You can view and make comments on the plans at www.dpaw.wa.gov.au/yawuru. The plans are open for public comment for three months until Friday 25 September 2015.



New agreement with Karajarri people



Above: Karajarri Rangers. Photo – Karajarri Traditional Lands Association

The State Government has signed an Indigenous Land Use Agreement (ILUA) with native title holders, the Karajarri people, for the creation and joint management of parks and reserves at Eighty Mile Beach, under the *Kimberley Science and Conservation Strategy*.

Environment Minister Albert Jacob said the State Government had made an ongoing commitment to continue to work with and support the Karajarri Rangers to manage the values of Karajarri land and sea country.

“The signing provides new employment and training opportunities for the Karajarri Rangers and a formal land and sea management role for the people,” Mr Jacob said.

“The Government is looking forward to working closely with the Karajarri people to prepare a management plan for new and existing reserves across Karajarri country, including a number of

important *jila* sites (permanent water sources).

“The existing Dragon Tree Soak Nature Reserve (to be renamed Kurriji Pa Yajula Nature Reserve), the Proposed Walyarta Conservation Park, Proposed Jinmarnkur Conservation Park and Proposed Jinmarnkur Kulja Nature Reserve, together with the recently declared Karajarri Indigenous Protected Area, will result in a network of protected areas extending from the Great Sandy Desert to Eighty Mile Beach.

“The agreement will also allow the intertidal portion of Karajarri country at Eighty Mile Beach to be formally added to the marine park.”

Implementation of the marine park management plan and the plan for the terrestrial conservation estate will also help to contribute to a number of the targets and objectives identified in the Karajarri Healthy Country Plan.

The management plan for Eighty Mile Beach Marine Park recognises and supports the rights of the Karajarri people to continue their customary activities, as will the terrestrial reserves management plan currently in preparation.

Mr Jacob said the State Government had already signed ILUAs and joint management agreements with the Nyangumarta and Ngarla people at Eighty Mile Beach.

“These agreements highlight the successful partnerships being developed in the Kimberley between the State Government and native title groups. A key priority for the Liberal National Government is working with Aboriginal groups in the creation of conservation areas to ensure their cultural values are protected and to generate social and economic benefits for communities,” he said.

New tourist facilities on Kimberley wilderness road



Tourist developments on the Gibb River Road and Kalumburu Road in the world renowned east Kimberley are making this remote and beautiful area more accessible for visitors.

Environment Minister Albert Jacob said work on about a 200km section of road, which is the main access route to the Mitchell Plateau, Carson River Station, Drysdale River National Park and Kalumburu, had provided improved facilities for tourists while maintaining conservation values.

"This infrastructure is important because it will help to draw more tourists to some of the region's remote natural wonders," Mr Jacob said.

"The Mitchell Plateau is a spectacular area with incredible waterfalls such as Mitchell Falls and Surveyors Pool, amazing rock art and tropical fan palm forests.

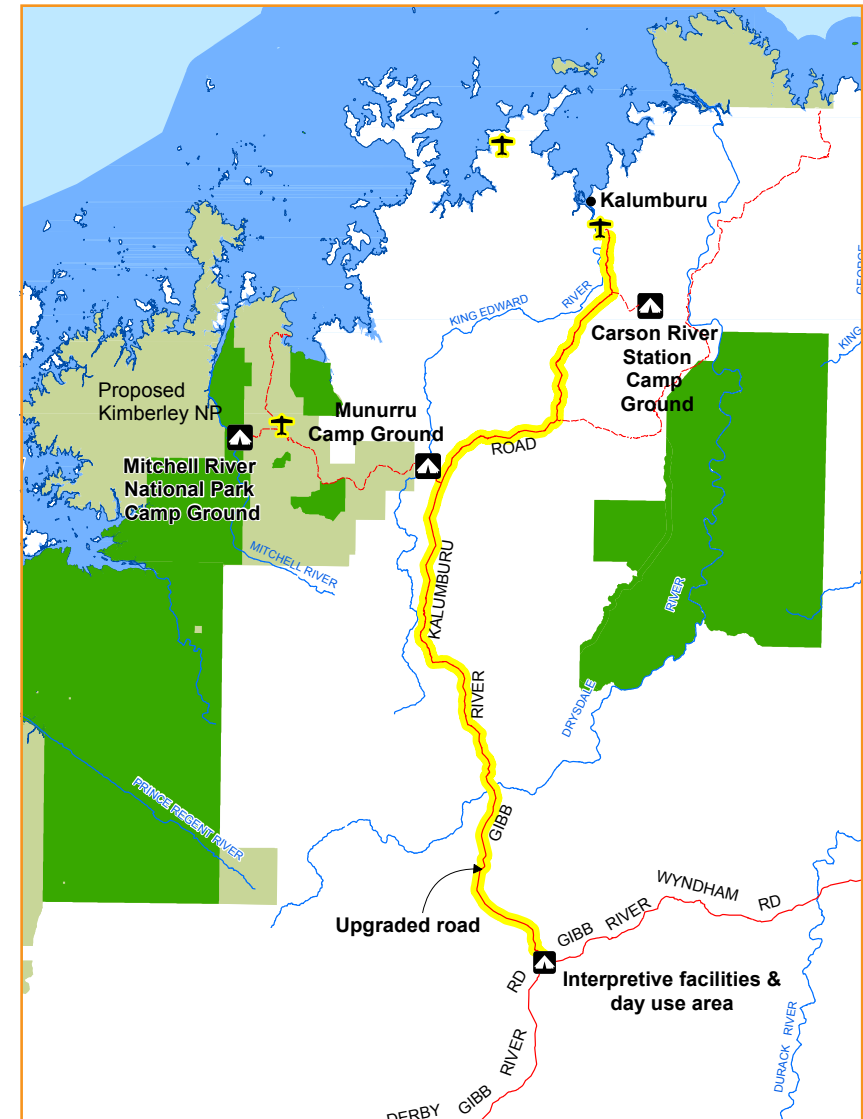
"The work on this wilderness road is part of the State Government's \$81.5 million *Kimberley Science and Conservation Strategy*, the largest ever targeted investment in the Kimberley. Through this strategy, we are creating WA's biggest system of marine and terrestrial parks and providing opportunities for nature-based tourism and Aboriginal employment."

An \$800,000 redevelopment at King Edward River Crossing, or Munurru, has seen the installation of a new day-use area and access track, upgraded car park, hybrid toilets with disability access and sunshades.

This development has also provided work for the Wunambal Gaambera traditional owners who have undertaken works at Munurru and also installed a boardwalk around the historic Mermaid Tree and conducted associated weed control in Prince Regent National Park.

The Kalumburu Road has also been upgraded and interpretive signage, hybrid toilets and day-use facilities provided at the Gibb River and Kalumburu Road junction.

Since 2011 the State Government has spent more than \$5.8 million on upgrading facilities to enhance visitor experiences at many locations in the Kimberley such as Purnululu National Park, Windjana Gorge National Park, and Geikie Gorge National Park.



Above left: The Munurru Day Use site provides access to and protects sensitive rock art. *Photo – Parks and Wildlife*

Map: *John Dunn/Parks and Wildlife*



New marine parks employ traditional owners

The creation of new marine and other parks under the State Government's *Kimberley Science and Conservation Strategy* has so far resulted in 20 traditional owners being employed by the Department of Parks and Wildlife in the west Kimberley.

The Lalang-garram / Camden Sound and Eighty Mile Beach marine parks have now been created under the strategy, with planning for marine parks at Roebuck Bay, Horizontal Falls and in the north Kimberley well advanced.

Dambimangari traditional owner Adrian Lane is one of three full time staff who crews the vessel PV *Worndoom* that will be the platform to jointly manage islands, coastal conservation lands and waters in the Kimberley and particularly those in Dambimangari country.

"Dambimangari people working in the marine park with Parks and Wildlife with one common aim to look after the country is a goal now being realised," Mr Lane said.

"At the same time it promotes opportunities for young Dambimangari traditional owners to be involved and employed with managing the park and help meet their aspirations to access their country."

Parks and Wildlife also employs eight Dambimangari Rangers to undertake management work in

Dambimangari country (the Lalang-garram / Camden Sound Marine Park and the proposed marine and national park at Horizontal Falls) on a fee for service.

Two Nyangumarta Trainee Rangers and two Ngarla Trainee Rangers have been employed full time by the Department of Parks and Wildlife in the Eighty Mile Beach Marine Park. Traditional owners from the Karajarri ranger group will be employed in the park on a fee for service basis as required.

Seven Aboriginal people are employed full time in Parks and Wildlife's West Kimberley District Office to manage Yawuru conservation estate on their traditional lands in and around Broome including in the Proposed Yawuru Nagulagun / Roebuck Bay Marine Park. They include a Yawuru Operations Officer, a Yawuru Trainee Ranger Supervisor, four Yawuru Trainee Rangers and a Yawuru Clerical Officer.

The employment and training of traditional owners in marine park management helps them to maintain connection to, and exercise responsibilities for, their land and sea country. It is hoped that in future the new marine parks will also generate further business opportunities for traditional owners via nature-based and cultural tourism ventures.

Left: Dambimangari traditional owner and Parks and Wildlife employee Adrian Lane. *Photo – Peter Dans*

Workshops to combat aquatic pests



Above left: Nyul Nyul, Bardi Jawi Oorany and Bardi Jawi ranger groups working together at the Beagle Bay workshop. **Above right:** Yawuru and Karajarri rangers inspecting New Zealand green lipped mussels. *Photos – Department of Fisheries*

Indigenous ranger groups from across the Kimberley have joined forces with the Department of Fisheries Biosecurity Section to strengthen WA's frontline defences against aquatic pests.

The Department of Fisheries manages the State's aquatic biosecurity, to protect our waters from aquatic pests.

Workshops, involving about 70 rangers, were held in Kununurra, Kalumburu, Bidadanga and Beagle Bay in March, to exchange information and ideas on what it means to look after and manage country.

Jessica Ngeh, from the Department of Fisheries Biosecurity Team, said Indigenous rangers had extensive local knowledge of the land and sea country in the Kimberley and often visited remote locations so were in the best position to notice and report anything unusual.

"The various ranger groups are managed by the Kimberley

Land Council and the Department of Parks and Wildlife and already perform valuable work across the Kimberley, so we are extremely grateful they are willing to keep an eye out for invasive aquatic pests," Ms Ngeh said.

"Early identification of newly arrived aquatic pests provides the best chance to stop them from establishing, because if they go unnoticed in remote areas and get a hold in the coastal environment any eradication attempts would be very unlikely to succeed.

"The workshops helped us heighten awareness among the Indigenous rangers of the types of aquatic pests that could potentially establish in the Kimberley, such as the Asian green mussel, Asian paddle crab, black-striped mussel and *Mozambique tilapia*.

"The rangers were given practical advice on photographing, recording the location and features of a potential pest

and how to collect and report it so it can be assessed and identified by Department of Fisheries' scientists."

Aquatic pests can arrive in the Kimberley on vessels, in ballast water, attached to dive or fishing gear, on ghost nets and via the release of pets into our waterways.

Ms Ngeh said help was also needed from the rest of the community.

"If you think you have found an aquatic pest, please report it to the Department of Fisheries' 24/7 FishWatch line 1800 815 507, or via the smart phone app WA PestWatch, which can be downloaded free from iTunes or Google Play.

"Photographs of suspected aquatic pests, from various angles, greatly aid our scientists in identification."

See www.fish.wa.gov.au/biosecurity for more information on protecting the Kimberley from aquatic pests.

Teacher toads give goannas a second chance

Sometimes a little bit is just enough to learn your lesson. Native goannas in the Kimberley are being taught to be wary of cane toads by introducing them to smaller toads that will give them a non-lethal dose of poison.

Researchers from the University of Sydney and Parks and Wildlife, together with the Balanggarra Rangers, are giving small “teacher toads” to predatory native goannas, making them just sick enough to want to stay well clear of cane toads in the future.

At the Forrest River Reserve in the Kimberley, where there are 3-5 cane toads per square metre around waterholes at night, conditioned taste aversion (teacher toad) trials are now in their second season.

The cane toad is listed by the World Conservation Union as one of the world’s worst invasive species. In other parts of Australia, native predators such as northern quolls, crocodiles and goannas have significantly reduced in number following the arrival of the cane toad, making it important for Parks and Wildlife to research options to mitigate the impact of cane toads on native predators.

The researchers are analysing data to evaluate the success of the teacher toad training, and so far results are promising. Training has increased the lifespan of some goannas in some of the areas of highest toad abundance.

Next season the partners will focus on monitoring the remaining goannas, as well as goannas that move into the area. They will also investigate ways to apply conditioned taste aversion training on a larger scale.

Similar trials are underway elsewhere, with Parks and Wildlife investigating the field application of toad sausages to train endangered northern quolls to avoid toads.



Any successful mitigation strategy for these top order predators will be of significance to Kimberley islands in reducing the impact of the invasive species on island biodiversity.

The involvement of the Balanggarra Rangers in the trials on a fee for service basis has also had other benefits for traditional owners: “It’s getting back on country, and Oombi is where I grew up, and I just love getting back there and seeing that country,” Balanggarra Ranger Quentin Gore said.

Above: The yellow-spotted monitor is at risk from cane toads.

Right: Balanggarra Rangers check a goanna trap. *Photos - Georgia Ward-Fear*



Baby flatbacks make a big splash

Baby flatback turtles released at the Eighty Mile Beach Marine Park should soon add to world scientific knowledge on the habitat and movements of this species.

Eight juvenile flatback turtles, with equally small radio transmitters attached to their shells, were released with 27 other turtles into the pristine waters of Eighty Mile Beach Marine Park in May.

Department of Parks and Wildlife principal scientist Dr Scott Whiting said information provided by the transmitters would help provide vital knowledge about the 'lost years' after flatback hatchlings entered the sea.

"Evidence suggests flatback turtles are unique among marine turtles and do not spend their early years in the open ocean, but remain on the continental shelf during their development," Dr Whiting said.

"This project will help fill knowledge gaps about their early movements, important habitats and may provide some insight into why they don't venture into the open ocean.

The world-first research is being conducted by renowned marine scientists including Dr Whiting

and Dr Tony Tucker from Parks and Wildlife, Professor Jeanette Wyneken and Dr Michael Salmon (Florida Atlantic University) and Dr Mark Hamann (James Cook University).

The project is also receiving significant support from AQWA, the Nyungumarta Traditional Owners who are joint managers of Eighty Mile Beach Marine Park with Parks and Wildlife; *National Geographic* and volunteers. It is part of the State Government's *Kimberley Science and Conservation Strategy*.

Dr Whiting said it was the first time juvenile flatback turtles had been tracked with satellite technology.

"Hatchlings were collected at Eighty Mile Beach Marine Park in January and raised at AQWA until they were big enough to hold a small solar powered satellite transmitter, and flown to Broome on 25 May," he said.

"Eight of the four-month-old flatbacks were fitted with transmitters before being released at Eighty Mile Beach," Dr Whiting said.

Some of the released turtles can be tracked at www.seaturtle.org/tracking.



Above: Nyungumarta Ranger Nathan Hunter releases a tagged flatback turtle. *Photo - Parks and Wildlife*