"The Hunter's Hidden Gem: The Story of Hexham Wetland" – Extracts from Parts 1 to 3 of *Newcastle Herald* series (January 2024)



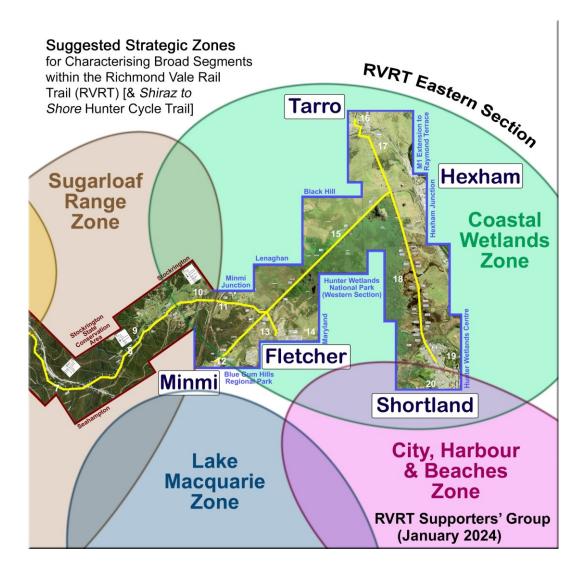
Newcastle Herald has produced a six-part series of interesting articles about the Hexham Wetland, essentially documenting its past, present and predicted (or hope for) future.

We would like to acknowledge all of the *Newcastle Herald* staff who initiated and produced these articles, especially Matthew Kelly, Damon Cronshaw and Simone De Peak, as well as all of the other contributors.

You are **encouraged to read the print or online versions of these Newcastle Herald articles directly from the original source**, which contains additional acknowledgements, photos and links to related materials [the relevant URL links are provided in this document].

In the interests of 'public education, environmental protection and appreciation, and community engagement', we have extracted the text and most of the images from these *Newcastle Herald* articles.

As illustrated opposite, the proposed RVRT Eastern Section (within Newcastle LGA) traverses the western section of Hunter Wetlands National Park, as well as the broader Hexham Wetland.



Part 1: Dreamtime in the big swamp: 'a place of significance' - By Matthew Kelly (Online: January 6 2024 - 12:00pm)

Link to Newcastle Herald article (for subscribers): https://www.newcastleherald.com.au/story/8455676/hexham-wetland-is-full-of-history-mystery-and- stunning-beauty/?cs=7573



Part 1: Dreamtime in the big swamp: 'a place of significance' -By Matthew Kelly

Newcastle Herald – Print Edition: Saturday 6th January 2024 (Pages 6-7).

Dawn breaks and the vastness of Hexham Swamp awakes from its slumber. The stillness gives way to a hidden universe of colour and movement that bursts forth across the 2000-hectare wetland.

Tens of thousands of commuters pass by this natural wonder as they travel between Maitland and Newcastle each day.

Yet few are familiar with the story of how this ecological gem was once sacrificed in the name of



A new day breaks over the Hexham wetlands.

Inset: Matt Syron and Ray Kelly.

Pictures by Simone De Peak.

urban development before it was transformed back into a globally-recognised wetland rehabilitation project.

Burraghihnbihng

Before European settlement, the Indigenous inhabitants knew the area bounded by Shortland, Beresfield and the Hunter River as Burraghihnbihng, meaning "country of lots of freshwater eel". Located near the foot of Keemba Keemba (Mt Sugarloaf), the estuarine wetland's tributaries would have stretched to Port Stephens and Lake Macquarie.

The vast array of Indigenous artefacts found around the swamp area suggest it was likely a shared space between the Awabakal and Worimi peoples. "This is a place where people would have met up and shared stories," Awabakal cultural and heritage officer Matt Syron said as he surveyed the vast open space from a high point at Fletcher.

"We also know that it would have been a place for hunting and gathering."

A small tree-covered hill that juts out from the flat plain on the wetland's western fringe is known locally as Rocky Knob. While little is known about the site, it is thought it may have been a ceremonial area.

"We don't know a lot about its cultural significance, or whether it was a sacred site," Mr Syron said.

"But the fact that it's a high point in such a flat area, makes it seem like it must have been a place of significance."



Hexham Swamp has deep significance to the Aboriginal people of the Lower Hunter.

In her 1986 book, the *Settlers of the Big Swamps*, the late Hunter historian Dulcie Hartley provided a possible reconstruction of the landscape that the area's Indigenous communities would have lived in for thousands of years.

"Huge melaleucas surrounded the shallow margins interspersed with reeds; casuarinas abounded on the verges intermingled with dense undergrowth and many species of eucalypts. On the southern extremity, magnificent strands of Eucalyptus Maculata were found on the rises and rainforest species hugged the banks of the water courses meandering down to the big swamps," Hartley, whose great great grandfather was allotted a land grant at Hexham, wrote.

Colonial settlers, most likely passing through from Newcastle to the Hunter Valley, were first reported in the area in the early 1820s.

While there are no recorded interactions between Indigenous people and Europeans around Hexham, elsewhere in the Hunter the early 19th century was a period of intense conflict.

"You can imagine the turmoil it would have caused as the settlers pushed into this area from Newcastle and down from Port Macquarie," Mr Syron said.

"The families that would have been living in an established area for thousands of years were suddenly getting forced out. It would have been chaos because they would have been trying to stay away from the Europeans but also not cause trouble with other mobs that they would have been colliding with."

Bunyips stalked early settlers

As Newcastle and Lake Macquarie grew throughout the 19th and 20th centuries, Hexham

Swamp remained largely unchanged.



Awabakal Local Aboriginal Land Council heritage officer Matt Syron.

Picture by Simone De Peak.

The first land grant in the Hexham area occurred in 1828 when Edward Sparke Senior received 809 hectares. A year later Alexander W Scott was granted 1000 hectares, which was increased to 1130 hectares.

Another prominent identity was John Hannell (1815-1891), the brother of Newcastle's first mayor James Hannell.

In addition to being the proprietor of the Wheat Sheaf Inn, one of the two hotels that once stood in Hexham, John Hannell also operated a nearby racecourse.

A stone vault that once held the remains of Hannell and his wife Mary Ann still stands on the Hunter River bank near the confluence of Purgatory Creek.

Many of those early settlers believed the area was haunted following reports of guttural growls emanating from deep within the swamp.

It was widely believed these sounds were made by a bunyip that inhabited the area.

Former police sergeant J.G Brown recalled an incident in 1878 when three men believed they



Hexham (Burraghihnbihng) as it appears in Joseph Cross/Henry Dangar 1828 Map.

Source: Hunter Living Histories.

had encountered the creature as they were leaving the swamp following an evening's duck hunting.

"While saying unkindly things about the absence of the ducks, without warning, a tremendous roar, like that of a lion, but very much more powerful, coming from one throat, rang out in the still night," Mr Brown told *The Don Dorrigo Gazette and Guy Fawkes Advocate* in 1925.

They looked in the direction from where the sound came, and they subsequently stated that all they saw were two golden orbs, about the size of soup plates, at a distance of 20 yards.

"The loudness of that roar and the sight of those golden orbs entirely took their speech and the power of their arms away. They looked at each other, blankly and stupidly, quite unable to utter a word or to lift their guns to their shoulders and fire."



Hunting the Bunyip of Hexham Swamp, The Don Dorrigo Gazette March 25, 1925

Transcribed from 1925 P. 3.

A year earlier Mr W. Turton, who was born at Hexham's Wheatsheaf Inn in 1856, told the *Newcastle Sun* that stories about the bunyip, which the Irish settlers referred to as a banshea, were rampant during his childhood.

That was until he and his grandfather John Hannell were able to provide a factual explanation for the mysterious noise.

"About 1864 Mr Hannell [who was a noted duck-shooter] and others started investigating, and as he and myself were almost continuously on the swamps, it was not long before we located the 'bunyip', which proved to be not a mosquito but a bird named the bittern," Mr Turton wrote.



John Hannells house at Hexham, built 1856, which had earlier been the landmark Wheat Sheaf Inn.

"After some years absence from the district I returned to Hexham in 1918 for a period of two years, and while there the bunyip and banshea were still to be heard."

Do you think that Hexham swamp is fully appreciated by the Hunter community? Email news@newcastleherald.com.au or join the discussion below.

Part 2: How Hexham's bountiful wetlands became a wasteland - By Matthew Kelly (Online: January 7 2024 – 8:00am)

Link to Newcastle Herald article (for subscribers): https://www.newcastleherald.com.au/story/8455682/why-hexham-wetlands-were-almost-destroyed-in- the-name-of-progress/?cs=7573



Part 2: How Hexham's bountiful wetlands became a wasteland -By Matthew Kelly

Newcastle Herald – Print Edition: Monday 8th January 2024 (Pages 4-5).

Hexham and its surrounds became a hub for much of the industrial and urban growth that occurred in the Lower Hunter in the first half of the twentieth century.

Major projects included the establishment of the Oak milk processing factory in 1927, the Richmond-Pelaw Colliery Railway, the Great Northern Railway line and the Hunter Water pipeline.

Earthworks associated with these projects gradually increased the concentration of freshwater in the swamp by cutting off tidal channels to the Hunter River to the north and concentrating drainage of the wetland through the Ironbark Creek channel to the east.

By the 1960s the pendulum of progress had swung to the point where the swamp was zoned 'non-urban' and 'industrial'.

In the spirit of progress, a future regional airport was among the land uses identified for the newly reclaimed land.

Longtime Hexham resident Mick Hain recalled visiting the area in the early 1960s with well-known Merewether riding school owner Wal Tracey.

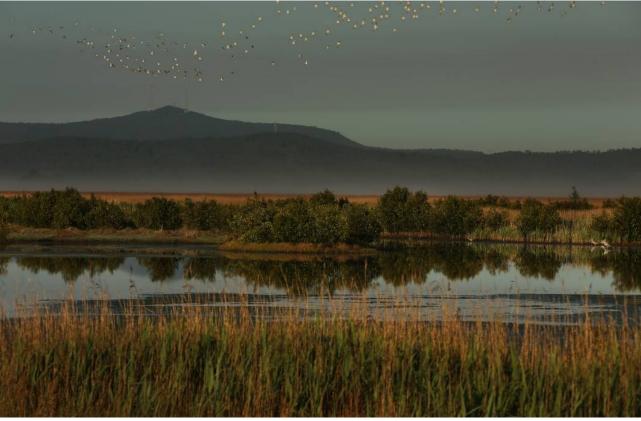
"Wal used to bring his shetland ponies up and graze them during the week. He'd pick them up on Friday or Saturday and take them back to Newcastle for the weekend," he said.

"People used to come from all around to graze their animals back then."

The prevailing attitude was that grazing was the best use for the boggy wasteland on the city's fringe.

At the same time, few understood its environmental importance and its role in the food chain.

Trawlerman Geoff Hyde was among the exceptions. He recalled an area teaming with juvenile marine life that eventually made its way out to sea.



View +7 Photos

Hexham wetland looking across to Mt Sugarloaf.

Pictures by Simone De Peak.

"I'll never forget the day I was working in Steelworks Channel and got 2800 tonnes of prawns in one morning," he said.

"Half of them were King Prawns and half of them were School Prawns. They all came out of Hexham Swamp. It was a magic place, it truly was."

One of the earliest recorded research projects into the area's significance involved tagging prawns in the swamp in the late 1960s.

"You wouldn't believe it, six months later they caught those same prawns off Brisbane because they had tags on them," Mr Hyde said.

But attitudes and priorities were changing.

Following a series of major flooding events in the Lower Hunter during the 1950s, the idea of installing floodgates at the swamp entrance combined with a series of drainage channels was taking hold in the community.

The Department of Public Works and local political representatives were among the biggest supporters.



Fisherman Geoff Hyde recalls Hexham Swamp teaming with fish and birds.

Picture by Simone De Peak.

"A scheme has been prepared for the area which will prevent the entry of salt waters into the swamp area, drain the majority of the swamp area and reclaim areas which are now covered by mangroves," a NSW Public Works summary of the proposed engineering masterpiece stated.

"...as a result of the completed scheme, a large area of swamp will be reclaimed and could then be put to a much better type of production than is presently the case."

Local media championed the project with the Newcastle Sun declaring that the swamp was a "landmark Newcastle could well do without".

Another article justified the installation of the floodgates, described as an engineering masterpiece, and declared the swamp "needed to be cut down to size".

As a bonus, the project was promoted as a silver bullet solution to Newcastle's alleged mosquito problem.

Mr Hyde recalled being the lone voice of dissent at a series of public meetings held to discuss the plan.

"I was trying to get them to understand they didn't know what they were doing and they

should forget about it. It was futile, "he said.



How Hexham's bountiful wetlands became a wasteland.

[&]quot;There were a couple of politicians who had farms at the back of Hexham Swamp. They were the ones pushing the hardest because they wanted more property to run their cattle on."

Devastating impact

Within months of their installation, the environmental impacts of the floodgates were apparent.

The land began to dry out, the once abundant bird and marine life disappeared and, ironically, the saltwater mosquitoes were replaced with a freshwater species.

"It was instant, as soon as those gates went in

The Hexham floodgates as they are today.

Picture by Simone De Peak.

that was the end of the prawns going to sea because they couldn't get in there to breed," Mr Hyde said.

In 1972 the Hunter Valley Conservation Trust expressed the view that further flood and salt mitigation works should be deferred until an environmental impact statement for the project had been completed.

It would be the first environmental impact statement undertaken in NSW under new planning legislation.

The retrospective study, published in late 1972, confirmed the area's immense ecological significance and recommended that work on the project be halted until further studies were completed.

Things remained largely unchanged until the early 1990s when the tide of environmental consciousness began to rise.

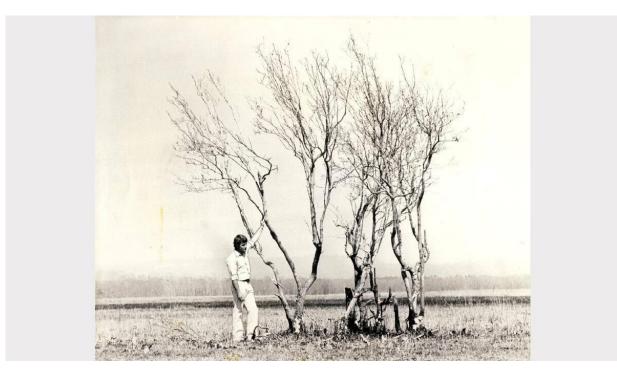
Like 30 years earlier, there were community meetings. This time the focus was to discuss whether the floodgates should be reopened for the benefit of the environment.

Not surprisingly, those who had campaigned so

hard for the floodgates were having none of it.

The need to protect Wallsend from flooding was among the main concerns put forward for keeping the gates closed.

The late Jack Priestly, a significant landholder on the Maryland side of the swamp, was among those who wanted the flood gates kept in place.



Hexham Swamp in the early 1970s.

Picture: Local Land Services.

"Jack was a pretty strong-willed character and he was happy to tell you his opinion about the flood mitigation scheme," Mick Hain said.

"I remember there were some meetings held at the St Joseph's old people's home, where Jack was quite vocal and quite happy to take on the establishment. He was a great advocate for keeping those floodgates working the way they were."

But it was clear times were changing. In response

The dried-out wasteland of Hexham swamp in the 1970s.

Picture: Local Land Services.

to increasing concern from the community and fishing industry, the *Ironbark Creek Total Catchment Management Strategy* was prepared in 1996.

Its key recommendation was to rehabilitate the wetland.

A survey of vegetation changes between 1966 and 2005 found the area of mangroves had reduced from 180 hectares to 11 hectares, saltmarsh had reduced from 681 hectares to 58 hectares, tidal mudflats and shallow ponds had reduced from 59 hectares to 1 hectare and the freshwater reed Phragmites australis had expanded in range from 170 hectares to over 1005 hectares.

Discussion: Do you think the Hexham floodgates were a good idea?

Part 3: The mammoth task of rehabilitating the Hexham wetlands - By Matthew Kelly (Online: January 11 2024 – 2:22pm)

Link to Newcastle Herald article (for subscribers): https://www.newcastleherald.com.au/story/8455685/how-a-wasteland-was-transformed-back-to-a-thriving-wetland/?cs=7573

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vice, which is also responsible for the mago Wetlands and Ash Island rehabili was like more than 250 years ago," he said.

I Read previous articles in this series:



One of the world's most significant wetlands

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the project is now regarded as one of the world's most significant wetland rehabilita-

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Newcastle Herald – Print Edition: Thursday 11th January 2024 (Pages 8-9).

Turning the tide

After 12 years of planning, research and stakeholder consultation, the mammoth task of rehabilitating the wetland was finally approved by the NSW Department of Planning in 2006.

The gates were progressively opened from 2008 to 2013 to gradually re-introduce saltwater tidal flows from the Hunter River at Hexham.

Geoff Hyde, who had persevered through a tough few decades of frugal fishing in the Hunter estuary was among those on hand when the first flood gate

was opened in 2008.

"It was a fantastic experience, magic," he said.

The green light was given to open another two in September 2011 and the final two were opened in July 2013.

Rigorous monitoring of water quality, tidal inundation, vegetation changes, fish and prawn assemblages, bird counts and mosquito monitoring was conducted at each stage of the process.



Geoff Hyde.

Picture by Simone De Peak.

The total cost of the project to date is \$5.4 million, which includes ecological surveys, the acquisition of low lying land and bund construction.

Green shoots

Mr Hyde's daughter, Amanda, has been involved with wetland's rehabilitation for the past 20 years. The most rewarding part of her involvement has been witnessing the gradual restoration of the fish and prawn nursery habitat.

"It's been amazing to see that habitat being restored back to what it was," she said.

"It's such a valuable habitat that makes such a huge contribution not just to local fisheries but to the state."

And there's still plenty of work to do. The results of environmental monitoring, managed by Hunter Local Land services in accordance with NSW state government requirements, show the rehabilitated wetland is continuing to improve.

The most recent surveys of vegetation communities and mosquitoes were conducted in 2020-21 and seasonal sampling of fish and crustaceans and a creek bank assessment was conducted in 2021-22.

The results showed estuarine habitat has improved and continues to develop and increase in area.

The vegetation survey in 2021 found the area of mangroves had increased to 185 hectares, saltmarsh to 109 hetares and tidal mudflats and shallow ponds to 135 hectares. The area of freshwater reed has reduced to 792 hectares.



Amanda Hyde.

Picture by Simone De Peak.

The vegetation mapping indicates a continuing transition of habitat in a mosaic fashion including mangrove recruitment and expansion of saltmarsh, ponds, channels and mudflats. These estuarine wetland habitats covered 520 hectares in 2021, approaching the predicted minimum increase of 600 hectares. The next vegetation survey will be conducted in 2025.

One of the world's most significant wetlands.

After decades of toil and perseverance, the project now regarded as one of the world's most significant wetland rehabilitation projects.

"There's not too many projects that have been done on this scale; there have been some big projects in China but the thing that makes this stand out is its size and length of time it has been going for," Ms Hyde said.

"The fact that this project has been under one ownership, but under different names (Hunter Catchment Management Trust, Hunter Central Rivers Catchment Management Authority and Local Land Services) makes it unique. We have environmental monitoring data going back 20 years and it's ongoing. That's pretty special."

Low public awareness

Despite the impressive achievements, relatively few people in the wider community have an understanding of the wetland.

For instance, few would be aware that it is part of an internationally recognised habitat for migratory bird species that travel from the northern hemisphere.



The mammoth task of rehabilitating the Hexham wetlands

"It's amazing that we have that right here but people aren't aware of that," Ms Hyde said.

"One of our main priorities moving forward will be to raise public awareness."

Among the most exciting proposals to open the wetland up to the wider community is a cycleway that would extend from Shortland to Beresfield, where it would connect to the Richmond Vale Rail Trail.

"It has been a hidden gem for a long time. Opening it up for access with some interpretive signage has the potential to put a real focus on this magnificent wetland," Ms Hyde said.

Partnerships are the key

The Hexham Swamp rehabilitation project, managed by Hunter Local Land Services, falls within the broader footprint of the Hunter Wetlands National Park.

Local Land Services works collaboratively with the National Parks and Wildlife Service, which is also responsible for the Tomago Wetlands and Ash Island rehabilitation projects.

"Just seeing this area, which had been highly



Jo Erskine.

Picture by Simone De Peak.

modified for agricultural use, come back to life as a floodplain and thrive, has been really rewarding," National Parks and Wildlife Service Hunter Ranger Jo Erskine said.

Like many, she agrees the speed at which the wetlands have returned to life has been extraordinary.

"Within three to four weeks [of the floodgates reopening] there were fish jumping out of the water in an area that had been stagnant for a long time," she said.

"It's also surprising how quickly the saltwater vegetation like saltmarsh and mangroves comes back."

But with the wins come challenges.
Unsurprisingly, foxes have made their way into the newly established habitat and are the subject of a baiting program, which Awabakal and Worimi Green Teams have been involved with.



The mammoth task of rehabilitating the Hexham wetlands.

[&]quot;Foxes are a big problem across the Lower Hunter; they come in from everywhere," Ms Erskine said.

[&]quot;What's required is a cross-land tenure approach. We are in a continuous conversation with Newcastle and Port Stephens councils and Local Land Services."

Big plans on the horizon

The NPWS hopes to acquire more land to add to the national park. In recent years it has purchased one block at Hexham and another at Tomago

"We are trying to future proof. As sea levels rise, we are looking at stepping stones further inland," Ms Erskine said.

"Newcastle is surrounded by what we call coastal squares. Most of the wetland areas have urban interface behind them, so we are looking at areas like Hexham

Local Land Services NSW **Hexham Swamp** Rehabilitation Project

The mammoth task of rehabilitating the Hexham wetlands.

Swamp where we may have the opportunity to purchase land when people want to sell to extend the park and the conservation zone."

For Awabakal cultural and heritage officer Matt Syron the wetland's future is about sharing the area's indigenous heritage with the wider community.

"There's going to be opportunities to put fire through here again, just like the old days. I'm excited that people are going to be able to come here and experience what it was like more than 250 years ago," he said.

Discussion: What would you like to see greater access to the Hexham wetlands?