



**2018 INTERPRETATION  
AUSTRALIA AWARDS - PART A**

# **Explore Walka**

**ECOLOGY EDUCATION RESOURCES  
AND THE WALKA BIRD APP**

**WALKA INTERPRETATION MASTERPLAN 2014**



## 1) WHAT IS YOUR PROJECT

### **Introduction**

The heritage value of the Walka Water Works, Maitland, extends well beyond the bricks and mortar of the former pumping station and reservoir. The place has outstanding landscape beauty and has significance as ecology altered by progressive human habitation. This project arises from the place's particular significance as a bird habitat and the initiative of the Maitland City Council and the Hunter Bird Observers Group in establishing a viewing platform on the western edge of the reservoir. This project has developed both on site and multimedia online resources which are discussed and illustrated in this project nomination.

They include:

- Construction of a viewing platform;
- Installation of seating for 20 people to facilitate small group discussion;
- Brochure guide for schools and visitors;
- Signage investigation, content, design;
- Sculptural presence on the site through the installation of a series of marker posts for wildlife viewing areas;
- Educational web based resources;
- Production of the Walka Bird App, a digital education resource.

This project has further developed the heritage school zone on the MCC website. Resources and the Walka Bird app can be viewed at:

<https://www.maitland.nsw.gov.au/our-services/community/education-programs/heritage-education-programs>

Relationships with local schools have been further developed from previous initiatives. The school provided content review throughout the process.

### **Background**

The Walka Water Works Interpretation Masterplan adopted by Council in June 2016, was an action rising out of the Draft Walka Water Works Plan of Management recognising the exceptional significance of the site, and the importance of making its values accessible and understood by visitors.

The Masterplan proposed three thematic programs – Water Works, People in the Landscape, and Ecology.

This project related to interpretation of the site's ecology, as a means to improve understanding of diversity in a human-impacted environment. Walka's rich birdlife has been harnessed to demonstrate its varied ecological values. Content was developed with a focus on observation skills and taking time to appreciate 'Body and Mind' at Walka.

## 2) HOW DOES IT DEMONSTRATE EXCELLENCE AND BEST PRACTICE IN HERITAGE INTERPRETATION?

### **RESEARCH, CONCEPT PLANNING AND METHODOLOGY**

Maitland is the fastest growing inland centre of NSW, and it is considered important that young children have the opportunity to connect to and understand the heritage values of their city. This project seeks to provide useful tools for them to do so.

### **Audience**

The initial focus of interpretation has been students at Stage 2 (Years 3-4; Ages 8-9) of NSW curricula. However, the experience is also intended to provide engagement to other Stages and other casual visitors to Walka, including parents and grandparents with children.

### **Key messages, Themes and Storylines**

During public exhibition of the Walka Water Works Interpretation Masterplan in 2015, the most popular interpretation theme for the reserve was Ecology. 'Ways of seeing nature' had the highest number of respondents who were 'excited' about it. Suggestions have made positive and substantial contributions towards implementing and incorporating ideas into visitor experiences at the site. Comments provided by respondents included:

- More information and tours
- Observation areas
- More opportunities for children to interact with the wildlife and nature
- Sculptural items that connect with a broad range of our community

Interpretation planning for the project was multi faceted and based around preliminaries, investigations, scope finalization, working papers and onsite project team liaison investigating education options which were delivered as part of interpretation works for the Ecology Platform at Walka Water Works. Outputs included:

- Signage investigations, content and design;
- Sculptural onsite installation/s;
- SHI for lodgement under the NSW Heritage Act for on-site works (Exemption for Minor Works);
- Content for the production of a student brochure guide.
- Digital and online resources

The interpretation planning importantly identified:

- Key stakeholders and what to require of them;
- Methods to arrange and present content;
- Project outputs.

### **Communication, Design and Environmental Considerations**

Online, multi media and onsite resources and installations were developed for this project which included a curriculum resource guide, the construction of a ecology viewing platform, ecopod seating for small group discussions, viewing area markers, the Walka Ecology Explorer's Guide, the Walka Bird App, site Information panels, website educational resources and a revegetation program.

- *NSW School Curriculum*

A curriculum resource development guide for Walka was prepared by education consultant Helen Doust which recommended that Walka opportunities can support teaching of History, Science and Geography syllabi. This set the structure for educational outcomes and resources which have been delivered. A Blooms grid mapped to curriculum learning outcomes (arranged by six thinking levels and multiple intelligences) has been developed for a range of context areas and is included as part of the Walka web resources. Students are encouraged to be involved in activities, directed as to how to observe, and how to recognise change. This can be viewed on the website at:

<https://www.maitland.nsw.gov.au/our-services/community/education-programs/heritage-education-programs/walka-water-works-education-programs/walka-for-teachers>

### **Interpretive Media**



*Ecology Viewing Platform*



*Seating at the Ecology Platform*



*Viewing area marker*

- *Ecology Viewing Platform*

The Ecology Viewing Platform (below) set on the lake's edge represents the centre of the program of interpretation works around the theme of ecology.

Designed and constructed by Council, and centrally located within the network of existing trails across the site, the platform has been developed as a destination as part of the project's Walka Ecology Walk, interpretation signage, and a new seating area for small groups.

- *Seating at the Ecology Platform*

The installation of 'ecopod' seating for small groups (up to 20 people) improves the usability of the Walka Ecology Walk and viewing platform. The provision of seating was identified as a priority during project consultation with the Morpeth Public School and the Hunter Bird Observer's Club.

The selection of seating incorporates both accessible and smaller seats configured for group discussion. They are sourced from Repeat Plastics, a company who specialise in sustainably produced products.

- *Viewing area markers*

Visitors are encouraged to complete the Lake Trail circuit where sheltered and expansive viewing areas are marked by a post offering good opportunities for observing wildlife. The route commences from the Pump house car park, progresses to the Ecology Viewing Platform, and continues back to the Pumping Station car park via the reservoir wall.

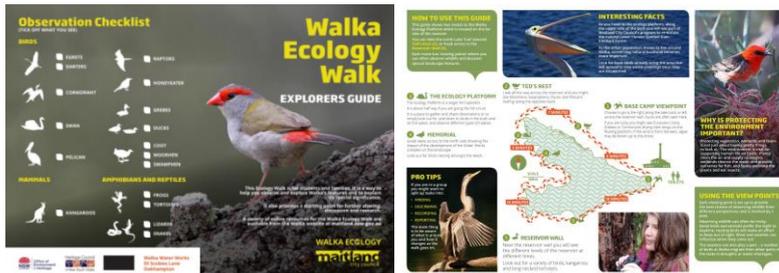
The way finding posts mark key observation points along the walk and have been developed as a sculptural presence on the site. Their locations were developed in close consultation with the Hunter Bird Observer's Club as excellent vantage points for observing wildlife.

The markers consist of metal rhs section coloured posts topped by bird silhouettes representing a common species often seen from their Viewing Area location.

“Look for this species” logos also incorporated into the markers.

- *Walka Ecology Walk Explorers Guide*

An A5 brochure guide has been developed for students and teachers as an excursion resource. School groups are encouraged to divide into groups. Half walking along the northern Lake Trail, and the other half across the reservoir wall. Groups would meet at the Ecology Platform for reporting, observations and discussion.



- *Walka Bird Database*

A selection of birds representative of the over 140 species who visit Walka was developed in close consultation with the Hunter Bird Observer's Club and based on long term survey results and observer experience, A database of details relevant to each of these species was developed which formed the foundation of digital resources developed for the project including the Walka web pages and the Walka Bird App.

The bird list was developed to;

- accommodate the central message of “ecological diversity in altered environments”
- target the program’s primary skill outcome of “observation”.
- highlight the diversity of birdlife of the wetland and its adaption to specific aspects of the Walka environment.

Fields for the database were carefully considered and arranged to encourage observation skills of bird shape and behaviour rather than simply providing definitive points of identification for each species including details on **Habitat, Behaviour, Shape - Bird Silhouettes, Comparative Size, Field Marks, Seen/occurrence** (at Walka), **Numbers** (at Walka), **Food, Scientific Family**.

| Common Name          | Reference Image | Photo                 | Plumage | Size   | Sex and Age     | Typical Size | Field Mark                            | Habitat                                 | Food   | Number | Behaviour                      | Scientific F.     | Notes  | Field # |
|----------------------|-----------------|-----------------------|---------|--------|-----------------|--------------|---------------------------------------|---|--|--------|--------------------------------|-------------------|--|---------|
| Great Crested Grebe  |                 | GRE_GREB_01042018.JPG | Orange  | Medium | Male and Female | 15-20cm      | Orange crest, black neck, white belly | Open water areas, especially near shore | Plankton, small aquatic insects, snails and small fish | 1-2    | Swims on water, dives for food | Fam: Podicepsidae | Water level, temperature, water quality, nesting sites | 1-2     |
| Lesser Crested Grebe |                 | GRE_GREB_01042018.JPG | Orange  | Medium | Male and Female | 15-20cm      | Orange crest, black neck, white belly | Open water areas, especially near shore | Plankton, small aquatic insects, snails and small fish | 1-2    | Swims on water, dives for food | Fam: Podicepsidae | Water level, temperature, water quality, nesting sites | 1-2     |
| Heary Mould Grebe    |                 | GRE_GREB_01042018.JPG | Orange  | Medium | Male and Female | 15-20cm      | Orange crest, black neck, white belly | Open water areas, especially near shore | Plankton, small aquatic insects, snails and small fish | 1-2    | Swims on water, dives for food | Fam: Podicepsidae | Water level, temperature, water quality, nesting sites | 1-2     |

Database extract

- *Hunter Bird Observer's Club Photo Image Library*

Fundamental to this project has been agreement to access and use the Hunter Bird Observer's Club Image Library. This has provided exceptional high resolution visual imagery which has been used in all components of the project including the brochure guide and map, onsite signage, the Walka Bird App and the Walka web page resources.





The bird photographic showcase can be viewed here:

<https://www.maitland.nsw.gov.au/our-services/community/education-programs/heritage-education-programs/walka-water-works-education-programs/walka-bird-photos>

- *Walka Bird App*

The Walka Bird App has been developed as a starter's guide into birdlife at Walka. It was generated from investigations and documentation relating to habitat, bird descriptions, behaviour, food and photography. Importantly, the ordering of information has been developed according to specialist advice and involvement from the Hunter Bird observers Club and specifically designed to focus on improving observation skills;

The app's design strategy aims to compliment and support excursions to the site, with broad educational goals enabling observation, data gathering and collection, and returning to the classroom for more in depth analysis. It is intended as a digital experience which can be pre-loaded in a browser-based desktop / tablet map application.



Screen shots from the Walka Bird App and the App logo

- **Information Panels**

Two onsite signs are located at the commencement of the Walka Ecology Walk (near the entry to the site) and near the Ecology Viewing Platform.



- *Web Educational Resources*

A website including a range of visual, written and interactive digital resources has been developed to support students and teachers in using and enjoying visits to Walka. The use of a website as the principal repository of information was recommended during school consultation. The Walka resource is located within the educational resources section of the website and specific pages include:

**Walka for visitors** introduces the site. **Walka school excursions** provides details for planning an excursion to Walka Water Works and mapping, **Walka for teachers** has been produced to provide in-class resource support and curriculum guidelines. It includes detailed information sheets, Excursion Risk Assessment, Walka Resource Curriculum Guide and Blooms Matrix, **Walka for students** presents activity sheets and fact sheets perfect for preparing to visit Walka and for classroom projects, **Walka image gallery** includes a range of Walka images which can be used to explore the place's history from the late 1800's through to today, **Walka bird slideshow** has been developed with the assistance of the



Hunter Bird Observer's Club presenting a superb photographic showcase of Walka's wildlife.

Examples of Activity and fact sheets can be found here:

<https://www.maitland.nsw.gov.au/our-services/community/education-programs/heritage-education-programs/walka-water-works-education-programs/walka-for-young-explorers>

- *Walka Water Works Revegetation Project*

A separate program of environmental rehabilitation has been underway at Walka. Complementary and concurrent to the interpretation project, it has resulted in the removal of large areas of weeds around the Ecology Platform, and along the Ecology walk route, in addition to native plant habitat rehabilitation and new plantings.

The focus for the revegetation project are eight sections which are in sight of walking tracks allowing for community appreciation. The works will be supplemented by signage which provides information on the endangered ecological community which exists at Walka and the methods of revegetation which have been applied. All signage design will be consistent with that used for the Interpretation project.

## **ENGAGEMENT**

- *Walka Waterworks Interpretation Plan public exhibition*

Community engagement relating to the broader interpretation planning for the project included the public exhibition of the Walka Interpretation Plan undertaken over a four week period between 28 July and 3 September 2015. The plan was on display on the Maitland Your Say site, Council's administration building and local libraries.

During the exhibition period an online hub was created on Council's online engagement site, Maitland Your Say. The site included key information about the project including links to information materials such as project factsheets and display posters, the draft master plan document and master plan map with indicative features.

A total of 351 people visited the project page during the consultation period.

An online survey was developed to capture key information and feedback from the community and key user groups on the draft interpretation master plan. A total of 111 surveys were completed during the consultation period by both individuals and groups.

Several hundred people visited an engagement booth at the Maitland Aroma Festival to speak with the project team about Council's current projects, including the Walka Water Works Interpretation Master plan.

Information posters and a copy of the draft plan was available to be viewed at Council libraries and Council Administration building and onsite during the public exhibition period.

Ecology and the natural environment was an area of particular interest voiced by many people.

- *Ecology project engagement*

This project was initiated with the establishment of a specific project team drawn from the community based S355 committee. Regular meetings and consultation with the team, and individual members continued throughout this project. and additionally included input from Morpeth Public School.

Involvement of the local pilot school commenced in the early stages of the project to determine school interests, needs, capabilities, how they currently utilise the Walka site and the type of digital resources they had access to.

Due to the less than perfect mobile reception, the use of a website and development of an app were identified as the most desirable formats for digital media. The school reviewed the digital resources as they were drafted and built, and we were able to act and incorporate their ongoing suggestions.

## **IMPLEMENTATION**

**This project represents Stage 1 of the implementation of the Interpretation Masterplan.**

Important partnerships established through this project included:

- New level of awareness and acceptance of the Interpretation Plan for Walka by site managers and the Council as a whole;
- Sharing of resources and ongoing working relationship with special interest Walka groups, particularly the Hunter Bird Observers Club Inc;
- Working relationship with local schools

## **ACCESS**



The app has been made to be accessible to the visually impaired through methodologies including descriptions and objects which can be read by Voice Over when using the app.

### TRAINING

Council recognised the importance of developing heritage related, curriculum based resources with the formal training of Council's Heritage Officer in professional children's writing. This two year course has been completed with the awarding of a *Certificate in Professional Children's Writing* under the Australian College of Journalism's Open College's program.

This has allowed for the in-house scripting of content for educational resources

### 3. IDENTIFY THE RESOURCES NEEDED FOR YOUR PROJECTS (E.G. STAFF, MATERIALS, MONEY). DEMONSTRATE HOW YOU USED THESE RESOURCES EFFECTIVELY.

|   |   |
|---|---|
| <p><i>Significant economies were achieved through partnership with the Hunter Bird Observer's Club who provided free use of their exceptional photo library, and also expertise in bird watching techniques and Walka site knowledge.</i></p> <p><i>In addition, Council used its own inhouse graphic designers for graphic layouts, and its own website as a home for content.</i></p> | <p><b>Consultancies</b><br/>         Umwelt Archaeology, Heritas architecture, Mindaribba LALC, GCA Engineering Solutions, Butons Visual Design Surveyors <b>\$31 850</b><br/>         Platform construction <b>\$21 467</b><br/>         Education curriculum review <b>\$1125</b><br/>         Daniel Woo UXED digital design <b>\$ 8250</b><br/>         Convergence interpretation consultants <b>\$15 400</b><br/>         Seating purchase and installation <b>\$13 295</b><br/>         Signage and marker post fabrication and installation <b>\$ 5142</b></p> <p><b>In Kind</b><br/>         Project management inc content research and development <b>\$9000</b><br/>         Graphic design <b>\$2340</b><br/>         Hunter Bird Observer's Club Photo Library and advice <b>\$5400</b></p> |
| <p><b>TOTAL</b></p>   | <p><b>\$113 269</b></p>   |

### 4) HOW HAS YOUR PROJECT MET CLEAR AND MEASURABLE OUTCOMES FOR YOUR CLIENT/ORGANISATION AND STAKEHOLDERS?

Broadly, the project's measures of success have been demonstrated by:

- Meaningful consultation and coordination of the project within Council;
- Guidance from a specialist education curriculum consultant to guide appropriateness of outputs to schools;
- Meaningful consultation with special interest community groups;
- Integration of physical works on site with educational resource development;
- Quality and usability of digital resource outcomes.
  - *Council*

The Walka site is managed by Council's Community Services Department and as such, from the outset their involvement and ongoing support has been essential to the project's success. This has been facilitated through review of working papers, networking with community contacts established through Council's S355 Committee (and coordinated by Community Services), involvement and agreement to design development for site works, and input into new Council digital resources.

Council's Environmental Programs division have also made an important contribution to the project through provision of technical advice on the ecological values of Walka, in addition to the integration of a separate environmental works program. This has resulted in site rehabilitation in the vicinity of the Ecology (bird watching) Platform.

- *Community*

The preparation of the Walka Interpretation Plan in 2015 was guided by a project team including representatives of the Walka S355 community based committee. The continued involvement of this team, in particular the Hunter Bird Observers Club, has been fundamental to the success of the project. Their knowledge of the site and willingness to share research and high quality photography has underpinned the ability to produce the resources produced as part of this project. These contributions have been provided voluntarily and at no cost to Council.

Early contact with education stakeholders was a priority identified as part of the Interpretation Planning preliminaries, and a series of meetings were subsequently held with a local primary school, Morpeth Public. The outcomes of these meetings established key direction for the project outputs and have been integral to the project's success. It is noted that future involvement and engagement of the school and all others in the region will be essential in the distribution and promotion of the resources which have been produced.

- *Quality and usability of new digital resources*

As identified in the interpretation planning for the project, discussions with user school groups, and education specialists was a major part of the project. Through these discussions, the provision of digital resources for Walka was a priority request and need. An intensive program of investigation and product development followed, with the ultimate production of the Walka Bird App and Walka web based resources.

