IMAS Taroona Upgrade

Summary for Taroona Community Association & Taroona Environment Network

Stewardship of the IMAS site

We acknowledge our responsibility for stewardship of this special location in Taroona and are committed to:

- Its **environment**, including bushland, native species and water.
- Its **heritage**, including Aboriginal sites, historic structures and its role as a research facility since 1966.
- Its place in **the community**, including as a provider of education and jobs for local people, and its proximity to sporting fields, beaches, walking trails and homes.
- Its status under **planning legislation** with a detailed planning analysis prepared at the commencement of the project to guide site development and design.

About IMAS Taroona

- Extraordinary people are doing extraordinary things at IMAS Taroona – on climate, species conservation, sustainability in our oceans and Antarctic science.
- This is reflected in our **international rankings**:
    - **Fourth in the world** for Marine and Freshwater Biology *(2017 Center for World University Rankings)*
    - **Seventh in the world** for both Fisheries and Oceanography *(2017 Center for World University Rankings)*
    - **Top 100** for Earth and Marine Sciences *(2021 QS World University Rankings)*
- IMAS Taroona projects contributed to UTAS earning the No.1 ranking in the world for climate action. *(2022 Times Higher Education Impact Ratings)*

What's changing at IMAS?

- IMAS's Newnham teaching facilities are below industry standards and nearing 'end of useful life'.
- In 2020 UTAS determined to consolidate IMAS in the south and invest in new facilities.
- This will require the optimisation of existing facilities in the South, as well as new teaching and research facilities.
- Predicted growth in student numbers will come from an increase in domestic enrolments and international scientific collaboration.
- The Taroona facilities are ageing and this is an opportunity to update them.
- There is the need to improve IMAS Taroona's user experience and teaching program for our students, staff, industry and academic partners.

About AAD

- The Australian Antarctic Division (AAD) leads, coordinates and delivers the Australian Antarctic Program.
- The AAD is recognised as the world leader in aquarium research on Antarctic krill.

- Krill are a sentinel species for studying climate change, and as food for seabirds and whales, are vital to Southern Ocean ecosystems.
- Australia's scientists research Antarctic krill in the Southern Ocean and in our current aquarium lab at AAD in Kingston.
- Continuing our world leadership of krill science is dependent on having the best-possible facilities to carry out our research.

What's changing at AAD?

- AAD has a new scientific icebreaker – RSV *Nuyina* – which has world-leading 'wet well' technology to capture and transport krill.
- The wet well technology on *Nuyina* has transformed krill survival rates. Now 95% of the krill survive the journey back to AAD. Previously around 10% survived.
- AAD's existing aquarium in Kingston does not have the capacity to accommodate the quantity of specimens that are now available for our research.
- AAD is partnering with IMAS in Taroona to propose an aquarium that will:
    - Allow seamless transport of krill from aquarium containers on *Nuyina* to a new state-of-the-art aquarium on land;
    - Provide sufficient accommodation for thousands of krill to live for many years as scientific specimens;
    - Have five times the capacity of the current aquarium to enable simultaneous research on all aspects of the krill life cycle;
    - Provide world-leading research facilities for AAD scientists to work collaboratively with IMAS staff and students to study krill biology including impacts of climate change on krill reproduction and development.

IMAS and AAD collaboration

- AAD is partnering with IMAS in Taroona to propose new Antarctic aquarium infrastructure specifically designed to interface with RSV Nuyina's containerised aquaria which will enable research begun at sea to continue in terrestrial aquaria in collaboration with University of Tasmania staff and student researchers. ***(Note: RSV Nuyina will continue to dock in Hobart, not Taroona)***
- The aquarium would strengthen Hobart as an international gateway to East Antarctica by further developing Southern Ocean research infrastructure. Research from this aquarium would help AAD to provide the basis for Australia to support sustainable management of Southern Ocean fisheries, environmental protection and to enhance our leadership in the Antarctic Treaty System.
- This collaboration would provide greater scope for research collaboration on areas of overlap such as plankton ecology and aquatic husbandry as well as easier pathways for University of Tasmania graduate students into Antarctic science.

What's proposed for Taroona?

- A new building that includes a **teaching lab, wet lab** and **research facilities**.
- A connected **krill research aquarium** in partnership with the **Australian Antarctic Division**.
- **Renovations** to older buildings for better utilisation.
- A **55-space carpark** to better manage traffic and parking near the precinct.
- A new entrance that is a **welcoming face** to students, staff and the community.

- A **more accessible and attractive site** for students, staff and the community. For example, an ageing fence will be removed and a large area made accessible to the community.

Boost to marine and Antarctic research

This upgrade will help our work on:

- The conservation of **threatened species** like the handfish and maugean skate.
- Reducing the risks from toxic **algal blooms.**
- Minimising the environmental impact of **aquaculture.**
- Ensuring **fishing** can **continue sustainably** into the future.
- Informing the conservation and management of the **krill-based ecosystem** in the Southern Ocean.

Focus on sustainability

- **Sustainable building practices** will be embedded in the project. For example, sustainably grown timber and recycled plastics will be used. The new lab building will be financed in part by a **Green Bond.**
- A $3.5 million upgrade to the site's water filtration system will improve our on-site **water management**.
- **Native coastal flora will be planted** on the site, ensuring habitat for local species and replenishing trees lost as part of the site's rejuvenation.
- **Tunnel crossings** will be built for native species safety.
- An 8592m^2 **bushland reserve will be** returned to the community as previously committed.

Benefits to the community

- Sixty years of world class research in the vital areas of **climate and ocean sustainability** to be bolstered.
- The site would be made **more accessible and attractive**, with more space open to the community.
- **Native coastal flora would be planted**, ensuring habitat for local species.
- An 8592m^2 **bushland reserve with a conservation covenant will be** returned to the community as previously committed.
- A $3.5 million upgrade to the site's water filtration system would improve our on-site **water management**.
- The heritage of the **historic quarantine cottage**, built in the 1920s, would be restored.
- A new car park would ensure local streets are safer and will be **available for community and sports club use** outside business hours.
- The upgrade would **consolidate teaching and research jobs** in Taroona.
- All collaboration with industry and government would be **teaching or research related**.
- Our existing links with **Taroona High School's Exploring the Ocean** program, including National Science Week tours, work placements and our new shared campus, would be enhanced. The proximity of these world class labs can continue to inspire the next generation of marine scientists.

Questions

Question: Which trees will be affected?

Answer: Fourteen trees with a high or very high conservation classification are proposed to be removed from inside the IMAS precinct. Fifteen with a low conservation classification (including 4 dead stumps) would also be removed from inside the precinct. A landscaping plan is being developed to plant areas of the site with local provenance native coastal flora that is habitat for local species. A biodiverse area will be preserved and improved by removing existing exotics and made accessible to the community, along with more open space at the new entrance to the precinct. Tunnel crossings will be included for the safe movement of native species.

Question: What numbers of people are expected to be on the upgraded site?

Answer: Undergraduate students would begin attending the campus in 2024 to study specialist units in the latter years of their degrees. Maximum undergraduate teaching capacity at any one time would be 60 students across the new labs. It is expected that a maximum of 119 students, across all course levels, could be on site at any one time. An additional 25 staff could work from the site (6-8 at any one time) by 2025, a 26% increase that could boost local business. Current jobs would be consolidated in the local area – 40% of current IMAS Taroona full- and part-time staff live in Kingborough.

Question: What is the expected increase in traffic for Nubeena Crescent?

Answer: We expect the increase in traffic to be minimal, and are committed to the following measures to keep it as close to current levels as possible:

- Working with Kingborough Council on appropriate safety measures.
- Classes - and hence most car movements - would be constrained to **business hours,** Monday-Friday.
- The free **Uni Hopper** mini-bus would provide services between IMAS Salamanca and Taroona, minimising car use.
- UTAS will promote the use of **active and public transport:**
    - Metro buses to Nubeena Crescent, through our membership of the Southern Transport Forum
    - Taroona's bike lane infrastructure, already well used by IMAS staff, with the inclusion of end-of-trip facilities
- Heavy vehicle movements would be **unchanged**.
- A new 55-space car park would ensure local streets are clearer and be **available for community and sports club use** outside business hours.

Detailed traffic modelling is being completed and will be available as part of the development application.

Question: Who is the planner on the proposal?

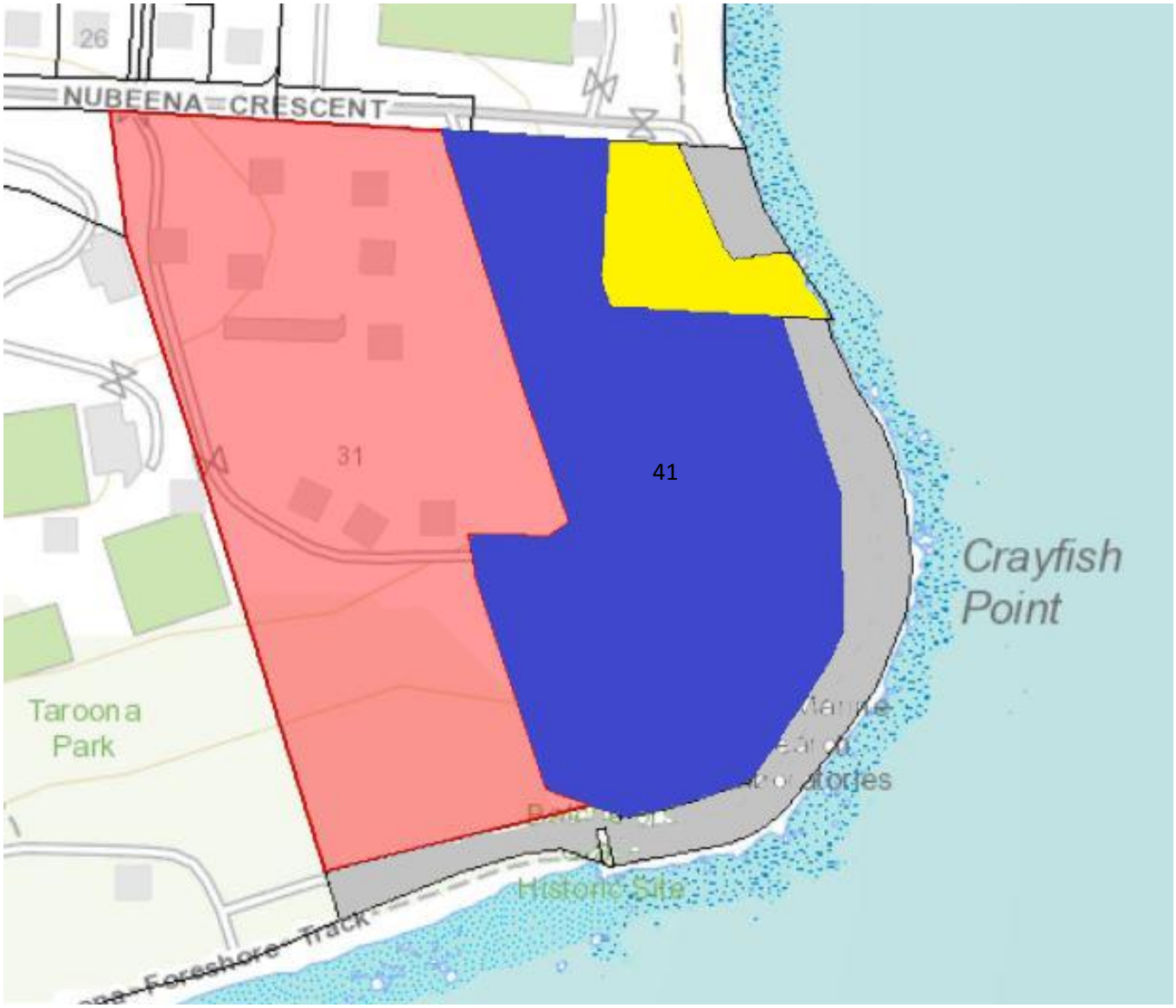
Answer: Frazer Read, AllUrbanPlanning

Feedback

The feedback below will be considered by UTAS:

- Removing the decommissioned pump station.
- Improving engagement between IMAS and the Taroona community.
- A community meeting to present the proposal and answer questions.

- Continuing a conversation around weed management on the coastline. Please see the maps below illustrating the IMAS facility's boundaries.



Red: University of Tasmania 171435/2 – 31 Nubeena Crescent, Taroona

Blue University of Tasmania 175969/1 – 41 Nubeena Crescent, Taroona

Yellow: DIPIPWE (Crown Land Services) – 171411A/2

Grey: DIPIPWE (Crown Land Services) - 171411A/1 and 171435/3