

Drawing Landscape Narrative:

(Interfacing between the cultural, ecological and habitat imperatives of Tallow Creek ICOLL Watershed)

by Nathan Galluzzo

Thesis submitted in fulfilment of the requirements for the degree of

Maters of Architecture (Research)

under the supervision of James Melsom & Penny Allan

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May 2021

CERTIFICATE OF ORIGINAL AUTHORSHIP

I, Nathan Galluzzo declare that this thesis, is submitted in fulfilment of the requirements for the award of Masters of Architecture (Research), in the School of Architecture at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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ABSTRACT

This research explores a participatory and integrative methodology, using the concept of 'drawing together', a highly iterative process that encourages shared accounts and deeper relationships among key stakeholders in order to gain a broader knowledge of site, its community and Indigenous heritage.

This research reflects on and develops strategies that aim to uncover the essence of a landscape, and its 'one truth' (N.Graham, 2020, pers. comm., 11 March) through openness that is 'dialogical, reflective, and attentive to processes' (Rose 2007). It promotes a framework which nurtures collaboration amongst stakeholders in pursuit of uncovering the collective understanding between system diversities, complexities, concerns within environments, and acknowledging the hidden voices.

In so doing, the research thematises approaches to landscape that address the complex environmental, social, political, economic and cultural factors effecting the complex ICOLL environment of Tallow Creek, Byron Bay.

To this end, these non-traditional practices have the potential to aid landscape architects to employ alternate strategies that better document, engage, promote, and respect the complex relationships that exists between stakeholder groups, cultural landscapes, their belief systems and values with landscape.

Key Words: communication, drawing, community, ICOLLs, process, landscape architecture

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I would like to thank Helen Brown a great advocate of landscape, who has devoted over 20 years of voluntary work to Suffolk Park Dunecare group for her contribution in sharing her personal connection through stories and embracing not only the process but me, i am internally grateful.

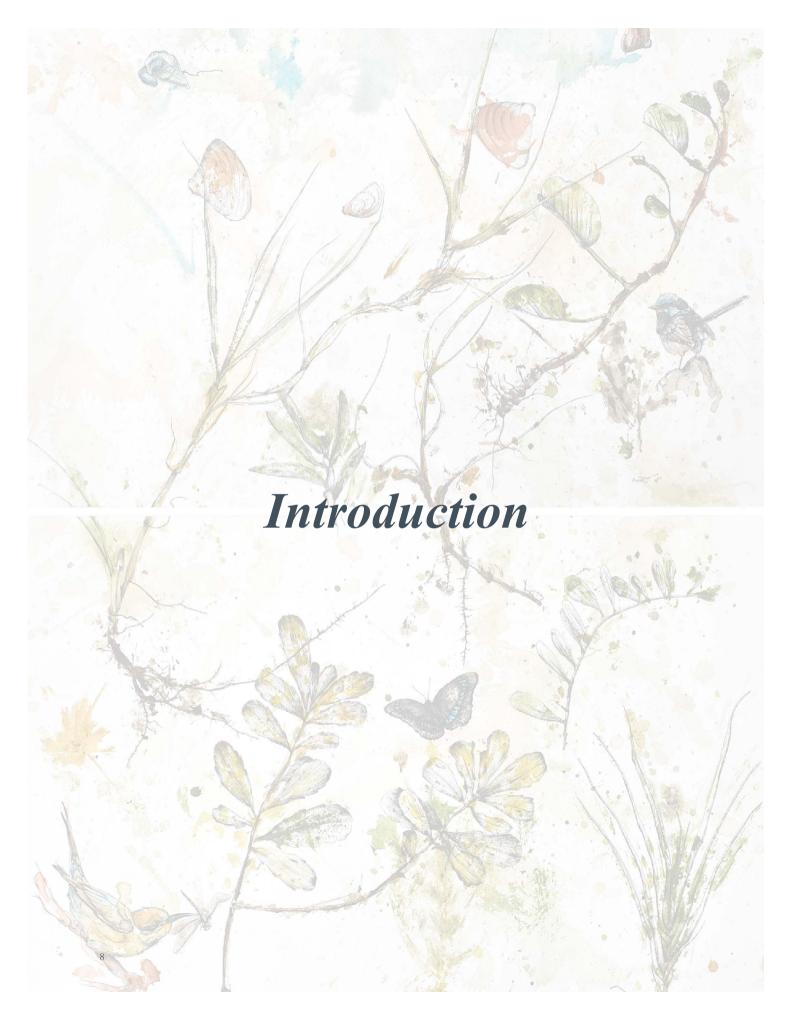
I would like to thank Chloe Dowsett from Byron Shire Council for enabling me to visit their office, sharing information about the site, past processes, and operations. I am hopeful that this paper will enhance council's future management strategies of Tallows Creek.

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MOTIVATION

I love to draw, it is where my interests lie, a way to express who I am, how I feel, what I've learnt; I am particularly fascinated by the desire to capture certain moments in space informed by experience when conducting fieldwork.

For me it ushers in a way to express certain characteristics of site that allow for a better understanding of landscape dynamics and natural systems. Drawing is effective because it can identify the assemblages of elements that together frame the surrounding environment that I am traversing.

In recent years, I have begun to use watercolor, pen-work and the act of pressing, to investigate and convey site information. This has allowed me to undertake a conceptual reading of the environment, which is reinterpreted and drawn on the page with attention to relationships between things.

In this sense, the site speaks to me through the use of on-site material, mediums, pigments, and textures in order to tell a story that is often unnoticed.



Fig. 1. Working on the ground amongst the mangroves and mudflats of Belongil Creek, Byron Bay, NSW (Jeremy Chivas 2019).

Fig. 2. Preliminary drawing, Series 01 – Torra Point Natural Reserve, 'Transient Immersion' (2019) communicates relationships between the site, natural processes, the changing conditions and embodied motion through trans-lation in space. Seen by graphically representing flows, shifting site conditions, habitats and living things (e.g. the crabs, the succulent shrubs, the mangroves, the butterflies, ect) and the processes of (tidal flows, micro topography, humidities, shad, etc).





Fig. 3. Preliminary drawing, *Series 03 – The banks of Tallow Creek*, 'Banks' (2019) communicates my observation of the qualities through vegetation around Tallow Creek. Seen by graphically representing vegetation communities that were encountered within each frame, (e.g. Rushland and Dry Sclerophyll Forest & Woodland/ Shrubland).





In late November/early December 2019, I took part in a summer elective 'Going Coastal', a 10 day intensive study (delivering on two assessments) run by James Melsom and Penny Allan (UTS) that involved measuring, surveying and simulating the processes of coastal erosion, estuarine morphology, urban development and sea level rise at Tallow Creek, Suffolk Park, NSW. The elective content was set over three site areas and included a series of workshops and self-directed learning activities.

My group worked with historical data from preliminary mapping, on-site fieldwork/ close observation that looked at measuring the terrain and local input from authorities, resident, and experts. This study allowed a better understanding of ICOLL ecosystems specifically dune vegetation and ecologies, the relationships between coastal hydrology to geology, ground conditions of sediment dynamics, wave motion and interactions with the ocean. Furthermore, the engagement over the material with local community groups provided an insight into different stories and narratives, sparking certain personal reflections that allowed the group to gauge a presence of strong cultural values and connections tied to Tallow Creek, the wider Suffolk Park region where they live in terms of the waterway, and the specific identity of place.

This resulted in a series of graphic representation with numerous mappings and diagrams that recaptured the information into three transect studies focused around the interplay of two systems: (beach berm and entrance of the creek, infringing vegetation and species habitation, residents and flooding). The study concluded with a presentation/ exhibition to Byron Shire Council, highlighting the holistic understanding captured through the medium of drawing. Feedback from that meeting gave us a sense that stakeholders are diverse, and communication is difficult, focusing overwhelmingly on scientific understandings on site.



Fig. 4. A welcome to country, with National Parks Arakwal member Norman Graham (Photograph by James Melsom, 2019, site visit at the bridge of Tallow Creek).

Fig. 5. Presenting findings and discussion with Byron Shire Council member Chloe Dowsett (Photograph by Hayley Mulder, 2019, Council Offices

TALLOW CREEK - A UNIQUE ICOLL ENVIRONMENT

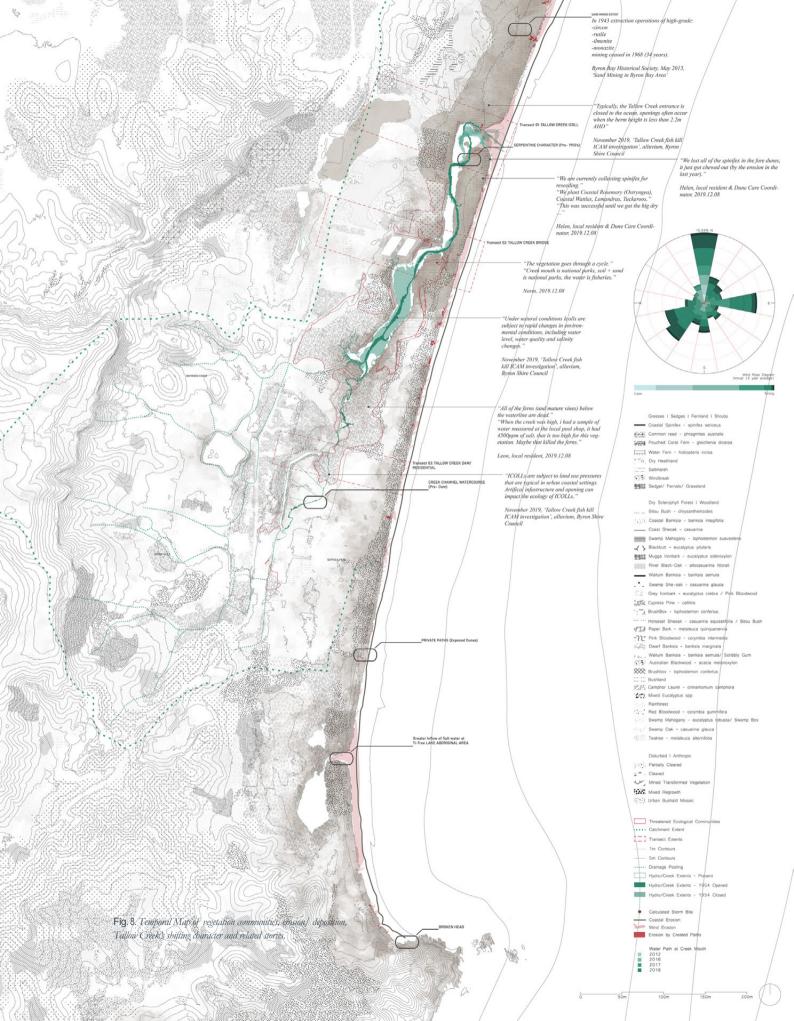
Intermittently open and closed estuary or lakes (ICOLLs) are highly complex in their hydrological adaptive nature.

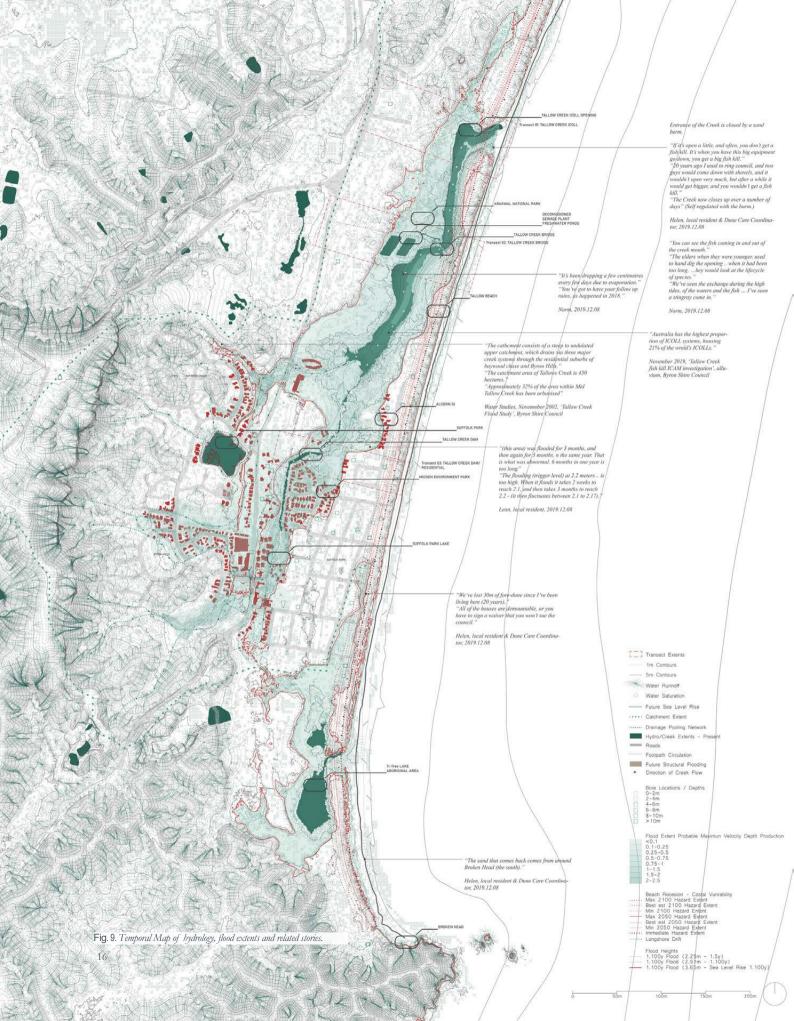
Making up over 60% of the estuaries in NSW that have an 'interaction between fluvial, tidal and wave processes' (Stephens & Murtagh 2011, these environments are typically erratic and comparatively variable 'characterized by either storms or recurring drought' (Helman & Tomlinson 2015. They experience issues of flooding, erosion, stratification of high dissolved oxygen levels that result in fish-kills, buildup of organic matter that impact ecosystem processes such as denitrification, and nitrogen over-enrichment.

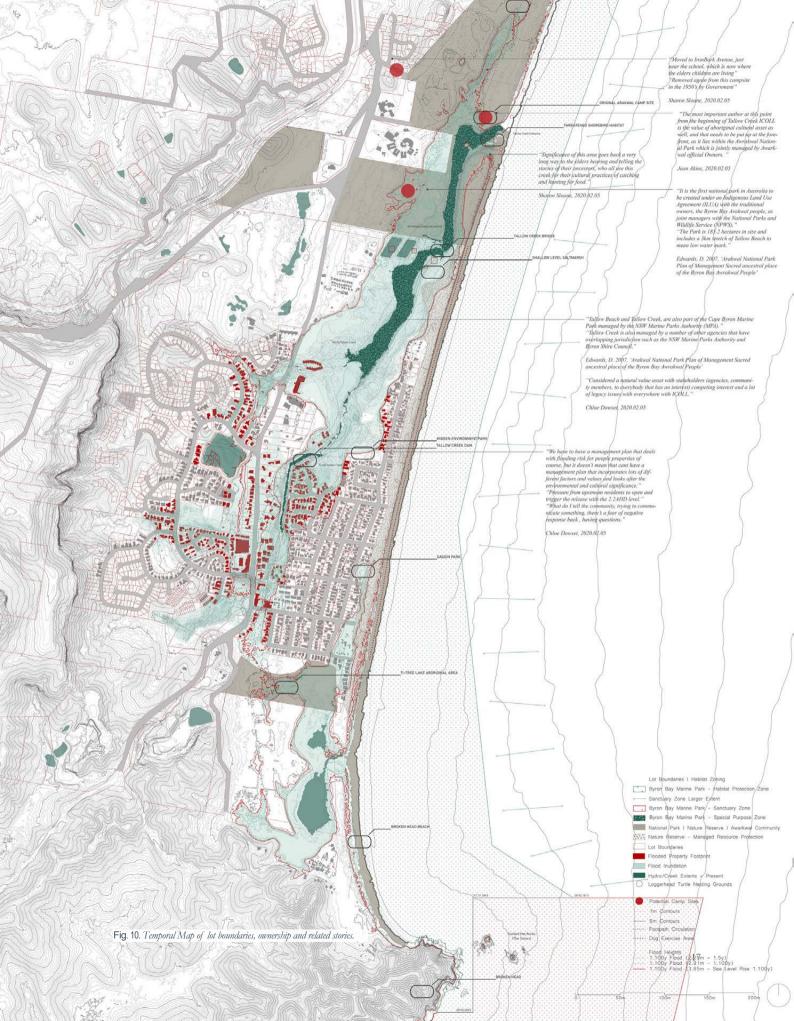
These events are determined by natural and anthropogenic changes which often create debate amongst key stakeholders with competing interests as they struggle to understand the complexities of the system, its natural ecological health, and the significance/ effect on community groups into the future.











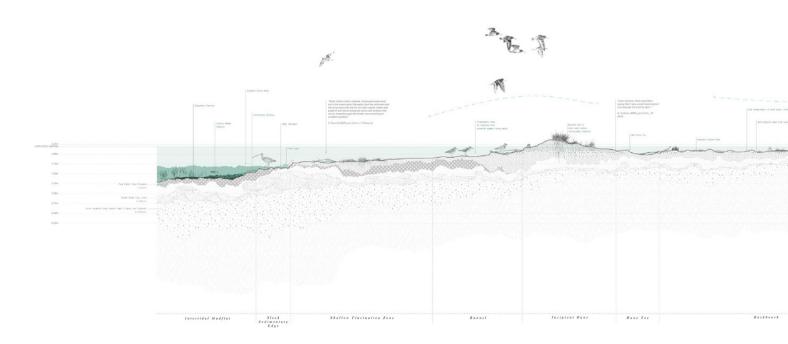


Fig. 11. Section of Tallow Beach berm.

Tallow Creek -

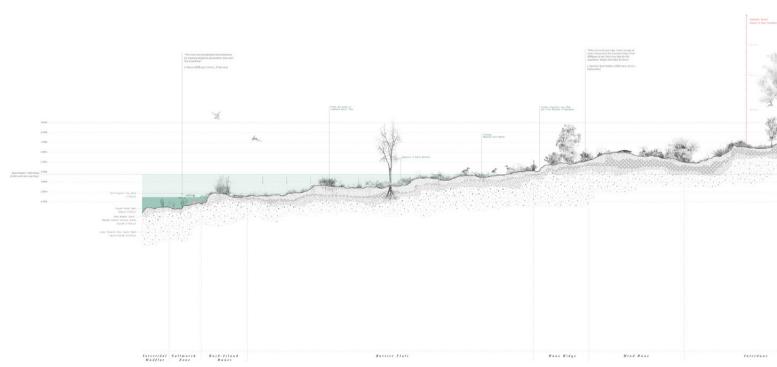
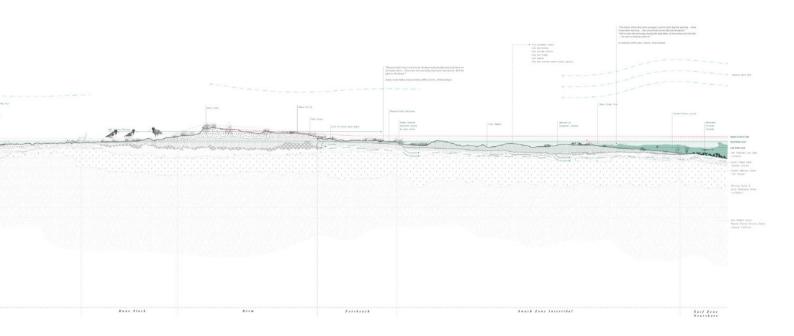


Fig. 12. Section of Tallow Beach frontal dune system.

- Beach Berm



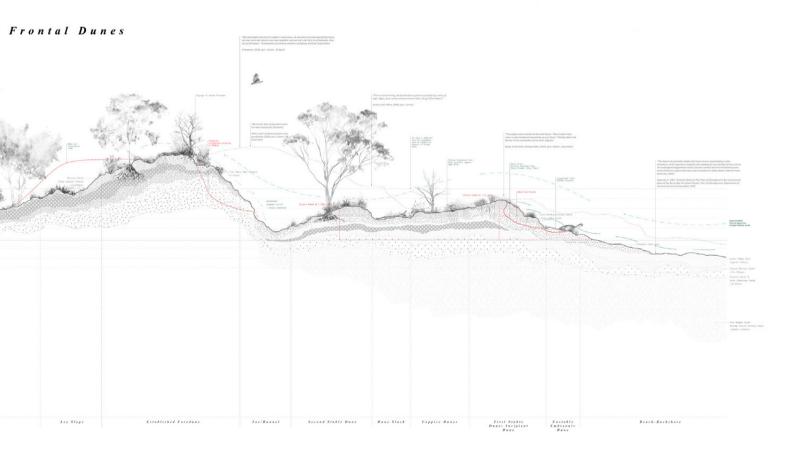




Fig. 13. Section of Tallow Creek water shed and its banks.

Tallow Creek - Hy

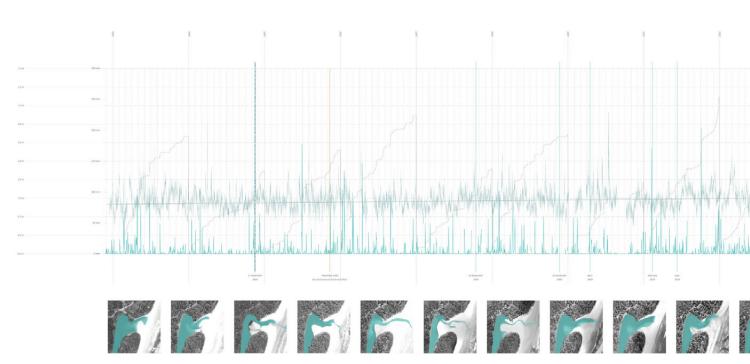
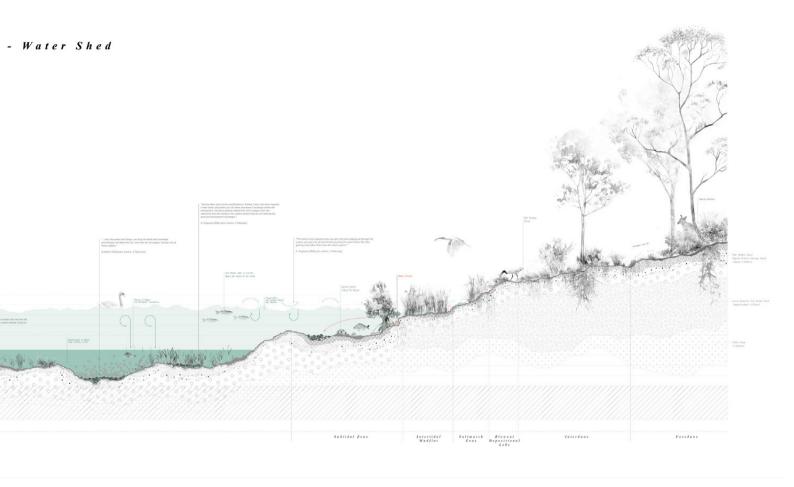
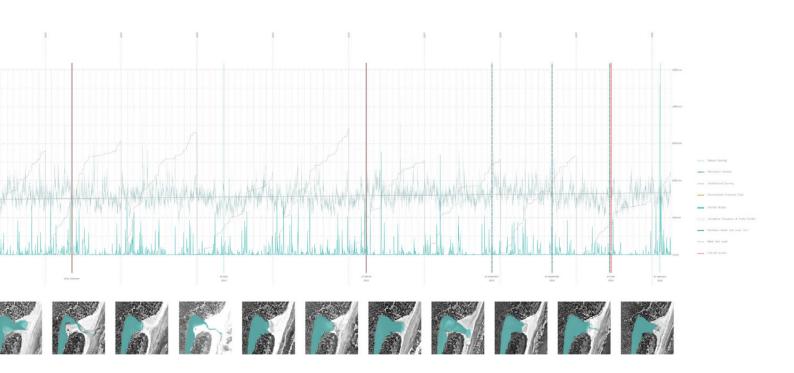


Fig. 14. Graph of hydrological data from 2003 - 2020 within Tallow Creek



drological Shifts



MANAGEMENT OF TALLOW CREEK

The ICOLL 'Tallow Creek' located on the East Coast of Byron Bay is presently facing a range of 'communication' and 'stakeholder engage-ment' challenges due to the limitations of the current planning practices which has seen 'scientific studies' dominate the strategies and public fac-ing communities. (C.Dowsett, 2020 pers. comm., 05 May).

Whilst the current scientific practices are extremely important and provide invaluable information required by agencies in the development of management policies and strategies for the area, their execution is not without limitations.

As described by members of Bryon Shine Council these limitations include difficulties communicating through plans and concepts to non-agency stakeholders, lack of community engagement and not taking into consideration the non-scientific attributes of the site.

Specifically

- 'we don't really understand that true connection that the Arakwal people have with the site' (C. Dowsett, 2020 pers. comm., 05 February)
- 'decision making with individuals, there's no process of joint decision making as such' (C. Dowsett, 2020 pers. comm., 05 February)
- 'in the management plan it's all this technical stuff that people just shut down, you need to have that connection' (J. Atkins, 2020 pers. comm., 05 February)

The opportunity identified in this research is in the way we break down the information to be transferred, shifting from conventional approaches, for example, 'we write reports and that's it' (C. Dowsett, 2020, per. comm., 26 March), to a new framework or an easily digestible format that can be shared for joint decision making process with various community groups that facilitate a deeper enriched connection and understanding of place. This vision is expressed in the Arakwal National Park Plan of Management that considered the input from the wider community through stakeholder workshops that saw 'both science and cultural knowledge blended together to meet both legislative and cultural obligations' (Edwards, 2007). The approach requires one to reevaluate the level of community participation that has recently become 'an imperative for policy development and environmental management and planning practices all around the globe' (Mcintosh & Marques, 2017).

This view point is further supported by the research paper titled Tallow Creek Fish Kill ICAM Investigation in which concludes that current practice lacks an 'effective integrated catchment management approach which identifies all social, economic, cultural and environmental values of Tallow Creek' (Owen, Ivezich, Teague, 2019) For example the current management plan only considers how flood risk is managed and fails to take into consideration other elements such as the fish and community values with respect to the site.

Community engagement tends to be skewed towards 'the loudest stakeholder', whereas Council representatives are looking for ways to 'listen to all these voices and look at how it functions and how we can manage it to the best for everybody involved....making sure that everybody is heard.' (C. Dowsett, 2020 pers. comm., 13 May). In particular with regards to the Indigenous community the question is 'how exactly can we pay our respects to Arakwal, not just invite them to meetings..., we would like to collaborate and incorporate traditional knowledge in our management more, so what does that look like' (C. Dowsett, 2020, pers. Comm., 26 March).

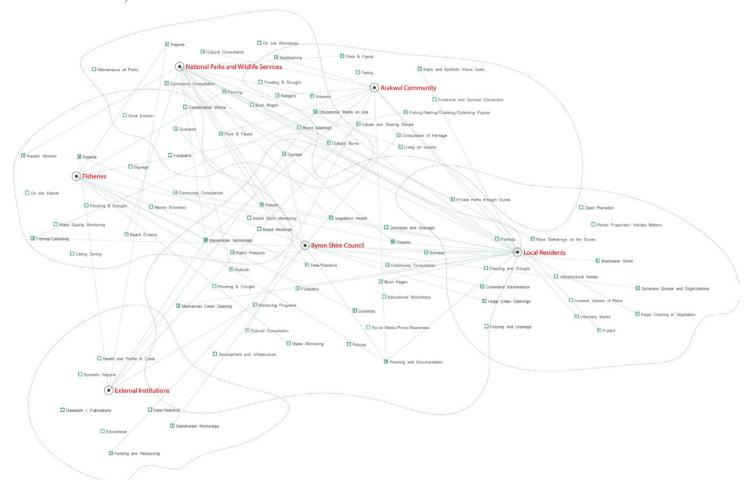


Fig. 15. Diagram of key stakeholder groups, unpacking the links between each one, the responsibilities, and levels of involvement through response that may impact other stakeholder groups.

Moreover, Western cartographic methodologies of mapping out territory, renaming Country, has obscuring spiritual and social meaning, show little attention to identifying other world views, in particular with Aboriginal knowledge systems that are deeply embedded in 'land, water and sky that are communicated through the telling of story' (Milroy & Revell, 2013, p.5). This type of mapping style can be seen in figure 16, overlaying a chronology of historic maps that represent Tallow Creek from 1840 - 1964.

Approaches such as enclosing Aboriginal relations of Country with fictional boundaries and borders, with lot names from other places and assigning ownership titles with colour and initials have limited the way non-Aboriginal people conceive of and think about the landscape, challenging Aboriginal law and the (nonmaterial) levels of knowledge about Country.

A view that is shared with members from different Aboriginal communities suggest that:

- 'the narrative of sites through art and design is needed to explain our religious and spiritual and physical connections to these things' (K. Duncan, 2020 pers. comm., 05 August).
- 'its hard to convey our story to Council so that they can understand' (K. Duncan, 2020 pers. comm., 05 August).
- 'despite everything there's not enough information that addresses our values and or concerns' (N. Graham, 2020 pers. comm., 11 March).
- -Thave always had an issue with how Council have looked after the Lake, and never understanding the significance the attachment that Arakwal have to that area' (Y. Stewart, 2020 pers. comm., 16 April).

CHRONOLOGY OF LAND USE - ARAKWAL NATIONAL PARK

Throughout the research it was also acknowledged that there were several constraints that may be impeding council's ability to collaborate and consult with local community groups, in particular the Arakwal Indigenous community. Chloe Dowsett the coastal and biodiversity coordinator for Bryon Council points out that:

Who:

It's trying to engage with those other members outside of those state agencies, the community groups that don't get invited to meeting,they feel like they haven't been engaged as the information doesn't really filter down to people or these different groups in the community.'

Why:

'We have a community engagement policy, it's up to everyone and anyone at the Council to manage it depending on the status of the project.'

It might just be a simple complaint that elevates the situation, its hard when Council don't really know what to do, we typically just send emails having one point of call from administration for the corporation and I don't really know how the information filters through to the other members.'

How:

We tend to engage on traditional methods, community surveys, online, websites, Facebook posts, reports to people and asking them to review and provide comments, it's really kind of static, as far as I know there's no process or program or policy or step by step formal procedure as to how to engage with Arakwal and or other traditional owners, that's where the project might fall so it's definitely a gap.'

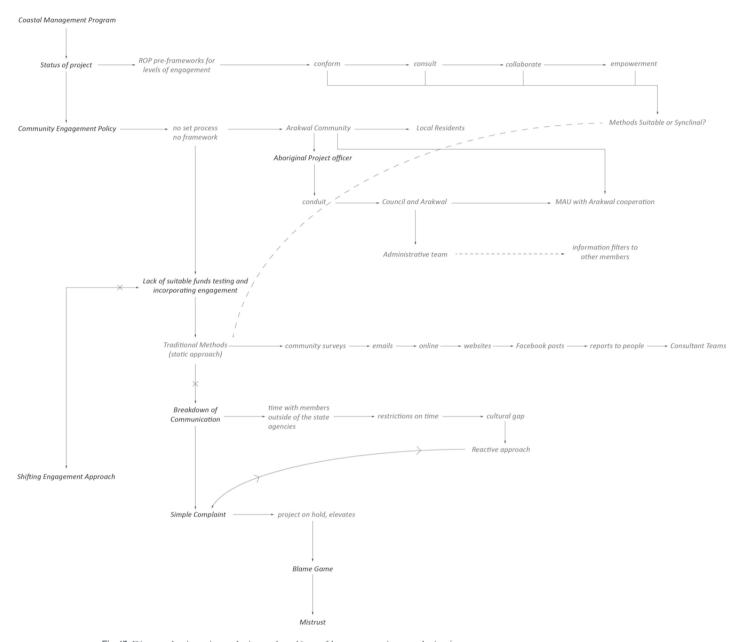


Fig. 17. Diagram that investigates the internal workings of how community consultation/programs are run within Byron Shire Council. Identifying gaps within the traditional framework which often leads to a breakdown of communication.

RESEARCH QUESTION

The research question is designed to take into consideration not only the challenges associated with the current consultation practice but also the way in which knowledge and information is captured and shared using scientific and cartographic methods that is rigid and limited by the process in itself.

'How might landscape architects use drawing as a vehicle to reveal the complex relationships that exist between stakeholders and the land to foster a shared regard for future adaptive strategies.'





The research aims to develop a deeper understanding of the way drawing is used as a creative medium to not only engage key stakeholders but also as a tool to bring together stakeholder groups, particularly indigenous communities. The research aims to also critically assess and uncover the practices and methodologies and processes that could be employed in my own research and practice.

MEDIUM OF DRAWING

The purpose of this research is to locate bodies of work that explore the different approaches and modalities of drawing (digital, analogue, in person, on site, etc.), within the context of how drawing generates a space for reflection and analysis and constructs a collaborative relation-ship amongst stakeholder groups.

It will examine how the practice of drawing encompasses a way of thinking, extrapolating the strengths of drawing as a space forming tool that guides conversation and enables a translation of insights and understanding; a tool where one's thoughts through reflective activity are communicated, amended, created, distinguished by 'vortices, flows, currents, chasms, pinions and vectors' (Spiller, Castle, Ellerby & Gongde, 2012).

These forms of making, layering, and projecting in drawing create a dialogue between thought and conversation with the living landscape and the individual experience. This allows for an ability to 'see' possibilities, to see differently and to offer new dimensions in knowing and connecting with particular representations of landscape spatial, material, and temporal conditions. Literature from James Corner's Drawing and Making in the Landscape Medium (1992) is of relevance to unpack the value and action of drawing techniques, by explaining the medium of drawing through projection, notation and representation. These ideas that are used to translate and capture landscape focuses the way one sees and understands the landscape to which they refer a particular vocabulary to a theorem and motive. Drawing here demonstrates a relationship between parts that re-present a scene through observing effects, interpreting flows, layers of experience, recording special and tactile qualities, movement, and time in an abstract and sometimes indirect way with landscape. Drawing in this context has its limits where the output should not be emphasized as prized artifacts nor as actual experience but as a tool 'of composition and communication, as vehicles of creativity and realization' enabling speculative activity between spontaneity and reflection that sees possibilities 'to discover new ground, and to gain insight' (Corner, Hirsch, 2014).

The act of drawing also considers a temporal and dynamic sequence of responses that is played out overtime, an existence through drawing is created when one draws, this is informed by the parts that is being illustrated in duration that connects references in space. This is referred to as the deictic drawing, which highlights the importance of recording and tracing a drawings evolution with reference to prior thoughts, ideas and associations. Such drawings may suggest without necessarily identifying specific settings and topologies in which the drawing was created. The use of scale shifts, change of light, texture studies, and notation scores, become active to unpack relationships between ideas and focuses. These types of drawings are not a finished work but rather a 'plot' of making and its pieces, to see, to draw out and to bring into being by the reflective mind. One such example can be seen in the text Mississippi Floods: Designing a shifting Landscape where maps, surveys, photographs, archival research, field explorations, and interviews are overlayed to convey the adaptions, response and shifting characteristics of the Mississippi River through time. These layers of knowledge and varied types of representation suggest how we construct landscapes in our minds, how we understand a system through a set of depictions, in this case to describe periods of idleness and intensity. In doing so the drawings generated turn one's attention to the Mississippi's boundless working landscape, its natural history of river logic and the approaches to river management that attempt to contain it. This encourages the viewer to draw out different maps, to read a process in how information is presented and to reflect on their minds and on the terrain.

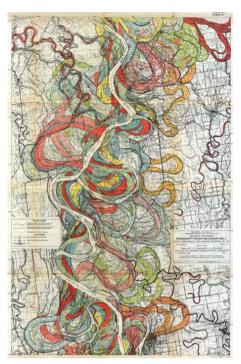


Fig. 18. Fragment of Mississippi River Meander Map drawn by Harold Fisk in 1944 (Mathur, Cunha 2001)

The power of drawing also considers a *donegality*, a term used in the book Drawing Architecture, referenced for how one may build tools that allow for multiple people to draw over one drawing. The term defines the presence of an atmospheric chemistry in drawing, a terrain, a dimen-sional grasp that evolves through the acknowledgment of 'assumptions, special fields, formal constellations and negations that provide the work a donegality' (Spiller, Castle, Ellerby & Gongde, 2012).

This concept of drawing as a field is re-enforced by the authors reference of a game invented by the University of Texas School of Architecture in the mid-1950's known as Dot-the-Dot. The game extends the logic of drawing allowing one could enter and exit, with an integration of ideas and extended logics, where no erasure, no editing, just thoughtful addi-tions are captured in time.

The study shows how certain types of collaborative drawing allow for unexpected, inexplicable change formed from different participants. It encourages one to physically project one's own thoughts on the paper or to continue others thus creating a particular expression of drawing, a fuzziness, which is achieved through the adoption of a loose framework where the creation of the drawing ties different ideas, configurations and assemblage of dynamics that form the terrain of a particular plan which can be questioned by other stakeholder groups.

The method and premise of Dot-the-Dot was then explored through an architectural analysis assignment in 2012 at Cornell University. The exercise aimed to harness the rawness of hand drawing between students in their sketchbooks, being asked to mesh fragments of studied buildings and gardens with their own. A moment of sudden insight was revealed during the mid-term sketchbook review, where visual bleedings between drawings started to evolve from layering the pages on the ground and noticing the intersection between depictions. This allowed for new ideas to develop from 'the procedure of the shared drawing itself' (Spiller, Castle, Ellerby & Gongde, 2012).

Here the act of drawing is seen as a social vehicle, one that actively broadens the knowledge of the group through the act of piecing together, drawing together to make whole. It suggests the sense of discovery, where the role of the hand to the translation of the drawing prompts one to think between pages and objects, into a portal through which unknowable things become seen. This transition is an act of constructing, taking place within a given location, amongst a given focus with specific tools, and between languages.

Drawing therefore is seen as a narrative and speculative proxy where ideas are evoked from the drawings themselves.

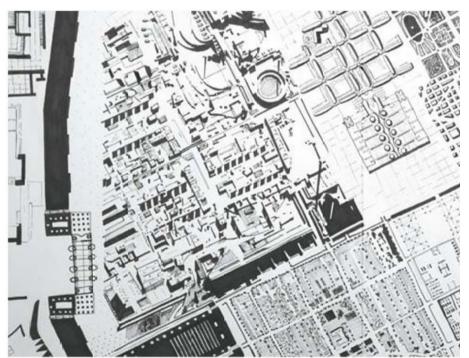




Fig. 19. Snapshots of students Exquisite Conurbation sketchbooks from Architectural Analysis II assessment, Department of Architecture, Cornell University, New York (Neil Spiller 2012, p. 25-26).

KEY STAKEHOLDERS & INDIGENOUS COMMUNITIES

This research looks at how drawing and visual communication is used to engage and work alongside Indigenous communities, creating a space of great sensitivity in how it employs particular graphical languages in an effort to transfer knowledge, meaning and understanding of place and its landscape through shapes, colors, lines and light. In the case of communities that have historical intimacy with their lands, as with many indigenous groups, the health of the people may be closely related to the health of the land. A notion captured in Australian Indigenous maxim 'healthy country, healthy people' (Fikret, B. & Helen, R. 2013) which describes how communities build resilience through their response to shock and stress by actively developing parameters through capacity building and social learning.

This ability in co-producing knowledge requires a bridging between organizations to incorporate multiple levels of participation. This may take the form of a process that is nonlinear which involves dynamic interactions between a person and their social/ physical environment that supports and strengthens 'renewal cycles', allowing for memory, cycles, disturbance events, drivers of change to be revisited through viewing the layers of information, complexity, feedbacks, nonlinearity, and scale all together.

Collective discussions and visual tools are seen here to facilitate reflection and participation, 'allowing for a structural change as it transforms knowledge production, equal participation in the co-creation process and moves away from a hierarchical, linear model of engagement.' (Carlson, E., Rowe, G., Gebrehiwot, T. & Story, S. 2017). Drawing in this context creates a space to pass experience along to future generations where stories could be graphically shared such as 'drawing directly onto the earth using natural landscape elements to represent areas on a map' (Anderson, Singh, 2020). These collaborative drawings consider a personal commitment to create a space for equal participation where the use of appropriate mediums have been chosen by the community to learn, reflect and act.

Murujuga Cultural Management Plan

The participatory process for the Murujuga Cultural Management Plan, developed by landscape architects of UDLA studio based in Fremantle (landscape architecture, urban design & community development) with the local Murujuga peoples in Western Australia, started with an understanding of the broader context, gained from a group of elders who explained the key links between the physical, spiritual, natural and social practice of custodianship.

The act of listening and sharing stories helped understand the term Country, being referred to as a 'shared interrelationship that has been developed, where the health of the landscape becomes entwined with the health of its traditional custodians' (Marques, Grabasch, & McIntosh 2018, p. 6), capturing the essence of everything that's living and nonliving woven together. It illustrates an attempt to restore the Murujuga's connection to nature, that had been altered and impacted by urban fabrics, robust engineered spaces and industrial activities, causing a 'lack of attention to, or responsive design of, social places and human amenity that allows people to engage with and respect culturally significant places' (O'Faircheallaign, 2006).

The Plan explored strategies that facilitated the co-creation of design concepts through the development of recording and mapping informal sketches over iterative drawing processes by landscape architects who are seen in this case as both facilitator and communicator in establishing reconnections between indigenous peoples, core values and customs, thus, engaging, educating, and empowering the wider community to acknowledge and improve the sustainability of their environments.

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Fig. 20. Learning from drawing in the pindan dirt with the Murujuga peoples, Western Australia (Bruno Marques 2018, p. 8).

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Fig. 21. Walking in the country, Karratha, near to Dampier, Western Australia (Bruno Marques 2018, p. 7).

Akoranga Wairarapa Moana

The second case study explores a reconnection between the Maori culture of Ngati Kahungunu ki, and the landscape of the Wairarapa region taking the form of the Akoranga Wairarapa Moana project. A co-production of design experiments involving the local Maori tribes uncovered the inseparable crossover that connects all living things with 'the Maori creation myths, stories, and ancestral linage' (Marques, Grabasch, & McIntosh 2018, p. 8).

The process of uncovering included numerous and extensive site visits, meetings, workshops, and focus groups, a process of listening and understanding. These activities and focus group meetings were used to frame the first iterations of the design scenarios, ones that spoke to the transparent relationship and sacredness of the spiritual world with the landscape features (mountains, hills, cliffs, gullies, rivers, and lakes).

From this cultural exploration, visual techniques were constructed (collage and mind-maps), developing a method that shifted away from conventional zoning diagrams by government agencies to drawings and sketches that delved deeper into graphically portraying connections, oral narratives of values and their ties with natural elements.

By doing this, strong links were established through collective and open debate between the Maori community and other stakeholders, making it possible to deepen mutual understanding and capture common needs.

As such, cross-cultural partnership facilitated 'a strong feeling of ownership, guardianship, custodianship, and responsibility' (Marques, Grabasch, & McIntosh 2018, p. 10), gained by landscape architectures' ability to take the role of the mediator, promoting new 'analytical, experiential, and communicational skills.'

Fig. 22. Students meeting with local community members over the Akoranga Wairarapa Moana project (Jacueline McIntosh 2017, p. 24).

The Iowa Blood Run Cultural Landscape Masterplan

The Iowa Blood Run Cultural Landscape Masterplan provides a framework which respects, protects, and ties heritage of tribal traditions through a highly 'integrative and participatory process that brings together tribal representatives, sate managers, local stakeholders' (Bailey 2017, p. 6).

The study highlights the process of mindful growth under landscape architectural direction alongside the American Indian tribes, allowing for pursuits that welcomed visitors into sacred sites (huts and relics within the landscape).

The mode of conversation through talking amongst tribal councils, listening to the concerns, and asking them 'how they would like to be included in the project and what they would like to see as outcomes' (Bailey 2017, p. 6) greatly strengthened the interconnected ties with cultural development in hearing and listening.

This prompted a shift away from traditional design principles that do not address inclusion of its indigenous custodians, to one that builds strong relationship and trust amongst stakeholder groups, agencies and indigenous communities. In this sense shifting typical interpretations that champions negotiation of working together in 'learning to step outside mainstream cultural views to enhance placemaking' (Williams, 2018, p.1).

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Fig. 23. Collaboration with Landscape managers and stakeholders as part of the Xe' (Blood Run NHL) master plan (Brenda Williams 2018, p. 5).

Fig. 24. Ponca Tribe of Nebraska Elder Larry Write, Jr., explaining to project team members the importance of building the earth lodge on tribal land (Brenda Williams 2018, p. 4).

DRAWING TECHNIQUES

This section explores how methods of illustrations and graphical techniques could be employed throughout this project by drawing inspiration from artists like John Wolseley, and Geoffrey Bardon.

Both artist create a 'mindfulness' that requires one to be attentive, uncovering aspects of novelty and storytelling through methods and mediums in tangent with the landscape, and cultural groups in constructing a formation that moves away from recording 'what I can actually see, touch and feel' into 'feeling it and experiencing it' (N. Graham, 2020, pers. comms., 08 April).

The artists John Wolseley challenges environmental discourse in the search of a 'formal language through which he could express the unique peculiarity of the Australian environment' (Grishin, 2006), instilled through reflecting on his surroundings 'in the experience of wilderness itself' (Grishin, 2006). Reporting through a process of a journey within landscape 'my paintings often have their origins in a special experience – a moment of time in wild country when the land reveals something of its secrets' (Wolseley, 2019). Wolseley uses a hybrid method, pairing art and science, relating the natural world through abstract dimensions to landscape dynamic systems, being humanly aware of his surroundings in a way that allows for a deconstruction of complex systems through annotation/ documentation that frame the essence and identity of particular landscapes.

The artwork titled Mallee – ephemeral pools, Wyperfeld National Park (2009-2012) reveals physical and kinetic contact with plants, trees, rocks, and the earth in order to depict changes of the living system, drawing out invisible flows of hydrological processes that are hidden within intermediate subsurface tides.

It is through Wolseley's actions of working, in pouring, brushing, splashing, pressing landscape elements on the paper 'I pool it, I let it run (the watercolor) and singalong the paper' (Cathcart, 2015) allowing the shifting nature and hidden forms of the site to be revealed. Wolseley describes this as 'I am looking at the pulse, the energy, the flow of the earth, a distillation of those moments in time' an 'emotional recollection of nature that is formed through experiences and moods gained from working and being present within landscape' (Wolseley 2019). This encourages a type of collaboration, a collaboration between the paper, the environment, and the maker where 'to move my paper against the tree and get them to write on it and then other times having the watercolor paper in the water that have allowed the plants to collaborate with me.' (Cathcart, 2015).

This almost analogue recreation encourages landscape architects to expand the tools of representation: 'we need a combination of phenomenological analysis, that enables us to connect with human subjectivities at play' (Geertz 2006, p. 10), broadening our employment of the medium to make sense of landscapes where a shared experience can be captured on the page.

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Fig. 26. Mallee 'gilgai' – ephemeral pools, Wyperfeld National Park (2009–12) watercolour, charcoal and gra (John Wolseley 2019).

The book Papunya - A Place Made After fuses art techniques that were formed and inspired by storytelling to reveal Papunya's Tula Indigenous ways of seeing the world.

This framework alludes to the relationship between two different cultures, highlighting ways of communicating complex cultural stories that are not appropriations of place. Instead, it describes how engagement and trust can promote direct partnership which blur boundaries, and aid in understanding Indigenous ties with the natural landscape and past inhabitants through dreamtime and ceremonial stories.

Geoff Bardon's use of personal accounts and diary entries document, deconstruct, and uncover the development of his relationship through encounters, dialogical accounts, and context-specific experiences of personal, social and cultural realities that allow for artistic creation through the Western Desert painting style with the indigenous members.

The artworks depicted within the book materialise a chronology, a sort of timeless storyboard that capture expressions through the construction of the drawing from a narrative or story. The artworks prompt one to 'understand the particularities of an element in the landscape' (Balmori, 2014), to focus and observe, where the invisible emerges and opens insights to others.

From his ties with the Central Australian Aboriginal community and their attachment, Bardon's frames the things described and drawn, similarly shared by Sean Kay an Indigenous painter of the Arakwal people 'painting today give me my guidance to land, my Country and my acknowledgment of who I am today' (Graze 2013). It brings about a closeness, making us look at the landscape and express its importance with a certain gesture. This mode of drawing allows others to be part of the drawing's creation, and extends to the interaction within space, encouraging others to consider that shared insight of information and allows a same level of connection to be reached.

Each of these examples demonstrate a broad range of approaches to drawing as site interpretation, as document and as act or process, as well as the constructive social potential of drawing.

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Fig. 27. At Papunya, near the Western Desert, Geoffrey Bardon (at right with Old Tom Onion in 1971) encouraged Aboriginal people to take up painting (Catriona McKenzie 2004).

Fig. 28. Snippets from the collection of visual recordings (paintings and sketches) in the book PAPUNYA - A Place Made After the Story - The Beginnings of the Western Desert Painting Movement (James Bardon 2004).

INDIGENOUS PRINCIPLES AND PROTOCOLS

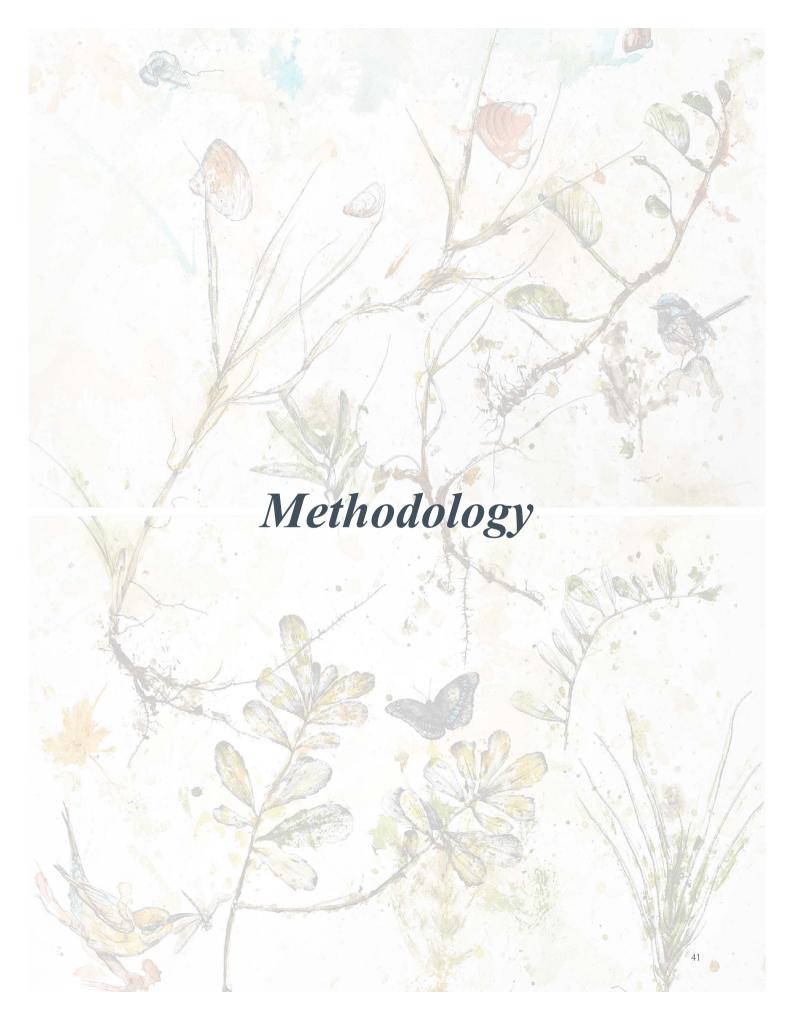
The six key principles outlined by the GERAIS code of ethics, and UTS guidelines Design Indigenous Principles and protocols, and the journal articles Ways of knowing, being and doing: A theoretical framework and methods for indigenous and indigenist re-search (Martin & Mirraboopa 2003), Indigenous Epistemology and Indigenous Standpoint Theory (Foley 2003), connect different world views, to respect and acknowledge Indigenous Aboriginal culture. These were used to develop an engagement framework that safeguards the knowledge, maintains the connection, enhances the relationships of the Arakwal cultural practices and ensures that these are protected post-project completion.

This framework can be found in Appendix A:

With these guidelines in mind it was deemed by the Arakwal community, (Norman Graham, Delta Kay, Yvonnee Stewart and Leon Kelly) that the following practices and protocols would be observed in order to foster a working relationship that is deemed as being 'culturally safe and culturally respectful' (Martin, 2003).

Specifically, it was agreed that any collaborative research:

- Needs to be carried out in consultation with members by the culture, integrating an organic communication style with Aboriginal participation over continual check-ins, to actively engage and obtain active participation,
- Needs to be characterised by full levels of exchange with recording, interpreting, and feeding back information through a seeing and walking side by side,
- It must include Aboriginal values and concepts, acknowledgment of traditional material, cultural stories, Aboriginal worldviews, and ask the permission with using preferred language, terms and expressions,
- Needs to have capacity for a legacy, building operations that can hold and advocate issues, protect sites, empower communities, create opportunities to access knowledge, and connection of future community involvement,
- Needs to invest in a formal involvement with community representative bodies e.g. BOBAC and agree on the processes, factoring time via modes of reporting back, acknowledge external constraints and pressures,
- Must have a code of ethics and must properly reference and recogn ise the information from the knowledge holder to openly agree on the content and context through spoken agreements, mutual talking, and building relationships.



To reveal the complex and interconnected relationships that make up both the physical and metaphysical elements of Tallows Creek my role is to create a platform that will empower and build a sense of ownership as 'community now becomes a critical component in the process' (Sanders, 2002).

In doing so, development of a procedure and a framework through a practice of fieldwork and expressive illustrations will be informed by the information that is revealed by its research, information, storytelling, community groups and science.

This approach is intended to establish a level of collective knowledge, a participatory action research, taking the form of varied visual techniques, 'a whole combination of drawing together' (N. Graham 2020, pers. comm., 24 March), such as on-site sketches, drawings, mind maps, collages, diagrams, pointcloud scans, physical and computer-generated models. The combination of these approaches from interaction, co-drawing, discussion and hybrid outputs as a whole form a space between drawing and repeated iterative meetings with key individuals where layering of knowledge, experiences, and discussions come together to provide a holistic view of site. These aspects may incorporate traditional techniques within drawings and mappings that are in isolation, yet the combination and collection of these different techniques create a whole story.

The graphics will capture certain stories, moments in the environment, communicate unconscious/ intangible values, relationships with place, storytelling through oral narratives, and past research that 'connect the past with the future, the land with the people, and the people with the story' (McIntosh, Marques, & Hutton 2018). Where 'a connection to knowledge, a location within a paradigm, a relational nature' is formed with the researcher and participant engagement.

Tallow Creek will provide the framework for an investigation, building links between core environmental layers working holistically across social, ecological, political and cultural realms.

MAPPING

I will begin with mapping, recontextualizing the landscape of Tallow Creek to strengthen and build new relationships that comprehensively draw out narratives, and show how communities can be represented both through visualisation but also feeling represented in a process.

The illustrations will be developed through a community lead approach over a process of sharing one's knowledge, that is place-specific and adopts a culturally acceptable approach of representation, allowing the communities to work through their preferred methods that use 'associated objects that remind me of this time' (N. Graham 2020, pers. Comms., 24 March). This is particularly important when working within the Indigenous space, it requires great sensitivity, time, and flexibility with the discussions and output needs to be enable a willingness for co-authorship. The illustrations will document, communicate, record and map lived experiences, natural processes of Tallow Creek and its significance, between the realms that establish connections, knowledge and experience of place for all. 'It's being able to see those layers and talk about it, compared to not knowing the story, about country, the creek, and its life' (N. Graham 2020, pers. comm., 10 April). This method can also be thought of as a form of storytelling in which stories are communicated graphically through a collaborative approach between two groups that involves a cyclical and iterative process to develop deeper understandings of relationality and reciprocity through crafting relations, learning, and immersion. What results is a reflective and meditative practice where aspects of time are transcended through the drawing to allow the layers of the drawing to merge, a non-linear reading, or the emergence of when knowledge had been shared, and the order in which the animations were drawn.

COMMUNICATION

In addition to the illustrations, a strategy will be developed for measuring the effectiveness of communication between the different community groups, forming an iterative relationship between the work carried out and the feedback received and in a way which qualitatively and quantitatively defines the shifts in how included and represented community groups/environment feel at the beginning and end of this process. This will be achieved through a level of public consultation defined as 'deep and respectful listening' (N. Graham 2019, pers. Comms., 24 November) through relationships of mutual trust with key individuals that represent Council, the residential public and the indigenous community of the Arakwal People. The method of storytelling, focus-groups, open-ended interviews, varning and other mixed-method approaches over various degrees of participant observation will be adopted where participants can describe their answers orally in such a way that the research can collect and disseminate knowledge, translate information and enhance the validity of data through communication.

Because of Covid 19 restrictions on face to face interactions, a specific contextual set of tracking tools was generated through interviews and direct dialogue over virtual platforms (e.g. Zoom, Conceptboard) that begin to construct a written and graphical lens which maps weekly reflections. The live focus of the drawings informs an ongoing dialogue, revealing non-tangible cultural understandings of site, helping communities to retain complete ownership of that knowledge for themselves and use it in a way that develops their own capacity for ways they see fit. As Norman Graham described, 'we were able to discuss how something was represented and moving it about and changing it as we go through it because you can't get everything out at once and I guess that's what we were able to do, that constant checking in with each other to see how it looks, to figure out the best representation to describe the story and how it may change overtime which might be a bit of a challenge. We got use to the storytelling and graphically putting it pen to paper so to speak' (N. Graham 2020, pers. Comms., 11 September).

The conversations will be tailored to different stakeholders (local community, the Arakwal people, Byron Shire Council, NSW National Parks & Wildlife Service) using the method of drawing together. The method shifts the process of gathering information, collating information and structuring information and instead literally 'draws out' insights from collaborative methods which broaden frames of knowing as it relates to land, health, values and why they are considered important. Such approaches go beyond the typical half day workshop as it relies on a level of dedication from these key individuals over a process that requires multiple meetings to unpack layers of memory, redraw and refine previous layers of knowledge and to trigger new observations.

These entanglements with people and the landscape will be vividly and expressively depicted through drawings which recognise the significance between the presence of processes, the presence of living things, one's responses and how individuals connect and inhabit the landscape.



Fig. 29. Drawing with Norman over Zoom and Conceptboard depicting the movement of fish and the cultural ties with the Arakwal people (24 June 2020).

CULTURAL AWARENESS

The work will aid Council initiatives in developing collaborative measures that pay respect to Arakwal and National Parks, 'a resolution that was made after the big fish kill event in 2019', (C. Dowsett 2020, pers. comm., 26 March), incorporating traditional knowledge in future management broadening the general understandings of place. I look to form a series of drawings/graphical pieces, and written translations built from developing trust with key individuals from the local community, addressing an interface of site-specific interests and concerns through past, present, and future contexts of Tallow Creek that create a crossover of cultures, exploring the possibilities of new ways of looking, and imagining a shared story of place. The research and its knowledge is shared equitably between the researcher and the community, that the community can be enriched by the process to reveal knowledge, provide healing, create relationships and identity.

The research will also aid the Arakwal Indigenous community in sharing information about Aboriginal culture, deepening respect and understanding of information that can be used by the Arakwal community for improving cultural learning tools, allowing for connections and crossovers to be identified through different types of mappings (national parks and place of plenty) and establishing a resource package of not only the oral history but also the historical research which aids in the information.

PRESENTATION

The work will take the role of a performative piece, engaging people through a forum of visual documents with an exhibition, shared over Council websites, NSW Parks and Wildlife education office and developing a process that can be implemented within Byron Shire Council's 2020 Coastal Management Plan which consider collaboration and consultation with the Indigenous Arakwal community and local residents.

These platforms will create the activation of cultural knowledge where unwritten histories can be shared and brought to the surface, where stories now become part of informing the wider community and playing a part of changing attitudes which identifies and acknowledges that 'the things that the Elders wanted to do was to share information so that the wider community can understand why this Country is important to us and why we want to try and preserve it and keep it healthy' (N. Graham 2020, pers. Comms., 15 June).

The work will translate, test and foster tools for future cross communication and discussion that have not yet been explored and establish different frames of understanding and 'awareness to often-hidden values' (Marques, Grabasch & McIntosh 2018, p.4). It will provide an opportu-nity for future adaptations and enable future work to arise from systems of knowing or personal and cultural knowledge that are expressions of the landscape.

'Artworks that explicitly remediate singularities in general abstraction, provide narrative scenarios of how people learn to identify, manage, and maintain' (Berlant 2010). If successful, the presentation of the work will prompt public participation in practices of potential future management that fosters responsibility and care for Indigenous culture, natural ecosystems, and future use of the landscape. It will become a catalyst in the restoration of connection to nature, an expression of views or values, and possible healing and repair for members of the Arakwal community.

EVALUATION CRITERIA

To address the question:

'How might landscape architects use drawing as a vehicle to reveal the complex relationships that exist between stakeholders and the land to foster a shared regard for future adaptive strategies.'

It is important to recognise that the process of evaluating either the success or failure is not as straightforward and linear as one would like. In practice so far, the process has been cyclical, iterative, and messy often limited by my own knowledge and awareness of indigenous culture, local agencies past practices and community values and beliefs.

Despite its fluidity the following framework has been designed to test and measure the effectiveness of the drawing process at each major milestone. For example - story telling / review of each drawing.

The following test questions used to evaluate the effectiveness of the methods is derived from prior test methodologies, research material, consultation, community, and stakeholder feedback.

How does the drawing?:

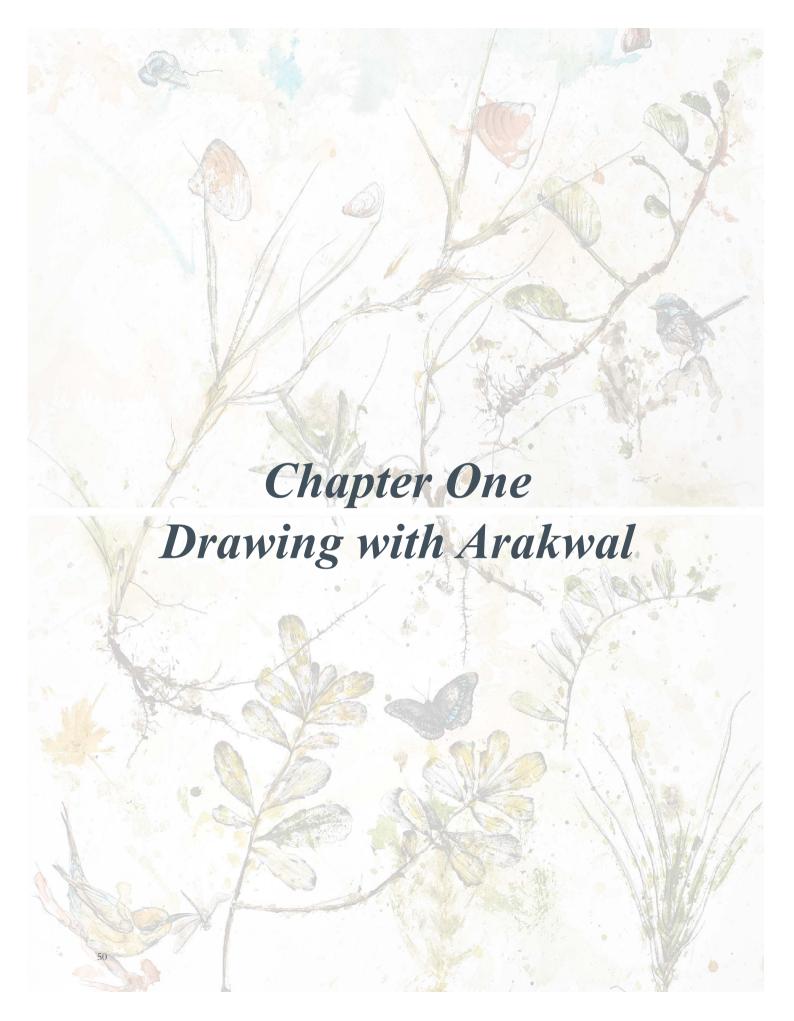
- Demonstrate new ways of looking at a system its complex nature with diverging interests / culture / social/ ecological etc?
- Develop an easily accessible format that allows for documenting and recording information in working and interacting through mapping?
- Translate immeasurable things into measurable entities?
- Allow for the flow of ideas of sharing information?
- Capture non-tangible narratives?

How does the act of drawing bring together stakeholder groups particularly indigenous communities. Does it:

- Establish a potential base line for collaboration?
- Show how the different interest of all parties is brought together?
- Use drawing as an education tool?
- Allow other parties to participate in this process?
- Educate?
- Speak to a lot of people from different backgrounds?
- Encourage further depth that makes a wider connection between space, context, and time?
- Bring people on the journey?

How does the medium of drawing allow you to understand the particularities in the landscape?

- Specifically, what particularities are you capturing?
- What symbols and iconography have been constructed?
- What techniques are being used?



'Aboriginal peoples are the keepers of the oldest stories and the oldest story systems in the world' (Milroy & Revell, 2013, p.1), and from my personal experience, they see that 'everything is alive and everything is in relationships; past, present, and future are one, where both the physical and spiritual worlds of Country interact.' (Milroy & Revell, 2013, p.1).

Storytelling is a shared knowledge, it is something that is lived, learnt and taught by Aboriginal people, some of which is knowledge that is purely observational, traditionally passed down orally which consists of one's intimate knowledge and details about intricate connections within the natural world such as weather, animal cycles, plant species and seasonal expectations. It is 'a way of archiving which is fragile as it is intrinsically linked to language, cultural practices and social values' (Delaney 2015). Uncle Kevin (Gavi) Duncan, an Aboriginal Cultural Education and Tourism Officer from the Darkinjung community describes it as: 'Being able to be passed down from generation to generation, that's how we done it traditionally many, many years ago and parts guided by mouth' (G. Duncan 2020, pers. comm., 5th August).

In particular, the Bungjalung of Byron Bay – Arakwal Bumberlin people retain a strong connection to Country, handed down by their ancestors in recognising the importance of sharing knowledge, traditions and cultural practices that actively care and connect people to place, 'expressed through our stories, art and songs, our dance and ceremony, and the way we understand and respect Country' (Arakwal People of Byron Bay 2011). These storylines of Country and of people are strongly connected with meaning and messages, for Arakwal people to know and belong one must *Stop, Look and Listen (Binungall*).

To give direction and guide our thinking we will begin with a Bungjalung Creation Story shared by Norman Graham (Arakwal Indigenous Elder, knowledge holder) 'as an introduction to Country and how it relates to water and land, the value to people, seeing that, identifying with that and how we came from that' (N. Graham 2020, pers. comm., 16 August).

CREATION STORY - 'The Story of the Three Brothers'

In the very beginning, Three Brothers Mamoonth, Yarbirri and Birrung together with their wives and mother travelled from far across the sea, arriving on the Australian coast at the mouth of the Clarence River. Their boat, however, was blown out to sea in a storm, so the brothers decided to build new canoes in order to return to their homeland.

They completed building the canoes but could find no sign of their mother who had gone to look for food, so they set off without her. On returning to find she had been left behind, their mother climbed to the top of the hill at Goanna Headland near Evans Head and cursed them for abandoning her. She called to the ocean in anger. The water rose creating the first waves on the North Coast and the wild seas forced the brothers back to land at Bullinah (known as Ballina). Once the seas had abated one of the brothers returned south to find their mother. They settled near Bullinah, developed families and a thriving community.

Eventually the brothers decided they had to populate the land, so one went north, another west and the third to the south, forming the three branches of the Bundjalung people. It was through these brothers that this area was populated, and that the laws were passed on.'

The Arakwal people connect with story as 'places where these events occurred, depicting where we need to come to get our nourishment, back on our Country because that sustains us and its where, we come to get nourishment, to feel healthy, healthy mind and healthy body and healthy in soul, back on country' (ABC Australia 2019).



BEGINNING WITH STORY - 'The Story of the Flathead'

The story of a flathead is a narrative that seemed at first trivial and inconsequential in the scheme of things, yet through discussions with Uncle Norman Graham it became clear that the aquatic life within Tallow Creek specifically the flathead is of great importance, holding cultural ties that govern the movement over land, symbolic links to teaching, to wider narratives of site, identifying seasonal changes and times of exchange when the Creek is open or closed.

Fig. 31. The Dusky Flathead, watercolor painting revealing a deeper understanding into untapped narratives of Tallow Creek.

Over a period of 6 months The Story of the Flathead evolved through the drawing process. The process used to reveal the importance of site and heritage of this story with respect to many other stories, can be broken down into three discrete stages, 1) The Story as Art, 2) Storytelling for Sharing and 3) Listening to Country. In my experience, storytelling and the drawing process became one and inseparable as the process felt natural, instinctive and fluid without boundary or external influences or preconceived biases; it was in the end a blank canvas.

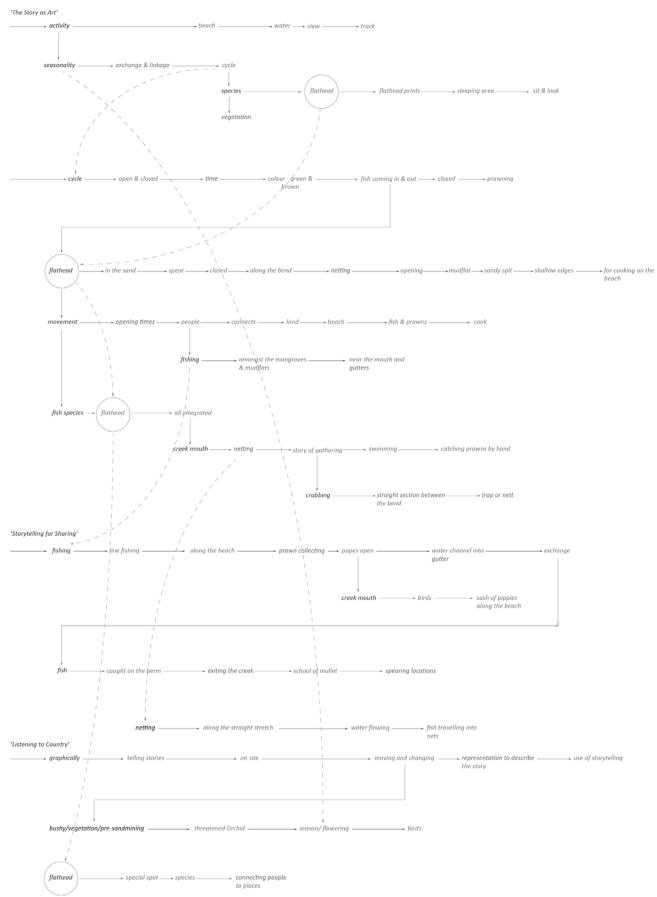


Fig. 32. An anecdotal breakdown of 'the story of the flathead' discussions through the drawing, high-lighting the interconnectedness between many other stories and values that were uncovered throughout the drawing process.

THE STORY AS ART

The early conversations with Norman identified the characteristics, locations, habitat, and interconnected relationships of the flathead with other aquatic life (e.g. prawns, crabs, mullet).

The drawing below (the first sketch), undertaken during our first meeting in April 2020 conveys the mouth of the creek in relation to the fish, the exchange between two systems (the creek and ocean), the surrounding habitat on the banks and the interconnection of the flathead with other aquatic life.

The drawing depicts the flathead spatially, seen through the use of dotted lines which Norman characterised as the wake of the fish as they journey throughout the creek system. As quoted by Norman 'using patterns like those dots, it reminds me of that wake of the fish, when you get a lot of small fish and you get that ripple wake' (N. Graham 2020, pers. comm., 08 April).

Using Zoom and drawing tools such as Conceptboard the initial drawing became integral and the focal point in all future discussions and the drawing process as it provided me with a framework that could be used to overlay and validate site specific information, uncovering links to culture, spiritual belief systems and values that have not yet been documented in any public available text or research material.

Throughout this process I was humbled and honoured that Norman felt comfortable in sharing information that is sacred and of importance to his community.

Fig. 34. Snapshots of drawing with Norman over Conceptboard, as we continued to overlay information about the flathead and narratives that were linked using the flathead as the focus of our discussion and drawing workshops.

Using visual references such as arrows, circles, colour and pictures overlayed in areas of the drawing, Norman describes 'the flathead, they come up and they sort of rest along the mouth, they would be on the Southside near the sandy spit around the corner.' Where their habitats lie, 'the flathead come and rest, when it (Tallow Creek) gets stable they come in and sleep.' Between people, 'movement is very important around the opening times (of the creek) the movement of people and the flathead in the sand where you can easily see them and sneak up to them and spear them before they see you, that's how we connect to the flathead when the mouth of the creek is closed'. Of things and how it's all connected, 'things that relate to that activity and that sacredness like pippies on the beach. That seasonality, that exchange and linkage with not just the water but also the species between them in the cycle' (N. Graham 2020, pers. comm., 10 April).

Fig. 35. The drawing continued to develop in greater context of these stories, in particular the relationship Norman had with the vegetation, dunes, mudflats and the ocean. Referencing the view from the walking track under the trees in vegetation on the Northern side close to the campsite Norman describes this as 'having the whole land movement, with the tracks from Tallow Camp where you go down onto the beach, and get fish and prawns, and leave them and cook them up on the beach as well'. The use of patterns and figures that connects stories and identity, 'when I look at this and see it, I see the trees, that's those areas, and particularly that circular bit for me represents the meeting place of the creek, that's where everyone moved off to gather' (N. Graham 2020, pers. comm., 10 April).

As we continued to iterate through the drawing process the stories that were shared highlighted the incredible richness of this place, of the fish coming in and out, this exchange of species and array of movement beneath and above the water's surface. Movement between things and within the larger system presented a significant connection to the Creeks mouth, described by Norman as 'when the Creek opens movement occurs, and when it closes a new cycle begins and that cycle is within the Creek, when it opens it means an opportunity is formed changing with what the cycle would allow.' The cycle of the creek also highlights the ties with the land and the Arakwal people, how they connect and use the creek, how they journey through space, how they are influenced by the landscape changes within the creek, being impacted from it. The cycle therefore holds values that are 'living', the drawing looks to understand that value and its relationship between people and its wider context, as 'the creek lives in a circle that's connected and must consider the wider circle which it lives within' (N. Graham 2020, pers. comm., 15 April).

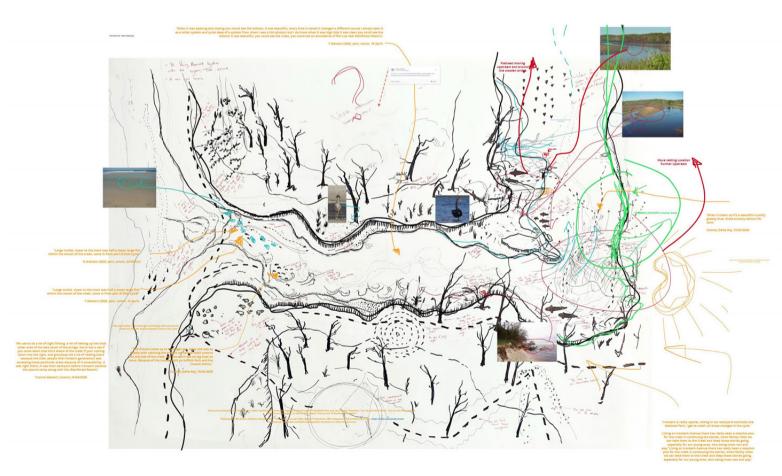
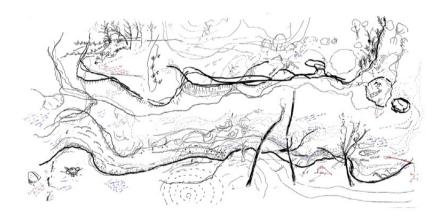


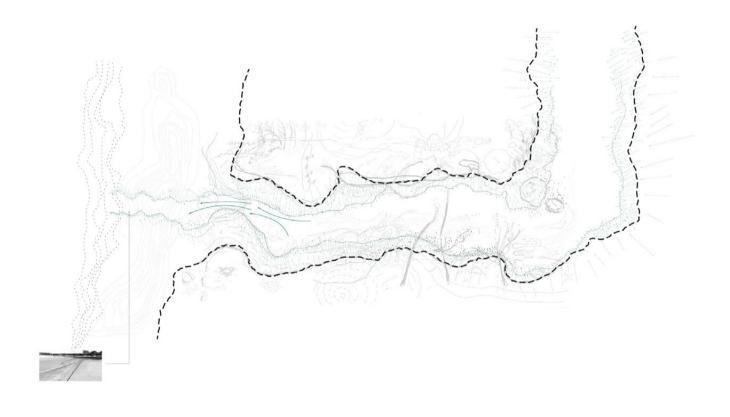
Fig. 36. Snapshots from the second iteration after clarification, feedback and drawing together with Norman Graham and Delta Kay (Normans sister), sharing further photos and stories to enrich the drawing.

The exchange of knowledge, enriched by drawing, extended to these relationships between seasonality and cultural use during system cycles, referenced by Norman as 'where the mangroves are, the mudflats, between the bridge and the mouth along that space were used to fish, net and spear depending on seasonal changes, we also use to crab around the corner along that straight section between the bend.' When the mudflats are exposed you have other species and values coming from that idea of what species are going up and down the creek because they are continuing through it all' (N. Graham 2020, pers. comm., 15 April). Other activities around the edge with values extending to the beach and creek mouth with 'the prawns coming up to the edges, mum was so deadly catching them with her hands' (D. Kay 2020, pers. comm., 15 April).

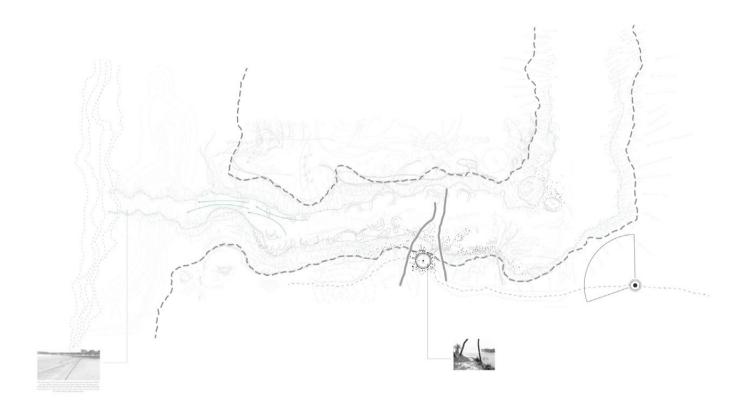
These early drawings with Uncle Norm was then translated within a format of drawing which is not more accurate nor improved than the originals but rather provides insight into the drawings creation. This is seen within the proceeding figures (36-50) that unpacks the performative aspect of how conversations flowed, the order of storytelling that formed connections between topics and spatial moments while the drawing was being created.



'With the creek it's how we can make the creek that centre of attention, not the person. A whole combination of drawing together, work that represents stories, to get that whole other story, talk visually about the creek.'

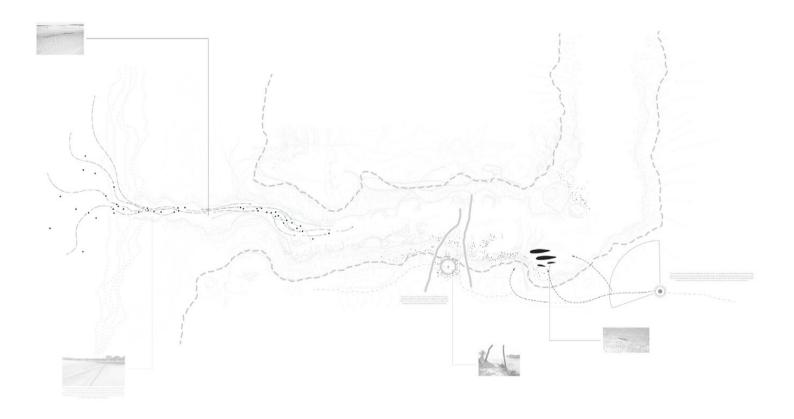


'The creek does go through its cycles having enough rain to open it up, shifting through different seasons and how the creek interacts with the people and other parts of Country. Its one little creek but its related to the wider landscape, the Creek lives in a circle that is connected to wider circle, looking at how water sits within Tallow Creek, a shared value.'



'For us that is the view from the walking track that comes out, walking out with different views from being along the track, that's where you'll tend to sit within those surroundings. Particularly that circle area, it does hark at that point there seeing the wake of the fish, when you get a lot of small fish and you get that ripple wake, standing there looking at that view it's our meeting spot to stand and show and point.'

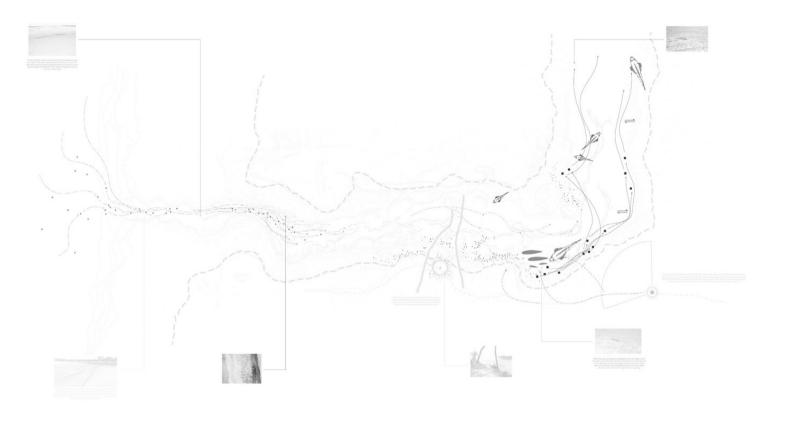
'Sometimes I go and look to see where the flathead are lying, Looking towards the ocean along that edge to pick up what might be around, what fish are in the ocean. There a slight little channel to see the coming and going of any fish as well.'



'It's this idea that its open and closed and all of a sudden you see the ripple of the water representing fish coming in and out. It's like those dots, little ripples distinguish the fish movement in and out and bigger dots represent that number of large fish coming in for part of that cycle.'

'When the creek gets stable, the flathead come in and sleep next to the water around the sides near the sandy spit of the corner, leaving there markings in the sand to suggest they moved off into other parts in the creek because there sleeping area is no longer there when the water starts to flow again from the opening.'

Fig. 40. Layered stories with Uncle Norm - 4

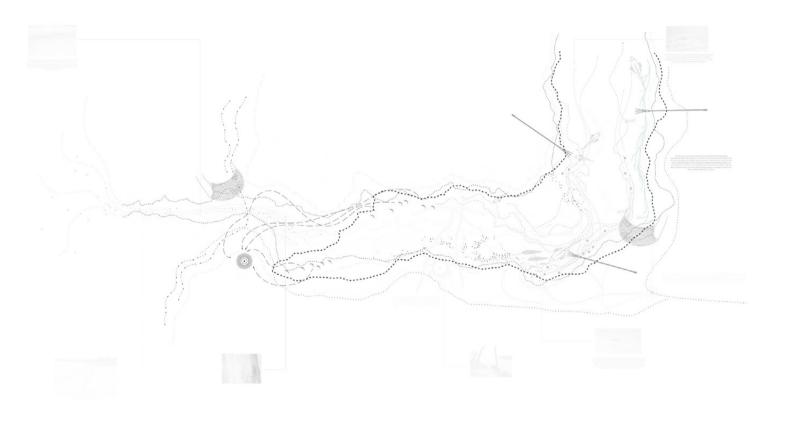


'The flathead are typically located within the bend and further up as well, in the very low bits of mangrove and mudflat bedding that's how far they naturally go, moving as the cycle permits around the embankments for food.'

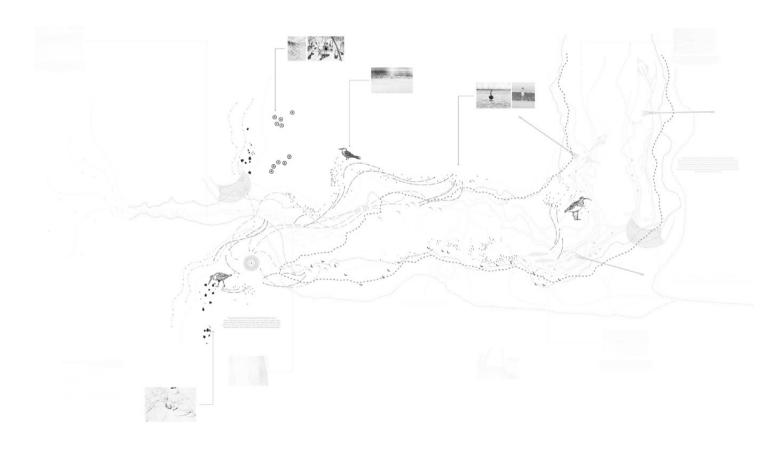
Fig. 41. Layered stories with Uncle Norm - 5



'Growing up as kids we fished when the tide permitted, having that opportunity when the creek was closed. We would sneak up to the flathead in the sand and spear them before they would see us. We also put nets across the creek, along the Western side through the reeded beds knowing where the channels where and that sort of stuff, the flathead would swim down with the flow at deeper areas, we would pick our places along the whole of Country so that we didn't deplete the system.'

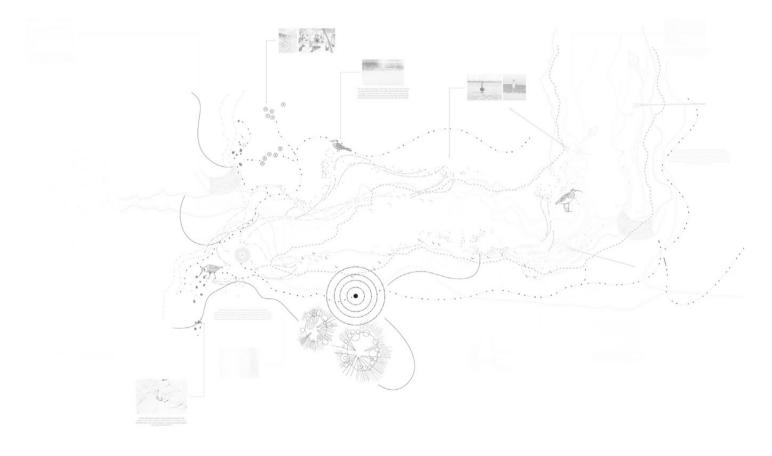


'The prawning inside also happened when the creek is closed, hand-catching the prawns which hung in the very shallow edges of the water, having the whole land movement that connection with the creek with the tracks down onto the beach, to get fish and prawns to bring them back and cook them up in a billycan, the creek offered that opportunity.'

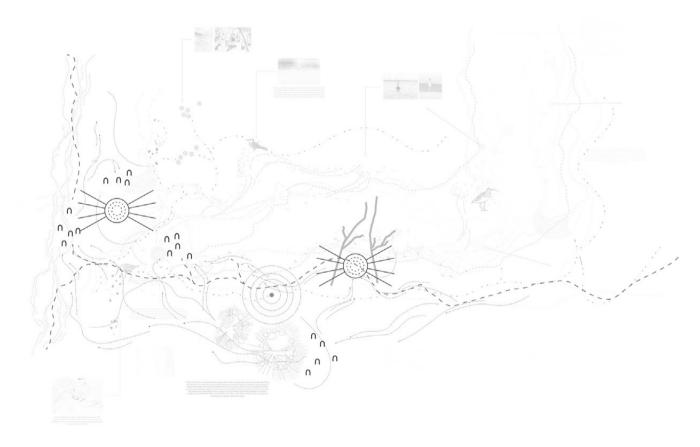


'The seasonality, exchange and linkage with the water also tided in the species between them in the cycle. Like the bird species that congregate behind the berm, it's their feeding and congregating area, that's what they do they like the waters edge and when the water level drops they journey onto the sandy spit in the middle.'

'Things that relate to that activity and that sacredness, like pippies on the beach. Eating on the beach occurred up on the Northern side, close to the campsite, cooking up a feed of pippies along that creek interface.'

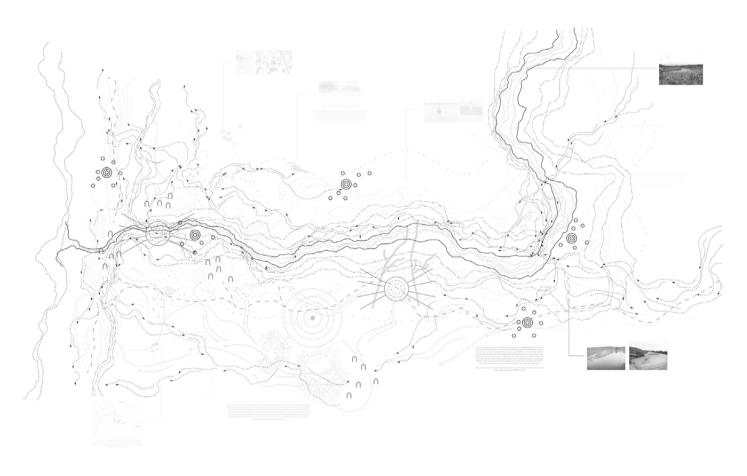


'That circular bit for me represents the meeting place of the creek, the home area that was described to be 50m inland of the creek mouth. That's where everyone moved off to gather, accessed by routes along the edges north of the creek that now extend to the tracks to Ironbark camp. This area provided everything we needed, everything happened around here, they would have walked up and down this area we've got that whole beach interacting all over country, accessing all these areas flowing together and mixing together, move within the whole space.'Relating to the Bora north of the creek, two where the general community would gather and share stories.'



'It's the meeting spot under the trees, brings that comfort of healing being there it was the spot for sharing stories of the unseen and the literal memories passed down by our ancestors. Our ancestors moved everywhere, our grandfather went north and south for resourcing, there was a lot of teaching along that whole beach area, that's where they would also exchange information and stories, we would walk all up and down there. For us it's the Ironbark track onto the beach allowed for movement of people and families, family would come and stay, they would be down at the Creek mouth, hearing them, that reminiscing a way for them to connect back to their parents, to the past.'

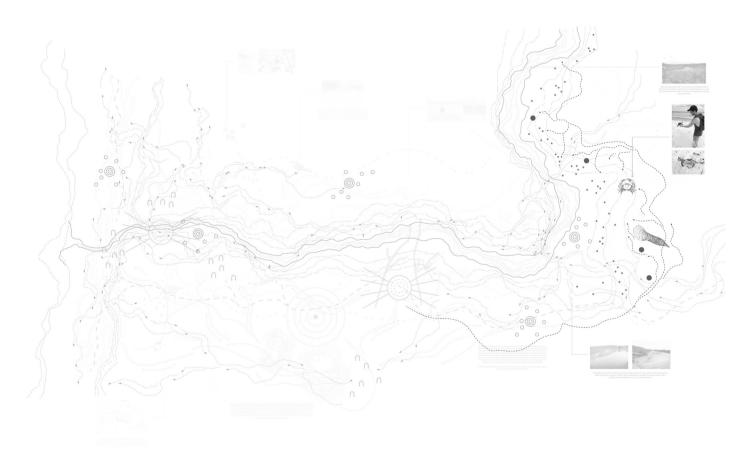
The scenery would allow you to tell a story that you could see, under the trees, to point away, allows you to see different things.



'Years and years ago when it was open you would just have a little thin line of water, maybe only 3m wide therefore we could walk along that whole area and see everything that was coming along the creek.'

'It would be almost like a channel, presenting opportunity for my ancestors at that time, having that opportunity to practice fishing. At very low tide, we are able to walk along the creek, picking the shortest bits to cross at the narrow points.'

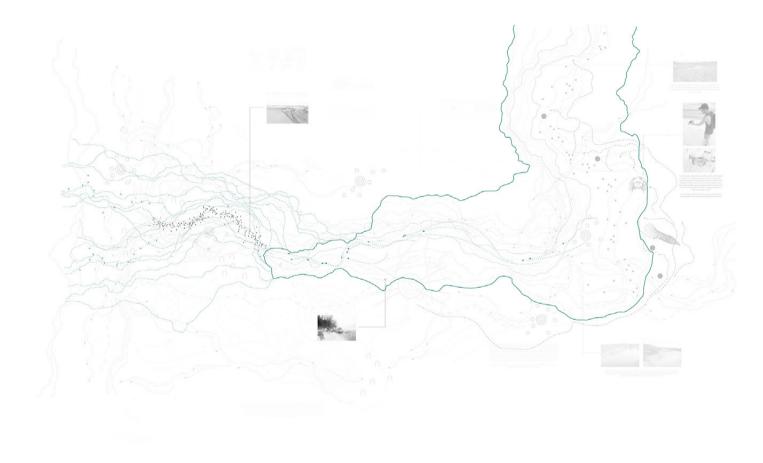
Fig. 47. Layered stories with Uncle Norm - 11



'On the track, under those trees it's a path well traveled setting some other activities around the edge with values extending to that straight section and how that's changed overtime. We use to crab around that corner along that straight section between the bend from that bend south towards the creek, catching the big mud crabs with a trap or nett.'

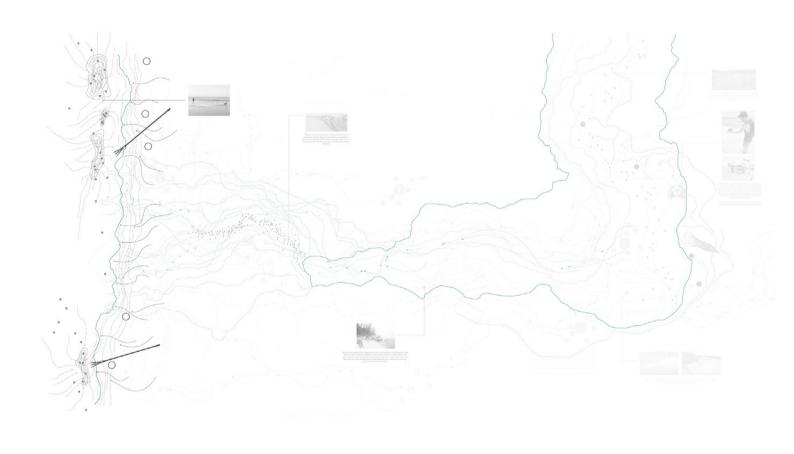
'It's that idea of what species are going up and down the creek because they are continuing through it all.'

Fig. 48. Layered stories with Uncle Norm - 12



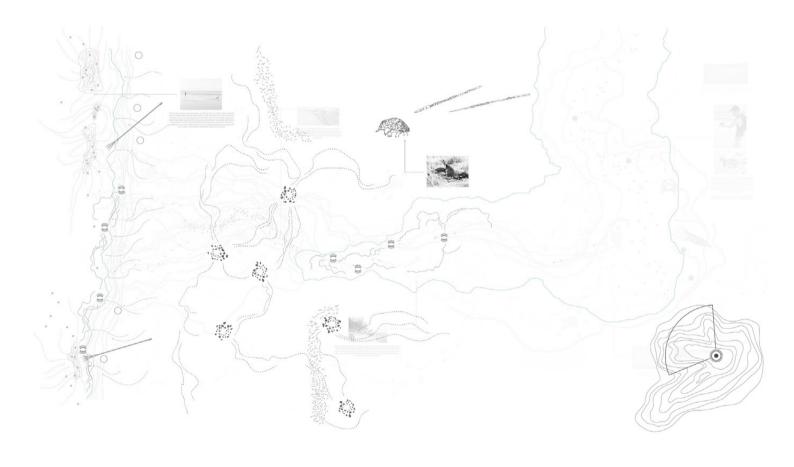
'We grew up opening the lake, with our parents it was a generational thing, where if it was closed, we would just open it, we would dig, just hand dig, enough to open it up. It was just something that we did when it looked a bit high or a bit dirty.'

'When it was opening and closing you would see the bottom, it was beautiful, every time it closed it changed a different course I always seen it as a wider system and quite deep of a system from when I was a kid but I do know when it was high tide it was clean you could see the bottom it was beautiful, you could see the crabs, you could see an abundance of fish.'



'The ocean is also access at that same time, fishing near the mouth, near the gutters that run along either side. We would pick our hole along the beach, we would wait until the tide runs out and slowly the fish would move into those deeper parts, the water channeled everything into that gutter and that time the swallow tails they all came at that one half hour period. When the creek popes open that's where they usually fish, even South of the Creek mouth, it its good and you found a gutter real close and you don't need to walk that's where you would go.'

Fig. 50. Layered stories with Uncle Norm - 14



'You have the creek mouth, swimming in the beach, that whole strip along there they used that whole area. Beaches where the highways of their day. The old girls use to talk about where they could light a fire like in the old days, anywhere along the Creek mouth, because they roamed that whole beach they saw it anywhere along there and go back to the Tallows Camp, allowed them to go back. They did fires up on the beach for fish and pippies, that whole dune.'

'They did love there bush and bush tucker, that whole interaction between what we would see in terms of the vegetation between the Holiday park and Ironbark. Grandfather he would sit on the hill see the Echidna it was a good vantage point up near Ironbark, it's that special recognition.'

Fig. 51. Layered stories with Uncle Norm - 15

STORYTELLING FOR SHARING

There were also different types of drawings taking place, this saw layers from the previous drawings being translated into more traditional and conventional graphical maps which tied Normans implicit knowledge of the aquatic life (linking quotes, moments and memories to lines, symbols and areas in the drawing).

It is important to note that these modes of drawing are mutually supporting and that one doesn't have priority over the other, enabling specificity through the use of various graphical devices that can be translated and speak to agencies that work and identify with their own mapping language.

Using conventional graphic mapping techniques Norman and I captured the Creeks evolving environment between the closing and openings of the creek, the aquatic species moving within it and its relation to Aboriginal culture. The Fish Movement Map highlights this site-specific information such as the exact aquatic species inhabiting the Creek, their habitat locations, what they eat, feeding and spawning grounds, movement cycles during the creeks opened and closed state, and the relationships with the Arakwal stories of (spearing, netting, line-fishing, hand-collecting). Described by Norman as 'there's a lot of movement, a lot of activity beneath and above the surface, it's the connection between two systems, that overlap which provides an opening of food source, being the most central place' (N. Graham 2020, pers. comm., 04 June).

LISTENING TO COUNTRY

In mid-July 2020 I had the opportunity to return to Tallows Creek. Over a four-day period I immersed myself within the natural surroundings to listen to sounds of the creek, the birds, the gusts of wind as they passed over the land, to smell the air and to touch the ground, the sand, the mud flats, the bark from the surrounding trees and the leaves from the shrubs that's populated the banks.

This activated my senses *on these lands*, bringing me closer to relate to site in a human way, which promoted a consciousness of how this site may have spoken to generations of Arakwal people before me.

During my time on site, I watched and waited with patience as the 'interpretations and representation of patterns emerged' (Martin 2003, p. 213), to reveal the connection between living things within and around the landscape. Noticing the aquatic life inhabiting and moving through the outer reaches of the banks leaving ripples from intermittent water breaks, the vegetation as changes in density and conditions offered habitat to an array of insects, the species of shorebirds that moved along the landscape in search of food, the flows and currents of the water that moved material from upstream and out into the ocean.

While engaging and reflecting on Country I recalled the stories from Norman, opening my mind to look, listen and acknowledge Arakwal people's cultural connections with the site, such as netting and spearing the fish, and where the ancestors walked, camped and shared stories.

Using this newfound lens, I was able to track throughout the landscape as I walked softly, moving through the environment, painting with on-site materials as pigments, mediums, and textures allowed me to 'reconnect and link up the dots of how various currents interact and how pathways through land and water change' (N. Graham 2020, pers, comm., 24 March). This translated my embodied motion that was in contact with the ground, its elements and the processes that are culturally alive within the qualities of site to form a language that was able to communicate natural processes, cultural values, spatial/ material conditions of the creek.



Fig. 53. On Country, along the banks of Tallow Creek, during my 4-day study trip whilst spending the day along the mouth listening, observing, reflecting, and painting moments within the landscape (11/07/2020). Here I worked with the elements of the landscape, enriching my experience by being physically present.



Fig. 54. The artwork *Series 05 - Tallow Creek 'Cycles'* relates to the ephemeral nature of the Creek, working with the atmospheric qualities of site such as light, colour, texture, details, flows and system diversities at a human scale. The series unpacks the relationships of 'water and life, it's about revealing the way the environment works so it's not hidden in the ground' (Kombumerri & Tyrell 2020). Its 'having that joint sharing and being on Country, caring for County, and seeing Country easier' (N. Graham 2020, pers. comm., 15 June).



On the 12th of July 2020, I met with Uncle Norman on the Northern bend near the mouth of the Tallow Creek. At this spot we talked about the nature of the natural opening and how site painting can capture its particularities by incorporating elements from the landscape to connect moments of movement that are of cultural importance. For example, Norman suggested that the flow of the water could be represented using the green algae that had been washed up on the banks near the mouth of the river as pigments of colour to show the greeny browns 'tea tree' running out of the creek while the blue fresh water from the ocean runs into the creek.



Fig. 55. Image of Norman along the North banks of Tallow Creek close to the original campsite, were we discussed the Creeks recent opening the importance of the water system and the opportunity to explore the nature of Country and Indigenous connection to Country. 'One of the things that the Elders wanted to do was to share information so that the wider community can understand why this Country is important to us and why we want to try and preserve it and keep it healthy' (N. Graham 2020, pers. comm., 15 June).

Norman took me to the hidden Ironbark trail situated west from the creeks mouth. As we climbed the bush track, Norman shared stories about how his ancestors navigated through Country 'this is the more hilly bit that our ancestors used to walk down from Ironbark camp, they would trace the contour down to the creek mouth following the flatter points', about how connections to place can be respected 'take your time and enjoy it as you come through its not necessarily just going down to the beach but taking your time and walking through here.... the beach might be the end destination but take the bush and the parks in', and to value this area and what it holds such as 'our threatened orchid, our midden sites left from our ancestors and the sustained end of the bush track stories and our homes, the animals have their place and we need to respect that place' (N. Graham 2020, pers, comm., 12 July).

Walking the Ironbark track with Norman allowed me to gain a greater appreciation of the connection that Norman had with the land and specifically Tallows Creek and the surrounding bushland, I found our discussions to be dynamic, engaging and moving 'that everything is alive, inherently rooted in mutually reciprocal and interactive relationships' (Dudgeon, Bray, Darlaston-Jones & Walker 2020).

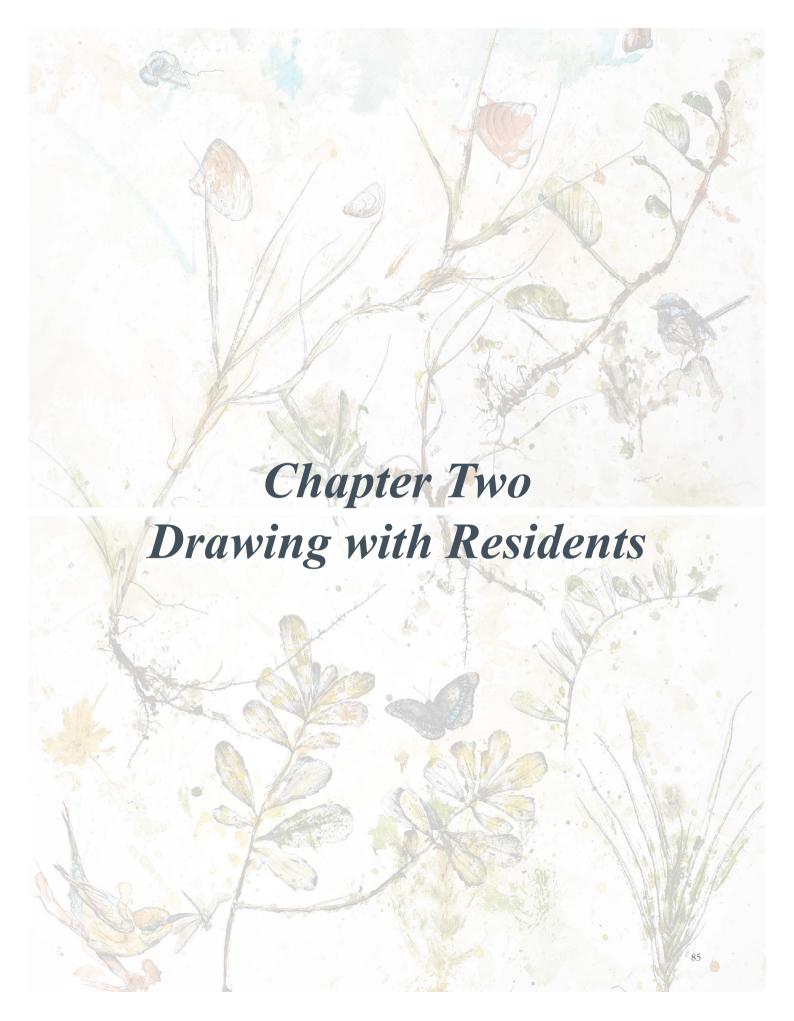


Fig. 56. Walking with Norman Graham along the Ironbark walking track, sharing stories of Country, reconnecting with the birds, plants, earth, and movement of his ancestors (12 July 2020).

REFLECTION

Using the Evaluation Criteria as a framework to reflect on the method and process undertaken by Uncle Norman, and feedback provided by both Uncle Norman and the broader community can be summarized as per the following:

- The drawing process through the method of mapping and communication successfully brought together Uncle Norman stories in a way that would allow for the exchange of experience, perspective, and world views to be shared with non-indigenous stakeholders and community groups.
- The drawing process helped foster a common starting ground, an openness, vulnerability, and trust this allowed for stories to immerge as Uncle Norman trusted that I would communicate his lived experiences and the stories of his ancestors in a way that was representative of his indigenous culture.
- The drawing process successfully revealed a deep sense of spirituality and culture that goes well beyond current / modern mapping techniques.
- The drawing process not only successfully captured Uncle Norman's stories, but was then used to establish a baseline for collaboration amongst other indigenous members as stories were layered and added on by others.
- The drawing process with Uncle Norman aided in my own learning and development as I developed through our discussions and interactions a deep awareness and importance of interconnectedness of community and environment (historical, political, cultural, economic, geographical, and localized context)
- The drawing process made it visually easy to see elements, make modifications in real time as Uncle Norman shared his cultural stories and importance of place and its elements.
- The drawing process surfaced hidden voices, creating links over time and space where multi-generational sense of knowing was brought forward to acknowledge lived experiences between the past, present and future.



As described by Uncle Norman, Tallow Creek embodies both an inner and outer circle which are interconnected by a symbiotic relationship that is heavily influenced by both natural environmental forces that have shaped the landscape since deep time and more recently the impact of human settlement.

These forces are particularly present along the six and a half kilometre stretch of Tallows Beach, situated between the Cape Byron Conservation Area and Broken Head Nature Reserve (the outer circle). Forces such as erosion and deposition of the landscape act between both territorial and fine-grained scale, making the landscape extremely temporal which in turn have had a profound influence in the way that vegetation grows, animals that inhabit the area, water flows, and how ecologies form.

Tallow Beach has had a contested and troubled past, caused by human extractive processes from sand mining operations where rutile, zircon and ilmenite were collected from the black sands of the dunes between 1947- 1972. As a consequence, space, material, ecologies, and biodiversity were under significant pressure as extensive land reforming took place along the dunes as 'sand was pumped (from the beach) back to the mined areas (of the dunes and creek), ... replanting the dunes with imported plants such as 'bitou bush' which later infested the area' (Byron Bay Historical Society 2017).

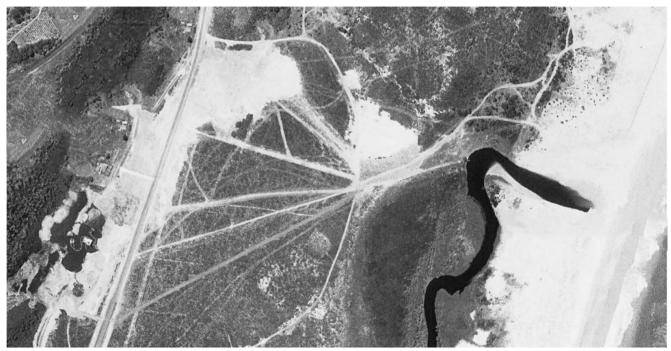


Fig. 57. 1966 aerial of Tallow Creek/Beach during sandmining operations (Byron Bay Historical Society 2017).



Fig. 58. Early 1960's image looking North of dredging within and along Tallow Creek/Beach (Byron Bay Historical Society 2017).

These environmental complexities that form part of the larger system surrounding Tallow Creek were explored with local resident and Suffolk Park dune care veteran Helen Brown. Her stories stem from a deep-rooted connection with Tallows beach and the dunes, formed through her 20 years of volunteering where she connected to on ground experiences, taking on a new meaning for life as she worked hard to 'preserve and conserve the sacredness of this place (Tallow Beach)' (H. Brown 2020, pers, comm., 21 September).

Helen's specialised knowledge of site was therefore formed by a working knowledge, as she reflected and responded to environmental concerns through looking, noticing and witnessing events firsthand. This durational approach considered 'working with the flows of the dunes, that experience of being on site, that's how we connected and learnt from the environment' (H. Brown 2020, pers, comm., 25 May).





Fig. 59. Visiting Helen Brown, listening and learning about the work she performed to stabilise the dunes, her personal relationship within particular locations along Tallow Beach and her hope to one day see the dunes restored. Photos reveal the revegetation attempts and the heavily eroded foredune that are met by natural storms, king tides, high winds but also the care and love Helen has for the

site. (14/07/2020)



Fig. 60. Collection of images from the Suffolk Park Dunecare Group revegetation work along Tallow Creekside by the bike-path, where removal of Bitou Bush, installation of tree guards and plant-

ing of coastal scrub was undertaken in 2014 within a 3-4m area (NSW Landcare Gateway 2021).

UNCOVERING TRUTH & PASSING KNOWLEDGE

Early conversations with Helen identified her personal experiences, spiritual connections, environmental concerns, and how the natural processes such as wind, tides, seasons impacted the dunes along Tallow beach.

The slightly territorial scaled drawing below (the first sketch), undertaken during our first meeting in July 2020 coveys a spatial recount of memories, and the significant locations tied to events that Helen recalls during the countless hours spent on the dunes.

The drawing illustrates the health of the dunes and Helens contact on the ground, like the paths that were created as she traversed the dunes, moments of reflection under the Sheoak (Casuarina) tree and down through the beach where she encountered different species of flora and fauna.

The drawing process allowed me to see and hear the deep connection Helen had with the landscape as she shared intimate stories that described; 'It was something that I was called to do, I was called by the beauty of the landscape, I just felt it was something that I should be doing' (H. Brown 2020, pers, comm., 01 December). Her very personal feeling about Tallow Creek, where she's wandered and the love for the dunes finding herself immersed in the vegetation Tve been coming to Byron since I was a 17 year old, there's something here, you walk out on that beach, that strip of Tallow Beach and immediately it has an extremely spiritual feeling, 2 minutes on that beach and suddenly you're a different person, the feeling comes over you, it's just a feeling you get and that's why I've always been attracted to it, I did not like seeing the degradation and the encroachment of the weeds in that area so that's why I chose to join Dunecare and make a difference'(H. Brown 2020, pers, comm., 28 July). It highlights how the land was managed, by who it was managed by and the extents of management. I worked along 4km of beachfront that was Crown land, between the northern side of the track that was Arakwal and the southern side that was privately owned, that's where I found a lot of peace' (H. Brown 2020, pers, comm., 28 July).

Fig. 61. Preliminary sketch from the discussions with Helen Brown, to capture and reveal her individual stories with the Creek, along the beach and amongst the dunes. Forming a geospatial understanding, an abstract form of mapping between a series of overlays that depict the past character before Dunecare, the present situations and concerns for the health of the system (weeds, endangered species of wildlife, illegal drainage), the relationships between events, details and her particular knowledge that connect through the drawing and its qualities. The use of icons and lines were used to connect some of Helen's stories to site such as the heavily weeded areas, the layering of lines that represent the retreat of the frontal dune, drawing out species of wildlife that were encountered, and Helen's movement as she went about her work.

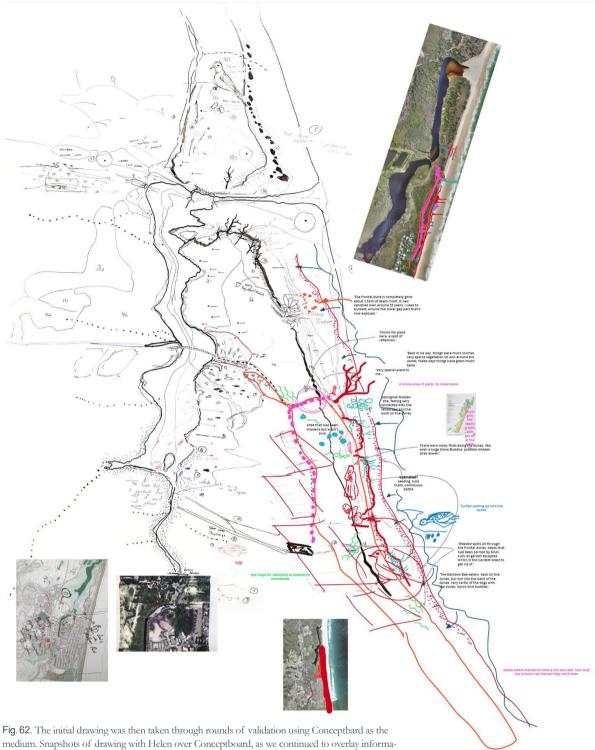


Fig. 62. The initial drawing was then taken through rounds of validation using Conceptbard as the medium. Snapshots of drawing with Helen over Conceptboard, as we continued to overlay information through aerial imagery and hatchwork to spatially communicate Helens personal memories, the shifting character of the dunes through time 'the incipient dunes have been washed away, there's now a gap and is left vulnerable', the links between vegetation and animals, and between natural processes that continue to reshape the beachfront 'tides, water runoff and high salt winds' (H. Brown 2020, pers. Comm., 28 July).

The drawing process allowed Helen and I to unpack certain elements, creating a focal point across multiple scales, discovering how one thing influences another and the kinds of relationships that are formed between them, 'everything ties in with each other, the wildlife that move between the creek for feeding and nesting within the dunes, the vegetation that prevent the sever effects of erosion from king tides, how people connect and interact with the land forming a cultural awareness' (H. Brown 2020, pers. Comm., 28 July).



Fig. 63. The previous drawings where then translated into more conventional and contemporary styles of mapping the information. Generating a style of 'graphics like the aerial plan and photographs that relate to a more focused and exercised reveal' (H. Brown 2020, pers. Comm., 21 September) of Helens connection with and knowledge of the dunes. This saw the development of both a map and series of diagrams that resonated with Helen as it was consistent with the use of quotes, symbology, hatchwork and colour that were applied during the earlier drawing process to reveal complex interconnections between one's personal attachment to landscape and the scientific understandings of site.

Using traditional graphic mapping techniques Helen and I captured the dunes evolving nature between the times of erosion, the migration and location of endangered wildlife, the growth of native vegetation from dunecare planting within heavily weeded areas, and the creation of paths through the landscape that allow for movement and circulation for both Dunecare and the public.

Stories became more tangible by working together, it allowed us to view the vegetation in a different way than just hard edges on a plan that segments and classifies different habitats (Shown typically in mapping from Council). Described by Helen as 'everything is in motion, the wildlife that coincide with their homes on the dunes, there's a broader sense of looking at the values and the cultural ties, it's about looking at that broader picture' (H. Brown 2020, pers. comm., 21 September).

Part of the challenge identified here is within the professions (councils, and other stakeholder groups) that often rely on generalised mappings and data that limit an 'understand of that water country, its undulating, it's not flat country, its changing' (Kombumerri & Tyrell 2020). Helen describes this as not spending enough time on the land to obtain that experience, 'What I've discovered in a lot of these reports is there's not much relevance to what's actually happening. It doesn't actually translate in capturing a particular moment, that's what I find discouraging. My observation is from visual appearances, we have to go back to the basics as to why this has happened,' (H. Brown 2020, pers. comm., 21 September) as Aboriginal people refer to it as 'walking on country or seeing on country' (Kombumerri & Tyrell 2020).



Fig. 64. 2017 Byron Shire Council map of vegetation zones within crown land and council owned land.

WORKING WITH DUNECARE - 'A Call for Care'

Culture is embedded within landscape, passed down by one's knowledge, relationships, and sense of place. Helen found her calling through her activities with dunecare, caring very deeply about the future of Tallow Creek and the need to return the area to its 'natural glory' as 'something had to be done, I followed the footsteps of my neighbour, it was virtually a call, that's where the story starts, the spirit of the beach called me to do it' (H. Brown 2020, pers. comm., 01 December).

This deep love and care for landscape took the focus of the conversations towards a very special spot, near the wooden bridge, where Helen devoted a lot of her time restoring the dunes with the help of the local schoolchildren. 'That's the area I'd like to highlight because that's where we've got the most visual proof of working with dunecare, it could be anywhere through photos and drawings, you can recognise it, its specific, all that area along there, which was sheer hard slog, but with a very good outcome' (H. Brown 2020, pers. comm., 21 September). 'The work with the school children was mainly because of environmental concerns, that's what we were up against, the environment was being hindered by the weeds, the erosion and I wanted to pass onto them some awareness about the environment and how it has to be looked after' (H. Brown 2020, pers. comm., 01 December). This idea of collective knowledge formed by an enriching relationship through care allowed for different approaches towards participatory processes, involving the school directly with the area established a valued space, to protect and connect through public understanding of the landscape they live in. It had to be started somewhere, involving the school children extended that hope for conservation with the next generation, the children are adults now and they tell me today the work that we did along the dune' (H. Brown 2020, pers. comm., 26 November).

Specific drawings were later developed to capture the ways in which Helen responded:



Fig. 65. A succession through methods of drawing being communicated in aerial view that form a graphic timeline of the dunes transition, its evolving nature and moments of response where Helen worked with the schoolchildren. Revealing details of the natural processes such as wind, erosion, tides and the retreat of the dunes by 30m, the ability for the dunes to mitigate storm events, the relationships between vegetation groups, planting strategies and species of plants used, the interaction between the incipient dunes and the waves, and the species of birdlife that were encountered. This drawing also helps communicate the highly constructed nature of the dunes, applications of planting and different levels of temporality that show the new growth since the start of Dunecare.

The drawing shifts one's perspective of the lands 'natural' character to one that has been reshaped and rebuilt by sand mining operations and various patterns of land ownership that compete with landscape systems.

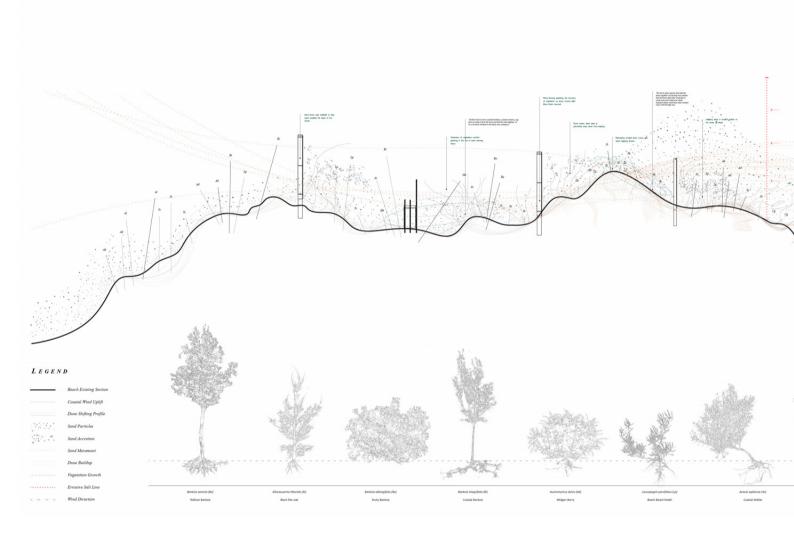
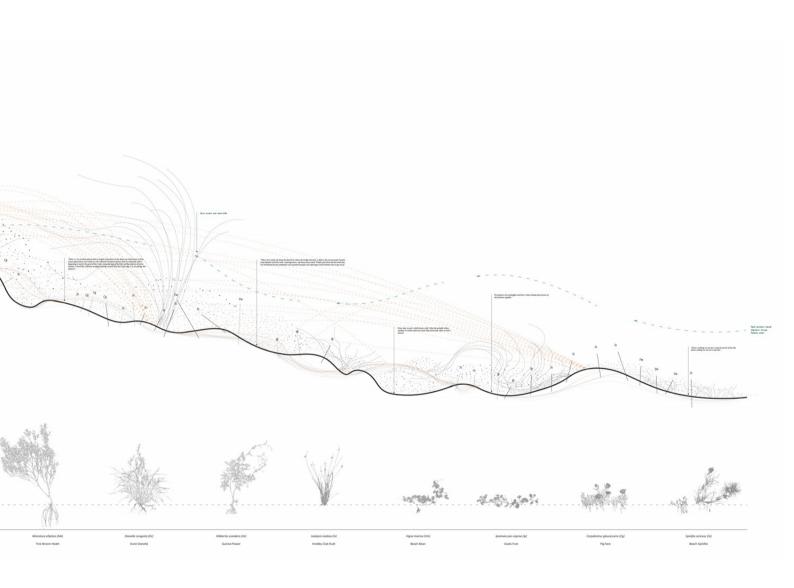


Fig. 66. A series of sectional details were also developed in combination with the previous plan. Helen connected with these types of drawings as easily recognising what she wanted to communicate. For example, an enhanced reflection of the native plant species that were planted along the transition of foredune, the distribution in respect to the dunes slope, moments of intervention, built elements which protect and enhance the stability of the dunes, and the relationships to its ephemeral nature such as wind, sand, and water.

We tried a lot of different things to form the basis that would hold the sand together, especially planting species that would hold the dunes together, planting a lot of spinifex on the foredunes and further inland planting a lot of coastal banksias, coastal rosemary and pig face, so the dunes are a bit more resistant from the heavy seas' (H. Brown 2020, pers. comm., 21 September).



Weed Remova



Fig. 67. The cross-sectional analysis of the foredunes presented an opportunity to highlight the particularities and fine-grained details of the work undertaken by dunecare. This was communicated through a series of closer sectional readings that allow Helen's stories to be read across space and time. The first drawing titled 'Weed Removal' frames the preliminary tasks of rehabilitating the dunes by removing invasive weeds that were introduced by the sandminers, these garden escapees include, Asparagus ferns (Asparagus setaceus), Bitu-bush (Chrysanthemoides monilifera), Morning glory (Ipomoea) and Mother of Millions (Bryophyllum spp.). This activity was carried out by stem injecting the base of the weed roots, cutting the stems to free native vegetation that had been smothered by the vines, and turning soil to dry out the weed seed banks beneath the surface. Work like this was essential in re-establishing an area to plant natives, allow for new growth, increase biodiversity and stabilise the area to help prevent the effects of erosion.

Installing Tree Guards & Native Planting

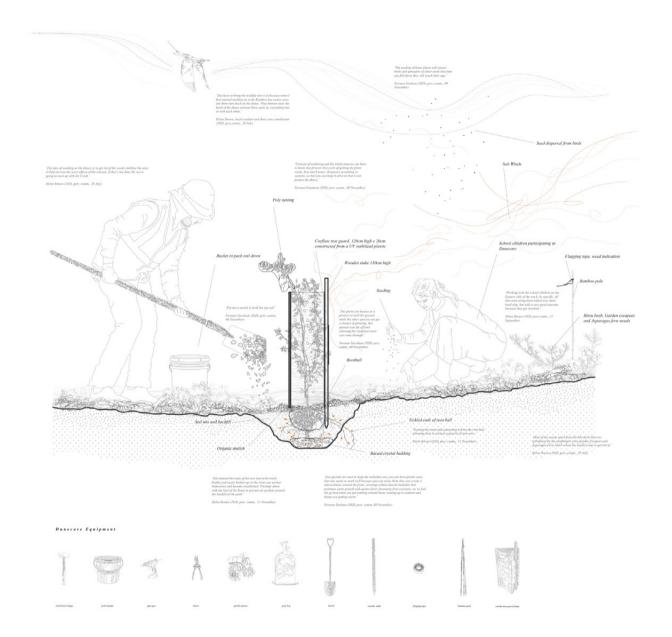


Fig. 68. The drawing (above) frames the operations of planting the saplings of native vegetation using specialised techniques with types of tree guards. Helen describes the use of constructing tree guards to protect the plants from foraging wallabies, rabbits, and other animals. A pioneer plant holds the ground while other native species can grow and take its place, creating a microclimate around the plant to promote extra growth and help it resist high salt winds from the coast. It's the concept of tending through a stepped process using tools that serve a particular purpose within the landscape, as well as an awareness of natural growth cycles such as soil depths, watering frequency according to seasons, nutrients for soils and how seeds propagate from birds.

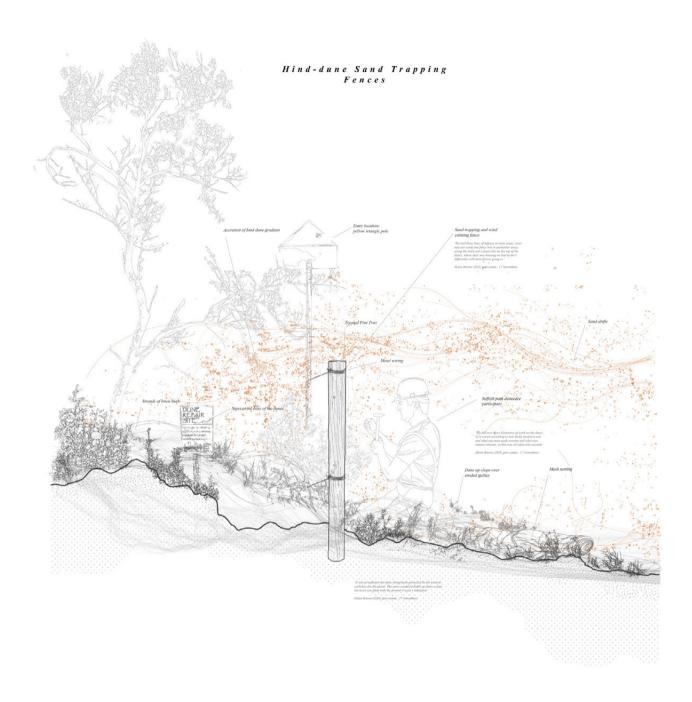


Fig. 69. This sectional drawing illustrates the sand trapping fences installed to combat the blowouts along the up slopes of the foredunes created by foot tracks made to access the beach. The approaches along the beach differentiated, responding to a variety of different issues. According to Helen, pole structures sat within the eroded gullies 'capture sand by the mesh netting, they sat relatively shallow, we sometimes had three lines of defence running along the tops of the dunes to deter people from walking through exposed areas of dune' (H. Brown 2020, pers. comm., 17 November). This system allowed for the accretion of sand at the base of the dunes, transported by onshore winds. The stability from accumulation would then allow for wattle seed and other species of shrubs to consolidate these areas, further strengthening the dunes and reducing the effects of sand-drifts from the established root structures. Signs were also used to inform the public about dunecare work, these were located at the base of the dunes near main pathways.



Fig. 70. The spinifex planting along the foredune was also depicted through sectional analysis. This allowed for a shift in focus, to look beyond the top layer of information and into the root structures of the spinifex that function as a first line of defence to hold the dunes from high tides and strong winds. As Helen suggests 'the root structures are very important because it's the only thing that's holding both the topsoil and the subsoil firmly in place from erosion' (H. Brown 2020, pers. comm., 17 November). The onground human relationship to specific techniques were also conveyed through the collection of female seedheads, the conditions for planting tube stock, and how to transplant ends to form new growth. 'Every time we got a heavy swell and the spinifex was seeding', Helen said 'we would go down and collect the heads from the beach, holding them until we had a chance to plant them hoping that we wouldn't get a big tide afterwards to wash it all away.' 'we used to do a lot of transplanting, you would cut the ends of existing plants providing it has a root and just transplant it in another spot where we dug a small trench, it depended whether we had rain to follow' (H. Brown 2020, pers. comm., 17 November).



THE SPIRIT OF THE BEACH



Fig. 71. Aerial image of working within the frontal dune of Tallow Beach (east from the wooden bridge), here I connected to on-site elements through a drawing (Series 6 - Tallow Beach 'Spiritual Dunes'). This piece is my direct response to the way Helen worked 'on-ground' during dunecare, as she was in a similar way 'reflecting, looking and noticing what was going on in one spot, working with the sediments, vegetation, animals, natural processes, and root systems' (H. Brown 2020, pers. comm., 01 December).



Fig. 72. The artwork Series 6 - Tallow Beach 'Spiritual Dunes' translates moments that link to fragments of the Tallow's dune landscape and particularities that reflect Helens personal narratives. The transect study moves out from the beach and inland into the vegetation, showing the complexity of life through a network of living systems. It makes 'whole', making the unseen seen, like the roots that are buried by sand or the animals that seek shelter through the dense foliage. It provides a qualitative reading of the often-hidden things that now become noticed such as 'the soldier crabs that come out during low tide, the Rainbow bee eater which nest within the edge of the dunes, or midden sites that we came into contact with under the she-oak tree' (H. Brown 2020, pers. comm., 28 July). The drawing not only shows the literal things but how these things are happening in space and time. This phenomenological mapping between things reinforce Helen's sense of noticing and the connection to planting and defending through working and interacting with landscape elements at multiple scales.







REFLECTION

Using the Evaluation Criteria as a framework to reflect on the method and process undertaken by Helen, and feedback provided by both Helen and the broader community can be summarized as per the following:

- The drawing process successfully communicated Helen's lived experience, her personal observation, triggering a chronology through reminiscing over her personal connection with the Dunes of Tallow Creek.
- The drawing process gave me a glimpse of the work Helen undertook as she relived her experiences through the drawing process.
- The drawing process established important links that existed between other community groups, such as Byron Bird Buddies (BBB), Byron Bay High School (B.B.H.S), and other members from Suffolk Park Dunecare Group.
- The drawing process brought people on a journey, to listen and raise awareness of often hidden themes such as vulnerability/fragility, adaptability, concern, and response.
- The drawing process was used to establish a potential vision for the future, to intervene and add value, to be used as an education tool that will allow for public access, instruction to be passed on between residents and direct future generation in maintaining the dunes.
- The drawing process revealed the natural process, system diversities and the rate of change, this was achieved through subtle representations to illustrate wave action, runoff, wind direction, and tides.
- The drawing process helped foster an on-ground experience, a qualitative reading that linked to Helens physical connection with the vegetation and elements of site, highlighting hidden networks beneath the surface such as root systems.



The exhibition 'Our Special Place – Tallow Creek' held on the grounds of Bryon Bay Lighthouse Cottage, between the 10th – 12th March 2021, exhibited the storytelling process, cultural significance, values, and ecosystem complexities that were captured throughout the drawing process with Uncle Norman Graham and Helen Brown.

The Lighthouse Cottage was selected as the ideal site as it not only provided easy access for visitors but also overlooked Tallow Creek and Tallow Beach, allowing visitors (both tourists and local residents) to establish an awareness of place, and a visual link as visitors could ponder their deeper awareness of the site as they walked out of exhibition and looked down upon Tallow Beach and the Creek.

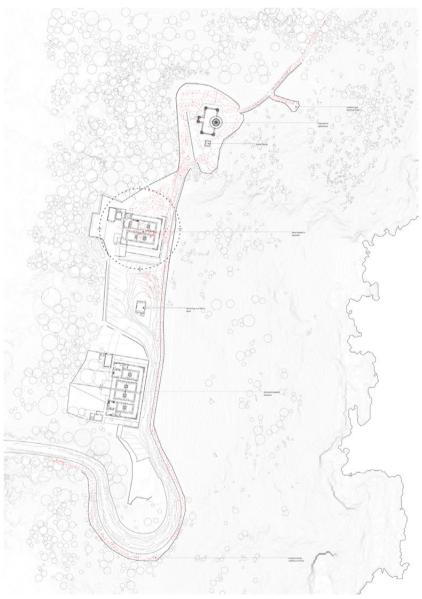


Fig. 73. Context plan of Cape Byron Lighthouse and location of exhibition, communicating high pedestrian and vehicle movement, built elements, and visual vantage zones to connect to Tallow Creek/Beach.

In preparation of the exhibition a lot of time was spent in the planning phase with a number of key stakeholders including Byron Shire Council, NSW National Parks, and Government agencies that were all heavily involved in the marketing aspects of the exhibition, the logistics associated with site access, covid safety measures, public health and safety, launch of the exhibition and pre and post media interviews and local press.

The layout of the exhibition included two rooms so that visitors could immerse themselves in the illustrations that reflected the stories that were shared by both Uncle Norm and Helen through the drawing process.

The layout of each room was as such that it created a sense of mystery before entry, guided tours facilitated a deeper connection and understanding with the material and allowed for personal awaking as visitors moved through the rooms, connecting with the stories, meaning and message.

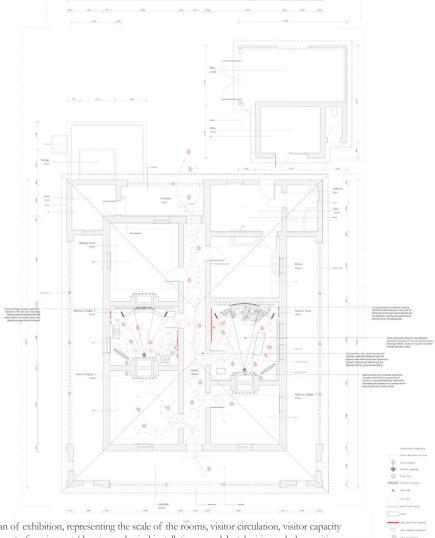


Fig. 74. Floor plan of exhibition, representing the scale of the rooms, visitor circulation, visitor capacity per room, placement of equipment (drawings, physical installations, models, televisions, desks, sanitisation station), film projection angles, lighting, power outlets, and materiality of floors and walls.

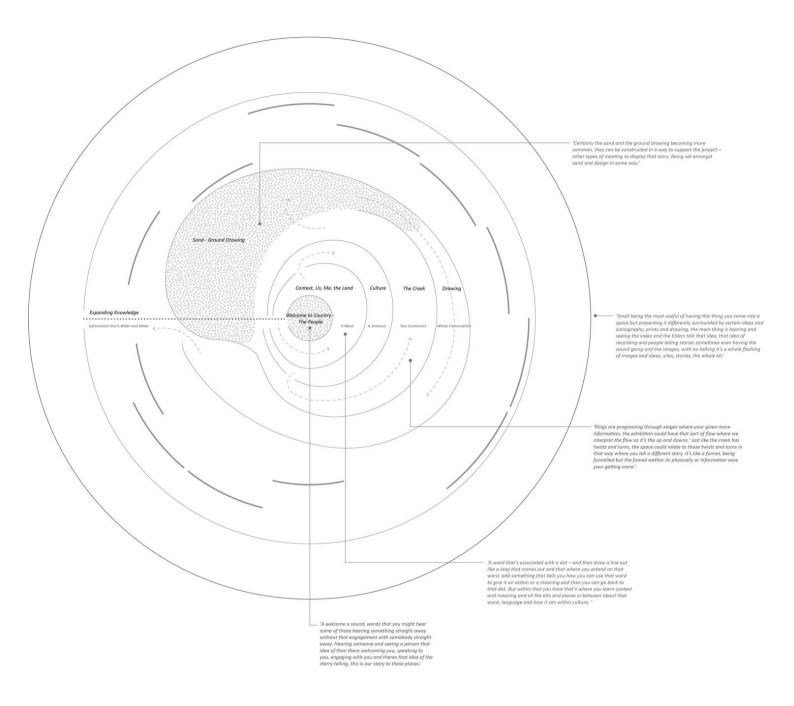


Fig. 75. Diagram of key flows between layers of information through stages within the exhibition, a progression of how stories unfold, starting with a welcome through a sound or a visual prompt that engage visitors to unpack a word and/or sentence. A flow through focused views were directed in a way that presented the information as deeper layers of knowledge, bringing wider and more in-depth areas of site into perspective. Described by Norman as 'coming out and moving back, it's this motion that ties aspects of two steps forward and one step back, a continual looping relationship that each loop holds a certain discussion or idea' (N. Graham, 2020, pers. comms., 01 September).

Visitors engaged with the material through aspects of immersion where sensorial ques prompted one to listen, look, and feel over static and moving images, focused lighting, colour, and transient sounds thus allowing an individual experience to be had with the stories in space, forming a journey through scales, objects, light, and texture.

Visual mediums such as maps further allowed agencies to instantly relate to a familiar graphical language, creating a deeper appreciation for professions like Council to understand complex relationships between personal and environmental connections, 'to see it through a three-dimensional lens looking at all the interconnections' (C. Dowsett, 2021, pers. comms., 09 March).

'The exhibition asks us all to take a moment to consider the stories and beauty of this sacred space from both indigenous and non-indigenous perspectives, it gives you a whole new understanding and connection to Tallow Creek - it's like seeing it through completely new eyes' (Boss 2020).

The exhibition offered a way to form a personal and collective experience, a journey where 'the site became an extension to how we talked and walked to the idea of storytelling where information is passed on by connecting physically with place and with people' (N. Graham, 2021, pers. comms., 02 May).

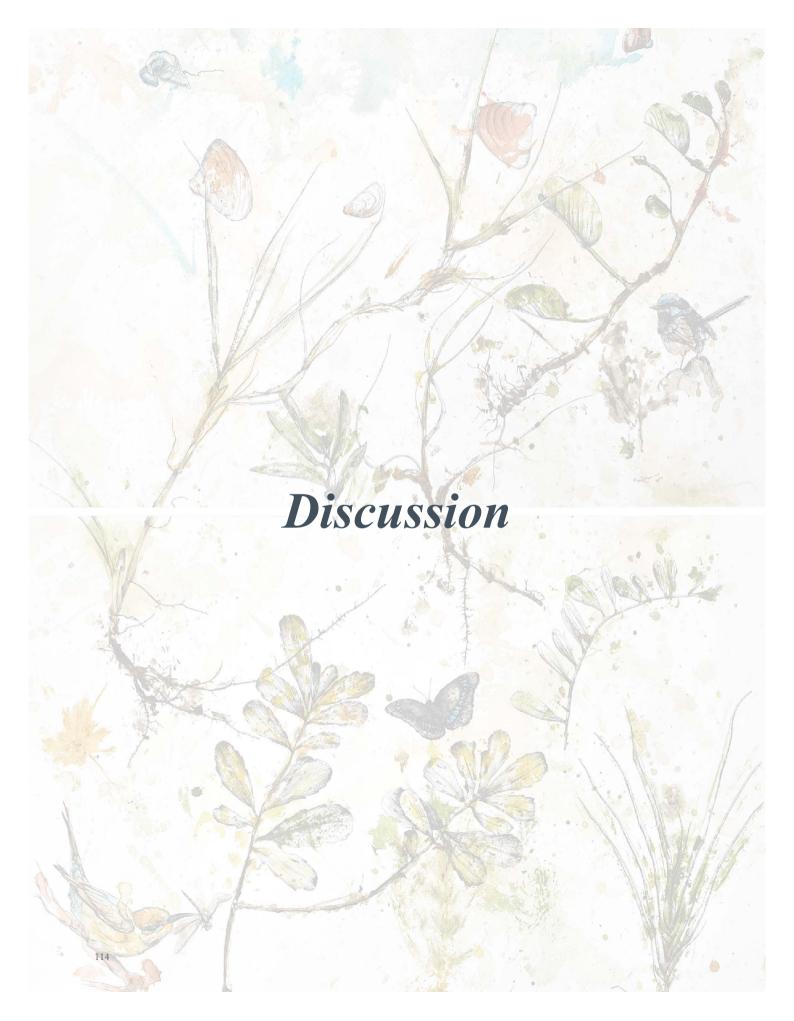
The use of film presented a live focus within each of the rooms, this helped summarise the key messages that Uncle Norm and Helen wanted to share to the public in respect to their relationship with landscape and how they connect to the ground. This was achieved by hearing the tone of Helen and Uncle Norm, by listening to their words, connecting views and angles from site with their stories.

These films can be accessed via the links below:



Fig. 76. The Story of the Flathead: https://youtu.be/rDVAOtwlMfs

Fig. 77. The Spiritual Dunes: https://youtu.be/U8B7s9LJmEs



The results of the test criteria that were used to examine the effectiveness of the drawing process with both Uncle Norman Graham and Helen Brown are a strong indicator that:

'landscape architects can use drawing as a vehicle to reveal the complex relationships that exist between stakeholders and the land to foster a shared regard for future adaptive strategies.'

As the 'practice of drawing encompasses a way of thinking, extrapolating the strengths of drawing as a space forming tool that guides conversation and enables a translation of insights and understanding' (Spiller, Castle, Ellerby & Gongde, 2012) which occurred through collaboration with both Uncle Norman and Helen Brown.

The drawing process became a vehicle that not only transferred knowledge, meaning, and understanding of place and its landscape through shapes, colors, lines and light, but also on a personal and emotional level I developed a deep bond and respect for the site as I began to 'feel the place and feel the people' (N. Graham 2021, pers. comm., 12 January) from the stories that were shared. And that the participatory process described between landscape architects of UDLA and local Murujuga peoples of Western Australia, were not dissimilar to our own in that through our iterative drawing process we developed a deep sense of partnership as we formed 'a strong feeling of ownership, guardianship, custodianship, and responsibility' (Marques, Grabasch, & McIntosh 2018, p. 10).

I also found that Uncle Norman and Helen approached to drawing was different as they communicated through a lens that was either analytical, technical, gestural, or suggestive, for example:

The use of line weights, colour, and figures were used by Helen to express her deep connection with the Dunes so that 'it opens people's mindset to read the landscape by the mediums used, its graphic style, showing hidden levels below ground' (H. Brown 2021, pers. comm., 09 March).

The drawing process created a space that uncovered the essence of a landscape, a dialogue that was durational which allowed for a contemplative and reflective nature between stories and landscape. The drawings were in this sense given life, seen within particular instances, moments and parts within the drawing, the conversation that went with it, the spaces that created words of richness, such as going to site, looking at elements of caring and protecting, of stories of time being embodied within the drawing's choice of line weights, colour, and figures

And whilst the drawing techniques used by Uncle Norm and Helen were unique in nature, they also at large created an interface with each other, as each story imbedded within one drawing exist in the other, and that stories overlap and occur in parallel through time and space. This interface is like Corbel University Dot-the-Dot findings as students through bleeding between drawings started to evolve from layering the pages on the ground. (Spiller, Castle, Ellerby & Gongde, 2012).

This is also supported by the research carried out by John Wolseley and Geoffrey Barton uncover the essence and identity of environments through different drawing techniques that created a mindfulness, a co-formation with the landscape and cultural groups which help deconstruct natural processes, human connections, and one's interaction within space.

Whilst the cartography methods are extremely important and provide invaluable information, they have been criticized as being too difficult to use as a communicate tool to engage community and non-scientific stakeholders at large. Unlike the inherited limitations of traditional practices, the artworks that were exhibited and feedback provided by guest that visited the exhibition are an indicator that the drawing process provided a new framework that could be used to communicate and engage with community stakeholders in new ways that would:

- (a) enriched the general public's understanding and connection
- (b) improve community participation and engagement
- (c) transference of cultural and spiritual knowledge

Moreover, these methodologies of mapping out territory, renaming Country, has obscured spiritual and social meaning, showing little attention to identifying other world views, in particular with Aboriginal knowledge systems that are deeply embedded in 'land, water and sky that are communicated through the telling of story' (Milroy & Revell, 2013, p.5), which we have characterised as being the 'hidden voices.'

Moreover, these methodologies of mapping out territory, renaming Country, has obscured spiritual and social meaning, showing little attention to identifying other world views, in particular with Aboriginal knowledge systems that are deeply embedded in 'land, water and sky that are communicated through the telling of story' (Milroy & Revell, 2013, p.5), which we have characterised as being the 'hidden voices'

A view that is shared with members from different Aboriginal communities suggest that:

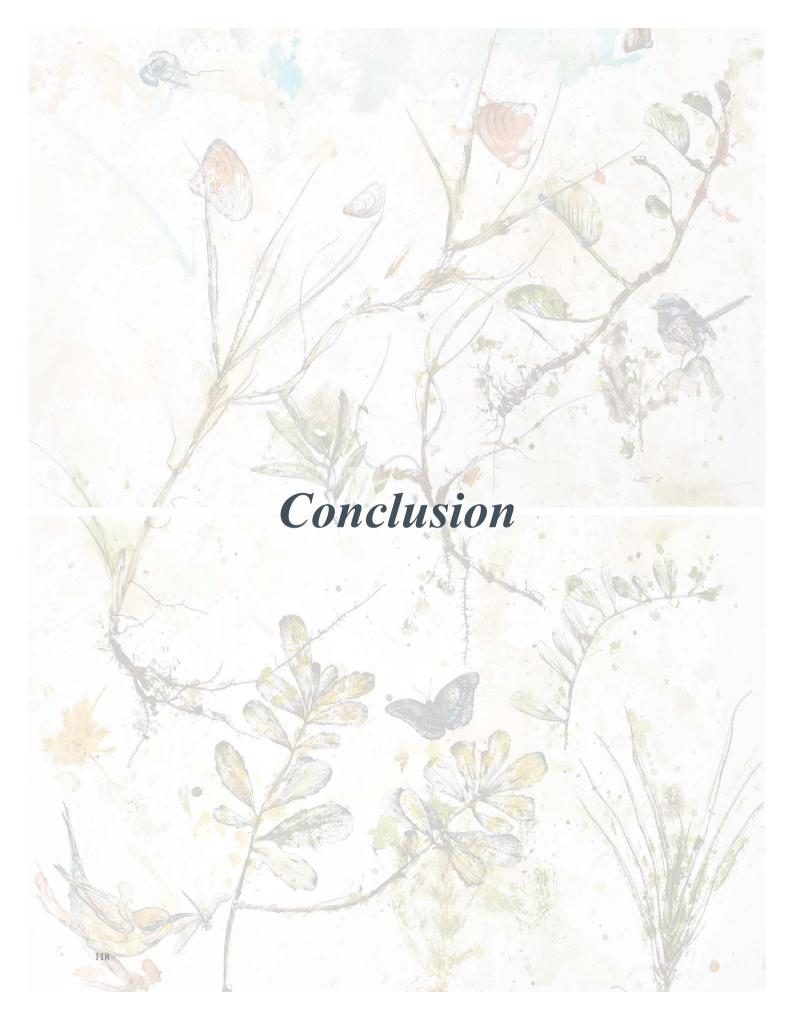
- 'the narrative of sites through art and design is needed to explain our religious and spiritual and physical connections to these things' (K. Duncan, 2020 pers. comm., 05 August).
- 'its hard to convey our story to Council so that they can understand' (K. Duncan, 2020 pers. comm., 05 August).
- 'despite everything there's not enough information that addresses our values and or concerns' (N. Graham, 2020 pers. comm., 11 March).
- 'I have always had an issue with how Council have looked after the Lake, and never understanding the significance attachment that Arakwal have to that area' (Y. Stewart, 2020 pers. comm., 16 April).

It's important to recognise that these hidden voices exist and in my own experience found that visualising multiple layers of information, allowing for discoveries to be made through the drawing process created certain connections where a relationship of views and experience from past stories came into focus and become clearer

It is therefore incumbent on local Council members that are tasked with the management of such a rich and diverse complex system to take a "values based approach" that incorporates:

- A communication approach that nurture's collaboration amongst community groups,
- Acknowledgement of Aboriginal law, culture, and relationship,
- Establishment of trust and respect amongst Indigenous and non-indigenous stakeholder groups,
- A framework that best represents stories rather than silencing or distancing minority groups or non-technical audience,
- A process that promotes self-reflection and awareness,
- A process that promotes community involvement and active participation.

This partnership and co-creation of artworks underpins the entire process that was used to establishing connections between indigenous peoples, their core values, and customs, in order to share, educate, and empower the wider community.

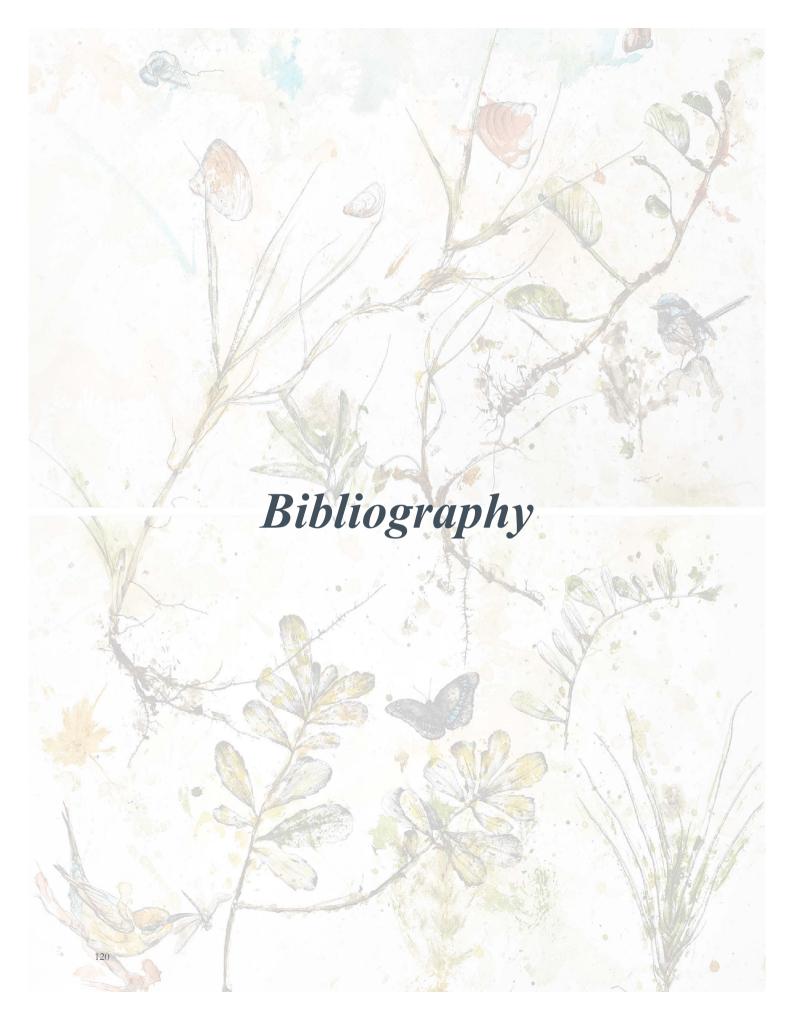


My hope is that through this research and its application of the drawing process encourages us to not only think differently about the tools and techniques that are available to landscape architect's but to consider the importance of narrative, whether indigenous and non-indigenous telling a story about the relationship one has with their environment is a wonderful way in which one can express and pass on their deep connection, experience, and knowledge with others.

As described by Uncle Norman 'this has demonstrated that getting together and going through the process can get the individuals people stories out to a wider audience....you can hear the stories of my Aunties years ago and to be passed on, to be able to come back to the drawing a week later or a year later and you'll hear more, it's a way of doing these things which has a good outcome for everyone, whether its me, the mob or the local community, drawing allows us to enter into new relationships' (N. Graham 2021, pers. comm., 12 January).

I also hope that this work has to some degree aided Helen and Uncle Norm's mission to see Tallow's Creek and the surrounding Dune's restored to its natural and pristine state and that Bryon Council and key stakeholder groups that are responsible for the management of such complex systems take a value's base approach in the restoration and ongoing management strategies.

And that finally as a modern Australian and with the support of other's that I will continue to drive positive change through the use of non-traditional practices that will aid landscape architects to employ alternate strategies that better document, engage, promote, and respect the complex relationships that exists between stakeholder groups, cultural, belief systems and values.



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INDIGENOUS PRINCIPLES AND PROTOCOLS

Rights, respect and recognition -

- Recognise the diversity of Indigenous peoples, included within communities and between individuals, identifying varying views and is not represented and generalized as the collective view of the community. Transcribing stories that are 'considered as everyday knowledge that is to be shared with the public' (N. Graham 2020, pers. comm., 08 April).
- Maintain, control, protect and develop the cultural heritage of the Indigenous knowledge, traditional cultural expressions and intellectual property by understanding and reforming to Article 31 of the Declaration on the Rights of Indigenous Peoples status protecting the knowledge of their intangible heritage (fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts), incorporating relevant knowledge, ideas, cultural expressions and materials, into all stages of research methodology and its evolution.
- Acknowledge the source of information and those who have contributed to the research, through the recognition of the contributions through the transference of intellectual property and the benefits that result from the research.
- Consider all cultural property and aids in the continuing Indigenous practice that promote its nature as a 'living, evolving entities, and not simply historical occurrences.' (Melgar, 2020)

Negotiation, consultation, agreement and mutual understanding -

- Seek informed consent of members from the Indigenous community, individuals, or group with sharing stories and greater ties about Country.
- Hold preliminary and ongoing meetings through a two-way process to discuss the direction of the research and reach agreements through updated outlines of any new material generated from discussions.

Participation, collaboration and partnership -

- Incorporate Indigenous perspectives by direct involvement before commencement of the project and throughout.
- Instill the acknowledgment of co-ownership/ co-authorship of intellectual property, recorded works, and performances, recognizing the continuing ownership of traditional knowledge, traditional cultural expressions and intellectual property rights.
- Facilitate of a continual involvement with Indigenous communities, taking part and in agreeance with compiling the research, sharing the results.

Benefits, Outcomes and giving back -

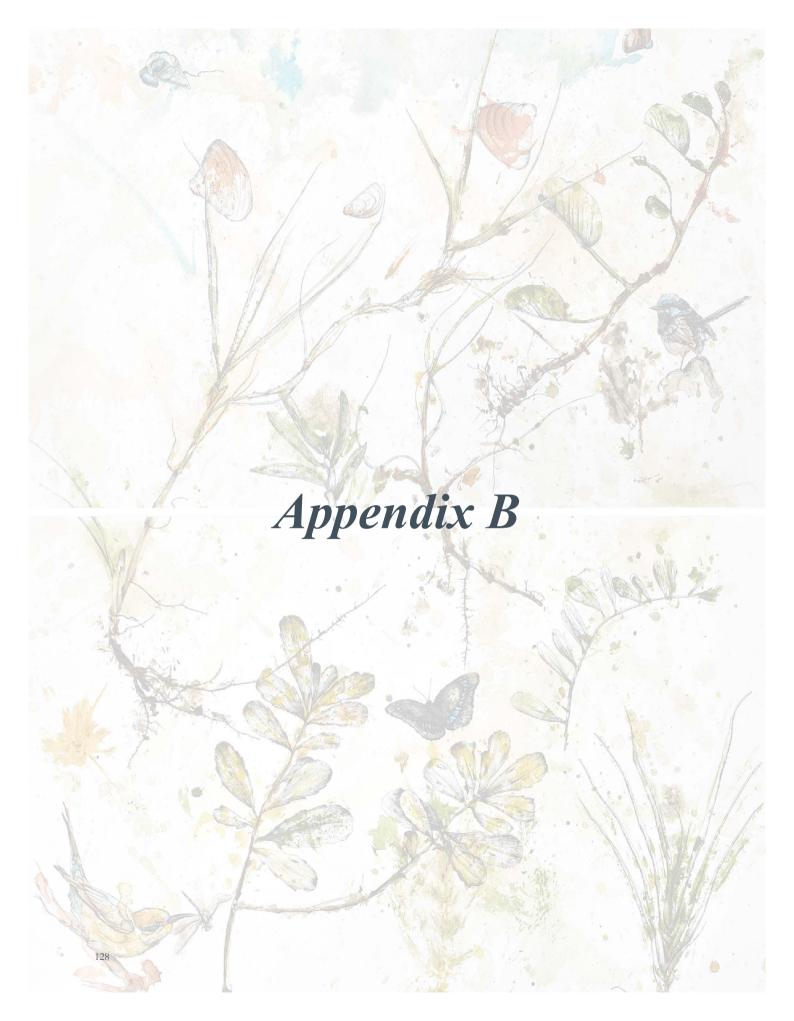
- Offer a better way to engage with Indigenous communities, to empower and create 'joint sharing and exchange of informationto achieve some of our goals.' (N. Graham 2020, pers. comm., 15 June).
- Ensure reciprocal benefits of the project that aim to employ and respond to the needs and interests of the Indigenous community, including more awareness that relate to but not limited to communicating intangible cultural heritage, opportunities for future collaboration amongst stakeholder decision making, training, better management, employment through community development, new internal programs, future opportunities and uses of the project via accessibility to participants.

Managing research: use, storage and access -

- Consult and obtain agreement with all participant organizations, groups, stakeholders, e.g Arakwal cooperation, Byron Shire Council, National Parks, local community groups over the finalization and output of the project that deals with an exhibition, presentation and or workshop.
- Consider transference of the work, the storage of results and matters of confidentiality with the use of information.

Reporting and compliance -

- Ensure appropriate implementation and monitoring of the research project to comply with these guidelines and principles through its evolution and various stages.



CHAPTER 1 EVALUATION CRITERIA RESULTS

The evaluation criteria provided a framework to assess the effectiveness of the drawing process with respect to the projects question

'How might landscape architects use drawing as a vehicle to reveal the complex relationships that exist between stakeholders and the land to foster a shared regard for future adaptive strategies.'

To ensure that my own unconscious bias was removed from the critical assessment I drew on the feedback provided by multiple stakeholder groups throughout various stages of the project's development.

Evaluation Criteria - Test 1

How does the drawing?:

- Demonstrate new ways of looking at a system its complex nature with diverging interests / culture / social/ ecological etc?
- Develop an easily accessible format that allows for documenting and recording information in working and interacting through mapping?
- Translate immeasurable things into measurable entities?
- Allow for the flow of ideas of sharing information?
- Capture non-tangible narratives?

Norman Graham (24th March 2020)

Sketching in real time, sharing stories, and to visualise its importance the relationship with food, associated objects, showing a storyline of what happens on country, that exchange and connection is described as 'getting across our human story, work that represents stories, having time together to go deeper, the appreciation of the values of why we have this relationship, and that personal relationship, its moving away from the democratic style so the speak.'

"Telling a story in the park, to see the drawings that there is other visual representation that can convey that type of cultural information and it's easier to digest. People can read that map of country because it's something that they can see.'

Norman Graham (4th June 2020)

Describing 'last year a catalyst for change was when we had the large fish kill in 2019, it did not take our values into consideration, as the Creek and the catchment was looked at through one lens, one viewpoint.' Whilst the drawing process 'can be seen as pulling together all these other aspects to produce something that isn't the standard planning document, it's a different approach in terms of how information is presented both science, social and cultural to tell a story about a relationship to a particular place. Its presented differently from our normal catchment maps and catchment plans because they possibly don't have that cultural background'.

Norman Graham (8th April 2020)

'A meeting point and adds to inform them (Council) even more, how that could be the linkage into it. Meeting with Chloe went well, in seeing how they can use the information and been able to get those stories across compared to what we usually do with our reports, and just the opportunities and the ways that we can value add to it as well, putting together different ways of presenting.'

Norman Graham (8th April 2020)

I can look at it and tell a whole lot of stories about what's depicted in there, to talk to another topic and subject that's related to it, the drawing allows you to see the other side, it has other values.'

'It's a link into other stories of the unseen and the literal, about country with having both connections that go beyond the top layer of the graphic.'

Delta Kay (15th April 2020)

'It's increasable what you both are doing, the picture tells a thousand words, I was amazed when Norman showed me.'

Norman Graham (4th May 2020)

We've been able to show the relationships a little bit more, showing the values of what we want to see preserved within the Creek (the fish) that's a living value is a real something for some people. This process allows the creation of ideas to come together and can produce something and interpret it into a plan and drawing that captures that information, turning this value that's intangible into something that you can actually relate to and see. In this way it builds something to have that interaction of the space rather than missing it.'

Norman Graham (21st May 2020)

'This project for me has triggered my mind into all the other bits and pieces in all the details, that focus on one little spot in that area that connect to different areas.'

Norman Graham (27th May 2020)

The drawing developed further connections, a format that allowed for documenting, recording information, and sharing one's wealth of knowledge, becoming part of the revitalisation in working and interacting. Bringing people on the journey to look and come together, it's having that 'engagement between Council, Government departments and the wider community.' Presenting the information in a different format, enabling Norman to be able to tell the story in a different way that opened up discussions through going into the drawing process, which 'allowed us to go deeper as a communication tool, to look and come together to see a story, messages that are trying to get across that natural engaging'

Chloe Dowsett (26th March 2020)

You can visualise it for people and members of the community, having something that speaks to those hidden narratives, paying respects to Arakwal, to collaborate and work with Arakwal to incorporate that traditional knowledge.'

Chloe Dowsett (13th May 2020)

'The idea of almost having to step outside of your own brain when we are so use to managing the system (Tallow Creek) with policy and management plans but it's kind of like look, Norman says the creeks alive, opens your eyes and ultimately there would be a better way of managing due to fish or movements or weather and tides.'



Fig. 78. Meeting with Yerin Aboriginal Health Services Limited, located in the Central Coast with Uncle Kevin (Gavi) Duncan – Aboriginal Cultural Education and Tourism Officer (Darkinjung Local Aboriginal Land Council), Vicki Field – Opperations Manager at Yerin (Wiradjuri woman), Paul Hussein – Business Manager and Allen Beale - Health Promotions at Yerin.

Uncle Kevin (Gavi) Duncan (5th August 2020)

As he notes 'as an artist myself, ive painted exactly the ways that the lake system and oceans meet, the breeding areas of fish, the in and out of prawn movement, I've painted a lot of that, it's a cultural mapping we call it naturally, a recording of how the systems works and how we as Aboriginal people live from those systems through our seasonal walks and following seasonal changes to notice the flowering of a plant that would tell you something else is moving in the water, along the waterways or on the land itself, and that I definitely connected with all that.'

'Definitely, that's what's needed, what Nathan is exactly doing, you've done something that's culturally sensitive and reinforces what the culture needed and that community needs.' It's being able to 'learn off each other, walking side-by-side, how culture is shared.'

Allen Beale (5th August 2020)

'That really hit the nail on the head of what you're doing, giving back, talking country, storyline the reason why they are there, you've got the blueprint bud, that's what it's all about, you've got it there, we've just got to follow on from that, absolutely.'

Norman Graham (9th March 2021)

It was good seeing that as time went on, we talked about stories and relationship, similar to what the old girls used to talk about, you got to look, listen and learn and Nathan's been doing that. On that day onwards we've continued to talk, this is the right way of engaging as it's allowed me to tell my stories. That this whole process of engagement and interaction from last year working over zoom or when Nathan come up here through meetings or phone calls allowed us to talk about questions that Nathan may have had or clarifying information and then in-turn allowed for a better outcome whether it was holding an exhibition or having the stories recorded so that I can pass it on the next generation just like my Elders did.'

'One of the legacies that I've got from this whole process and the mob as well, is that we have our stories told in a new way that will engage on what the mob will be able to see, how we feel about Country and other opportunities. Some of the mappings in the exhibition really shows that we have a lot of stories out there, which allows for me to be able to talk through it and pass onto the next generation.'



Fig. 79. A view from within the first room of the exhibition 'Our Special Place – Tallow Creek' (at the Lighthouse Cottage, Byron Bay) featuring audio visual presentations, drawings and sand paintings from Uncle Norm and Auntie Delta. Here visitors were encouraged to look, listen and reflect through the exhibitions immersive display of material where discussions were had at the conclusion of each tour to record what people resonated with or learnt.

Dailan Pugh (10th March 2021)

Ignoring is the biggest issue, this exhibition will help in that, a change had to happen as Norm has a voice and you have helped him have that voice. These drawings and maps allow you to see things differently, it amazes me with what had been ignored or unaware, this has brought it to the attention with a difference through the fish dynamics, cultural dynamics and the environmental vegetation. There is a different approach or application that has been applied to bring it to the public's attention, it informs people.'

Bothee Back (11th March 2021)

Tm interested in the nature of taking care for Country, the passion that people have, dedicated individuals has been very well presented for tourists like us.'

Catriona Corbett (11th March 2021)

The exhibition helps put a new lens onto this landscape, a new perspective of site was presented through shifts in scales and how it incorporates aerial and ground views. This also asks the question about learning more from Indigenous ways of working with the land. There records with short term periods, and a lot has been forgotten knowledge, this will help in recording the information and changes in the climates.'

Evaluation Criteria - Test 2

How does the act of drawing bring together stakeholder groups - particularly indigenous communities. Does it:

- Establish a potential base line for collaboration?
- Show how the different interest of all parties is brought together?
- Use drawing as an education tool?
- Allow other parties to participate in this process?
- Educate?
- Speak to a lot of people from different backgrounds?
- Encourage further depth that makes a wider connection between space, context, and time?
- Bring people on the journey?

Chloe Dowsett (26th March 2020)

In principle we have commitment, we would like to collaborate and incorporate traditional knowledge in our management more, so what does that look like, I believe you are quite integral in that.'

Norman Graham (4th May 2020)

'That this process allows (things that are happening they exist) the creation of ideas to come together and can produce something and interpret it into a plan and drawing that captures that information, compared to what you might normally get in planning or planning or torn planning or catchment planning any of the things that council want to do for managing country or to create something you actually turn this value that's intangible into I something that you can actually relate to so you can try and see is you construct it and build it in this way, if it's something new you're planning to succeed if you're having that interaction of the space. Rather than missing it.'

Chloe Dowsett (13 May 2020)

I think it would be really valuable for agencies because they are still managing this in a conventional way. To have a joint collaborative project with Arakwal.'

Norman Graham (21st May 2020)

Look at this framework, it allows stories to be told but in a way that involves everyone to have that say, it's a softer way of navigating through peoples thoughts, to value the drawing and to say that the information is valued as its alive and therefore safeguard the life of the creek. A good opportunity to have that workshop, getting to know the place and those values, been spoken more easily.'

Norman Graham (4th June 2020)

It is the opportunity to have fresh eyes at to the issue and have more information out to how we could better and record those values so that they could have that better understanding being conveyed to them as well and hopefully appreciate that as part of the community, environmental groups and all that.'





Fig. 80. Stakeholder Workshop (13th July 2020) with representatives from Bryon Shire Council, Arakwal Community, National Parks and Local Residents of Bryon Bay at NPWS Meeting Room, Norman Graham speaking through *The Story of the Flathead*, resulting in thoughtful discussions and collective understandings.

Chloe Dowsett & Norm Graham (13th July 2020)

In response to using drawing as a vehicle to communicate, connect and engage with schools, transient parties, community groups and stakeholders, 'would you see Nathan's work as a good conduit between Council and Arakwal.' Norman: 'It's about getting those stories and those types of things, to empower and to work through, we've told stories in the past and we've had certain ways (traditional ways) in recoding areas. The best example for this is like Marine Park zooming, you have a map and you draw a boundary, and this is how we do this activity here. And there's not as much detail and no human relationship in what you're doing inside that space. And for other areas and wider communities you can adopt and approach them with these.'

Norm Graham (13th July 2020)

When we've gone through this cycle it's a story and cycle ongoing renewal with ups and downs, producing it through drawing and new styles of maps, and a story that then converts it to Council planning. For us is a new way of doing consultation because we've haven't done that with Council, we've always had the old style of communication. It has a different way of engagement and storytelling and it's like we do our story telling differently.'

Chloe Dowsett (13th July 2020)

When considering how drawing could be used as an underlying catalyse where programs of work can be moulded around it, being creative to bring stakeholder and demographics together she responded by saying; 'I think people are inherently visual people and just to see and interpret what they are thinking.'

'It's very different to how we would normally engage. A normal consultant doesn't do that kind of thing, we were going to do that with our climate change workshop with quite specialist people they come and do all those drawing, it's very interactive.'

Norm Graham (13th July 2020)

When considering future generations and cultural identity, Norm described how the drawing process could be used by future generations in order to overlay information, new relationships to the drawings and maps.

'the next generation down, getting their experience, particularly one person and talking to the others of that generation, it's a way of communicating, spreading the message of that way. Its how you now exchange that information through to the younger generation, they have that different relationship knowing about those spaces and stories told in a different time.'

The drawing process also saw the involvement with other family members from the Arakwal community facilitated by Norman who presented the drawing as the centre of discussion at the Arakwal NP Management Committee meeting. He explained how participation from family where triggered by using the drawing as the centre for discussion, 'that's what works, especially in mobs to tell stories, to visually explain through the maps it communicates the message and to hear what others are thinking and visualising' with new wealth's of knowledge, sharing information and bouncing stories off members to enrich parts of a wider connection within the current drawings.

Leon Kelly (13th July 2020)

'This conversation is grounding to give other stakeholders a new perspective, it's also so basic to understand with a few lines and dots like what you and Uncle Norm had drawn to see why it is really important for us.'



Fig. 81. Site visit with Normans nephew Leon Kelly. It was a way of hearing the incredible richness, the knowledge and affection for the vegetation and the dunes, identifying the spiritual element of midden locations, here at *The Pass-Midden*, sharing stories about the personal connection with the vegetation around Tallow Creek and the importance of fire.



Fig. 82. Sand painting by Auntie Delta Kay titled *Currents of Tallow Creek* at the exhibition 'Our Special Place – Tallow Creek'. Using natural elements sourced from the landscape of Tallow Creek/Beach (pipi shells, sand, burnt bark, eucalyptus seed pods, and ochre (orange) from Broken Head) translating the mouth of the creek, movement of water and aquatic life, the three campgrounds, and places of gathering to eat and share stories. Described by Delta as 'I saw the artwork from Norm and in a similar way related to the connections that we have with water, land, fish and cycles, that's what I can see and what I'm showing here' (D. Kay 2021, pers. comm., 9th March).

How does the medium of drawing allow you to understand the particularities in the landscape?

- Specifically, what particularities are you capturing?
- What symbols and iconography have been constructed?
- What techniques are being used?

Norman Graham (8th April 2020)

'In that case you can stand and show and point, it's doing it diagrammatically and playfully, to have that tangible object it comes in handy.'

'Do it graphically so it's been depicted by elements from the landscape and notice things, like putting it in the water, to go and look to see where the flathead is lying.'

Looking to form a piece of information using patters that are surrounding the mouth to avoid representation of the landscape because the landscape and site is influencing that representation.'

'Using different types of colour to represent different spot, to distinguish the shapes in that sort of way such as the green arrow of the track being representative of the route to the old Tallow Camp, that is now the Ironbark Camp.'

Delta Kay (15th April 2020)

Needing to listen to Country, as it's a hard feeling to put into words, walking through country and listening to the birds and the sand, it's an incredible feeling, because these so many memories that have been passed down by our ancestors.'

Norman Graham (21st April 2020)

Ways in which you can represent the landscape in terms of different types of country, e.g. my brother Sawn Kay used colour on a sponge. It's how we do it locally for us it is part of making it localised for your story, using blue and that sand colour and shading and brown/red with different parts of country. The medium would help the line drawings.'

'Using the shape, relating sometimes how I would see it, similar in how we have been drawing, its different to Sawn's different maps, with different mapping techniques presents moments of collaboration and interconnectedness.'

Norman Graham (4th June 2020)

It's how the information can be drawn in that communication is twoway, stuff that they want to know, like raw data. Once it's understood or conveyed in a certain way, we can then understand what those results mean to value. For me it's about human relationship.'

Norman Graham (15th June 2020)

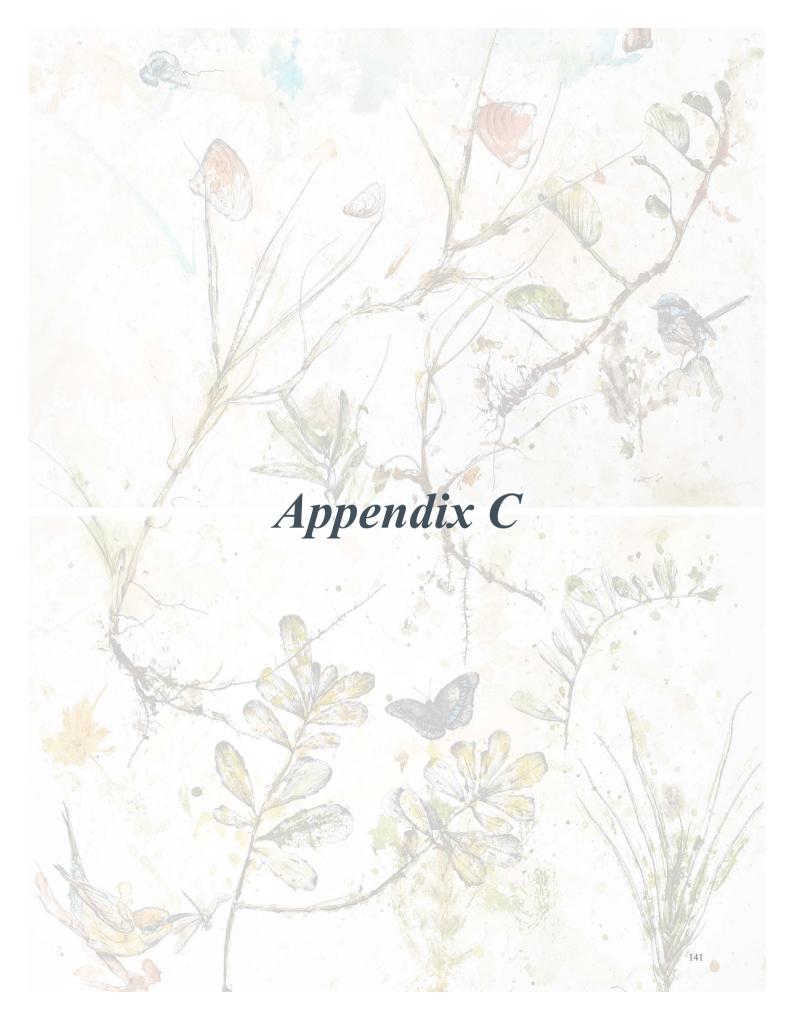
Norman describes how effective the drawing technique as being 'Able to draw and discuss how that relationship can be presented graphically for me it was quite easy because we were talking, despite the distance, we could have been sitting down we could have been drawing on site, so settling around and talking about country telling stories about country and being able to see that represented graphically.

Norman Graham (12th January 2021)

It's the idea that your able to hear my worlds, stories and while they are words you are able to pull them together and tie them together in a graphic sense. I can see the direct application in what is my memory, my story into a physical drawing form, and because I can actually see it through the drawing means that says your actively listened to what I said rather than just listening.'

'It's that your drawing a space that has story, and to be able to draw those accurately for me to be able to see that space, I can see the creek, the meeting ground, all these parts that are represented in the drawing, so that's what it's telling, it's those stories that keeps the sacredness alive and the drawings are part of that story.'

'A spot within the drawing sits amongst a wider relationship that has its own dynamic, and to its own stories that fit within the landscape. You can look at one part of the drawing and focus on that, yet it might lead you to another part, it's how it all fits together to link other stories, experiences, it allows for different connections to be made.'



CHAPTER 2 EVALUATION CRITERIA RESULTS

To ensure consistency, the same evaluation criteria that was developed to assess the previous drawing process is also applied to the drawing process between Helen and myself in order to consider the effectiveness of the drawing process with respect to the project question:

'How might landscape architects use drawing as a vehicle to reveal the complex relationships that exist between stakeholders and the land to foster a shared regard for future adaptive strategies.'

To ensure that my own unconscious bias was removed from the critical assessment I drew on the feedback provided by multiple stakeholder groups throughout various stages of the project's development.

Evaluation Criteria - Test 1

How does the drawing?:

- Demonstrate new ways of looking at a system its complex nature with diverging interests / culture / social/ ecological etc?
- Develop an easily accessible format that allows for documenting and recording information in working and interacting through mapping?
- Translate immeasurable things into measurable entities?
- Allow for the flow of ideas of sharing information?
- Capture non-tangible narratives?

Chloe Dowsett (11th July 2020)

'It's been a great learning experience, its fantastic work. It's just been a very interesting process, as this way of communication is very foreign to me but has really opened my eyes, listening to Nathan and this whole concept of drawing.'

Helen Brown (21st September 2020)

For me it captures my initial relationship with the dunes, how I worked with the elements of the landscape, its full of that information of the bush regen project.'

Norman Graham (08th November 2020)

These images somehow keep it together to narrow it down with how you communicate different values between different groups and people and how you represent that in a way that reflects whether it's mine or Auntie Dell's or whether it comes out in Helen's sort of style. It allows for the person telling the story to pick up the drawing / maps and talk to them as if they did it themselves in that sort of sense, it becomes that familiar, that's the idea of some communities feeling like they've been listened to in a process.'

Helen Brown (26th November 2020)

T'm hoping that Council's awareness increases because of the drawings, before it was me banging on the doors, but with this I'm sure it's going to increase Council's understanding of what's happened.'

'The drawings to me make me realise just how valuable the work we did on the dunes was, looking back at it now, as it's allowed for the native species to regenerate.'

'This is a whole new process, drawing like this has not been done before of negotiation and approach, it shows Council exactly the work that has been done and how it has helped save the dunes.'

'To me the drawing talks about my own personal connection, that more spiritual connection to the land than what a photograph does in the simplest way. The photograph doesn't show the root structure or anything that makes up the dune, yet you can see it with within the drawings, you can see the structure of the dune, how the root system holds everything together and the different types of plants.'

'Tallow beach has a very spiritual connection to me and your drawings help drawn on that, it's a marvelous process, managing to connect to what I'm saying, developing a real understand of where I'm from.'





Fig. 83. Meeting with Helen Brown, talking through images of the area that she worked with the schoolchildren, connecting her personal stories with the drawings, and enriching the perspective of dunecare through certain graphical styles (26 November 2020).

Norman Graham (21st December 2020)

When I first saw the drawing, particularly when Nathan had been doing the latest ones, all that I can see was that I can hear Helens voice within those drawings, the stories we've discussed over the years and seeing the space where the regen occurred. It makes sense to me, it felt very familiar in getting across all that work and effort and how Helen feels towards that whole landscape, it puts it easy for me to understand not only because I had a user background but it felt very normal to understand that whole relationship, its stories about that particular part of the landscape that's how I found the drawings.'

Helen Brown (21st December 2020)

'The drawings help Nathan to relate to how I feel about the area, which in turn allowed us to delve deeper in capturing my commitment, my spiritual pull and my strong feeling to the area.'

You where translating what I was telling you into a visual, its been replicated in your drawings done in a visual way, that's what I wanted.'

Fig. 84. A view from within the second room of the exhibition 'Our Special Place – Tallow Creek' (at the Lighthouse Cottage, Byron Bay) featuring stories/ audio visual presentations of Helen Brown, drawings about dunecare and physical installations of tree-guards and spinifex runners. At the conclusion of each tour, discussions where had with visitors, this allowed for feedback as to the effectiveness of the material on display, hearing how the exhibition resonated with people, presenting new insights, asking questions or sharing ones own interests about landscape.

Chloe Dowsett (09th March 2021)

'This exhibition gives you a whole new understanding and connection to Tallow Creek - it's like seeing it through completely new eyes. It's asks us all to take a moment to consider the stories and beauty of this sacred space from both indigenous and non-indigenous perspectives.' 'Nathan's work has exposed a deeper level of understanding of Tallow Creek providing insights into ecosystem dynamics activated by his drawing process and research methods.'

Jan Olley (10th March 2021)

'The exhibition talks about the story of people and the story of birds, heightens that unawareness through accommodating Norms and Hel-ens wishes with their drawings and videos.'

Suzie Oleyris (10th March 2021)

'This is a beautiful exhibition, a great piece that will educate visitors about the areas living beauty, its Indigenous history and what we can do to make a difference.'

Ben Fitzgibbon (12th March 2021)

'It's really powerful communication piece this whole exhibition, especially for communities who have already stepped in and worked with the land to better the landscape, its framed beautifully to follow up on what someone did already.'

'There's a real desire from our younger generation to continue to teach, inform, and empower to be environmental stewards, cultural stewards. That these very simple concepts of maintaining your dune along your local beach is just so important and your drawings provide them with that knowledge and information of how to do that.'

'Its about prompting people to think, your drawings allowed us to step back and have that reflective sense of mind, you've definitely made me think deeper today, I feel very touched by the exhibition.'

Helen Brown (03rd May 2021)

'The drawings took me right back to when I first started working on the dunes, it took me through that whole process again - of how we prepared the earth, the removal of the weeds, followed by the planting of native species, followed by the emerging new growth, followed by the increase in wildlife.'

Evaluation Criteria - Test 2

How does the act of drawing bring together stakeholder groups - particularly indigenous communities. Does it:

- Establish a potential base line for collaboration?
- Show how the different interest of all parties is brought together?
- Use drawing as an education tool?
- Allow other parties to participate in this process?
- Educate?
- Speak to a lot of people from different backgrounds?
- Encourage further depth that makes a wider connection between space, context, and time?
- Bring people on the journey?

Norman Graham (11th September 2020)

It's good to see Helens drawings aswell, I can certainly see a lot of stories that we've spoken about over the last 10-15 years just looking at the drawing, it's good to see that coming along.'

It's the way in which its sharing information but having that respect and understanding at the beginning, I suppose the ideas of stepping forward and then back and then as you move forward each time you get further and further information, that's part of building the relationship and I guess engaging with whoever you might be working with so that, in the beginning when that's understood and respected then your able to communicate more openly and freely and be able to tell a story which then can be with somebody else then translate it and presented in a different way to tell stories in a different way so that you can build that relationship from the information presented and brings a wider audience.'

'The drawings speak to information that I've heard from my Aunties years ago that are passed on, the drawings allow you to go and speak to people a week later or a year later, talking about what could be the future having a good outcome for everyone, whether it's me or the mob and allow us to go into new relationships in the future.'

Fig. 85. Site visit with Auntie Delta Kay walking along Tallow beach, relating to stories passed down by the Elders of connections between the sea, creek and dunes. Interacting made with the system through on site teachings of how to spot and catch pipis from the beach (7 October 2020).

Chloe Dowsett (11th September 2020)

'Nathan's work has gone outside my area, spoken to the communications team, we have certain ideas of how we would like to engage, we can absolutely move forward with this area, I'm really looking forward with trying to fill that gap.'

Helen Brown (26th November 2020)

'This can only intensify and enhance the work that we've done, we've had conversations over the drawing. It allows us to have an extension to bring in other parties into this process with likeminded interests and connections like people from council.'

It would be wonderful to approach the school children with these drawings and appreciated by university students, things that can be translated to the next generation and that opportunity to connect.'

Helen Brown (21st December 2020)

I think its brilliant, I would say that drawing has appealed to the members of Council and to the people that are responsible in making the decisions.'

'My biggest wish is to get the junior children on board, they are so enthusiastic to learn as they want to know why, why did this happen, why isn't this doing what it should be doing. I think they are the ones that we really need to get on board and work with them through drawing and on site.'

Norman Graham (21st December 2020)

It's open ended, and therefore its more of a fluid way which you can approach certain opportunities to give a new light on growth and to use drawing as a spark for something else. As the drawings link to stories of others overtime such as my Aunties and link into something else where you can hear a story of Helen or other people who have done work and cared for Country in that area.'

Burenguta Bingial Brown (9th March 2021)

I would like to say thank you to Hellen we actually had some experience before, you've done a wonderful job in managing and helping the Tallow area recover, back when I was in high school back in 2012 the high school was holding events to come out of class and go down to the beach to pull up bitu bush and replanting natives, back in those days we did some wonderful work. It was a lot of fun for us we did some wonderful work and that area is very special for me and my family.'

Helen Brown (03rd May 2021)

'The act of drawing allowed for wider stakeholder groups like Council to want to know more, it created a deep awareness, a holistic understanding that drew them in, they weren't looking at it through indifference to see a different connection and appreciation by a new medium for learning.'

Evaluation Criteria - Test 3

How does the medium of drawing allow you to understand the particularities in the landscape?

- Specifically, what particularities are you capturing?
- What symbols and iconography have been constructed?
- What techniques are being used?

Norman Graham (08th November 2020)

'These are the species that are holding back the dunes, you can really see them in the drawing, especially when the people from dunecare were working on the dunes, planting acacias, it was interesting because it really took off, the spinefex really helped the dunes and it really held the dunes together.'

'The drawings start to draw out these details specifically of how you can protect these plants when you first plant them on the dunes through dunecare, what species, what distribution, the step by step process and the seasons.'

Helen Brown (26th November 2020)

'The drawing reveals exactly as I have explained, being the process of where it starts and where it stops. The drawings can increase council's awareness with the hard work and management that is required.'

You can see the different layers it's dynamic, the dunes are always shifting and they go unnoticed by lots of people therefore the subtlety approach within the drawings is the best way to represent these changes with using various lines, shadows and colour to represent the story of change.'

Well as you realise the root structure is very important because its only sand that's what they are holding, and with the tides that we are now having they have changed (the roots) and also the wind, you need both the subsoil and the topsoil to be held firmly to be able to maintain the shape of the dune now so that theirs not more erosion, and the drawing tells a story of how its doing that.'

'The section drawing is the best representation for both in terms of the language with the care and how people can visually see it and understand it. The section shows these levels of complexity because it reveals the root structures of plants and how they propagate, so it's a whole different layer of dune that's what I think we need people to be able to understand and I can see it in the drawings here, it shows the whole process it shows the root system particularly with your spinifex which is your first line of defence and as you work back through to your other species and how you accrete sand overtime it comes and it goes.'

Looking at the natural processes focusing on those such as seasons, pointing out the environmental changes that have occurred over the 20 years that I have been doing it and representing that through drawing by lines and depicting the plants as they are.'

Linda Biffin (10th March 2021)

I was drawn to the details such as the root system holding the dune in place or the ecosystem signs such as noticing the flathead with its prints in the sand that are connected to the currents as they move up and down the creek.'

Kate David (11th March 2021)

'This (the exhibition) has allowed me to know more about planting quickly, of how it (the dunes) all changed, cleaning up and looking after, and about doing something about it, to help stabilise the 5km of sand dunes with native plants.'

Victoriana Evans (12th March 2021)

'These are works of art that also hold a massive amount of information. They are compelling, they tell a story, advocate and are sensitively rendered in line with Norm and Helen. I'm particularly struck by the spinifex and using the dried spinifex to replant it at the right time and right place to balance the ecosystem, showing how the spinifex grows which I hadn't yet made that connection.'

Helen Brown (03rd May 2021)

'The process brought lots of little details out such as the stages of regeneration, in particular working with the high school children, sitting and surveying the work that we were doing, how far regrow advanced, the emergence of native animals in particular the rainbow bee easter and diversity of ecologies.'





Fig. 87. Physical installation of spinifex runner at the exhibition 'Our Special Place – Tallow Creek', highlighting the lengths of the root system, segments of how it grows and where to cut and transplant.



