

The aim of the Kayak Store is to present the application of a place based material; Seagrass as an architectural roof and wall cladding solution and assess its connectivity to place and to life. Seaweeds; in particularly seagrasses have been documented as a traditional construction material in the Nordic regions, China and Japan for hundred of years (Wang, 2023). Perth, WA, Australia is home to an abundance of Seagrass varieties that are relational to the varieties used in application abroad. This material source, through craftsmanship (traditionally women lead) has a life expectancy of more than 150 years (Reynolds, 2018). Its naturally non-toxic, fire-resistant and can perform as a thermal insulator but beyond this it offsets carbon throughout the entirety of its lifecycle from life under water to life in soil (Short, 2003). The application of Seagrass as a wall and roof cladding, on this particular site close to Perth city with its direct relationship to the Swan River and associating community is a potent resource for reconnecting human to life through the embodiment of place and shifting of attention towards a building being apart of place rather than being on place.

KAYAK STORE ON THE SWAN RIVER - SEAGRASS AS CLADDING, FILTER AND REFORMER A SYSTEMATIC SOCIAL HYDRATION

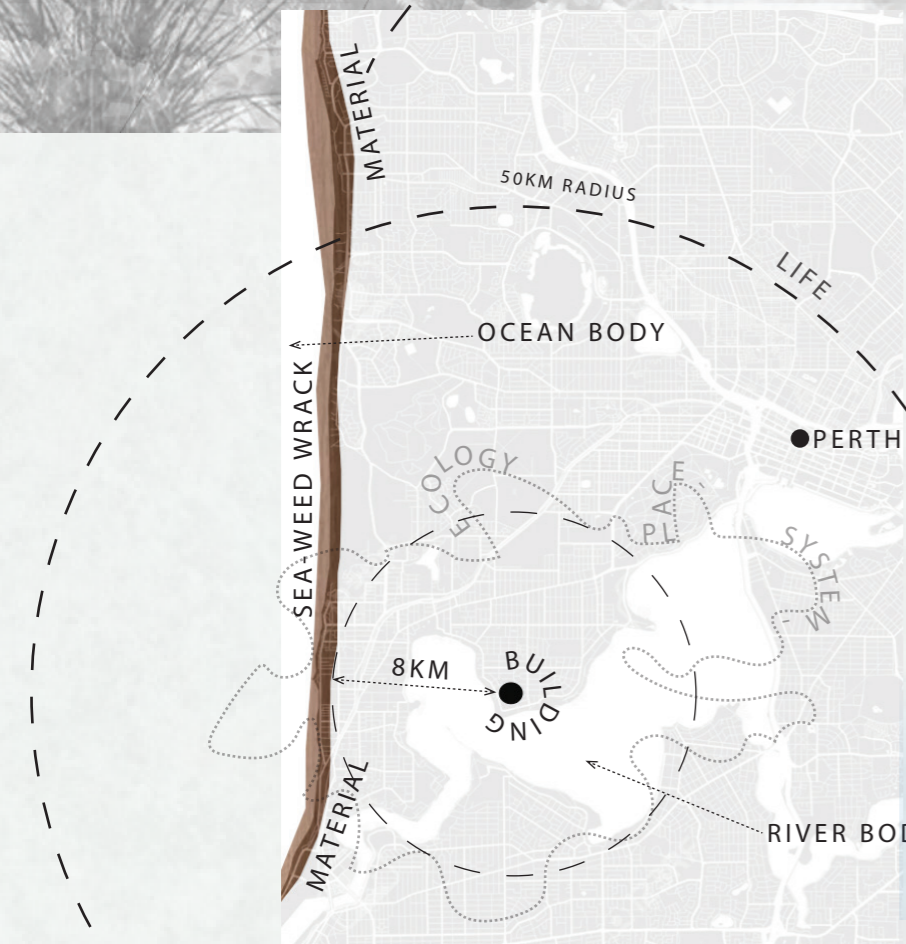


Figure 7: Locality of site to material source Place and Context. Author.

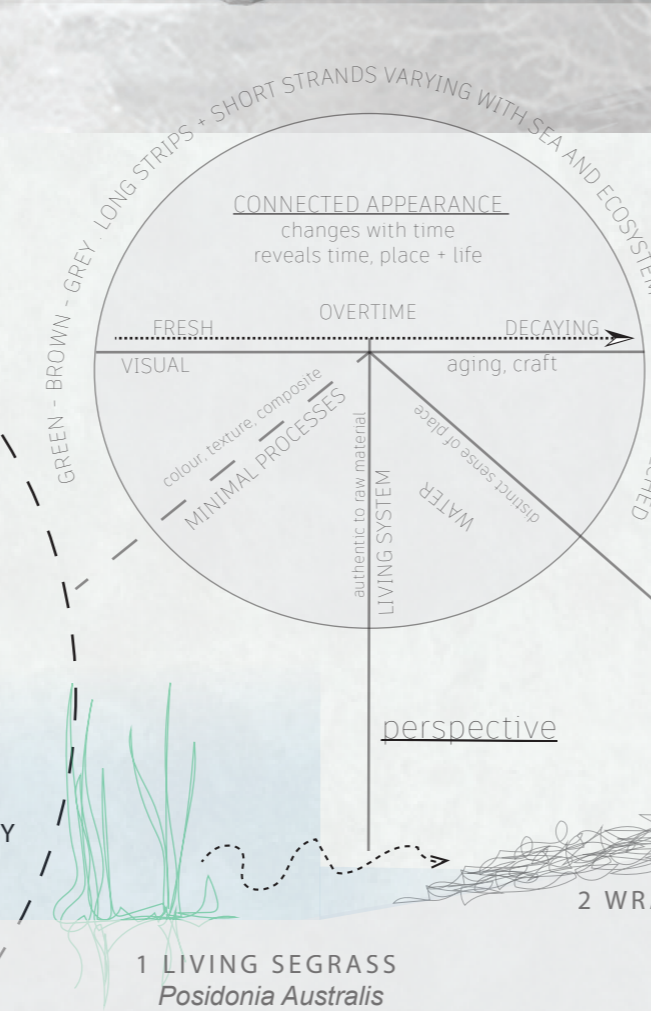
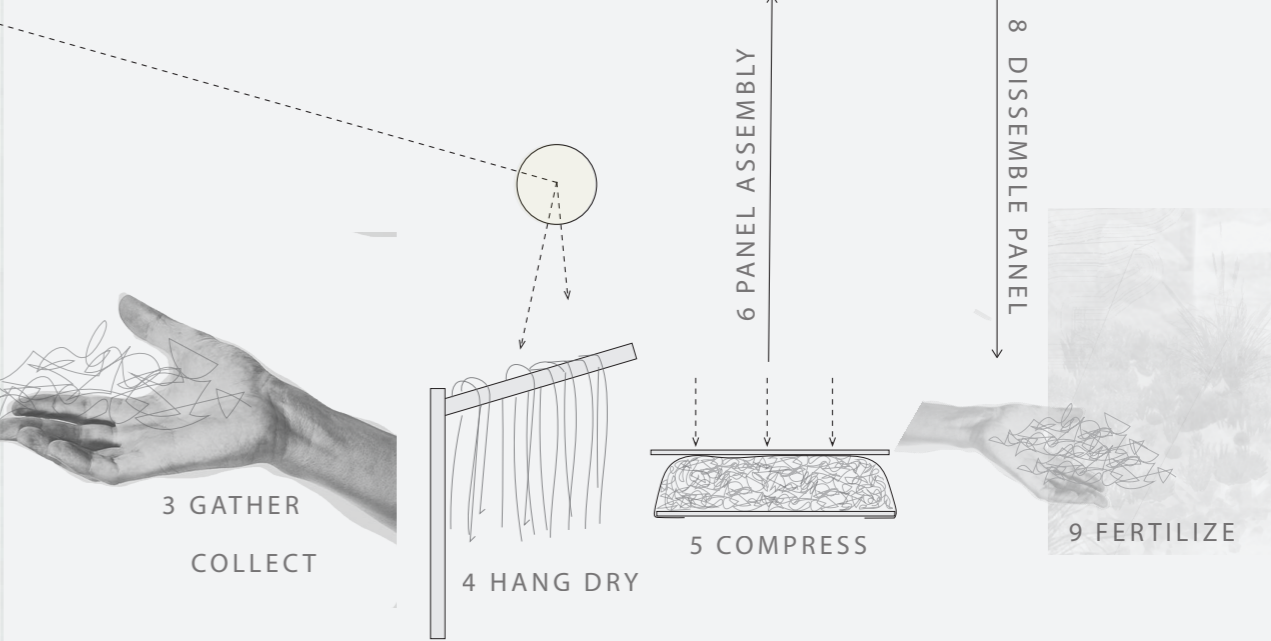
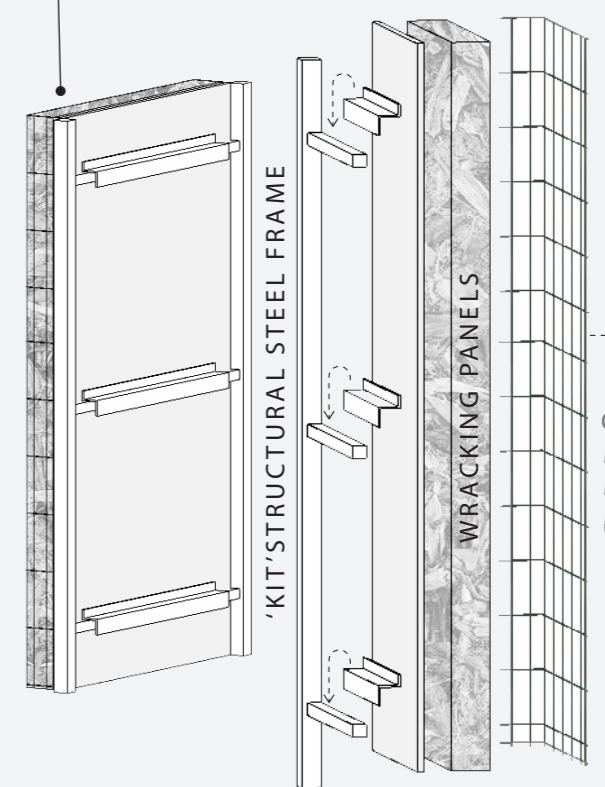
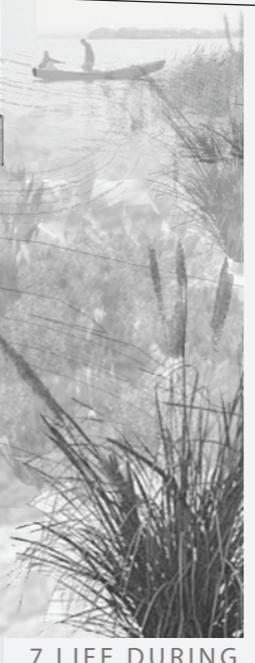
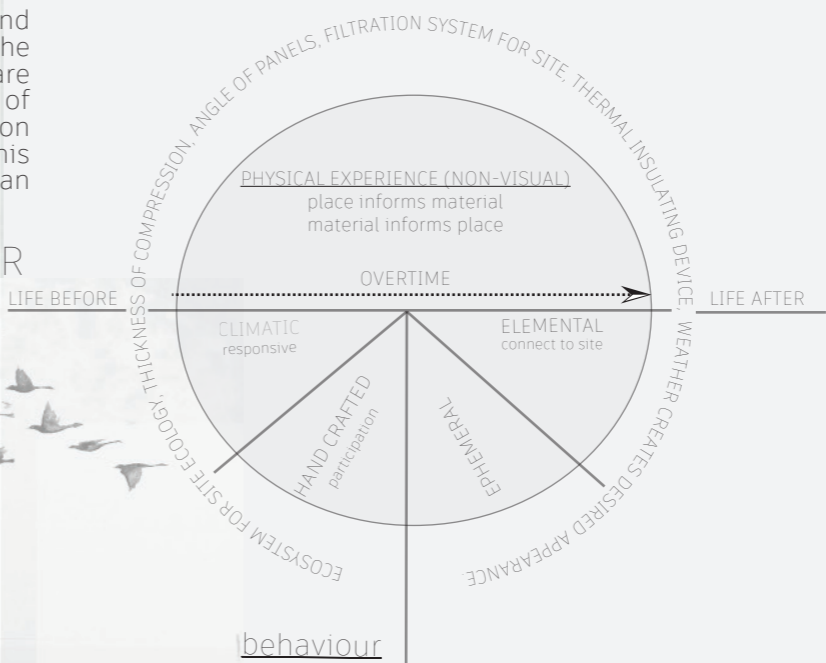


Figure 8: Example Dial Assessment for Seagrass Cladding



The use and focus on this material is an extension of exploring Architecture as a foundation for water as an act of reinforcing and reminding users of the greater ecological system that exist and that they are apart of. This notion is in line with the Architects declare statement 5. Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach. Alike water in architecture, seagrass; a bi-product of water can be seen as a visceral force in manifesting a piece of architecture that not only connects but celebrates the function of its application. The seagrass panels act as a cladding, water filter and habitat simultaneously protecting the structure and adjacent swan river water body whilst also celebrating the materials authentic nature from life before to life after. In working with and celebrating life cycle through Architecture with specific consideration to site, material use and integrated systems will allow Architecture to perform as a beneficiary to the ecosystem it exists within.