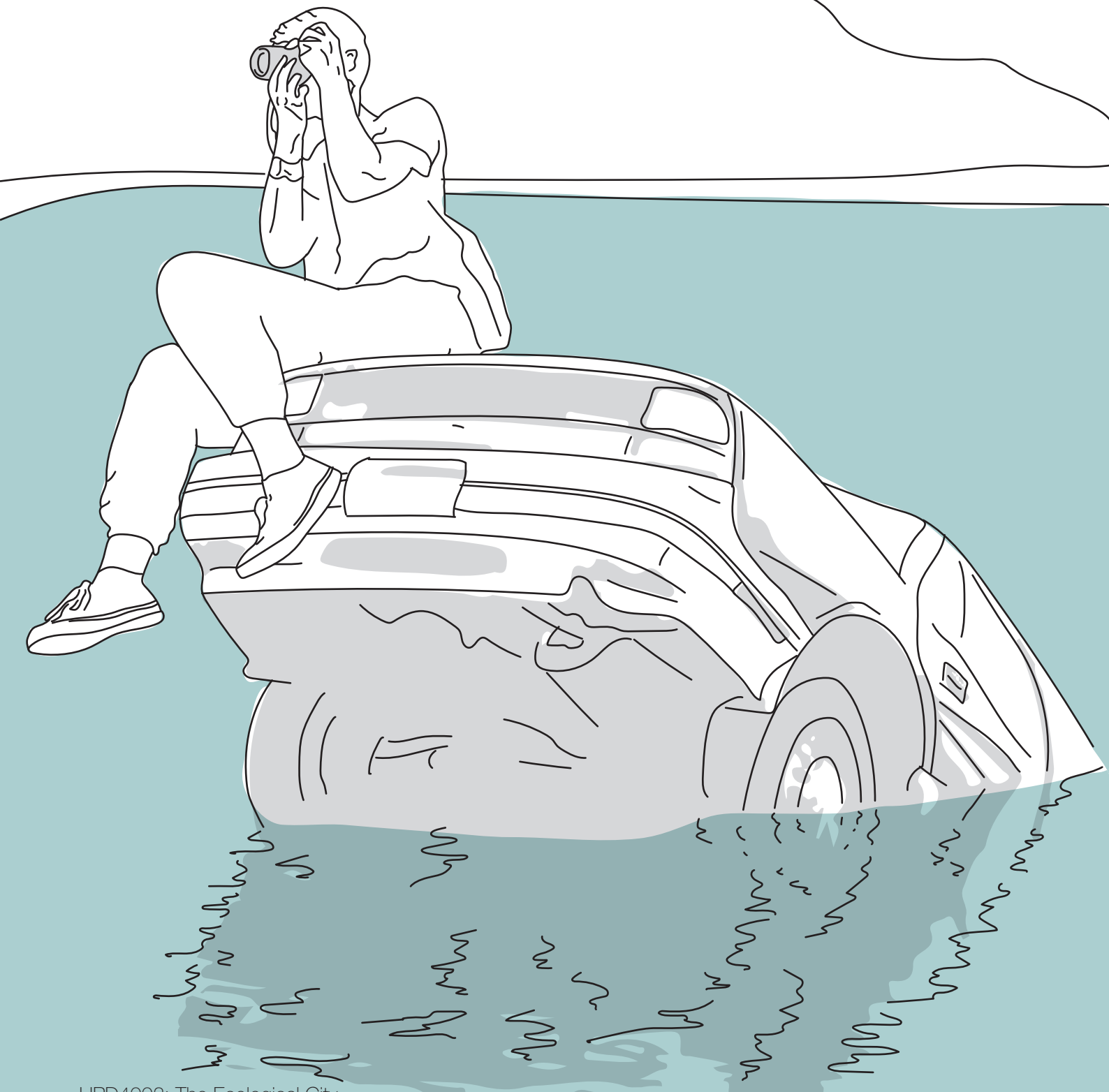


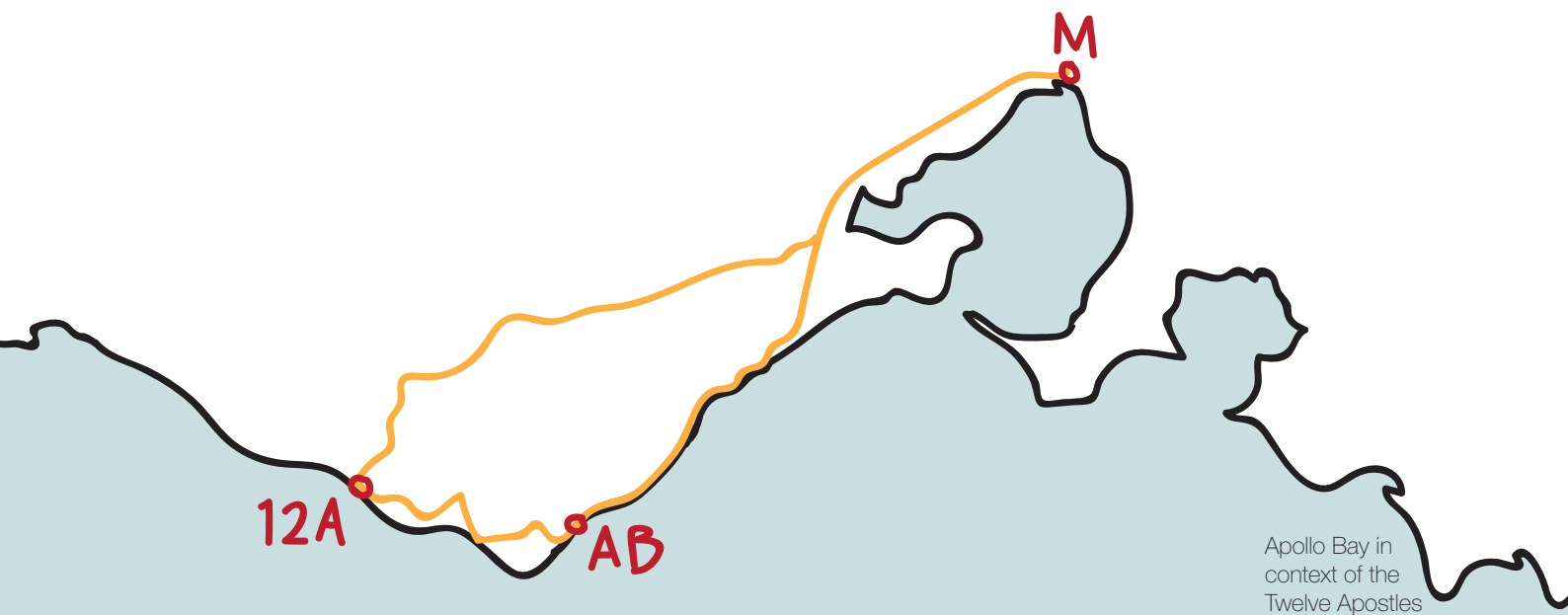
This was once a tourist town.

Parking a Post-Apostle Apollo Bay

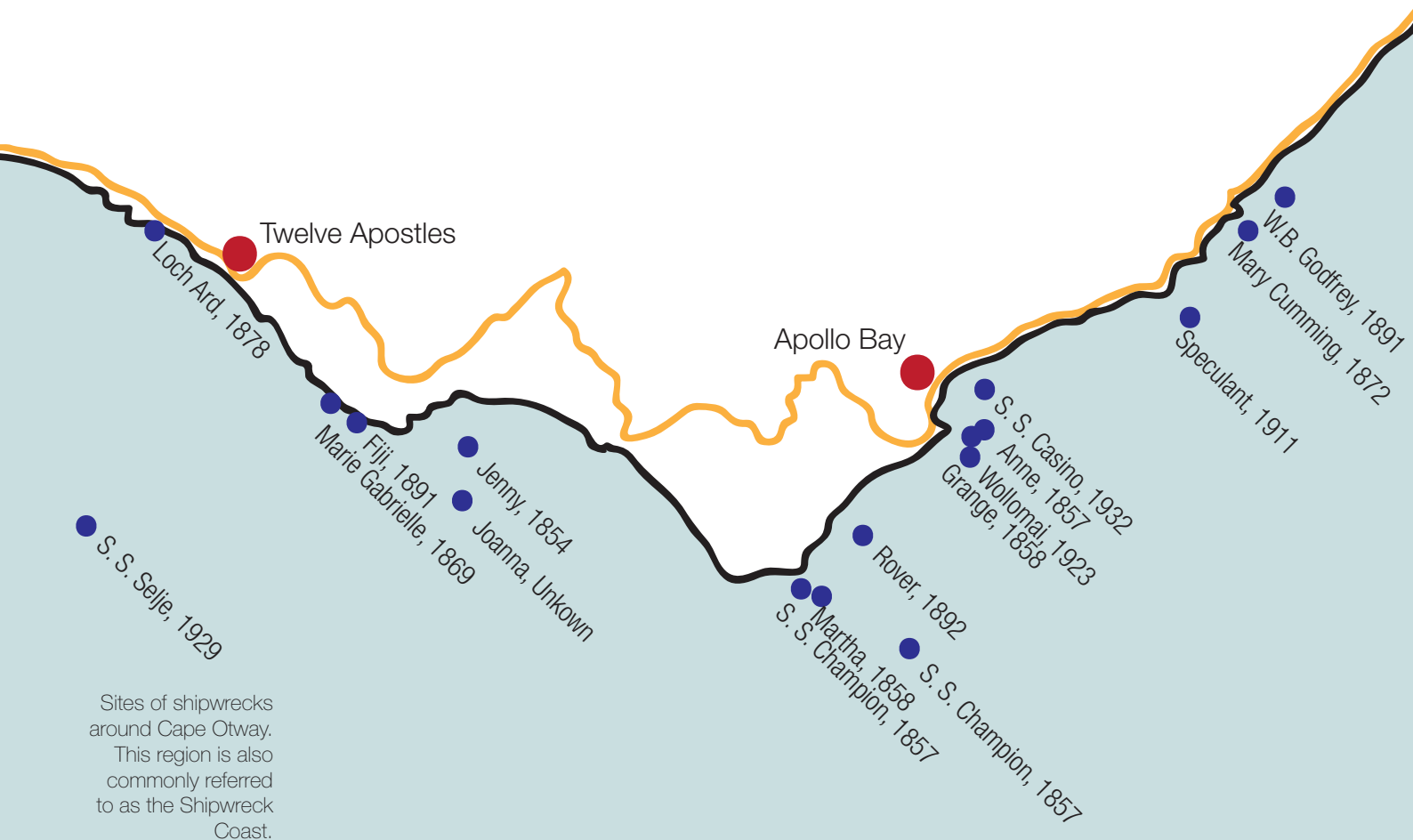


Apollo Bay in Context

An incidental tourist town facing imminent change



Apollo Bay, located to the east of Cape Otway, was initially settled as an industrial port for the logging industry in the Otway Ranges. Prior to the construction of the Great Ocean Road, the settlement was largely isolated from almost any connection to the greater colony of Victoria. Following the First World War and the construction of the Great Ocean Road, Apollo Bay was connected with the rest of the state in 1932. Currently, the town's major industry is tourism, whose tourists include backpackers, surfers, holiday home owners, but predominately those intending to travel to the most visited natural tourist site in the state, The Twelve Apostles.



The major concerns for Apollo Bay's future that this report will address are:

Tourist Amenity - How can the existing infrastructure be improved to improve the visitor experience, encouraging them to stay longer?

Civic Infrastructure - How can the amenities of the town be improved to allow locals to be included in the town's experience?

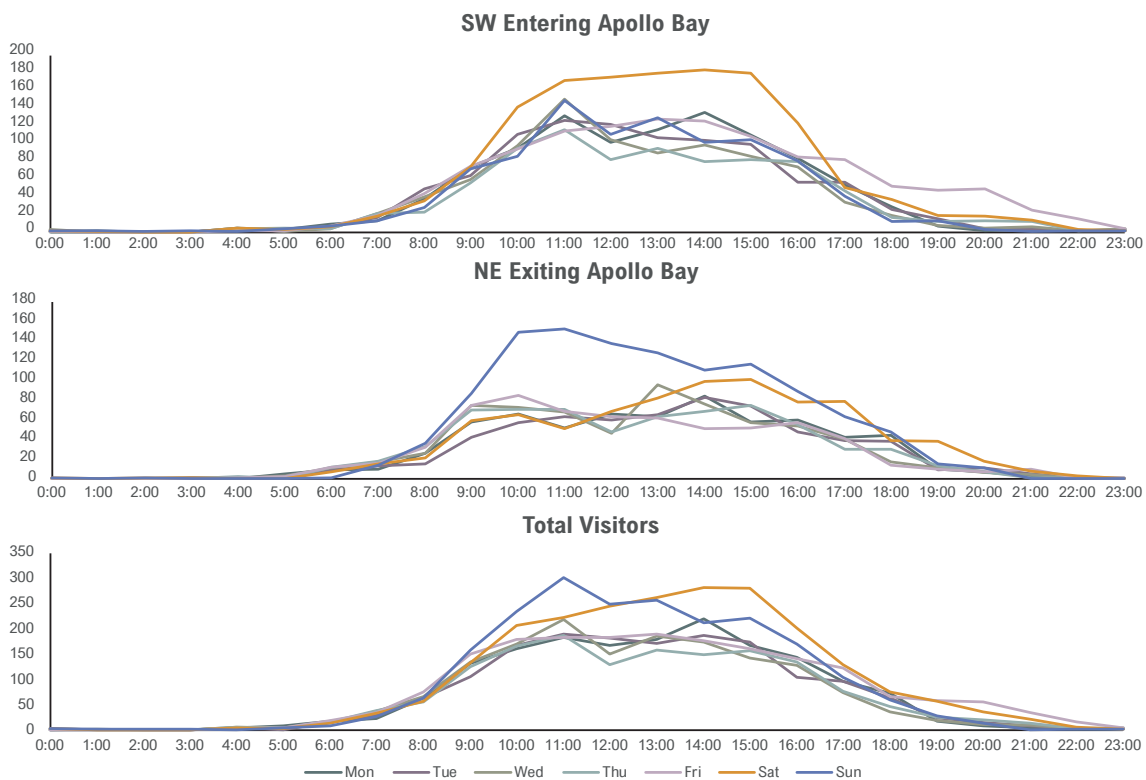
Peak Tourist Capacity - How can the town better cater to large numbers of tourists in peak seasonal periods?

Tourist Demand - How can Apollo Bay's infrastructure handle fluctuating demand on a yearly cycle, and into the distant future?

Infrastructural Decay - How can the infrastructure that is built to meet short-term needs be re-imagined when its initial use is no longer required?

Tourism in Apollo Bay

Current Apollo Bay Tourist Amenities



The number of vehicles entering/exiting Apollo Bay throughout the day from 15th - 21st of March, 2010
Source: TraffixGroup

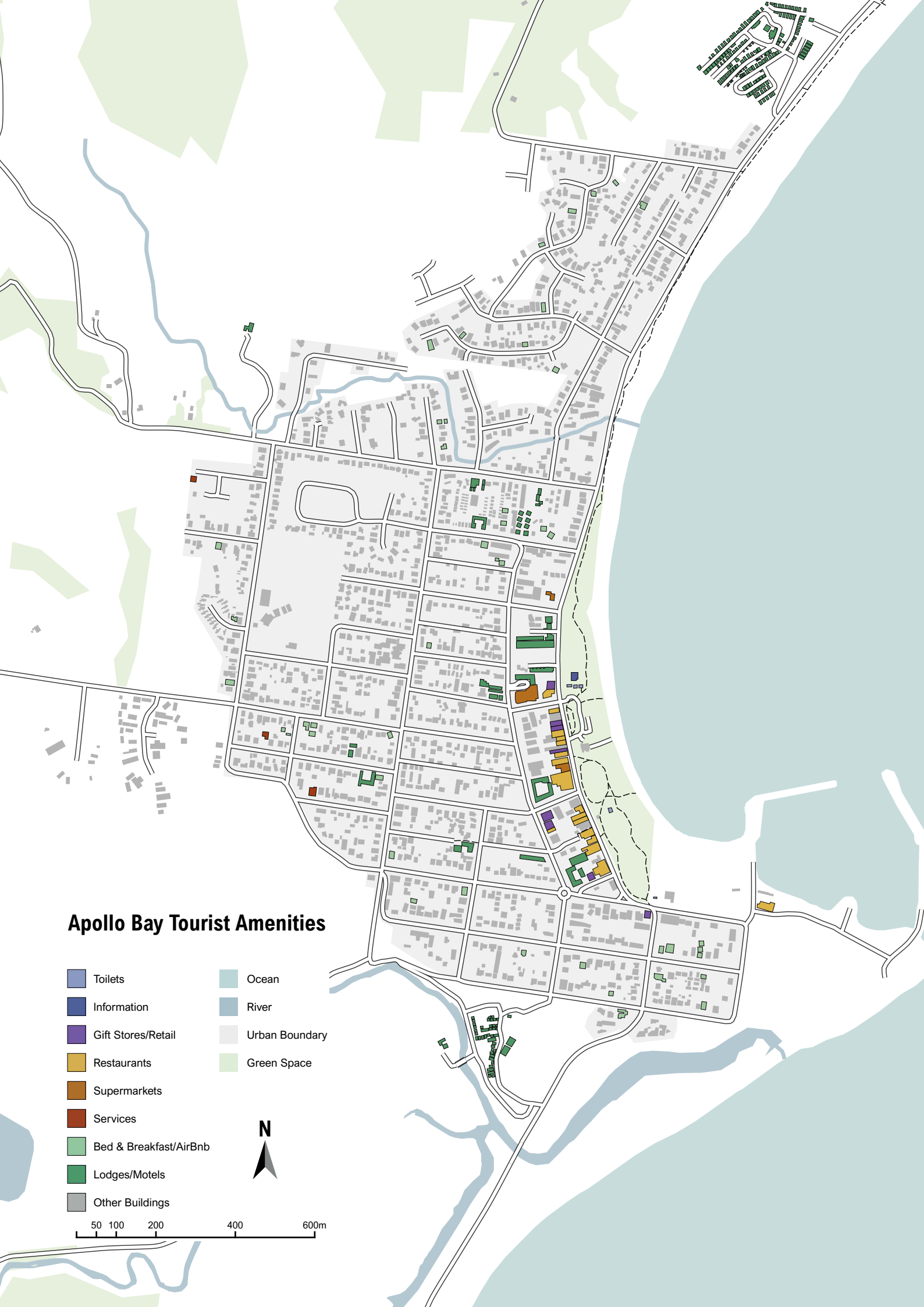
Apollo Bay's location between Melbourne and the Twelve Apostles results in a distinct form of tourists, in their experience, expectations, and actions.

One of the more prominent forms of tourism through Apollo Bay is as a pit stop on the journey on the Great Ocean Road on weekend trips. The number of visitors fluctuates quite significantly over the course of the few hours of the lunch period, thanks to the town's convenient location.

The time of day, and day of which majority of the visitations occur also suggests that weekend trips are particularly prominent. There is a noticeable spike in visitors traveling South (entering Apollo Bay from Melbourne) on Saturdays, from midday to the afternoon, and a smaller spike of tourists on Sundays traveling North (entering Apollo Bay from the Twelve Apostles), in the morning. This implies that one of the prominent forms of visitation to Apollo Bay is as a stopping point on a weekend trip.

To cater this fluctuating demand, the core of the town's commercial facilities are situated on the Great Ocean Road (this portion is named Collingwood Street, but is the same network) near the car parking facilities. While there are many other tourist amenities in Apollo Bay, the foreshore and opposing street is the key area of focus.

Locations of various sites passing tourists are likely to stop at in Apollo Bay.
Source: OpenStreetMap



Apollo Bay Tourist Amenities

- Toilets
- Information
- Gift Stores/Retail
- Restaurants
- Supermarkets
- Services
- Bed & Breakfast/AirBnb
- Lodges/Motels
- Other Buildings
- Ocean
- River
- Urban Boundary
- Green Space

50 100 200 400 600m

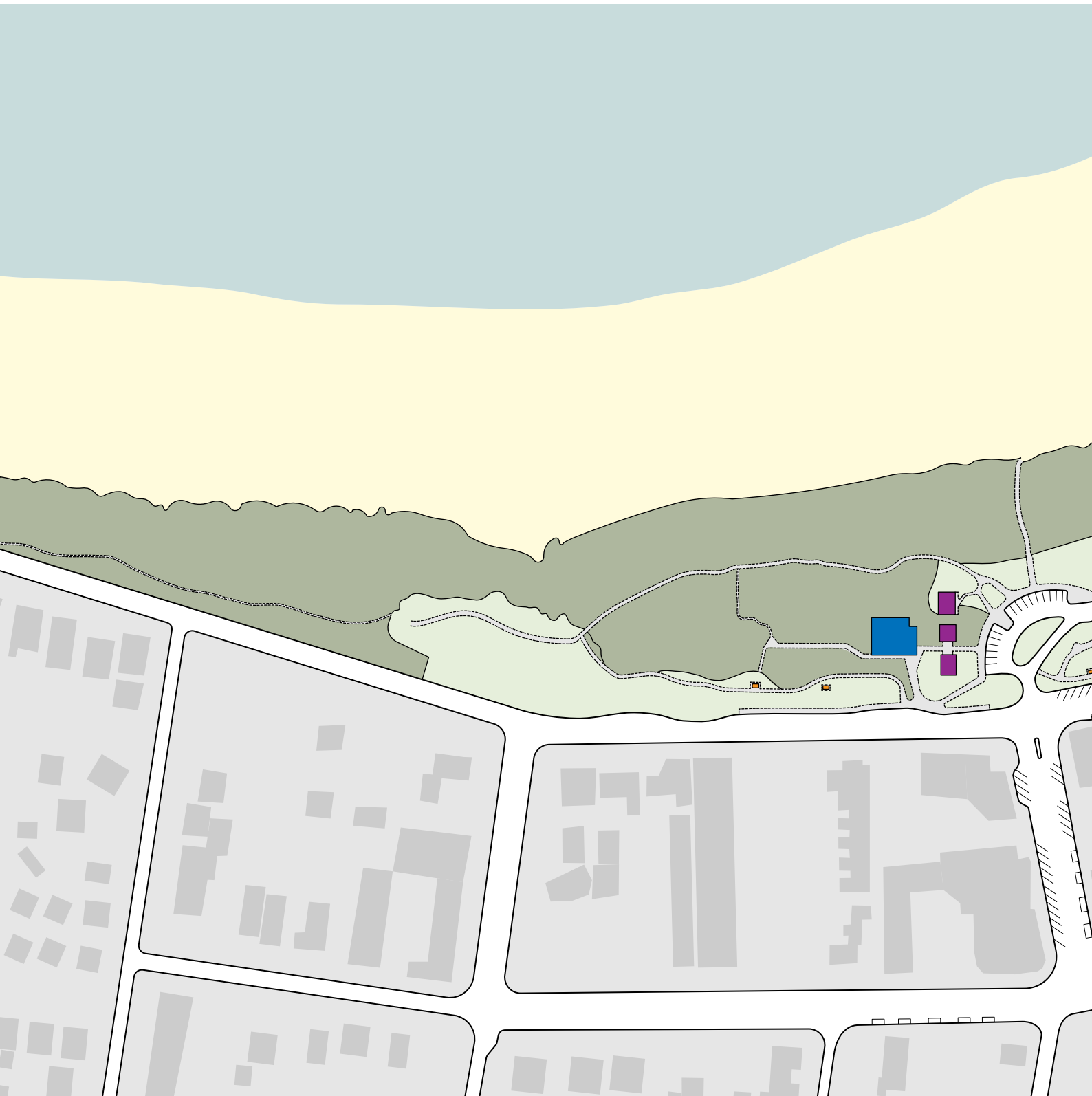


The Foreshore

Apollo Bay's Lackluster Civic Infrastructure

This is the existing civic infrastructure on the Apollo Bay foreshore. While it does contain the basic amenities needed to provide service to locals and tourists, it is sorely lacking in many aspects, particularly in peak times. The toilet facilities are woefully inadequate and poorly maintained. The information centre is obscured by vegetation, with unclear pathing that reduces the likelihood of visitors to enter, if they even see that the centre exists. The footpaths along the foreshore do not

coincide with human uses, with many paths starting and stopping seemingly at random, and in many locations where a path could be expected, there is no path at all. Public seating and barbecue infrastructure does exist, however there is a lack of shaded seating areas and pavilions, resulting in inadequate capacity during peak seasons. This general lack of quality civic infrastructure results in a diminished quality of experience for both tourists and locals alike.



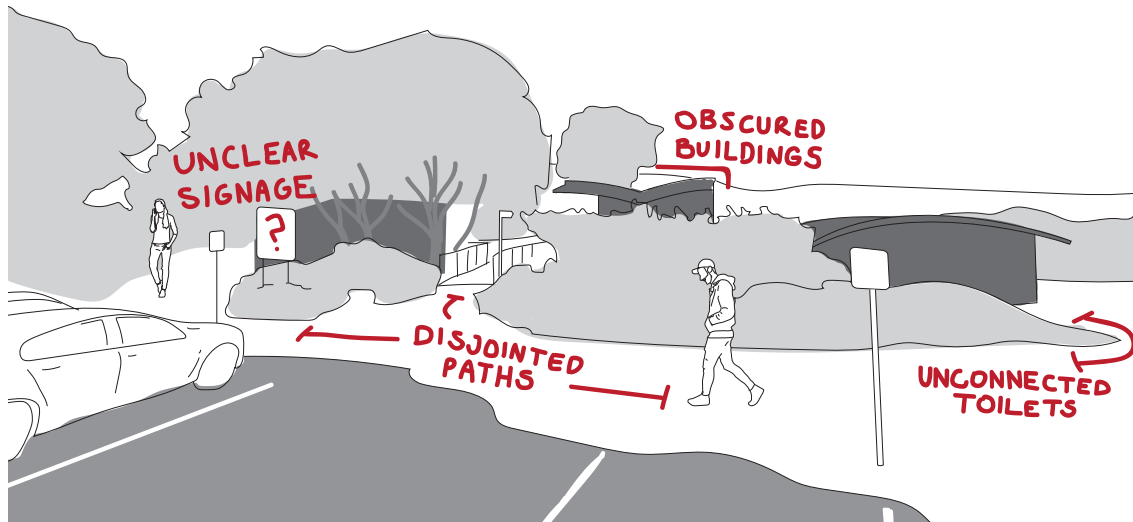
Existing Apollo Bay Foreshore

- Community Amenity
- Information Centre
- Public Toilet
- Park Amenity
- Surf Lifesaving Club

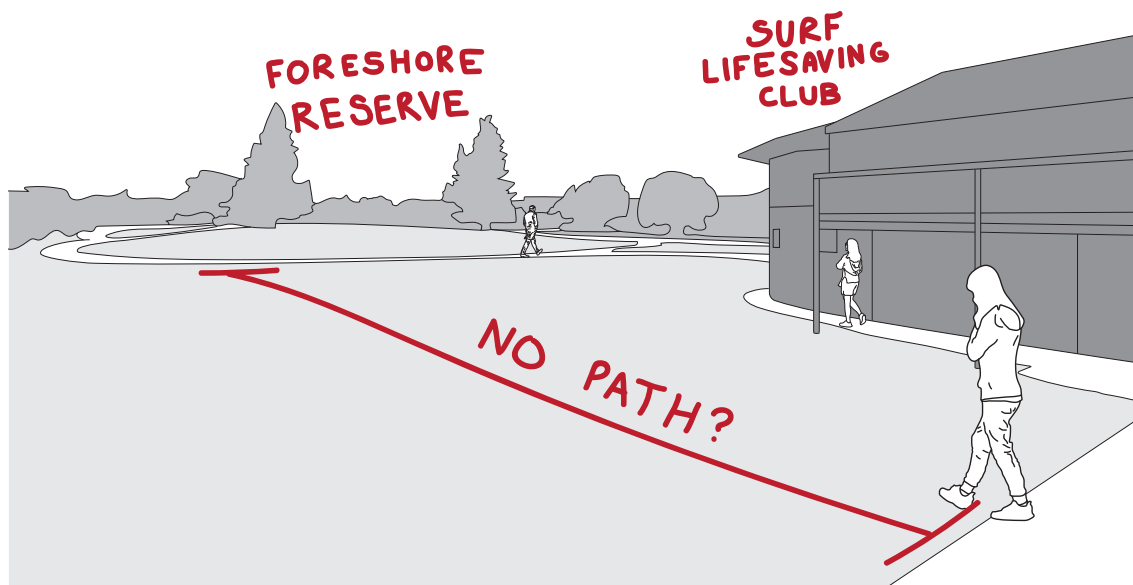


The Foreshore

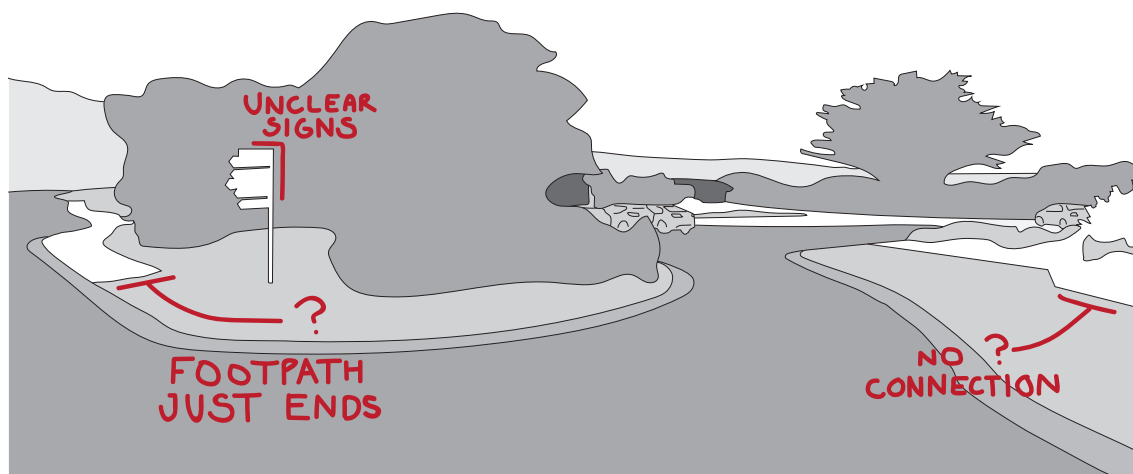
Consolidating Apollo Bay's Tourist Amenities



Infrastructure around the information centre and toilets.



Lack of footpath infrastructure in foreshore reserve surrounding surf lifesaving club.



Disjointed footpath infrastructure at entrance of foreshore car park.



Diagram of potential reconfiguration of civic and tourist amenities based on localised demands.

Apollo Bay's existing amenities are disjointed and potentially confusing to tourists. By consolidating the civic infrastructure on the foreshore, Apollo Bay can provide a more easily accessible entrance to the town, creating a tourist experience that is more appealing in general. Creating clear and distinct locations for visitors to go to will also likely create incentives for visitors to spend more time in the town, possibly increasing their economic contribution to the town.

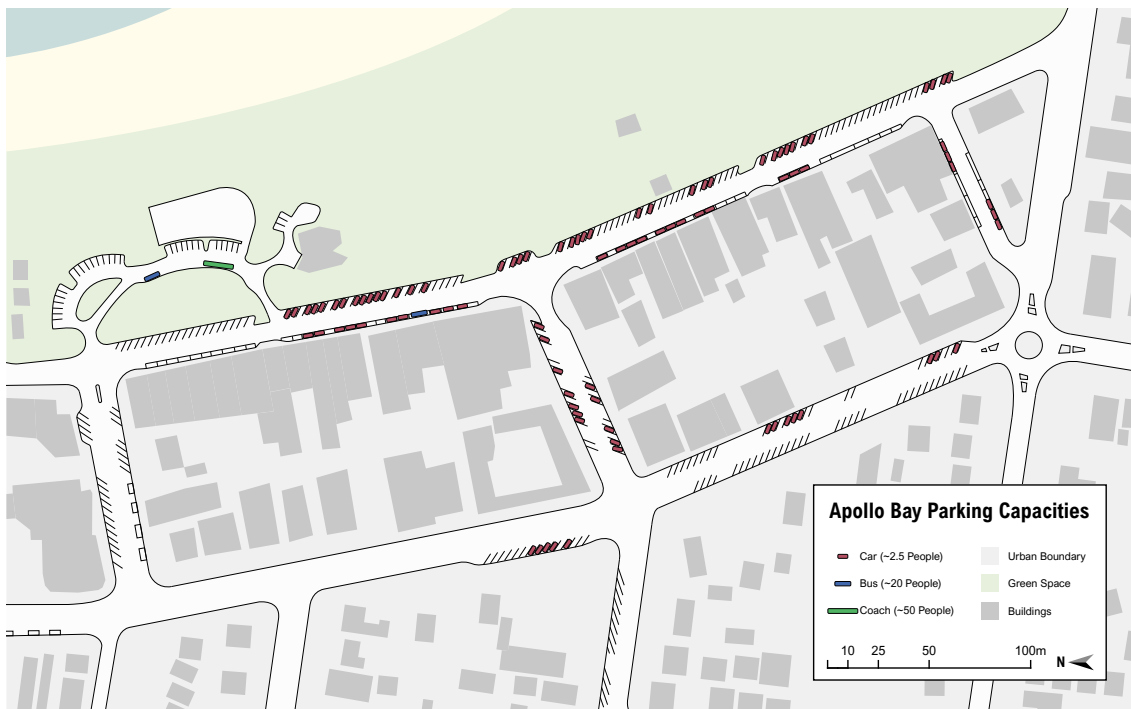
More intentionally developed civic infrastructure can meaningfully and deliberately cater to the differing needs and desires for locals, which are separate from those of the visitors. Furthermore, by amalgamating these disparate civil amenities, these spaces can be more effectively utilised

in off-peak seasons as community space for local residents. An increase in capacity can create greater opportunity for locals to continue enjoying the foreshore separate to tourists, even during peak seasons. This can be achieved by the simple fact that if there are multiple places for people to congregate, then there is a reduced likelihood of all places to be occupied.

The specific locations of the civic amenities could potentially be reconfigured on the general demand for the different users of the foreshore. The diagram above describes one configuration of this mechanism. Further surveys are required, but this methodology could result in a more holistic solution to the current amenities.

Parking

Pressures on Infrastructure



An average off-season day in Apollo Bay, many car parks unoccupied.



During peak tourist times, particularly in summer or holidays, the entirety of Apollo Bay can be occupied by vehicles, causing great strain on much of the civic infrastructure, including toilets and car parking.

Changing Demand

The number of tourists to Apollo Bay, while currently growing, is not necessarily a certainty. It is important to consider shifting paradigms that may occur in the coming 10, 20, 50 or 100 years, that may dramatically alter the form or quantity of tourism in the area.

A shift in the number or type of tourists could potentially come to pass through an incident such as a major vehicle accident, particularly catastrophic bushfires, instability in the road due to erosion, or geopolitical turmoil. New developments in technology such as automated vehicles or electric vehicles could also result in new forms of requirements in parking facilities, or could alleviate the necessity of parking capacity. Alternative forms of access to Apollo Bay, such as ferries, could also result in reduced vehicle numbers, reducing the required capacity of the car parking facilities in the town.

While it is very likely that tourism will still continue in Apollo Bay, the current growth, and consequent demand, is not necessarily something that can be relied upon to continue in the future. It is important to plan for possible contingencies when building new infrastructure to meet current and short-term demands, without losing sight of the possibilities in the future.

Artificial Ground and Protective Parking



Sakaide Artificial Ground, Masato Otaka 1968

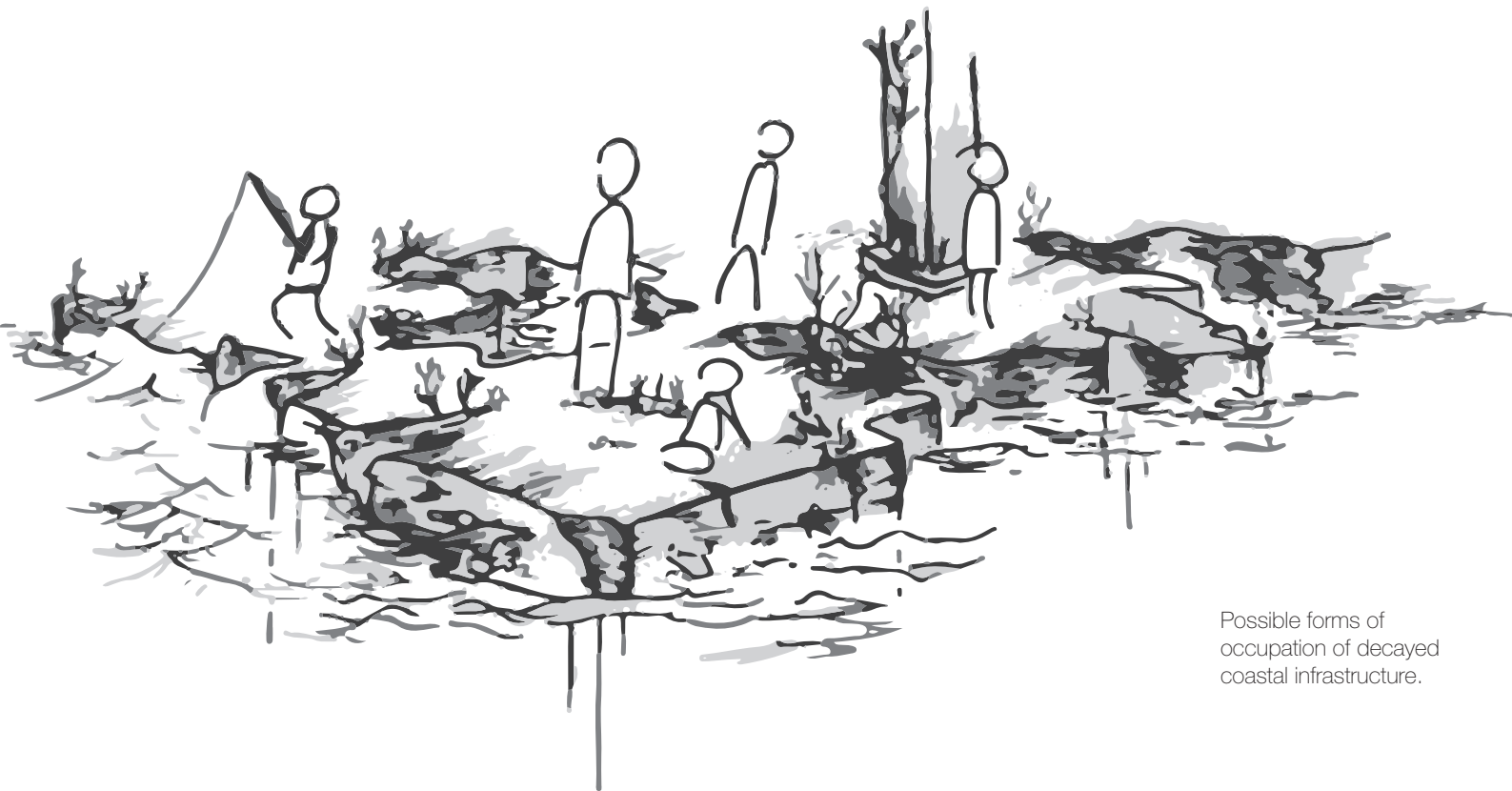
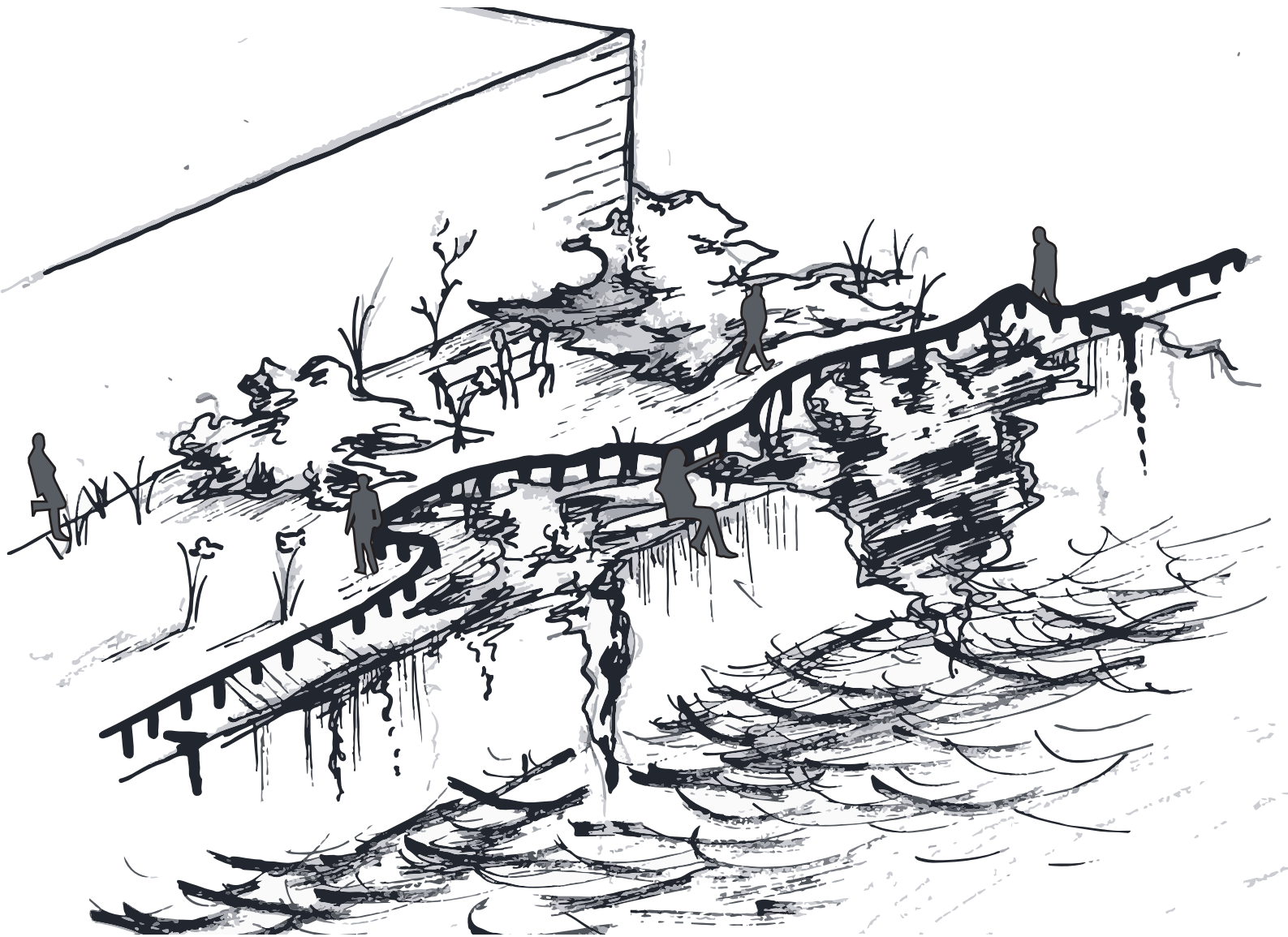
This experimental project was an architectural approach to solving the issue of the abundance of urban car parking on the city, and the lack of differing uses associated with parking towers. The few levels closest to the ground were all occupied by parking, and above, an artificial ground created a new dimension of urban development. This artificial ground was intended to be able to be legally subdivided and act as a series of distinct lots as legitimate as the rest of the city, although this did not come to fruition by the time the project ended.



An example of parking under the foreshore also acting as a dike, protecting the shoreline. Katwijk Aan Zee, The Netherlands

Designed Decay

Future-Proofing Apollo Bay's Character Past



Possible forms of
occupation of decayed
coastal infrastructure.

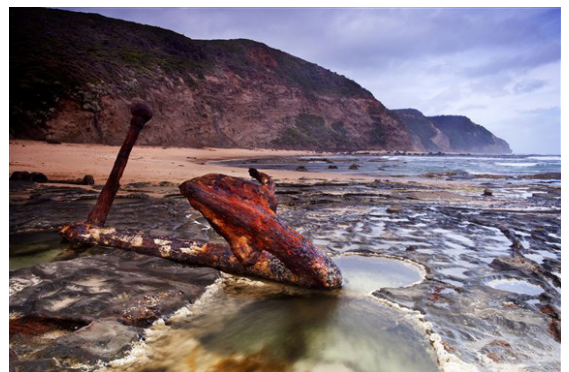
This permeable concrete technology creates a surface that, if desired, could be unobtrusively abandoned.



The existing marine infrastructure in Apollo Bay, embodies the character of the town. The materiality and development over time could reflect this.



The region surrounding Cape Otway is known as the Shipwreck Coast due to the numerous shipwrecks in its turbulent waters. This decay is emblematic of the region, and the designed civic infrastructure could reflect this character.



These abandoned concrete ships in Cape Charles, Virginia are an attractive example of the physical and aesthetic qualities spaces created through decay.



Design Principles

Ideals by which the foreshore should be developed



Environmentally Responsive

The design should respond to changing environmental factors, either by protecting, adapting, or intentionally retreating.



Function Flexible

The design should be functional for multiple uses, and respond to Apollo Bay's fluctuating demands over the course of the year.



Designed Decay

The design should exist in a meaningful capacity in the entirety of its lifespan, and should have a plan for future generations of use.



Parking Capacity

The design must increase the parking capacity of Apollo Bay; the design should alleviate the influx of daily tourists at peak times.



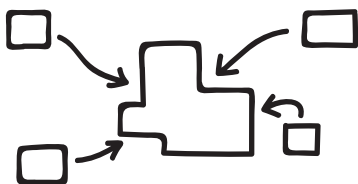
Temporary Parking

The design should cater to the temporary parking use of daily tourists, either by individual cars, or by buses.



Post-Parking

The design should be involve preparations for a decline in vehicle use, either by shifting use or by being decommissioned.



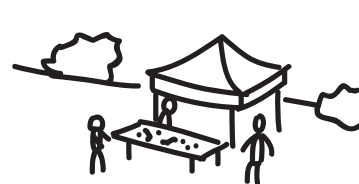
Amenity Consolidation

The design should aim to unify the disparate civic infrastructure on the Apollo Bay foreshore in a meaningful location.



Footpath Infrastructure

The design must endeavour to connect the disjointed footpath infrastructure on the Apollo Bay foreshore.

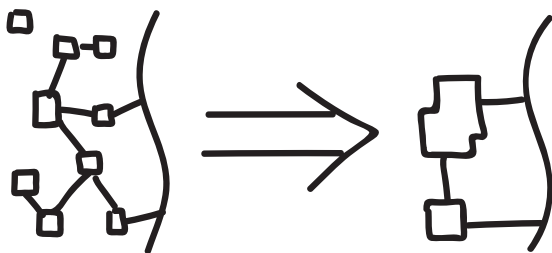


Economic Opportunities

The design should provide space and incentives for new economic opportunities and the capacity for commercial facilities.

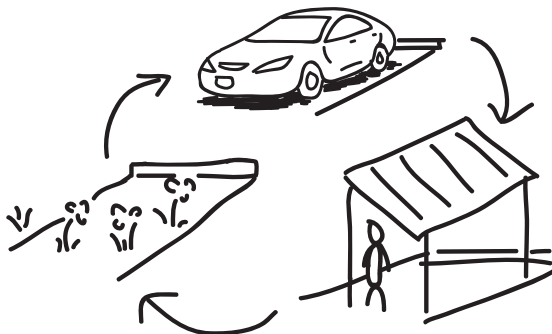
Strategy and Implementation

1. Consolidate Foreshore



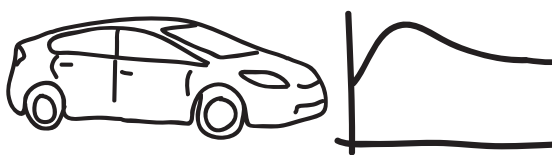
The civic infrastructure and amenities on the Apollo Bay foreshore will be consolidated and rebuilt to better cater to the needs of locals and visitors alike. In order to accomplish this, there will be a process of community consultation and tender process in order to develop a quality design for all.

2. Establish Seasonal Parking Management Plan



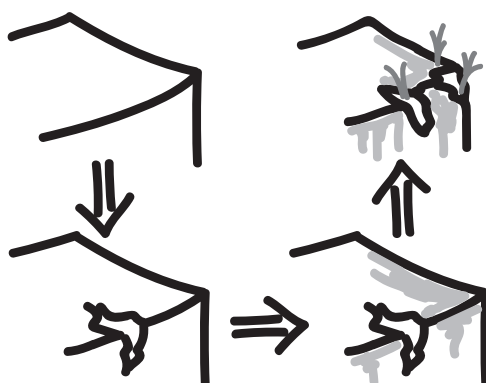
The car parking facilities of Apollo Bay lay unused for much of the year. These spaces could be better utilised throughout the year in many ways. For example, temporary shelter or gathering spaces for events such as markets, or gardens during particularly quiet season. The additional car parking capacity that is required for Apollo Bay does not need to remain a car park for its entirety.

3. Monitor and Survey Parking Use



The number of tourists for each year, and in particular, peak seasonal times, will be recorded. This will allow greater planning in regards to possible decommissioning.

4. Establish Decay Management Plan



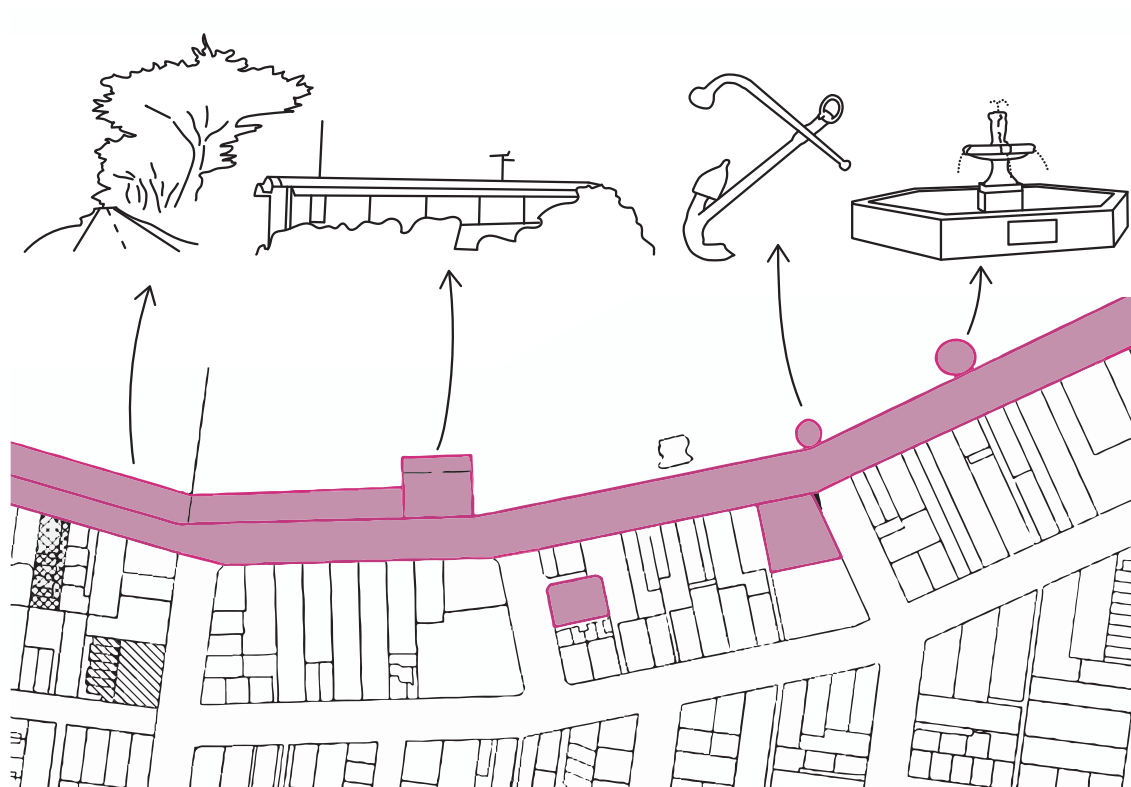
The infrastructure that is built for current and short-term demands may not be required to exist in the same capacity in the somewhat distant future. The infrastructure that is built must be considered to be a part of the town for many years to come, and should be designed to decay in place. In order to ensure ongoing stability and safety of the infrastructure, the decay will be intentionally designed and managed. There will be periodic assessments to ensure that the plan is effectively delivered.

Policy and Planning

Existing Condition and Possible Interventions

Overlays

The town of Apollo Bay has several overlays that affect much of the land. Overlays related to land management or environmental protection such as the Erosion Management Overlay, Land Subject to Inundation Overlay or Bushfire Management Overlay cover majority of Apollo Bay's surrounds. Majority of the town itself is covered by Design and Development Overlays, which relate to permits on the form of the development of the town. Many other features of Apollo Bay are covered by Heritage Overlays with various protections. There are several sites that on the Apollo Bay foreshore that are covered by Heritage Overlays, but these could be worked around for community development for various reasons.



Heritage Overlay on Apollo Bay's foreshore.

HO6: Monterey Cypress Avenue. While the overlay covers a wide region, the actual trees no longer exist near the town centre itself.

HO312: Great Ocean Road. The road is currently protected under heritage controls, and considerations to alter the course have been rejected.

HO13: Apollo Bay Information Centre. The building, location, and visual appearance of the Information Centre is currently protected under heritage. This would require redevelopment proposals to make a reasonable case for relocation or demolition. More likely however, development proposals would be required to respond to the existing building in a meaningful and respectful way.

HO4: Pioneer Memorial.
HO5: 'Speculant' anchor.

These historically significant objects have no specific protections on their location, form, or appearance and can be adjusted. However, these objects should be considered with reasonable respect in accordance with the general wishes of the local residents.

Zoning

Majority of Apollo Bay's foreshore is zoned as a Public Conservation and Resource Zone (PCRZ), which allows nearly any use as-of-right, with the sole condition being that the proposed use is "conducted by or on behalf of a public land manager" (VPP 36.03-1). This is not an issue for coastal development, if it is managed by the relevant government authority, as the entirety of the foreshore is crown land (Marine and Coastal Act 2018, Part 1 Section 4.1):

Subject to this section, marine and coastal Crown land means the following between the outer limit of Victorian coastal waters and 200 metres inland of the high-water mark of the sea

- (a) Crown land (whether or not covered by water) to a depth of 200 metres below the surface of that land;
- (b) any water covering the land referred to in paragraph (a) from time to time.

This effectively means that the managing authority effectively has free reign to perform any development it wishes, given it can justify a reasonable case. This will be beneficial in foreshore development, as it removes the majority of the barriers on development in this regard.

The buildings in the foreshore (toilets, information centre, surf lifesaving club) are zoned as Public Use Zone, Category 7 (VPP, 36.01). This zone effectively allows any form of public use, with minimal restrictions. As the zones currently correspond with the locations of the existing buildings, development that would involve changing the locations of the buildings would require some relatively minor rezoning of specific sites.

Stakeholders

The Apollo Bay foreshore is currently managed by several government bodies with minimal cooperative organisation. The Great Ocean Road is managed by VicRoads, much of the foreshore is managed by the Otway Coast Committee, and the Colac-Otway Shire manages many of the buildings on the foreshore. However, there are several cases in which the different managers operate independently from each other in generally inefficient ways, such as multiple owners of the same toilet facilities, increasing expenses without the benefit of increased quality in amenities.

There is an ongoing effort to amalgamate these disparate organisations, not only in Apollo Bay, but across the entirety of the Great Ocean Road. The new organisation, the Great Ocean Road Parks and Coast Authority, would operate as the land manager for the entirety of the public land in Apollo Bay, greatly expediting potential development processes. While the efficacy of this new authority is yet unknown, it could potentially lead to more holistic approaches to development on the Great Ocean Road and Apollo Bay.

Project Timeline

The Changing Foreshore Over Time

Planning,
Surveying,
Consultation,
Research,
Tender Process,
Designing

2020

2022

Construction

2025

Initial Capacity

Designed to cater for
peak summer demand,
according to research.

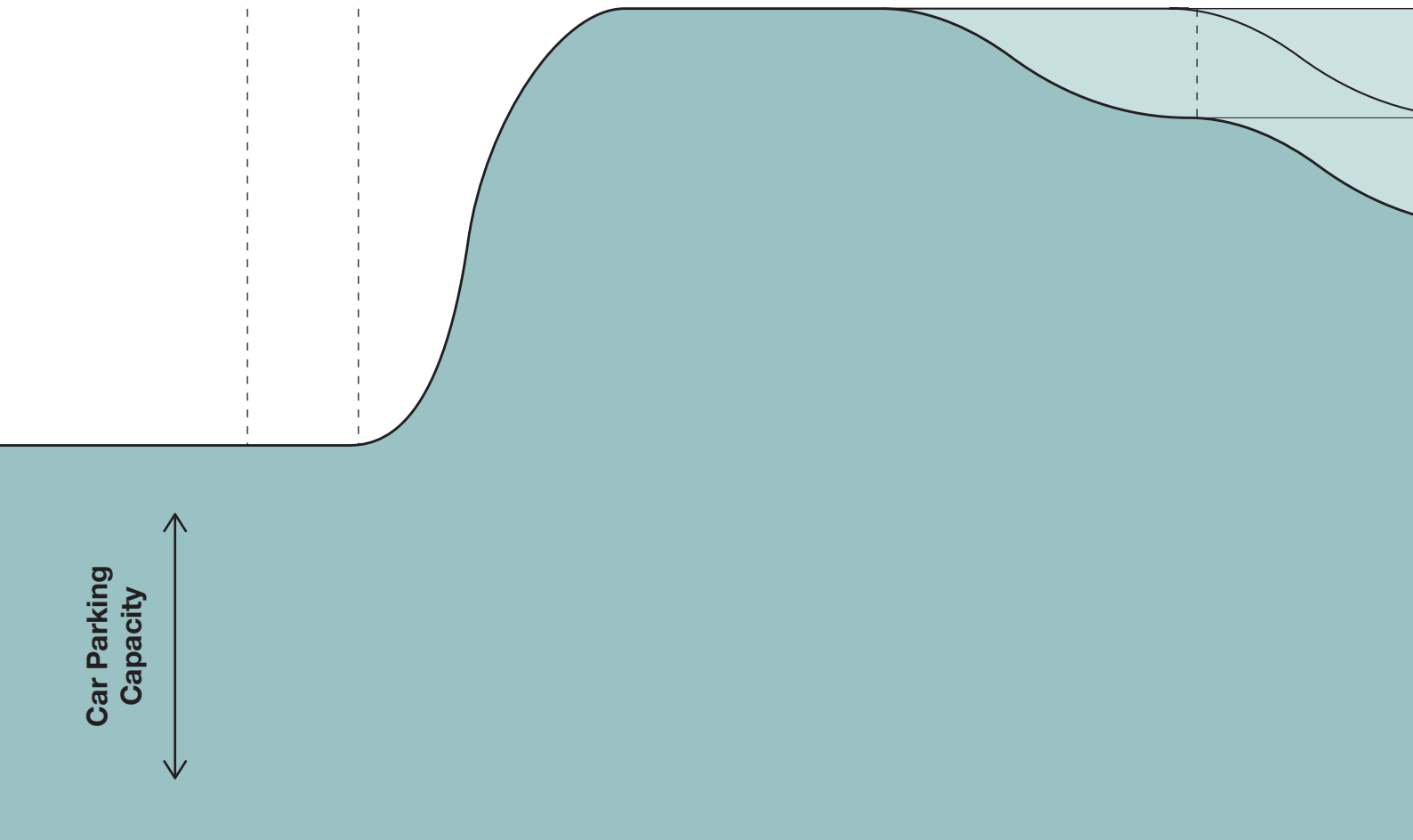
2030

2035

Every five years:

Reassessment of parking capacity. Survey projected tourist demand growth. If future peak demand projection is less than 80% of current capacity, decommission part of the parking facility. Renew maintenance for rest of parking infrastructure.

Car Parking
Capacity



Over time, the capacity of the car parking facilities will be reduced, in accordance with the necessary demand.

The decommissioned car parking will intentionally decay, and become part of the town's character.

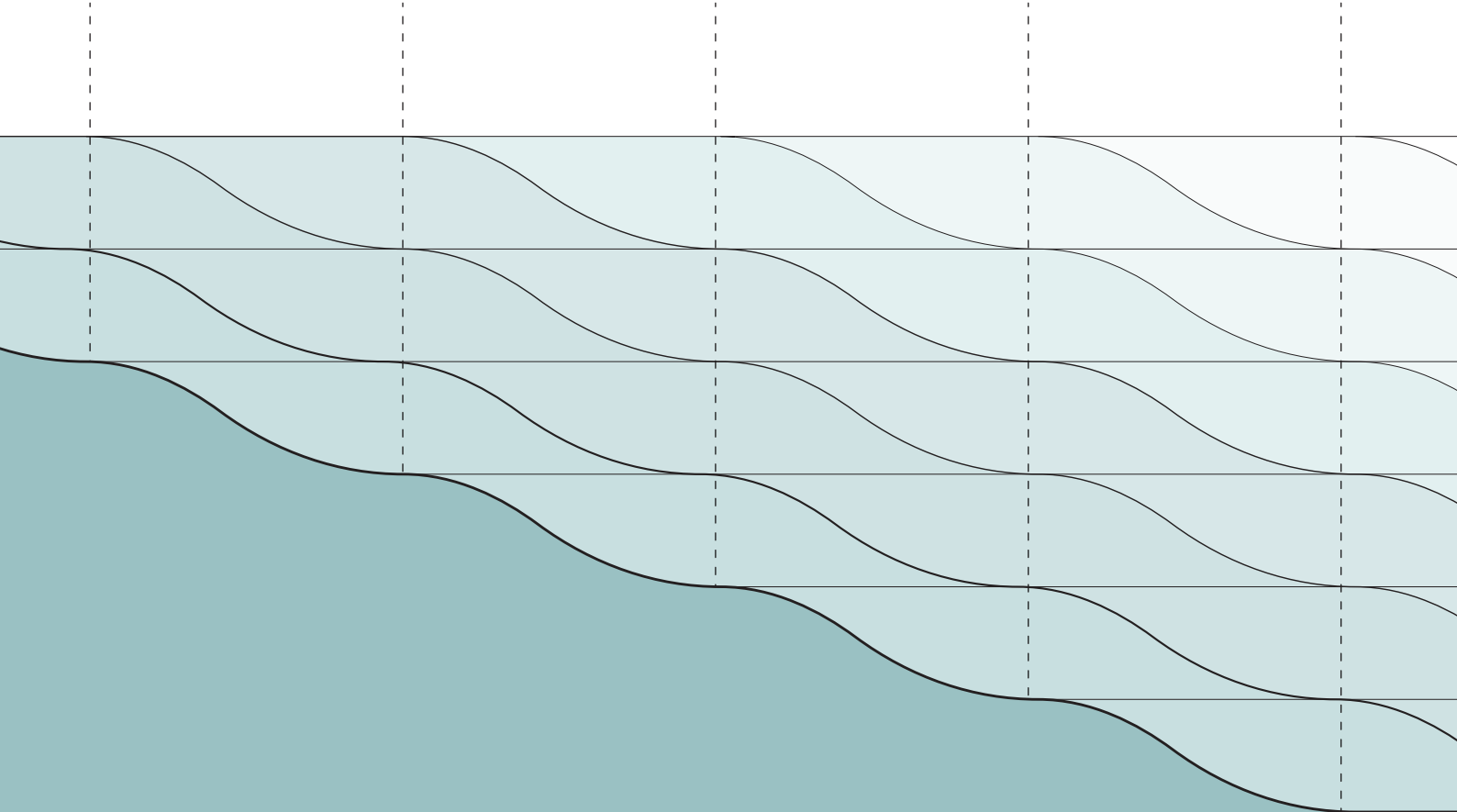
2040

2045

2050

2055

2060



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