CastlecliffPresentation from Jim Dahm, 9 June 2022



Area 1: North Mole



Site Overview

This area includes the car park at the seaward end of Morgan Street and the North Mole itself. The North Mole gets its name as it is built on the northern bank of the Whanganui River. The car park and area is commonly used by people fishing, surfers, horse riders and walkers. People also often visit the area to enjoy the views to Taranaki. The North Mole is currently being upgraded.

The area seaward of the car park lacks a frontal dune due to regular earthworks and vehicles which prevent dune vegetation from establishing.



Key issues

The lack of a dune and sand-trapping vegetation seaward of the car park leads to a number of issues, including:

- Serious windblown sand issues on the road and car park sand needs to be periodically cleared to maintain access.
- Vehicle and pedestrian use preventing a natural foredune from establishing seaward of the existing car park.
- Untidy appearance of the beach and rubbish dumping.
- The existing car park not being accessible to everyone due to flooding and sand build-up.
- Invasion of exotic plant species in back dune areas.

Management options for consideration

Maintain current management

Current management involves the ongoing prevention of dune formation with the annual removal of sand from the road and carpark to manage windblown sand issues.

Advantages

- Vehicular access through to the beach would be maintained for people fishing, surfers and other users.
- The views from the carpark would be maintained.

Disadvantages

- The ongoing issues and expense associated with windblown sand would be likely to worsen over time.
- The existing car park is not readily accessible for many users due to flooding and sand build up.
- There is minimal car parking space.
- It detracts from the natural character of the beach and gives it an untidy appearance.

Restore foredune seaward of existing car park

This option would involve creating and restoring a narrow, native-vegetated frontal dune seaward of the existing car park. The diagram below is only a simple sketch to show the broad details and location. If this option was chosen, detailed design (including further consultation with key stakeholders) would be carried out.

If pursued, this option would include defined pedestrian accessways from the carpark to the mole and from the carpark to the beach. As the dunes would be vegetated with spinifex, they would be low and gently grading, making it relatively easy to walk across. The existing car park would need reforming.



Advantages

- Vehicular access would be maintained close to the beach for people fishing, surfers and other users.
- It would reduce windblown sand on the carpark.
- Enhanced natural values and visual appearance.

Disadvantages

- Loss of sea views from the carpark.
- No vehicle access to the beach.
- Limited width to sustain a dune system.
- It would be difficult to manage pedestrian and vehicle use due to the narrow dune.
- There would be some ongoing wind-blown sand issues, albeit reduced.
- Moderate-significant ongoing management would be likely to be required.

New raised car park further landward

This option would see a new car park built behind a wide, restored frontal dune. Morgan Street would terminate at the new raised car park. The car park would be elevated to provide good views of the sea, river and mountains. Accessways from the car park would also provide direct access to the mole and easy access to the beach over the low restored dune.

This option would also restore a low foredune seaward of the car park, vegetated with native dune species. The dune would be designed lower than the car park to provide good sea views.



Note - The simple sketch above is *indicative only and is not a proposal*. If this option was pursued, any details would involve a community consultation process and a design process.

Discussion so far has indicated this is likely to be a preferred option for many of the community. Funding for the car park would need to come from sources other than the Coastal Action Plan but funding for the dune restoration and accessways can be considered from the Coastal Action Plan.

Advantages

- Views of the river and sea.
- Sustainable foredune with minimal maintenance requirements.
- Windblown sand issues on the car park would be significantly reduced.
- It would enable effective management of vehicle and pedestrian use.
- Considerably enhanced natural and visual landscape values.
- Vehicle access would be maintained close to beach for people fishing, surfers and other users.

Disadvantage

• There would be no vehicle access directly to the beach or the North Mole.

Area 2 Morgan Street to Rangiora Street



This is a large dune area with some serious wind erosion problems and various informal tracks created by pedestrians, vehicles and horses. The dune vegetation is largely exotic, but there is a narrow band of spinifex in the most seaward areas.

Key issues

- Common use of off-road vehicles on dunes, with access largely off Morgan Street.
- Widespread and increasing issues with wind erosion and dune damage associated with disruption of dune vegetation by human activities, particularly off-road vehicles.
- Rubbish and green waste dumping along the back dunes
- Dune ecology dominated by exotic vegetation.
- Issues with noise, safety and conflicting uses.





Figure 1: Aerial photos indicate increasing dune damage and wind erosion over time.

Over the last two years, Whanganui District Council and Coastcare have started planting work to try and reduce the extent of wind erosion, but this work is not likely to be successful over time without managing vehicle use.

Management options for consideration

Maintain status quo

This would involve maintaining the existing uses, including off-road vehicles accompanied by small-scale, occasional plantings and driftwood placement to slow the rate of increasing dune damage.

Advantages

• Maintains existing uses.

Disadvantages

- Ongoing and increasingly severe issues with disruption of stabilising dune vegetation, wind erosion, dune damage and wind-blown sand.
- Ongoing user conflicts and noise issues for adjacent residents.
- Ongoing dominance and expansion of exotic dune vegetation.

Improved management of human use accompanied with dune restoration

This option aims to enhance recreational use and amenity while also reducing dune damage and facilitating dune repair. It would include improved management of human use to prevent dune damage and would also be likely to include the exclusion of vehicles from the dunes.

There are a range of possibilities to enhance recreational amenity and use including pedestrian, and possibly horse, trails. It would also involve progressive restoration of the native dune vegetarian and ecology.

Advantages

This option would:

- gradually reverse existing dune damage and windblown issues.
- enhance recreational and landscape amenity.
- enhance natural character and ecological values.
- reduce existing user conflicts and noise uses.

Disadvantage

Vehicles would likely be excluded from the dunes which would reduce the recreational potential for these users.

Area 3: Rangiora Street



Rangiora Street is the main beach accessed by the community. It is the location of the Duncan Pavilion community building and the surf lifesaving club as well as various car parks. The area is used for recreation (swimming, walking, walking dogs), social gatherings, collecting resources such as driftwood, and socialising and being part of a community group. Sea views from the upper car park are highly valued.

Key issues

- No foredune seaward of the car park.
- Ongoing windblown sand issues over the car park.
- Driftwood accumulations causing access issues for the surf lifesaving club and beach users.
- Buildings and infrastructure reaching the end of their design lives.

Management options for consideration



Continue current management

This would mean continuing to clear sand and driftwood from the beach and carpark and periodic lowering of the beach to reduce windblown sand issues further inland.

Advantages

- This maintains a wide cleared beach over summer.
- It gives easy access from the carpark.
- It retains a valued beach view, especially from the elevated, top car park.

Disadvantages

- It involves an ongoing battle with nature.
- It prevents a natural foredune forming seaward of the car park.
- Significant windblown sand issues on the carpark would continue.
- Cost of continued management approach.



Restoring a native vegetated foredune seaward of the car park

This would involve restoring a low, native-vegetated frontal dune seaward of the car park with easy beach access and surf club vehicle access provided. Log clearance from the beach seaward of the dune would continue before each summer. The dune would be designed to ensure views from the upper car park and the new surf club location were maintained.

This work would be integrated with surf lifesaving club and Duncan Pavilion upgrades to maintain their views, as well as maintaining views from the upper car park.

This option also has the potential to enhance the back beach area to increase amenity value (e.g. potential to incorporate a sheltered use area landward of the restored dune).



Note: The following diagram is just a simple sketch showing the location of the restored dune. This option would require detailed design and consultation with the community and key stakeholders.

Key considerations

- Maintaining valued sea views from the upper car park.
- Providing surf lifesaving club vehicle access and beach views the club is a critical facility and service.
- Dune width required for an effective, sustainable dune and associated native vegetation.
- Maintaining easy pedestrian access between beach and car park.
- Potential future shoreline change.

Advantages

It would:

- reduce windblown sand issues on the carpark
- enhance natural character
- improve back-beach shelter and amenity
- maintain sea views from the upper car park and a new surf club
- maintain ready beach access
- be relatively simple and inexpensive to implement and maintain.

Disadvantages

- There would be a loss of views in the bottom car park.
- People would need to walk across a low dune to access the beach however this is similar to most other beaches.

Surf lifesaving club and Duncan Pavilion

These buildings are both getting towards the end of their design life. The surf club is currently working on the design a new facility, which may be designed so it can be enlarged to be a joint facility when the Duncan Pavilion has to be retired.

These works would be funded outside of the Coastal Action Plan but have to be considered to ensure integrated management, planning and consenting. The surf lifesaving club is a critical facility for beach use over summer and both facilities are used and valued by the community.

Area 4: Northern Dunes



This is a very large dune system which extends over 5km north of Rangiora Street. There are isolated dune blowouts but no widespread dune damage. This area includes a stream and freshwater wetland and creates the potential for a wide range of work to enhance both human use as well as dune and wetland ecology. Many people walk along the beach and through the dunes and coastal forests.

Key issues

- Localised dune blowouts requiring improved management of human use.
- Significant invasion of dunes by exotic vegetation.
- Poor health of freshwater wetland.

Management options for consideration

There are a range of options for this dune system:

Maintain current management

This would mean continuing to support community groups and maintaining walking tracks and beach access.

Advantages

- Relatively low cost.
- Community driven.
- The walking tracks are currently well maintained.



Disadvantages

- There is only limited restoration of native biodiversity.
- There is the potential for localised blowouts.

Medium-scale dune restoration

This option would include repairing existing blowouts and improving access management to prevent recurrence of damage. It might also include limited additional dune restoration – though it would be primarily focused around areas of beach access and dune damage.

Advantages

- Blowouts would be restored to create healthy dune systems.
- There would be increased native biodiversity.
- Enhanced walking tracks in the coastal forest.

Disadvantage

• It would restrict vehicle use on the dunes.

Large-scale dune restoration

This option would involve progressive restoration of native dune vegetation over a large area including restoration of a natively-vegetated frontal dune and a coastal forest sequence in the backdune areas. It might also include some restoration of the freshwater wetland if suitable agreements could be reached with the various private property owners.

Advantages

- Restoration of a natively-vegetated frontal dune.
- Extensive back dune restoration (including shrub and forest restoration).
- Improved management of beach and back beach access.
- Increased biodiversity.
- Improved ecosystem services.
- Potential for improved health of the dune wetland.
- It could be progressively implemented over many years and even decades.

Disadvantages

- Higher cost over time but it could be implemented over many years (or even decades) to make it practical.
- This option is intergenerational so it might be harder to keep it going.