



## Investigation Report - Teacher's Notes

### Investigation Report

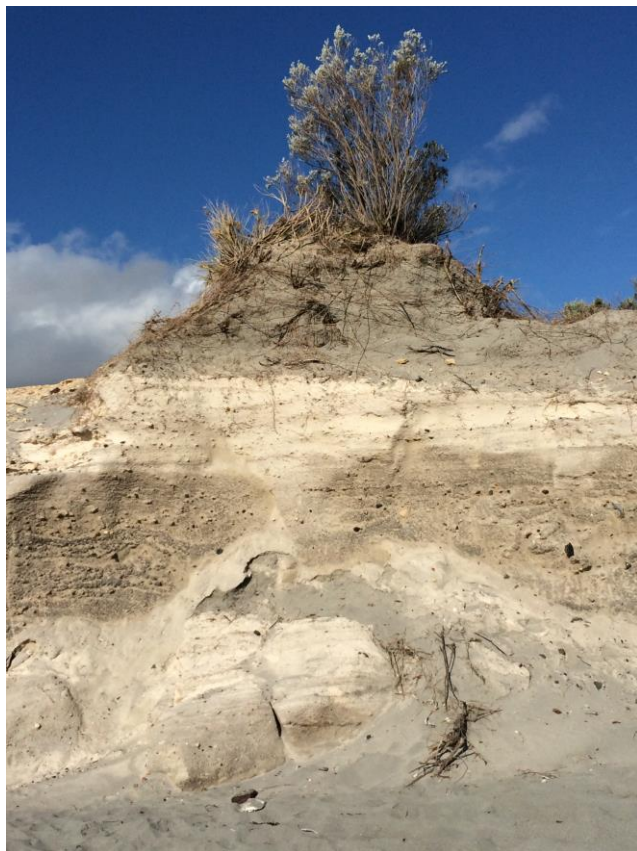
*A simple field report of an area that has changed because of natural processes.*

A simple field report explains where and what has happened and what can be done to try and repair any damage. Scientists take rough field notes and sketches then return to the office to make a good copy.

This picture is of a dune near the South Fremantle beach, which has been eroded by wave action during a spring storm. It was taken on the 3<sup>rd</sup> of October 2016. The "cliff" face is 2.4m high.

Topsoil and sand have been blown away by wind and plants have been destroyed and swept out to sea by storm waves. Plant roots have been exposed by cliff collapse shown at the bottom of the picture.

This area needs to be fenced off then covered with tree branches to stop further erosion by wind and to keep people from damaging it. It will later be planted with deep-rooted grasses to hold the remaining soil together.





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Groynes have been built out into the sea to try and reduce seawater current strength and minimise further erosion during storms.

### Suggestions for field study

- A local gully, riverbank, beach or roadside eroded by rainwater,
- Natural tree-fall causing damage and exposing soil
- A landslide due to storm water
- Topsoil loss after high winds or a drought
- Fire damage
- Flooding

### Field report on **The name of the area**

Name of investigator **Both first and last names please.** (1 mark)

Date of investigation (1 mark)

Where is the area you are investigating? **E.g. Bush land at the corner of Grace Street and Main Street in White Gum Valley** (2 marks)

What things have changed? **E.g. a quarter of the grassy area has been washed away leaving a gully 4m long and 20cm deep. Roots of wattle bushes have been exposed and they are now dying. The washed-away soil has covered and killed button grass downslope.** (3 marks)

What natural processes caused the changes? **E.g. Heavy rain last week was channeled downhill and cut into the soil. It has eroded the surface and washed soil away. Only some larger stones have been left behind.** (2 marks)

How can we measure the changes? **E.g. rulers can measure the height and width of gullies. Tape measures can be used for larger areas.** (1 mark)





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Sketch or photograph of the changed area. (Label the important parts clearly). (5 Marks)

What can be done to stop these changes happening again? **Build walls, change the position of the path, fill in the hole, plant more vegetation, put old branches on the top of the dunes to reduce erosion and deter animals tracking across them.** (2 marks)

Field notes attached (3 marks)

Total marks /20

