



Tweed River Entrance Sand Bypassing Project (TRESBP)

www.tweedsandbypass.nsw.gov.au

Worksheet 4: perceptions and management TRESBP research report

Worksheet 4, of 4

Required for this worksheet:

- *TRESBP Coastal Management Case Study — parts 2 to 5*, (PDFs), available online
- Internet access and TRESBP fact sheets or website

Perceptions

1. Identify the main points and perspectives of the four extracts in *TRESBP Coastal Management Case Study — part 2, Perceptions*.
2. Locate online one of the source documents extracted. (Or for the unpublished article, locate the research institution.) What additional viewpoints or perspectives on coastal issues and coastal management can you find?
3. You are an active writer of newspaper 'letters to the editor'. Write expressing your views about the TRESBP in relation to your life and activities in the area. Base your letter on:
 - a. one of the perspectives you identified in question one above
 - b. a personal evaluation and viewpoint of TRESBP as a coastal management system.



Responses

1. Outline some coastal issues and government responses at southern Gold Coast beaches and the Tweed River entrance. Explain why governments responded with the sand bypassing system.
2. Find out about the Delft Report. When and why was it undertaken? What was recommended?
3. Explain how the community has responded to coastal issues in this area.
4. Read the extract from 'Impact of coastal erosion in Australia' by Professor Andrew Short on *TRESBP Coastal Management Case Study — part 3, Responses*. Our responses to environmental sand flow issues on the Gold Coast have been effective but also very expensive. List what you consider the three major benefits to the area and nearby areas because of this investment.



Management and decision-making

1. Draw a diagram to illustrate TRESBP governance and management structures.
2. Describe the processes available for stakeholders' views to be considered.
3. TRESBP operations and responsibilities are guided by laws.
 - a. When and in which Australian states were these laws passed?
 - b. Write down four points about these laws.
 - c. Find the legislation online and make some brief observations on how legislation is presented.

Sustainable approaches and the community

1. Outline activities or arrangements that support sustainable management, sustainability, the community or fairness.
2. Explore TRESBP's video monitoring and follow the link to the University of New South Wales Water Research Laboratory.
 - a. Describe the system being used and how it come about.
 - b. Investigate this system— what types of images result and how can they be used?
3. Examine the Tweed River entrance seabed map on *TRESBP Coastal Management Case Study — part 5, Sustainable approaches and the community*. Describe the river entrance—for example, depth variations, and a likely navigation channel and hazard—by using distance, direction, landmarks etc. in your description.



Research report: for fieldwork or online research

Is sand bypassing an effective coastal management measure at the Tweed River entrance and the southern Gold Coast?

Prepare a research report on the above. Use the following geographic inquiry model to structure your research; you might also find the model helpful to structure your report.

- What is sand bypassing and where does it occur on the southern Gold Coast?
- How does Tweed sand bypassing work?
- Why is the system needed?
- What are the environmental, social and economic impacts of the sand bypassing system on the southern Gold Coast?
- What is being done and what should be done to manage sand issues on the southern Gold Coast?

Conclude your report by recommending future actions for TRESBP.

In your answer include:

- a map and images of the area of investigation
- a description of the physical features of the area of investigation
- an outline of the issues at the area of investigation
- a summary of the sand bypassing system
- some research and evaluation of perceptions and responses of different groups; management and decision-making approaches; and implications for sustainability and the community
- other relevant aspects of sand bypassing you might have researched.

In your report use geographical terminology and mapping conventions. Also use relevant secondary data (e.g. tables, graphs, diagrams, pictures), where you can, especially to support issues, research or recommendations. TRESBP Fact Sheets and Case Study sheets, and the TRESBP website will help with research.



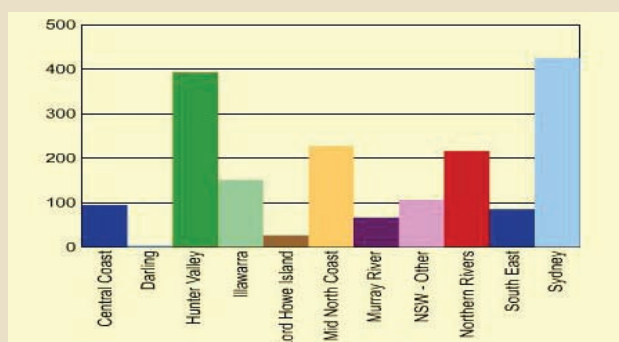
Extension activities

- The historic photo albums on the TRESBP website document more than a century of beach appearance and community use, see www.tweedsandbypass.nsw.gov.au/historic_photographs Find two or three images that contrast or interest you and outline why.
- Research the internationally known 'Superbank' on the southern Gold Coast. What is it and how did it come about?
- Why do you think shipping was critical to the Tweed region in the past? Why is navigation and navigation safety still important?
- a. What can you find out about shipwrecks in the Tweed region?
b. Investigate shipwrecks in Australia—how many, how old, how are they protected, which ones are famous? Expand with details for one particular region.

- Find out about the little tern's appearance, status, habitat, behaviour and threats to this bird. Why is sustainable management of the area where TRESBP jetty is located important for this bird?



Numbers of Ships Wrecked in New South Wales by Region



Graph courtesy of Heritage Branch, NSW Office of Environment & Heritage.

- The Gold Coast—with almost 60 kilometres of beachfront—has Australia's largest surf lifesaving service. Discuss the development and importance of surf lifesaving at the Gold Coast or a coastal location of your choice.
- Investigate a coastal volunteer group such as Coastcare, BeachCare, Dune Care, Landcare, Volunteer Marine Rescue Association, Volunteer Surf Life Saving, Surfriider Foundation Australia or others. What do they do? In which ways do the coast and communities benefit through their presence?
- Significant coastal regeneration has occurred in Australia since the 1970s. Outline some of the actions people can take to minimise coastal impacts and why these are important.