



## RESOURCE: TWEED SAND BYPASSING SCHOOLS PACKAGE

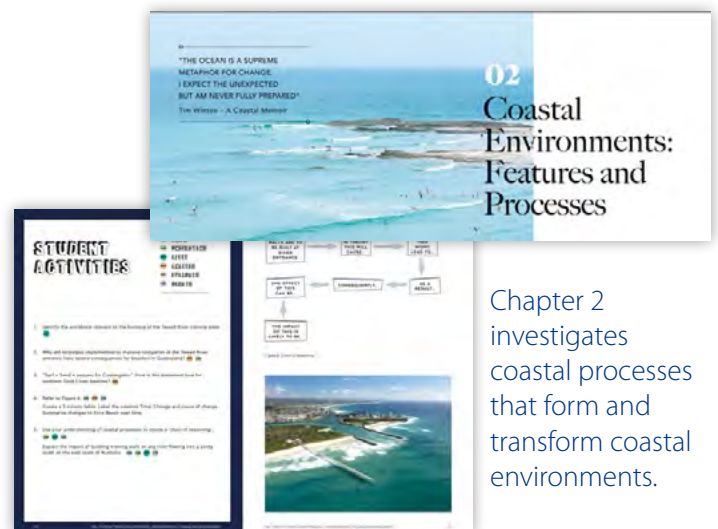
Lorraine Chaffer, Geography Education Consultant

Tweed Sand Bypassing (TSB) is a coastal management case study used in many NSW schools studying coastal environments.

The TSB Schools Information Package was developed during 2019 and 2020 by Tweed Sand Bypassing in collaboration with the Geography Teachers Association of NSW & ACT to provide a complete study for the Stage 5 topic **Environmental Change and Management**. Geographical inquiry and the development of 21st-century skills such as collaboration and creativity are the focus of student activities integrated throughout the package.

Features of the package include:

- **Downloadable chapters** for content areas including coastal environmental processes, environmental change and management, Tweed Sand Bypassing case study, a comparative study from Waikiki Beach in Hawaii as well as other illustrative examples. Key learning is identified for each chapter.
- **Hyperlinks** to videos and other websites such as BOM.
- High quality **stimulus material** such as the change over time images on page 110.
- **Student activities** integrated throughout (coded to levels of thinking)
- **A stimulus booklet** with student activities
- A suggested, transferable **fieldwork activity**, adaptable to other locations
- A suggested **outcomes-based assessment task with marking guidelines**.



Chapter 2 investigates coastal processes that form and transform coastal environments.



Source: <https://www.tweedsandbypass.nsw.gov.au/operations/sand-delivery.html>

# WEB RESOURCE: TWEED SAND BYPASSING

The following tables from the package illustrate coastal management strategies (page 60) used in Australia and globally by coastal managers and coastal monitoring tools (page 128) used by Tweed Sand Bypassing.

Table 1. Coastal protection management strategies in NSW and Queensland.

STRATEGY	DESCRIPTION	ADVANTAGES	DISADVANTAGES
<b>1. TRAINING WALLS</b>  Tweed River Entrance training walls. Source: Tweed Sand Bypassing	Walls located at river mouths/estuaries to prevent natural movement of the entrance. Training walls are often accompanied by periodic dredging (e.g. coastal rivers along the NSW and south-east Queensland coast).	The coastal inlet or river maintains one position along the coastline. A trained river entrance can improve navigation and safety for boats, which enhances the social and economic values of the coast.	Can contribute to beach erosion (downdrift) by interrupting longshore drift. Sand can accumulate on one side of a wall, growing beyond the wall and then forming bars across the river entrance. Dredging is often required to maintain navigational channels. Can cause a change to the tidal prism of the estuary. This can have detrimental effects on coastal processes and the estuary ecology.
<b>2. SAND TRANSFER/SAND BYPASSING</b>  Tweed Sand Bypassing Sand Jetty. Source: Tweed Sand Bypassing	Sand is pumped from one location to another through mechanical means (e.g. Tweed Sand Bypassing, Noosa Beach Sand Shifter, Queensland).	Restores sand. Can be used to bypass training walls and structures that may otherwise impede natural sand movement.	The infrastructure is expensive to build and operate. Requires ongoing monitoring and the ability to adapt to changing conditions such as storm erosion.
<b>3. BEACH NOURISHMENT</b>  Dredge placement at the Gold Coast. Source: City of Gold Coast	Sand is added to a beach through mechanical means. Nourishment can be onshore (e.g. delivery of sand by truck to a beach) or offshore (e.g. dredge placement).	Restores and widens a beach. Enhances amenity. Fast and effective short-term solution to erosion.	Over time it's likely that nourished sand will be lost. Usually needs to be repeated after a period of time. It can be expensive to continually replenish eroded sand.
<b>4. GROYNES</b>  Kirra Point Groynes. Source: Tweed Sand Bypassing	Shore perpendicular structure to the coast, aimed at trapping sand that is moving along the beach. Typically constructed using rocks or geotextile containers.	Traps sand and stabilises the beach updrift. Can increase surf amenity (e.g. Kirra beach).	Typically causes erosion on the downdrift side of the structure. Expensive as it requires an engineered solution. Can be visually unattractive. Can decrease surf amenity.






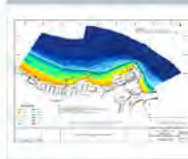




STRATEGY	DESCRIPTION	ADVANTAGES	DISADVANTAGES
<b>5. SEAWALLS</b>  Sea wall construction at Palm Beach, Queensland. Source: City of Gold Coast	A shore parallel structure used to provide protection to beach and waterfront land from erosion.	Effective in protecting land and property from erosion. Can utilise a number of different designs and materials. Can be attractive and enhance beach amenity and access (e.g. Manly Beach, NSW).	Can cause increased erosion in front and at the ends of the seawall. Expensive as it requires an engineered solution. Maintenance required over the lifetime of the seawall. Can be visually unattractive.
<b>6. BEACH SCRAPING</b>  Beach scraping at Woolli, NSW. Source: NSW Government	Sand is moved from the lower beach onto the upper beach to increase dune sand volumes. Typically used with dune catch fencing to assist in stabilising dunes.	Low-cost solution. Builds beach and dune sand volumes to provide protection from coastal erosion.	Revegetation strategy required following scraping to assist with dune stabilisation. Over time it's likely that scraped sand will be lost. Can produce an artificially high dune which is easily eroded during a storm event.
<b>7. OFFSHORE BREAKWATER OR ARTIFICIAL REEF</b>  Narrowneck artificial reef, offshore of Surfers Paradise. Source: City of Gold Coast	A rock or geotextile bag structure built parallel to the shore.	Reduces erosion by making waves break further offshore and reducing wave energy at the shore. May increase surf amenity. Low maintenance. Supports marine ecosystems.	Expensive to create. Not always effective.
<b>8. MANAGED RETREAT</b>  Clarkes Beach Caravan Park managed retreat, Byron Bay, NSW. Source: NSW Government	Development relocated from vulnerable coastal zones. No new development.	Long-term solution. Reduces future threats to property. Restores natural processes.	Expensive. Community resentment.
<b>9. BUYBACK</b>  Colleray Beach, NSW. Buyback at this coastal erosion hot spot would be very expensive. Source: UNSW WRL	Governments purchase vulnerable properties, remove structures and ban further development.	Minimises property losses in vulnerable areas.	Very expensive. Community resentment.

Table 1: Geographical tools and TSB monitoring

PRIMARY DATA SOURCES	GATHERING PRIMARY DATA: FIELDWORK	PURPOSE
	1. Vertical aerial photographs of the project area (Fingal-Currumbin) are taken from an aeroplane at a fixed height. This has historically occurred in autumn and spring.	Aerial photographs are georeferenced and used in GIS to carry out spatial analysis. Changes to beaches, offshore sand banks and reef exposure can be measured and analysed.
	2. Oblique photographs taken from helicopters every 3 months.	Series of photographs are used to: <ul style="list-style-type: none"> <li>make visual comparisons of change over time</li> <li>identify and annotate potential causes of change such as storms and seasonal wave conditions.</li> </ul>
	3. Ground-level beach photographs taken <ul style="list-style-type: none"> <li>from 5 locations at the main project area beaches every few months.</li> <li>by community members at the Gold Coast CoastSnap station at Kirra Hill (City of Gold Coast)</li> </ul>	
	4. ARCUS camera network – a series of cameras on tall buildings in Coolangatta take photos every minute of Kirra, Coolangatta, Greenmount and Rainbow Bay.	Images are merged using computer programs and the location of the shoreline for each beach is determined. The images are used to make time-lapse videos which are used to examine and communicate beach change over time.
	5. Wave monitoring using a wave rider buoy in the ocean off Fingal to record wave height, period and direction.	Computer models use wave data to predict how much sand is moving along Lettita Spit by longshore drift. Wave data is also used to: <ul style="list-style-type: none"> <li>interpret changes shown on hydrographic surveys and photographs</li> <li>create wave roses.</li> </ul>

Table 1: Geographical tools and TSB monitoring

PRIMARY DATA SOURCES	GATHERING PRIMARY DATA: FIELDWORK	PURPOSE
	6. Hydrographic surveys collect bathymetry – the depth of the ocean floor – using sonar from a boat or jet-ski.	Computer programs analyse the data to determine the change, over different time scales – by comparing surveys and calculating differences. Maps and diagrams are also produced to visualise changes in the sea floor.
	7. Boat crossing data is collected by Marine Rescue at Point Danger.	The crossing data is graphed over different time scales to determine patterns and trends.
	8. Dredge logs are used to record exactly where TSB sand is being collected and placed.	The data is collated into tables and graphed.
	9. Surf quality – visual records. Qualitative data from observations, surfing photos and videos obtained by or from: <ul style="list-style-type: none"> <li>the TSB Project team</li> <li>sites such as Coastal Watch</li> <li>the TSB Advisory Committee</li> <li>the surfing community</li> </ul>	Wave pael analysis is used to determine surf quality at Duranbah Beach.
	10. Community consultation is the primary mechanism of gaining opinion and sentiment about Tweed Sand Bypassing. It includes: <ul style="list-style-type: none"> <li>quantitative data collected through online survey</li> <li>qualitative data collected through questionnaires, interviews and ongoing discussions (particularly with the Advisory Committee).</li> </ul>	Feedback from community consultation is used to: <ul style="list-style-type: none"> <li>incorporate local coastal processes knowledge when planning for sand delivery</li> <li>figure out what the information needs of the community are</li> <li>understand how the community feels about Tweed Sand Bypassing and what improvements can be made (adaptive management).</li> </ul>

# WEB RESOURCE: TWEED SAND BYPASSING

The downloadable **stimulus booklet** contains a variety of geographical tools including maps, graphs, tables and statistics, diagrams and photographs. All of the stimulus material relates to the Tweed Sand Bypassing Case Study. A thorough set of **student activities** require students to demonstrate their knowledge, understanding and geographical skills.

Waikiki Beach is an interesting **Comparative Study** for Environmental change and management challenging students to decide whether a sand bypassing system would work as a coastal management strategy in Hawaii.

**Tweed Sand Bypassing LIVE WAVE BUOY**

View identified wave buoy data plots on QLD Government website here

**WEATHER CONDITIONS**

27°C  
7km/h  
100% humidity

**Map of the Tweed River**

**Topographic Map**

**Map of the Tweed River**

**05 Global Comparative Study**

**WAIKIKI BEACH, OAHU, HAWAII, USA**

**KEY INQUIRY QUESTION**

IF AN AT-RISK REGION IN THE PROBLEM OF WAIKIKI BEACH, IS A SAND BYPASSING SYSTEM A POTENTIAL SOLUTION?

**Suggested fieldwork** activities and a **summative assessment** are based on the Tweed Sand Bypassing Case Study.

**TWEED RIVER ENTRANCE AS AT 18 SEPTEMBER 2018**

**Map of the Tweed River**

**Map of the Tweed River**

**Map of the Tweed River**

**COASTAL FIELDWORK**

**STOP 1: LAHINA SPIT/TERR JETTY**

**STOP 2: POINT DANGER**

**STOP 3: POINT DANGER**

**STOP 4: TERRA INCORPORA**

**STOP 5: POINT DANGER**

**STOP 6: TERRA INCORPORA**

**STOP 7: TERRA INCORPORA**

**STOP 8: TERRA INCORPORA**

**STOP 9: TERRA INCORPORA**

**STOP 10: TERRA INCORPORA**

**STOP 11: TERRA INCORPORA**

**STOP 12: TERRA INCORPORA**

**STOP 13: TERRA INCORPORA**

**STOP 14: TERRA INCORPORA**

**STOP 15: TERRA INCORPORA**

**STOP 16: TERRA INCORPORA**

**STOP 17: TERRA INCORPORA**

**STOP 18: TERRA INCORPORA**

**STOP 19: TERRA INCORPORA**

**STOP 20: TERRA INCORPORA**

**STOP 21: TERRA INCORPORA**

**STOP 22: TERRA INCORPORA**

**STOP 23: TERRA INCORPORA**

**STOP 24: TERRA INCORPORA**

**STOP 25: TERRA INCORPORA**

**STOP 26: TERRA INCORPORA**

**STOP 27: TERRA INCORPORA**

**STOP 28: TERRA INCORPORA**

**STOP 29: TERRA INCORPORA**

**STOP 30: TERRA INCORPORA**

**STOP 31: TERRA INCORPORA**

**STOP 32: TERRA INCORPORA**

**STOP 33: TERRA INCORPORA**

**STOP 34: TERRA INCORPORA**

**STOP 35: TERRA INCORPORA**

**STOP 36: TERRA INCORPORA**

**STOP 37: TERRA INCORPORA**

**STOP 38: TERRA INCORPORA**

**STOP 39: TERRA INCORPORA**

**STOP 40: TERRA INCORPORA**

**STOP 41: TERRA INCORPORA**

**STOP 42: TERRA INCORPORA**

**STOP 43: TERRA INCORPORA**

**STOP 44: TERRA INCORPORA**

**STOP 45: TERRA INCORPORA**

**STOP 46: TERRA INCORPORA**

**STOP 47: TERRA INCORPORA**

**STOP 48: TERRA INCORPORA**

**STOP 49: TERRA INCORPORA**

**STOP 50: TERRA INCORPORA**

**STOP 51: TERRA INCORPORA**

**STOP 52: TERRA INCORPORA**

**STOP 53: TERRA INCORPORA**

**STOP 54: TERRA INCORPORA**

**STOP 55: TERRA INCORPORA**

**STOP 56: TERRA INCORPORA**

**STOP 57: TERRA INCORPORA**

**STOP 58: TERRA INCORPORA**

**STOP 59: TERRA INCORPORA**

**STOP 60: TERRA INCORPORA**

**STOP 61: TERRA INCORPORA**

**STOP 62: TERRA INCORPORA**

**STOP 63: TERRA INCORPORA**

**STOP 64: TERRA INCORPORA**

**STOP 65: TERRA INCORPORA**

**STOP 66: TERRA INCORPORA**

**STOP 67: TERRA INCORPORA**

**STOP 68: TERRA INCORPORA**

**STOP 69: TERRA INCORPORA**

**STOP 70: TERRA INCORPORA**

**STOP 71: TERRA INCORPORA**

**STOP 72: TERRA INCORPORA**

**STOP 73: TERRA INCORPORA**

**STOP 74: TERRA INCORPORA**

**STOP 75: TERRA INCORPORA**

**STOP 76: TERRA INCORPORA**

**STOP 77: TERRA INCORPORA**

**STOP 78: TERRA INCORPORA**

**STOP 79: TERRA INCORPORA**

**STOP 80: TERRA INCORPORA**

**STOP 81: TERRA INCORPORA**

**STOP 82: TERRA INCORPORA**

**STOP 83: TERRA INCORPORA**

**STOP 84: TERRA INCORPORA**

**STOP 85: TERRA INCORPORA**

**STOP 86: TERRA INCORPORA**

**STOP 87: TERRA INCORPORA**

**STOP 88: TERRA INCORPORA**

**STOP 89: TERRA INCORPORA**

**STOP 90: TERRA INCORPORA**

**STOP 91: TERRA INCORPORA**

**STOP 92: TERRA INCORPORA**

**STOP 93: TERRA INCORPORA**

**STOP 94: TERRA INCORPORA**

**STOP 95: TERRA INCORPORA**

**STOP 96: TERRA INCORPORA**

**STOP 97: TERRA INCORPORA**

**STOP 98: TERRA INCORPORA**

**STOP 99: TERRA INCORPORA**

**STOP 100: TERRA INCORPORA**

**STUDENT ACTIVITIES**

**TWEED GOLD COAST LOCATION AND ENVIRONMENT**

**Refer to Source 1: Topographic Map**

**Refer to Source 2: Topographic Map**

**Refer to Source 3: Topographic Map**

**Refer to Source 4: Topographic Map**

**Refer to Source 5: Topographic Map**

**Refer to Source 6: Topographic Map**

**Refer to Source 7: Topographic Map**

**Refer to Source 8: Topographic Map**

**Refer to Source 9: Topographic Map**

**Refer to Source 10: Topographic Map**

**Refer to Source 11: Topographic Map**

**Refer to Source 12: Topographic Map**

**Refer to Source 13: Topographic Map**

**Refer to Source 14: Topographic Map**

**Refer to Source 15: Topographic Map**

**Refer to Source 16: Topographic Map**

**Refer to Source 17: Topographic Map**

**Refer to Source 18: Topographic Map**

**Refer to Source 19: Topographic Map**

**Refer to Source 20: Topographic Map**

**Refer to Source 21: Topographic Map**

**Refer to Source 22: Topographic Map**

**Refer to Source 23: Topographic Map**

**Refer to Source 24: Topographic Map**

**Refer to Source 25: Topographic Map**

**Refer to Source 26: Topographic Map**

**Refer to Source 27: Topographic Map**

**Refer to Source 28: Topographic Map**

**Refer to Source 29: Topographic Map**

**Refer to Source 30: Topographic Map**

**Refer to Source 31: Topographic Map**

**Refer to Source 32: Topographic Map**

**Refer to Source 33: Topographic Map**

**Refer to Source 34: Topographic Map**

**Refer to Source 35: Topographic Map**

**Refer to Source 36: Topographic Map**

**Refer to Source 37: Topographic Map**

**Refer to Source 38: Topographic Map**

**Refer to Source 39: Topographic Map**

**Refer to Source 40: Topographic Map**

**Refer to Source 41: Topographic Map**

**Refer to Source 42: Topographic Map**

**Refer to Source 43: Topographic Map**

**Refer to Source 44: Topographic Map**

**Refer to Source 45: Topographic Map**

**Refer to Source 46: Topographic Map**

**Refer to Source 47: Topographic Map**

**Refer to Source 48: Topographic Map**

**Refer to Source 49: Topographic Map**

**Refer to Source 50: Topographic Map**

**Refer to Source 51: Topographic Map**

**Refer to Source 52: Topographic Map**

**Refer to Source 53: Topographic Map**

**Refer to Source 54: Topographic Map**

**Refer to Source 55: Topographic Map**

**Refer to Source 56: Topographic Map**

**Refer to Source 57: Topographic Map**

**Refer to Source 58: Topographic Map**

**Refer to Source 59: Topographic Map**

**Refer to Source 60: Topographic Map**

**Refer to Source 61: Topographic Map**

**Refer to Source 62: Topographic Map**

**Refer to Source 63: Topographic Map**

**Refer to Source 64: Topographic Map**

**Refer to Source 65: Topographic Map**

**Refer to Source 66: Topographic Map**

**Refer to Source 67: Topographic Map**

**Refer to Source 68: Topographic Map**

**Refer to Source 69: Topographic Map**

**Refer to Source 70: Topographic Map**

**Refer to Source 71: Topographic Map**

**Refer to Source 72: Topographic Map**

**Refer to Source 73: Topographic Map**

**Refer to Source 74: Topographic Map**

**Refer to Source 75: Topographic Map**

**Refer to Source 76: Topographic Map**

**Refer to Source 77: Topographic Map**

**Refer to Source 78: Topographic Map**

**Refer to Source 79: Topographic Map**

**Refer to Source 80: Topographic Map**

**Refer to Source 81: Topographic Map**

**Refer to Source 82: Topographic Map**

**Refer to Source 83: Topographic Map**

**Refer to Source 84: Topographic Map**

**Refer to Source 85: Topographic Map**

**Refer to Source 86: Topographic Map**

**Refer to Source 87: Topographic Map**

**Refer to Source 88: Topographic Map**

**Refer to Source 89: Topographic Map**

**Refer to Source 90: Topographic Map**

**Refer to Source 91: Topographic Map**

**Refer to Source 92: Topographic Map**

**Refer to Source 93: Topographic Map**

**Refer to Source 94: Topographic Map**

**Refer to Source 95: Topographic Map**

**Refer to Source 96: Topographic Map**

**Refer to Source 97: Topographic Map**

**Refer to Source 98: Topographic Map**

**Refer to Source 99: Topographic Map**

**Refer to Source 100: Topographic Map**

**06 Environmental Change and Management**

**A CAFE CONVERSATION**

**OUTCOMES**

**EXPLAINS PROCESSES AND INFLUENCES THAT FORM AND TRANSFORM PLACES AND ENVIRONMENTS**

**ANALYSES THE EFFECT OF INTERACTIONS AND CONNECTIONS BETWEEN PEOPLE, PLACES AND ENVIRONMENTS**

**ASSESSES MANAGEMENT STRATEGIES FOR PLACES AND ENVIRONMENTS FOR THEIR SUSTAINABILITY**

**ACQUIRES AND PROCESSSES GEOGRAPHICAL INFORMATION BY SELECTING AND USING APPROPRIATE AND RELEVANT GEOGRAPHICAL TOOLS FOR INQUIRY**

**COMMUNICATES GEOGRAPHICAL INFORMATION TO A RANGE OF AUDIENCES USING A VARIETY OF STRATEGIES**



# WEBSITE RESOURCE: TWEED SAND BYPASSING

## THE TASK

Using the TSB Case study and fieldwork data (if relevant) prepare a 3-minute "café conversation" for a podcast segment on environmental change and management on the Tweed/Gold Coast with specific reference to the TSB Project.

Working in pairs your focus is on answering the following key inquiry question...

**Inquiry Question**  
Should Tweed Sand Bypassing be funded in the long term? **OR** **NO**

In your conversation consider:

- the causes of, and responses to, environmental change on the Tweed/Gold Coast
- the environmental, social and economic benefits and consequences of TSB
- possible futures without TSB

You will record the conversation and submit for marking on \_\_\_\_\_ (insert date)

Marking guidelines provided on the next page

**For Queensland Teachers:** Use the QCAA Standard Exemplars/ASA tool when making judgements about student responses using a five-point scale.

## A CAFÉ CONVERSATION PODCAST MARKING GUIDELINES

<b>A</b> 17-20	<ul style="list-style-type: none"> <li>Shows a detailed understanding of TSB</li> <li>Provides a clear and detailed understanding of the environmental, social and economic benefits and consequences of TSB</li> <li>Effectively integrates appropriate and accurate evidence and examples (including feedback data)</li> <li>Effectively uses appropriate geographical terminology</li> <li>Both students contribute equally to the conversation</li> <li>Length of conversation is provided</li> </ul>
<b>B</b> 13-16	<ul style="list-style-type: none"> <li>Shows an understanding of aspects of TSB</li> <li>Provides a detailed understanding of benefits and consequences of TSB</li> <li>Integrates appropriate and accurate evidence and examples (including feedback data)</li> <li>Uses some geographical terminology</li> <li>Both students may or may not contribute equally to the conversation</li> <li>Length of conversation is provided</li> </ul>
<b>C</b> 9-12	<ul style="list-style-type: none"> <li>Shows a limited understanding of aspects TSB</li> <li>Provides an understanding of some benefits or consequences of TSB</li> <li>May refer to examples (may refer to feedback)</li> <li>Uses some geographical terminology</li> <li>Both students may or may not contribute equally to the conversation</li> <li>Length of conversation is provided</li> </ul>
<b>D</b> 5-8	<ul style="list-style-type: none"> <li>Provides general information on some aspects of coastal change and/or management OR TSB</li> <li>Uses general terms and phrases to communicate geographical information with little or no use of feedback examples</li> <li>Both students may or may not contribute equally to the conversation</li> <li>Length of conversation is provided</li> </ul>
<b>NOT ASSESSABLE</b> 0	Non-submission/non-attempt

Student activity worksheets can be used to guide geographical inquiry or test knowledge and understanding at the completion of the topic.

## WORKSHEET ACTIVITY 2

**EVALUATING EFFECTIVENESS: STRATEGIES TO ADDRESS MANAGEMENT ISSUES ON SANDY COASTS**

Fill the gauge to represent the level of effectiveness of each management strategy at a stated location.

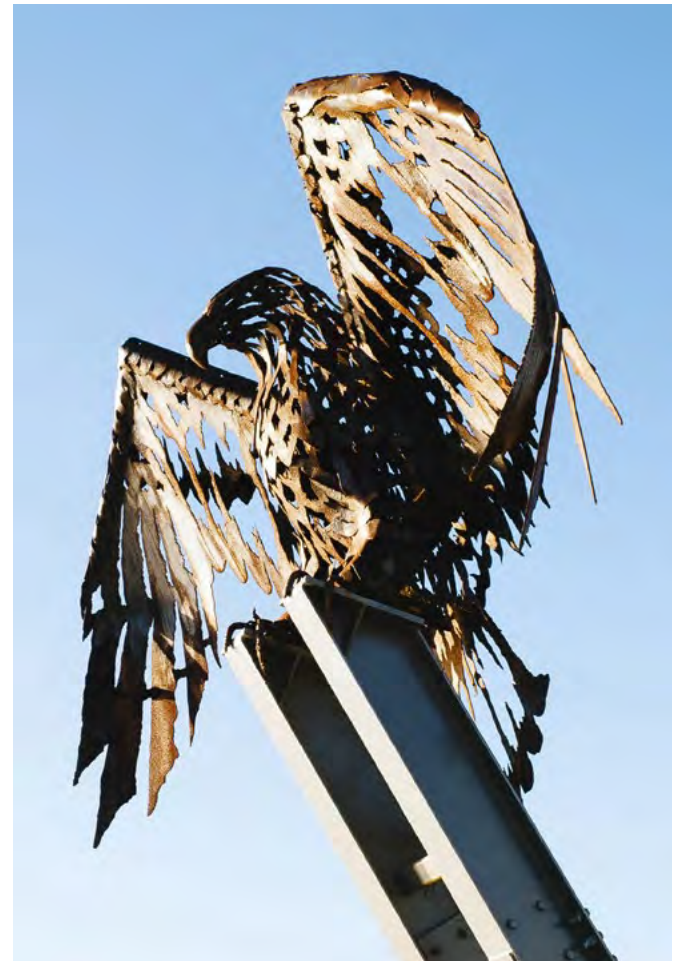
<p><b>Beach Nourishment</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>	<p><b>Groynes</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>	<p><b>Training Walls</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>
<p><b>Rock Walls</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>	<p><b>Sand Bypass System</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>	<p><b>Artificial Reef</b></p> <p>Aim of the strategy: A location</p> <p>Effectiveness level (scale): High Medium Low</p>

**NOTE:** You are evaluating (making a judgment) about whether the selected strategy has been successful (achieving its aim) at a specific location (this is the criteria).

## WORKSHEET ACTIVITY 5

**COASTAL ENVIRONMENTAL CHANGE and MANAGEMENT: GLOBAL SCALE**

Complete the mind map about environmental change in coastal environments at a global scale. Work clockwise from Coastal Change. Add more circles where needed.



All images from Tweed Sand Bypassing Schools Package: <https://www.tweedsandbypass.nsw.gov.au/school-students/school-information-package.html>

## BONUS VIDEO ACCESS FOR GTA BULLETIN USERS

The following link will take you to a presentation from the 2020 Digital Professional Learning Package made available to schools during Term 4. Lorraine Chaffer and Catherine Kerr discuss development of the package and most of the key features. <https://vimeo.com/469682666/b8897b0a44>

Password: **2021specialBULLETINaccess**