

## Field Study: Coastal Dynamics and Management

### Activity Outline

#### **Year Level 7-12**

Waves, wind and currents shape our beaches every day and is one of the most rapidly changing physical environments on Earth. Many people utilize the coast for a wide array of purposes which has an effect on this environment. In this activity students will investigate the strong links between society and coastal change and gain a better understanding of this environment and what causes it to change its state. Students will gain this understanding through practical and theoretical experience.

#### **Key Understandings**

- The impact of humans on local aquatic and terrestrial environments will differ with locality.
- The Activities of humans can cause systematic habitat alteration.
- The distribution, diversity and numbers of plants and animals found in ecosystems are determined by biotic and abiotic factors.
- Each local aquatic or terrestrial ecosystem is unique.

#### **Key terms**

erosion, waves, wind, currents, habitat, community, diversity, ecology, light, rock cycle, sedimentary rock, igneous rock, metamorphic rock, management, ecosystem, environment, interaction, conservation.

#### **Outcomes**

This activity is designed to incorporate outcomes from the following NSW Board of Studies Syllabus’;

#### **Geography Years 7-10**

Outcomes: 4.1, 4.2, 4.3, 4.6, 4.8, 4.10, 5.1, 5.2, 5.3, 5.6, 5.8, 5.10

#### **Science Year 7-10**

Outcomes: 4.10, 4.13, 4.14, 4.15, 4.17, 4.19, 5.10, 5.13, 5.14, 5.17, 5.19

Life skills: LS.10, LS15, LS.16

#### **Earth and Environmental Science Stage 6**

Objectives and Outcomes: P10, P11, P12, P13, P14, P15, P16, H10, H11, H12, H13, H14, H15, H16

#### **Biology Stage 6**

Objectives and Outcomes: P7, P8, P11, P12, P13, P14, P15, P16, H7, H8, H11, H12, H13, H14, H15, H16

**Key competencies**

- Working scientifically
- Collecting, analysing and organising information
- Communicating ideas and information
- Using technology
- Working with others and in teams