



Students in Bequia, St. Vincent and the Grenadines, undertaking a Sandwatch project to clear a coastal drain and reduce pollution at the beach and in marine waters

Chapter 14 Taking action

The fourth step of the Sandwatch methodology (**M**onitoring, **A**nalysing, **S**haring, **T**aking action) consists of designing, implementing and evaluating a beach-related project to fulfil one or all of the following criteria:

- addresses a particular beach-related issue;
- enhances the beach; and
- promotes climate change adaptation.

This fourth step is what distinguishes Sandwatch from other environmental monitoring activities, and makes it an example of education for sustainable development (see also discussion in Chapter 2). The Sandwatch “Taking action” component is based on science and consultation with others.

Designing a Sandwatch project→ Based on the results and analysis of the monitoring activities and the feedback received when sharing your findings with other persons and groups, brainstorm ideas for beach related projects. This might be a good time to return to the sketch map of the beach that you prepared when you were starting Sandwatch.

- List the ideas received, and try and keep each suggestion simple so that it focuses on just one activity;
- discuss each idea with the group and identify how the suggestions fulfil one or all of the three criteria listed above;
- prepare a shortlist with just two or three suggestions that can be implemented by your group;
- make a selection.

Examples of Sandwatch projects

- Tree planting behind the beach.
- Planting and conserving sand dunes.
- Beach beautification activities.
- Beach and underwater clean-ups.
- Promoting recycling at the beach.
- Placing informational signs at the beach
- Preparation and distribution of educational brochures and videos to specific target groups.
- Murals, dramatic presentations and exhibitions to create awareness among the general public.
- Influencing tourism developers about the fragility of the beach.
- Relocating endangered species, e.g. iguanas threatened by development.
- Conserving sea turtles, e.g. monitoring nesting activity and protecting nests.

Planning a Sandwatch project→

- Define the project's objective(s): be specific and identify what you hope to achieve at the end of the project;
- list the project's activities and place them in a consecutive and logical order;
- estimate the time frame for project implementation;
- determine if the project requires support or funding from outside the group; if so, identify the nature of the support required and likely sources to approach;
- prepare a simple table (see Figure 28) showing for each activity the time frame, participants and resources required.

Evaluating a Sandwatch project→ Evaluation is a very important step that will help the group determine the effectiveness of the activity.

- Review the project objectives and determine whether they were fulfilled;
- identify the activities that went well;
- identify the activities where improvement is needed;
- write up the results of your project for the Sandwatch website, and your own web page.

Examples of Sandwatch projects from The Bahamas

Over a four-year period, students aged 10-11 years from Hope Town Primary School in Abaco, Bahamas, have implemented a series of Sandwatch projects that have fulfilled the three criteria. First of all they spent several months in measuring various beach characteristics and how they changed over time. They interviewed beach users and recorded their activities: walking, swimming, sunbathing and snorkelling. They observed the different types of boats and found that sport fishing and tourist rental boats were the most common. They measured the width of the beach and observed how it was eroded and virtually disappeared during the 2004 hurricanes. They used a simple kit to measure water quality. After recording and counting the

Action	Time Schedule	Persons Involved	Activities and Resources Needed	Expected Outcome
1. Plan and design the content of the mural	January - February	Class 4 students and teachers for science, art, language, woodwork	a. Visit to beach to assess potential sites	a. Storyboard showing what the mural will display and the message it intends to convey; b. Sketch map and photos of beach showing where the mural will be placed. c. List of materials needed to construct the mural.
2. Consult with land owners, beach managers and other persons in authority to obtain permission to place the mural	March - April	Teachers for class 4 and school principal arrange meetings with: a. Government departments responsible for beaches, planning and environment b. Leaders from communities using the beach	Discuss the project and obtain permission for the mural.	Written permission from relevant authorities to prepare and construct the mural.
3. Prepare and place the mural	May to June	a. Identify funding and sources for materials to construct the mural. b. Prepare the mural itself.	Materials to make the mural and paint.	Hold an official "opening" and related public awareness activity.
4. Sandwatch students assess the impact of the mural	July to August	Class 4 students conduct a questionnaire survey among beach users to determine the impact of the mural, and based on the results design further awareness or follow-up activities.	Research, consultation with local experts	Evaluation of the project and lessons learnt.

Figure 28: Sample Project Action Plan

Project to create awareness about beach health and climate change resilience with a beach mural

different types of beach debris they used their art classes to make decorative items with the discarded material.

After graphing and analysing their data they concluded that one of the main issues was that visiting tourists were damaging a small reef located about 20 m from the beach. They had observed visitors standing on top of the coral reef to adjust their masks, breaking off pieces of coral to take as souvenirs and even spear-fishing close to the beach.

Their first project addressed this particular issue that of unwise user practices destroying a reef. They designed a questionnaire to find out how visitors viewed the reef. After discussing the results of their questionnaire survey with the rest of the school, their parents and a local environment group, they decided to try and educate the tourists by designing a brochure on proper reef etiquette. Copies of the brochure were placed in hotels and nearby rental properties and were very well received by visitors.

SHARE OUR CARE----
BE AWARE

WELCOME TO OUR REEF !
HOPE TOWN SCHOOL WANTS
TO SHARE SOME
INFORMATION WITH YOU -
OUR VISITORS- ABOUT OUR
UNIQUE REEF IN ORDER TO
GIVE YOU AN EXCITING AND
SAFE SNORKELING
EXPERIENCE AND TO
PRESERVE THE REEF FOR
FUTURE GENERATIONS OF
VISITORS AND BAHAMIANS
TO ENJOY.

THE BAHAMAS ENJOYS THE
PRIVILEGE OF HAVING THE
THIRD LONGEST STRETCH
OF BARRIER REEF IN THE
WORLD. HERE IN ABACO,
REEFS FRINGE OUR MILES
OF WHITE SAND BEACHES
FOR YOUR ENJOYMENT.

CORALS ARE LIVING
ORGANISMS WHICH GROW
VERY SLOWLY OVER
THOUSANDS OF YEARS TO
REACH THE STAGE THEY
ARE NOW. IN ORDER TO
ENSURE THAT OUR REEF IS
SUSTAINABLE HERE ARE
SOME HELPFUL TIPS TO
FOLLOW :

1. PLEASE DO NOT STAND
ON OR EVEN TOUCH
THE CORAL ON THE
REEF. SOME FORMS OF
CORAL CAN CAUSE A
SERIOUS IRRITATION.
2. TAKING ANY OBJECT
FROM THE REEF IS
AGAINST ALL
REGULATIONS-PLEASE
TAKE ONLY MEMORIES!
3. THIS REEF IS FOR
VIEWING ONLY--NO
SPEARING PLEASE.IT IS
A VERY SAFE
ENVIRONMENT , THERE
IS NO NEED TO TAKE
SPEARS TO PROTECT
YOURSELF.
4. SNORKELING OVER
THE REEF, YOU MAY BE
ABLE TO VIEW THE
FOLLOWING FISH
SWIMMING AMONG
STAGHORN, BRAIN
AND FIRE CORAL AND
SEA FANS:
YELLOW TAIL,
GROUPE, BERMUDA
CHUB, TRIGGER FISH,
SARGENT MAJORS,
HORSE-EYED
JACKS, PARROT FISH,
CRAWFISH AND AN
OCCASIONAL MORAY
EEL . ENJOY!!!!!!

Tourist brochure produced by students at Hope Town Primary School

There following several severe hurricanes that eroded the beach and dunes. The government scraped sand from the sea bottom to restore the sand dunes. Their second project focused on enhancing the beach and making the dunes more resilient to future storms and hurricanes as they worked with other groups to replant the damaged dunes with sea oats.



Planting the restored sand dunes with sea oats.



Four years later the restored sand dune stabilised with sea oats

As their third project they prepared a short video showing viewers how their activities to protect their beach and nearshore reefs were keeping their beach healthy and thereby more resilient to climate change (visit the Sandwatch youtube channel to view the video, see also Chapter 13).

Final comments

This example from the Bahamas provides a glimpse of Sandwatch in practice, and there are many other examples from countries around the world documented on the Sandwatch website. Sandwatch has the potential to become a worldwide movement for change – taking effective action to care for the beach environment and thereby building its resilience to climate change.

Visit www.sandwatch.org and become a part of the change.