# **Ocean Frontiers Educator's Guide:**

Ocean Frontiers is a unique documentary about conservation, solutions and community. The stories in *Ocean Frontiers* help audiences understand key principles of ecosystem-based management and coastal and marine spatial planning, which are the cornerstones of the National Ocean Policy. These complex concepts come to life and are easy to grasp through the stories and people featured in *Ocean Frontiers*.

The Ocean Frontiers Educators guide is designed to help teachers blend the stories in the documentary into their curriculum and expose students to positive examples of conservation and complementary science concepts. Teachers should view the documentary to be familiar with the stories and science concepts highlighted. Lists of various activities are provided for teachers to consider using in their classrooms. Ocean Frontiers would easily fit into many subject areas; please share with us how you have used this film in your classroom.

"It is widely agreed that education is the most effective means that society possesses for confronting the challenges of the future.

Indeed, education will shape the world of tomorrow."

## **Chapter 2 Florida Keys**

#### **Essential Questions:**

How do we best manage our coastal resources? What is so special about Coral Reefs?

### Video Summary: An Ocean Blueprint for Florida Keys

The coral reefs of the Florida Keys are America's most popular marine destination, home of myriad sea creatures, magnet of sport fishers, divers and sightseers. Lately they are also America's showcase of marine conservation zoning, providing refuge, recreation, and livelihoods, through a collaborative plan developed by all concerned.

## **Ocean Literacy Principles**

The video and activities support:

- Essential Principle # 5: The ocean supports a great diversity of life & ecosystems
- Essential Principle # 6: The ocean and humans are inextricably linked.

# **Teaching Tips**

### Engage:

Ask the students to help you plan a trip to the Florida Keys. In groups, the students will have 15 minutes to find and suggest three activities you might like that involve the water. Provide three 5x7 note cards that students will note the

activity, weblink, place or address for activity, equipment needed plus the cost and time needed (informal assessment, observe which groups of students use the key word/s water and water sports, and how they organize and search for the information needed)

## Explain/Explore:

After the allotted time, give each group a chance to report out and organize a chart or list of the activities noting duplicates. You might want to have a large map of the Florida Keys to mark off locations of activities.

How many different water and water sport activities did they discover? How many areas comprise the Florida Keys and do they see any activity patterns? SAMPLE WATER SPORT LIST:

wreck dive, coral reef dive, underwater photography dives, snorkeling, fishing, spear fishing, swimming, sailing, kayaking, wave runners, dolphin encounters, parasailing, water skiing, knee boarding, tubing, speedboat tours, catamaran tours, windsurfing, glassbottom boat tour and marine wildlife observing Then show the video, and implement one or more of the following activities.

### **Suggested Activities**

The following activities would be complementary to Ocean Frontiers Chapter 2: An Ocean Blueprint for Florida Keys. There are several concepts in this video segment worth exploring in depth with students and making a connection to the real world examples of the Florida Keys conservation plan.

1) CONCEPT: Coral Reel Education

**ACTIVITY:** A Collection of Lessons for Middle and High School

http://coralreef.noaa.gov/education/educators/resourcecd/lessonplans/

**ACTIVITY:** Keeping Watch on Coral Reefs, What's Down There? <a href="http://www2.umaine.edu/USITASE/teachers/pdf/lce%20Cores.pdf">http://www2.umaine.edu/USITASE/teachers/pdf/lce%20Cores.pdf</a>

Description:

Find great activities to teach your students about Coral Reefs, from how coral reefs grow to monitoring reefs for conservation

**ACTIVITY:** Coral Reef Adventure

http://www.coralfilm.com/edu.html#guide

Description:

This is a great teacher's guide full of lessons about coral reefs

#### EXPAND/ADAPT/CONNECT

Here are some more links to expanded activities

Coral Reef Links

http://coralreef.noaa.gov/education/educators/

Florida Keys Marine Sanctuary <a href="http://floridakeys.noaa.gov/welcome.html">http://floridakeys.noaa.gov/welcome.html</a>

National Marine Sanctuaries <a href="http://sanctuaries.noaa.gov/education/teachers/curriculum.html">http://sanctuaries.noaa.gov/education/teachers/curriculum.html</a>