# FB Highlights 2002 through 2008

#### 2002

### **Education and Outreach**

### • Dive Medical Technician Training

The Sanctuary Program and the NOAA Dive Center conducted a training for Dive Medical Technicians which was held at the Utulei Convention Center. 10 professionals from EMS, the National Park of American Samoa and the private sector participated in the workshop. In addition, two personnel from the Emergency Medical Service were sent to the NOAA Dive Center in Seattle for certification as Dive Medical Technicians and decompression chamber operators.

### • Whale Workshop and Watch

The Sanctuary sponsored a whale workshop conducted by Joylynn Olivera from the Hawaiian Islands Humpback Whale National Marine Sanctuary. 5 teachers attended. In addition, workshops were held at all the high schools. A whale watch with approximately 80 people was held on the *Lady Naomi*.

#### • Outreach Specialist

John Nazzaro from the Florida Keys NMS visited here and worked with our education staff to review our outreach program, make recommendations for outreach approaches. He also did one public presentation that had 15 people in attendance.

### • Enviro-Discoveries Camps

Three EnviroDiscovery camps were held, one in Amalau and one in Nua-Seetaga. Approximately 30 youngsters enjoyed the three-day, two-night camp that focuses on environmental activities. The third camp was held in Manu'a; 80 children attended.

#### • Teachers' Training

Larry Madrigal conducted a teachers' training in marine science. 40 teachers attended the training, which focused on lower elementary level.

### • Sustainable Seas Expedition

FBNMS sponsored the Sustainable Seas Expedition to American Samoa. The Team included Dr. Sylvia Earle, who was bestowed the title "Penina o le Vasa" by the Lt. Governor, Francesca Cava of SSE, Kip Evans and Gail Mead of the National Geographic Society, and Lad Akins of the Reef Environmental Education Foundation. During the week teacher workshops were held, diving expeditions to the Sanctuary were conducted, there was an '*ava* ceremony in Futiga for the guests, and there were nightly public presentations.

### • Earth Day

A dive cleanup was conducted to co-celebrate Earth Day and the Sanctuary's 17<sup>th</sup> anniversary. Several hundred pounds of trash were collected from Utulei Beach area and at the DMWR wharf.

### Science and Monitoring

• Mapping

A bathymetric mapping mission in November concluded a two-year project of mapping the Sanctuary and other areas on Tutuila. Mapping included Pago Harbor, Faga`itua Bay, Taema Bank and the north shore area of the National Park of American Samoa. The maps will be integrated into the GIS database being maintained by the Oregon State University and available on <a href="http://dusk.geo.orst.edu/djl/samoa/">http://dusk.geo.orst.edu/djl/samoa/</a>.

### 2003

# **Education and Outreach**

Ocean Fest

The first Ocean Fest was held and approximately 400 people attended. This public event was held on one day, filled with hands-on ocean related activities coordinated by various agencies, entertainment by youth groups, and presentation of FBNMS scholarship and awards.

# • Teacher Training

Marine science art workshops were conducted the college during Ocean Fest, led by marine artist Robert Lyn Nelson and Patty Miller from the Hawaii DOE. Two workshops were held, one for adults, one for children. 20 people attended each workshop, which was held at the community college.

# • Volunteer Coordinators' Training

FBNMS sponsored Mary Enstrom of the Nature Conservancy to conduct a series of trainings related to volunteer program administration. Members of the Sanctuary's education/outreach section, and staff from the American Samoa Coastal Management Program participated in the trainings.

### • Save A Beach Program

Save A Beach Program: This was the pilot year for this program as it was reinitiated after several years layoff. Three schools were invited to participate. The schools cleaned adjacent beaches at least monthly, and participated in regular "contests" such as poetry, artwork, and essay writing, etc. There was good media coverage of this program and regular half page announcements of winners appeared in the *Samoa News*.

# • EnviroDiscoveries Camp Tifitifi

Three camps were held featuring environmental activities coordinated by FBNMS staff and local agencies. This year, 100+ children participated in all three sessions.

# Reef Weeks

Fourth grades from four schools were selected to participate in the month-long program, in which classes participated in environmental presentations, were taken on reef walks, wetland tours, and participated in regular "contests" such as poetry, artwork, and essay writing for individuals, and a "coral reef classroom" competition.

# Teachers Sponsored in Workshop

One teacher and two students from the South Pacific International Christian School were sent to Florida for a one week coral reef monitoring workshop. The teacher was chosen because of her participation in the Save-a-Beach program.

# Marine Science Scholarship

The first DOC/FBNMS scholarship was awarded to Ms. Bonnie McCuddin. She is a junior in marine biology at the University of Hawaii.

# Coastweeks

FBNMS staff took a class of 25 students on a tour of Fagatele Bay, joined Le Tausagi in school presentations for a week, reaching 400+ students, career shadowed two high school students, and also set up a display booth and held activities during the local DOC Fair day.

# • Arbor Week

FBNMS staff joined Le Tausagi in school presentations and tree planting for a week, reaching about 14 schools.

# **Research and Monitoring**

# • Humpback Whale Survey

David Mattila of the Hawaiian Islands Humpback Whale NMS, and Jooke Robbins, of the Center for Marine Studies, conducted an 8 day survey of our humpback whale population in September. They counted 33 whales—a much larger number than anticipated, and collected DNA from 17. This project will continue in the next whale season.

# • Ocean Transport Study

Eric Treml, a graduate student at Duke University began this project which will extend through 2005. He placed coral settling plates at selected sites (including Fagatele Bay) during our spring spawning season (October) and has begun collecting weather and oceanographic datasets for analysis and modeling.

# • Cultural Resource Inventory

Erica Radewaggon conducted a cultural resource inventory of Fagatele Bay and we are awaiting her final report.

### Benthic Habitat Delineation

Fagatele Bay NMS staff participated in the NOAA benthic habitat delineation project that has involved participants from several local ASG and federal agencies, as well as NOAA's National Ocean Service (NOS). Staff helped facilitate the project during the planning and implementation phases, and worked in the field helping to verify the habitat types. NOS have completed draft habitat maps of Tutuila.

# Analysis of FBNMS Research and Monitoring

A biostatistician conducted a full analysis of the Fagatele Bay a survey series to determine spatial and temporal patterns. His conclusion was that the survey methodology was adequate to the questions being asked.

### 2004

# **Education and Outreach**

• Education Coordinators' Meeting

The education staff participated in the annual Sanctuary Education Coordinators' meeting held in Hawaii this year. One new facet of the meeting this year was a Dive Into Education Workshop held for elementary school teachers. Our staff presented a session that they had developed, Finding Nemo: Developing Marine Themed Activities, and it was favorably received.

• CHOW

Rosia Tavita traveled to DC to assist in the Capital Hill Ocean Week celebration sponsored by the National Marine Sanctuary Foundation. She gained valuable experience in hosting this type of project that included panel discussions, presentations and awards, and targeting lawmakers.

# • Overfishing Workshop

Sanctuary staff planned and participated in an overfishing workshop, which was sponsored by NOAA's National Marine Fisheries Service, and the Coral Reef Advisory Group. *Puipui le Gataivai mo le Taeao* (save our resources for tomorrow), subtitled "Reducing Fishing Pressure: Resetting the Baseline", was held in the three districts of Tutuila. The workshop's goals were to educate the public about the local overfishing issues on nearshore coral reefs, to engage local fishers in a dialogue with resource managers, and to encourage the villages to take steps to protect their precious fisheries. Over 100 people participated in the workshops, held in the three districts of Tutuila, the main island. Conducted in Samoan and featuring guests from environmental agencies in Samoa, including the Ministry of the Environment and the South Pacific Environment Program, the program featured short presentations by local government and village authorities,

and facilitated discussions with the public.

### • **REEF Training**

Fagatele Bay National Marine Sanctuary hosted volunteers and staff from the Reef Environmental Education Foundation (REEF), who conducted a two day survey training for 25 local participants including sanctuary staff and staff from Department of Marine and Wildlife Resources, and the American Samoa Community College. As part of the training, all participants conducted REEF surveys while diving or snorkeling. In addition to the training, the REEF group spent several days diving, including one in the sanctuary. They used that time to validate the draft survey materials that REEF has been developing over the past 18 months. The sanctuary arranged three dive trips for the group.

### • EnviroDiscoveries Camp

The Sanctuary Education staff spearheaded the annual EnviroDiscoveries camp (Camp Tifitifi) again this year. Two sessions were held, one at Lions Park and one in Aunu'u. The overnight camp was co-sponsored by other environmental agencies (ASEPA, ASCC-Land Grant-Agriculture, Sea Grant and Forestry extensions, DMWR, USDA-Farm Services) within the Le Tausagi group. The purpose of this camp is to educate children of ages 8-12 on environmental issues and to encourage them to become wise stewards of our environment.

#### Save-A-Beach

Eight schools participated this year, three high schools (Fagaitua, Samoana and Nu'uuli Vo-Tech) and five elementary (Alataua Lua, Taputapu, Matafao, Le'atele and Afonotele). All the schools turned in data of the debris that was collected during the clean-ups. Based on the information that was submitted, there was a decrease on the number of materials collected as the year progressed.

### Coastweeks

Staff provided two tours of Fagatele Bay for 50 people, assisted with a tilapia farm tour, and a botanical garden tour at ASCC Land Grant.

#### • Scholarships

Fagatele Bay National Marine Sanctuary awarded two scholarships to students majoring in marine science. Both students, Bonnie McCuddin and Sasa Satele, are upperclassmen at the University of Hawaii.

#### • Samoa's Environment Forum—Staff Participation

Fagatele Bay National Marine Sanctuary Education Coordinator Rosia Tavita and Education Specialist Allamanda Amituana`i were featured speakers in neighboring Samoa's Environment Forum, held during their Environment Week. Partnered with National Marine Fisheries Service Pacific Island Regional Office's Fatima Sauafea, the trio talked about improving community skills and knowledge to build, enhance and promote environmental stewardship.

### • Arbor Week

Fagatele Bay National Marine Sanctuary Education Specialist Allamanda Amituana`i participated in a week of activities to commemorate Arbor week. Presentations were done to a total of 78 students from levels 6 to 8 in both Fitiuta and Faleasao Elementary Schools. The high school students were introduced to the sanctuary programs with the focus on Fagatele Bay's coral reefs and the connection to the trees and the impacts and threats to our reefs when we cut down the trees.

## ReefWeeks

The Education staff completed this month of coral reef education for fourth grade classes across Tutuila and Manu`a. This annual program offers classroom instruction featuring ocean related activities, contests (e.g. which class can decorate itself as the best "coral reef"), and field trips. Six schools participated in ReefWeeks this year, serving over 200 students.

# Enforcement

• Busted

A team of enforcement officers headed by Martina Sagapolu, the National Marine Fisheries Agent, apprehended two fishermen who were illegally spearfishing at the sanctuary. They talked to the men and issued a local (not a federal) ticket. The fishermen requested signs be posted in additional sites around the bay, and we will follow up with that request.

# **Research and Monitoring**

### • Resource Survey

Scientists conducted the sixth iteration of the Fagatele Bay Biological Resource Survey. Begun in 1985, this is one of the longest running coral reef monitoring programs in the world. Preliminary data show that the coral has fully recovered from the past twenty years of serious perturbations. Fish populations have not recovered, and overfishing is cited as the cause.

# • Ocean Transport Project, Year 2

A two-year project developing a multi-scale model of current patterns at the local, regional and South Pacific levels was continued this year and will conclude early next year. Preliminary results were presented at the International Coral Reef Symposium in June.

# • Coral Reef Ecosystem Initiative Cruise

FBNMS staff helped coordinate some of the logistics for this project. A continuation of the initial coral reef surveys conducted in 2002, this year's efforts were expanded to include a five week multi-beam survey of Tutuila and Manu`a, which will add significantly to the island's mapping products. The Sanctuary Manager participated for two weeks during the survey as a technician, and

traveled to Rose Atoll and all the Manu`a Islands. While onboard, she was provided guidance for some of the new site selections.

### • Humpback Whale Survey II

The second year of a long term humpback whale survey completed in October. Over 30 whales were sited and photos taken of their tails (for identification), as well as skin samples taken from about half of those seen. Researchers have not yet determined where the Samoan whales are coming from in the Antarctic, and how often they return to Samoa. A student from ASCC will be using the photos to attempt to match them to a tail photo database.

### • Science Support

The Sanctuary assisted in other science missions including a coral disease survey and a coral bleaching/water quality monitoring study.

### Archaeological Survey

Dr. Hans Van Tilburg, the Sanctuary program's Pacific Island Regional archaeologist, visited American Samoa to participate in, and learn about, the CREI multibeam mission, and to visit FBNMS. He made two trips to Fagatele Bay, one with the manager for a dive trip, and one with Erica Raddewagen to visit the old village site where she is conducting an archaeological survey for the program. Hans' specialty is marine historical resources—primarily sunken ships—and he is interested in some of our sites, particularly the *Chehallis*.

# 2005

### Management

### Sanctuary Advisory Council

Fagatele Bay National Marine Sanctuary inaugurated their Sanctuary Advisory Council May 23. The nine new members of the Council were given an overview of the National Marine Sanctuary Program, and of Fagatele Bay. Deputy Undersecretary for Oceans and Atmosphere, Tim Keeney was present for most of the meeting. The second SAC meeting was held on June 17. Allen Tom, Pacific Islands Regional Director and Brady Phillips, Program Specialist from NMS Headquarters gave presentations on program updates and the upcoming Management Plan Review for Fagatele Bay NMS. The SAC will be an integral part of this review process, providing much of the public input, and staffing the working groups.

# **Education and Outreach**

Ocean Fest

Fagatele Bay NMS sponsored the Ocean Fest on Utulei Beach in collaboration with many of the local environmental agencies. Lt. Governor Ipulasi Aitofele Sunia provided welcoming remarks, and Tim Keeney, Deputy Assistant Secretary of Oceans and Atmosphere, delivered special remarks. Activities included a Tilapia Tasting Contest where six contestants vied for first place for their delicious tilapia recipes, demonstrations by the American Samoa Swimming Association and the American Samoa Kayak Association, trivia contests for the school children, presentations of songs and dances by elementary students engaged in the ReefWeeks programs, and environmental demonstrations and activities at the various agency booths. Over 200 people attended the event.

#### Boat Safety Course

Fagatele Bay NMS coordinated the first annual boat safety refresher course. The three-day refresher course was held at DMWR and included 11 DMWR staff, the NMFS agent, and two National Park employees. Classroom activities were featured the first day, and the next two days mixed classroom and on-the-water drills for safety checks, man-overboard drills, and towing a disabled vessel. Local staff were enthusiastic participants, and benefited from the course's emphasis on safety and attention to details such as pre-departure safety briefings, trip planning, and other professional marine operations procedures.

#### Teachers' Workshop

Fagatele Bay National Marine Sanctuary co-sponsored a local marine science teachers' workshop along with the American Samoa Community College's Sea Grant Extension Program, the Coral Reef Advisory Group, and the local Department of Education. Twenty-five teachers participated in last week's workshop, which was aimed at grade levels 4 to 7. This is the second year for this pilot program, and it was revised this year to improve the science learning. To achieve this, focus was on the scientific method and philosophy of science, using marine science as the tool.

#### Teacher and Student Sponsorship

Mr. Wayne Salave'a, the local high school marine science teacher attended the National Marine Sanctuary Program field study that is co-sponsored by the National Geographic Society, held in Hawai'i this past summer. He and his student, Hawley Auva'a, learned a great deal from the field study, had a wonderful experience, and also enjoyed working with other participants and staff.

#### EnviroDiscoveries Camp

Education staff at Fagatele Bay NMS led this year's annual EnviroDiscoveries camps. 50 students participated in the two camps held at Aoloau. EnviroDiscoveries Camps is geared towards 8 to 12 year olds, with lessons and activities that teach them about the importance of our natural world, and how they can become better stewards and caretakers of our environment. Eight participants from past returned this year to serve as junior counselors, assisting with camp preparations and activities and there was one student intern from the college. This project is a collaborative effort among Le Tausagi, the local environmental educators group, consisting of the American Samoa Department of Commerce

Coastal Management Program, Fagatele Bay National Marine Sanctuary, the Department of Marine & Wildlife Resources, Environmental Protection Agency, the Coral Reef Advisory Group, and the American Samoa Community College's Land Grant Forestry Extension Services. The American Samoa Swimming Association and Kayak Association were also on hand to teach the kids how to swim and kayak.

• Safe-A-Beach

The Save A Beach program concluded with the end of the school year. Seven elementary and high schools participated, with over 100 students in the program. This year the program expanded to include ASCMP's Water Quality Program for the high school participants, creating a more robust program. Save a Beach/Water Quality goals include developing stewardship skills and understanding in students and the general public, reducing litter and waste, and keeping beaches clean.

### Enforcement

• Blast Fishing

Blast fishing activities have increased dramatically at the Sanctuary. After several years of no observed blasting damages, a number of blast sites were found in the shallow forereef area during a field trip to the site. A subsequent survey of the sites documented 23 areas, for a total of over 30 blast sites, most covering an area of 1-4 square meters. These areas will take years to recover and reflect the potentially large numbers of fish and other reef denizens injured or killed. DMWR enforcement conducted a site visit, and an investigation by the National Marine Fisheries Service is pending.

### **Research and Monitoring**

• Deep Water Survey

Dr. Dawn Wright, from the Oregon State University led a group of investigators, including Emily Lundblad from NMFS, Leslie Whaylen and Dr. Doug Fenner from the Department of Marine and Wildlife Resources, and two teachers and one student, aboard the KOK, on a HURL mission to survey the deep waters in and around Fagatele Bay. One dive in the KOK's submersible took Wright and Whaylen down to more than 500m--from the shallower 50m just inside the sanctuary to the offshore depths in territorial waters. Because of the shallow topography, the planned dive in the National Park on the north shore was scrapped, but a second dive was conducted off of Taema Bank, which lies three miles south of Pago Pago Harbor. Video and still photos documented the dives. A number of new species for the territory were seen, and some possible new species of fish and invertebrates that they were unable to identify were found.

#### • Humpback Whale Survey Year 3

David Mattila and Ed Lyman from the Hawaiian Islands Humpback Whale NMS conducted the third survey of humpback whales in American Samoa. In addition,

Mattila visited SPREP Director Asterio Takesy and SPREP whale specialist Louis Bell in Apia, Samoa to discuss joint projects.

#### 2006

#### **Education and Outreach**

#### Ocean Forum

Fagatele Bay National Marine Sanctuary, the Ocean Resource Management Council and the American Samoa Community College hosted the Ocean Forum, Monday April 3 at the ASCC gymnasium. The panel-style forum featured invited guests from the region and local agencies and businesses. The Ocean Forum theme, 2010: Balancing Ocean Uses and Conservation, was the springboard for guests to defend either the development/exploitation of the land and sea, or for their preservation. Moderators and students questioned the speakers, and engaged in discussion of the issues. Students presented summaries at the end of each panel session, and resolutions at the end of the day. Follow-up activities are planned for future forums.

#### Sanctuary Anniversary Celebration

On Tuesday, April 4, the Sanctuary Advisory Council (SAC) sponsored a gala anniversary dinner for the sanctuary's 20<sup>th</sup> anniversary. At the direction of the SAC, sanctuary staff made all the arrangements for the festive evening. The program included a presentation of the Sanctuary Hero award to Governor Togiola Tulafono and Bill Thomas. Also premiered was the sanctuary's first informational video.

#### Geodetic Mark

A geodetic mark commemorating the Fagatele Bay National Marine Sanctuary  $20^{\text{th}}$  anniversary was dedicated in the Futiga village malae. Dave Zilkoski, Director of the National Geodetic Survey, was the guest of honor. The village made an `ava presentation to special guests during the dedication ceremony. An agreement was signed between DOC and the *sa*`*o* of the Uiagalelei family, Iona, who granted the space for the mark, and pledged to maintain the mark for the village.

#### • Ocean Film Night

Two films were presented free to the public to educate them about ocean issues, and to introduce them to the sanctuary. This was the closing event for the sanctuary's anniversary week. The ocean films were screened in the Convention Center, to approximately 75 guests.

#### • EnviroDiscoveries Camp Tifitifi

Fagatele Bay National Marine Sanctuary led the annual Le Tausagi environmental camps for youngsters 8-12. Held in three locations—Tula, Lions Park and Ta`u, the camps attracted over 80 youngsters. Department of Commerce's Coastal

Management Program along with the American Samoa Environmental Protection Agency, Department of Marine and Wildlife education and enforcement divisions, American Samoa Community College's Conservation and Natural Resources Program and the Coral Reef Advisory Group all participated in presenting the activity-based camps. In addition, there were 5 junior counselors most who had participated in past camps, and returned this year as volunteers. Six ASCC marine science students also contributed, broadening the capacity building aspect of this program. This was the 14<sup>th</sup> year for environment based summer camps.

### Marine Science Scholarship

Fagatele Bay National Marine Sanctuary awarded two marine science scholarships for the coming semester. Imelda Gebauer and Ching Mauo Wei, both recent graduates in marine science from ASCC, were awarded \$2,500 each. Both will be eligible for a second installment for the spring semester based on their grade point average. The scholarship is part of the Department of Commerce goal of capacity building for environmental sciences.

### • NOAA ship HI`IALAKAI Education Cruise

Three education cruises targeting all the high schools in American Samoa, including Manu`a, were conducted. Over 90 teachers and students spent one day aboard ship learning about ship operations and science activities. Each student completed 5 education modules including water quality, GIS, benthic sampling, and habitat identification.

# • NOAA ship HI IALAKAI VIP cruise

Over 25 local VIPs including Governor Togiola Tulafono, Lt. Governor Ipulasi Sunia, Speaker of the House Matagi McMoore, and other department directors and staff spent one day aboard the NOAA research vessel HI`IALAKAI. They toured the ship, spoke to researchers on board, and went out to Fagatele Bay to view the sanctuary.

### • Ocean Futures Film Team

A film team from Jean-Michel Cousteau's Ocean Futures spent 10 days in American Samoa filming for a new PBS program called "Ocean Adventures", which will feature two episodes on the National Marine Sanctuaries. The crew included Cousteau's children Fabien and Celine who will be featured in the final production. Sanctuary staff provided logistical support for the film crew, taking them out to the sanctuary for filming, and other locations on Tutuila. The program aired in September.

### • Futiga Village Outreach

Staff conducted three village outreaches in Futiga, which is the village hosting the sanctuary. The outreaches were held with three church youth groups.

# • ReefWeeks

The annual ReefWeeks program aimed at fourth grade students, was completed. Five schools were included in this year's program, and over 100 students learned about coral reefs, were taken on field trips to study reefs, and participated in a coral reef classroom decorating contest. This annual program targets initial school outreach level for all of Fagatele Bay National Marine Sanctuary's education programs.

# • Hollings Scholar

Jed Sana, a University of Hawai`i student, won a Hollings Scholarship and chose Fagatele Bay as his station. He spent two months working with the education staff, and developed a syllabus for the Enviro-Discoveries Camps.

# **Research and Monitoring**

# • Water Quality Program

Sanctuary Science Coordinator Bill Kiene established water quality monitoring protocols for Fagatele Bay NMS in collaboration with American Samoa EPA. This program will expand ASEPA's island wide beach water quality monitoring to include Fagatele Bay. The Sanctuary's isolation limits accessibility and provides ASEPA's program a baseline for enterococci levels in coastal waters. This sampling will also give FBNMS a basis on which to judge potential changes in water quality if human use of the beaches in Fagatele Bay increases.

# • SWiM

FBNMS completed its first System-Wide Monitoring Condition Report. The report provides a detailed analysis of site history, pressures/challenges, state of the Sanctuary's resources, and responses to pressures.

# • Humpback Whale Survey Year 4

David Mattila returned to conduct his fourth survey of humpback whales and other cetaceans in the waters of American Samoa and Samoa.

# • CREI Cruise

The sanctuary provided logistical support for this biennial cruise, this time aboard the HI`IALAKAI. The manager worked as a technician onboard and traveled to Swain's Island with the ship.

# • Coral Disease Survey

The sanctuary helped support a survey by Dr. Greta Aeby and Dr. Theirry Work when they conducted a coral disease survey of Tutuila. Both the sanctuary manager and the sanctuary science coordinator assisted the team in the field.

# 2007

# **Education and Outreach**

### • Fagatele Bay Trail & New Signage

A 5km trail to Fagatele Bay from Taputimu with perimeter views of the Sanctuary offers recreational as well as health benefits to all.

### Coral Reef - Treasures Undersea Exhibit

Prepared and completed in conjunction with the USCRTF meeting held in American Samoa in August, 2007, this exhibit provides a photographic and graphic celebrating the vibrant coral reef ecosystems in the Territory at the Convention Center.

### • Dive Certification of Governor Togiola Tulafono

In response to Sanctuary Program Director Dan Basta's challenge to Governor Togiola Tulafono, FBNMS sponsored and paid for dive certification classes and equipment of our Governor to experience the unique and pristine coral reef ecosystems of our territory.



# **Science and Monitoring**

• **Territory of AS & Fagatele Bay National Marine Sanctuary Data Atlas** NOS compiled GIS maps into a book that cover a range of; bathymetry, temperature, sea mounts, tropical storm tracks, togography, biological environments, and economic/population activities.

### Management Plan Review

- Fagatele Bay NMS officially launched it's kick off for management review process in April 2007.
- NOAA's Biogeography Team completed a 10 page biogeographical concept paper in preparation for the management plan review.

### 2008

### Management

• A Socio-Economic assessment was conducted June to September 2008 with a survey of the adjacent villages to FBNMS. The results will be evaluated and become part of the information needed for the management plan review.

### • Joining Hands Hyperbaric Wound Care Project

Thunder Bay NMS and FBNMS joined hands to work on efforts to establish a hyperbaric Wound Care model mirrored on the successes of Alpena, Michigan. Meetings were held with private and government sectors.

### • Marine Conservation Initiative

As part of President Bush's ocean legacy to conserve pristine Pacific, 7 areas were assessed for designation as Marine Monuments under several legal authorities. One of the areas of consideration was Rose Atoll and FBNMS lead the marine conservation initiative with public open houses and hosting of the White House CEQ Council Chairman, Jim Connaugton when he was on island in October.

# Business Plan for Marine Science Center

NOAA Office Of National Marine Sanctuaries in collaboration with the CRAG funded a Business Plan for the Governor's initiative to establish a Marine Science Center in the Territory. The completion of this plan allows the Territory to solicit funding via private, public, organizations and foundations.

### • UN World Heritage Nomination

Fagatele Bay NMS was nominated to be considered as a United Nation's World Heritage site for cultural and resource protection in the Pacific.