| Project Title                                 | Federal Funding | Description of Activities  |
|---|-----------------|--|
| <b>Coral Reef Ecosystem</b>                   | Research Grant  | ts   |
| P.R. Coral Reef Monitoring (2002)             | \$149,576       | Supports a baseline characterization of bio-optical oceanographic properties in the region. Advances in technologies and assessment techniques using remote sensing, in-situ observations, high-end computing, and integrative biological and physical measurements will be incorporated into the "toolbox" available to coral reef ecosystem managers.  |
| Guam US Coral Reef<br>Initiative Grant (2002) | \$149,916       | Guam's Department of Agriculture was provided funding to develop recruitment assays and identify biomarkers of environmental stress as tools to be applied to coral protection and/or stressor reduction efforts. Research is needed to address development of appropriate indicators to define coral ecosystem health, function of reef ecosystems, such as coral and fish recruitment sources and sinks and explicit coupling of biological and physical models.   |
| State and Territory Co                        |                 |  |
| Hawaii Coral Reef<br>Management (2002)        | \$360,000       | Funding supports a number of project tasks such as: -Develop a model collaborative approach for the Department of Land and Natural Resources to use to implement a marine protected area (MPA) where there is a community interested Support travel to workshops and conferences that will assist managers in coral resource management efforts Develop materials to raise awareness about coral reefs to targeted audiences Develop and implement cost-effective methods to restore degraded coral reef ecosystems by providing match funding to community based groups who develop and implement conservation programs Determine the economic costs and benefits of MPAs to assist in decision-making for a concerted effort to justify designation of additional sites. |
| Florida Coral Reef<br>Management (2003)       | \$325,000       | Funding supports two overall project tasks:  - Mapping coral reefs and other benthic habitats found off the coast of Palm Beach County using high-resolution, shipbourne acoustic bottom classification.  - Development by an interagency group of three-year local action strategies which attempt to address major threats to coral reef ecosystems in Southeast Florida. The suite of strategies will use knowledge-based, consensus-building, integrated, and continuous management with frequent public review.   |

| <b>International Coral R</b>   | eef Conservation | 1  |
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| Evaluating Management Effectiveness of two Indonesian MPA's: Incorporating Science and | \$32,000         | This project is a pilot test of the recently developed World Commission on Protected Area management effectiveness guidelines and indicators at two Indonesian sites, Bunaken National Park in North |
| Participation (2002)   |                  | Sulawesi and Sebesi Island Marine Sanctuary in South Sumatra. The roles and limitations of   |
|  |                  | scientific and participatory processes in the design and implementation of MPA management will be  |
|  |                  | investigated evaluations and the existing tools for  |
|  |                  | measuring management effectiveness of MPAs will<br>be improved by developing some guidelines for   |
|  |                  | how to incorporate both science and participation into management evaluations.   |
| Promoting Watershed<br>Management in the Wider<br>Caribbean (2003)                     | \$70,000         | The Soufriere Marine Management Area (SMMA) is managed by the Soufriere Marine Management Association and was established to secure the  |
| Caribbean (2003)   |                  | sustainable use of various resources. This project will seek to establish a permanent interagency  |
|  |                  | structure linked to the SMMA with the prime  |
|  |                  | purpose of securing the necessary interventions in<br>the Soufriere watershed. The aim will be to reduce   |
|  |                  | the harmful inputs into the Soufriere Bay using the  |
|  |                  | same community-focused and partnership approach  |
|  |                  | that was adopted by the SMMA. The project will   |
|  |                  | seek to employ environmentally sound resource-use  |
|  |                  | practices supported by a comprehensive public awareness and sensitization campaign.  |
| Reef Check Community-  | \$24,200         | Reef Check Foundation-Europe is establishing a   |
| based Biophysical and  | φ21,200          | Reef Check coral reef monitoring team in Kenya   |
| Socio-economic Monitoring  |                  | and strengthening the existing team in Tanzania by   |
| in East Africa (2002)  |                  | training and certifying Reef Check trainers who will   |
|  |                  | continue coral reef monitoring activities with new   |
|  |                  | volunteers in their respective areas. The teams are conducting 20 reef surveys during the project year   |
|  |                  | and will submit the final data to the Global Coral   |
|  |                  | Reef Monitoring Network. Results will also be  |
|  |                  | disseminated to local and regional managers.   |
| <b>Projects to Amend Co</b>  |                  |  |
| Management of Fisheries in   | \$250,000        | The Council is characterizing the habitat of Pulley's  |
| the Gulf of Mexico (2002)  |                  | Ridge and the Florida Middle Grounds through   |
|  |                  | mapping, aerial photography and video and still images of resident communities, and is completing  |
|  |                  | multi-beam surveys of the Madison-Swanson  |
|  |                  | MPPA and the adjacent Twin Ridges Contract Area.   |
|  |                  | Within Pulley's Ridge, most of the effort involves   |
|  |                  | development of baseline information on the extent  |
|  |                  | of particular habitat types and community  |
|  |                  | composition, while the Middle Grounds efforts are  |
|  |                  | focused on monitoring and assessment to evaluate   |

|                                |                  | change in the area over the last 25 years.            |
|--------------------------------|------------------|---|
| Assessment and                 | \$750,000        | This project is supporting staff, travel and workshop |
| Management of Western          | 4,50,000         | activities needed to assist in gathering critical     |
| pacific Coral Reef             |                  | information in order to facilitate coral reef         |
| Ecosystem Resources and        |                  | ecosystem resource management decisions, improve      |
| Habitat (2003)                 |                  | coral reef protection and maintain healthy            |
| 11                             |                  | ecosystems and sustainable fisheries. Specific        |
|                                |                  | components include continued mapping of the           |
|                                |                  | Northwestern Hawaiian Islands and assessment,         |
|                                |                  | characterization and mapping of important             |
|                                |                  | bottomfish habitat in the Kahoʻolawe Island           |
|                                |                  | Reserve (KIR), a study on Hawaii's lobster            |
|                                |                  | resources - their cultural significance, biology and  |
|                                |                  | life history information, tracking home range sizes   |
|                                |                  | of three commercially important fish species in the   |
|                                |                  | Managaha Reserve within CNMI, investigation of        |
|                                |                  | the diets of taape and some important native fishery  |
|                                |                  | species to quantify the level of interactions between |
|                                |                  | native and introduced species, and an evaluation of   |
|                                |                  | the use of bait stations as a tool to monitor         |
|                                |                  | abundance and size frequency of nearshore and         |
|                                |                  | deep-water coral reef ecosystem fish species.         |
| <b>State and Territory C</b>   | oral Reef Ecosys | stem Monitoring                                       |
| American Samoa Coral reef      | \$100,000        | American Samoa's DMWR supports a series of            |
| Monitoring Program (2002)      | ,                | projects recommended by the local Coral Reef          |
|                                |                  | Advisory Group (CRAG). Based on an analysis of        |
|                                |                  | data collected during FY2000 and FY2001, the          |
|                                |                  | advisory group decided the following six activities   |
|                                |                  | represented American Samoa's priorities toward        |
|                                |                  | coral ecosystem management, and should be             |
|                                |                  | considered for funding under the coral reef           |
|                                |                  | conservation program: 1) Continued support to         |
|                                |                  | assess population dynamics and fishery                |
|                                |                  | characteristics for lobsters; 2) A comprehensive      |
|                                |                  | macro-algal survey and inventory for the Islands of   |
|                                |                  | Manua and Tutuila; 3) A survey of introduced          |
|                                |                  | species along the coast of Tutuila; 4) Continued      |
|                                |                  | support for local "Reef Check" community              |
|                                |                  | monitoring activities; 5) Hiring of a biometrician to |
|                                |                  | analyze the volumes of data being collected under     |
|                                |                  | this and other programs; and 6) Mapping benthic       |
|                                |                  | habitats using aerial photography and satellite       |
|                                |                  | imagery as a spatial framework for future coral reef  |
| Manitarina and Assessment      | ¢121 500         | conservation.   |
| Monitoring and Assessment      | \$131,500        | This project provides continued support for           |
| of Coral Reef Ecosystems in    |                  | monitoring sites throughout the USVI using the        |
| the U.S. Virgin Islands (2003) |                  | monitoring protocols established under the FY2002     |
|                                |                  | grant. To improve implementation of the newly         |
|                                |                  | established St. Croix East End Marine Park, efforts   |
|                                |                  | also will be put into additional assessment of the    |

|  |             | park resources and toward the development of a Marine Park Monitoring Plan.   |
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| <b>General Coral Reef Co</b>   | onservation |   |
| Wise Management and<br>Sustainable Use of the<br>Hawaii Aquarium Fishery<br>through MAC Certification<br>for Reef management and<br>Best Practices (2003)  | \$35,000    | The project will work with marine aquarium trade stakeholders in Hawaii, especially the industry, to promote the wise management and sustainable use of coral reef resources. Specific elements include:  1) building awareness of management alternatives for a sustainable marine aquarium trade in Hawaii through multi-stakeholder consultations and outreach; 2) developing management plans for reef areas subject to marine ornamentals collection though stakeholder participation; and 3) facilitating marine aquarium fish collectors and companies to understand and achieve Marine Aquarium Council (MAC) Certification for "best practices."   |
| Transforming the Live Reef<br>Fish Food Trade towards<br>Sustainability in the<br>Republic of the Marshall<br>Islands through Community-<br>based Coral Reef<br>Conservation and Fisheries<br>Management (2002)                                  | \$50,000    | IMA is working in partnership with government agencies, the College of the Marshall Islands, and local communities to ensure that the growing live reef food fish trade is managed sustainably. The initial work will involve an assessment of the grouper and Napoleon Wrasse fishery and of coral reefs and biological resources in the remote northern atolls of the Marshall Islands; community meetings to improve awareness of the fishery; and the building of capacity to manage the Live Reef Fish Food Trade in a sustainable manner.   |
| Comparative Investigations of Red Hind (Epinephalus guttatus) Spawning Aggregations Under Different Management Strategies: fully protected marine reserves in the U.S. Virgin Islands and seasonal closures in the British Virgin Islands (2003) | \$70,000    | The project will focus on a collaborative effort between the United States Virgin Islands (USVI) and the British Virgin Islands (BVI) to collect and assimilate biological data on a critical habitat in the BVI with the creation of a Marine Protected Area (MPA) in mind. One component will focus on a scientific investigation of a large traditional red hind grouper ( <i>Epinephalus guttatus</i> ) spawning aggregation site in the British Virgin Islands. The spatial area of the aggregation site will be determined as well as the density of spawners, sex ratio, size frequency, habitat type, benthic complexity, and fish community structure. In addition, a tag and release program will be implemented. Data from the Anegada site will be compared to that from the MCD and the use of MPAs as a management technique will be assessed for the sustainability of a fisheries resource. |
| Coral Culture for Reef<br>Restoration and Coral<br>Research  | \$43,513    | This project is establishing clonal lines of four key coral species, <i>Acropora cervicornis</i> , <i>Montastraea faveolata</i> , <i>Porites astreoides</i> and <i>Gorgonia ventalina</i> for use in coral research and restoration activities. Coral fragments and small colonies  |

| generated by vessel groundings are being collected from throughout the Florida Keys (as well as larvae from parent colonies of <i>Porites astreoides</i> already in culture) and are being propagated at Mote Marine Laboratories Center for Tropical research. Research efforts include quantification of growth rates of the explants, development of standardized |
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| rates of the explants, development of standardized clonal lines, and identification of disease resistant   |
| strains.   |