American Samoa

Agencies Interviewed

- American Samoa Department of Commerce
- Department of Marine and Wildlife Resources
- American Samoa Environmental Protection Agency
- National Park Service
- Fagatele Bay National Marine Sanctuary (FBNMS)

American Samoa Context

- Small, remote islands in the South Pacific.
- There are no NGOs, Universities, Research Stations or Marine Laboratories.
- There is limited scientific staff/resources.
- Overall, we have minimal research capacity as well as limited technology and infrastructure.

Issue 1:
Fisheries Management Background

- There is concern that reef fish populations have declined, especially large reef fish, and reef fish populations need to be better managed/protected.
- There is a general lack of enforcement capabilities and fisheries regulations.
- Concerns exist regarding the impacts of habitat degradation.
- The effectiveness of the existing Community-based Fisheries Management Program (CFMP) has not yet been evaluated.

Issue 1:
Fisheries Management Information Needs

- Maps of outside banks and shallow water habitats are needed.
- Determine locations of spawning aggregation sites (including the use of Traditional Environmental Knowledge).
- Continued need for information on fish/habitat from inaccessible areas (Rose and Swains).
- What is a sustainable fishery for a multi-species coral reef ecosystem: determine practical metrics for field managers to (1) determine whether their reefs are overfished, and/or (2) establish recovery goals if their reefs are overfished.
- What other factors are influencing fishery resources?
- Current data for larval dispersal.

Issue 2:
Marine Protected Areas Background

- Establishment of an MPA Network is in progress including DMWR's CFMP, Independent Samoa, the National Park and FBNMS.
- No no-take MPAs currently exist, aside from Rose Atoll, yet a mandate to protect 20% of territorial waters by 2010 is in place.
- More effective enforcement is needed.
- FBNMS is undergoing a management plan review and biogeographical/socio-economic evaluation.

Issue 2:
Marine Protected Areas Information Needs

- Determine location of spawning aggregations for better management.
- Improved connection between land-based and marine data that is available for better management.
- Development and maintenance of a monitoring program to assist in implementation of management actions.
- Mapping products including spatial distribution of resources for consideration in MPA design, including independent Samoa, to better protect and manage shared resources.

Issue 3:
Habitat Degradation and Land-based Pollution Background

- Decline in coral reef ecosystem health due to pollution, COTS, and hurricanes.
- Threat of habitat change due to disease/algae.
- High levels of sediment/nutrient runoff due to piggeries, detergents, and coastal development.
- AS is entirely coastal with very steep topography and high rainfall = high natural sedimentation.
- Negative effect of population increases.

Issue 3: Habitat Degradation and Land-based Pollution Information Needs

- Baseline assessments of coral reefs.
- Establishment and continuation of research and monitoring of coral disease and bleaching.
  - Prediction and preparation for bleaching events.
- Monitoring information on sedimentation, nutrients and their affect on reef health.
- Information to determine what reefs to protect.
- Remote sensing information from NOAA satellites.
- Greater understanding of other nearshore habitats – mangroves, etc…
- Lack understanding of climate change effects (bleaching, acidification, etc...).

Issue 3: Habitat Degradation and Land-based Pollution Information Needs

- Determine impacts of sedimentation.
- Determine sources of pollution.
- Map current land use practices and effect on water quality.
- Maps of impinged water quality to determine areas of most degradation.
- Establish long term water quality monitoring program and enhance our testing capabilities on island.

Additional Issues

- Overarching issue of climate change
- Population growth and impacts
- Information dissemination/accessibility
- Capacity and governance
- Education
- Enforcement
- Collaboration
- Link management and science for successful conservation outcomes

Final Priorities

- Mapping products regarding the spatial distribution of resources for consideration in MPA design, including independent Samoa, to better protect and manage shared resources.
- Monitoring information on sedimentation, nutrients and their affect on reef health.
- Current data on larval dispersal/regional connectivity.