Highlights from the Climate Change Resilience Workshop

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Challenges

• To develop viable strategies to protect coral reefs and associated marine resources
• To buy time through local management activities to address global climate change
• To improve the bridging of science to stakeholders, managers and policy makers
• To address the essential human behavioral changes needed to protect coral reefs
• To enhance the ability to accurately predict change and prepare for it
• To communicate urgency, as well as solutions
Purpose of the Workshop

- Review status and challenges of coral reef resilience studies and climate change research in American Samoa and the other jurisdictions that comprise the Task Force.
- Define clear links between reef resilience and the behavior of human communities locally and globally.
- Learn about advances in how to build natural and social resilience into adaptive coral reef management plans.
- Discuss how to apply small-scale successes at a larger scale.
Progress

• Research in the natural laboratory of American Samoa on climate change and coral bleaching, coral adaptation, resilience, and reducing and reversing coral bleaching through innovation

• Management-directed research to show cause and effect relationships between specific stressors and coral health (identifying the “smoking guns”) and the effectiveness of mitigation activities

• Integrating traditional ecological knowledge with modern science

• Climate Resiliency planning in such as Amouli Village as example for future community planning efforts
Lessons Learned

• Resilience exists at three levels: species, ecosystems and human communities. True resilience requires all three.
• Human leaders and communities can embrace adaptive behaviors
• Solutions need to be economically feasible, culturally acceptable and pragmatic
• Don’t re-invent the wheel - incorporate CC adaptation into existing community processes
• CC should be addressed among other threats, not in isolation
• Need for locally relevant outreach materials targeted at traditional / community leaders
Opportunities

- Engage leaders about ways to reduce local stressors on coral reefs.
- Use partnerships among communities, agencies, NGO’s, scientists (social and natural sciences).
- Use existing legislation (i.e. Clean Water Act) and funding resources to plan and implement measures to reduce local stress on coral reefs.
- Communicating that whatever we do for coral reefs is also good for humanity (Why we do coral reef conservation work).
Next Steps/Recommendations

• Establish sound metrics and evaluation criteria for species, ecosystem and community resilience.
• Communicate climate change as a scientific issue and not just a political issue.
• Strengthen education and outreach programs to identify actions that community members can do.
• Improve communications among local and Federal agencies, stakeholders and policy makers.
• Build strategies and priorities that are flexible to allow for differences in cultural, environmental, or situational issues.
Future Scenarios

- Live Coral Cover (%)
- Year

Graph showing future scenarios with lines for +W, LBR+W+A, and optimistic predictions.