Key Discussion Points From Meeting of GCMRC and its Senior Ecologist with Science Advisors on Ecosystem Approaches in Science

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Use of Adaptive Management Process in GCDAMP Science and Management

- The GCDAMP emphasis on well planned, documented integrated science is critical to continued science and management success.
- GCMRC approved science programs must be supported. Improved science integration is recommended.
- Evaluate alternative approaches for looking at conceptual aspects of the system; data, photography, non-numeric models.
- Emphasize mini models (sub models) for predictive needs; reevaluate numeric system model approach

Use of Adaptive Management Process in GCDAMP Science and Management (continued)

- Improve adaptive management processes for resolving issues affecting all GCDAMP programs; DFC, management actions, roles and responsibilities. Utilize timely workshops.
- Adaptive management processes need continued effective leadership at GCMRC, AMWG, TWG and Secretarial level. Evaluate a more permanent Executive Director position.

GCMRC Science Thrusts

- Pursue long term assessments of interrelated effects of food web, near shore habitat, predation, and competition on native fish.
- Evaluation of HBC recruitment trends associated with changing systems.
- Improved capabilities to evaluate integrated water quality changes on systems biology.
- Full integration of the Lake Powell and downstream water quality monitoring programs.

GCMRC Science Thrusts
(continued)

- Fully address the questions, “will flow only ecosystem management concepts fulfill stakeholder management objectives”. Use system wide monitoring and research.
- Contrast cultural CJ model with less complex alternative approaches including risk models.
- More comprehensive socio-economic assessments are needed, i.e. hydropower, recreation, water, tourism, etc. Review GCEM sub model.

DASA Program and Remote Sensing Assessments

- Three GCMRC systems level remote sensing options for FY 2009 were discussed; budget availability of $600K.
- Comparing options 1 and 2 for reassessments in 2009, a tradeoff exists between evaluating vegetation change (option1) and gaining bathymetric and topography capability (option2).
- Option 1 ($300-$400k) would be a reasonable use of the $600k available funds.

DASA Program and Remote Sensing Assessments (continued)

- Future geomorphologic system assessments would seem to benefit from new topographic and bathymetric capabilities; i.e. option 2 SHOALS LiDAR technology.
- Option 3 for site specific cultural resource assessments seems cost effective, i.e. $2,000 a site.

Coping with Surprises in Ecosystem Management and Science

- Placing emphasis on learning from recent surprises from system. Science and management planning can reduce surprises, e.g.;
  - Involve interdisciplinary teams of experts.
  - Develop risk assessments
  - Formulate improved science/policy questions and timely assessments.
  - Develop and implement long term sand resource monitoring.
  - Continue to develop other long term resource monitoring.
  - Continue to develop and use conceptual systems descriptions of CRE.

Core Monitoring Plan

- GCMRC should complete the Core Monitoring Plan for SA review, and resolve revisions by May.
- Involve TWG and scientists in workshop on plan by early summer.