

## Panel Session -- Moderator Tom Olliff

Note: Cathy Whitlock and Cass Bromley, Bob Gresswell (?) were also taking notes during this session (computer); Glenn Plumb has handwritten notes—Dave Schimel—prepping for his talk? (perhaps send out an email to all who attended—send us your notes!)

8 minute summaries from group

- Climate Change – Steve Gray – talk was pretty close to notes from group
- Invasive Species – Tom Stolgren – **might want to get Tom to flesh out the notes that were presented to the group before he turns them in. Mentions of citizen science, mentions of publications like journals and YS.**
- Land Use Change – Tom Hobbs – not all criteria need to be met; 2- does the research question tell us more about how the system works; note of reciprocal feedbacks

STO Plan: bring back groups, make them declare themselves on their priorities, then evaluate their work. Focus on the questions in the program.

Questions or comments for the panel:

- Managers, does this workshop feel useful to you?
  - SK: Yes.... Felt they created a valuable framework to evaluate some of the processes and some of the issues from a GYA standpoint. Expected a little more specificity to come out of the workshop. Intuitively has to issues for the next 10-15 years. Expected to come out with an approach or flesh out a research objective that might address some of those priorities. Turned out a little differently than expected. Need to take this plan to the next step—take this framework and apply it at the GYCC subcommittee level and flesh out some of the priorities those groups may have. Need to articulate specific goals, add more detail.
  - TS: We need to show a proof of concept now. Invasives—try running an aquatic species or disease and run it through some models. Work in the cc scenarios, same with land use change scenarios. Next step: need to do the walk.
- Any specific needs that came out of your group?
  - SK: Yes. There were some specific research needs. Group focused on creating an outline of the process rather than specific research needs.
  - CL: Management perspective: How do management decision needs integrate science, and as a result, how does that make us do things differently. What science do we need to make good decisions? Yes we do basic science, science for the sake of science. Called in JJ new order—parks as a place for science for climate change. What does a manager need to know from the science community to make better decisions? How risky are the threats (e.g., cc, luc, is). Science needs to serve managers to make decisions. Managers need to know where to put their money. Should we put money into keystone species or maybe something less important?

- SK: Good point. Determine risk assessment. Take a step further into scenario planning. Take the process into the next step—subcommittee?
- ME: Question from another manager about the session—was it difficult? How will this session turn into concrete actions. Felt we got there during the process. How do you think about vulnerabilities? How do you do the work? Who will do the integration across the agencies and science management? How do you move forward? Individual units may have strategies for investments and specific actions. How do we move forward with out siloing information? Wants integration.
- Scott Christiansen: Bob Gresswell credited for being a good facilitator. There is so much new information coming out on cc now—it's almost hard to keep up with. There are so many agencies within the GYE that have different missions, mandates, guidelines—at the end of the discussion, there was an idea for a working group. This might be a GYCC subcommittee. Is there a bigger, more important platform that this might sit on? Maybe USGS... something that would give it a higher profile. Need to get everyone together on a consistent basis—think bigger.
- Starting to talk about the how's...
  - TO: DOI agencies have been mandated to work on a larger scale.
  - Chris S(?): LCC to address issues of cc across BC, Alberta, NRock, build on existing partnerships and systems, respond to critical needs agencies have, might be able to provide funding. Secondarily, deliver conservation associated with cc, do it with fed, state, tribal. Cooperative effort is new. Committee is part of a coordinating process work for shared common goals.
  - AH: Discussion in group: became clear that additional stakeholders in addition to federal and state folks need to be involved, possible through forums. Trying to move towards ecological objectives for the GYA and prioritizing them. Currently each agency has its own objectives. This is an opportunity to integrate all of these ownerships and prioritize, what are these ecological objectives? Could get everyone on the same page on objectives across agency ownerships.
  - CS: LCC is starting on this.
  - AR: Given all of this starting stuff, how do you move past the generalities? If you had a different group of people, you would have different objectives.
  - CS: LCC will send out questionnaire to all top 5 information needs for topic of cc. Come up with shared concerns, elevate the priorities. Come up with some finer level of resolution. Suggests our group sit down and refine goals, come up with achievable goals, and things that can be done in a short time frame. Hope on of the products of this effort is going to refine.
  - TO: Early December, 5-6 sit down with results from workshop, develop draft framework. Second group help refine that. Something out by beginning 2010. Wants to glean quick action items from discussion groups.

- MC (?): Likes LCC concept. How can you incorporate issues related to luc and is into the LCC>
- CS: Will look at cc, energy development—LCC will work on all of these issues, can separate them. CC is on the hub of this wheel, but they all work together.
- Gary Gannon: CC observation. Some of a rift between scientists and managers, what they wanted to get out of this. Goals and constraints were different, focus of decisions, budgets. Needed to discuss how decisions are made at the beginning would have been helpful. If there could be explicit statements about how decisions are made for each stakeholder, might be easier for group to know where everyone's coming from. In some cases, the goals of the managers and funding of the managers might not be matching up with the issues we're discussing. I think there are other stakeholders that could have been here that could be impacted—ranchers, people on the periphery that will be impacted.
- ME: Didn't notice a rift, but thought managers were looking for more immediate tools. Not adverse to long-term needs, but were looking for immediate. Like question about "what do manager's need?" Scientists were looking for specific answers. Needed a better process for helping managers make decisions in the shorter term. Don't want to be short sighted, but might have an exercise of managers at different levels. What are the questions managers will really be asked? What is solvable? Might also have local government levels, NGOs, on the ground techs. Look at a 5-10 year framework?
- CS: agrees. This was in his group's summary from session 1.
- AH: saw purpose of event as, what really are the key needs of managers for science? Doesn't see this as a missed opportunity. There is a need to elucidate managers needs on specific timeframes, what are the questions of science and research that can address those questions at different times. This needs to go into the report and into the science agenda.
- ME: needed more needs to help meet manager's needs.
- SK: Agrees. Research has to be focused on management needs, need everyone involved (inc. tribes), danger of going into this without knowing what manager's need before you go into the process with so many different interests and it gets watered down.
- STO: What I heard: maybe there needs to be a different kind of process to get at what we need? Maybe have a group of managers from different levels in an organization.
- CL: Managers need to hear from scientists—were at a critical point here. Science needs to inform what we need to manage in order to meet the NPS message. There is a divide: We ask, what do you need? Well, what do you have? Managers need the basic information, need to have conversations with scientists about, what should we do.
- Gary Gannon: To be explicit about the mission, let us know what the constraints are. Opportunity to evaluate the gap between what we know and what we don't know.

- CL: Need data to be productive.
- Jan Engert: A lot of the focus is on ecological impacts, heard decisions are constrained by politics and social system. Heard from a lot of groups that they need expertise from these groups—need more info on the people aspects of the group. Is there potential to have these folks included in the future.
- CL: LU group—what is the role of social science.
- TS: Need someone to help facilitate the group discussion that involves social science, economics.
- JG: Re: need for research to inform decisions. LU group started very specifically about questions. Beginning questions reflected who you were working from. Took some work to make questions more general and take out specific needs of individual agency. But he can go back to his agency and show how these questions can fit their needs.
- STO: we should include this in the broad document.
- TH: Thinks there is some value in the detail in research priorities. More details = constrictive. If you set too specific priorities, then you might lose scientists. Priority should be they fit needs of managers. Fundamental processes in cc, luc, and is are not well understood, and can't inform management decisions. This document should acknowledge this—this doesn't have to be funded by mission-oriented agencies.
- SG: Group got over significant uncertainty. Not too long ago, group might have felt paralyzed by uncertainty. Didn't see that in today's discussion. Major accomplishment. Might indicate potential better interaction between managers and science communities.
- Sterling Miller -- NWF: Three fundamental points to the success of this discussion: (thanks, good job) need money—where will this come from? Source of that money has to be in national legislation. Warner-Leiberman Bill—if we're going to be successful, need \$ in nat. legislation. 2. How do we adapt to cc, how do we mitigate, can't get lost in how to we adapt and lose site of avoid and minimize the amount of cc that—need to reduce CO2. A little outside of the scope of this, but wanted to mention. In order to achieve mitigation, need public support.
- STO: yes, we did limit the scope of the workshop.
- BG: Goal of this meeting was to begin to define long-term research goals for the next 10-20 years. Important for us to get back to important management discussions. We were working on two different time lines: most of the manager questions were 2-3 years. Most of those folks probably won't be in those jobs 10-20 years from now. Struggled with this.
- STO: time frame for manager decisions typically 1 day-maybe 5 years. Science much longer. Will be interesting to reconcile this.

STO: Thanks. Some things I picked up:

- Need for more usable information—need science to be more available and accessible to managers.

- Managers and scientists live in different worlds. Trying to bridge the gap.
- Need a structure to help folks work together.
- Adding value without adding workload. How do you do this without spending time together?
- Jerry: method for mapping relationships. How can you use this in the future.
- Suzanne Lewis: For organizing committee: thinking about natural tension between managers and scientists. All relationships build and change over time. For these topics, we need to look for ways to transform these relationships. Manager needs to tell how they make decisions, need to for the transformation between the people. These are not easy things. How are we going to treat the sense of urgency? Right now—what time scale? Scientists need to share their senses of urgency. We need to understand the types of commitments it will take to do this type of work. Traditional approaches to commitments, might not be enough for these issues. If I thought about budget issues, I wouldn't get anything done. What are the policy changes I can ask for to make these things needed. Parks will never have the funds to do everything it wants. YNP hasn't gotten a budget increase in 10 years. We have our own buckets, though. What should we be doing? If I have this agenda, I can do something more transformational. How can I step outside the traditional ways. Might need social science, organizational psychologist. How can we take the organization to a different place?