

Science Working Group

Notes from September 1, 2011

Dan Yparraguirre provided a “walk-through” of the “Science of the Department of Fish and Game” (document passed out to WG members in attendance; document emailed to WG members during this morning’s meetings).

Distribution of Science and Technology Transfer

What are the top 5 unfunded priorities? Never enough.

Some areas intolerant; some are not as tolerant

How comfortable with level of power and capacity of science?

Are there areas of concern? I.e. listing petition. How do you get more information to make decision in timely manner and avoid jeopardy. I.e. Delta.

Process (science) versus product (decision making)

Commission doesn’t have the science capacity versus decisionmaking by USFWS. Commission decision political?

Commission balance human needs – based on science and other factors. Failure of science to communicate to policy makers.

Failure of the institution to communicate with decision makers.

Game – monitoring, management mode

Non-consumptive – need for new knowledge i.e. listing

DFG works closely with their counterparts at state and federal level – should be complementary.

Best available science – uncomfortable. May or may not be adequate for decisions. One needs to be careful. Peer review good.

WG should look at ways to facilitate collaboration. Best professional judgement and new available information.

Avoid building models on erroneous information. Need more capacity for better modeling. Special skill set – universities and larger agencies (USGS, NOAA, USFS) are in a better position.

Need independent review of the “science center” work.

Something missing in DFG capacity.

If not enough in house capacity – is there a way to address this? Collaboration may not be enough. Need to institutionalize in DFG.

DFG working to institutionalize process – birth to death. Want robustness and power. Need broad structure development – get biggest bang for the buck.

650 scientists versus 650 individuals with science degrees. How many are working in the scientific process? Commitment, capacity, institutional barriers.

Until '70s, DFG had a science unit. That function moved to university. In concept, sounds good. In practice, need money, difficult to get individuals interested in CA issues. How do you motivate those to do science for policy makers?

Hiring process barriers to developing internal science unit. Too small for SPB to pay attention to. Current classification process has resulted in unintended consequences. Can't get to good science without dealing with recruitment and retention.

What is the role of a state agency in science? Is it conducting the science or evaluating the science or translating the science – or all three?

Partnerships with research users (to partially address above)?

Science Advisory Board (USEPA) – compensated scientists, review science agenda and frame the science issues. Conceptually may be a good model.

Good review and analyses takes time. Group needs to look far ahead in order to be prepared. Anticipatory planning.

Use the right, the best information to make management actions. Generate and use in the best defensible manner.

How to deal with uncertainty. Agency not good at using science as part of risk analyses. Agencies tend to take a conservative position.

Biological opinion – best available scientific evidence. Not good at translating into defensible action (and staying out of court) – big challenge.

“Science and Decisions” NAS 2009

Missouri River Restoration Committee – six member science advisory. Has avoided lawsuit. Can DFG draw something from this process? Something about the civility of the process – lacking in the Delta.

DFG needs modeling expertise. Need for ecosystem management.

Need for integration, coordination and communication.

Matrix – what are the responsibilities of these entities and use to weave into a governance body. Who is doing what?

Independent Science Review (Peer Review) – putting review in the right step in the process, need more time, selection criteria important. Good model: Everglades - National Research Council/nationwide members – annual reviews of omnibus program.

Leadership has to have the courage to “seek the truth”.

Organization needs to have a commitment of objectivity and truth seeking all the way to the top

How do you use information to make policy decisions? A lot of tools; need to be translated to a defensible decision.

Sustain harbor communities. At tipping point – losing infrastructure. Not integrating with what is already there.

DFG – attempting to integrate its science. Currently scattered around the department.

Goal – sound science.

Conflicting mandates result in litigation. 168 current cases. How many related to science challenges?

Create a venue to publish. Encourage publication. Numbers have gone down. Credibility become the perception.

Look at steps/structure for risk analyses. Tran-scientific step is not articulated – not transparent.

Use of information is important. What based on judgment, data, etc. Better inform the public and stand up in court.

OEHHA – raw science; kick data to DPH for policy

Core element: How do get raw science? WG, matrix, collaboration, salary structure, etc.

Core element: How do you use it?

Need for a firewall between science and policy makers. Regulators should not be adjudicators. I.e. big game advisory group (independent body). Design is pure and answer question – policy makers not part of design = firewall.

Re-review models on what works and doesn't work.

General Fund is/should be the firewall.

Possible model: PFMC Science and Statistical Committee.

Field training biologist – enhance technical skills.

Integration: where has it worked; where has it failed? Need for planning. Have a cohesive plan to know what things to tackle. USGS: Information hub; biogeographic branch; best available information.

Initiative – state-level information hub; information sharing. Need to automate “knowledge base”.

Data portals.

Design component to science/information management.

DFG – iDesk who doing what, where...

DFG waterfowl population studies (for management) might be a good model – lets you know how post-evaluation (did it work? Did it not work, and why?) Comfortable with the risk set. Data string is an advantage.