

**North American Waterfowl Management Plan Evaluation Team (CET)
Minutes of the January 14-16, 1997 Meeting in Lafayette, Louisiana**

The meeting was called to order at 8:30 am on January 14 at the National Wetlands Research Center of the U.S. Geological Survey. All members of the CET were present (Mike Anderson, Bob Bailey, Rick Baydack, Fred Johnson, Mark Koneff, Tom Martin, Jeff Nelson, Jim Ringelman, and Clayton Rubec). The recent decision of Mike Tome to resign from CET service due to overwhelming professional commitments was noted. Best wishes to Mike and thanks for a job well done. Mark Koneff was appointed as acting CET Chair for the meeting.

First-Order Issues

The minutes and action items of the summer 1996 meeting were reviewed and no changes were suggested. Clayton Rubec then provided an update on the status of Canadian Wildlife Service administrative positions which oversee activities under the North American Waterfowl Management Plan (NAWMP). David Brackett is on an 18mo assignment with IUCN, Steve Curtis will act for him. Linda Maltby has been selected as the next director of the Habitat Conservation Branch, under which resides the NAWMP office, which continues to be headed by Danielle Bridgett. Linda Maltby will not take up control of the Habitat Conservation Office for 18mo as she will be acting for Steve Curtis. Bob McLean has been selected to act for Linda Maltby as the director of the Habitat Conservation Branch for the 18mo of her absence. Steve Wendt remains as chief of Migratory Birds, but is replaced as the NAWMP Canadian Co-chair by Bob McLean. Although the changes in personnel are major and several administrators assume acting positions, the individuals now charged to oversee NAWMP implementation are believed to be strong NAWMP supporters.

Jim Ringelman reviewed the results of the October 1996 meeting of the NAWMP Committee in Quebec City, Quebec. The report of the CET was, in general, well received by the NAWMP Committee. Jim noted that the primary conclusions of the NAWMP Committee were that the CET had the green light to proceed and continue to develop their ideas about the application of ARM concepts to habitat management. Concern was expressed that the CET keep expectations about the utility of ARM to waterfowl habitat conservation be kept in check. There is a tendency for ARM to be perceived as something drastically new and for expectations to soar unrealistically. It will be important for the CET is focus upon communicating realistic expectations -- ideas of ARM are logical extensions to, and often similar to, current approaches and are not panaceas.

Mark Koneff provided an update on the consultation process for the 1998 Update to the NAWMP. A time-line of consultation activities was reviewed and the contents of the Phase I consultation kit was discussed.

Action:

- 1) Mark Koneff will send Tom Martin 50 copies of the Update consultation kit for distribution at the PIF Western Working Group meeting.

- 2) Tom Martin will call Ken Williams to discuss the extent of consultation activities within PIF, possible ways in which Tom might assist consultation activities, and other specific issues.

Jim Ringelman, Fred Johnson, Jeff Nelson, and Mark Koneff attended the December meeting of the Adaptive Harvest Management Working Group. They presented the rest of the CET with an update on the outcomes of that meeting. At the meeting the CET made its first official overtures of cooperation to the Working Group. The feeling was that the CET's overture was not poorly received, however, the full relevance of the CET's suggestions was not immediately appreciated by many on the Working Group. The CET's main point to the Working Group was that at the larger-scale, the CET and Working Group share many critical development needs related to the "realism" of the alternative AHM models and the need to better describe hypotheses about the effect of habitats within the model suite. The CET concluded that they were the unfortunate victims of bad timing at the Working Group meeting. That meeting was dedicated to difficult and frustrating negotiations over harvest regulation packages, and the messages brought by the CET appeared to "get lost" within the larger set of Working Group meeting objectives.

Action:

- 1) The CET will continue with future efforts to stimulate cooperation with the Working Group.

Developing a Strategic Game Plan for the CET: Discussion on Future Directions

The CET sought to strategize about items 1 to 3 below in order to provide the National Offices and Plan Committee with a strategic plan which outlines CET products, schedules, and needs over the next 1.5 years, within the framework of a 5-year longer-term game plan.

1. Long-term game plan (5 year)
2. Immediate Issues (12-18 months; 2 CET report cycles)
 - tasks
 - approach
3. CET roles/membership/structure

Following the identification of these 3 broad components of the strategic plan, the CET proposed a modification of its primary mission, which focused more heavily upon the ultimate objectives of NAWMP and less upon currently mandated review and reporting processes. The revised mission statement read...

CET MISSION AND MANDATES REVIEWED AND REVISIONS PROPOSED

CET Mission

To assist in the attainment of NAWMP Goals by providing useful advice to Plan partners on the effectiveness and future directions of NAWMP programs and the conduct of Plan evaluations.

Services offered by the CET can still be broadly categorized within recommendations about implementation strategies based upon evaluation feedback, and about evaluation strategies *per se*...

Services of Plan Partners (intentionally broader than the Plan Committee)

A. Recommendations regarding programs

- implications of results from biological analyses
- strategic analyses (e.g., biological foundations, policy analysis, institutional structures, funding, etc.)

B. Recommendations regarding conduct of evaluations

- ARM development
- other continental analysis (retrospective)
- other JV consulting/research

LONG-TERM (5 YEAR) CET OBJECTIVES

The CET proceeded to define the elements of their long-term strategy (5 year)...

5-Year Goals

1. Contribution to the 1998 Update of Plan

2. Framework for adaptive habitat management

✓ Continental ARM scoping

A. Generate specific hypotheses about habitat impacts on survival and recruitment (work with AHM people)

B. Enhance monitoring to support future retrospective analyses

✓ Development of JV ARM framework

- ✓ Consultation communication plans
- ✓ Building hierarchial objectives for NAWMP; cross-scale linkages

3. Strategic analysis

- ✓ Policy Analysis
 - A. Review of government policies that impact attainment of NAWMP goals
 - B. Identification of policy instruments to assist NAWMP
 - C. Model probable impact of instruments (above) on Plan objectives
 - D. Recommendations for implementation
- ✓ Megatrends analysis for Plan (e.g., world food demands, water issues)
- ✓ Strategic positioning of the Plan within broader environmental frameworks (e.g., CEC linkages, technical issues for update)
- ✓ Establish complementarity of NAWCA and NAWMP evaluations

4. Ongoing Communications with plan partners regarding evaluation design, results and recommendations

- ✓ Routine JV communications
- ✓ N.Am. conference paper
- ✓ '97 report to the Plan committee

DETAILED OBJECTIVES AND TIME FRAMES FOR MAJOR TASKS (12-18 MOS.)

1. Contribution of 1998 Update of Plan

**Draft by March 30
Done mid-April**

- ✓ Immediate input (3-5 pp.)
 - A. Assess management performance to date
 - summary of evaluation results to date

B. Assess evaluation efforts to date

- summary of evaluation progress
- assess limitations to progress
- value of better information for management performance
- describing ARM conceptually and the opportunity it affords

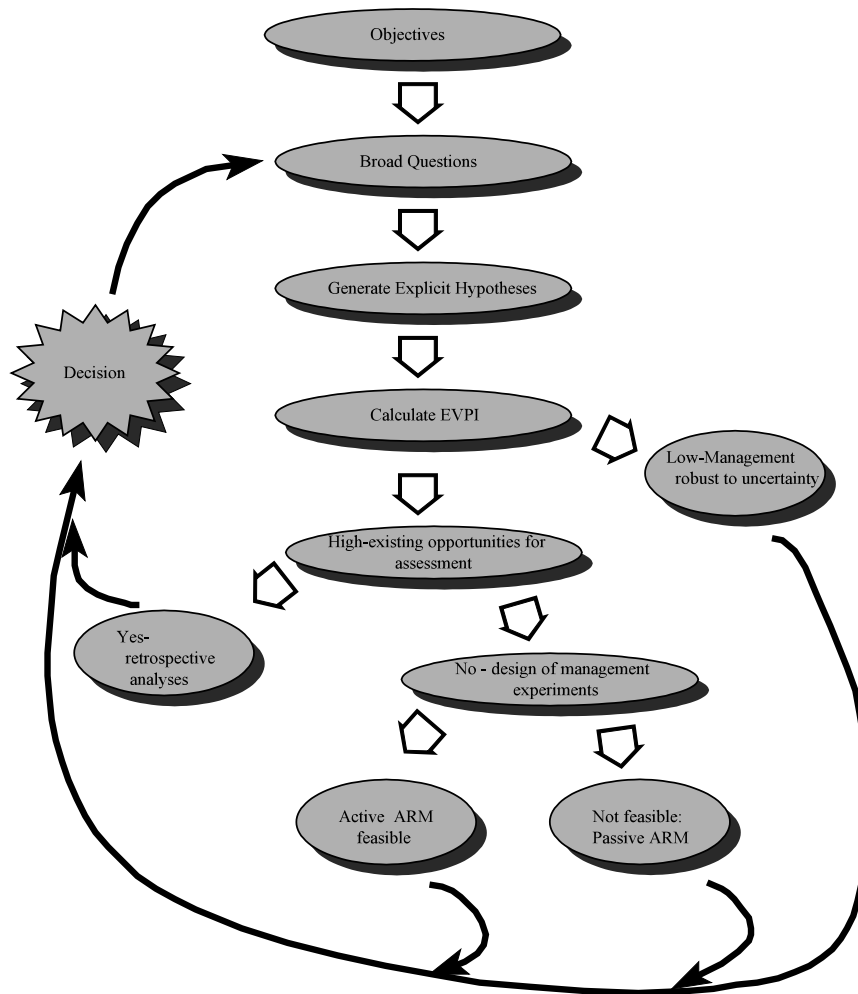
C. Strategic issues

- ✓ Review of update drafts

Summer 1997

2. Framework for adaptive habitat management

- ✓ Flow of ideas for developing ARM framework



_____ In struggling with the nature of an evaluation strategy at the scales of joint ventures versus the continent and where it is most likely the above thought process would lead at these divergent scales, 4 questions were offered proffered as a “litmus test” for the likelihood that a true active application of ARM was possible at the continental versus joint venture scales. These were labeled “sobering questions” and are listed below.

Sobering Questions

- ✓ Can explicit, commonly-held objectives be embraced?
- ✓ Do information needs lend themselves to ARM?
- ✓ Will resources be re-allocated based on better information?
- ✓ Is learning possible?

On reflection, therefore, the CET concludes that (under current institutional arrangements driving habitat conservation partnerships) active ARM likely is not feasible at continental scale. It has become apparent that flexibility in evaluation planning is paramount, and that from the thought process flowchart, above, a number of different strategies will likely be employed at different scales and for different management uncertainties. The CET proceeded to define in greater detail immediate (18mos) tasks to continue with the development of adaptive strategies for NAWMP at both the continental and joint venture scales.

Continental ARM Objectives

- | | |
|---|------------------|
| ✓ Retrospective analyses | Done 1/98 |
| ✓ Generating hypotheses with AHM group | Done 4/98 |
| ✓ EVPI analyses | Done 4/98 |
| ✓ Review current and proposed monitoring programs to support ARM (wildlife, agriculture, climate) | Done 7/98 |
| ✓ Recommendations for enhancements | Done 7/98 |

JV ARM Objectives

- ✓ Draft frameworks for PPJV and LMVJV **Done 7/98**

The intent is to develop these "model" frameworks to the stage that we have consensus and commitment (by both technical and management boards) to trying the ARM approach. Secondly, we want to progress through the stage of EVPI calculations (see flow chart above) with the JV technical committees.

3. Strategic analysis

- ✓ Policy Analysis

- A. Policy analysis plan (U.S., Canada, Mexico) with major priorities identified **Done 7/97**

- B. Funding proposal **Done 8/97**

- C. Communication with national offices

- D. Review and identification of policy instruments done (3 A and B above) **Done 7/98**

- ✓ Megatrends Analysis

- Expected to be done in association with policy tasks **Done 7/98**

- ✓ Positioning of the Plan within broader environmental frameworks

- A. Monitor language in the '98 Update r.e., positioning **Summer 97**

- B. Foster NAWMP / CEC Linkages

- C. Positioning proposal **Done 7/97 - Rubec**

- ✓ Institutional Adjustments

- A. Identification of barriers / issues r.e., evaluation in North American Conference manuscript **Done 2/15/97**

- B. Recommendation to NAWMP Committee r.e., value of

an objective, independent review of the NAWMP structure and its effect on program success.....how do we keep the good and enhance performance? **Done 10/97**

✓ Establish complementarity of NAWCA and NAWMP evaluations

A. Immediate advice to Ken Williams (see notes from next day)

B. Further development of ranking criteria as developments warrant

4. Ongoing Communications with plan partners regarding evaluation design, results and recommendations

✓ CET annual reports to Plan partners (1997 and subsequently) **Done 10/01**

Goal = outline / rough draft done to discuss at summer meeting.

✓ North American paper **Done 2/15**

✓ Routine JV communications

A. Communication about evaluation reports ('96 feedback and reminder for '97) **Immediately**

B. Design assistance as needed.

CET RESPONSIBILITIES, STRUCTURE, AND MEMBERSHIP

Given the tasks, and timelines identified above, and the 4 long-term objectives of the CET (traditional business, ARM development, policy / strategic issues, communication imperatives) the CET undertook initial steps in a review of support (both financial and logistical) needed to accomplish these tasks according to the timelines identified.

Conclusions:

✓ Communication tasks are essential for all the above roles/responsibilities

✓ CET should form 2 temporary sub-groups: one to pursue policy and strategic issues; one to pursue exploration of ARM. In addition, the Team will continue to meet twice each year to continue normal team functions with respect to reporting, joint venture communications, etc.

✓ In the short term, sub-groups need to scope resource needs for attaining our 12-18 month goals. Scoping, including rough budget, to be **done by 2/28**. On same schedule, **Koneff and Rubec will estimate costs for continuing traditional Team activities**, assuming 2 meetings per year.

✓ Initial assignments for the sub-groups:

ARM = F. Johnson, Ringelman, Nelson, Koneff, Anderson, Martin

Policy = Bailey, Baydack, Rubec..... and we need a U.S. member.

Establishing the Complementarity of NAWCA and NAWMP Evaluations

Lacking strict sideboards, but realizing the importance of providing input to the North American Wetlands Conservation Council (NAWCC) before their March retreat on monitoring and assessment issues, the CET provided some initial thoughts on processes by which evaluation proposals could be prioritized for funding.

As a general guideline, and as indicated in the Act, the CET assumes that “in the absence of any umbrella objectives/strategies, the NAWCC would revert back to international cooperative plans/institutions (NAWMP, PIF, WHSRN) for guidance on implementation and evaluation priorities in conserving wetland ecosystems for migratory birds.” This, in fact as been standard NAWCC procedure as reflected by the current scoring process. As new international implementation and evaluation plans are constructed, it is assumed that the NAWCC will utilize these plans in prioritizing conservation projects for funding. Some rough criteria which could be used to assess the priority of an evaluation proposal are:

Criteria

- ✓ Does the proposal support the purposes of the Act?
- ✓ Does the proposal adequately “demonstrate” benefits (consideration of EVPI in concept)?
- ✓ Does the proposal incorporate sound scientific designs?
- ✓ How would the expected information influence management policy?
 - are there institutional arrangements/considerations/agreements that would ensure the information has the appropriate impact on implementation strategies?

Obviously, these criteria remain too broad to provide a reliable means of selecting the highest priority evaluation proposals for funding, and NAWCC Staff could not be expected to house sufficient technical abilities to apply these criteria to a potentially broad spectrum of proposals. Therefore, the CET suggests that as the 3 initiatives (NAWMP, PIF, WHSRN) develop, technical bodies be appointed to 1) develop detailed ranking criteria within the broad criteria already suggested which would be specific to the individual initiatives, and 2) apply the

detailed criteria to NAWCA evaluation proposals and provide a ranking of evaluation proposals specific to the individual initiatives. This ranking would be provided to NAWCC Staff to provide background information for their deliberations. The CET would be willing to serve in this capacity for the NAWMP should NAWCC and the National Offices deem this an appropriate function.

Updates on the IWWR Duck Deficit Modeling and the NAWWO/MBMO/PWRC Recruitment Modeling

Mark Miller provided an update on the “duck deficit” modeling being conducted for the U.S. and Canadian prairie pothole and parkland regions for 12 species of ducks. A “duck deficit” is defined as the difference between strata specific abundances of ducks predicted by historic pond-abundance relationships and observed values. Results were available for mallard, blue-winged teal, and pintail, and were shared with the CET. Final results for the 12 species will be ready for the February Ducks Symposium in Baton Rouge.

The status of recruitment modeling efforts and survival modeling efforts, outlined in the June 1996 CET minutes, were reviewed. It was noted that Mark Miller will be conducting the recruitment modeling (jointly funded by NAWWO/MBMO/PWRC), under the direct guidance of Jim Nichols, and that progress was being made in gathering and investigating broad-scale environmental datasets which might prove useful in the process. It was noted that little progress has been realized in the planned survival modeling, but that Patuxent remains committed to assist. Final products are still expected by November 1997.

Thoughts on the NA Paper

The CET recognized that resolutions made during the current meeting had significant ramifications on the approach being considered for the CET paper at the March NA Conference. A new strategy was suggested, built upon the ARM thought process which was flow charted earlier in these minutes. The group decided that it was critical that the paper be written from the perspective of managers’ needs and in a manner that provides realistic examples which quickly engage a management oriented audience.

A rough outline was suggested...

- ✓ Engaging the reader - shared perception of problem (incomplete information, limited resources)
- ✓ Get managers to question whether they should worry about their uncertainty - potential gain in management performance and the likelihood that management is robust to the uncertainty.
- ✓ How can the experience of management be used to better inform future management?

Suggested length - 15 or less double-spaced pages.

Timeline-- Fred/Mark - provide CET with rough draft by Jan 29.
CET return comments by Feb. 5
Authorship will include full CET
Mike Anderson will present at the Conference.

Meeting with the Gulf Coast Joint Venture

The CET met with 20+ GCJV partners to discuss the status and progress of GCJV evaluation planning efforts and to provide advice to the GCJV on the direction of these efforts. The GCJV, through its Coordinator and several Initiative Area Chairpersons, provided the CET a synopsis of the purposes, objectives, strategies, and assumptions of the JV. During this synopsis, several key assumptions were identified which will likely be important features of JV evaluation planning -- 1) focus on habitat availability during stressful years, 2) freshwater marsh systems are a critical focus of JV implementation strategies, 3) the functional equivalency of flooded croplands, and 4) how and why birds redistribute, 5) importance of foraging versus sanctuary limitations. To help structure the thinking of joint venture participants, the CET offered a simple diagram showing various levels at which JV programs may be evaluated, and the relative “directness” of the linkage of these levels to the ultimate NAWMP population objectives.

MORE

DIRECT

<u>LEVEL</u>	<u>RESIDUAL QUESTIONS?</u>
NAWMP Population Goals ----->	None, Nirvana
Survival----->	How does S relate to population size?
Body Condition/ Disease-Loss----->	How relate to S?
Duck density, Distribution and Mobility----->	How impact condition?
Habitat accomplishments (Base time -> current time)----->	How much is enough? Quality or value of habitat

LESS

DIRECT

Several take-home messages were offered to the JV...

- ✓ The CET is not making demands upon the JV to provide specific information needs for the continental assessment. CET thinking has matured since the original evaluation guidance was released in 1992. It is important that the JV design evaluation strategies which are most informative and useful to them, recognizing that some information (particularly that from monitoring programs) will likely be useful in the continental assessment.
- ✓ New possibilities for evaluation funding (such as potential from NAWCA) puts renewed emphasis on the development of comprehensive JV evaluation strategies to ensure that funds available are channeled to highest priority evaluation needs.
- ✓ New ideas within the JV to restructure the MERT and give it a more integral role in JV delivery are noteworthy. To date no JV has afforded such opportunity to marry equally critical evaluation and implementation processes.
- ✓ Attempts within the JV to identify funding and establish a full-time evaluation coordinator are important. A full-time coordinator working closely with both research and management has proven invaluable in other joint ventures in moving evaluation efforts forward.

Meeting with Representatives of the Prairie Pothole and Lower Mississippi Valley Joint Ventures

The CET met with Ron Reynolds (PPJV) and Bill Uhlein (LMVJV) to discuss opportunities to apply ARM concepts at the joint venture level to further evaluation progress and improve implementation. These joint ventures have been initially invited to participate in joint scoping efforts with the CET because their planning status, in general, is more mature than other joint ventures and dedicated personnel are available at the joint venture level to facilitate progress. Both Ron and Bill provided the CET status reports on implementation and evaluation planning efforts to-date. The following discussions about the potential and applicability of ARM concepts in JV implementation and evaluation were then focused on the PPJV in order to make more immediate progress, since key assumptions or hypotheses on the breeding grounds are presently more clearly defined.

Much discussion ensued on the nature of uncertainty within the PPJV, particularly in relation to the tools utilized in that JV in implementation planning - the Mallard Production Model and the MAAPE process (Multi-Agency Approach to Planning and Evaluation). It was noted that some structural uncertainty is present about the relationship of components within the model itself, but that more important to management are uncertainties about factors regulating key model parameters (parametric uncertainty). A natural prioritization of evaluations of treatment variabilities follows from the cost and perceived importance of treatments, ideas about the robustness of treatments to key uncertainties, and the ability to discover cost-effective means of measuring and monitoring landscape factors which regulate treatment success.

The CET then presented the earlier thought process flow-chart and suggested that such a process might be useful in structuring joint venture evaluation planning processes in the future. The general consensus of those participating was that the process proposed was logical and that it, in many instances, conformed to the processes already used to develop existing joint venture evaluation strategies. It was agreed that these ideas were worth further joint exploration and that it was important to apply the process within the joint ventures before further judgements regarding its usefulness were drawn. It will be important within the PPJV, where so much has been invested in the MAAPE planning process, that we highlight that this is the logical next step (evaluation) following the planning phase currently underway.

During discussions, the differences between traditional management and research approaches (as currently integrated in evaluation plans) and the thought process being explored by the CET were highlighted. In many instances, it was noted that the differences were subtle, but that ARM provides and necessitates an explicitness in planning not found in most existing evaluation plans, by forcing planners to consider the impact of their evaluation findings on implementation up-front, and by providing opportunities to balance focus on traditional management objectives with learning such that implementation programs themselves provide the means for treatment evaluation.

How to best further explore these ideas at the joint venture level ?

The participants decided that it was necessary to begin to involve a broader array of joint venture expertise in exploring these ideas within the respective joint ventures.

Action:

- 1) Ron Reynolds will attempt to coordinate a venue for a joint meeting among the ARM sub-group of the CET and technical representatives from the PPJV for mid- to late April 1997. Potential dates will be forwarded to Mark Koneff for distribution to the ARM sub-group.
- 2) Bill Uhlein will undertake similar efforts within the LMVJV on a similar timeline.

During these CET/JV workshops, participants will attempt to follow the logical flow of ideas presented earlier in the flow chart in these minutes using actual management uncertainties faced within the respective joint ventures. This can be accomplished by stepping through a series of questions...

- ✓ What are the management interventions open to the joint venture?
- Which are most important or costly?
- ✓ Do we have information on how well they work or how variable their results are?
- ✓ Do we have ideas (hypotheses) about why we see different responses?

- ✓ What are those ideas?
- ✓ If we knew which ideas were correct, how would they change our management?
 - Robust to uncertainty?
 - Cost worth acquisition?
- ✓ Are there opportunities to clarify why we see different responses to management?
- ✓ Can management be implemented to help understand why we see different responses to management (competing hypotheses)?

Dates of Next Meeting

The dates of the next meeting of the full CET were tentatively set– August 11 to 15. No specific location was decided upon.