

**Appendix D: Breakout Session 1, 2 and 3 Group Notes (Separate Cover)**

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## Appendix D: Breakout Session 1 Group Notes

NOTES -- Breakout Session #1 – Group #Birch Lake/Maple Lake

<b>Discussion Leader</b>	Min	Huang	CT Dept of Environmental Protection
<b>Recorder</b>	Kathryn	Dickson	Canadian Wildlife Service
<b>Participants</b>			
	Greg	Balkcom	Georgia Department of Natural Resources
	Bob	Blohm	US Fish & Wildlife Service
	Patrick	Devers	U.S. Fish and Wildlife Service
	David	Fulton	U.S.G.S. Minnesota Cooperative Fish & Wildlife Research Unit
	David	Howerter	Ducks Unlimited Canada
	Don	Kraege	Washington Dept of Fish and Wildlife
	Ken	Mayer	Nevada Department of Wildlife
	Len	Ugarenko	Association of Fish & Wildlife Agencies
	Jim	Unsworth	Idaho Department of Fish and Game
	George	Vandel	SD Game, Fish & Parks Department
	William	Vander Zouwen	WI Dept of Natural Resources
	Jeffrey M.	VerSteeg	Colorado Division of Wildlife
	David	Viker	U.S. Fish and Wildlife Service
	Rick	Warhurst	Ducks Unlimited
	Greg	Wathen	Tennessee Wildlife Resources Agency

We should aim to manage populations and their habitat, maintaining productive habitats across their life cycle.

A lot of different models would have waterfowl persist on the landscape, want an objective to include future recreational demand (demand will change from now)

Not enough recognition how much we depend on other people to sustain constituency support, they put the habitat out there

Hunters are the choir, already converted, what about the larger untapped constituency? At the same time, hunters are still our key supporters. Even within our hunting community, who are active – who are the actual contributors, politically, to engo's, etc.?

Sole burden to conserve waterfowl/wetland habitat, can't be all on the shoulders of hunters.

Different values of new citizens – didn't grow up with outdoors ...

Not all hunters are members of environmental organizations, and not all members are hunters.

Hunters could be better organized to provide political support.

Wildlife Habitat Canada is solely dependent on hunter's buying stamps -

All our efforts can be wiped out easily (e.g Farm Bill), unless the larger constituency is engaged.....especially the next generation.

Best way to preserve hunting, is to take a bunch of kids outdoors, maybe don't have to be hunting.

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Habitat is the key, of course, but don't forget the simpler, more unified regulations important!

The objective has to be broader than waterfowl to justify all the money spent on habitat conservation, harvest is a much less important part.

The biggest challenge is how to integrate all these objectives.

Our NAWMP habitat goals must be realistic, must be achievable. The system is changing (Climate change etc), when we set goals for the future – what is a 20-year goal (where will we be with # hunters, landscape pressures, etc.)?

Should the habitat goals be expressed more about providing K for certain number of birds, rather than a goal of a certain number of birds.

As well as integrating objectives for habitat, human dimensions and harvest, we have to think about integration with those managing other species, ie. NABCI.

Need more often waterfowl hunter surveys.

- Objective is to have healthy landscapes, that supports hunting, but reaches a broader audience of support
- recognition that habitat conservation is the key, but the most important mechanism to ensure habitat conservation is the human dimension
- the concern about declining hunter community, and whether there is another audience that can be groomed to take up the charge for rounding up political support, financial support, for habitat conservation, etc.
- The current funding model needs to change, to provide not only the funding support but the political support
- to-date, most attention has been paid to habitat and harvest management, but the motivations and objectives of the public is been ignored
- some groups have found a successful formula for increasing participation in outdoor activities, how to expand that more broadly?
- Objective is not so much to increase hunters per se, but the question is how to raise funds and support for habitat conservation for its broader values more generally
- Some pessimism about our ability to conserve habitat in the future, given the big pressures (climate change, ethanol production, etc.)
- Habitat is key – what should be our habitat goals?
  - o NAWMP habitat goals must be realistic, must be achievable, but not easy. Don't want to disenfranchise our key client right now through regulatory details. The system is changing (Climate change etc), when we set goals for the future – what is a 20-year goal (where will we be with # hunters, landscape pressures, etc.)?
  - o How can broader habitat objectives for other birds be incorporated? Role for NABCI – other species shared wetlands habitat.
- Did not discuss harvest management much, many folks are tired of talking about harvest!
- But, clearly harvest management is important, populations must be able to respond to improved habitat availability

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### Breakout Session # 1 Ballroom 1 Notes 8-27-08 1000am

Mike Anderson (discussion leader)

Ken Abraham (recorder)

<b>Discussion Leader</b>	Michael	Anderson	Ducks Unlimited Canada
<b>Recorder</b>	Kenneth	Abraham	Ontario Ministry of Natural Resources
<b>Participants</b>			
	Ron	Anglin	Oregon Dept of Fish & Wildlife
	Jimmy L.	Anthony	LA Department Wildlife & Fisheries
	Brad	Arner	Ducks Unlimited Canada
	Todd	Arnold	University of Minnesota
	Ken	Babcock	Ducks Unlimited
	Brad	Bales	Oregon Dept of Fish & Wildlife
	Ian	Barnett	Ducks Unlimited Canada
	Mike	Brasher	Gulf Coast Joint Venture
	Paul	Castelli	New Jersey Division of Fish and Wildlife
	Dale	Caswell	Canadian Wildlife Service
	Tom	Melius	DOI USFWS Regional Directors Office
	Dave	Smith	Intermountain Joint Venture
	Mark	Whitney	Georgia Department of Natural Resources
	Greg	Yarris	California Waterfowl Association

### Goals of Waterfowl Management

1. **4-tiered**: keep populations at sustainable level, next objective is to determine what those popn levels should be, next is to have habitat to support those popn, next is to have enough hunter base to support/justify

EC – at top levels, questions being asked: what are we doing, who are we producing the ducks, should be thinking of broad (continental) picture, degree to be determined

2. How do we **maintain what we have**, habitats will get worse, so challenge is to maintain that level, linked to hunter base via money to do the work, challenge is to keep equilibrium

3. **Maintain waterfowl popn** (a biodiversity issue) is a floor objective; but 3&4 are not mutually exclusive; IF we manage for hunting, we need to manage for more birds than we would otherwise need and then need the habitat. THEREFORE, **Framework is that waterfowl management should be managing for hunting**

4. Focus on the problem, need to start. #2 (sufficient habitat) is clear, but the rest is chicken-egg. NAWMP should be **re-cast in terms of integrating** the 3 legs. Harvest and hunters should not be side-bars.

5. Providing resources to maintain populations at some determined level. Primary motivation to do that is to **sustain hunters**. Assumption is that positive feedback is that as long as we have birds and habitats, we'll have hunters. Recently this has been challenged; might reach a tipping point where there are not enough.

6. Bottom line: maintaining popn at levels that would maintain hunters; determining what hunters need/want to stay participation; If you want those popn and you are addressing the hunter needs, then you need the habitat to provide the birds; **re-think the 1970s objective for popn**; we have a long way to go in terms of

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using a model driven approach to habitat; still a lot of opportunistic habitat work (i.e., not well linked to the waterfowl population objective).

7. Momentum of certain legs (i.e., amount of resources going to each, etc.) is going to be difficult to control (i.e., habitat). Some of the legs (human dimensions) are weaker and are going to be hard to focus upon, especially hunter participation. Therefore, we need to concentrate on the **human dimensions** aspect to improve our knowledge base.

8. **Hunter participation** and habitat are so linked (CA), can't talk about one without the other. Without hunter participation, wouldn't have habitat (\$20 M/yr private money spent to manage – not acquire- habitat. Managed wetlands predominate, 2/3 of habitat wouldn't be there without hunting. Sense is that society does not feel it is critical to maintain wetland habitats, if hunting were not part of the equation. **Maintaining waterfowl popn to maintain hunter interest and participation is the key.**

9. **Habitat.** Need efficiencies. Re-think goals for habitat (i.e., 1970s levels). Human dimensions – decline is worrisome.

10. What is ultimate objective? Is it **hunters, or are hunters a means to the end** (i.e., maintenance of the waterfowl population). Human dimension is important – need to know why it is changing (not likely opportunity, as there is lots of it). Defining availability of habitat, defining hunter ability to access.

11. Populations are the most important, but they come from **having enough habitat**. However, is that enough to sustain hunters? Will they be satisfied? Today's hunters want it all – if they don't get a limit, they won't be happy. Necessary waterfowl population size will always be a moving target, as society will tell us what is needed. Expectations of other hunters are also changing (e.g., deer). Build habitat and there will be enough to satisfy hunters.

12. **Integration** of the three components ought to be a specific goal/objective of future waterfowl management (regardless of the difficulty or practicality). Habitat on breeding grounds (i.e. productive capacity) is absolute need (90% of popn momentum). Then we can discuss allocation, etc. Evaluate model of habitat delivery (e.g., JV-flyway linkages) – will it continue to work. What is motivating the decline, when populations and seasons are so good (e.g., the last decade, Canada, etc.). **Hunting tradition** that we need to maintain is the one where everyone is able to participate (clubs and leases are constraining), so public areas are needed. Do we have the courage to face that issue?

1a. Expectations need to be managed.

2a. Regional differences must be recognized (wintering vs. breeding). New stressors that didn't exist 30-40 years ago, e.g., water maintenance may be driven by endangered fish. This constrains management of habitat for waterfowl Too much control of habitats is in the hands of too few in some instances (e.g., wintering habitat in the Atlantic Flyway).

6a. Habitat managers **must** work with harvest managers to focus where habitat should be built/maintained to satisfy the objectives. Need spatially explicit objectives.

DL: Must have **complementary objectives** among the three components. If not, we can be working at cross-purposes.

3a. In terms of HD, avid groups are very hard to satisfy, especially consumptive user groups. Multi-modal desires are common. Understanding human dimensions of hunting, requires acknowledgement that there is a difference depending on whether hunting is *opportunity* driven or *bag-limit* driven (e.g, NJ has lots of public area, but still has a hunter number decline). *System change* has occurred in our hunting population. "Yellow boots" are really important – need to get them back.

12a. Observed that "regulations" were not mentioned during this break-out session.

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11a. Hunters are discouraged from participating by complexity of license structure. Simplifying regulations is necessary (e.g., LA, GA).

12a. **Understanding waterfowl hunters** should be a primary objective of waterfowl management.

1a. Canada example. Ample opportunity, lots of birds, ease of access, simple regulations. These are not barriers. There is a **Social System change at the root of the participation decline**. Can this be rectified by the traditional management tools?

Maintain the habitat we have on breeding grounds (secure and improve). Ensure habitat on migration and wintering areas does not become limiting. Establish complementary objectives for habitat, population, and harvest management. Develop models. Commit to enhancing understanding of hunters, with goal of maintaining short term, increasing long term. Using structured decision making in institutions to determine why we are in business. Recognize and accommodate regional differences.

### Parking Lot

Concept of bringing 3 legs together is good, hesitation of how to go there, vision of how it would work still fuzzy

JVs may be reluctant to tie-in with harvest management, challenge will be to get their convergence  
Bringing hunters into habitat will be easier

Could Canada benefit from quantifying waterfowl as an export to the US, so that policy will be focused on gathering US resources to provide means to maintain population, habitat, etc.?

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Breakout Session #1	Group #2	Notes-8-27-08-(9:30 am)AM.	
<b>Discussion Leader</b>	Seth	Mott	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jorge	Coppen	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Doug	Bliss	Environment Canada, Canadian Wildlife Service
	Brad	Bortner	U.S. Fish and Wildlife Service
	Dave	Brittall	Washington Department of Fish and Wildlife
	John	Buhnerkempe	Illinois Dept of Natural Resources
	Eric	Butterworth	Ducks Unlimited Canada
	Bob	Carles	Saskatchewan Watershed Authority
	Breck	Carmichael	SC Department of Natural Resources
	Tom	Collom	Oregon Dept of Fish & Wildlife
	Steve	Cordts	Minnesota DNR
	James H.	Devries	Ducks Unlimited Canada
	James A.	Dubovsky	U.S. Fish and Wildlife Service
	John	Dunn	Pennsylvania Game Commission
	Chris	Dwyer	U.S. Fish and Wildlife Service
	Alan	Wentz	Ducks Unlimited
	Steve	Williams	Wildlife Management Institute

### **What are the objectives for waterfowl management?**

Our overarching mandate is healthy & sustainable waterfowl populations.

But what are the specifics? (e.g., 8.8M MCM) What are the harvest mgmt. objectives?  
What sideboards help us ID the “number” society finds acceptable and is achievable?

NAWMP used as a guide indicating 1970s habitat (productivity of habitat) supports population of the 1970s.

### **To unify waterfowl management, we must balance habitat objectives, hunter satisfaction, and population objectives.**

Reasonable objectives for hunters may be difficult to determine given changing heterogeneity of the culture of society & hunters.

How do we track heterogeneity & changing culture within a timeframe to narrow down what hunter satisfaction really means?

Are we targeting the wrong groups (those that already support waterfowl management)?

HD work may flesh out commonalities among such disparate group?

Significant decline of hunter numbers in Canada. Satisfaction issues tend to be localized. Is our role really to grapple with the social context?

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Hard sell to politicians to promote programs to recruit hunters, given urban public demographics don't support recruitment. Gaining public support is a challenge.

Ultimately customer service is our goal and a business model framework may be best structural approach to address hunter recruitment issues.

Other segments have an influence (first nations) beyond duck hunter satisfaction and need to build our understanding of impacts to waterfowl objectives. They influence whether threats from development impact lands under their control.

Need to improve our databases for a wider variety of waterfowl species & populations beyond the mallard. Other spp. with narrower ecological niches...But, slicing the pie is a danger. Do we fine-tune this to the last duck? What is achievable?

Preserving wetland ecosystem functions resonates better with the public than producing ducks for hunters...healthy & clean environment trumps the public interest. How do you set a goal or objective that serves waterfowl?

Need to establish a benchmark. How many ducks do you need?

Decreasing land base has led to a crisis situation for maintaining habitat base  
Hunter satisfaction has not improved when ducks increased.  
How do we pinpoint what satisfaction issues are?

**As we face declining habitat, and waterfowl objectives are harder to meet, the crisis of "professional credibility" forces us to find new ways to approach transparent mgmt.**

Hanging our focus on hunter satisfaction perceived as inappropriate & dangerous. **Setting goals driven by public satisfaction is difficult since we don't know what that is.**  
**Hunter harvest is but one component. Credibility needs to incorporate goals that are "achievable".**

Need to use hunter harvest information for decision making but lag time may be significant to inform models in a timely manner.

### **Stepwise needs:**

**State of pops (models tracking landscape change, harvest, & impact of landscape variables on productivity)**

**What are habitat objectives needed to sustain populations**

**Work on satisfying & retaining user groups**

Establish some goals...then spend less time setting a population goals but spend more time considering how we are going to support waterfowl management.

Setting goals for human dimension component should be downplayed to priority biological issues in waterfowl management.

Ask "Why?" to the reason folks voted on the Turning Point question of goals for hunters (Should we stabilize hunter numbers?).

NAWMP 1970s benchmark still a viable goal for waterfowl management.

Hunter number stabilization, more than satisfaction per se, should be a focus for goal setting.

**Financial & political support emanates from hunters so focusing on hunter satisfaction is important...we need to connect/orient hunter enthusiasm to the political & financial issues that affect their future use.**

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TP question: “Which of the following is the most important objective for waterfowl mgmt.” If we have habitat, we’ll have the ducks...so we can focus on hunter satisfaction secondarily...But if we don’t have hunter political & financial support upfront, how do we achieve habitat objectives to begin with? Hence, hunter retention is paramount.

**We have professed in NAWMP updates that strengthening the biological foundation is the goal for waterfowl management – human dimensions will include changes in culture beyond hunters that will influence future recruitment & support for waterfowl management - a major undertaking...*Hunter number stabilization, more than satisfaction per se, should be a focus for goal setting.***

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### Future of Waterfowl Management Workshop

Breakout Session #1

Group: Ballroom 3

<b>Discussion Leader</b>	Rex	Johnson	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jim	Ringelman	Ducks Unlimited
<b>Participants</b>			
	Mike	Carter	Playa Lakes Joint Venture
	Greg	Chasko	Connecticut Dept Wildlife Division
	Alan	Clark	Utah Div of Wildlife Resources
	Ronald	Clarke	Alaska Department of Fish and Game
	David	Cobb	North Carolina Wildlife Resources Commission
	Diane	Eggeman	FL Fish & Wildlife Conservation Commission
	Robert	Ellis	VA Department of Game & Inland Fisheries
	Jody	Enck	Cornell University
	Kathy	Fleming	U.S. Fish and Wildlife Service
	Joseph P.	Fleskes	USGS Western Ecological Research Center
	Joe	Fuller	North Carolina Wildlife Resources Commission
	Jim	Gammonley	Colorado Division of Wildlife
	Sean	Kelly	U.S. Fish and Wildlife Service

### What are the objectives for waterfowl management?

- 1) Ensuring sustainable populations (Alaska example, climate change)
  - a) Huntable populations as well
  - b) Population size necessary for huntable populations is much larger than population size for a sustainable population
  - c) **General agreement that the ultimate objective is to produce enough birds at the continental scale, with the right distribution, to satisfy hunter needs (human consumption) at the local scale**
- 2) Sustaining the habitat
  - a) Related to distribution of hunters as well
    - i) Example: hunter numbers and distribution in CA determines where managed habitat is distributed
  - b) Habitat conservation is the tool to sustain huntable waterfowl populations
    - i) Habitat conservation comes about because of the support provided by hunters.
- 3) Maintaining hunter numbers
  - a) CT example: hunter numbers dropping to a critical level
  - b) Some state have professional marketers on their staff to promote hunting/retain hunters
  - c) Issue is especially important to states
    - i) Funding part of the reason
      - (1) Although other general revenue funds becoming increasingly important
      - ii) Traditions and sense of obligation/agency also important
  - d) Noted that decline in hunters pursuing species other than waterfowl
    - i) Nationally, the number of hunters has gone down; regional exceptions
    - ii) Many hunters pursue multiple species

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- e) Waterfowl hunters somewhat unique among hunters in that they are more apt to engage in policy and management issues
- f) What does it mean to “recruit” or “retain” hunters?
- g) If you don’t have hunters, you don’t have an audience for what we do
- h) They are our primary customers
- 4) Scale issues need to be considered
  - a) Big scale objective: sustainable and huntable populations
  - b) When stepped down to state level: maintaining habitat for birds and hunters
  - c) Can we design monitoring systems to handle “state shifts” like climate change?
- 5) Exercise on scale dependence
  - a) Exercise: demonstrate your opinion on “what is the most important objective for waterfowl management at the state or JV scale”?
    - i) Results (# of people) : Habitat 5; Populations 5; Human dimensions: 3
- 6) Exercise: demonstrate your opinion on “what is the most important objective for waterfowl management at the state or JV scale”?
  - i) Results (# of people) : Habitat 7; Populations 2; Human dimensions: 4
  - b) Exercise: demonstrate your opinion on “what is the most important objective for waterfowl management at the local scale (as in the area around a refuge, etc.)”
    - i) Results (# of people) : Habitat 8; Populations 0; Human dimensions: 5
- 7) **Conclusion: objectives are scale-dependent**
  - a) Why this trend re: scale-dependency?
    - i) A shift to habitat at the state level because states have control over habitats
- 8) Satisfaction
  - a) What constitutes hunter satisfaction?
    - i) Buy a license(?)
      - (1) A hint
    - ii) Some states survey for satisfaction
  - b) What metric?
    - i) A simple majority?
    - ii) Multiple metrics?
  - c) **What contributes to satisfaction?**
    - i) **Unfulfilled expectations**
    - ii) Lack of success
    - iii) Complexity of regulations
    - iv) Crowding or lack of access
    - v) Expectations based on past experience (where used to hunt, etc.)
      - (1) Relates to social changes, landowner change (need to ask permission now, didn’t used)
      - (2) Age and scale-related as well
    - vi) Other interests and commitments
      - (1) How do you control for these competing, external interests?
  - d) We are being “creamed” by the marketing done
  - e) There is a high level of interest among 5<sup>th</sup> graders, but as they get older their interest wanes
    - i) Do state regulations related to minimum age for licenses play a role in this?
  - f) **Mentoring very important to recruitment**
    - i) **Must retain hunters who serve as the mentors**
  - g) How do regulations affect satisfaction?
    - i) Surveys indicate dissatisfaction with regulations have little influence over overall satisfaction with hunting
      - (1) Having an open season most important
    - ii) **Is shooting a limit of birds part of an expectation leading to satisfaction?**
      - (1) **Not universal, but pertains to some of the hunting population**
      - (2) **A high bag limit sets some unrealistic expectations and sets the hunter up for a disappointing experience**
      - (3) One bird pintail bag limits (when inundated by pintails) leads to frustration
      - (4) Can’t generalize over waterfowl hunters, because they are so different
        - (a) Many just hunt one or two days

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- (5) It's not so much the specific regulations, but the change in regulations that gets people's attention
- h) How many of these satisfaction issues described above can be managed through education and outreach?
- 9) **Are there certain segments of the hunting populace that should be the focus of our attentions because of what they provide?**
  - i) **Managed private habitats**
  - ii) **Contributions to conservation organizations**
  - iii) **Political connections**
  - b) **Yes... probably... but not to the detriment of the general populace, at least not to a great extent**
  - c) There is a growing number of "have-not" hunters, those without places to hunt, etc.
    - i) Are we losing a higher percentage of these people?
      - (1) An important information gap
- 10) Looking back at the TP survey, noticed that the program managers/agency heads differ from biologists and scientists. Why?
  - a) Scale at which each group works?
  - b) Agency directors and others hear from high level elected officials when populations decline?
  - c) Biologists/scientists have ability to focus on the system?
- 11) Should JV's be held accountable for meeting population and habitat goals, as are the flyways for regulations?
  - a) They have to be if we are to achieve true coherence
  - b) Problem: science does not support a clear habitat objective, which makes accountability difficult
  - c) So many uncontrollable environmental effects that make annual accountability difficult
  - d) **Should we have a continental K and a JV K?**
    - i) **JV's look at potential K and harvest folks look at actual K. General agreement on this point**
      - (1) **Example: AHM models rely on moisture conditions that we don't control, but are important to annual changes in population size, BUT at a JV scale (i.e., PPJV) the focus is on retaining wetland basins and grassland nesting habitat, and annual moisture events actually complicate assessment of conservation progress**
  - e) Do we need to be setting objectives for a strong constituent base in support of JV's?
    - i) NGO's like DU do this to support programs

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### Breakout Session 1 – Ballroom 4 (Clark – Herbert)

<b>Discussion Leader</b>	Robert	Clark	Environment Canada, Canadian Wildlife Service
<b>Recorder</b>	Jeff	Herbert	Montana Fish, Wildlife & Parks
<b>Participants</b>			
	Dave	Erickson	Missouri Department of Conservation
	Arthur	Feinstein	San Francisco Bay Joint Venture
	Jamie	Fortune	Ducks Unlimited Canada
	Dale L.	Garner	Iowa Department of Natural Resources
	Jonathan	Gassett	KY Dept of Fish & Wildlife Resources
	David	Goad	Arkansas Game and Fish Commission
	David	Graber	Missouri Department of Conservation
	Karla	Guyn	Ducks Unlimited Canada
	Robert	Hoffman	Ducks Unlimited
	Rob	Holbrook	DOI USFWS Region 8 CVJV
	Rob	Hossler	Delaware Div of Fish and Wildlife
	Jack	Hughes	Canadian Wildlife Service
	Kevin	Hunt	Mississippi State University
	Barbara	Pardo	US Fish & Wildlife Service

#### Objectives for Waterfowl Management:

What are your priorities?

Conserving species and habitat – supportive of hunting and the need to get people out into the field to experience. Work on habitat restoration projects. In urban areas, hunting is not a very viable activity. Should do what we can to support hunting but need to recognize the value that other communities (nonconsumptive groups) will bring to policy level actions. Need to broaden constituencies to support conservation.

Acknowledge that there are a variety of public uses associated with these resources, not just hunting. What happens when hunter numbers decline by 50% in the future – what does that mean to a clean environment?

Importance of maintaining hunting as a means of providing a base of support for conservation actions, recognizes the value of associated activities.

Need to recognize the role of wetland grassland systems from a systems standpoint and the role of hunters in support of this system. Recognizes the value of stabilized regs to the hunting public.

Need to continue and get better at influencing policy as it affects habitat conditions. Need to maintain and recruit hunters via stable and simplified regulations. Core group of waterfowl hunters who will won't lose but we've lost the generalist or less specialized hunters.

Lots of opportunities and resources are in good shape but few and declining numbers of hunters. Big issues with nonhunted species that haven't received the attention that waterfowl resources have. Need to think continentally. People are getting back into hunting.

Need to consider specialized interests of hunters that overlap with other game species. This represents an obstacle that we need to deal with in the recruitment retention issue.

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Focus public policy on habitat conservation and incorporate good science. Consider a population focus with these policies.

Maintain biological systems and recreational opportunities. Regs need to be simple to encourage new participation. Habitat systems have been altered significantly in some landscapes.

Habitat is the key and hunters have been great supportive of conservation actions. Impacts to other suites of species as the landscape has been altered. Need to maintain hunting opportunity and that hunting is an acceptable and worthy activity.

Coherence issue is very important. Use science to indicate which areas on the landscape need focus and attention. Harvest mgmt and habitat mgmt to need to work in sync with one another in working towards the same population goals.

Objectives are to sustain waterfowl populations at some level. Must link conservation work to achieve population goals. Increasingly concerned with hunter retention.

Issue is one of sustainable funding for waterfowl management. Requires broad base of support, including other ethnic groups. Get women and kids involved. If we don't diversify, we won't have the political support necessary to support the system. Hunter expectations are currently quite high and more than what they have achieved. Getting lapsed hunters back is important. We may need to reframe what a waterfowl hunter is – can it be a person with a gun and waders?

If we're going to sustain hunting, we need to have waterfowl populations that will support those harvest opportunities. If we don't have the hunter base, do we simply need to maintain viable populations at lower levels? Managers have failed to effectively communicate who we are and what we do. Biologists and communication folks need to better coordinate the messages that we are providing and the audiences that are receiving those messages. Need to get into the education system and reach kids.

What's missing or needs to be emphasized?

We have identified the importance of habitat and hunters but how do we achieve coherence and what does that mean?

How do we market this information? We are afraid or reluctant to promote hunting as an important and valued activity.

State action plans can bring diversity into the mix both from an audience and a habitat/species focus basis. Be more inclusive and emphasize the importance of landscape conservation.

There are now more people in urban areas than rural areas. Need to consider how hunting is viewed by urban communities.

Coherence is a very specialized issue to a specialized group of people. Goals need to be clarified and then the remainder of us can deliver the message. In Ontario, 8% of the population are opposed to hunting but if hunting is framed as a choice, a lot of good work and a great story are possible. Local food production and eating healthy are becoming a more common message.

Some hazard in creating a separate urban rural message and try to not categorize as game and nongame species work - important to blend as conservation initiatives.

Believes it is important to maintain waterfowl populations with a broad set of set of conservation actions and a broad constituency.

Must do a better job of communicating why we do what we do and what is accomplished.

Don't give up on "cheap" bird watcher groups from a funding perspective. We should not be afraid of reaching out to these diverse groups.

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Recent scaup issue highlights the need to refine population objectives for other species that could be brought more explicitly into habitat goals and objectives. Not sure if it is possible but it is important.

Game people and nongame people still perceive themselves as different – they need to be brought together. Another perception problem is funding and how pass-through dollars from various sources for habitat work are viewed by Commissioners, etc. Need to better market our message. Need to pull the various hunting communities together.

Opportunity to readily engage hunting has really changed.

Better manage expectations of hunters. Important to keep getting out the message of hunting and do not lose sight of anti-hunting groups and their intent. Other agencies are looking at new revenues and it may not come to wildlife agencies.

Habitat needs to be the focus and objectives should be high. Put the bird in the habitat.

Concern over the potential impacts to existing landscapes from farm policy, energy development and climate change. Maintain healthy habitats recognizing annual variation that occurs across those habitats.

Mutually agreed upon population objectives are key to folks that deliver habitat programs. Better understanding hunter's expectations is critical. Message is that hunters need to better understand what the systems can support. Managing expectations - "It's not about me".

Need to frame waterfowl management in the context of larger landscape conservation with multiple societal benefits.

## Appendix D: Breakout Session 1 Group Notes

Breakout 1  
Ballroom 5

<b>Discussion Leader</b>	John	Eadie	University of California Davis
<b>Recorder</b>	Fred	Johnson	USGS Florida Integrated Science Center
<b>Participants</b>			
	John E.	Frampton	SC Department of Natural Resources
	Sam	Hamilton	FWS, Southeast Region
	Susan D.	Haseltine	U.S. Geological Survey
	Jeff	Haskins	U.S. Fish and Wildlife Service
	David C.	Hayden	Alabama Wildlife & Freshwater Fisheries, ADCNR
	Curtis R.	Hopkins	Ducks Unlimited
	Michael A.	Johnson	U.S. Fish and Wildlife Service
	Tim	Jones	Atlantic Coast Joint Venture/USFWS
	James R.	Kelley	U.S. Fish and Wildlife Service
	Tom	Kirschenmann	SD Game, Fish & Parks Department
	Kevin	Kraai	Texas Parks & Wildlife
	Larry L.	Kruckenber	Intermountain Joint Venture
	David	Luukkonen	Michigan Dept of Natural Resources

Objectives of W/F mgmt?

### Take-home messages:

- Concept of sustainability: many definitions, many facets – populations, habitats, hunters; how do we go about defining/organizing this concept?
- Most discussion revolved around human dimensions – what are values/needs/desires of stakeholders and how does they influence population and habitat objectives?
- Focus on human dimensions is perhaps appropriate, because mgmt objectives/policy flows from social values and needs
- Hunters probably should be viewed as principal stakeholder because they foot the bill and, at least to date, efforts to secure other major funding sources have seen limited success.
- However, incorporating hunter-oriented objectives must recognize that:
  - Hunter-demographics (and expectations) are changing
  - We don't know enough about hunters
  - There is an opportunity cost: hunter's can't foot the bill, so what role should other stakeholders have (who are they, how do you market conservation to them?)

### Discussions:

- Multi-faceted: Harvest, habitat, hunters
- Are we solely talking about hunters w/respect to stakeholders/human-dimensions? no
- Human dimensions go well beyond hunters; e.g., over-abundant populations – nuisance problems
- How do we rank objectives among categories but also within categories?
- Overarching goal: sufficient/sustainable habitat to support populations adequate to meet demands by all user-groups?
- Even though AHM targets maximum harvest, sustainable habitats and populations are necessary.
- Sustainable w/f populations (needs to be defined) may be surrogate for habitat and hunter needs

## Appendix D: Breakout Session 1 Group Notes

- Sustainability has to be unambiguously defined (too vague a goal)
- If you want to increase populations, then leads to habitat needs and increased hunter/user opportunity
- Sustainability – is as applicable to habitat and hunter #'s as to populations
- So many factors affect w/f-related human dimensions, our sphere of influence is relatively small
- How do we tie in large-scale environmental change with objectives?
- Are JVs the vehicle for evaluating/monitoring success? JVs have responsibilities far beyond w/f
- Coordination among JVs is difficult because they are bottom up, rather than top down
- But because JVs are bottom up, there are better opportunities to deal with human dimensions
- To what extent do we agree that hunters are critical to maintaining viable w/f mgmt programs? Straw poll:
  - No one disagreed that they are critical for providing funding, but
  - Some believed that maintaining hunting tradition, connection to the land, are also an important components beyond funding
  - Have to recognize limits to recruiting hunters (competing choices, time limitations), and hunter #'s probably will never be sufficient to support necessary mgmt programs; need to continue to seek other funding sources; Other funding sources have not materialized, despite some efforts to do so;
  - What if we increase hunter #'s, but we have no place to put them?? Challenge will be providing quality experience (e.g., sufficient access)
- Intersection between human dimensions and habitat mgmt – what might your habitat-mgmt objectives be, especially with respect to satisfying hunters?
  - Access is a key objective, particularly in migration and wintering areas (e.g., so perhaps we shouldn't spend all duck stamp dollars in the prairies)
  - Hunter expectations have increased dramatically over time; is this related to changing hunter demographics (e.g., more urban hunters, rather than people that live on the land)?
  - Private lands largely unavailable because leased up by more affluent, leaving agencies responsible for providing access to less affluent – not as important a role for agencies 20-30 years ago
  - How important is hunter access to guiding habitat management programs? Very.
  - But how useful is access as a performance metric? If we could provide all the access desired, would that lead to acceptable levels of habitat and population abundance?
  - The European model of hunting is coming: affluent hunters demanding instant gratification
- How do we begin to incorporate human dimensions in developing management objectives?
  - Are we prepared to live with the results, especially if they are heavily influenced by the affluent, politically connected (i.e., non traditional) hunter? We need to recognize changing hunter demographics?
- Should we let hunters principally guide mgmt objectives (should we be marketing to that group), or do we need to bring in the larger group of stakeholders? How do we grow out the group supporting w/f mgmt?
- Wrap-up – priority mgmt objectives?
  - Focus on habitat
  - Habitat in right spots
  - Better knowledge about hunters, other human dimensions critical to setting mgmt objectives; need to have social-science specialists
  - Build it, they will come
  - More habitat
  - Ecosystem integrity (much of extant habitat is compromised)
  - Habitat – but need money, whether it comes from hunters or whomever

## Appendix D: Breakout Session 1 Group Notes

### BREAKOUT SESSION 1-CEDAR LAKE 0830

<b>Discussion Leader</b>	Ken	Williams	US Geological Survey
<b>Recorder</b>	Scott	Yaich	Ducks Unlimited
<b>Participants</b>			
	Jane	Austin	USGS Northern Prairie Wildlife Research Center
	Vernon	Bevill	Texas Parks & Wildlife
	Tom	Nudds	University of Guelph
	Russ	Oates	U.S. Fish and Wildlife Service
	Casey	Stemler	US Fish & Wildlife Service
	Scott	Stephens	Ducks Unlimited
	Marie	Strassburger	U.S. Fish and Wildlife Service
	Scott	Sutherland	Ducks Unlimited
	Robyn	Thorson	U.S. Fish and Wildlife Service
	Nicholas	Throckmorton	U.S. Fish and Wildlife Service
	Bill	Uihlein	Lower MS Valley Joint Venture
	Johann	Walker	Ducks Unlimited
	Guy	Zenner	Iowa Department of Natural Resources

#### “What are the objectives for waterfowl management?”

- Consensus that integration and coherence are largely synonymous
- **Goal: maintaining habitat and pops to support simple, stable regulations**
- But, this means that the purpose of conservation is to support hunting
- Same flavor, but expand to “enjoyment by everyone”
- Also need to consider the importance of **maintaining wetland ecosystem function**
- Other comments regarding “multiple users”
- Many references to “sustainable:” Definition? Need to be careful because perceptions of sustainable are variable;
- [there was some discussion about the issue of “sustainability,” what it means to society, etc.]
- Regs may not be stable, but up to whims of the environment
- Need to separate stability from sustainability (latter is dynamic, but maintains opportunities to attain goals)
- Need to **sustain the habitat base**
- **Goal: Maintain healthy wetland ecosystem functions sufficient to support socially viable, self-sustaining pops of waterfowl**
- Meaning of socially viable?
- *The hunting community needs to understand our goals; we need to be careful about language*
- But, there is value to making sure that other groups understand and see relevance, as well; *need to consider all the other stakeholders* in waterfowl and habitat conservation
- *Need to consider the implications of this to “bringing in more money” than what is provided by hunting*
- Habitat base that supports healthy populations; concern about what the word “healthy” means
- “Subsistence hunting” comes under “sustainability”
- Can’t limit this to wetlands, need to consider all waterfowl habitats; consider hunters beyond waterfowl hunters?
- Do we need to have “sustainable” systems? Is “self-sustaining” meaningful in much of NA today?
- *Should be “humans” not just “hunters”*

## Appendix D: Breakout Session 1 Group Notes

- NAWMP was really about fixing the ecosystems, and the ducks would come for free at the desired levels
- Objective? “Fix” the prairie-ag economy
- We must recognize the fact that hunters have been the ones to “rise up;” how to get others to rise to the challenge
- OK to focus on waterfowl at this meeting. Is this important to connect to the broader conservation community? Is this part of our goal?
- *We must try to connect to the bigger picture; thus, the references to ecosystems and sustainability*
- Need to get agriculture and others on the same page
- “wetland ecosystem functions” captures the bigger picture
- We don’t need to maintain current waterfowl pops if we don’t hunt; we need to say that we want waterfowl for many other reasons
- *Issue of scale at which management is going to occur needs discussion; temporal scale also needs to be worked into the goal; [covered by sustainability?]*
- Seems to start with people, but chief among them are hunters and their values;
- *We need to engage a broader constituency with our objectives if we are going to get favorable policy*
- Simple, intuitive concepts to incorporate: carrying capacity; *have a carrying capacity for waterfowl that will meet user demands; we have to pick out a few simple things that can be explained to anyone as a set of objectives; 2-3*
- [there was a focus in the discussion on habitats and ecosystems, and the breadth of user interests]
- *We haven’t done a good job of educating our constituents, in simple terms that they can understand, about the system of waterfowl management*
- Pops go up, pops go down; production goes up and down; hunting goes up and down; we need to focus on the future, the potential for adequate waterfowl pops and desired hunting experience
- **Goal: to improve and increase access to waterfowl-related opportunities; need the opportunity to engage in this resource into the future**
- **Maintain the dynamics of waterfowl populations in the presence of harvest, whatever they would be in the absence of harvest; “take the interest, not the capital” and allow for sustenance of the opportunity into the future – this is the ideal of the yield curve; focus on landscape capable of supporting desired population and allow for natural variation**
- We all need to be sensitive to language; “yield curves,” “coherence,” “AHM”
- *We need to do a better job of communicating*
- **What do they want me to say?**
  - Goals for waterfowl management have to include traditional consumptive and nonconsumptive uses
  - Also maintain functioning ecosystems (wetland/upland)
  - Recognize that there is still going to be natural variation, and hence, in society’s use
  - Need to also tie in communication of broader values to society; need to figure out how to engage broad segments of society to sustain the ecosystems
  - Improve and increase access [tied to sustainability]
  - Take the interest, not the capital [latter two both tied to “maintain opportunity”]
  - **Maintain sufficient carrying capacity of waterfowl populations through sufficient habitat quality and quantity to provide a buffer against natural and human influenced fluctuations; to benefit con and non-consump users, including access, hunting and rec. oppor.**

## Appendix D: Breakout Session 1 Group Notes

### Future of Waterfowl Management Workshop

Breakout Session #1 Discussion Notes

Group: Deer Lake

27 August 2008

<b>Discussion Leader</b>	Andy	Raedeke	Missouri Department of Conservation
<b>Recorder</b>	Michael	Runge	USGS Patuxent Wildlife Research Center
<b>Participants</b>			
	Hugh	Bateman	Ducks Unlimited
	H. Dale	Hall	US Fish & Wildlife Service
	Jeff	Nelson	Ducks Unlimited Canada
	Kirk	Nelson	Nebraska Game and Parks Commission
	Jeff	Raasch	Texas Parks & Wildlife
	Larry	Roberts	Wyoming Game and Fish Department
	Rudolph	Rosen	Ducks Unlimited
	Ken R.	Sambor	Ducks Unlimited, Inc.
	Terry	Shaffer	USGS Northern Prairie Wildlife Research Center
	Charles R.	Sharp	Alabama Wildlife & Freshwater Fisheries
	David E.	Sharp	U.S. Fish and Wildlife Service
	Stuart	Slattery	Ducks Unlimited Canada
	Gregory J.	Soulliere	U.S. Fish and Wildlife Service
	Bryan L.	Swift	New York Division of Fish, Wildlife & Marine Resources

Discussion Leader: Andy Raedeke

Recorder: Michael Runge

Participants: Hugh Bateman, Dale Hall, Jeff Nelson, Kirk Nelson, Jeff Raasch, Larry Roberts, Rudolph Rosen, Ken Sambor, Terry Shaffer, Charles Sharp, David E. Sharp, Stuart Slattery, Greg Soulliere, Bryan Swift

Order around the table:

Andy, Ken, Kirk, Larry, Jeff N., Hugh, Chuck, Jeff R., Stuart, Bryan, Rudy, Dave, Greg, Mike

### What are the objectives for waterfowl management?

- Go back and look at the treaty and MBTA, hunting wasn't an automatic thing that happened. There are times when hunting would be allowable, but up to governments to determine when and if that would occur. Treaty doesn't guarantee any rights for hunters.
- Harvest must be sustainable, but that means there must be habitat out there to support. Healthy, strong populations. Needs monitoring program.
- Balance between three aspects: harvest, habitat, hunters. Spend too much time trying to squeeze the last bird out of the harvest. Could better spend time on habitat or access issues.
- Hunting opportunities
- Minimize the things we do that would deter hunting
- Don't see a problem with hunter participation. In some areas, don't know where you'd put any more. Crisis is on the habitat front.

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- We manage waterfowl for people's use. There's a conservation trust issue, but we're not close to the edge on this. We need to meet people's expectations, greater satisfaction, the more they'll support the system, positive feedback loop. What level of popn's do we want to have to make people happy, so they'll support habitat programs that will buffer future threats. Hunters disproportionately support these programs, so how do we grow that market?
- Connect sustainability to ... without hunters, we're done. There's enough habitat for these birds to persist. But in terms of increasing habitat, it's because of hunters.
- Why do we need all these wetlands? Waterfowl aren't in danger of extinction. We need all these ducks because we want to harvest them. Hard otherwise to find a rationale for these habitat programs.
- If you need all the ducks, then you need the habitat, and then you get other environmental goods and benefits. Good and benefits aren't the primary objective.
- Prevent extinction.
- Health of natural places.
- Birdwatching benefits.
- Hunting benefits.
- We don't have control over a lot of the drivers: agriculture, etc. If we don't take care of the habitat, other things will take over.
- It's not just about the hunting, but that's an important part of what we're doing. People that help us get things done (landowners, hunters through direct support or political support, etc.), keep them happy so we can continue to support the habitat. If we take care of wetlands in NA, then a lot of the other issues will take care of themselves.
- Impact of economics on what we do, urbanization, etc. Habitat is important, we've got that. Populations, we know what they're doing. But we haven't been dealing with the participation. We need to think about what our goals are around that. Then how do we do it, if we can?
- It's not going to be the hunters that decide our fate, it's going to be the larger public. Non-hunting public will determine what happens, economically, politically, etc. We need to instill in the non-consumptive public an ethic that supports waterfowl goals. Keep them connected to the habitat and wildlife.
- Disagree. It's the hunters that will make or break us. They'll either replace themselves or they won't. Hunters will have to play a clear role in preserving the tradition.
- Very divergent strategies just articulate. Do you go to general public to support hunting tradition, or do you focus on the hunting public to preserve the tradition.
- NAWCA was put in place by general public to support wetland-dependent wildlife. But, it wasn't sold, and it isn't, a program to support habitat for hunters. The public won't support that.
- How much is enough? How many ducks do you need? We need enough ducks for an acceptable season for those hunters who contribute the most (to habitat conservation). If you close the season, then you don't motivate the winter habitat conservation, then we've got a big problem with sustaining waterfowl populations.
- Effort to educate general public will get nowhere. The hunters have a passion, they'll devote their time and money. But that's driven by harvest regulations.
- Hunter retention is a real challenge. Complexity of regulations and access affect this. Want simpler regulations, this will help with hunter retention. Trend in hunter numbers is bothersome. We need to diversify portfolio—sell the societal benefits of wetlands to greater public.
- Ground water recharge, dead zone in Gulf, etc. Benefits of wetlands.
- Distribution of ducks and hunter access. Don't we have enough ducks? Isn't just an issue of where they are and who has access to them?
- Maintain the hunter base.
- Is maintaining hunter participation a means or fundamental goal?
  - It's both. We do need hunters to support habitat programs.
  - Everything we do is for people.

Andy reframed the questions:

- What is a sustainable population and why?

## Appendix D: Breakout Session 1 Group Notes

- How many wetlands do we need and why?
- What do we need for the public and how much? Hunter numbers?
  
- Waterfowl depend on private land. We're in a race to the base. Habitat mortality going on every day. We're trying to get growth in the support base to get to the end of the race with some habitat left.
- In 1986, when we signed the Plan, it said we didn't have enough ducks. We've lost habitat every day since then. Want harvest, hunter base, and habitat base of the 1970s. Have those goals changed?
- We're managing this for people. Hunters are a small segment of the public. Hunters hunt with the permission of the rest of the public. Need to maintain that.
- Habitat conservation—don't sell this based on increased opportunity to kill ducks. But we have to talk about hunters because that's who pays the bills. We're restoring habitat because hunters tell us to.
- I love to hunt. It's important to me. Doing good things for wetlands has a lot of benefits. There's a broad public base to support that. We need good healthy wetlands in NA. We need to do everything we can to support this—good regulations, motivated hunters, work with farm community. We know what we're doing. Be smart to make it work in the right way.

Quick round robin of final comments. Where do we need to go in the future relative to where we are now? New goals?

- We know there are things we can do with regulations that negatively affect hunter attitude (hence recruitment and participation). Do we know the mechanics of how we can get more hunters to get more pleasure out of fewer ducks? Can we educate the average hunter?
- We have good goals in NAWCA plan. We need business model to shore up participation by hunters.
- What's the difference between robins and ducks. Hunters as a mean to protect wetland and maintain a waterfowl hunting tradition.
- We don't understand the different kinds of hunters—what they expect and what they contribute. We need to understand the dynamics in different groups, different regions.
- Encouraging hunter participation and numbers is positive. Focusing on wetlands conservation. Simplify hunting regulations.
- Maintain the hunter tradition and numbers. But can we provide habitat (and access) for hunters? A lot of the decisions will be made by non-hunters; we need to address that.
- Take a negative view of recruitment and retention. Don't have much hope for it. Wasted effort, perhaps. Effort better spent elsewhere. Doomed business model if we're tied to hunter recruitment. Changing demographics—many of those people will never hunt. Don't look at them as potential hunters; at best, look at them as people who might know what a wetland is and have a positive feeling about that.
- All three thrusts are important. We have to know when work on one objective affects the others. Work in concert. Coherence.
- Hunters are fickle. Tough to pin them down on what they want. We focus too much on symptoms. Need to focus on the underlying problems. That might be more societal than anything else, but we focus on the symptoms (regulations, etc.)
- Goals of Plan cover all three legs plus coherence is taken care of. Concern is system change (climate change, societal change).
- 

### Summary of Objectives mentioned:

- Prevent extinction of waterfowl populations
- Harvest must be sustainable
- Provide hunting opportunity

## Appendix D: Breakout Session 1 Group Notes

- Maintain hunter base and participation
- Motivate habitat conservation
- Ecological goods and benefits of wetlands
- Maintain waterfowl populations
- Create good winter distribution of waterfowl and allow access for hunters
- Keep hunting regulations simple

### Some key issues that came up:

- Is hunter retention/participation a fundamental or means objective?
- How does the non-hunting public play a role in waterfowl management?

## Appendix D: Breakout Session 1 Group Notes

Breakout Session 1 Elk Lake Notes  
8-27-08 8:30-9:45am

<b>Discussion Leader</b>	Phil	Seng	DJ Case & Associates
<b>Recorder</b>	Barry	Wilson	Gulf Coast Joint Venture/USGS
<b>Participants</b>			
	Dennis	Jorde	USGS Northern Prairie Wildlife Research Center
	Jane	Noll-West	US Fish & Wildlife Service
	Bill	Rudd	Wyoming Game and Fish Department
	Dave	Schad	MN DNR Division of Fish and Wildlife
	Paul	Schmidt	U.S. Fish and Wildlife Service
	Dave	Scott	Ohio Division of Wildlife
	Bob	Shaffer	DOI USFWS Region 8 CVJV
	Carey	Smith	U.S. Fish and Wildlife Service
	John	Tirpak	Lower Mississippi Valley Joint Venture
	Robert	Trost	U.S. Fish and Wildlife Service
	Kent	Van Horn	WI Dept of Natural Resources
	Mark P.	Vrtiska	Nebraska Game and Parks Commission
	Tina	Yerkes	Ducks Unlimited
	Dan	Yparraguirre	California Dept Fish & Game

### **What are the objectives for waterfowl management? (Habitat, Harvest, Human Dimension)**

#### Habitat

##### **Maintain or enhance populations (and habitats?) similar to historic levels**

Continental diversity of species/populations may be difficult to maintain in light of climate change

Maximizing habitat values of existing wetlands

Account for changes in climate

Hunters/public more aware of e.g., sea level rise in coastal/Great Lakes areas  
Some concern/awareness of perceived/potential migration changes

Affordability for private land management

#### Harvest

##### Harvest/Humans

##### **Overarching objective to serve waterfowl hunting customer**

quality hunting/satisfied hunters

Need to broaden customer base beyond hunters

Maintain hunting quality

Finite habitat for access may limit hunter numbers in some regions

Maintaining hunting traditions

Can/should traditions evolve?

Keep hunting affordable, esp to managers on private lands

Importance of maintaining private lands among the potential hunter access sites (for some)

Monitor e.g. hunter approval ratings?

## Appendix D: Breakout Session 1 Group Notes

Better information (monitoring/research) regarding hunters and waterfowl

Where are we trying to end up?

Perhaps more explicit detail of 2-3 broad goals

### Overarching Goal

Provide sufficient habitat to produce sustainable harvests at socially acceptable levels  
“inter-relationships”

3 Elements

Social Satisfaction (of which Hunters Satisfaction is a subset)  
or Hunter Satisfaction??

### Round-Robin of Opinions

- Maintain tradition of hunting/NA model
- Hunter participation as an important metric - 2
- Hunter satisfaction/opportunity important as mission statement - 2
- Ecological Engineers (take people where they will be satisfied when they get there) vs Politician (take people where they want to go) - 2
- Hunters as a subset of society, all of whom's needs are important (3-legged stool approach)
- Hunters in support of habitat and populations
- Economically based decisions
- Concerns about mechanics of incorporating hunter needs
- Emphasis on non-hunting public

## Appendix D: Breakout Session 1 Group Notes

### Breakout Session #1 PreFunction1 Group Notes

<b>Discussion Leader</b>	Dale	Humburg	Ducks Unlimited
<b>Recorder</b>	Mark	Koneff	US Fish & Wildlife Service
<b>Participants</b>			
	Bruce	Batt	Ducks Unlimited
	Cal	DuBrock	Pennsylvania Game Commission
	John	Hoskins	Missouri Department of Conservation
	Beth	Huning	San Francisco Bay Joint Venture
	Paul R.	Johansen	West Virginia Division of Natural Resources
	Michael	Johnson	North Dakota Game & Fish Department
	Pat	Kehoe	Ducks Unlimited Canada
	Joe D.	Kramer	Kansas Department of Wildlife and Parks
	Ray	Marshalla	Illinois Dept of Natural Resources
	Faye	McNew	Kansas Department of Wildlife and Parks
	Tim	Mitchusson	NM Dept of Game & Fish
	Tom	Moorman	Ducks Unlimited
	Dave	Morrison	Texas Parks & Wildlife
	Craig	Mortimore	Nevada Department of Wildlife
	Frank	Rohwer	Delta Waterfowl Foundation

Degree to which what we talked about yesterday captures objectives for wf mgt

Sound habitat base for ducks  
Adequate wf hunting opportunity  
Make sure my grandkids can hunt ducks  
Keep hunting ducks well in the future  
Sustain wf pops  
Go duck hunting with my son  
Sustain wf pops for duck hunting  
Keep regs simple  
Maintain tradition of wf hunting  
Pops to allow hunting  
Invest in wetlands  
Future of wf mgt and how can benefit public

Summary – comments on personal obj vs agency/prof objectives (seems personal skewed toward hunting, vs prof toward habitat) – no, to maintain pops we need the habitat base

Is hunting traditional inherently important or is it just the \$\$ hunters bring for conservation?

- coming to a point (decline of hunters) where others are required for solutions, \$ from hunters insufficient
- if we don't have hunting, we don't need a habitat mgt program...we'll have plenty of habitat for pops supporting non-hunting uses.

Are there other reasons other than hunting to be doing what we are doing...other ecological goods and services?

- as wf managers, our focus is our hunting base...if no hunting base, don't need the number of ducks we need to support for hunting

## Appendix D: Breakout Session 1 Group Notes

- SF Bay different...high human density...other ecological goods and services important...many don't have access to wetlands...hunters or otherwise
- EGS opportunity for funding, also an opportunity to communicate broader societal values of hunting...and the resources it generates for conservation\*\*\*
- In SF Bay the model is a bit different (than NA model of wf conservation supported solely as hunters)
- Hunters need to be seen as a core constituency...not necessarily singular important, but if not prominent role in supporting wf mgt...hunting tradition will fade away
- We don't (in some places) want more hunters...too crowded...need the habitat base and access simultaneously...\*\*\*
- hunting can't be only for the rich...you want the rich influential but can't only be for them...how find that balance??
- Do our objectives capture these ideas?

### Many competing objectives at multiple scales?

- how deal with objectives in conflict?\*\*\*
- Educational opportunity/need – if enough ducks to support hunting, there is plenty to support non-hunting recreational opportunities...position hunters as providers of opportunity for other societal segments
- Raedecke slide scary -- look at Canada duck hunters...maintaining ducks doesn't necessarily mean you'll have hunters...do need to focus also on the tradition of hunting and its preservation...how do we incorporate hunter objectives in wf objectives??\*\*\*see below

### How incorporate hunter (and objectives of other societal groups) objectives?\*\*\*

- no "average" duck hunters...will always make some group unhappy...what's a majority...what if the sum of the groups you'll tick off with a decision exceed the constituent group that will be satisfied with it (no single majority)
- maybe don't want to lose any group entirely...everyone pissed at us a little
- how do we meet hunters needs/desires/provide opportunity without disenfranchising other constituent groups?
- Comes down to managing tradeoffs among user groups
- Other groups aren't sharing in the costs of conservation...need to bring these groups in...but also that comes with perhaps some loss of influence over the objectives of conservation efforts
- But important to note that society as whole is in fact paying for conservation...general treasury \$\$ critical as well – be careful about absolute statements like hunters pay the freight
- Many do understand that hunting is a part of resource mgt...tremendous market we've not exploited and we don't need to give away farm (ie, that hunters will lose by engaging this broader constituency) to involve them
- all this discussion has been around hunters and hunting traditions?, again in contrast to turning pt responses...habitat to support pops – and hunting/hunters will follow?? Present discussion suggests that we do need greater focus on incorporating specific objectives related to hunters and perhaps the desires of other user groups...\*\*\*
- what are the hunter objectives (satisfaction, participation, access, etc)? We are not to the point were we can specify these.
- We also need to make the work we are doing (to support hunting) relevant to a much broader constituency...explicit recognition of who our stakeholders are...we is the intersect between the groups we know support us and others
- So 95% society at least are supportive of hunting...don't lose sight of the 5% of anti's. The first time FWS is sued successfully and a season is shut down...we are in trouble→ critical objective is that we maintain a very high proportion of society that are at least supportive of hunting \*\*\*
- Gonna get harder and harder to put same amount of resources into wf mgt (state level)...need to figure out as others have indicated how to engage other constituent groups...JVs may be a vehicle

## Appendix D: Breakout Session 1 Group Notes

- Disconnect...maintaining hunter #'s low ranking (prof response, turning pt)...prof response, its about habitat...really it may have just been the question....all related, but HABITAT is the necessary condition for all others so selected this.\*\*\*

### Weights on 3 legs of stool?

- Do we need to consider different weights on the 3 different legs of the stool?\*\*\*now we put lots of weight on pop. Mgt...but group discussions have recognized habitat and hunters are the 2 most critical legs of the stool
- How much weight would we put on each element (amt of staff and budget directed to-or importance relative to current expenditures)?
  - o Habitat Mgt (under emphasized) – should have most weight
  - o Pop Mgt (overemphasized-better direct these resources to marketing effort-document there is a lot more support than we understand)
  - o Hunter Mgt (greatly under emphasized)
  - o Other Constituents (most under emphasized)
- We know so little as to how to incorporate human desires ?Can we weight conservation actions....say based on access.

### Summary

- 1) Discussions of group heavily weighted toward hunters/hunting...there is an inherent desire to continue the hunting tradition and explicitly recognize the importance of hunters/hunting constituency
- 2) Turning point questions focused attention on need for habitat –
  - \*are we assuming if we have habitat the tradition of hunting will take care of itself...can't assume this, see example of Canadian hunters
  - \*or did we respond to the turning pt question the way we did because habitat is a necessary condition for pops and hunting
- 3) We need to better understand and engage more than just the hunting constituency
- 4) Overall: we need to be purposeful in goal to continue hunting tradition...its more than a by product of habitat conservation: Hunters=habitat=ducks=Hunters (but can't lose focus on broader societal concerns)

## Appendix D: Breakout Session 1 Group Notes

### Breakout Session 1—Prefunction 2 Notes-8-27-08

<b>Discussion Leader</b>	Robert	Byrne	DJ Case & Associates
<b>Recorder</b>	Ralph	Morgenweck	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Tony	Leif	SD Game, Fish & Parks Department
	Andy	Loranger	U.S. Fish and Wildlife Service
	Wayne	MacCallum	Massachusetts Div of Fisheries & Wildlife
	John	Major	New York State DEC Bureau of Wildlife
	Bob	McLandress	California Waterfowl Association
	Luke	Naylor	Arkansas Game and Fish Commission
	Paul	Padding	U.S. Fish and Wildlife Service
	Ed	Penny	MS Dept of Wildlife, Fisheries and Parks
	Mark	Petrie	Ducks Unlimited
	W. Adam	Phelps	Indiana Department of Natural Resources
	Matt	Pieron	Ohio Division of Wildlife Department of Natural Resources
	Bruce	Pollard	Environment Canada, Canadian Wildlife Service
	Benjamin N	Tuggle	US Fish & Wildlife Service
	Emily Jo	Williams	U.S. Fish and Wildlife Service

What are the objectives of waterfowl management?

Preserving a waterfowl hunting tradition is important because it leads to habitat protection. Protecting the habitat and waterfowl resource. Need to reach out to a wider constituency to bring support for all wildlife conservation. Sustain and perpetuate waterfowl and wildlife populations and the hunting tradition. Synchrony of habitat and harvest leading to support of the hunting tradition. Emphasis on the sustainability of these resources. Yes, the three legs of the stool are important with habitat as they key because it leads to the two legs. Can't lost sight of the need to be strategic because of growing human population and the pressures that come with it.

NAWMP is important for habitat and need the human interest to keep such programs moving forward and funded. Perpetuate is an important word...habitat, waterfowl and hunting. Sustainable populations is the key and translate that into habitat needs and quantity/quality. Need to get all of the resource users pulling together. The hunter number trends and the growing disconnect of humans from nature is a basic issue since we cannot have habitat support or harvest support without the human support.

Some concern that recruiting nonhunters into waterfowl conservation might lead to a start in losing support for hunting traditions. A counter is to bring those nonhunters in and hopefully change their views of hunting and its tradition. Thus, an increase in support results. Be aware of differences in regional attitudes toward hunting and a conservation tradition. These differences may be based in part by the degree of urbanization of the region. Caution must be used to ensure that hunting traditions aren't implemented in such an extreme way (very high bag limits) that it offends the urban nonhunter.

We don't understand the motivation of hunters. Why do some not hunt each year? What role does access or populations play? There are other factors that we do not understand and need to learn about. Difficult to do an adequate job on the human dimensions aspect with what we know right now. We have spent 60 years on populations; 20 years on habitat and a few years on human dimensions.

## Appendix D: Breakout Session 1 Group Notes

Regional approaches are important and one size does not fit all. What are the sizes of these regions? These are different than flyways.

Turning point questions: Not surprised that biologists look at things differently than administrators.

Three legs of the stool: How do we integrate these 3 items? Need some way to measure the hunter data in an appropriate way and then integrate that appropriately via models or other mechanisms. We need to know what those basic human drivers are. Need to make a decision as to who we are managing for...the avid hunter? The occasional hunter? What are the appropriate categories of hunters? Then we might manage differently.

Some people believe that changes in regulations affect hunter participation. It may also affect how people manage their lands e.g. California.

Still, there is so much we do not know about the relationships between the hunter, habitat and harvest. We are making a great many assumptions about these relationships. What is the balance of those unknowns? Does it tip us toward any of the three legs of the stool? Some feel that looking back at human behavior does not inform us well for what is coming in the future.

Concern of who is going to pay for the work that is needed to support the legs of the stool. Duck hunters are paying the bill so far. Need to gather the data on human dimensions side and figure out how to integrate that into waterfowl decisions regarding harvest and habitat. Need to continue to try to get nonhunters support for things like habitat. Still some unknowns on the habitat side...how much is enough? How to achieve that? Predator control? More acreage? This needs to be integrated as well.

We have to remember the tremendous contribution made by USDA through their farm programs. Nonhunters can be recruited to support those conservation programs. In Canada, only 1-1 ½ per cent of people hunt so need the support of the nonhunters is very important. Actually, it may be more important in determining legislation. Is the nonhunter a fourth leg of the stool? They need to be engaged in conservation efforts. Some recognized that there are dangers in recruiting nonhunters and that the degree of motivation might be less; still, highly motivated people can be influential. However, it may not be that the nonhunters are highly motivated but they might at least accept hunting and be willing to nominally support it. We need to evaluate whether even the hunters are highly motivated enough to protect their sport. Perhaps we need not only to know what hunters want but perhaps what the nonhunters want as well. There is a danger that we lump all who do not hunt into one group when they have different motivations as well.

Some expressed the view that nonhunters (birdwatchers) have enough ducks to see. The real concern is for hunters and maintaining enough habitat and populations for a satisfactory harvest experience.

How many are enough? Think about deer hunters and deer populations and Canada geese resident populations. Ducks are different. Do we need to get population estimates or can we use some surrogate like population triggers? Would this reduce our cost and make it still effective information for making decisions?

It is possible that we could learn more about human dimensions and still not be able to do anything about the motivations of hunters. Perhaps we cannot overcome societal trends. That might mean we change our strategy for protecting habitat, harvest and the hunting tradition and hunter numbers. Might it mean we have to accept the limitations of society's changes? That might mean we need to develop new tools to deal with that new information about society. Society is also regionalized...the SE is different than the West. Cultures differ across the country. There are some similarities though for example, the tremendous number of opportunities for ways for families to spend their time now.

## Appendix D: Breakout Session 1 Group Notes

Massachusetts study: ethics, safety, practice, and the opportunity to hunt with an experienced hunter in the field were the 4 elements that both kids and parents wanted (these were nonhunter families) in order to joint the sport.

Using Junior Duck stamp in the schools to get conservation and hunting message out effectively in 200 schools in CA.

## Appendix D: Breakout Session 1 Group Notes

Break out session 1 –Prefunction3/Dancing Ladies 3 notes 8-27-08-

<b>Discussion Leader</b>	Sara	Pauley	DJ Case & Associates
<b>Recorder</b>	Mark	Gloutney	Ducks Unlimited Canada
<b>Participants</b>			
	Tom	Hauge	Wisconsin Department of Natural Resources
	Ross	Melinchuk	Ducks Unlimited
	Randy	Milton	Nova Scotia Dept of Natural Resources
	Eugene Greg	Moore	Delaware Div of Fish and Wildlife
	Steve	Moran	Rainwater Basin Joint Venture
	Marvin	Moriarty	US Fish & Wildlife Service
	Henry	Murkin	Ducks Unlimited Canada
	Harvey K.	Nelson	Trumpeter Swan Society
	Duane	Pool	TNC Migratory Bird Program
	Ronald (Rocky)	Pritchert	Kentucky Dept of Fish & Wildlife Resources
	Michael	Rabe	Arizona Game and Fish Dept.
	Ryan	Reker	Rainwater Basin Joint venture/USFWS
	Larry	Reynolds	Louisiana Dept Wildlife & Fisheries
	Ron	Reynolds	U.S. Fish and Wildlife Service
	Ken	Richkus	U.S. Fish and Wildlife Service

What are waterfowl management objectives?

Need to look at overall structure to integrate harvest habitat and human dimension: Paradigm shifts as lots of things happening in isolation

Social landscapes in Canada (production) and US differs (harvest)

Challenges to recruit hunters is a growing challenge. Where do we find people who can talk about ducks but understand human dimensions? So limitation of pool to recruit from to fill the human dimensions.

Pretty good understanding of harvest and habitat but little knowledge of the human dimensions, this creates challenges in terms of integration. Cart is well ahead of the horse at the is point as the information to inform the model. Administrators do not understand the language of human dimension.

Need to work to integrate the human dimension people into the fold as we did with the harvest modellers over the past decade.

Issue of communication of efforts around attempts to engage more hunters. Need to communicate silver bullet responses. There is a document that exists.

Human dimension split into 2 main issues: 1) Waterfowl hunter retention aspect, 2) hunter attitudes into annual cycles.

Waterfowl hunters are specialists, but most hunters start from the small game perspective. So need to recruit hunters first then promote them into waterfowl hunter.

Canada: limited hunter pool. Need to look at the broader benefits of waterfowl and wetlands. Human dimension deals with more than just hunters, but all potential stakeholders (i.e. bird watchers, urban population, and politicians). Support comes from all the other benefits from a broader suite of constituents.

Current flyway system does not really account for social differences between Canada and US. Regulation setting process so different.

## Appendix D: Breakout Session 1 Group Notes

US need to be broadening the scope of discussion with the non hunters to achieve our waterfowl goals.

Habitat messaging needs to focus on the EGS. The human dimensions of the population important not just the waterfowl hunters. But need to be careful not the walk away from those that brought us to the dance. As the bulk of conservation resorting comes from ducks stamps and NAWMP with match coming from key NGO's with waterfowl.

Hunter access is a key issue that needs to be addressed. Need to guard against hunting being an elitist sport.

Challenge is to bring the hunters and nonhunters together to see common outcomes of habitat conservation.

Discussion around habitat base to support harvestable population has been around for decades, only bringing in human dimensions issues in the last decades

Hunting traditions declining in many landscapes that have faced substantial habitat change (ie east cost). Issue of access to land is big issue, with public lands often only option.

Need to build experts with human dimension capacity. Need to pay attention to this because the hook and bullet groups are the critical funders of much habitat conservation. Paradigm shifts in state agencies need to have a base of funding that is broader then licence sales.

The goal of habitat conservation needs to expand beyond waterfowl. Broaden the goal to make the case that waterfowl habitat benefits more then just waterfowl. (non game, water quality, flood suppressing).

Primary objective: Need to focus on sustaining waterfowl populations through the protection and conservation of habitat base. The human dimension aspect is important about why and how we do this. Don't see how the human dimensions will get us there. But need to worry about the decline in hunters and the potential impact on political and funding influence. This can be complimented by building broader constituency that are interested in complimentary benefit.

Cultural change in the country that is taking people out of the rural situation. Access for all outdoor activities are influenced declining access to land.

Goal need to preserve wetland habitat in the face of declining wetland loss.

How do we convince people about the goal of habitat and waterfowl? Why are do we need more ducks? Need to do a better job of convincing population about the extent of wetlands to achieve our goals. Need to consider the co-management of wetlands for multiple benefits. This might not necessarily be the best for waterfowl, but it might be critical for constituency development.

Need to ensure that we do not give up on current population goals. We should not reduce pintail goals.

Root of all issues is human populations. Too many people on the globe with too high a standard of living. Making life easier.

Fundamental goals of waterfowl management have not changed.

Can't get to the habitat base on the backs of hunters along. But must ensure that we do not abandon the hunters.

When we talk about setting goals, need to get some assessment of contribution from other sources (i.e. WRP, coastal)... This would demonstrate the actual contribution of hunters to conservation.

## Appendix D: Breakout Session 1 Group Notes

Yield curves need a human dimension desire as a third axes that will better reflect real needs in waterfowl and goals.

Challenge is to integrate regional issues into the establishment/achievement of regional goals.

Need to separate goals: how many ducks do we need?

Mechanisms: we will do this through habitat

Purposes: Maximize hunting opportunity, view waterfowl, water quality.

Hunters value abundance, other want to see some not the same scale, ie value occurrence.

Create a "flyway consultant role for CWS regulation process similar to USFWS process (goal: increase integration across borders).

Put waterfowl population goals into federal law (or rule). (goal: create public sanctioning of NAWMP goals).

Increase human dimensions training for waterfowl management biologists. (goal: improve human dimension considerations).

## Appendix D: Breakout Session 2 Group Notes

NOTES -- Breakout Session #2 – Group Birch Lake/Maple Lake

<b>Discussion Leader</b>	Min	Huang	CT Dept of Environmental Protection
<b>Recorder</b>	Kathryn	Dickson	Canadian Wildlife Service
<b>Participants</b>			
	Sean	Kelly	U.S. Fish and Wildlife Service
	Tom	Nudds	University of Guelph
	Larry	Roberts	Wyoming Game and Fish Department
	Terry	Shaffer	USGS Northern Prairie Wildlife Research Center
	Charles R.	Sharp	Alabama Wildlife & Freshwater Fisheries
	David E.	Sharp	U.S. Fish and Wildlife Service
	Stuart	Slattery	Ducks Unlimited Canada
	Gregory J.	Soulliere	U.S. Fish and Wildlife Service
	Bryan L.	Swift	New York Division of Fish, Wildlife & Marine Resources
	John	Tirpak	Lower Mississippi Valley Joint Venture
	Robert	Trost	U.S. Fish and Wildlife Service
	Kent	Van Horn	WI Dept of Natural Resources
	Mark P.	Vrtiska	Nebraska Game and Parks Commission
	Tina	Yerkes	Ducks Unlimited
	Dan	Yparraguirre	California Dept Fish & Game
	Guy	Zenner	Iowa Department of Natural Resources

### Technical Challenges/Barriers to Integration

Impediments are:

- 1) scale, application of continental level goals and ways to step-down to local level where we work
- 2) don't have an agreed-to objective statement that all parties can rally around – is the current NAWMP mission still valid?
- 3) metrics that are needed:
  - a. explicit linkage between birds and habitat (structural and quality) and (how many birds can be supported by how much of what kind of habitat) – ie “K”
  - b. measures of landscape change
  - c. defining and tracking hunter satisfaction, perhaps “participation” as a surrogate – how to incorporate these into the objective function
  - d. support from other stakeholders – how to incorporate these (going back to earlier discussions about the importance of broader audience interested in ecosystem function) – are these captured in K? (make use of the work in other fields regarding consumer satisfaction)
- 4) missing knowledge about effects of decisions regarding trade-offs required to balance amongst the various objectives, optimizations may need to be done regionally (breeding habitat is important in prairies, but hunter participation maximization may be needed elsewhere).
- 5) Discussion of two K's – carrying capacity of the landscape for ducks, and also carrying capacity of the landscape for hunters
- 6) Technical capacity!

## Appendix D: Breakout Session 2 Group Notes

### **Policy and Structural Impediments:**

- 1) Technical capacity stretched thin
- 2) Reality is the importance, but extreme difficulty, in being able to transfer resources among priorities
- 3) Strategies to manage change

Big impediment is agreed to objective statement that all parties can rally around. Is it the populations of the 1970's, or is it a currently socially acceptable harvest level...

Big challenge – how to measure vital rates, and how are they linked between JVs..

Participation rates could be added into the objective function – what factors lead to the decision (ie. When you read the number of ponds will be X, at what point do you buy or not buy a permit)- how to measure this ?

Surrogates for “satisfaction” by hunters?

Need a new goal point, counterproductive to try and achieve the peak period of the 1970s.

What do hunters really want? – they don't expect stable high populations all the time.  
“thick as gnats”

## Appendix D: Breakout Session 2 Group Notes

### Breakout Session # 2 Ballroom 1 Notes 8-27-08 1200am

<b>Discussion Leader</b>	Michael	Anderson	Ducks Unlimited Canada
<b>Recorder</b>	Kenneth	Abraham	Ontario Ministry of Natural Resources
<b>Participants</b>			
	Ron	Anglin	Oregon Dept of Fish & Wildlife
	Jimmy L.	Anthony	LA Department Wildlife & Fisheries
	Brad	Arner	Ducks Unlimited Canada
	Ken	Babcock	Ducks Unlimited
	Ian	Barnett	Ducks Unlimited Canada
	Doug	Bliss	Environment Canada, Canadian Wildlife Service
	Brad	Bortner	U.S. Fish and Wildlife Service
	John	Buhnerkempe	Illinois Dept of Natural Resources
	Eric	Butterworth	Ducks Unlimited Canada
	Bob	Carles	Saskatchewan Watershed Authority
	Kirk	Nelson	Nebraska Game and Parks Commission
	Dave	Smith	Intermountain Joint Venture
	Steve	Williams	Wildlife Management Institute
	Greg	Yarris	California Waterfowl Association

#### Challenges of integration (identifying them, administrative focus)

1. Contrasting **state control** of deer management (regulations, hunters, habitat) with **national and international nature of control** of waterfowl management

**Number of partnerships** complicates the process of changing directions

Lack of understanding of what hunters are responding to (e.g., LA increase of 13K not understood).

2. Birds move through **multiple jurisdictions**. Communication between jurisdictions and agencies needs improvement (**isolationist tendencies**). Need to improve this but maintain **flexibility** to meet regional requirements.

3. Administrators need to do a better job of tying the expenditures in habitat to the hunter satisfaction measures. Need to figure out how to do that.

4. **Communication problem** in jurisdictions where there are a lot of non-hunters, if we are to sell the integration of the 3 components and a hunting framework. **Education challenge** (getting non-hunters to understand the broader aspects of hunting's connection to conservation). Number of hunters is not large in proportion to total population (e.g., CA).

**Potential backlash** among non-consumptive users if they see a pre-dominance of hunter influence on wetland management, e.g., instead of management for biodiversity or other ecological goods & services.

5. Using the limited amount of money available in a better way.

6. **Legislators don't understand** the business and needs of waterfowl management. Their interest is in how it impacts their constituents, e.g., economic impact – specific measures of social impact.

## Appendix D: Breakout Session 2 Group Notes

Does ecological goods & services satisfy some of that need? LA using the hurricane damage restoration opportunity to build support for wetlands which will provide benefits to waterfowl and hunting as a sideline.

7. **Complex community of users/values.** Tendency to seek groups with similar values at the local level makes it difficult to scale up (**fragmentation** in conservation community).

8. **Communicating with silent majority.** Waterfowl management is invisible to a large proportion of NA society. Somehow we have to increase the groundroofs support for what we do.

9. **Three legs of the stool are independent.** Hunting management is focused but narrow. Habitat management is ground level and more inclusive. Hunter satisfaction is least well understood. Solution: Habitat: get everyone to buy in to the need. Habitat-population link: need for strategic expenditure. Population number. Integration should occur at the level of objectives.

10. Human dimension has least structure (there may be a lesson from fisheries managers). We have to figure out what hunter numbers respond to, otherwise we are just wasting money. Understanding that kids these days want a social network, not independence – are these the correct groups to

11. **Federal funding** mechanism for waterfowl human dimensions is needed (e.g., Recreational Boating and Fishing Foundation) (ca. 10 M/yr).

12. **Institutional barriers (ownership).** Power goes with budget, difficult to convince factions to give up something. Need to be aware that **funders are facing their own challenges** in terms of core funding when we make requests. What is our rallying cry – e.g., more duck for hunting isn't accepted. We don't have consensus on the message – is there one thing that the public can't do without? Is the third leg of the stool (hunters) correct – consensus seems to be no – it is the broader public.

13. **Potential lack of commitment** of agencies to the concept of integration? Divergence among the goals groups with respect to hunters (only one group indicated they were primary). Need to recognize that we go to them time and again for support (e.g., duck stamp increases, license increases, Farm Bill support, etc.).

**Disconnect** between what administrators/policy decision-makers want and what the technicians want. JTG got close to connecting habitat and harvest but stopped short – we need to complete this and get on with the task. Need to be willing to recognize accountability. Need leadership from USFWS because they have final accountability for migratory birds.

14. **Diverse waterfowl management landscape** (interests, stakeholders, nations). Three legs are not the same in all places (new big players want different things). What are the commonalities among the three legs that we can use as starting points. Need agency-specific business plans that identify what each can contribute to the larger task.

15. **Institutional inertia.** Acknowledge its existence and deal with it (e.g., changing the funding allocations among the JVs is never willingly discussed). In some jurisdictions, the importance of waterfowl management to the lead conservation agency is low.

16. JVs have the challenge to **think and work more strategically.**

17. Need to improve the **information management and sharing** among all the groups working on one or more component of waterfowl management. There will be some surprises. Some very tough choices have been made.

18. **Lack of ability at present to step down population objectives** to an individual non-breeding JV. Need a commitment to understand these things and work to resolve them.

How do we overcome some of these challenges and barriers?

## Appendix D: Breakout Session 2 Group Notes

1. Flyway habitat committee (Pacific Flyway) established and it has invited JVs to meet and work jointly.
2. How do we begin the integration process? *Suggestion:* National Flyway Council should meet with the NAWMP Plan Committee and SRC.
3. Revise the NAWMP to incorporate all three components.
4. Link better yield models to habitat needs.
5. Position waterfowl management to capture investment from upcoming opportunities (e.g. climate change funding).

### Parking Lot of Ideas

This group seems to not accept the notion that waterfowl hunters are the main human group that we need to involve.

Many waterfowl professionals participate in more than one component of the business.

### Potential turning point questions:

What is your commitment to the concept of integration of the 3 identified components?

What is your commitment to the idea that hunters are the third leg of the stool?

We have the correct institutions and infrastructures in place to accomplish the integration necessary.

The next NAMWP update should be a revision to include all three components.

## Appendix D: Breakout Session 2 Group Notes

Breakout Session #2      Group #2      Notes-8-27-08-(11:12 AM).

<b>Discussion Leader</b>	Seth	Mott	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jorge	Coppen	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Breck	Carmichael	SC Department of Natural Resources
	Mike	Carter	Playa Lakes Joint Venture
	Greg	Chasko	Connecticut Dept Wildlife Division
	John	Christian	U.S. Fish and Wildlife Service
	Alan	Clark	Utah Div of Wildlife Resources
	Ronald	Clarke	Alaska Department of Fish and Game
	David	Cobb	North Carolina Wildlife Resources Commission
	Robert	Ellis	VA Department of Game & Inland Fisheries
	Dave	Erickson	Missouri Department of Conservation
	Arthur	Feinstein	San Francisco Bay Joint Venture
	Jamie	Fortune	Ducks Unlimited Canada
	Dale L.	Garner	Iowa Department of Natural Resources
	Robert	Hoffman	Ducks Unlimited

### **What are the policy/structural issues with integration?**

**Need to set GOALS first before struggling direction on policy/structural issues.**

There are some discrepancies...

Primary charge in Iowa is biological balance, beyond that is for citizens of Iowa (beyond hunters)

Alaska charged with statutes to address hunter's needs

Connecticut – biodiversity mandate primarily

Subsistence hunting an issue in some areas - First Nations control vast areas of boreal forest in Canada. No mandates for pro-hunting in N. Canada but interest in spring hunting opportunity.

### **Individual State mandates likely influence level of championing hunter satisfaction**

To sell wetlands conservation it must be placed in a broader context than hunter satisfaction.

If coherence is the goal...How do we get hunters to open up regarding control given impacts on the landscape being driven by other factors (e.g., agricultural community & climate).

**Administrative policy challenge is that agencies are driven by incongruent goals and so focusing on hunter satisfaction may not be primary need.**

**Need to embrace broader communities of potential constituents that we can convert into stakeholders (beyond waterfowl hunters). This remains a challenge we must focus on.**

Pressure from general populace for other uses creates a conflict to focusing on hunter satisfaction.

## Appendix D: Breakout Session 2 Group Notes

Wetland protection, CWA, CRP, NAWCA habitat work in Prairie Canada: these are big ticket items much more important than setting bag limits. Need to maintain a sense of priority of what really makes an influence policy-wise.

### **Administrative challenges include:**

**Need to embrace broader communities of potential constituents that we can convert into stakeholders (beyond waterfowl hunters). This remains a challenge we must focus on.**

**1. Better marketing of policy to appropriate audience. More importantly, need to determine what we are marketing.**

**2. Better performance metrics needed to measure success and how to allocate public funds efficiently.**

**3. Determining what's possible for all the components of integration. If we do not succeed in habitat improvements, can we criticize others if they are unsuccessful in changing public attitude? Need to target marketing efficiently in our individual silos.**

**4. Marketing strategy may need to be indirect to be inclusive of nature enthusiasts that may not be waterfowl enthusiasts. Challenge includes creating awareness among populace of broader issues (benefits of wetlands).**

**5. How do we translate environmental interest into wetland conservation action. Need to apply focus to the marketing needed to convert interest to supportive stakeholders by improving the knowledge base.**

“Build it and they will come” works in that communication, outreach & education can be self-supporting.

We are constrained by our tradition of serving the waterfowl hunter community to do what we need to do at the appropriate scale (too narrowly focused).

**6. We don't have the tools to recruit audiences (including waterfowl hunters) to our cause. We need to broaden the constituencies – how we do that is the challenge.**

Incongruencies noted on expenditures (skewed toward setting waterfowl regulations vs. allocating more funds where our challenges to lie).

## Appendix D: Breakout Session 2 Group Notes

### Future of Waterfowl Management Workshop

Breakout Session #2

Group: Ballroom 3

<b>Discussion Leader</b>	Rex	Johnson	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jim	Ringelman	Ducks Unlimited
<b>Participants</b>			
	John E.	Frampton	SC Department of Natural Resources
	Jonathan	Gassett	KY Dept of Fish & Wildlife Resources
	David	Goad	Arkansas Game and Fish Commission
	Sam	Hamilton	FWS, Southeast Region
	Susan D.	Haseltine	U.S. Geological Survey
	Jeff	Haskins	U.S. Fish and Wildlife Service
	Tom	Hauge	Wisconsin Department of Natural Resources
	David C.	Hayden	Alabama Wildlife & Freshwater Fisheries, ADCNR
	Curtis R.	Hopkins, Ph.D.	Ducks Unlimited
	John	Hoskins	Missouri Department of Conservation
	Beth	Huning	San Francisco Bay Joint Venture
	Paul R.	Johansen	West Virginia Division of Natural Resources
	Larry L.	Kruckenber	Intermountain Joint Venture
	Barbara	Pardo	US Fish & Wildlife Service

### What are the Challenges to Integration (technical, policy, structural)?

- 1) What does integration mean?
  - a) Working towards the same population goals on the habitat and harvest side
    - i) Not clear how H-D portion fits into this; who will do this?
  - b) Reconciling supply and demand
- 2) **Issues of professional conservation staff not being comfortable – or desiring to – take on challenges like integrating H-D**
  - a) **Silos develop in part due to the nature of the organizational structures**
    - i) **Silos of our own creation. If we created them we can solve them**
      - (1) **Need to break down walls, similar to the “game”, “non-game” situation**
- 3) If we were starting from scratch today, and had the ability to redesign the system, how would you design that system?
  - a) Start at the very bottom
    - i) Average hunter is all about themselves
      - (1) Need a marketing campaign to educate hunters what we are all about. How we do our business, why we do what we do, etc.
  - b) Start at the top
    - i) Throw a planning system at the problem
      - (1) Identify clear objectives
        - (a) Strategic
          - (i) Need measurable objectives
          - (ii) Engage technical and policy expertise

## Appendix D: Breakout Session 2 Group Notes

- c) Discussion: (b) above is what we have now, but we built them without input from hunters
  - i) We need hunter input
- 4) What constitutes hunter satisfaction?
  - a) Desire to kill a limit of ducks?
    - i) Need to clarify hunters' expectations
  - b) General agreement that we do not know what constitutes hunter satisfaction
  - c) Metrics will vary widely within the group we call hunters
- 5) Why do we need to integrate if we don't have shared goals?
  - a) Suggested (from last group) that the objective is to produce enough birds at the continental scale, with the right distribution, to satisfy hunter needs (human consumption) at the local scale
- 6) It's going to be nearly impossible to satisfy everyone, because expectations and desires are so different among hunters. What's the answer?
  - a) Define what the supply is and attempt to satisfy demand
    - i) NAWMP goals thought of as an indicator of demand (assumption that hunters were satisfied in the 1970's)
  - b) Satisfaction levels will go up if hunters are involved in the regulations process(?)
  - c) Key to satisfaction is identifying desires of hunters
- 7) Communications
  - a) Build conduits to allow more talking to occur amongst entities involved with waterfowl management
    - i) Cross-pollinate on issues that overlap and should be integrated
    - ii) Hunters don't have regular meetings like we do with flyway and JV meetings, which poses a challenge
  - b) Just communicating may not be enough
    - i) There needs to be a conscious effort to bring flyways, habitat, and H-D components together
      - (1) Will require a significant, organizational structural change
  - c) Flyways have information on what the hunters want
    - i) Is it truly reflective of hunter desires?
    - ii) Could this information be infused into the process?
- 8) It's not just about hunters anymore
  - a) Why are we not preparing for another national waterfowl hunter survey?
    - i) Is it because there is no crisis right now??
- 9) **We need to build up our H-D component/capacity**
  - a) About half of group had H-D staff
  - b) Just doing surveys will not help the problem
    - i) Need to do more outreach and communications so hunters better understand the waterfowl management process
- 10) We need to look at the situation as the hunter sees it, not convince the hunter to see it "our way"
- 11) **Points of agreement**
  - a) **Need to utilize and build on the capacity to understand what hunters want**
  - b) **Build our capacity for communications and outreach so the decisions we make are not a mystery to hunters**
  - c) **If we can build those capacities, then we need to integrate by getting habitat and population entities talking to each other**
  - d) Problem: flyway system is pretty inflexible when it comes to integrating JV
- 12) What has to happen when regulatory and habitat entities meet?
  - a) Do flyways care about integration?
- 13) Not much of a problem between habitat and regulations. The real problems lie in integrating habitat and H-D
- 14) **JV view: tell JVs what carrying capacity is needed, and then JV's can provide habitat so state population objectives can be reached (to meet hunter demand)**
- 15) **How do we build a structure that considers the needs of states to accommodate populations and therefore hunter desires?**
  - a) **A suggestion that every flyway should have a habitat sub-committee, and JV's should be represented on those committees**
  - b) **Is it time for the flyways to more formally engage the JV's in habitat issues?**

## Appendix D: Breakout Session 2 Group Notes

- 16) General belief that there is more cooperation today than ever before**
  - a) What we lack is leadership and working towards a common goal**

## Appendix D: Breakout Session 2 Group Notes

### Breakout Session #2 Ballroom 4 Group Notes

#### Discussion

**Leader** Robert Clark Environment Canada, Canadian Wildlife Service

**Recorder** Jeff Herbert Montana Fish, Wildlife & Parks

#### Participants

Bruce	Batt	Ducks Unlimited
Cal	DuBrock	Pennsylvania Game Commission
Michael	Johnson	North Dakota Game & Fish Department
Pat	Kehoe	Ducks Unlimited Canada
Joe D.	Kramer	Kansas Department of Wildlife and Parks
Tony	Leif	SD Game, Fish & Parks Department
Wayne	MacCallum	Massachusetts Div of Fisheries & Wildlife
John	Major	New York State DEC Bureau of Wildlife
Bob	McLandress	California Waterfowl Association
Ross	Melinchuk	Ducks Unlimited
Casey	Stemler	US Fish & Wildlife Service
Dr. Ben	Tuggle	US Fish & Wildlife Service
Emily Jo	Williams	U.S. Fish and Wildlife Service

What are the greatest structural/organizational barriers?

Changing demographics and cultural values – lack of connection to the outdoors, even fears associated with outdoor recreation. Diminishing support for conservation actions and a limited publicly administered land base in eastern regions of the country.

We need to think outside the box in establishing waterfowl mgmt objectives

Having the right habitat in the right place with the right tools to accomplish needed objectives.

Waterfowl conservation is in a good place right now and has a great deal of credibility but the greatest challenge will be to maintain that with both societal and landscape changes that are occurring.

Have done a pretty good job continentally but regionally there are some problems (e.g. pintails in CA) that need to be addressed. Continued urbanization is significantly reducing the habitat base, momentum is huge.

Dealing with a declining constituency base – how do we change this? Can we rely on flyway system to deal with harvest management issues? Canadian involvement in regulation process is limited and increased HD work will compound some problems.

Spend an inordinate amount of time on harvest and regulations when other impacts to the resources have much greater levels of impacts. Is this appropriate?

Interested in better understanding HD needs and how we deal with the third leg of the stool and implications of changing participation and demographics.

Elevating conservation so that it can compete against other land use pressures. Public lands are threatened by energy development, even with conservation protection in place.

## Appendix D: Breakout Session 2 Group Notes

Maintaining our hunter base is the driver. If we don't have hunters we likely don't need the infrastructure that has been put in place to support population goals.

Need to figure out how to engage other stakeholders without disenfranchising current stakeholders. Another constraint is public apathy. This issue is not on their radar screen and has little relevancy to larger publics. Need to refine objectives and increase skill set of facilitation and conflict resolution.

Inadequate staffing due to funding limitations or retirements that lack needed skill sets and institutional knowledge.

Infrastructure is in place but people bring individual bias that have a locally focused priority.

There is not enough integration between population, habitat, human dimension elements – no real infrastructure to accommodate this.

Three legged stool analogy may not be appropriate and discounts the primary importance of habitat that serves as a foundation. We place too much emphasis on regulations at the expense of bigger landscape conservation issues.

Is something like all bird conservation a more proactive and inclusive approach that continues to bring in the hunting public as a core group but recognizes the contribution that others bring to the table? Administrators spend less time on regulatory aspects.

Is something like all bird conservation a more proactive and inclusive approach that continues to bring in the hunting public as a core group but recognizes the contribution that others bring to the table? Administrators spend less time on regulatory aspects.

Difficult to actually report negative cumulative effects on the landscape.

Summarized thoughts re impediments:

Objective: Need to sustain waterfowl populations for all user groups

How do we elevate the value of landscape conservation against land use pressures that are fueled by societal needs?

How do we generate or enlist broader public support for conservation when larger demographics are becoming less connected to the land either recreationally or politically?

How do we deal with public apathy either within the wildlife community or a larger context if they assume that we're doing a good job and the resources are viewed as being in good shape? Are we in need of a good crisis?

Institutionally (Flyways, NAWMP, NAWCA, etc) are we keeping up with societal changes and how is this expressed differently between the US, Canada and Mexico?

Are we allocating the appropriate resources to the priority issues? Do we have the infrastructure, staff and skills sets in place to effectively accommodate coherence and clarify our goals/objectives?

Are we looking far enough ahead?

## Appendix D: Breakout Session 2 Group Notes

Breakout 2  
Ballroom 5

<b>Discussion Leader</b>	John	Eadie	University of California Davis
<b>Recorder</b>	Fred	Johnson	USGS Florida Integrated Science Center
<b>Participants</b>			
	Hugh	Bateman	Ducks Unlimited
	Dave	Brittell	Washington Department of Fish and Wildlife
	H. Dale	Hall	US Fish & Wildlife Service
	Randy	Milton	Nova Scotia Dept of Natural Resources
	Eugene Greg	Moore	Delaware Div of Fish and Wildlife
	Steve	Moran	Rainwater Basin Joint Venture
	Marvin	Moriarty	US Fish & Wildlife Service
	Henry	Murkin	Ducks Unlimited Canada
	Harvey K.	Nelson	Trumpeter Swan Society
	Jeff	Nelson	Ducks Unlimited Canada
	Jane	Noll-West	US Fish & Wildlife Service
	Russ	Oates	U.S. Fish and Wildlife Service
	Jeff	Raasch	Texas Parks & Wildlife
	Rudolph	Rosen	Ducks Unlimited

What are policy/structural issues with integration?

- Where's the fire? Is the mgmt system really broken? How do you make a compelling case to administrators?
  - Yes:
    - Changing human (hunter demographics), changing landscapes, changing expectations/values for conservation from society and a lack of a strategic plan to deal with them.
    - Lack of human-dimensions understanding
    - Institutional inability to direct existing funding/resources in a more strategic way.
  - But, sense is that major restructuring is not needed; fine-tune the system in place; tools are largely available
- How realistic is integration?
  - AHM was complicated enough and it hasn't really been tested
  - We've not really articulated the added value of this more formal integration. Integration sounds a bit academic, and is sure to be a huge challenge in terms of development and implementation.
  - With integration, technical and institutional needs (and uncertainties) grow exponentially. How do you deal with the parochial and finicky nature of human dimensions in a more formal, structured process?
- What barriers?
  - A challenge is organizational structure of institutions. How do we break down fiefdoms? How do we work more effectively across organizational boundaries?
  - The current organizational/institutional framework is compartmentalized, and this limits communication and cross-pollination. How do we break down barriers?
  - Organizational charts create barriers to communication, perhaps because people feel like "sanctioned" conduits for collaboration don't exist.

## Appendix D: Breakout Session 2 Group Notes

- Sense that focus and priority on NAWMP in Canada has seriously eroded
- What bridges?
  - Recently, less emphasis on re-organization and more reliance on networking for common goals (avoiding bureaucratic inertia and rigidity). This is the JV model.
  - Expand science capacity (especially beyond FWS and USGS) to meet challenge of managing harvest, habitat, & human dimensions.
  - Expand constituencies: promoting w/f habitat functions and values – e.g., carbon sequestration, flood control, water quality
  - Better coordination of efforts between U.S. and Canada
- Misc:
  - NAWMP is an excellent model for working across organizational barriers; we simply need to look at key areas where integration with other w/f programs is necessary/beneficial.
  - Organizational structures don't need to be revised; changing expectations regarding common goals is key to integration
  - How to build stronger constituencies?
  - How to?
  - Human dimensions is key component of both harvest & habitat mgmt.
  - Need to re-engage Canada in mgmt processes! NAWMP JVs, in particular, are not as high a priority or influential, as in U.S.
  - Consensus will be exceedingly difficult because of the complexity of the issues.
  - How do we expand beyond the hunter base? Hunters will likely always be a small proportion of total population. How do we make waterfowl and wetlands conservation relevant to a broader constituency?
  - More of a flyway focus would help better direct regional programs (e.g., those of JVs)
  - Timely to examine system of w/f mgmt because changes are coming more rapidly.
  - A key barrier is lack of communication/coordination between Flyways and JVs.

## Appendix D: Breakout Session 2 Group Notes

### BREAKOUT SESSION 2-CEDAR LAKE 1100

<b>Discussion Leader</b>	Ken	Williams	US Geological Survey
<b>Recorder</b>	Scott	Yaich	Ducks Unlimited
<b>Participants</b>			
	Ray	Marshalla	Illinois Dept of Natural Resources
	Paul	Padding	U.S. Fish and Wildlife Service
	Ed	Penny	MS Dept of Wildlife, Fisheries and Parks
	Mark	Petrie	Ducks Unlimited
	W. Adam	Phelps	Indiana Department of Natural Resources
	Matt	Pieron	Ohio Division of Wildlife Department of Natural Resources
	Bruce	Pollard	Environment Canada, Canadian Wildlife Service
	Duane	Pool	TNC Migratory Bird Program
	Rocky	Pritchert	Kentucky Dept of Fish & Wildlife Resources
	Michael	Rabe	Arizona Game and Fish Dept.
	Ryan	Reker	Rainwater Basin Joint venture/USFWS
	Larry	Reynolds	Louisiana Dept Wildlife & Fisheries
	Ron	Reynolds	U.S. Fish and Wildlife Service
	Johann	Walker	Ducks Unlimited

**“What are the challenges and issues to integration, coherency?”**

**“What the challenges we face for the future of waterfowl conservation?”**

- Struggle with how to integrate the 3 legs of the stool, while recognizing their importance
- How to deal with our challenges as our demographics change; fewer hunters
- **Communications with non-hunting public is a very big challenge**
- **Inability to measure/track net landscape change (quantity and quality) hamstrings us**
- Harvest management always been conducted at high levels or organization; habitat issues more often dealt with at field level (appropriately); need to be careful to leave the responsibility of understanding the impacts of habitat on populations at the field level; don't need top-down authority in habitat conservation; don't need JVs being told what to do;
- **Human dimensions issues have a high degree of inherent geographic variability;** challenge to bringing this into a unified framework
- Hunter satisfaction and hunter retention are two different aspects to human dimensions; different things will drive each; perhaps more ability to deal with satisfaction; not as equipped to deal with retention; challenge is how to incorporate this into a national/continental model
- **Is an issue of scale in dealing with satisfaction; tends to be local; big challenge as above**
- How to consider/incorporate other user-groups than hunters
- **Temporal dynamics of human dimensions; we don't understand HD now, much less the dynamics**
- **Hunters are not homogeneous;** Should we be targeting average or avid hunters in dealing with satisfaction?
- **Widespread public support for conservation** is an important challenge
- [Where is the real limitation??]
- Some concern that providing enough habitat may not address hunter satisfaction/retention issue; see Canada as an example; much larger societal issues in play

## Appendix D: Breakout Session 2 Group Notes

- **Need the birds, but also have to have the access and the opportunity**
- Thus, need to change model from focus on hunters to the broader audience?
- Need hunters to steer broader programs with other explicit objectives to benefiting waterfowl
- Need to be careful about broadening our audience and not disenfranchising hunters
- **Need to do better job of educating public about how our programs benefit them to generate their support and action**
- **[Some focus on funding needs]**
- Need to recognize the need to run programs that generate support
- 
- **Anyone concerned about the “shoulder strategy?”**
- Concern about suppressing the population if too high on the shoulder, and suppressing hunting opportunity as you move down the shoulder; increasing rate of closed seasons is bad
- **Maximizing harvest may not be the driving factor in hunter satisfaction and retention; [challenge: what do hunters *really* want? Harvest; opportunity (length, bag limits); access; number of ducks seen;]**
- If we lower harvest, could generate higher populations, and duck hunters value abundance
- Most hunters equate days with opportunity
- **What are the explicit trade-offs? We don’t know to what extent the trade-offs work; trading opportunity for increased abundance hasn’t worked with scaup!**
- If we trade harvest opportunity on mallards will we see more ducks in the air?
- **There are lots of uncertainties about the use of regulations to manage populations**
- Has our past changes cost us hunter numbers?
- **Challenge of human nature of using the tool you’ve got**
- Differences among flyways in AHM is an issue
- 
- **My messages to other reporters?**
  - **Vast uncertainties about hunters and hunting and their perceived needs and desires**
  - **Scale is important**
  - **Challenge of making USGS a full partner in these efforts, and not a paid contractor; technical support needs of the waterfowl management community are not being met with current structural arrangements (USGS related to USFWS)**
  -

## Appendix D: Breakout Session 2 Group Notes

### Future of Waterfowl Management Workshop

Breakout Session #2 Discussion Notes

Group: Deer Lake

27 August 2008

<b>Discussion Leader</b>	Andy	Raedeke	Missouri Department of Conservation
<b>Recorder</b>	Michael	Runge	USGS Patuxent Wildlife Research Center
<b>Participants</b>			
	Jody	Enck	Cornell University
	Kathy	Fleming	U.S. Fish and Wildlife Service
	Joseph P.	Fleskes	USGS Western Ecological Research Center
	Joe	Fuller	North Carolina Wildlife Resources Commission
	David	Fulton	U.S.G.S. Minnesota Cooperative Fish & Wildlife Research Unit
	Jim	Gammonley	Colorado Division of Wildlife
	David	Graber	Missouri Department of Conservation
	Karla	Guyn	Ducks Unlimited Canada
	Rob	Holbrook	DOI USFWS Region 8 CVJV
	Rob	Hossler	Delaware Div of Fish and Wildlife
	David	Howerter	Ducks Unlimited Canada
	Jack	Hughes	Canadian Wildlife Service
	Kevin	Hunt	Mississippi State University
	Michael A.	Johnson	U.S. Fish and Wildlife Service
	Bill	Uihlein	Lower MS Valley Joint Venture

Discussion Leader: Andy Raedeke

Recorder: Michael Runge

Participants: Jody Enck, Kathy Fleming, Joe Fleskes, Joe Fuller, David Fulton, Jim Gammonley, Dave Graber, Karla Guyn, Rob Hollbrook, Rob Hossler, David Howerter, Jack Hughes, Kevin Hunt, Michael A. Johnson, Bill Uihlein

Order around the table: Andy, Rob Holbrook, Karla, Jim, Joe Fuller, Mike A., Rob Hossler, Bill, Jack, Kathy, Dave H., Joe Fleskes, Kevin, Jody, Dave G., Mike R.

#### What are the technical challenges to integration?

#### What are the policy/structural issues with integration?

- Laying out on paper what the connections are between the legs of the school. Developing a road map for where we need to go.
- Figuring out what data even needs to be collected
- From the HD side, it's about tempering expectations—how do you integrate that?
- HD doesn't have as developed science as the other legs
- Different hunter demographic groups may have different expectations—how do you tease that out and measure that?
- Satisfaction is the congruence of expectations and outcomes—if we don't know what the expectations are, we can't measure satisfaction. Right now, expectations are through the roof. Technical challenge—how to measure expectations.

## Appendix D: Breakout Session 2 Group Notes

- Efficiencies and opportunities of integration—we need to identify those. Why would this system be better than the current system?
- If the plan is to have habitat conditions like the 70s, does that mean hunting will be like the 70s? Do we need to revisit that expectation? Is that realistic?
- Reconcile hunter demand/desires and the ability to support a system with the requisite carrying capacity. There's something bigger than hunters that affects K (other landuse interests). Reconcile ability of system to take care of the population, and the desires of the hunters.
- Right shoulder is OSP. It's a combination of biological potential and social values. Can we define that?
- (Organizational challenges...that's for another group)
- What actually affects K? Is there an upper limit, are we at it? What policies and programs could affect K. E.g., scaup, we don't understand why it's changed. If we did understand relationship of birds with habitat, maybe we could figure out ways to increase K. These are scientific challenges.
- Need a model of hunter motivations. What is it we need to measure?
- What are the management alternatives that we could implement, and how much control do we really have (for any of the three legs)? Our models might indicate we need huge changes in habitat conditions, but we might not have any ability to affect those changes. Need to explore partial controllability. How do we find actions we can do that aren't just tinkering?
- If we develop a 3-way interactive model, will it allow us to be able to identify management actions that we can actually take and that would be effective?
- Understanding how very difficult it is to increase recruitment. The scale and magnitude of actions it would take to change recruitment even a little. What does an x% increase in recruitment mean on the ground?
- Do the three legs have equal weights? Can we determine how to weight these? Which leg should get assigned the most weight?
- From wintering JV perspective, we don't have a clear understand at all what impact our habitat protections/enhancements are doing. We're shooting in the dark. We can't tell when we've protected enough habitat.
- There're several questions about winter habitat. Do we have enough to meet population goals? Do we have enough to meet HD goals? JV's haven't asked that latter question.
- Describing the landscape conditions necessary to support population objectives
- First step is agreeing on what the population objectives are, that's a huge challenge.
- Objectives may work in opposite directions. E.g., you may be adding winter habitat, but that might reduce satisfaction of hunters.
- Climate and other factors may mute what we can do
- We don't have much information to inform any of these linkages. Institutional inertia and budget impediments to gather that information. Can we do that type of integration (habitat and population) with the uncertainty we've got right now? If not, our main technical challenge is to redesign our monitoring.
- Several steps: Explicit expression of each objective; how each component enters the relationship (with weights); how do we address the interactions among those components?
- Using yield curves to understand relationship between populations and habitats. Challenge is trying to figure out where to be on yield curve—that's a HD questions and we don't have much information about that. Also, how to incorporate other species into MCM. Do we need a model of HD, that could be linked in to yield curves. There's a framework for the habitat/population; can we figure out how to integrate the HD?
- Do we want to manage for average conditions, or do we need to understand the extreme conditions?
- One of the biggest challenges is that we haven't identified the main goals. It's hard to talk about technical challenges when you don't know the objectives.
- The talks we saw in Breakout #1 showed a lot of confusion about objectives vs. strategies. We've got a lot more work to do on clarifying objectives.

## Appendix D: Breakout Session 2 Group Notes

- It's HD to determine where on the right shoulder. We don't know how to structure that conversation or elicit those objectives. Point on the shoulder captures a lot of different objectives. Need to understand those and understand tradeoffs.
- HD is bigger than just where on the yield curve. There are many other HD aspects.
- Are we going to do that for every stock of ducks? We don't have resources to do that. We manage as a block. Knowing that we manage a whole suite of species with different population dynamics, how are we going to do that in a reasonable way?
- What decisions are we trying to optimize? What are our objectives relative to multiple species? How do we weight across species? What kind of control do we have?
- Tradeoffs among species—how do you manage for the aggregate, yet recognize people's interest in particular species? How do you balance all those.
- "Wildlife acceptance capacity", "Wildlife stakeholder acceptance capacity"—emerging methods for looking at what wildlife levels balance the needs of a variety of stakeholders. First have to identify stakeholders, then look at their individual desires, then figure out how to weight those desires (manage the tradeoffs).
- We've sort of done that through the NAWMP goals. To some, those are sacred. To change them would be a huge communications issue. But JTG report suggests it's difficult to understand them.
- Does AHM have a feedback mechanism to review the goals? (No. We don't have a mechanism for double-loop.) Do we need to revisit the goals and if so, how?
- The motivation isn't a crisis, per se. But we've got a credibility issue. We've got to pursue this integration because it's the right thing to do, and it will help us manage better.
- In some places, we may have more habitat that we need. But we do that in order to hedge bets against future losses (due to ag policy, etc.). But that's difficult to explain to the public.
- We can draw all the box and arrow diagrams, but in the end, we have to put real numbers in there, that's a real challenge.
- There aren't many people with the technical capability within any leg, let alone that understand how to integrate. Can we find and attract those people?
- Institutional or cultural impediments? Do we have the structure to allow the integration? We have technical structures for 2 legs (but not HD), but no structure for the integration.

### Major points (incomplete):

- We need to understand the connections between the three legs
- We need a road map for where to go
- Need to build predictive models for hunter motivation, hunter recruitment, hunter satisfaction
- Need better understanding of how various actions we could take affect K
- What are the efficiencies and opportunities of integration?
- From wintering JV perspective, we don't understand the impact of our actions.
- Understanding tradeoffs among objectives
- Understanding ducks as a whole, rather than as a collection of individual species. This requires really reframing what we're trying to do.
- We may want and need to have species-specific assessments; but that doesn't mean we manage in a species-specific manner.

### Summary:

1. The starting point is the overall objectives for integrated management. But these are not articulated yet, so it's difficult to know how to proceed with technical development.
2. The next step would be to develop a conceptual framework for all the linkages between the three facets of waterfowl management. That has to happen before technical development.
3. There will be a number of technical challenges when we get into developing models and decision support systems that integrate the three facets. This is particularly acute for the human dimensions side, just because this is the youngest of the disciplines and there hasn't been a lot of work yet done on the sort of models we might need.
  - a. There was some sense that yield curves provide a useful tool for integrating habitat and population management.

## Appendix D: Breakout Session 2 Group Notes

- b. We need to begin to understand how human dimensions can be integrated in with those.
- 4. Eventually, we'll need to ask what data streams are needed to support an integrated framework. This may require substantial redesign of our monitoring programs, and development of new programs (especially on the HD side).
- 5. There is a limit to technical capacity even within the legs of the stool (and especially on the HD leg), but even more so with regard to integration. How do we find, attract, and/or nurture this technical capacity.
- 6. Do we have the institutional structures to allow integration? We have institutional structures for technical development within two of the legs, but not for the integration.

## Appendix D: Breakout Session 2 Group Notes

### Breakout Session #2 Elk Lake

<b>Discussion Leader</b>	Phil	Seng	DJ Case & Associates
<b>Recorder</b>	Barry	Wilson	Gulf Coast Joint Venture/USGS
<b>Participants</b>			
	Jane	Austin	USGS Northern Prairie Wildlife Research Center
	Tim	Jones	Atlantic Coast Joint Venture/USFWS
	James R.	Kelley	U.S. Fish and Wildlife Service
	Tom	Kirschenmann	SD Game, Fish & Parks Department
	Kevin	Kraai	Texas Parks & Wildlife
	Don	Kraege	Washington Dept of Fish and Wildlife
	David	Luukkonen	Michigan Dept of Natural Resources
	Faye	McNew	Kansas Department of Wildlife and Parks
	Tim	Mitchusson	NM Dept of Game & Fish
	Tom	Moorman	Ducks Unlimited
	Dave	Morrison	Texas Parks & Wildlife
	Craig	Mortimore	Nevada Department of Wildlife
	Luke	Naylor	Arkansas Game and Fish Commission
	Ken	Richkus	U.S. Fish and Wildlife Service

What are the technical challenges to integration?  
What are the policy/structural issues with integration?

#### Institutional

habitat-population interaction (organizationally) should be highest priority  
organizational structure wrt human dimensions

#### Overall

need to define integration (i.e., modeling versus organizationally)  
develop of common currency needed (e.g., yield curves?)  
Need to develop a model or models (conceptual or quantitative)  
assigning priorities/tradeoffs wrt hunters/pop'ns, etc.

#### HD

need for explicit objectives related to human dimensions  
refine habitat-population models  
resource/funding allocation among legs of the stool  
basic life-history information on hunters  
need for ongoing survey of hunter preference/satisfaction  
to include various levels/types of hunters  
need to deal with avid response bias  
need to deal with potential hunters  
need to deal with landowners who provide habitat  
need to deal with lapsing/intermittent hunters  
How to address needs/desires of nonhunters  
Perhaps a societal preference/satisfaction survey  
Build communication skills/efforts  
Set of alternative models needed  
Identifying and agreeing on explicit underlying assumptions (esp wrt HD)  
Right technical people (HD) not in the room to ask the right questions  
Can/does K incorporate social aspects, or just biology?

## Appendix D: Breakout Session 2 Group Notes

### Habitat leg

Linkage b/w habitat work and vital rate and K (including variability)

Need to know basic vital rates

Linking theoretical K to real K

Agreed upon definition for K

Incorporating climate change

### Population leg

Seasonally segmented vital rates at smaller spatial scales

Geographic & temporal variation

MOvement probabilities across spatial scales

ID of appropriate species (frequently harvested ones)

Should mallard be surrogate?

Better abundance/distribution estimates

Ability to monitor changes in distribution at large spatial/temporal scales

Understanding density-dependence (scale & relationship)

Compensatory/additive mortality

Improving predicted harvest rates

## Appendix D: Breakout Session 2 Group Notes

### Breakout Session #2 Prefunction 1

<b>Discussion Leader</b>	Dale	Humburg	Ducks Unlimited
<b>Recorder</b>	Mark	Koneff	US Fish & Wildlife Service
<b>Participants</b>			
	Vernon	Bevill	Texas Parks & Wildlife
	Andy	Loranger	U.S. Fish and Wildlife Service
	Bill	Rudd	Wyoming Game and Fish Department
	Ken R.	Sambor	Ducks Unlimited, Inc.
	Dave	Schad	MN DNR Division of Fish and Wildlife
	Paul	Schmidt	U.S. Fish and Wildlife Service
	Dave	Scott	Ohio Division of Wildlife
	Carey	Smith	U.S. Fish and Wildlife Service
	Scott	Stephens	Ducks Unlimited
	Marie	Strassburger	U.S. Fish and Wildlife Service
	Scott	Sutherland	Ducks Unlimited
	Robyn	Thorson	U.S. Fish and Wildlife Service
	Mark	Whitney	Georgia Department of Natural Resources

What are the policy/structural challenges with integration?

What is one primary policy/structural challenge in meeting current responsibilities?:

- permitting for habitat projects
- lack of a explicit framework for evaluating tradeoffs of mult objectives\*\*tools to id implicit explicitly –
- access
- how to effectively incorporate public values into decision
- interfacing with wf hunters – communicating decisions made by FWS and vice versa – states in middle between FWS and public
- budgetary difficulties – within state politics
- notion of uncertainty -- articulating objectives/regulatory alternatives\*\*
- communicate with administrators – to communicate and understand process
- funding – for every \$ we add to one priority we take away from something
- outreach
- state with big game focus – wf program small
- numerous issues focusing on wf in state where wf is not major issue
- managing large scale habitat programs in face of multiple competing desires of various constituencies
- Many of these are functional difficulties\*\*

Many folks here noted FUNCTIONAL difficulties....what STRUCTURAL changes are necessary to alleviate some of the functional issues identified?\*

- form follows function\*\*
- not enough personnel/resources to meet the demands of current challenges...moving forward with integration of current programs IS new and INCREASED workload.
- how allocate limited resources? how can we work better together to allocate shared resources...including human capital.??\*
- The more we accomplish (eg, habitat conservation), the more we are challenged to find the resources to upkeep these investments
- example of CARE coalition – provide O&M for refuges – is this a model for addressing structural deficiencies

## Appendix D: Breakout Session 2 Group Notes

- Habitat Acquisition vs Long term sustainability of habitats
- How do we track change over the longterm
- Structural challenges \*\*\*
  - o Structures do not exist for us to capture publics views/priorities regarding our habitat OR harvest actions
    - We assume NA goals will meet public desires – not likely
    - Not a matter of minor adjustment to existing structures – just not in place
  - o Not a good structure for resolving harvest and habitat tradeoffs (no overarching body) - we can't afford to keep these programs separate in future
    - Perhaps in this case it's a more minor but changes necessary – tweaks of existing system
  - o IS THE CULTURE DEVELOPED TO SUPPORT THESE STRUCTURAL CHANGES? – UNCERTAIN
  - o Has AHM (part of the structure we have in place now) and explicit decision making processes throttled the ability of the mgt community to consider and incorporate other societal values? – has it taken away from the collaborative aspect (if we have throttled these opportunities, its likely because we lack a good framework for developing and evaluating objectives very different than those currently in AHM)
- Huge communication barriers – habitat managers, population managers, modeling experts – now add human dimensions as a completely new discipline : how can structural impediments be addressed through improved communications.
- NO DISAGREEMENT ABOUT STRIVING FOR COHERENCE, BUT IS THE CULTURAL READY FOR IT, WHAT ARE THE STRUCTURES WE NEED TO MOVE FORWARD?\*

How might near-term loss of institutional memory affect our success in pursuing integration? Not a huge paradigm shift conceptually in order to pursue coherence...but big structural questions. How will loss of many of our most experienced members of community through retirement affect our ability to identify and make necessary structural changes?

How do we deal with the fact that the systems we are managing or managing for (habitats, populations, humans) are changing underneath us as we attempt to develop this structural framework? System change on environmental and social fronts increase the challenge.

Framework for integration suggested by the JTG does inform us as to what types of structural changes must occur in order to support integration.

What's the bottomline message that group members picked up? What are the solutions?

- we have not yet effectively framed these questions...but won't be done at the highest levels of organizations/agencies....will come from lower levels of agencies that are intimately engaged in these processes
- everyone agrees integration is needed, institutional path forward is not clear, but needs to be embraced by highest levels (related to pt above)
- human dimensions: how much \$ and effort is warranted to try to really understand these very complex and diverse issues (need to better define what measure we are after...satisfaction?)
- Everyone hates change, but need to be willing and open; everyone hates changes, so be the author
- How do we make a broader segment of society care about things we care about and then to act on this concern?
- Greatest structural uncertainty relates to human dimensions of work we do. Don't yet even know what segments of society to request input from.
- We have well developed infrastructures for the habitat and harvest side of things, but not so for human dimensions issues.
- Govt poorly communicates with constituents, high workloads often relegates communication to an afterthought.
- Need greater focus on accountability to public...in both harvest AND habitat management.

## Appendix D: Breakout Session 2 Group Notes

- Critical need to stem the loss of hunters, puts all existing infrastructure at risk.
- We can point to many past successes in wf mgt. We need to find a better infrastructure for interacting with the public..how to use science and communicate, but not in a dictatorial way.
- Do we need to think about moving Flyway fct to JVs or vice-versa?
- Others feel that flyway system representing states is vital.
- JVs are making progress toward greater public accountability...JVs ss

### Summary

1) We could easily id many “functional” impediments to moving forward with integration:

- many came down to limited resources to support current programs
- efforts to provide more coherent decision frameworks will also require reallocation of these same resources
- how can we combine and/or refocus resources to meet challenges

2) Given all the functional impediments, are there structural (institutional) changes necessary? What are the structural challenges?

- o Structures do not exist for us to capture publics views/priorities regarding our habitat OR harvest actions (for integrating human dimensions aspects, or for even effectively interacting with the public)
  - We assume NA goals will meet public desires – not likely
  - Not a matter of minor adjustment to existing structures – just not in place
- o Not a good structure for resolving harvest and habitat tradeoffs (no overarching body) - we can’t afford to keep these programs separate in future
  - Perhaps in this case it’s a more minor but changes necessary – tweaks of existing system
  - But perhaps more radical restructuring of habitat and harvest mgt infrastructure is needed/warranted
- o Future loss of institutional memory will likely increase and maybe change the nature of the challenges.
  - How do we deal with the fact that the systems we are managing or managing for (habitats, populations, humans) are changing underneath us as we attempt to develop this structural framework?
- o Has AHM (part of the structure we have in place now) and explicit decision making, processes associated with it, throttled the ability of the mgt community to consider and incorporate other societal values? – has it taken away from the collaborative aspect (occurred to the recorder...if we have throttled these opportunities, its likely because we lack a good framework for developing and evaluating objectives very different than those currently in AHM) – Need a more explicit framework for identifying and evaluating tradeoffs among competing objectives
- o No disagreement that we are striving for coherence, but is the wf mgt culture ready for it, and what are the structures we need to move forward?
- o Believe we are in agreement in the need to strive for integration...clearly in relation to habitat and harvest mgt.
- o But, is the culture open to really incorporating human dimensions into waterfowl harvest and habitat mgt decision making? Are we ready to be more directly accountable for both the harvest AND the habitat decisions we make...wrt public desires.

### Questions for turning pt

- 1) can existing structures used to advance wf mgt?
- 2) if not, which component part needs to be retooled?
- 3)Should we explicitly incorporate HD into our objectives/performance metrics?
- 4) How to best move forward? (from this workshop)

## Appendix D: Breakout Session 2 Group Notes

Breakout Session 2 Prefunction 2 Notes-8-27-08

<b>Discussion Leader</b>	Robert	Byrne	DJ Case & Associates
<b>Recorder</b>	Ralph	Morgenweck	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Bob	Blohm	US Fish & Wildlife Service
	Dennis	Jorde	USGS Northern Prairie Wildlife Research Center
	Ken	Mayer	Nevada Department of Wildlife
	Thomas O.	Melius	DOI USFWS Regional Directors Office
	Bob	Shaffer	DOI USFWS Region 8 CVJV
	Nicholas	Throckmorton	U.S. Fish and Wildlife Service
	Len	Ugarenko	Association of Fish & Wildlife Agencies
	Jim	Unsworth	Idaho Department of Fish and Game
	George	Vandel	SD Game, Fish & Parks Department
	William	Vander Zouwen, Jr.	WI Dept of Natural Resources
	Jeffrey M.	VerSteeg	Colorado Division of Wildlife
	David	Viker	U.S. Fish and Wildlife Service
	Rick	Warhurst	Ducks Unlimited
	Greg	Wathen	Tennessee Wildlife Resources Agency
	Alan	Wentz	Ducks Unlimited

Technical challenges to integration?

Policy and structural issues with integration?

How do we integrate harvest, habitat and hunters? Especially since we have an unequal understanding of the three legs of the stool. Need to establish an appropriate structure to gather the human dimensions information or do we let the states represent "their people" much like what is happening right now?

Policy issues get resolved at different organizational levels depending on what the issue happens to be so no single solution. One barrier is the legal steps needed to establish a season whereas there is not such steps required in the habitat and human dimension aspects. There has been a review of the regs setting process but the formal, legal process still stands. Actually, several reviews have occurred over the years. It is the confluence of the biology and the legal requirements to reach a decision to set seasons.

Issues can drive changes in regulation either from the bottom or the top. Some recall the baiting issues, framework changes as examples. How are the North American goals to be used in setting regulations because those goals affect the seasons being set. AHM has been helpful to us when we are setting our objectives. Do we want to keep adding models, harvest strategies and other species specific considerations with adds complexity or try to make the entire process more simple?

Habitat quality and quantity can substantially change the distribution of species. That benefits different groups of users. How do we decide where we put our effort? This refers both to species but also other wetland related habitat. Again, where we put our effort has ramifications to users and to how many and what type of waterfowl are produced.

The structure and policy of season setting does not now include considerations of the human dimensions aspects of waterfowl hunting. We simply don't know how to include those considerations but there is no

## Appendix D: Breakout Session 2 Group Notes

institutional opposition to doing so if the mechanisms were there. Might be able to manage at a coarser scale for waterfowl than we are doing now and that might suffice.

Perhaps a barrier is that we haven't scheduled another national duck hunter survey like we had in 2005. We need to see what has changed and what hasn't. We also need to find ways of using the information appropriately for decision making.

There is not an "average" hunter. There is a lot of heterogeneity in the group. Then how do we structurally include this hunter info into our waterfowl management efforts? Do we expect too much of the regulations process? Are we asking the regulations to do some things they cannot do? Are there other tools we need in addition to regulations setting?

A structural barrier exists between Joint Ventures talk about habitat while the Flyways talk mostly about harvest. There is some movement to bringing those considerations together but structurally it is evolving.

If we have such a shortage of usable info on hunters and other users, perhaps there are methods we simply aren't using or are unaware of to use. Several large decisions e.g. farm bill and court decision on the definition of wetlands, have been made but haven't motivated our publics especially hunters to rally in support of wetland protection.

Suggestion that we do some hunter dimensions experiments on a national basis. That raises a question of where is the money going to come from to gather the information. Budget is tight right now. Will we have to give up some of the work on other legs of the stool to do work on human dimensions? Unlikely that new money is going to be possible. Also a shortage of human dimensions specialists to be engaged in this work.

Perhaps we cannot protect enough habitat to meet the desires of waterfowl hunters. Therefore, how much is enough? We need to communicate to hunters what our limitations are. This is an issue beyond waterfowl and applies to other wildlife species as well. Specific question as to how we decide how much is enough...not any conclusions. There are policy barriers in terms of wetland protection through existing law in Canada and US, farm bill incentives, court decisions etc. Making the appropriate tradeoffs is based in policy. Biologists often think in terms of producing more critters as the solution rather than recognizing other more complex considerations.

The challenge for the flyway system is that each state has to figure out how flyway actions will affect the state's interest and that may determine whether the state supports the flyway's position or not.

## Appendix D: Breakout Session 2 Group Notes

Breakout session 2 Prefunction 3 08-27-08

<b>Discussion Leader</b>	Sara	Pauley	DJ Case & Associates
<b>Recorder</b>	Mark	Gloutney	Ducks Unlimited Canada
<b>Participants</b>			
	Todd	Arnold	University of Minnesota
	Brad	Bales	Oregon Dept of Fish & Wildlife
	Greg	Balkcom	Georgia Department of Natural Resources
	Mike	Brasher	Gulf Coast Joint Venture
	Paul	Castelli	New Jersey Division of Fish and Wildlife
	Dale	Caswell	Canadian Wildlife Service
	Tom	Collom	Oregon Dept of Fish & Wildlife
	Steve	Cordts	Minnesota DNR
	Patrick	Devers	U.S. Fish and Wildlife Service
	James H.	Devries	Ducks Unlimited Canada
	James A.	Dubovsky	U.S. Fish and Wildlife Service
	John	Dunn	Pennsylvania Game Commission
	Chris	Dwyer	U.S. Fish and Wildlife Service
	Diane	Eggeman	FL Fish & Wildlife Conservation Commission
	Frank	Rohwer	Delta Waterfowl Foundation

What are the technical challenges to integration?

Integration of harvest management folks with the JV's who deliver habitat conservation will likely remain a significant challenge. Each side needs to make substantial sacrifice to get to integrated objectives.

Habitat people can work without direct support on harvest management. However, ties to harvest might enhance the impact of the conservation actions.

Credibility issue with public in terms of meeting habitat and harvest goals.

Think about scale when considering habitat (JV) managers and harvest managers.

It will be a challenge to put waterfowl goals within JV might be in conflict with all bird goals.

Need to understand what our constituents want and this might help close the gap between habitat and harvest goals. Do we have the information to get an understanding of this.

Could set up a social carrying capacity that might help with convergence of goals for habitat and harvest goals.

Need for better coordination between all bird goals in terms of actual habitat projects that are implemented across the landscape.

The JV need to view themselves as part of a larger whole. Need to work towards common goals/objectives at a continental scale.

## Appendix D: Breakout Session 2 Group Notes

All JV need to understand how habitat objectives potentially impact population trajectories. Build good models that inform the JV decisions. Also need to include the harvest impacts.

Human dimensions aspects are poorly known. How do we weight the value of their desires.

Administrator desire to elevate the importance of the other bird pillars may undermine support for waterfowl.

Can we change societal pressure and acceptance of hunting? This will drive future support and direction.

Working towards harvestable surplus, but harvest management is not the sole way to get their. So need to consider the habitat aspects.

Human dimension needs to expand beyond hunters. Will administrators have the fortitude to continue the investment in increasing recruitment. Issue that current programs largely bring those that would have come to the fold anyway. So will we make the investment and will we build new effective programs that bring new people. Need to develop measures of success.

Support from nonhunters will create needs to balance needs of waterfowl and others expectations. (ie Integrate shorebird and waterfowl habitat conservation might be at odds.)

How will integration change how we manage habitat differently? This is easier at the breeding grounds, but more complex at the staging and wintering grounds.

Most of political and financial capital is from the hunters, yet to see the big ground swell of support of others.

Communication with hunters and public is key. Need to get them the information for them to make informed opinion, so that they can then help inform our harvest management. How do we get the message out? Also includes the needs of nonhunters

Habitat groups need tools for structured decision making to better inform investment. Need to build the models to the detail of the harvest management. How will we monitor the curves as we move forward, ie K. There will be competing objectives, want long seasons, but also want simple harvest regulations.

Can we really use yield curves to evaluate habitat? This is the big challenge – linking habitat to K or survival. Issue of how do we step this down to the JV, what is the incremental contribution of habitat to the key vital rates.

What habitat actions will result in an incremental increase in K? We can link a change in habitat to a vital rate at a local scale, but not to K.

Challenge of getting adjacent JV to work collectively on developing a tools.

Not sure that we need to invest in integration. Now have wall to wall JV. Maybe model of 6 focus areas might have been better.

When do we know when we are done?

Administrators: how do we balance the message about how much funding that we need when we are keeping population levels lower though harvest?

What species can we do integration for? We can really only do this for a handful of species at this time. Currently, move to stock specific harvest management, but desire to move to duck harvest management strategy. There needs to be a balance between stock management and overall impact of harvest on waterfowl.

## Appendix D: Breakout Session 2 Group Notes

Who has the technical capacity to do this?

Are there cross country issues?

Turning point question:

5 levels

- 1) Do you support the concept of integrating the 3 legs of the stool?
- 2) Is it feasible and a wise use of resources to integrate the 3 legs of the stool?
- 3) Breakdown by 2 by 2 legs.
- 4) Do you know how far it is to Cabella's

## Appendix D: Breakout Session 3 Group Notes

### NOTES -- Breakout Session #3 – Group Birch Lake/Maple Lake

<b>Discussion Leader</b>	Min	Huang	CT Dept of Environmental Protection
<b>Recorder</b>	Kathryn	Dickson	Canadian Wildlife Service
<b>Participants</b>			
	Greg	Balkcom	Georgia Department of Natural Resources
	Bob	Blohm	US Fish & Wildlife Service
	Patrick	Devers	U.S. Fish and Wildlife Service
			U.S.G.S. Minnesota Cooperative Fish & Wildlife Research Unit
	David	Fulton	Ducks Unlimited Canada
	David	Howerter	Ducks Unlimited Canada
	Don	Kraege	Washington Dept of Fish and Wildlife
	Ken	Mayer	Nevada Department of Wildlife
	Len	Ugarenko	Association of Fish & Wildlife Agencies
	Jim	Unsworth	Idaho Department of Fish and Game
	George	Vandel	SD Game, Fish & Parks Department
	William	Vander Zouwen	WI Dept of Natural Resources
	Jeffrey M.	VerSteeg	Colorado Division of Wildlife
	David	Viker	U.S. Fish and Wildlife Service
	Rick	Warhurst	Ducks Unlimited
	Greg	Wathen	Tennessee Wildlife Resources Agency

#### **Definitions of “coherence” – round table showed HUGE variation in individual definition of coherence, could be re-addressed tomorrow morning in the general session?**

- logical
- frequencies in tune
- better balance and connectivity
- goals are complementary, run parallel, and not opposed in concept or reality
- population level to achieve, and the harvest and habitat management that it takes to get there
- understandable, even to the uninformed
- more of a communication message than a technical exercise
- synchronous movement in decision-making
- acceptable level of acrimony among all stakeholders
- shared common goal, all “legs” working to the same objective
- population and habitat goals informed by human dimension considerations

#### **What are the benefits of coherence?**

- less acrimony among ourselves
- more informed better decisions
- better for the resource
- increased credibility
- ensure more and better support (political, funding, stakeholders)
- better accountability – are \$\$ going the right place?

#### **What needs to happen to reap the benefits of coherence?**

- Try it! For 3 or 4 species, do some scoping on the technical side
- List the impediments – then we’ll see what we need to do
- Coherence to be written into the next version of NAWMP
- Work through Waterfowl Working Group of AFWA

## Appendix D: Breakout Session 3 Group Notes

- Flyways – next step to decide that they will incorporate all 3 “legs” into decision-making (create Habitat and Human Dimensions Committees), and then see how it evolves
- Selling the concept – continue to market the idea – get buy-in and then see how it evolves
- Market the idea to hunters

### **Is this “coherence” concept related to the US-EIS on Hunting?**

- Not specifically. The EIS is still being drafted, it should be informed by what comes out of this meeting.
- Expect that comments later on the EIS will be affected by discussions here at this meeting.

### **How do we communicate with hunters?**

- State websites
- DU magazine

### **Need a new metaphor?**

- Layers of a pyramid?

### **How do we move forward?**

## Appendix D: Breakout Session 3 Group Notes

### Breakout Session # 3 Ballroom 1 Notes 8-27-08 16:00

Mike Anderson (discussion leader)

Ken Abraham (recorder)

<b>Discussion Leader</b>	Michael	Anderson	Ducks Unlimited Canada
<b>Recorder</b>	Kenneth	Abraham	Ontario Ministry of Natural Resources
<b>Participants</b>			
	Ron	Anglin	Oregon Dept of Fish & Wildlife
	Jimmy L.	Anthony	LA Department Wildlife & Fisheries
	Brad	Arner	Ducks Unlimited Canada
	Todd	Arnold	University of Minnesota
	Ken	Babcock	Ducks Unlimited
	Brad	Bales	Oregon Dept of Fish & Wildlife
	Ian	Barnett	Ducks Unlimited Canada
	Mike	Brasher	Gulf Coast Joint Venture
	Paul	Castelli	New Jersey Division of Fish and Wildlife
	Dale	Caswell	Canadian Wildlife Service
	Tom	Melius	DOI USFWS Regional Directors Office
	Dave	Smith	Intermountain Joint Venture
	Mark	Whitney	Georgia Department of Natural Resources
	Greg	Yarris	California Waterfowl Association

### Moving Forward

#### Human Dimensions

HD information and contribution to waterfowl management needs to be coordinated across scales (i.e., needs to be done efficiently rather than all doing it separately). Create a means/mechanism of sharing the results from these initiatives.

Acknowledge and use of product of AFWA *ad hoc* Waterfowl Human Dimensions Working Group (Raedeke, Humburg, Heng, Babcock, and others).

Acknowledge existing Waterfowl Hunter Recruitment and Retention Strategy Team (technical group reporting to WHDWG).

Develop process to get HD of Canadian hunters incorporated?

#### Integration of Objectives

We have to have a “common guide” and there is nothing better than the NAWMP as a vehicle to incorporate definite objectives for all three components of waterfowl management. NAWMP Plan Committee has equal representation from Canada and US, has 4 Flyways, etc.

Capacity of Plan Committee to pursue a re-structured NAWMP Plan is limited. PC will need to draw on a much broader group to do it, e.g. NFC, and indeed may need to hire people to be a Plan re-write Group.

## Appendix D: Breakout Session 3 Group Notes

Charge to a NAWMP Plan re-write group would have to include reference to Continental Assessment, JTG, HDWG, and other recent products. This would include a lot of consultation.

Start with a Scoping Exercise for Plan revision to be completed over a 6 month period.

A lot of technical work would need to be done preceding the Plan re-write (NSST, AHMWG, HDWG, special task groups). This requires commitment of technical capacity to NAWMP revision.

Will USFWS, USGS, CWS, etc. be willing to put some other waterfowl management initiatives on hold while this process occurs?

Question: Will there be commitment (agreement) from the agencies responsible for harvest management to embrace a Plan structure that would guide its work in the future.

Increase technical capacity and coordination among JVs (US, Canada, Mexico) and Flyway Habitat Committees. Could charge them with identifying what their information needs are to move forward with integration.

EIS on Waterfowl Hunting (US). Uncertain status and timing of contributions?

### Monitoring

Reduce incongruence between monitoring of continental K, temporal scale of measurement of net landscape change and annual production capacity, vital rates, etc.

## Appendix D: Breakout Session 3 Group Notes

Breakout Session #3	Group #2	Notes-8-27-08-(2:40 AM).	
<b>Discussion Leader</b>	Seth	Mott	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jorge	Coppen	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Doug	Bliss	Environment Canada, Canadian Wildlife Service
	Brad	Bortner	U.S. Fish and Wildlife Service
	Dave	Brittall	Washington Department of Fish and Wildlife
	John	Buhnerkempe	Illinois Dept of Natural Resources
	Eric	Butterworth	Ducks Unlimited Canada
	Bob	Carles	Saskatchewan Watershed Authority
	Breck	Carmichael	SC Department of Natural Resources
	Tom	Collom	Oregon Dept of Fish & Wildlife
	Steve	Cordts	Minnesota DNR
	James H.	Devries	Ducks Unlimited Canada
	James A.	Dubovsky	U.S. Fish and Wildlife Service
	John	Dunn	Pennsylvania Game Commission
	Chris	Dwyer	U.S. Fish and Wildlife Service
	Alan	Wentz	Ducks Unlimited
	Steve	Williams	Wildlife Management Institute

### **How do we move forward?**

NAWMP goals needs to be revisited in terms of coherence of habitat & harvest mgmt. as part of the next NAWMP update.

### **Questions:**

Do we need more explicit goals re: hunters, habitat capacity first?

Is it a foregone conclusion we will pursue coherence with all three legs? If so, Need explicit objectives upfront.

If there is buy-in, coherence will need to include goals & measureable objectives as part of the package.

### **Needs:**

Need to make a recommendation re: who makes that decision.

Need a broader definition of what the HD component is.

Make progress on harvest & habitat coherence - but uncertainty re: HD component may force us to define objectives for HD first.

We have a conceptual example in the JTG report for unifying harvest & habitat mgmt. and a discussion of trade-offs between these two. But judging the trade-off must include a component of HD in making choices.

Pursue collective buy-in from institutional leadership in the waterfowl community.

## Appendix D: Breakout Session 3 Group Notes

Provide decision-making tools for our leadership:

Provide information re: the costs/benefits of the pursuing a process of achieving coherence. Articulate obstacles, information needs, cost of achievement...put the decision back on the leadership for an informed decision.

Need to identify the leadership structure for the decision making exercise.

### **Recommendations:**

*A revolutionary idea:* Who will call the shots?

A more inclusive decision-making entity (consortium) would bring down the "Silo" effect and increase the ownership needed. (overall umbrella organization).

This new leadership structure would craft the overall goals of waterfowl management

Not that revolutionary...The existing sub-groups of our current infrastructure would still be functional.

Take a close look at Plan Committee structure to reconstitute and provide the authority required. Build a new consortium for coherence with the authority needed for considering and, defining the mgmt. goals & objectives of waterfowl mgmt. and with the oversight of the mgmt. framework required to support coherence of waterfowl management.

Developing strategies & objectives to pursue coherence must flow from the leadership revolution.

What are the covariates related to hunter expectations? How well is the system addressing those expectations?

Need a HD work group to identify key constituencies and bring to the new consortium the explicit definitions of the components of the HD aspects in linking habitat & harvest.

### **More Questions:**

What are the ramifications re: reaction of All-bird JVs? Will it serve as an impetus for other bird initiatives to step things up or will they day "sorry we are all-bird entities

## Appendix D: Breakout Session 3 Group Notes

### Future of Waterfowl Management Workshop

Breakout Session #3

Group: Ballroom 3

<b>Discussion Leader</b>	Rex	Johnson	U.S. Fish and Wildlife Service
<b>Recorder</b>	Jim	Ringelman	Ducks Unlimited
<b>Participants</b>			
	Mike	Carter	Playa Lakes Joint Venture
	Greg	Chasko	Connecticut Dept Wildlife Division
	Alan	Clark	Utah Div of Wildlife Resources
	Ronald	Clarke	Alaska Department of Fish and Game
	David	Cobb	North Carolina Wildlife Resources Commission
	Diane	Eggeman	FL Fish & Wildlife Conservation Commission
	Robert	Ellis	VA Department of Game & Inland Fisheries
	Jody	Enck	Cornell University
	Kathy	Fleming	U.S. Fish and Wildlife Service
	Joseph P.	Fleskes	USGS Western Ecological Research Center
	Joe	Fuller	North Carolina Wildlife Resources Commission
	Jim	Gammonley	Colorado Division of Wildlife
	Sean	Kelly	U.S. Fish and Wildlife Service

### How do we move forward?

#### What needs to happen to achieve the benefits of coherence?

#### What recommendations do participants have?

- 1) What's meant by coherence?
  - a) Coherence is an explicit appreciation of the role of populations, habitat, and human dimensions in waterfowl management, and provides for a framework for on-going integration between the three
- 2) **Can we have a common population objective for harvest and habitat management?**
  - a) **May need a continental K and a JV K**
    - i) **JV's look to achieve long-term gains in potential K ("potential" as when moisture conditions are favorable), and harvest management looks at annual changes in K driven mostly by uncontrollable factors like wet ponds**
      - (1) Example: AHM models rely on moisture conditions that we don't control, but are important to annual changes in population size, BUT at a JV scale (i.e., PPJV) the focus is on retaining wetland basins and grassland nesting habitat, and annual moisture events actually complicate assessment of conservation progress
    - b) Explicitness must be a key component
- 3) **What do we have to do to achieve coherence?**
  - a) **Identify a process through which objectives of waterfowl management can be determined**
    - i) **Setting objectives is a policy decision**
      - (1) **What do policymakers need to know to inform their decision?**
      - (2) **How can technical people help?**
        - (a) **Provide analyses that demonstrate the implications and tradeoffs that may occur as a result of alternative management objectives**
    - b) **Develop the technical competence in all three areas**
    - c) **Set in place institutional structures to make sure that we can make headway on the technical issues to achieve coherence**
- 4) When it comes to hunter participation/satisfaction, concerns about maintaining seasons with high harvest potential have probably been unwarranted

## Appendix D: Breakout Session 3 Group Notes

- a) More restrictive seasons will generate complaints from some avid hunters
  - i) Some risk that this would cause loss of credibility to agency
  - b) However, will not have much of an effect on hunter participation (based on H-D research)
- 5) **Task the technical groups (Flyway Technical Committees, NSST, and waterfowl H-D group with conceptualizing their “leg of the stool”, as well as assessing what they need to do to achieve coherence with the other groups**

## Appendix D: Breakout Session 3 Group Notes

Breakout Session 3 BR4 Notes 8-27-08 240pm

<b>Discussion Leader</b>	Robert	Clark	Environment Canada, Canadian Wildlife Service
<b>Recorder</b>	Jeff	Herbert	Montana Fish, Wildlife & Parks
<b>Participants</b>			
	Dave	Erickson	Missouri Department of Conservation
	Arthur	Feinstein	San Francisco Bay Joint Venture
	Jamie	Fortune	Ducks Unlimited Canada
	Dale L.	Garner	Iowa Department of Natural Resources
	Jonathan	Gassett	KY Dept of Fish & Wildlife Resources
	David	Goad	Arkansas Game and Fish Commission
	David	Graber	Missouri Department of Conservation
	Karla	Guyn	Ducks Unlimited Canada
	Robert	Hoffman	Ducks Unlimited
	Rob	Holbrook	DOI USFWS Region 8 CVJV
	Rob	Hossler	Delaware Div of Fish and Wildlife
	Jack	Hughes	Canadian Wildlife Service
	Kevin	Hunt	Mississippi State University
	Barbara	Pardo	US Fish & Wildlife Service

General Questions –

How do we move forward?

Turning Point Questions (for tomorrow) –

How likely is that all three elements could be combined into a coherent approach?

How likely is it that two of the three could be combined into a coherent approach?

Which of the two could most likely be combined in a coherent approach first?

How do we move forward?

Uncertainty of what this means is still an impediment and an assessment of the risk of pursuing or not pursuing coherence.

Clarify goals by assessing population and landscape potential, determine what is possible from a capacity standpoint (i.e. reframing NAWMP goals and clarifying objectives).

Set your goals high don't constrain your habitat objectives by current realities if habitat is not irreversibly converted. Habitat must remain the foundational element.

Assess the risk of pursuing or not pursuing greater coherence.

Consider incremental or phased approach to problem solving starting with habitat and population linkages being clarified first.

Develop a conceptual design of coherence would look like and more explicit definition of the linkages.

Development consistent methods and metrics for HD work with higher level of precision attached to those results, including hunter satisfaction.

## Appendix D: Breakout Session 3 Group Notes

Develop communication and marketing strategies to convey consistent messages to the various stakeholders.

Requires a more diverse approach to communication and we're not a very diverse group.

HD is more of a platform that the other "legs" must sit on. HD is bigger than the hunting public.

What needs clarification from your perspective? Random thoughts from the group -

Is it practical and feasible to include HD in the harvest habitat equation? The "how" is a real issue.

HD is actually being considered but not necessarily in a structured and explicit process.

Being asked to run before we walk – need to try to link population and habitat elements first and then consider how to bring in HD metrics.

In Canada, doesn't see a big issue. The habitat population connection is in place – the HD piece is more complicated.

Know very little about HD and therefore is difficult to link into the process.

In the absence of hunting, what would population goals be in order to maintain other user demands or population viability.

Conflict between habitat versus harvest entities and less integration. We don't necessarily understand hunter response to various harvest packages and should investigate those aspects.

Has NAWMP created more separation between habitat and harvest mgmt? Habitat science capacity has not been as rigorous.

Is this a question of coherence or the future of waterfowl management and what this will look like?

Common theme is maintaining good populations, concerned with the message that NAWMP goals need to be changed.

Need defensible goals in order to move forward.

Yield curves seem to be a driver in the frameworks we currently utilize, is that appropriate?

## Appendix D: Breakout Session 3 Group Notes

Breakout 3  
Ballroom 5

<b>Discussion Leader</b>	John	Eadie	University of California Davis
<b>Recorder</b>	Fred	Johnson	USGS Florida Integrated Science Center
<b>Participants</b>			
	John E.	Frampton	SC Department of Natural Resources
	Sam	Hamilton	FWS, Southeast Region
	Susan D.	Haseltine	U.S. Geological Survey
	Jeff	Haskins	U.S. Fish and Wildlife Service
	David C.	Hayden	Alabama Wildlife & Freshwater Fisheries, ADCNR
	Curtis R.	Hopkins	Ducks Unlimited
	Michael A.	Johnson	U.S. Fish and Wildlife Service
	Tim	Jones	Atlantic Coast Joint Venture/USFWS
	James R.	Kelley	U.S. Fish and Wildlife Service
	Tom	Kirschenmann	SD Game, Fish & Parks Department
	Kevin	Kraai	Texas Parks & Wildlife
	Larry L.	Kruckenber	Intermountain Joint Venture
	David	Luukkonen	Michigan Dept of Natural Resources

How do we move forward?

What needs to happen to achieve the benefits of coherence?

What recommendations do participants have?

- Where are we? Are we making progress toward a collective understanding of coherence?
  - A long way; need smaller groups to make progress; need patience
  - Perhaps easier to think about integrating harvest & habitat management; much harder to think about integrating HD
  - A paradigm shift needed and it will be a long time coming
  - Perceived lack of progress may be due to frustration with complexity and limited understanding of issues
  - Sense of confusion of what 'it' is? Coherence of harvest & habitat mgmt objectives? Growing support for waterfowl & wetlands conservation? The role of human dimensions?
- Where did 'this' originate? Grew out of conflicts between NAWMP pop objs and AHM, and recognition that HD research was needed to resolve conflict.
- There has been evolution from origin to something more comprehensive.
- Not clear what scope of HD role is.
- How would you recognize coherence/integration if you saw it? What are its attributes?
  - Common currency in harvest and habitat mgmt (perhaps before we engage HD efforts in substantial way? K as a performance metric?)
  - All participants had difficulty with this?
- The need to be accountable (to OMB, stakeholders, hunters) – what are the social/economic metrics?
- We probably have technical expertise (not necessarily capability) to integrate harvest and habitat management (for more efficient mgmt), but that has to be guided by societal values and needs. Where do they come from? How are they used to guide integration/coherence? Are we prepared to be guided by those values?
- Concern that we've had good discussions, but we're all preaching to the choir; we struggling with action items.

## Appendix D: Breakout Session 3 Group Notes

- We don't do a good enough job of marketing
- Conclusion: we need a better collective understanding of what it is we're trying to accomplish; scope is broader than JTG or NAWMP assessment reports

## Appendix D: Breakout Session 3 Group Notes

### BREAKOUT SESSION 3-CEDAR LAKE 1440

<b>Discussion Leader</b>	Ken	Williams	US Geological Survey
<b>Recorder</b>	Scott	Yaich	Ducks Unlimited
<b>Participants</b>			
	Jane	Austin	USGS Northern Prairie Wildlife Research Center
	Vernon	Bevill	Texas Parks & Wildlife
	Tom	Nudds	University of Guelph
	Russ	Oates	U.S. Fish and Wildlife Service
	Casey	Stemler	US Fish & Wildlife Service
	Scott	Stephens	Ducks Unlimited
	Marie	Strassburger	U.S. Fish and Wildlife Service
	Scott	Sutherland	Ducks Unlimited
	Robyn	Thorson	U.S. Fish and Wildlife Service
	Nicholas	Throckmorton	U.S. Fish and Wildlife Service
	Bill	Uihlein	Lower MS Valley Joint Venture
	Johann	Walker	Ducks Unlimited
	Guy	Zenner	Iowa Department of Natural Resources

**“How do we move forward?”**

**“What needs to happen to achieve the benefits of coherence?”**

**“What recommendations do participants have?”**

- Had goals, challenges, and now “what do we do?”
- Just heard long list of challenges related to **technical issues**; and, **administrative issues**, that could be turned into action items; **marketing and communications issues**; **social issues**
- **Flyways: seek to increase their ability to serve the interests of hunters; somehow integrate flyway councils and JVs; what will they do when they get together?**
- Scaup, for example: what issues can be addressed with habitat issues?; flyways, how to assess the results of that?
- **\*\*\*NAWMP Update: set a target date that explicitly links waterfowl pop goals and habitat goals**
- **Assess what is known about hunter attitudes; segment markets**
- **Hire HD people to develop a system of gathering consistent information from hunters**
- **Use NAWMP update as a focal point for organizing needs, action items, use as an instrument to develop the road map for moving forward**
- 
- **We need a conceptual framework that the communities can respond to**
- Revisiting NAWMP goal
- **Need common currency, common language, common framework**
- K is difficult to use a common currency because it is a moving target; can we possibly integrate something else (HD) into this framework?
- **Flyways; Make regulatory process simpler; Free up manpower/dollars to address other needs**
- Greatest deficiency is in the HD component; address information needs there

## Appendix D: Breakout Session 3 Group Notes

- **Define expectations for JVs relative to waterfowl; need to focus JV efforts related to meeting waterfowl needs understanding their broader conservation mission**
- **JVs** are required to report on output (now on acres and dollars); move toward biological outcomes, **better measures of success and accountability: meaningful, measurable, repeatable**
- **\*\*\*Caution: will likely still be dealing with the same amount, or less, resources; need clear understanding of administrative trade offs in moving this forward; but haven't assessed the costs of addressing these needs**
- **\*\*\*Need to balance the concern regarding the unknowns associated with moving forward with the unknowns associated with staying the course we're on**
- We have to figure out how to get more out of the same dollars; be as efficient as possible with monitoring
- **Resource availability: communication with other groups, market positioning of waterfowl conservation, in the discussions of broader groups such as climate change, ag. policy**
- Growth in our infrastructure/\$\$\$ is unlikely; **need to re-design infrastructure to economize; some of this can come from integration of capacities**
- **Charge Flyways with simplifying the process in order to spend more intellectual capacity on things that are most important;**
- **\*\*\*Financial resources are finite; absent a new infusion of resources, growth in one area means contraction in another**
- Recognition of sideboards
- **Need to better job of accessing and integrating assets of each component and partners**
-

## Appendix D: Breakout Session 3 Group Notes

### Future of Waterfowl Management Workshop

Breakout Session #3 Discussion Notes

Group: Deer Lake

27 August 2008

<b>Discussion Leader</b>	Andy	Raedeke	Missouri Department of Conservation
<b>Recorder</b>	Michael	Runge	USGS Patuxent Wildlife Research Center
<b>Participants</b>			
	Hugh	Bateman	Ducks Unlimited
	H. Dale	Hall	US Fish & Wildlife Service
	Jeff	Nelson	Ducks Unlimited Canada
	Kirk	Nelson	Nebraska Game and Parks Commission
	Jeff	Raasch	Texas Parks & Wildlife
	Larry	Roberts	Wyoming Game and Fish Department
	Rudolph	Rosen	Ducks Unlimited
	Ken R.	Sambor	Ducks Unlimited, Inc.
	Terry	Shaffer	USGS Northern Prairie Wildlife Research Center
	Charles R.	Sharp	Alabama Wildlife & Freshwater Fisheries
	David E.	Sharp	U.S. Fish and Wildlife Service
	Stuart	Slattery	Ducks Unlimited Canada
	Gregory J.	Soulliere	U.S. Fish and Wildlife Service
			New York Division of Fish, Wildlife & Marine Resources
	Bryan L.	Swift	

Discussion Leader: Andy Raedeke

Recorder: Michael Runge

Participants: Hugh Bateman, Dale Hall, Jeff Nelson, Kirk Nelson, Jeff Raasch, Larry Roberts, Rudolph Rosen, Ken Sambor, ~~Terry Shaffer~~, Charles Sharp, David E. Sharp, Stuart Slattery, Greg Soulliere, Bryan Swift

Order around the table:

Andy, Ken, Kirk, Larry, Jeff N., Hugh, Chuck, Dale, Jeff R., Stuart, Bryan, Rudy, Dave, Greg, Mike

#### How do we move forward?

#### What needs to happen to achieve the benefits of coherence?

#### What recommendations do participants have?

- Are we confident that coherence/integration is where we're going? Do we believe the purpose of the workshop has been achieved?
- A little surprised we're asking this. Is our chief impediment actually just getting on the same page with what coherence is, and a basic agreement that it's a viable option for the future? Thought coming into this that we were on the same page, but listening to the discussions, not sure if we're there yet.
- Need a definition of coherence, in the sense of applied (as opposed to theoretical) coherence.
- Haven't heard yet what this would mean on the ground. How would it actually work?
- Conceptually, could see the 3 legs of the stool and could see how we're making progress putting together metrics, models, monitoring, etc. But how to make this work in a real model, the details are mind-boggling, don't know how to do it.

## Appendix D: Breakout Session 3 Group Notes

- Surprised about the 76% saying we need to revisit the NA goals. People didn't know what the question meant, interpreted it differently.
- Concepts make sense, but if coherence requires more details, models, data, not sure that's the right way. Would like to see streamlining, efficiency.
- AHM and NA goals in tug-a-war—that motivated some of this discussion. Defining the NA goals—the revisiting might just be a clarification along these lines.
- Where is the hesitation in the audience? Can we do a TP question on Thursday about this? Is it fear of the technical? Is it the complexity of multiple goals? Is the problem bigger than people thought? Not sure if we can agree to it until we really know what it means.
- Habitat folks get nervous when you start to equate acres to some vital rate (especially in winter and migration JVs). On the harvest side, there's a concern that habitat efforts shouldn't constrain harvest.
- The NA Plan and its goals are sound. We understand the habitat and population issues pretty well. HD is the harder piece, knowing what to do with it. Stay hitched to the Plan. JVs should stick with their acreage goals.
- NA Plan. Population goals of the 70s. Didn't say anything about average conditions, etc. Had adequate numbers of ducks to fill consumptive and non-consumptive needs of people. If we could do that again, the world would be good. It was a benchmark.
- How long would it take to revisit the Plan? How much consternation would it take? Would we end up with anything better?
- This is the thing with HD. We're assuming that if we could get back to the 70s, duck hunters would be happy. But is today's duck hunter motivated in the same way?
- For a group that's often unhappy, hunters have been pretty happy of late. So maybe things are fine.
- More HD discussion...
- NAWMP and goals. 8.8 M MCM. Isn't the real question not to change that goal, but to think about the yield curve and shoulder concept—where should we be and how should we do that? That doesn't detract from long-term goal of 8.8. It's the growth in the yield curve that gives you the room to get to that 8.8 under a particular harvest strategy.
- Where the disconnect comes—when a JV is out there, how does the work it does plug into that overarching goal? \
- Younger folks are questioning everything. We should, too. Just because it's been on the table for 20 years doesn't mean we should keep it. We need to revisit what folks want. Ask some basic questions, without feeling like we have to remake the whole system.
- We've been doing HD for 40 years. Harvest has never been a huge issue. Harvest isn't the problem. It's the loss of habitat. We've been dealing with HD by trying to make the general public understand we're not just killers out there looking for blood. Now, we need to fess up and do the HD work more explicitly.
- Who and how to gather additional HD information? Who would formulate the questions? Is the Flyway system still intact and could do it?
- We do have an ad-hoc HD group that's about 1 year old. There's also piecemeal HD work within states. Recommendation: fortify a formal HD working group.
- That's a point of pushback. We understand harvest and habitat. But we can't see all the implications the HD would add. That's uncertainty that creates discomfort. At a time when budgets are tight, do we want to move resources to HD?
- What if, for a moment, we ignored HD and just talked about two legs. Can we look at coherence from the standpoint of harvest and habitat. Should we start there? Go there first. Don't let HD derail the coherence/integration.
- Coherence is about AHM and NA goals. We've got a disconnect now that's costing us harvest. We could do HD research to find out if this is important. We could reduce NA goals and get to coherence. We could just live with coherence. Or we could try to increase K to bring the two together (costs money). HD research could inform us what the expectations are.
- Different model: 3-legged stool isn't the right picture. Really we have the integration of harvest and habitat, but that occurs within a social context (so we need HD research to help with that). We're not managing humans/hunters in the same sense that we're managing habitat and harvest;

## Appendix D: Breakout Session 3 Group Notes

- rather the HD piece is the backdrop for understanding the objectives of harvest and habitat management.
- We use HD to help us understand context. But HD is also its own piece—have hunter, birdwatchers, general public that we want to support us. We draw our authority from the people, through laws. Public will accept what the science tells them, if they trust us. We've got to make sure they believe us. HD has to be there. How do we educate the public, so they accept the science part?
  - HD isn't a branch. It's the trunk of the tree.

### Summary Points

- Need to build or explore agreement for pursuing integration/coherence. On the conceptual level, maybe not much of a problem, but pushback when it comes to thinking about the details. That is, we're not all on the same page that coherence/integration is needed. We can't proceed on any other steps until some stronger consensus about direction is attained.
  - Can we get some TP questions tomorrow about where the pushback might be?
- Some sentiment that we don't want to rethink the entire NA Plan. But we need to better understand the HD aspect and how that relates to the Plan.
- Formalize and fortify the HD Working Group.
- Start with the integration of harvest and habitat. Don't have to integrate HD right away.
- Maybe, in fact, the 3 legged stool is the wrong picture. Really there are two legs (population and habitat management), but they're embedded in a social context, and we need the HD to understand the objectives for harvest and habitat management.

## Appendix D: Breakout Session 3 Group Notes

### Breakout Session #3 Elk Lake Group Notes

<b>Discussion Leader</b>	Phil	Seng	DJ Case & Associates
<b>Recorder</b>	Barry	Wilson	Gulf Coast Joint Venture/USGS
<b>Participants</b>			
	Dennis	Jorde	USGS Northern Prairie Wildlife Research Center
	Jane	Noll-West	US Fish & Wildlife Service
	Bill	Rudd	Wyoming Game and Fish Department
	Dave	Schad	MN DNR Division of Fish and Wildlife
	Paul	Schmidt	U.S. Fish and Wildlife Service
	Dave	Scott	Ohio Division of Wildlife
	Bob	Shaffer	DOI USFWS Region 8 CVJV
	Carey	Smith	U.S. Fish and Wildlife Service
	John	Tirpak	Lower Mississippi Valley Joint Venture
	Robert	Trost	U.S. Fish and Wildlife Service
	Kent	Van Horn	WI Dept of Natural Resources
	Mark P.	Vrtiska	Nebraska Game and Parks Commission
	Tina	Yerkes	Ducks Unlimited
	Dan	Yparraguirre	California Dept Fish & Game

How do we move forward?

What needs to happen to achieve the benefits of coherence?

What recommendations do participants have?

1<sup>st</sup> identify why we should “move forward”  
**engage HD experts so that we learn more**

consider simpler ways to link HD into harvest and HD into something else  
harvest in middle, fed by both habitat and harvest  
not sure about HD impact on habitat

we don't know enough to know the benefits of a coherent framework  
**need to determine and articulate the synergistic benefits of integrating all 3 legs**

**conceptual benefits versus the cost**  
HD study group to scope out potential costs

ID costs of setting up a framework

What are costs of not doing it?

**Incorporate relevant HD into HIP survey?**

Definition of K needs to be clarified

**Perhaps better integrate harvest and habitat as a first step**

**Incorporate a HD metric into harvest decisions**  
Develop agreement that HD metrics should influence harvest decisions

## Appendix D: Breakout Session 3 Group Notes

Timeline for revising NAWMP goals

**Continue refining the linkage of habitat to vital rates to K**

**Define “human” in HD**

better understanding of stakeholders in broad sense

**Set up logistics so that each group associated with a leg interacts with the other**

Blue ribbon panel to scope this out

**explore TP with regard to NAWMP goals**

TP - Who pays your salary?

## Appendix D: Breakout Session 3 Group Notes

### Breakout Session #3 PreFunction1 Group Notes

How do we move forward toward integration?

<b>Discussion Leader</b>	Dale	Humburg	Ducks Unlimited
<b>Recorder</b>	Mark	Koneff	US Fish & Wildlife Service
<b>Participants</b>			
	Bruce	Batt	Ducks Unlimited
	Cal	DuBrock	Pennsylvania Game Commission
	John	Hoskins	Missouri Department of Conservation
	Beth	Huning	San Francisco Bay Joint Venture
	Paul R.	Johansen	West Virginia Division of Natural Resources
	Michael	Johnson	North Dakota Game & Fish Department
	Pat	Kehoe	Ducks Unlimited Canada
	Joe D.	Kramer	Kansas Department of Wildlife and Parks
	Ray	Marshalla	Illinois Dept of Natural Resources
	Faye	McNew	Kansas Department of Wildlife and Parks
	Tim	Mitchusson	NM Dept of Game & Fish
	Tom	Moorman	Ducks Unlimited
	Dave	Morrison	Texas Parks & Wildlife
	Craig	Mortimore	Nevada Department of Wildlife
	Frank	Rohwer	Delta Waterfowl Foundation

What are the next steps, processes?

What resources are required, what organizations are critical?

(Are they minor tweaks or bold moves?)

- use Flyway Council infrastructure to integrate all 3 legs of stool (minor tweak)
- key questions: what is HD?, what is involved?\*\*\*
  - o key need to clarify who the stakeholders are and then, what their objectives are
  - o needs to be more structure behind HD
- Define “Incoherence” : decision-making frameworks for harv and habitat mgt that are possibly working at cross purposes because different objectives and neither fully incorporates HD elements in defining objectives and performance metrics
- We’ve not been managing FOR people (actively)...we’ve been managing the system and assuming that the public will react and let us know if we are not meeting their desires (passive)
- Need to integrate both the habitat and harvest mgt infrastructures (JVs and Flyways), and determine what structures are needed to interact with public. How do we blend these institutional structures?
- Concern that this workshop is running on the idea that this is the right thing to do and that its worth that resources to pursue this. Don’t think incoherence is an issue – the answer to the question, do we need to shoot fewer birds to meet NA goals, or do we need more habitat to shoot more ducks...answer to this is not important.
- Bold move on the HD side needed, but we need to be very careful how we adjust the existing frameworks for habitat and harvest management. There are huge communication challenges to adjusting NA goals, etc.
- Another strong advocate of incorporating HD, understanding what hunters want, what motivates them, etc. We do understand this in some states.

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- Gonna be hard to get resources to add another institutional layer on top of the institutions that currently exist for habitat and harvest
- Should NOT require a bold move to bring habitat management and harvest mgt into a common conceptual, technical, and institutional framework...likewise for HD. We are blowing the difficulty of this out of proportion. These are minor adjustments, not a paradigm shift.\*\*
- But others think that the fragmentation amongst these institutional elements is more severe
- Need to come to agreement on what objectives are...what does society want in terms of wf pops and what habitat is required to support these populations. Where do we best put our resources? Major institutional shifts will be required...these institutions are largely disjunct now.
- Many of our questions about priorities for resource allocation have been difficult to answer because we lack a common framework and objectives.
- If there is a major institutional shift to incorporate HD that affects habitat conservation infrastructure (at least big institutional shifts in the habitat conservation infrastructure)...will be significant concern from some JV Mgt Boards.
- Doesn't seem like this should be this controversial or hard??
- It will be difficult to determine how much HD data should factor into objective setting and decision-making (annual or double-loop learning, likely the later)
- Tweak: hire 4 or 5 more HD guys and have then create a better toolbox for wf mgt community to use to incorporate these considerations.
- Hard to see how states for which wf is a minor issue can move forward with this
- HD useful when we redo AHM packages – double loop learning again

### Summary

1) Need to better define what we are debating. HD (is hunter satisfaction or broader societal values)?

Coherence?

- those definitions are critical to assessing how hard or controversial this task will be and how significant the institutional changes might have to be
- maybe we are making too big a deal out of this
- if we don't know what we are trying to achieve, how can we define next steps, or decide if its worth achieving

2) We've not been managing FOR people (actively)...we've been managing the system and assuming that the public will react and let us know if we are not meeting their desires (passive)

- many felt bold institutional measures needed to move forward on this HD side

3) Should NOT require a bold move to bring habitat management and harvest mgt into a common conceptual, technical, and institutional framework...likewise for HD. We are blowing the difficulty of this out of proportion. These are minor adjustments, not a paradigm shift

4) Others felt that we did need significant restructuring of habitat and harvest mgt institutions or at least the processes (eg, stabilized regs)

## Appendix D: Breakout Session 3 Group Notes

BreakoutSession3Pref2Notes-082708-1530

<b>Discussion Leader</b>	Robert	Byrne	DJ Case & Associates
<b>Recorder</b>	Ralph	Morgenweck	U.S. Fish and Wildlife Service
<b>Participants</b>			
	Tony	Leif	SD Game, Fish & Parks Department
	Andy	Loranger	U.S. Fish and Wildlife Service
	Wayne	MacCallum	Massachusetts Div of Fisheries & Wildlife
	John	Major	New York State DEC Bureau of Wildlife
	Bob	McLandress	California Waterfowl Association
	Luke	Naylor	Arkansas Game and Fish Commission
	Paul	Padding	U.S. Fish and Wildlife Service
	Ed	Penny	MS Dept of Wildlife, Fisheries and Parks
	Mark	Petrie	Ducks Unlimited
	W. Adam	Phelps	Indiana Department of Natural Resources
	Matt	Pieron	Ohio Division of Wildlife Department of Natural Resources
	Bruce	Pollard	Environment Canada, Canadian Wildlife Service
	Benjamin N	Tuggle	US Fish & Wildlife Service
	Emily Jo	Williams	U.S. Fish and Wildlife Service

How do we move forward? What needs to happen to achieve the benefits of coherence? What recommendations do the participants have?

How far in the future are we looking to achieve this? Mentions the NAWMP time frames as an example. Achieving “this” is referring to approaching coherence of the three legs of the stool. There are several opinions regarding the timeframe....that it will evolve toward some level of coherence. Thus, there would be multiple timeframes.

Do we just think about hunters or do we also consider other human interests? The incorporation of a variety of human interests would be more complicated than if we just consider hunter interests.

Before we move forward, some said they want to know the assumptions that are the basis of coherence especially the human dimensions part. Need to scope the human dimensions inputs much better so we can understand how HD considerations may affect waterfowl management. What is the context of the HD considerations? How broad are they? What are the potential benefits of coherence? What are the potential problems with coherence? Can we define what is really needed? Can we tell someone how our habitat work has affected the populations of waterfowl? Can we insure the future of waterfowl hunting?

Need to keep in mind our long term objectives and need to keep in mind the need to keep the “table set” for when water comes. Stopping the loss of habitat and hunter opportunity and then rebuild.

Stronger interest in integrating harvest with human dimensions than habitat/human dimensions. What does this mean? Is it just that the harvest connection more obvious? The human dimensions considerations are still poorly scoped and we really don’t know what all of the requirements and effects will be.

Benefits of coherence: potential help with NAWMP revisiting north American goals and the other benefit is perhaps to remove the constraints in the AHM calculations. HD may also play a role in application of hunter behavior to increases or decreases in bag limits.

## Appendix D: Breakout Session 3 Group Notes

There may also be benefits in the larger context of wetland conservation. Not unanimous that HD plays a role larger than just waterfowl management. Some see societal support for wetland conservation as separate or not a result or benefit of coherence. Some see that as separate. A better scoping/definition of HD is really important. It is so foggy that it is hard to determine what others are talking about. If it is so vague, how do we know what the ramifications are?

HD can play an important part in maintaining our current stakeholders. There are lots of other drivers of environmental change but do we incorporate those...if so, how? We discussed a variety of considerations like vulnerability of the hunt because we don't have biological information on certain species. Some people don't want to go to the HD considerations because they feel like biological considerations are more important.

Some commented that in the end we need to pay most attention to maintaining the hunter and the hunting tradition. The group discussion seems to be moving back around to an emphasis on harvest and habitat. Also comments on the benefits of just integrating harvest and habitat even if we don't integrate the human dimensions issues were provided. More comments about the need for improved information exchange as a minimum for harvest and habitat.

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Break out session 3 prefunction3/dancing girls 3 08-27-08

<b>Discussion Leader</b>	Sara	Pauley	DJ Case & Associates
<b>Recorder</b>	Mark	Gloutney	Ducks Unlimited Canada
<b>Participants</b>			
	Tom	Hauge	Wisconsin Department of Natural Resources
	Ross	Melinchuk	Ducks Unlimited
	Randy	Milton	Nova Scotia Dept of Natural Resources
	Eugene Greg	Moore	Delaware Div of Fish and Wildlife
	Steve	Moran	Rainwater Basin Joint Venture
	Marvin	Moriarty	US Fish & Wildlife Service
	Henry	Murkin	Ducks Unlimited Canada
	Harvey K.	Nelson	Trumpeter Swan Society
	Duane	Pool	TNC Migratory Bird Program
	Ronald (Rocky)	Pritchert	Kentucky Dept of Fish & Wildlife Resources
	Michael	Rabe	Arizona Game and Fish Dept.
	Ryan	Reker	Rainwater Basin Joint venture/USFWS
	Larry	Reynolds	Louisiana Dept Wildlife & Fisheries
	Ron	Reynolds	U.S. Fish and Wildlife Service
	Ken	Richkus	U.S. Fish and Wildlife Service

What is coherence: Working towards the same thing: are we working towards a common population goal.

Coherence: An integrated framework for making decisions.

HD a key part or consideration when setting the goals (habitat and population), not necessarily a leg of the stool. Is HD a separate leg, can it stand alone? Is it part of the stool.

HD clearly need to be part of the decision process. Maybe the legs are not of equal length, but if they are different then stool not very comfortable.

We feel we will have a more coherent system if:

- 1) Conduct national hunter surveys every 2 – 3 years, including some JV based questions
- 2) More regular meetings between JV and flyways
- 3) Merged websites.

Flyway strong technical representatives make recommendation up to policy makers. This includes the hunters views. The JV are the habitat implementation but no strong communication between flyways and JV's. The reliance on models is creating some of the silos. AHM may have unintentionally reduce the HD input into the decision process. So there has been a reduction in the human dimension over the past 2 decades. The state agencies have reduce understand the hunters as well as they did in the past.

Web has increased the capacity for like minded hunters to communicate then in the past.

SRC process the flyway consultants are representing the human decision into the regulatory process.

From administrative point of view coherence in desirable. Technicians want to understand what this means and how it could happen.

JV tasked with articulating how their habitat actions contribute to continental populations.  
Need 5 years to get a handle on habitat carry capacity effects

## Appendix D: Breakout Session 3 Group Notes

Apportion investment from duck stamp to the places where ducks come from. In Louisiana 25% gadwall, know where they come from, so invest 25% to the key landscape where they are limited. Do by a species and location (state, province). Need to ensure that we are focused on the limiting factors.

Needs to be leadership that sets clear vision with clear defined expectations, and keep it fresh and in the front over time.

Need to build a HD plan with clear vision and expectation, similarly robust to NAWMP and AHM plans.

Already have components in place (flyways could enhance HD) JV doing habitat work. Issue of how much investment are we going to need to build the HD and that the outcomes will not necessarily be different. Nervous about the impact on habitat work in doing this.

We can tweak the existing process. Continue to update the process with an adaptive process.

Question who is charged with the leadership to move this forward? Whoever it is, need to convene a group to refine the existing system. Who and charge to them.

Who should provide the leadership to move coherence forward: Turning point question. CWS/USFWS/, AFWA, Flyway Councils, NAWMP PC, other – 1 votes.

Each JV should include a HD chapter into their plans. They should decide how it is applied.

AHM should have direct input of HD into the process. That HD directly in population management and habitat management. This should over time get us to the full integration. Inform next steps over time.

Need to be clear about what the waterfowl objectives are and whether we are managing for waterfowl population or harvest.

Need to look at our communication capability. Need to address sudden and important issues.

Refuge system regulations affecting waterfowl management and hunters should come through SRC.

Form HD committees within all 4 flyways.

Create a “flyway consultant role for CWS regulation process similar to USFWS process (goal: increase integration across borders).

Put waterfowl population goals into federal law (or rule). (goal: create public sanctioning of NAWMP goals).

Increase human dimensions training for waterfowl management biologists. (goal: improve human dimension considerations).