

Stakeholder Consultation Process Results

North American Waterfowl Management Plan Revision



Appendices



DJ Case & Associates

Ginny Wallace, Project Manager

Daniel J. Witter, Ph.D., Market Research Director

Dave Case, President

April 2011

Appendix A. Round 1 and 2 Web site feedback forms

ROUND 1 WEB STAKEHOLDER INPUT FORM AND INFORMATION

The NAWMP Committee and Revision Steering Committee are seeking input from the waterfowl management community in the revision of NAWMP (view goals and process communiqué PDF). A first step in the process is to develop a set of widely supported FOs for waterfowl conservation that clearly reflects stakeholder values.

The Revision Steering and Plan Committees have drafted an initial list of candidate objectives for waterfowl management. This list is drawn from previous discussions on goals and objectives held by various stakeholder groups. It is by no means comprehensive or complete, and we need your input.



Round 1 Stakeholder Input Form and Information, www.nawmprevision.org

Please download and review the initial objectives list (PDF).

After reviewing the list, please consider and respond to the questions below. Your responses will be recorded and compiled along with others and used by the Revision Steering Committee to synthesize a set of draft objectives that will be the basis of a decision framework and supporting models developed in later stages of the Revision process. Comments will be accepted through Monday, April 12.

There will be opportunities for stakeholder review and consultation throughout the revision process. New information will added as it becomes available, so check the “Updates” tab once in a while.

- Are there additional objectives you’d like to suggest?
- Would you suggest rewording any objectives? If so, how would you reword them?
- If you have any objectives to reword, please list the number(s) of the objective(s) you are rewording.
- Do you have any suggestions for how objectives might be measured?
- Please list the number(s) of the objective(s) for which you are suggesting measurable attributes.
- Which of these objectives do you think are the most important?

ROUND 2 WEB STAKEHOLDER INPUT FORM AND INFORMATION

The NAWMP Committee and Revision Steering Committee are once again seeking your input for the Plan Revision. Some of the questions below are similar to those being asked in round 2 workshops. There are several additional questions as well. Whether or not you have participated in a round 2 workshop, please take a few minutes to read through these questions and provide your input.

Note this isn’t a survey; it’s a way to capture the breadth and depth of experience, issues, concerns and suggestions related to the NAWMP revision. This opportunity will be open through March 25.

- Four fundamental goals (previously referred to as FOs) were identified during the first round of workshops.
 - To maintain healthy waterfowl populations in North America
 - To conserve landscapes capable of sustaining waterfowl populations
 - To perpetuate waterfowl hunting
 - To sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes
- What are the top four attributes that should be used to measure progress towards these goals? (E.g. number of wetland acres conserved):

The original North American Waterfowl Plan contained specific habitat and population goals. The current population objectives are essentially unchanged since 1986, and the habitat objectives have increased. There are many good reasons to include quantifiable objectives in a plan. They help with conservation planning, are used to gauge progress, inspire action, and justify resources. The next few questions ask for your input about objectives.

- Is it important for the NAWMP to have quantifiable objectives? If so, why is that important? If not, why not?
- Are the current NAWMP population objectives adequate to guide waterfowl conservation in the future? Why or why not?
- Should the plan include measureable objectives for each of the four fundamental goals? Why or why not?
- Should the plan include continental-scale distribution objectives for breeding, migration and wintering areas? Why or why not?
- Of the four fundamental goals, which is the most important for which to have clear, quantifiable objectives?
- Should objectives be realistic and achievable or should they be “stretch” objectives that will be a challenge to achieve?

The original NAWMP was unclear about what role harvest management should play in helping to achieve the waterfowl population objectives of the Plan.

- What role, if any, do you think harvest management should play in helping to achieve population goals (i.e., should we achieve our population goals strictly through habitat programs, or should harvest management also play a role)?
- Should harvest be constrained (e.g., shorter seasons, smaller bag limits) when waterfowl populations are below the NAWMP goal?

The original NAWMP called for stabilized regulations, which were described as regulations that remained unchanged for a period of years unless population surveys indicated a need to invoke restrictive regulations on certain species. This recommendation was never implemented.

- Should this proposal be revisited in the Plan revision? Why or why not?
- The original NAWMP identified six “priority habitat ranges” that became the original Joint Ventures. Now there are 22 habitat Joint Ventures that extend “wall-to-wall” (i.e., every place is included within a Joint Venture), and most have expanded their taxonomic focus to include “all birds”.
- How has the geographic and taxonomic expansion of Joint Ventures affected waterfowl conservation in North America?
- Hunter recruitment and retention were implied objectives in the original NAWMP. What role, if any, do you think the NAWMP should play in helping recruit and retain waterfowl hunters?
- What other input do you want to provide to the Plan Committee as they proceed with the NAWMP revision?

Appendix B – Round 1 Workshop Materials

Round 1 NAWMP Revision Stakeholder Workshop Agenda

Workshop Goals

- To begin a process of engagement with waterfowl managers concerning the practical aspects of fulfilling “A Vision for Integrated Waterfowl Management”
- To provide stakeholders (and/or their proxies) an opportunity to express their beliefs about the appropriate objectives of waterfowl management, and how they might best be pursued from a large-scale, strategic perspective
- To provide feedback that will be useful to the Plan Committee as they develop the scope and nature of the pending Plan Revision

8:00 a.m.	Introductions and workshop agenda review
8:10	Orientation to the NAMWP Revision and workshop
8:35	Introduction to Structured Decision Making (SDM) and elicitation process
9:00	Breakout groups <ul style="list-style-type: none">• Problem statement discussion• Objectives: additions; designations (fundamental or means or not)• Objectives: brainstorm/identify measurable attributes
... Break to be included in breakout group time period, as needed	
10:45	Full group discussion of breakout group results
11:30	Lunch (on your own)
12:15	Review new objectives
12:25	Introduction to objectives hierarchies—Scott Boomer
12:45	Breakout groups <ul style="list-style-type: none">• Review list of fundamental and means objectives from morning• Organize and group means objectives in relation to fundamental objectives• Specify relationships (linkages) between means and fundamental objectives• Identify additional measurable attributes associated with each objective• Identify potential actions to achieve fundamental and means objectives• Develop a graphical representation of the objectives hierarchy
... Break to be included in breakout group time period, as needed	
2:35	Full group review and discussion of breakout group results
3:25	Wrap-up
3:40	Workshop Evaluation
3:50	Adjourn

NAWMP Revision Workshops

Draft Purpose Statement (Aug 2009)

The purpose of the Plan is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America. Plan goals will be accomplished by partnerships that conserve habitats and sustain populations, guided by sound science.

NAWMP Revision Workshop Goals

To begin a process of engagement with waterfowl managers concerning the practical aspects of fulfilling “A Vision for Integrated Waterfowl Management”

To provide stakeholders (and/or their proxies) an opportunity to express their beliefs about the appropriate objectives of waterfowl management, and how they might best be pursued from a large-scale, strategic perspective

To provide feedback that will be useful to the Plan Committee as they develop the scope and nature of the pending Plan Revision

Glossary

(Adapted from: CSP3171: Introduction to structure decision making, National Conservation Training Center, Shepherdstown, WV [http://training.fws.gov/EC/Resources/Decision_Analysis/dec_08/glossary.pdf])

Objective - An explicit statement of a desired outcome, typically expressed in subject-verb-object sentence structure. Objectives are always a reflection of values, so setting objectives falls in the realm of policy and should be informed by legal and regulatory mandates as well as stakeholder viewpoints.

Fundamental Objective – A fundamental objective is one of the ultimate goals of a decision. It is something that we care about for its own sake, or which is an end in itself. An objective can be identified as fundamental by asking why until the answer is “just because.” A fundamental objective answers the question “Why?”

Means Objective – A means objective is one that is not sought for its own sake, but rather is a means of achieving a more fundamental objective. A means objective answers the question “How?”

Measurable Attribute – A metric used to assess achievement of an objective.


Actions/Alternatives – Different management actions that are available. This element requires explicit articulation of the alternatives available to the decision maker. The range of permissible options is often constrained by legal or political considerations, but structured assessment may lead to creative new alternatives.

Structured Decision Making (SDM) – Structured decision making (SDM) is a process that provides a framework to help us think through a decision in a methodical way—it is common sense made explicit. The term structured is misleading to the extent that this is not a rigid process that limits creativity. In fact it’s quite the opposite—by providing a framework and various analytical tools, it melds values and science into decisions in a very documentable way. The focus is value-based – articulating the decision to be made and our objectives (values) relative to that decision.



Candidate objectives for waterfowl management

1. Promote a conservation ethic in the general public
2. Maximize waterfowl harvest
3. Maximize hunter satisfaction
4. Promote non-consumptive uses of waterfowl
5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity
6. Increase the understanding of ecological mechanisms driving changes in waterfowl abundance and waterfowl landscapes
7. Expand the sources and amount of funding for waterfowl conservation activities
8. Perpetuate the tradition of waterfowling
9. Minimize harvest of under-abundant waterfowl species
10. Minimize loss and degradation of wetlands and associated uplands
11. Provide more public hunting opportunities
12. Minimize the detrimental effects of over-abundant populations (e.g. depredation, habitat destruction)
13. Maintain/establish regulations that are simple and will lead to high compliance rates among hunters
14. Maintain healthy waterfowl populations as part of the North American fauna
15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl
16. Increase public support for waterfowl conservation
17. Increase waterfowl hunter participation
18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.
19. Increase and improve duck breeding habitat
21. Increase and improve duck wintering habitat
22. Maximize the efficiency and effectiveness of the infrastructure and funding for waterfowl conservation
23. Provide maximum hunting opportunity.
24. Maintain the social license to hunt

25. Increase duck recruitment
26. Increase and improve duck migration habitat
27. Reduce mortality from disease and contaminants
28. Maintain a broad fall and winter distribution of waterfowl
29. Establish the infrastructure needed to ensure coherence in waterfowl management
30. Formalize the institutions needed to incorporate human dimensions into waterfowl management decisions
31. Increase hunter education and communications efforts



NAWMP Revision: Progress & Prospects

MEMORANDUM


TO: MIKE ANDERSON, JOHN EADIE, JEFF HERBERT, MIN HUANG, DALE HUMBURG, FRED JOHNSON, MARK KONEFF, JIM LEAFLOOR, SETH MOTT, THOMAS NUDDS, ERIC REED, JIM RINGELMAN, MICHAEL RUNGE, BARRY WILSON

FROM: DAVID A. SMITH - NAWMP COMMITTEE CO-CHAIR
FOR
STEVE WENDT - NAWMP COMMITTEE CO-CHAIR
DON CHILDRESS - IAFWA AHM TASK FORCE *David A. Smith*

SUBJECT: APPOINTING A JOINT TASK GROUP (JTG) FOR CLARIFYING NAWMP POPULATION OBJECTIVES AND THEIR USE IN HARVEST MANAGEMENT


DATE: JUNE 14 2005

Your participation in an *ad hoc* group of waterfowl scientists is requested to advance Recommendation A of AHM Task Force Status Report #5, (the establishment of a technical group to explore useful ways in which to interpret NAWMP goals for both habitat and harvest management). This Joint Task Group (JTG) is being asked to further develop and discuss options for the future use of waterfowl population objectives in both harvest and habitat management activities. Initial ideas along these lines were first put forth by some members of the proposed JTG in a draft manuscript entitled *Reuniting Waterfowl Management*, and have been subsequently discussed by both the AHM Task Force and NAWMP Committee.



Joint Task Group Recommendations (March 2007)


1. Harvest managers should adopt a shoulder strategy for Northern Pintails and Mid-Continent Mallards.
2. NAWMP should adopt the same shoulder strategy to ensure coherence.
3. Enhance the technical capacity of the AHMWG and the NSST.
4. Focus more science on reducing key uncertainties.
5. ~~Convene a human dimensions working group to assess stakeholder values and develop an approach for more explicitly incorporating HD information into management decisions.~~
6. Convene a waterfowl management policy summit: "Future of Waterfowl Management Workshop"



Messages from Minneapolis Policy Workshop (August 2008)

Achieved Low Success in:


1. Goals for harvest and habitat management that are complementary and coherent.
2. Understanding and incorporating hunter expectations and satisfaction.
3. Simplifying waterfowl regulations.
4. Clear process for setting and revising population goals.
5. Rallying support of non-hunters.



Messages from Minneapolis Policy Workshop (August 2008)

Conclusions:

- ✓ A group or venue be created to continue the work of the Human Dimensions Working Group. (94% agreed or strongly agreed).
- ✓ The NAWMP update should be used to develop ~~more coherent goals for waterfowl harvest and habitat management.~~ (88% agreed or strongly agreed).



Getting Started

The PC appointed a NAWMP Revision Steering Committee (Feb 2009):

- Broad-based; focal point for gathering, vetting and synthesizing ideas about content.
- Identify technical work and resources needed.
- Review NAWMP Assessment report and highlight topics needing attention.
- Develop stakeholder engagement process.
- Propose a review of management processes and institutions in light of the Revision.
- Propose work plan, schedule, process, etc.



2010 Progress to Date

1. Revision Steering Committee met in April to elaborate charge; numerous conference calls.
2. Technical working group established and met at Patuxent in June to consider a process for re-formulating Plan objectives.
3. RSC published the NAWMP Revision Scoping Document in early August.
4. PC met in August, reviewed draft Scoping document and agreed with recommendation that a series of objective identification workshops should be conducted as part of the initial consultation process.



Messages from PC Meeting (Aug 2009)

Draft Purpose Statement:

The purpose of the NAWMP is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America. Plan goals will be accomplished by partnerships that conserve habitats and sustain populations, guided by sound science.

A Vision for Integrated Waterfowl Management



2010 Progress to Date

5. The Technical Work Group met on November 9-10 to finalize workshop format and a recommended consultation process.
6. Plan Committee meeting/workshop November 11-12. Approved 2-phase consultation process.
7. NAWMP workshops held in Portland, Memphis, Edmonton, Ottawa, Sacramento, and (now) Milwaukee.
8. Other input being received from flyways, DU, and NAWMPrevision.org website.



Purpose of Workshops

- Identify fundamental and means objectives for waterfowl management.
- Discuss alternative, broad-scale (high level) strategies for achieving objectives.
- Identify actions and measurable attributes associated with objectives
- Create ownership of objectives.
- Consistent process; diversity of attendees.



Primary participants = waterfowl management community (involved in managing populations, habitat, and hunting)

- Plan Committee, Revision Steering Committee
- NAWMP Science Support Team (NSST)
- AHM working group
- HD working group
- NAWC Councils and Staff
- Federal, state, provincial governments
- Joint Ventures (Habitat & Species)
- Flyway Councils and Technical Committees
- NGOs - DU, CA Waterfowl, Delta, WMI, others
- Minneapolis Meeting participants
- Sporting conservation council



How will the results be used?

The Revision Steering Committee will be responsible for synthesizing workshop results, drawing on technical resources as needed.

- Synthesis work begins April 20-22.
- Proposed objectives hierarchy.
- Technical group - initial prototype model and decision framework.
- Vetted with NAWMP Committee.

Consultation Process Round 2

- Communicate results back to waterfowl management community.
- Facilitated, face-to-face workshops: review objectives, actions, measurable attributes, consequence tables, and trade-offs.
- Use consultation results to further inform objectives hierarchy, decision framework, and modeling protocols proposed in draft NAWMP revision.

Key Points on the Timeline

- March 22, 2010 - Final round 1 workshop(s) in Milwaukee at NAWNRC.
- April 20-23, 2010 - Revision Steering Committee begins work to synthesize results, develop prototype models.
- September, 2010 - Begin round 2 consultations at AFWA annual meeting.
- January, 2011 - Begin drafting NAWMP Revision document.
- June, 2011 - First draft released for comment.
- January, 2012 - Final draft for PC approval.

So what's the problem?

Draft Purpose Statement:

The purpose of the Plan is to maintain abundant waterfowl populations, preserving the traditions of wildfowling and providing broad benefits to biodiversity, ecosystems, processes and the people of North America. Plan goals will be accomplished by partnership to conserve habitats and sustain populations guided by sound science.

Not A Problem Statement!

Elements of a Problem Statement

...considers the critical elements of the decision context. These include:

- The trigger or the underlying motivation
- The nature of the problem
 - Legal and regulatory mandates or socio-political context
 - Timing and frequency of the decision(s)
 - Scope and spatial extent of the decision(s)
- The decision makers; linkages to other decisions

"The Future of Waterfowl Management Workshop"

- August 26-28, 2008; Minneapolis, MN
- 192 attendees; cross-section of management community

Waterfowl Summit Pre-Workshop Survey

Of 188 workshop pre-registrants contacted, 162 (86%) completed a pre-workshop survey

What is your primary employment affiliation?	Federal agency	47	30%
	Non-Government Organization	30	19%
	Private business	3	2%
	State/Provincial agency	74	47%
	University	4	3%
How long have you been active in waterfowl management?	0-1 year	5	3%
	2-5 years	18	11%
	6-10 years	26	16%
	11-20 years	41	25%
	21-30 years	49	30%
Many of us wear many hats--but which ONE hat do you most frequently find yourself wearing when it comes to waterfowl management--the hat which reads...	More than 30 years	22	14%
	Agency Director/Executive Director	28	18%
	Administrator/Coordinator of a program	71	44%
	Biologist/Scientist	50	31%
	Researcher/Academic	5	3%
Country:	Regulations Committee Member	6	4%
	Canada	22	14%
	Mexico	0	0%
You are:	United States	137	86%
	Female	11	7%
You are:	Male	149	93%
	24 or under	0	0%
	25-44	38	24%
	45-64	122	76%
	65 or over	0	0%

a. Resources dedicated to waterfowl habitat conservation should be re-allocated among important waterfowl landscapes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	44	27.2	67.3%	29.3
	Somewhat agree	57	35.2	50.0	67.3
	Neutral	29	17.9	19.3	86.7
	Somewhat disagree	16	9.9	13.4%	97.3
	Strongly disagree	4	2.5	2.7	100.0
	Total	150	92.6	100.0	
Missing	Don't know	9	5.6		
	System	3	1.9		
	Total	12	7.4		
Total		162	100.0		

Resources dedicated to conservation are not optimally allocated among landscapes



b. An inordinate amount of time is spent on the annual regulations setting process

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	45	27.8	71.1%	29.6
	Somewhat agree	63	38.9		71.1
	Neutral	26	16.0	17.1	88.2
	Somewhat disagree	16	9.9		98.7
	Strongly disagree	2	1.2	11.8%	100.0
	Total	152	93.8	100.0	
Missing	Don't know	8	4.9		
	System	2	1.2		
	Total	10	6.2		
Total		162	100.0		

Too much time is spent setting annual regulations



c. Greater attention should be placed on monitoring and evaluation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	46	28.4	77.5%	28.8
	Somewhat agree	78	48.1		77.5
	Neutral	24	14.8	15.0	92.5
	Somewhat disagree	12	7.4	7.5%	100.0
	Total	160	98.8	100.0	
	System	2	1.2		
Missing					
Total		162	100.0		

Monitoring and evaluation needs to be enhanced



i. Attention to waterfowl and wetlands protection and management has declined at the federal level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	43	26.5	72.2%	27.2
	Somewhat agree	71	43.8		72.2
	Neutral	22	13.6	13.9	86.1
	Somewhat disagree	15	9.3		95.6
	Strongly disagree	7	4.3	13.9%	100.0
	Total	158	97.5	100.0	
Missing	Don't know	1	.6		
	System	3	1.9		
	Total	4	2.5		
Total		162	100.0		

Federal activities to conserve waterfowl and their habitats have declined



j. Attention to waterfowl and wetlands protection and management has declined at the state/province level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	26	16.0	61.8%	16.6
	Somewhat agree	71	43.8		61.8
	Neutral	18	11.1	11.5	73.2
	Somewhat disagree	34	21.0		94.9
	Strongly disagree	8	4.9	26.8%	100.0
	Total	157	96.9	100.0	
Missing	Don't know	3	1.9		
	System	2	1.2		
	Total	5	3.1		
Total		162	100.0		

State and provincial activities to conserve waterfowl and their habitats have declined



b. Too little attention has been placed on understanding waterfowl hunters and their satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	27	16.7	54.5%	17.5
	Somewhat agree	57	35.2		54.5
	Neutral	30	18.5	19.5	74.0
	Somewhat disagree	32	19.8		94.8
	Strongly disagree	8	4.9	26.0%	100.0
	Total	154	95.1	100.0	
Missing	Don't know	4	2.5		
	System	4	2.5		
	Total	8	4.9		
Total		162	100.0		

Too few resources are directed towards understanding waterfowl hunters



a. Attention to monitoring and evaluation and the science supporting waterfowl and wetlands management has declined among universities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	42	25.9	75.9%	31.6
	Somewhat agree	59	36.4		75.9
	Neutral	18	11.1	13.5	89.5
	Somewhat disagree	11	6.8		97.7
	Strongly disagree	3	1.9	10.6%	100.0
	Total	133	82.1	100.0	
Missing	Don't know	27	16.7		
	System	2	1.2		
	Total	29	17.9		
Total		162	100.0		

Universities are less attentive to waterfowl science and monitoring/evaluating



b. Attention to monitoring and evaluation and the science supporting waterfowl and wetlands management has declined at the federal level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	32	19.8	59.0%	20.5
	Somewhat agree	60	37.0		59.0
	Neutral	27	16.7	17.3	76.3
	Somewhat disagree	28	17.3		94.2
	Strongly disagree	9	5.6	23.7%	100.0
	Total	156	96.3	100.0	
Missing	Don't know	4	2.5		
	System	2	1.2		
	Total	6	3.7		
Total		162	100.0		

Federal agencies are less attentive to waterfowl science and monitoring/evaluating



What do these have in common?

- Resources dedicated to conservation are not optimally allocated among landscapes.
- Too much time is spent setting annual plans.
- Monitoring and evaluation needs to be improved.
- Federal activities to conserve waterfowl and their habitats have declined.
- State and provincial agencies are less attentive to waterfowl and their habitats have declined.
- Too few resources are directed towards understanding waterfowl hunters.
- Universities are less attentive to waterfowl science and monitoring/evaluating.
- Federal agencies are less attentive to waterfowl science and monitoring/evaluating.

Resource allocation?



Efficiently allocating resources is going to require...

- Agreement on our fundamental objectives.
- A more thoughtful plan for how we will go about achieving those objectives.
- Perhaps, updating our system of waterfowl management so we are better coordinated and working towards a common goal.

Draft problem statement:

"The waterfowl management community is not in consensus on the fundamental objectives of waterfowl management, the means to achieve those objectives, nor the framework necessary for integrating multiple decisions in a way that efficiently allocates resources and coordinates actions."

NAWMP Revision



Consultation Workshop

Fred A. Johnson, U.S. Geological Survey
G. Scott Boomer, U.S. Fish & Wildlife Service
Dave Case, D. J. Case & Associates
and members of the NAWMP Revision Steering Committee



1

What makes decisions hard?

- Sometimes you don't know all the possible actions
- The objectives may be complex or contradictory, or in dispute
- The system dynamics may be poorly known
- Sometimes we confuse all the components
- Even knowing all the other components, the solution (optimization) may be difficult to figure out



2

A Vision for Integrated Waterfowl Management

- ... the Plan should seek to establish a unified system of waterfowl conservation ...
- ... a fully coherent management system would feature:
 - A set of widely supported fundamental goals for waterfowl conservation
 - A decision framework that allows managers to understand and balance tradeoffs
 - Managers using that framework to efficiently allocate resources



3

Structured Decision Making

- Is a formal method for analyzing a decision, by breaking it into components
- Helps identify where the impediments to a decision are, to focus effort on the right piece
- Provides a wide array of analytical tools for dealing with particular impediments



4

Benefits of structured decision making

- Decision processes that are
 - Relatively bias free
 - Transparent
 - Explicit
 - Deliberative
 - Able to be documented
 - Replicable
 - Efficient, especially when no single person or entity is the decision maker
- *An important goal is that everyone agrees with the process, knowing that not everyone will agree with the outcome(s)*



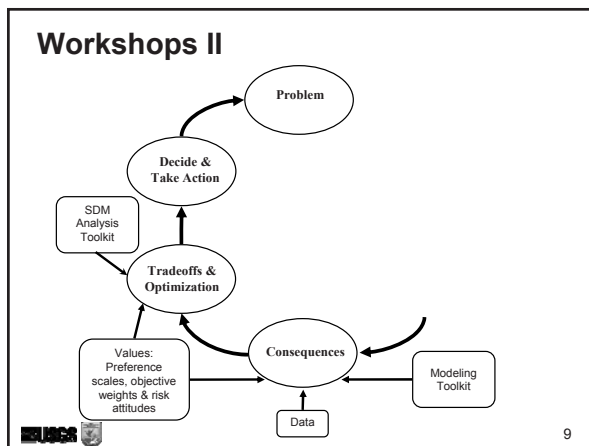
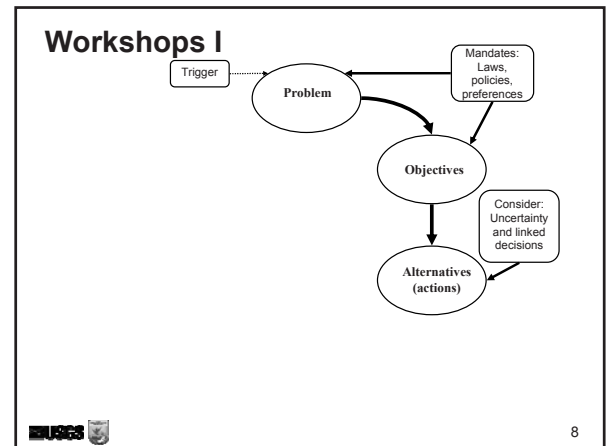
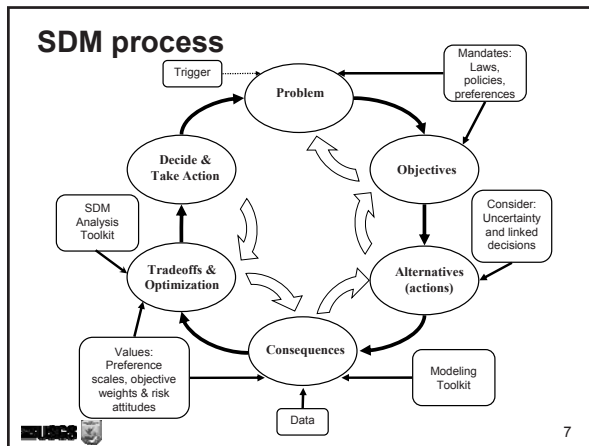
5

Two key elements of SDM

- Values-focused
 - The objectives (values) are discussed first, and drive the rest of the analysis
 - This is in contrast to our intuitive decision-making, which usually jumps straight to a debate of alternative actions or outcomes
- Problem decomposition
 - Break the problem into components, separating policy from science
 - Specify components, gather & analyze relevant information
 - Recompose the parts to make a decision



6



- ### Workshop I goals
- 1) To gather input on the overarching objectives of waterfowl management, and opinions on how such objectives might best be pursued from a large-scale, strategic perspective
 - 2) To obtain information from stakeholders that will help inform the Plan Committee as they develop the scope and nature of the pending Plan Revision
 - 3) To discuss with waterfowl managers the practical aspects of fulfilling "A Vision for Integrated Waterfowl Management"
- 10

- ### Workshop agenda
- **Today:**
 - Introduction
 - The Revision Vision
 - Taking a SDM approach
 - Break-out groups to:
 - Discuss the nature of the decision problem
 - Identify fundamental & means objectives for waterfowl management
 - Identify some measurable attributes
 - Group discussion; opportunity for individual input
 - **Tomorrow:**
 - Introduction to objectives hierarchies
 - Break-out groups to:
 - Construct an objectives hierarchy
 - Identify strategic actions to achieve objectives
 - Group presentations; synthesis
- 11

- ### Break-out Groups
- Review and discuss the Problem Statement
 - Review the handout of potential objectives
 - Add missing objectives
 - Discuss and reach agreement on whether each is a fundamental or means objective
 - Suggest re-wording for clarity if necessary
 - Suggest one or more measurable attributes for your fundamental objectives
- 12

Fundamental vs. means objectives

■ Fundamental objectives

- An essential reason for your interest in the problem or decision
- Constitute the broadest objectives influenced by your (conservation) actions
- Important because *it just is!*

■ Means objectives

- Represent a way station in the progress toward a fundamental objective (e.g., decrease natural mortality)
- Serve to help generate potential actions and can deepen understanding of the decision problem



13

Fundamental vs. means objectives

- Is this where I want to go? (FUNDAMENTAL) or is it a way to get there? (MEANS)
- Fundamental objectives answer “why?”
Means objectives answer “how?”
- The distinction usually is dependent on the decision problem; a means objective in one problem may be a fundamental objective in another (and vice-versa)
- The distinctions in our context can ultimately help us define and bound the scope of “integrated waterfowl management”



14

Objectives vs. actions

- The two are often confused in wildlife management planning documents
- E.g., “protect 1000 additional acres of habitat” - Not an objective, but a management action chosen (either explicitly or implicitly) from a broader set of actions
- Means objectives help define a potential set of actions; e.g., increase recruitment (means objective) by restoring native prairie, or constructing predator-proof fences, or creating nesting islands (set of potential actions)



15

Measurable attributes

Fundamental objective	Measurable attribute
Maintain duck hunting tradition	Number of people who identify themselves as duck hunters
Ecosystem goods and services	Wetland acres (not counting farmed wetland)
Hunt quality	Proportion of hunters who say they were satisfied or very satisfied with their season
Promote conservation behavior in the public	Annual total of public and private dollars for habitat conservation (\$billion)



16

Break-out groups



17



18

Draft Purpose of the NAWMP

The purpose of the Plan is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America.

(NAWMP Scoping Report for the 2011 Plan Revision, 8 Aug 09)



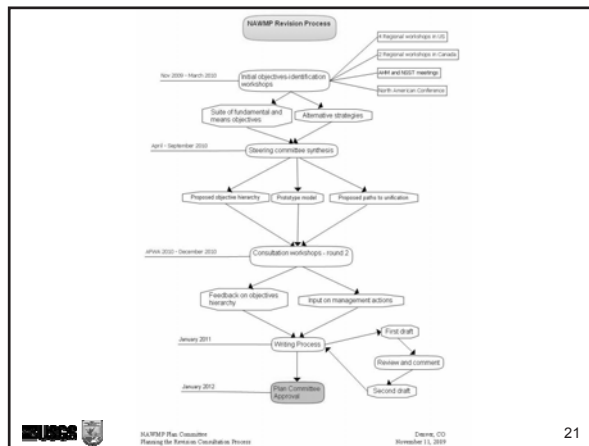
19

A Vision for Integrated Waterfowl Management

- ... the Plan should seek to establish a unified system of waterfowl conservation ...
- ... a fully coherent management system would feature:
 - A set of widely supported fundamental goals for waterfowl conservation
 - A decision framework that allows managers to understand and balance tradeoffs
 - Managers using that framework to efficiently allocate resources



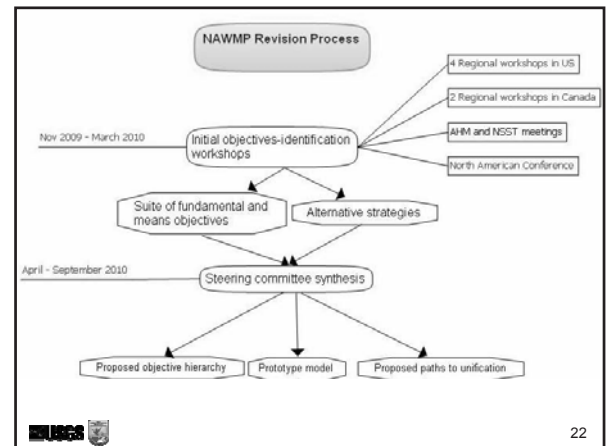
20



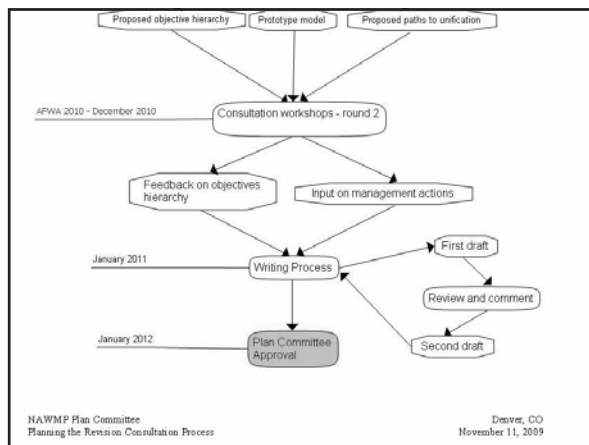
NAWMP Plan Committee
Planning the Revision Consultation Process

Denver, CO
November 11, 2009

21



22



NAWMP Plan Committee
Planning the Revision Consultation Process

Denver, CO
November 11, 2009

After the break-outs: Individual input (1)

- You will be given the opportunity to express *your* opinion (via Turning Point) about the list of potential objectives
- Purpose is NOT to conduct a “vote,” but a means to:
 - ensure everyone has a “voice” in a short period of time
 - determine the degree of variation in opinion
 - understand the sources of variation
 - have a record of (anonymous) responses



24

After the break-outs: *Individual input (2)*

- First step is to gather some basic demographics (nationality, affiliation, etc)
- Then for each potential objective provided, indicate whether you think it is:
 - 1 = not a relevant waterfowl management objective
 - 2 = a fundamental waterfowl management objective
 - 3 = a means waterfowl management objective



25

Workshop agenda

- Today:
 - Introduction
 - The Revision Vision
 - Taking a SDM approach
 - Break-out groups to:
 - Discuss the nature of the decision problem
 - Identify fundamental & means objectives for waterfowl management
 - Identify some measurable attributes
 - Group discussion; opportunity for individual input
- Tomorrow:
 - Introduction to objectives hierarchies
 - Break-out groups to:
 - Construct an objectives hierarchy
 - Identify strategic actions to achieve objectives
 - Group presentations; synthesis



26

NAWMP Revision



Consultation Workshop

Fred A. Johnson, U.S. Geological Survey
G. Scott Boomer, U.S. Fish & Wildlife Service
Dave Case, D. J. Case & Associates
and members of the NAWMP Revision Steering Committee



1

Workshop agenda

- **Yesterday:**
 - Introduction
 - The Revision Vision
 - Taking a SDM approach
 - Break-out groups to:
 - Discuss the nature of the decision problem
 - Identify fundamental & means objectives for waterfowl management
 - Identify some measurable attributes
 - Group discussion; opportunity for individual input
- **Today:**
 - Introduction to objectives hierarchies
 - Break-out groups to:
 - Construct an objectives hierarchy
 - Identify strategic actions to achieve objectives
 - Group presentations; synthesis



2

Evaluating Objectives...

- 1. Promote a conservation ethic in the general public
- 2. Maximize waterfowl harvest
- 3. Maximize hunter satisfaction
- 4. Promote non-consumptive uses of waterfowl
- 5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity
- 6. Increase the understanding of ecological mechanisms driving changes in waterfowl abundance and waterfowl landscapes
- 7. Expand the sources and amount of funding for waterfowl conservation activities
- 8. Perpetuate the tradition of waterfowling
- 9. Minimize harvest of under-abundant waterfowl species
- 10. Minimize loss and degradation of wetlands and associated uplands
- 11. Provide more public hunting opportunities
- 12. Minimize the detrimental effects of over-abundant populations (e.g. depredation, habitat destruction)
- 13. Maintain/establish regulations that are simple and will lead to high compliance rates among hunters
- 14. Maintain healthy waterfowl populations as part of the North American fauna
- 15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl
- 16. Increase public support for waterfowl conservation
- 17. Increase waterfowl hunter participation
- 18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.
- 19. Increase and improve duck breeding habitat
- 20. Ensure cooperation among jurisdictions (state, flyway, partners, etc.).
- 21. Increase and improve duck wintering habitat
- 22. Maximize the efficiency and effectiveness of the infrastructure and funding for waterfowl conservation
- 23. Provide maximum hunting opportunity.
- 24. Maintain the social license to hunt
- 25. Increase duck recruitment
- 26. Increase and improve duck migration habitat
- 27. Reduce mortality from disease and contaminants
- 28. Maintain a broad fall and winter distribution of waterfowl
- 29. Establish the infrastructure needed to ensure coherence in waterfowl management
- 30. Formalize the institutions needed to incorporate human dimensions into waterfowl management decisions
- 31. Increase hunter education and communications efforts



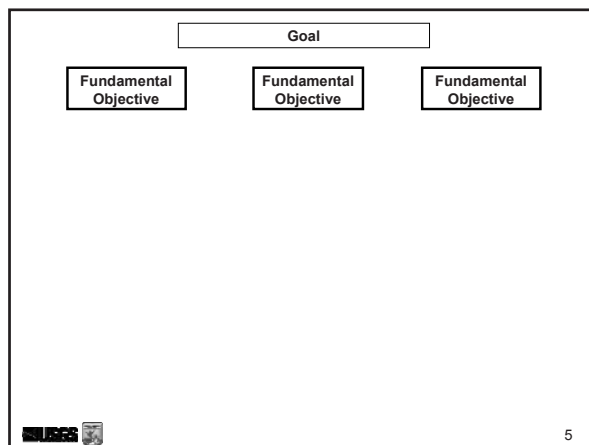
3

Evaluating Objectives

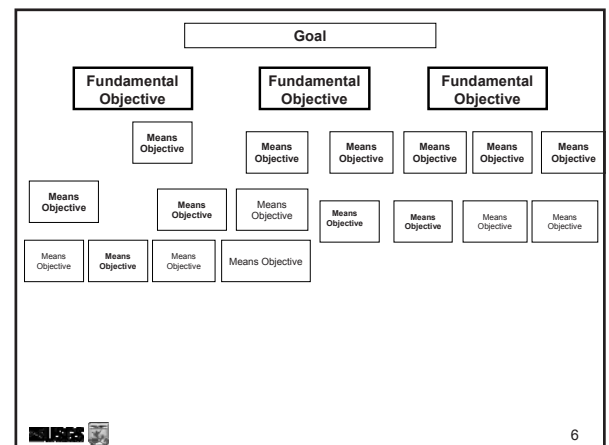
- **Objective Hierarchies:**
 - Group similar objectives along a gradient from fundamental to means
 - Graphically display the conceptual linkages between means objectives and fundamental objectives
 - Provide a context to develop measurable attributes
 - Provide a context to develop management actions or alternatives



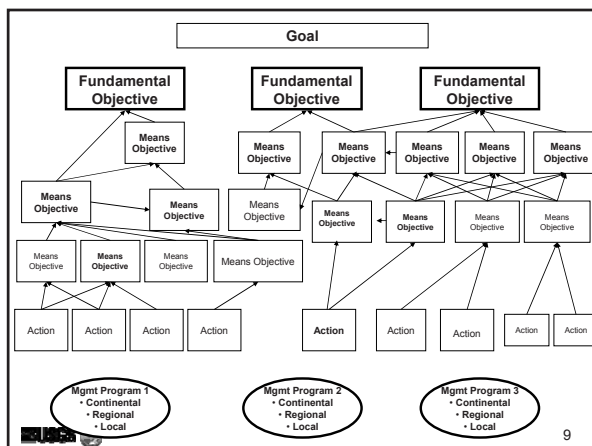
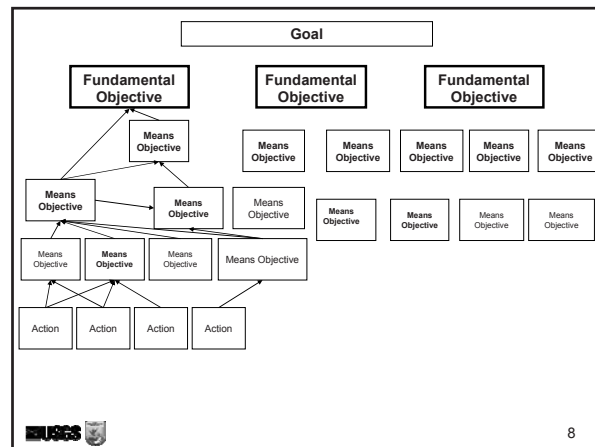
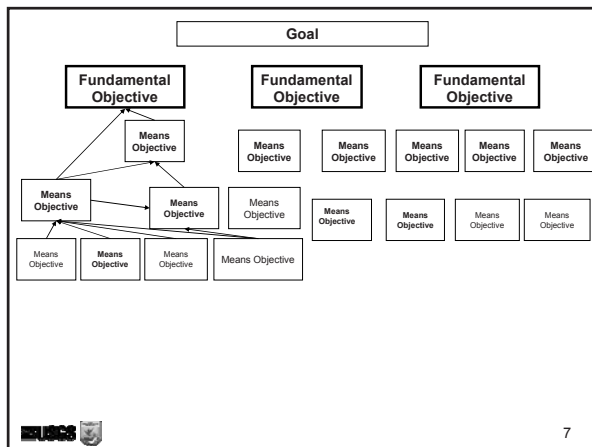
4



5



6



Objectives Hierarchy: key points

- Ensures that the views of stakeholders are considered and documented
- Organizes the complexities of the waterfowl management enterprise
- Illustrates the linkages between means and fundamental objectives
- Explicitly recognizes how multiple management programs/institutions, through their actions, can affect the same means and fundamental objectives

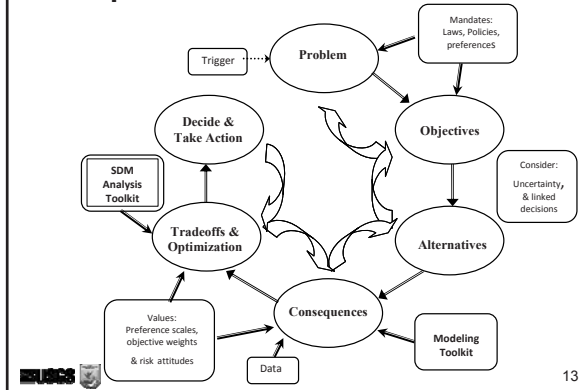
Break-out Groups

- Review list of fundamental and means objectives
- Organize objectives from fundamental to means
- Specify relationships (linkages) between means and fundamental objectives
- List some measurable attributes associated with each objective
- Identify some potential actions to achieve fundamental or means objectives

Break-out Groups

- Develop a graphical representation of the objectives hierarchy (PowerPoint, white board, or paper)
- Be prepared to discuss the key relationships between the fundamental and means objectives
- Be prepared to discuss some potential actions to achieve fundamental or means objectives

SDM process



Some technical details to consider

- Models link actions to outcomes that are relevant to the objectives (consequences); models are required to make predictions.
- The decision context determines the scope of the modeling and guides development.
- The initial modeling framework will have to accommodate a broad set of management alternatives to generate a prototypical consequences table.



14

Some expected outcomes from Consultation Workshop

- Objectives hierarchy
- Measurable attributes
- A list of potential actions/alternatives at a very broad scale...



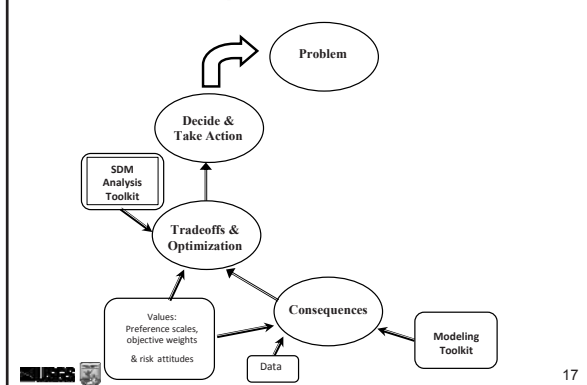
15

Break-out groups

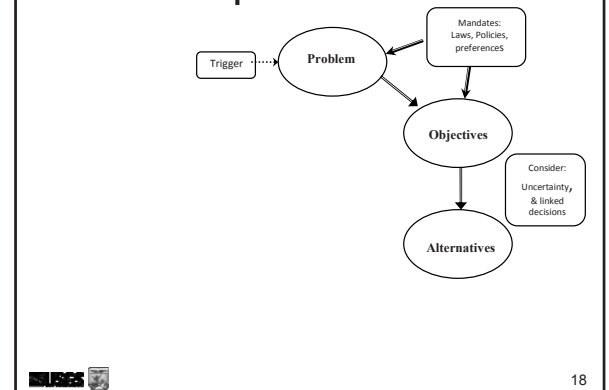


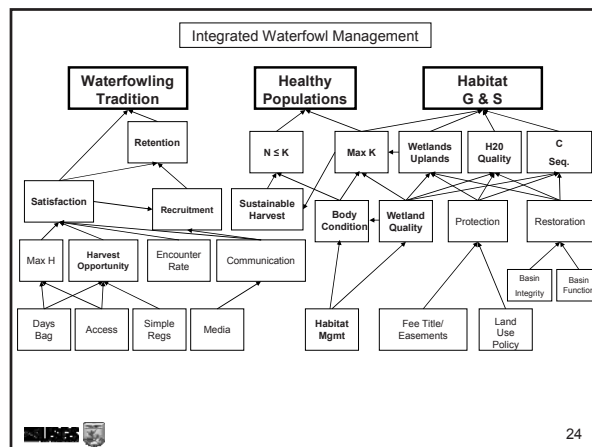
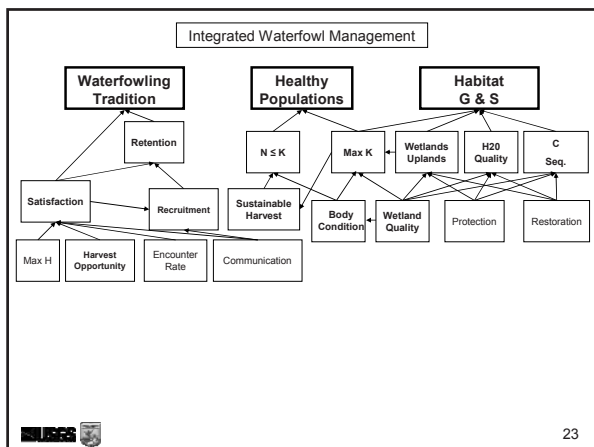
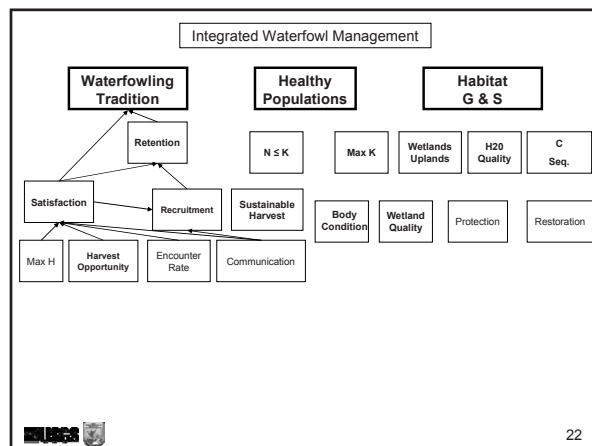
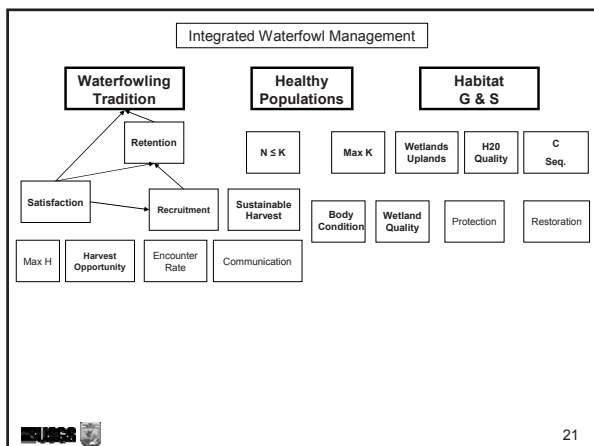
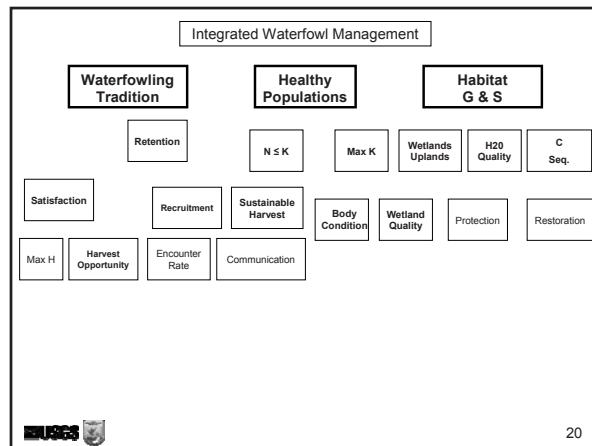
16

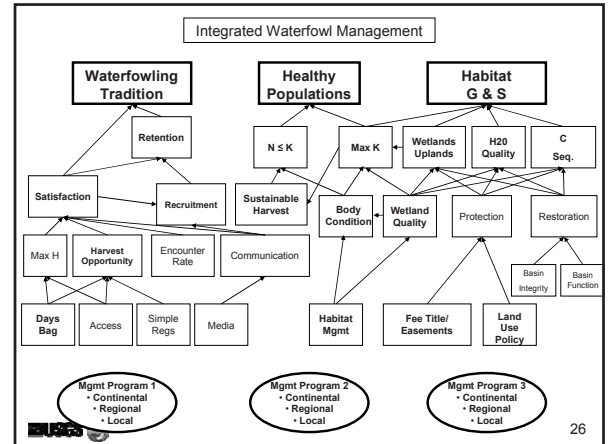
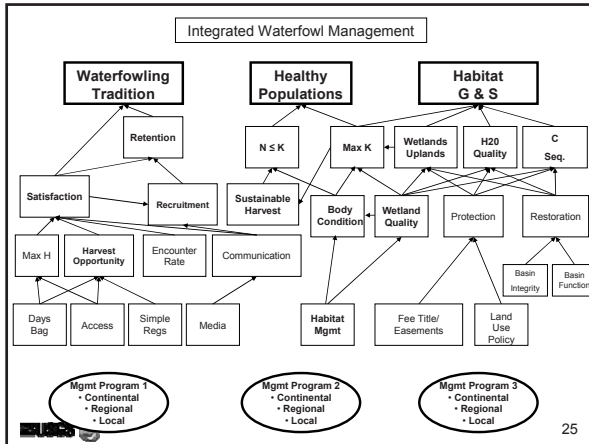
Consultation process II



Consultation process I



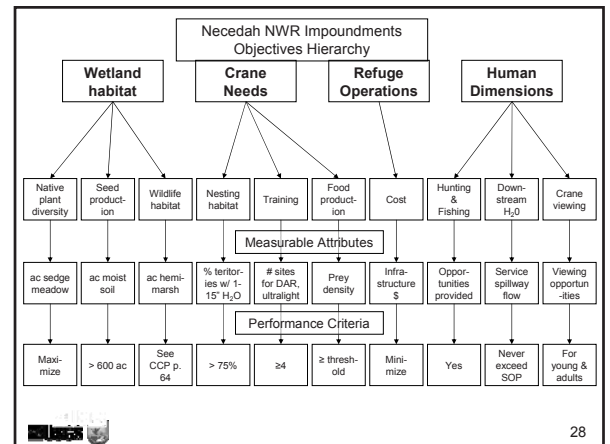





Integrated waterfowl management

Fundamental Objectives	Alternatives			
	Portfolio 1	Portfolio 2	Portfolio 3	Portfolio 4
Maintain Duck hunting tradition				
Maintain healthy duck populations				
Ecological goods and services				
Max harvest opportunity				
Max hunter satisfaction				

27



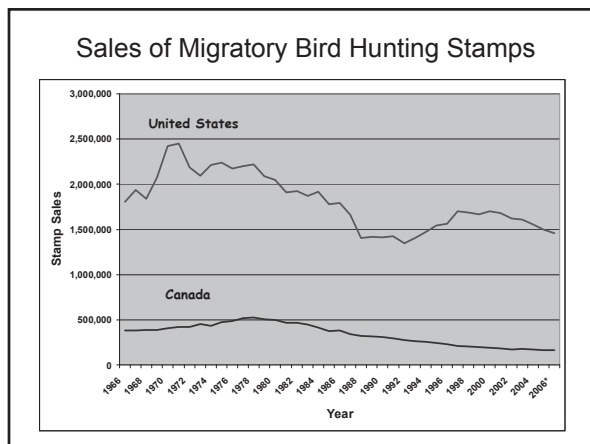



Workshop Wrap-Up

Summary of workshop results to date

Fundamental Objectives	Miss. Flyway	Cent. Flyway	Portland (AHM Group)	Memphis (NAWMP NSST)	Edmonton Canada	Ottawa Canada	NAWMP PC	Sacramento
Maintain healthy waterfowl populations	√√	√√	√√	√√	√√	√√	√√	√√
Perpetuate the waterfowling tradition	√√		√√	√√		√	√√	√√
Perpetuate waterfowling and related non-consumptive uses								
Increase waterfowl hunter participation		√√						
Maximize hunt quality	√							
Maximize harvest opportunity	√							
Ensure waterfowl population viability					√	√		
Promote non-consumptive uses	√	√						

Fundamental Objectives	Miss. Flyway	Cent. Flyway	Portland (AHM Group)	Memphis (NAWMP NSST)	Edmonton Canada	Ottawa Canada	NAWMP PC	Sacramento
Promote conservation ethics in the public	√√		√					
Increase Public Support for Waterfowl Hunting and Habitat Conservation		√						
Maintain/increase/maximize EGS of waterfowl habitat	√√	√√	√√	√		√		
Max. cons. of biodiversity while managing wetlands and associated uplands for waterfowl					√			
Maintain landscapes capable of sustaining healthy waterfowl populations			√√	√√	√√	√√	√√	√√





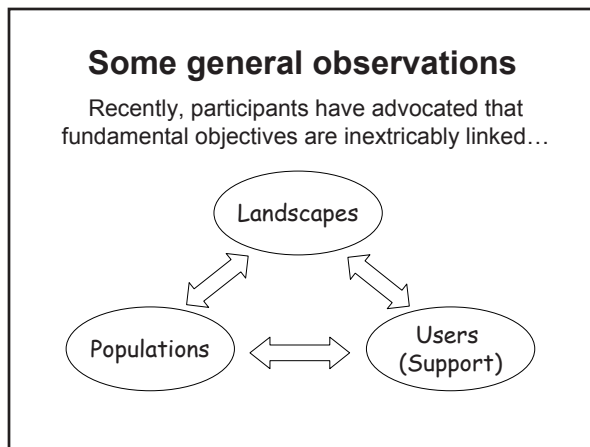
Ecological Goods and Services (EGS)

Ecological "Goods"

- Wildlife
- Food
- Fresh water
- Energy
- Minerals
- Fiber
- Timber

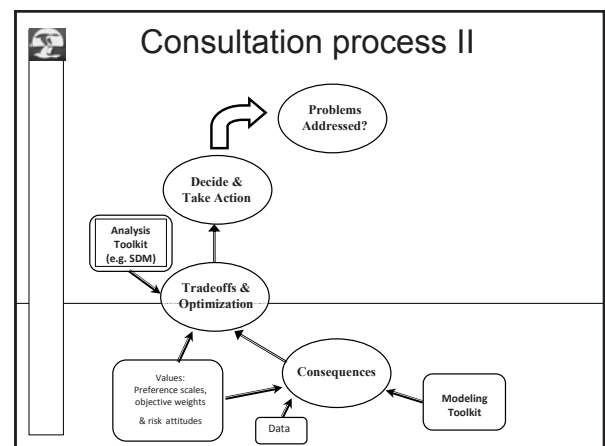
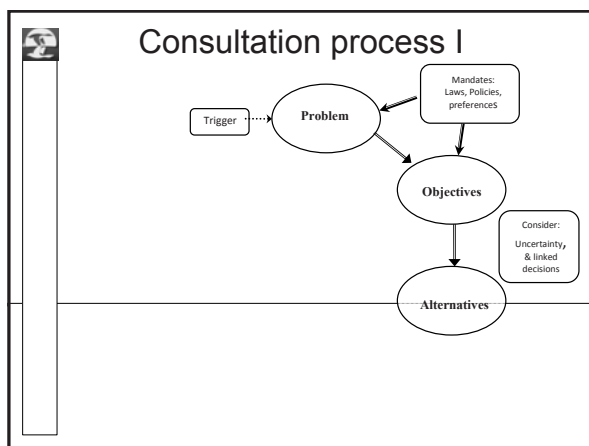
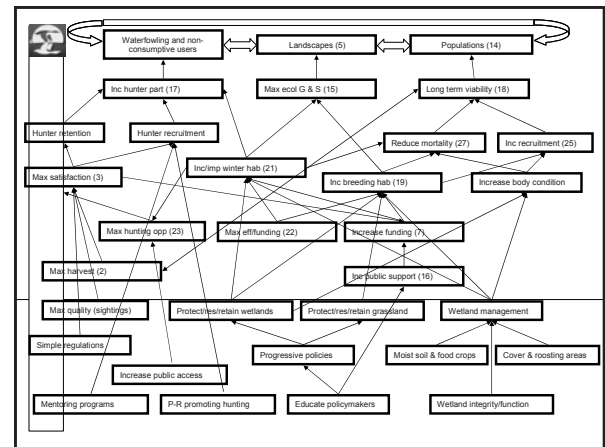
Ecological "Services"

- Recreational opportunities (hunting, fishing, birdwatching)
- Purification of water and air
- Carbon sequestration
- Ecosystem integrity (biodiversity)
- Mitigation of floods and drought
- Groundwater recharge
- Pollination of plants
- Regulation of soil fertility
- Control of ag pests
- Waste decomposition



Workshop Wrap-Up

Coherence... or lack thereof

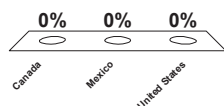


- Express *your* opinion (via Turning Point) about the list of potential objectives
- Purpose is NOT to conduct a “vote,” but a means to:
 - ensure everyone has a “voice” in a short period of time
 - determine the degree of variation in opinion
 - understand the sources of variation
 - have a record of (anonymous) responses
- If you have participated in another workshop (e.g. AHM), your input is already captured

- First step is to gather some basic demographics (nationality, affiliation, etc)
- Then for each potential objective provided, indicate whether you think it is:
 - 1 = not a relevant waterfowl management objective
 - 2 = a fundamental waterfowl management objective
 - 3 = a means waterfowl management objective

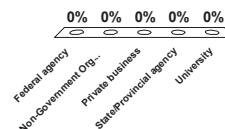
What is your country of residence?

1. Canada
2. Mexico
3. United States



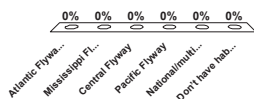
What is your primary employment affiliation?

1. Federal agency
2. Non-Government Organization
3. Private business
4. State/Provincial agency
5. University



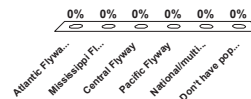
Which *ONE* best describes the geography for which you have waterfowl habitat responsibilities?

1. Atlantic Flyway
2. Mississippi Flyway
3. Central Flyway
4. Pacific Flyway
5. National/multiple Flyways
6. Don't have habitat responsibilities



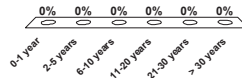
Which *ONE* best describes the geography for which you have waterfowl population responsibilities?

1. Atlantic Flyway
2. Mississippi Flyway
3. Central Flyway
4. Pacific Flyway
5. National/multiple Flyways
6. Don't have population responsibilities



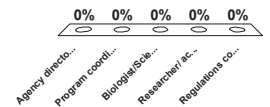
How long have you been active in waterfowl management?

1. 0-1 year
2. 2-5 years
3. 6-10 years
4. 11-20 years
5. 21-30 years
6. > 30 years



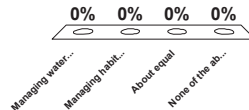
Which one hat do you most frequently wear when it comes to waterfowl management?

1. Agency director/ executive director
2. Program coordinator or administrator
3. Biologist/Scientist
4. Researcher/ academic
5. Regulations committee member



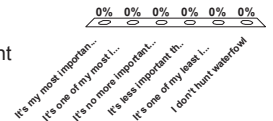
I spend most of my time on...

1. Managing waterfowl populations (sport harvest, subsistence take, take to reduce population size)
2. Managing habitat
3. About equal
4. None of the above



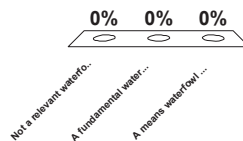
How important is waterfowl hunting to you?

1. It's my most important recreational activity
2. It's one of my most important recreational activities
3. It's no more important than my other recreational activities
4. It's less important than my other recreational activities
5. It's one of my least important recreational activities
6. I don't hunt waterfowl



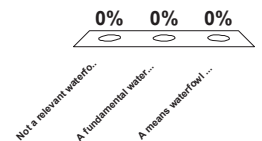
1. Promote a conservation ethic in the general public

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



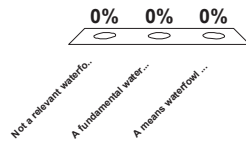
2. Maximize waterfowl harvest

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



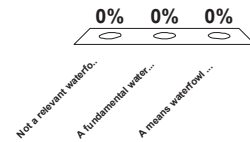
3. Maximize hunter satisfaction

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



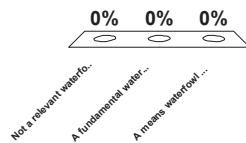
4. Promote non-consumptive uses of waterfowl

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



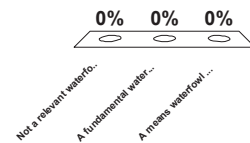
5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



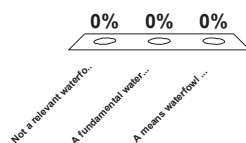
6. Increase the understanding of ecological mechanisms driving changes in waterfowl abundance and waterfowl landscapes

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



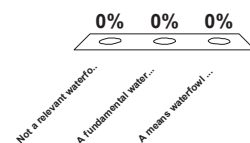
7. Expand the sources and amount of funding for waterfowl conservation activities

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



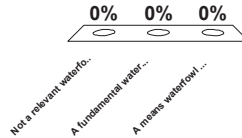
8. Perpetuate the tradition of waterfowling

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



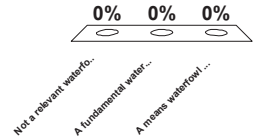
9. Minimize harvest of under-abundant waterfowl species

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



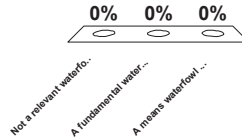
10. Minimize loss and degradation of wetlands and associated uplands

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



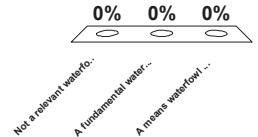
11. Provide more public hunting opportunities

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



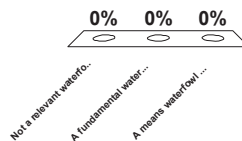
12. Minimize the detrimental effects of over-abundant populations (e.g. depredation, habitat destruction)

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



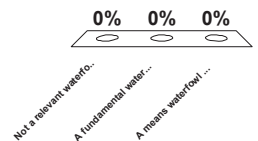
13. Maintain/establish regulations that are simple and will lead to high compliance rates among hunters

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



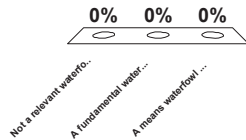
14. Maintain healthy waterfowl populations as part of the North American fauna

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



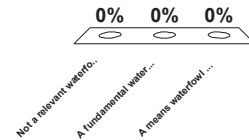
15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



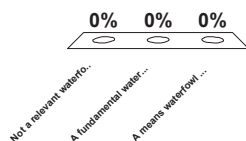
16. Increase public support for waterfowl conservation

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



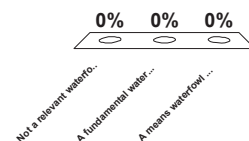
17. Increase waterfowl hunter participation

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



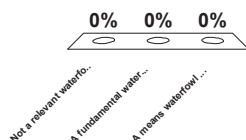
18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



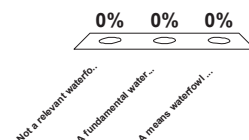
19. Increase and improve duck breeding habitat

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



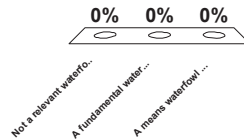
20. Ensure cooperation among jurisdictions (state, flyway, partners, etc.)

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



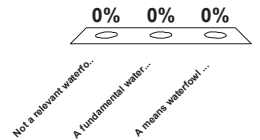
21. Increase and improve duck wintering habitat

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



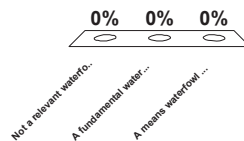
22. Maximize the efficiency and effectiveness of the infrastructure and funding for waterfowl conservation

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



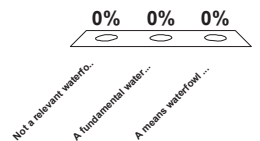
23. Provide maximum hunting opportunity

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



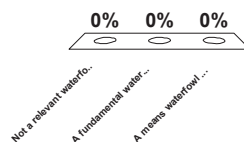
24. Maintain the social license to hunt

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



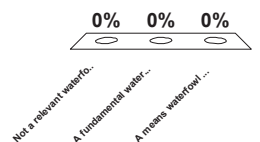
25. Increase duck recruitment

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



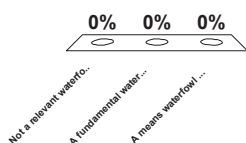
26. Increase and improve duck migration habitat

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



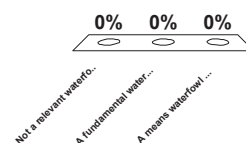
27. Reduce mortality from disease and contaminants

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



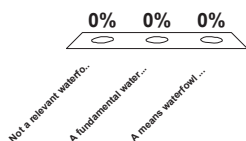
28. Maintain a broad fall and winter distribution of waterfowl

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



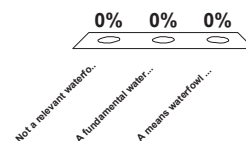
29. Establish the infrastructure needed to ensure coherence in waterfowl management

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



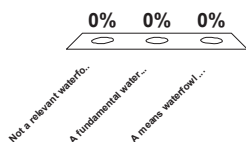
30. Formalize the institutions needed to incorporate human dimensions into waterfowl management decisions

1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



31. Increase hunter education and communications efforts

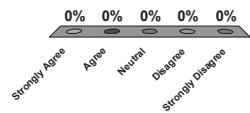
1. Not a relevant waterfowl management objective
2. A fundamental waterfowl management objective
3. A means waterfowl management objective



Workshop Evaluation

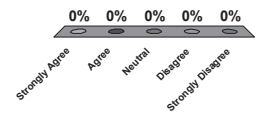
The meeting objective “To gather input on the overarching objective of waterfowl management, and opinions how such objectives might best be pursued form a large-scale strategic perspective” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



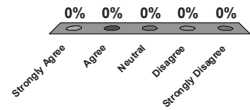
The meeting objective “To obtain information from stakeholders that will help inform the Plan Committee as they develop the scope and nature of the pending Plan Revision” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



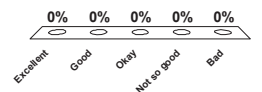
The meeting objective “To discuss with waterfowl managers the practical aspects of fulfilling ‘A Vision for Integrated Waterfowl Management’ ” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



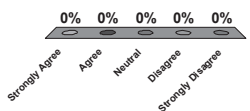
How do you feel about the Revision process as described at this meeting?

1. Excellent
2. Good
3. Okay
4. Not so good
5. Bad



Overall, I thought this workshop was a success

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



Appendix C – Round 2 Workshop Materials

Round 2 NAWMP Revision Stakeholder Workshop Agenda

Workshop Goals

1. To summarize Round 1 workshop results and provide an update on the NAWMP Plan Revision process.
2. To clarify the fundamental objectives and associated measurable attributes.
3. To seek input on the values associated with the fundamental objectives.
4. To discuss how best to formulate new objectives in the Plan Revision.
5. To initiate discussion of institutions and processes that will facilitate integrated waterfowl management.
6. To provide feedback to the NAWMP Plan Committee as they move forward with the Plan Revision.

8:00 a.m.	Welcome and Introductions
8:15	Orientation to the NAWMP Revision Process and Review of Round 1 Workshops—Jim Ringelman
9:00	Clarifying the Fundamental Objectives of the NAWMP—Jim Ringelman
9:15	Table group discussions about the fundamental objectives <ul style="list-style-type: none">• Discuss meaning and intent• Identify most important measurable attributes
10:15	Break
10:30	Valuing Fundamental Objectives—Jim Ringelman, DJ Case & Associates
11:30	Table group reports of morning discussions
Noon	LUNCH
1:00	Setting NAWMP objectives—Jim Ringelman, DJ Case & Associates Presentation and facilitated discussion
2:00	Institutions and Processes—Jim Ringelman
2:15	Table group discussions, Institutions and Processes
3:15	Break
3:30	Table group report out and facilitated discussion, institutions and processes—DJ Case & Associates
4:15	Facilitated discussion, NAWMP revision—DJ Case & Associates
4:30	Workshop Evaluation
4:45	Wrap-Up—Jim Ringelman
5:00 p.m.	Adjourn

NAWMP Revision Workshops – Round 2

Draft Purpose Statement (2010)

The purpose of the Plan is to sustain North America's waterfowl populations and their habitats at levels that satisfy human desires and perpetuate waterfowl hunting. Plan goals will be accomplished through partnerships guided by sound science.

Fundamental objectives

- Maintain healthy waterfowl populations in North America.
- Conserve landscapes capable of sustaining waterfowl populations.
- Perpetuate waterfowl hunting.
- Sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes.

NAWMP Revision Round 2 Workshop Goals

1. To summarize Round 1 workshop results and provide an update on the NAWMP Plan Revision process.
 2. To clarify the fundamental objectives and associated measurable attributes.
 3. To seek input on the values associated with the fundamental objectives.
 4. To discuss how best to formulate new objectives in the Plan Revision.
 5. To initiate discussion of institutions and processes that will facilitate integrated waterfowl management.
 6. To provide feedback to the NAWMP Plan Committee as they move forward with the Plan Revision.
-

Glossary

(Adapted from: CSP3171: Introduction to structure decision making, National Conservation Training Center, Shepherdstown, WV [http://training.fws.gov/EC/Resources/Decision_Analysis/dec_08/glossary.pdf])

Objective - An explicit statement of a desired outcome, typically expressed in subject-verb-object sentence structure. Objectives are always a reflection of values, so setting objectives falls in the realm of policy and should be informed by legal and regulatory mandates as well as stakeholder viewpoints.

Fundamental Objective – A fundamental objective is one of the ultimate goals of a decision. It is something that we care about for its own sake, or which is an end in itself. An objective can be identified as fundamental by asking why until the answer is “just because.” A fundamental objective answers the question “Why?”

Means Objective – A means objective is one that is not sought for its own sake, but rather is a means of achieving a more fundamental objective. A means objective answers the question “How?”

Measurable Attribute – A metric used to assess achievement of an objective.

(over)

Actions/Alternatives – Different management actions that are available. This element requires explicit articulation of the alternatives available to the decision maker. The range of permissible options is often

constrained by legal or political considerations, but structured assessment may lead to creative new alternatives.

Structured Decision Making (SDM) – Structured decision making (SDM) is a process that provides a framework to help us think through a decision in a methodical way—it is common sense made explicit. The term structured is misleading to the extent that this is not a rigid process that limits creativity. In fact it's quite the opposite—by providing a framework and various analytical tools, it melds values and science into decisions in a very documentable way. The focus is value-based – articulating the decision to be made and our objectives (values) relative to that decision.

Assigning Values to Waterfowl Management Objectives

This exercise concerns the four objectives for waterfowl management that emerged during Round I workshops for the North American Waterfowl Management Plan revision. Those objectives are:

1. Perpetuate waterfowl hunting.
2. Sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes.
3. Maintain healthy waterfowl populations in North America at levels sufficient to fulfill human desires (#1 and #2 above) and in harmony with the ecosystems on which waterfowl depend.
4. Conserve landscapes capable of sustaining waterfowl populations at levels sufficient to satisfy human desires (#1 and #2 above) in perpetuity.

We would first like to know how you view these objectives in terms of their overall importance to waterfowl management and conservation. Assume you have 100 points you can allocate among these four objectives based on their importance, and enter the point values on the lines next to each objective under “initial values assigned”. You should consider how each objective is important “in and of its own sake” as well as how it can help to accomplish one or more other objectives. For example, perpetuating hunting also helps to conserve landscapes because of the funding provided by hunters.

Now we would like you to specify why you think these objectives are important. We’ll call the “fundamental value” the importance of an objective “in and of its own sake”. An example would be how much you value perpetuating waterfowl hunting just because it’s an important and meaningful activity, and you don’t want to see it go away. In contrast, the “means value” of an objective is the contribution one objective plays in helping to achieve another objective. An example would be the importance of waterfowl hunting (and associated waterfowl hunters) in helping to conserve landscapes (by providing funding, etc.).

Start by dividing up the “initial value” points you assigned to “conserve landscapes” in a way that reflects how you view the fundamental and means values. Enter points representing the fundamental value in the box that says “conserve landscapes”, and allocate means values in boxes A, B, and C to reflect how you think conserving landscapes contributes to “healthy populations”, “waterfowl hunting”, and “viewing and enjoyment”, respectively. Note that the total points you allocate to the fundamental and means objectives should equal the total you assigned for initial value of “conserve landscapes”. If you find you want to revise your initial values, it’s okay to go back and do that.

Using the approach described above, move to “healthy populations” and assign a fundamental value and means values (boxes D and E); then move on to “waterfowl hunting” (fundamental box and F); then to “viewing and enjoyment” (fundamental box and G). Here are some things to think about as you consider each means value:

- “A” represents the value that landscape conservation makes to healthy populations. Consider how such conservation could enhance waterfowl reproductive and survival rates, increase carrying capacity, etc.
- “B” represents the value of conserving landscapes in helping perpetuate waterfowl hunting. Consider how waterfowl “landscapes” (e.g., wetlands) provide places to hunt as well as habitat for waterfowl.
- “C” represents how conserving landscapes can help achieve the objective of waterfowl viewing and enjoyment. One connection is the extent to which waterfowl landscapes (habitat) provide places for people to view and enjoy waterfowl.
- “D” reflects the value that healthy populations play in perpetuating waterfowl hunting. Consider how healthy populations mean more birds in the duck marsh and more liberal seasons.
- “E” reflects the value that healthy populations play in opportunities to view and enjoy waterfowl. Consider the relationship between more birds and greater viewing opportunities.
- “F” represents the role that perpetuating waterfowl hunting plays in helping to conserve landscapes. Think about the relationship between waterfowl hunting/hunters, and the resulting financial/political support for landscape conservation.
- “G” represents the role that the viewing/enjoyment plays in helping conserve landscapes. Think about the public’s enjoyment of waterfowl, the number of waterfowl viewers, and the resulting financial/political support for landscape conservation.

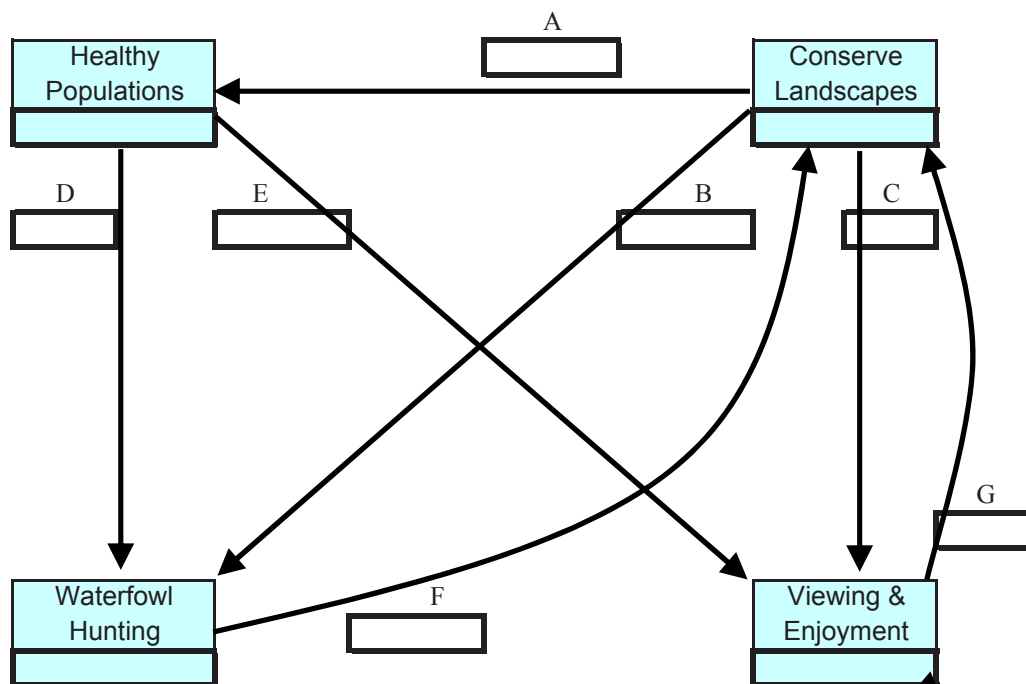
When you have filled in all of the fundamental and means boxes, look at all of the values and make sure they reflect your overall view of the waterfowl management enterprise. If not, adjust your responses.

Thank you for participating in this exercise!

Valuing Waterfowl Objectives Exercise

Initial values assigned:

Conserve landscapes _____
 Healthy populations _____
 Waterfowl hunting _____
 Viewing and enjoyment _____



Keypad number: _____
 Workshop location: _____
 Comments: _____



The North American Waterfowl Management Plan - A Model for Conservation - The Future of Waterfowl



The NAWMP

A new model for conservation (for '86)

- Landscape-scale effort – “Joint Ventures”
- Partnerships and leveraging resources
- Numerical population objectives
- Implied goal of sustaining sport hunting
- Regulatory elements



The NAWMP

Lack of clarity over...

- “Average environmental conditions”
- Role of harvest in achieving population objectives
- Hunter retention, participation, success
- Explicit goals for non-consumptive users



The NAWMP Updates: 1994, 1998, 2004

- Expanded partnerships (incl. Mexico)
- Habitat goals and geography expanded
- Biodiversity, landscape-level conservation, ecological services themes
- Advocated for stronger science foundation and adaptive management
- Call for a “progress assessment”



The NAWMP Assessment – 2007

- Comprehensive review noted many successes
- Key needs:
 - Tracking accomplishments and landscape change
 - Clear and robust accountability framework
 - Review population and habitat objectives
 - Increase attention to agriculture & water policy
 - Improve monitoring & assessment; revitalize NSST
- Greater linkage among NAWMP parts
- Integrating harvest, habitat and stakeholders; complementary “Joint Task Group” created



Linking Harvest, Habitat and Stakeholders – The “Joint Task Group” Report

“Yield curve approach” - theoretical coherence between harvest and habitat goals (incl. NAWMP)

Other recommendations...

- Focus more science on reducing key uncertainties
- Convene human dimensions working group
 - ✓ Assess stakeholder values
 - ✓ Develop approach for explicitly incorporating HD information into management decisions
- Convene a waterfowl management policy summit: “Future of Waterfowl Management Workshop”



Messages from “Future of Waterfowl Management” Workshop (2008)

1. Resources dedicated to conservation not optimally allocated
 - Too much time spent setting annual regulations
 - Need better monitoring and evaluation
2. Federal/state/provincial activities to conserve waterfowl & habitats have declined
3. Too few resources directed towards understanding waterfowl hunters
4. Federal agencies less attentive to waterfowl science & monitoring/ evaluating



Messages from “Future of Waterfowl Management Workshop”

Low Success:

- Complementary & coherent goals for harvest and habitat management
- Understanding & incorporating hunter expectations and satisfaction
- Simplifying waterfowl regulations
- Setting and revising population using a clear process
- Rallying support of non-hunters



Messages from “Future of Waterfowl Management” Workshop (2008)

Proposed Actions:

- ✓ A group or venue be created to continue the work of the Human Dimensions Working Group. (94% agreed or strongly agreed).
- ✓ The NAWMP update should be used to develop more coherent goals for waterfowl harvest and habitat management. (88% agreed or strongly agreed).



NAWMP Revision: Results of Round I Consultations



Purpose of R-1 Workshops

- Solicit responses to the NAWMP Revision “Purpose Statement” and seek input on a “Problem Statement”
- Identify fundamental and means objectives for waterfowl management
- Discuss alternative, broad-scale (high level) strategies for achieving objectives
- Identify actions and measurable attributes associated with objectives
- Inform the management community about the NAWMP revision and engage them as participants in the process



NAWMP Revision: R-1 Consultations

Workshops:

- Portland – Dec 1-2, 2009
- Memphis – Jan 27-28, 2010
- Edmonton – Feb 1-2, 2010
- Ottawa – Feb 16-17, 2010
- Sacramento – Feb 25-26, 2010
- Milwaukee – Mar 22, 2010

Additional input:

- Mexico
- Flyways
- Ducks Unlimited, Delta Waterfowl
- Website messages from individuals



Invited Participants – the “waterfowl management community”

- Plan Committee, Revision Steering Committee
- NAWMP Science Support Team
- Adaptive Harvest Management working group
- Human Dimensions working group
- N.A. Wetlands Conservation Council and Staff
- Federal, state, provincial governments
- Joint Ventures (Habitat & Species)
- Flyway Councils and Technical Committees
- NGOs – DU, CA Waterfowl, Delta, WMI, others
- Minneapolis waterfowl “Summit” participants

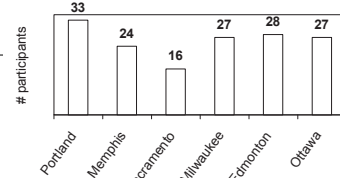


R-1 Workshop Participants

Country of Residence (%)

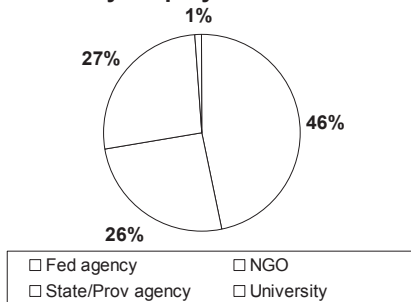


Meeting Participation



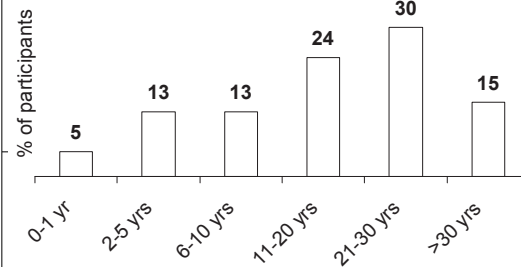
R-1 Workshop Participants

Primary Employment Affiliation



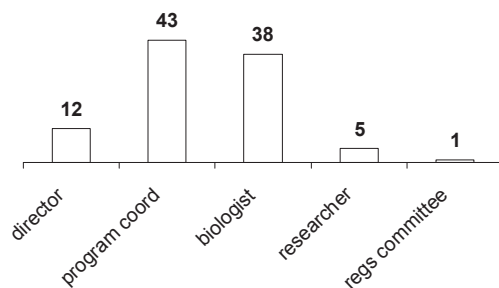
R-1 Workshop Participants

Years in waterfowl management



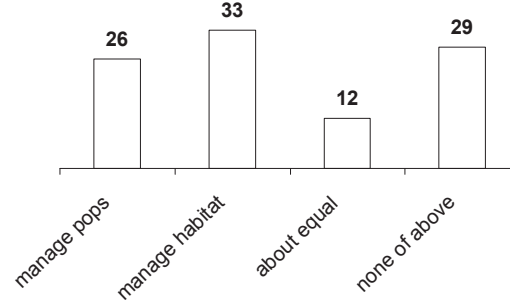
R-1 Workshop Participants

Waterfowl Management Hat (%)



R-1 Workshop Participants

Spend Most Time On (% participants)





Clarifying the “Problem”

- Losing habitat faster than we are restoring/conserving it
- Losing hunters despite liberal regulations and healthy populations
- Interest in waterfowl conservation in agencies and among the public is waning
- Allocation of resources in waterfowl management is inefficient



Revised Problem Statement

“Although the waterfowl management community is in general agreement on the fundamental objectives of waterfowl management, it has not reached consensus on the means to achieve those objectives, ~~nor the framework necessary for integrating~~ multiple decisions in a way that efficiently allocates resources and coordinates actions.”



Revised Purpose Statement

“The purpose of the Plan is to sustain North America’s waterfowl populations and their habitats at levels that satisfy human desires and perpetuate waterfowl hunting. Plan goals will be accomplished through partnerships guided by sound science”.



Objectives of Waterfowl Mgmt

Started with 31 candidate objectives derived from earlier meetings:

- Patuxent, Mississippi Flyway, DU

Offered starting point for discussions

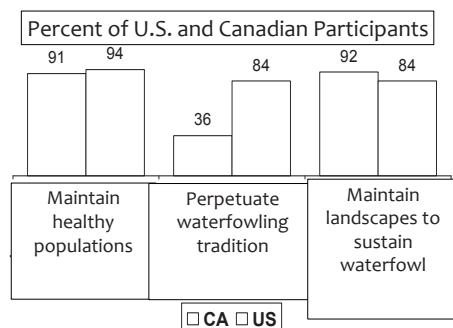
- Obtain quantitative data via TurningPoint technology

Edits and new objectives encouraged

Edits & additions examined during synthesis



Objectives of Waterfowl Mgmt



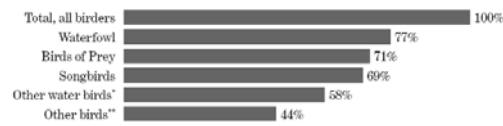
New or Modified Objectives: Other Users

- Provide more public non-hunting opportunities
- Outreach to non-hunting community
- To provide waterfowl populations adequate to meet the requirements of the waterfowlers, aboriginal peoples and other users
- Maintain the tradition, societal values, and economic benefits of hunting and other recreational uses of waterfowl
- Increase support of non-consumptive users for waterfowl conservation
- Increase non-hunter participation
- Maximize non-hunting recreational opportunities
- Maximize non-hunting recreational satisfaction



~14 million people in the U.S. traveled a mile or more from home to view waterfowl in 2006

Chart 8. Types of Birds Observed by Away-From-Home Birders: 2006



* shorebirds, herons, etc.
**pheasants, turkeys, etc.

“Seventy-seven percent reported observing waterfowl, making them the most watched type of bird”

Source: *Birding in the United States: a Demographic and Economic Analysis*

Birders

Some Statistics (U.S. only)

	Waterfowl hunters	Birders
Number	1,306,000	47,693,000
Expenditures	\$900 million	\$35.7 billion
Associated jobs	27,618	671,000

Source: *Birding in the United States: a Demographic and Economic Analysis*



Fundamental Objectives of the NAWMP

- Maintain healthy waterfowl populations in North America.
- Conserve landscapes capable of sustaining waterfowl populations.
- Perpetuate waterfowl hunting.
- Sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes.



So, Where is The Revision Headed?

Clarification of the “vision” for integrated waterfowl management...



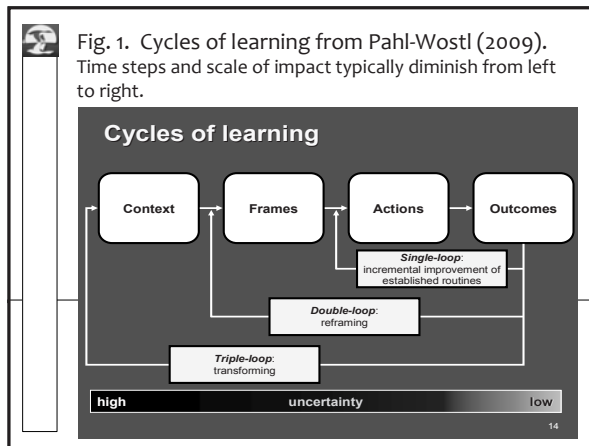
What’s the Vision of a Revised NAWMP?

- Highlight the challenges of change and the imperative of adaptation for future success



The Challenge of Change and Adaptation

- Changes emerging since the mid-1980s
 - Social change (hunters, urbanization, population diversity)
 - Ecological (loss/modification of habitats, shifting system dynamics)
 - Physical/Climate (climate primarily with associated impacts)
 - Technological (internet, communication)
- Need for resilience and adaptability
- Learning will be critical



Cycles of Learning

- Single-loop learning
Are we doing things right?
- Double-loop learning
Are we doing the right things?
- Triple-loop learning
Do we have the governance and institutions right?

Examples from waterfowl management

- Single loop: are we doing things right?
 - Passive adaptive harvest management – improving model-based predictions
 - LOTS of habitat management examples (e.g., planted cover or moist soil management options)

Examples from waterfowl management

- Double loop: are we doing the right things?
 - This program vs. that program? (e.g., PHJV Assessment)
 - Coherence between harvest and habitat management goals
 - Multi-stock management options

Examples from waterfowl management

- Triple loop: do we have the governance right?
 - Stakeholders – who are they? how will their interests be represented and served?
 - Relationship of waterfowl mgmt to broader conservation enterprise
 - Adequacy and effectiveness of waterfowl programs & institutions

What's the Vision of a Revised NAWMP?

- Highlight the challenges of change and the imperative of adaptation for future success
- Waterfowl Management must be:
Relevant – Effective – Efficient – Adaptable



What's the Vision of a Revised NAWMP?

- Highlight the challenges of change and the imperative of adaptation for future success
- Waterfowl Management must be:
Relevant – Effective – Efficient – Adaptable
- Strengthened consensus on future directions for waterfowl management



What's the Vision of a Revised NAWMP?

An integrated approach that considers habitat, populations, and human desires in objective setting, decision-making and resource allocation

A better focus on the things that matter most to the efficient achievement of renewed NAWMP goals



What's the Vision of a Revised NAWMP?

Set in motion changes that will establish an integrated system of waterfowl conservation featuring:

- Explicit and coherent objectives to guide habitat, harvest and human-dimension programs
- Means for coordinated actions to realize those objectives.



Five Critical Elements

1. A set of widely supported objectives
2. A working conceptual framework that allows managers to balance tradeoffs among objectives
3. Goals that are linked and coherent across scales
4. Managers using linked decision frameworks to efficiently allocate resources to achieve those objectives
5. Institutional and cultural support to enable such integrated management actions



Integration of waterfowl management also will require...

- Hard thinking about means objectives and system drivers
- Dealing with current uncertainties (e.g., causal relationships); obtaining new information in the long term to address them
- A willingness to adapt and change as new information comes to light
- A high degree of explicitness and transparency
- Time to work through these issues



What is Achievable in the Near Term?

- NAWMP has always been a high-level strategic guidance document... that won't change
- Other institutions have important roles to play in the evolution of waterfowl management
- Many important details remain to be worked out – an “Action Plan”
- As in 1986, how far and how fast we go will depend upon our collective will



Moving Forward

Within the 2012 Revision:

- Achieve broad consensus on goals and objectives of waterfowl conservation
- Articulate, at a conceptual level, the desired future state of waterfowl management as an integrated enterprise
- Develop momentum needed to establish and fully implement such a framework (Action Plan)
- Identify key functional linkages among objectives and commit to testing these through adaptive management or directed research



Moving Forward

Immediately following the 2012 Revision:

Within the next 2 years...

- **Establish quantifiable objectives** for population and habitat conservation, harvest opportunity, and user participation... with acknowledged tradeoffs among them
- **Implement a general integrated framework** for making linked harvest, habitat, and user management decisions
- **Implement monitoring and evaluation programs** to track progress toward objectives and reduce uncertainties about key functional linkages among goals



Moving Forward

Every 5 years thereafter, review and assess...

- Progress towards objectives
- External factors affecting NAWMP outcomes
- Progress in understanding functional linkages among objectives
- Commitments to monitoring and assessment
- Institutional processes for integration, and ~~their effectiveness, efficiency, and~~ responsiveness to change

At about 10-year intervals, review appropriateness of objectives themselves, governance structures, etc.



Moving Forward

Relevant – Effective – Efficient – Adaptable



Goals of this workshop

- ✓ Summarize Round 1 workshop results & provide update on the NAWMP Plan Revision process
- Clarify the “fundamental” objectives and associated measurable attributes
- Seek input on values associated with the “fundamental” objectives



Goals of this workshop

- Discuss how best to formulate new objectives in the Plan Revision
- Initiate discussion of institutions and processes that will facilitate integrated waterfowl management
- To provide any other feedback to the NAWMP Plan Committee as they move forward with the Revision.



Why do these things?

Clarity is important!

- What do we want to accomplish?

Why do we value objectives?

- For their own sake, or because they help accomplish another objective?

Numerical objectives have been at the heart of NAWMP.

- How should these be established, and why?

Limited resources for monitoring.

- What are the most meaningful, measurable attributes?

Our institutions and processes must foster coherence for greater efficiency and to enable adaptation.

- Are we ready?



Questions?



Clarifying “Fundamental” Objectives



Clarifying the Fundamental Objectives

What do we really mean by...

Maintain healthy waterfowl populations in North America

- What’s “healthy”? Just numbers? Some demographic rate?
- Do distributions matter?
- What do we consider “in harmony” with their ecosystems?



Clarifying the Fundamental Objectives

What do we really mean by...

Conserve landscapes capable of sustaining waterfowl populations

- What is meant by “conserve”?
- What is meant by “sustaining”?
- What does this imply about “net change”?
- What constitutes “landscapes”?



Clarifying the Fundamental Objectives

What do we really mean by...

Perpetuate waterfowl hunting

- At what level?
- Hunter numbers? Success? Days afield? Satisfaction?
- What type of hunter (multiple motivations)?

Clarifying the Fundamental Objectives

Sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes

- At what level?
- Viewer numbers? Success? Days afield?
Satisfaction?
- Target a certain demographic?
- Or is it \$\$ or influence in affecting conservation policy?

Valuing the Objectives



Valuing “Fundamental” Objectives

- How important are each of the objectives?
 - Should they all be “valued” the same?
-
- Base responses on personal beliefs about the waterfowl management enterprise as it exists today.

Valuing Objectives

Healthy Populations	Conserve Landscapes
Waterfowl Hunting	Viewing & Enjoyment

Valuing Objectives

Healthy Populations	25	Conserve Landscapes	25
---------------------	----	---------------------	----

How important is each objective?

Allocate 100 points of “value” among the four objectives

Waterfowl Hunting	25	Viewing & Enjoyment	25
-------------------	----	---------------------	----

How important is each objective?
Allocate 100 points of “value”
among the four objectives

Valuing Objectives

Healthy Populations 30	Conserve Landscapes 40
<p>How important is each objective? Allocate 100 points of “value” among the four objectives</p>	
Waterfowl Hunting 20	Viewing & Enjoyment 10

How important is each objective?
Allocate 100 points of “value”
among the four objectives

How significant are the linkages among objectives?

Table 3
Feb 17, 2010
JH/AL/AL

Handwritten diagram showing linkages between Healthy Populations, Landscapes, Waterfowl Hunting, and Viewing & Enjoyment. The diagram includes various numerical values and arrows indicating the strength and direction of the linkages.

Valuing Objectives

Healthy Populations 30	Conserve Landscapes 40
Waterfowl Hunting 20	Viewing & Enjoyment 10

Valuing Objectives

Assume the arrows represent key linkages. How much value do you assign to these?

Diagram showing linkages between Healthy Populations, Conserve Landscapes, Waterfowl Hunting, and Viewing & Enjoyment. Arrows represent key linkages, and question marks indicate the value assigned to each linkage.

Valuing Objectives

Allocate points in each objective to linkages

Diagram showing linkages between Healthy Populations, Conserve Landscapes, Waterfowl Hunting, and Viewing & Enjoyment. Points are allocated to each linkage (A, B, C, D, E, F, G).

Valuing Objectives

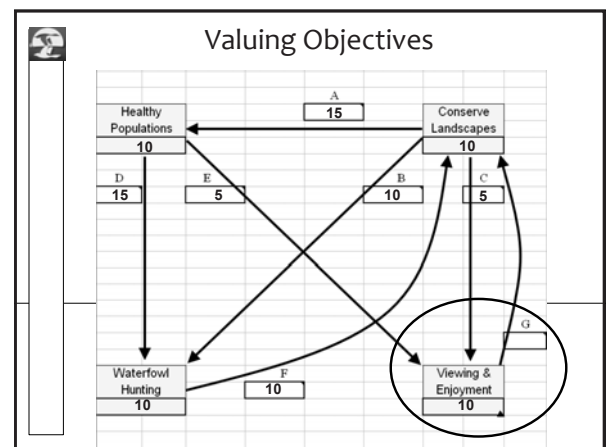
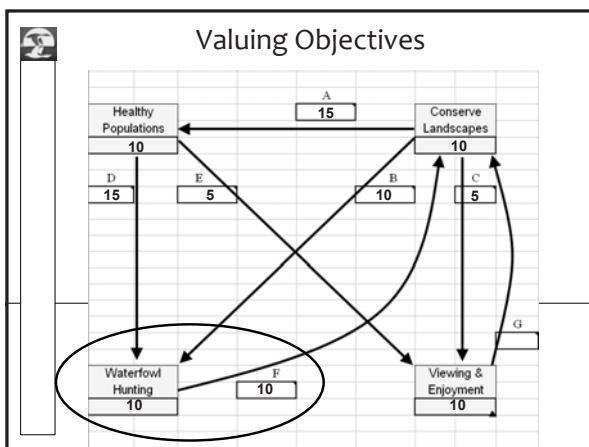
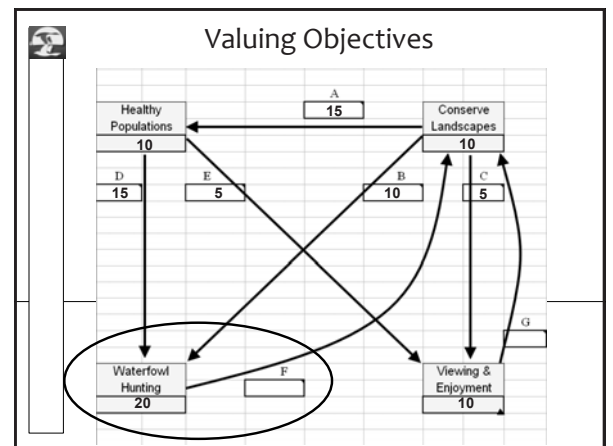
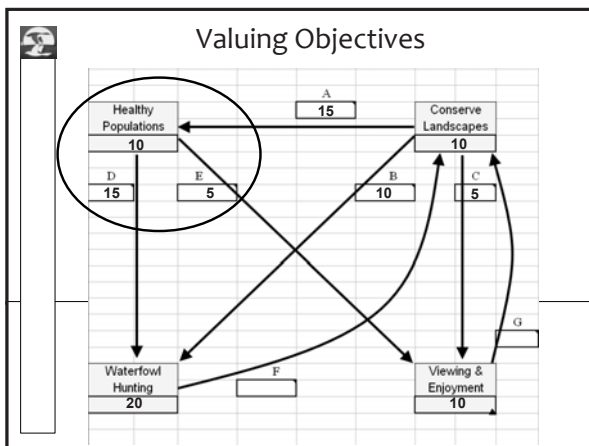
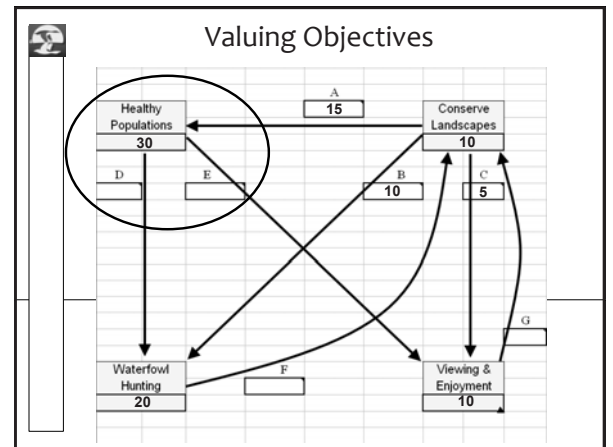
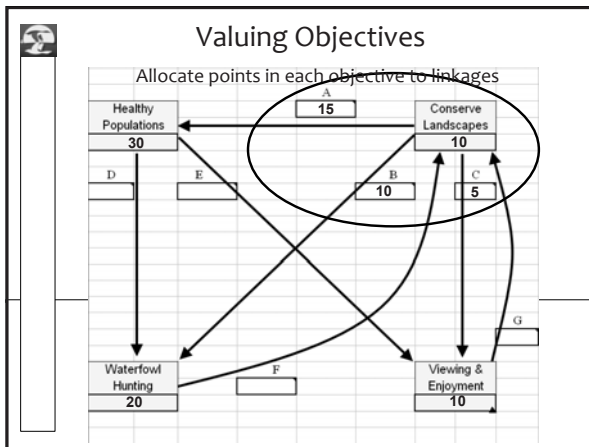
Allocate points in each objective to linkages

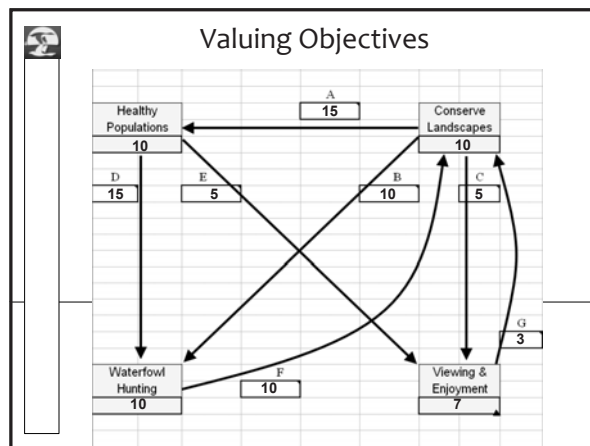
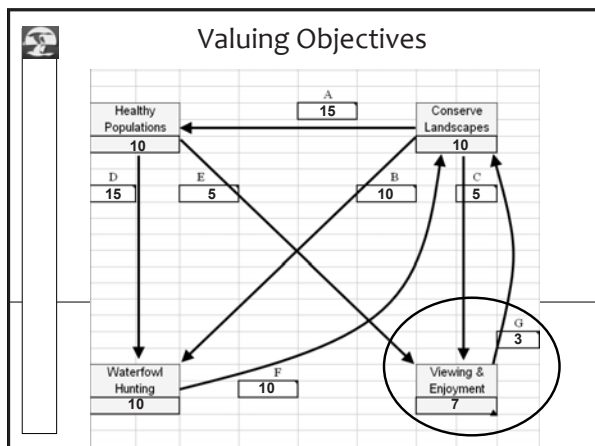
Diagram showing linkages between Healthy Populations, Conserve Landscapes, Waterfowl Hunting, and Viewing & Enjoyment. Points are allocated to each linkage (A, B, C, D, E, F, G).

Valuing Objectives

Allocate points in each objective to linkages

Diagram showing linkages between Healthy Populations, Conserve Landscapes, Waterfowl Hunting, and Viewing & Enjoyment. Points are allocated to each linkage (A, B, C, D, E, F, G).





Please begin the exercise...

Ask questions if you are confused!



Valuing the Objectives: Results from Yesterday



Round 2 Workshop
Part 2

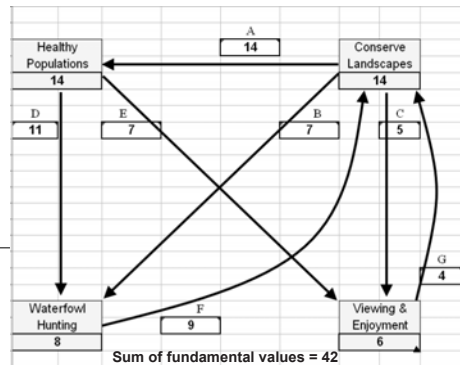


Valuing “Fundamental” Objectives

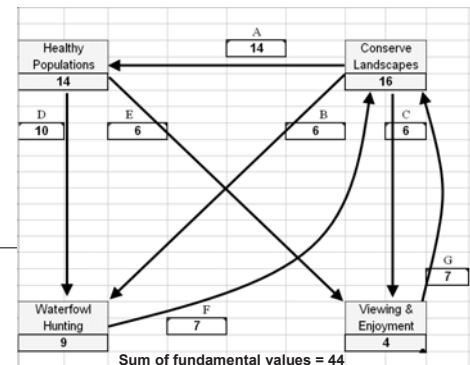
- How important are each of the objectives?
- Should they all be “valued” the same?
- Base responses on personal beliefs about the waterfowl management enterprise as it exists today



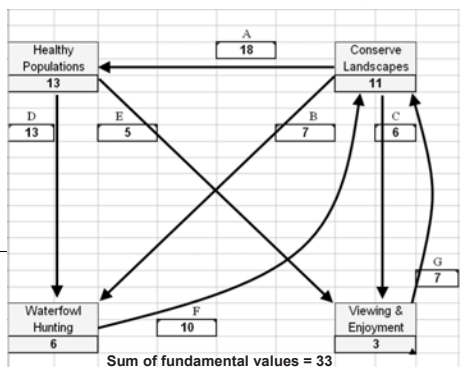
Results from Ottawa 2011 (N=22)



Results from Edmonton 2011 (N=19)



Results from Denver 2010 (N=15)



Implications of “Valuing Objectives” Exercise

- Evidence that current objectives are not truly “fundamental” (a possible complication for structured decision making approaches)
- Illustrates the strong linkages within the waterfowl management enterprise
- Provides a sense of the magnitude of dependencies
- Underscores the need for a coherent management system
- Hopefully a valuable heuristic exercise



Some Practical Implications

If we “conserve landscapes”...

- ... to provide healthy populations, then we should target landscapes with greatest demographic impact
- ... to perpetuate hunting, then target landscapes in areas with greatest number of hunters
- ... to perpetuate viewing/enjoyment, then target landscapes near urban centers
- ... just because we like to watch sunrise in a marsh, then can work almost anywhere



Numerical Objectives and NAWMP

Where do we stand?

What makes sense for the future?

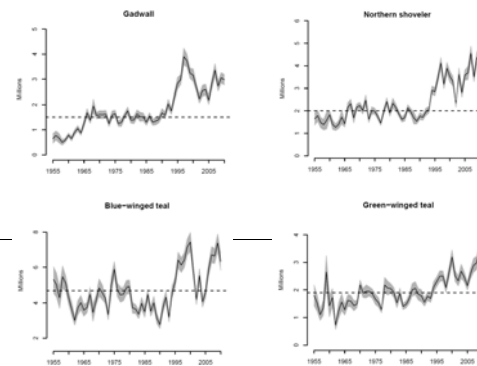


About Numerical Objectives

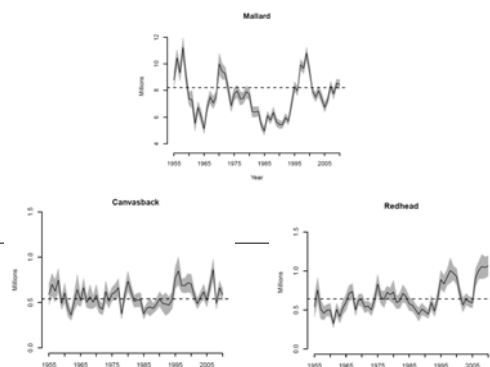
- Current population objectives essentially unchanged since original (1986) plan
- Habitat objectives have increased
- This session focuses on...
 - A quick review of population objectives
 - Discussing why we would want numerical objectives
 - Describing the desirable characteristics of quantitative objectives
 - Seeking input on how objectives should be developed



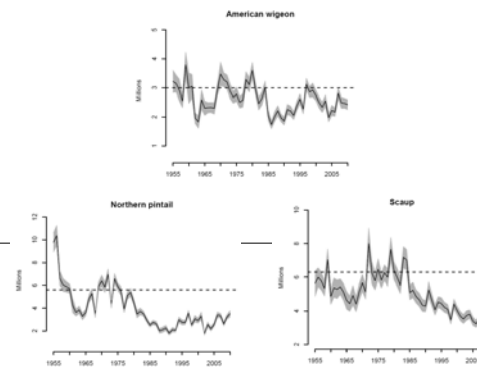
Above Objective



Looking Good



Below or Way Below Objective



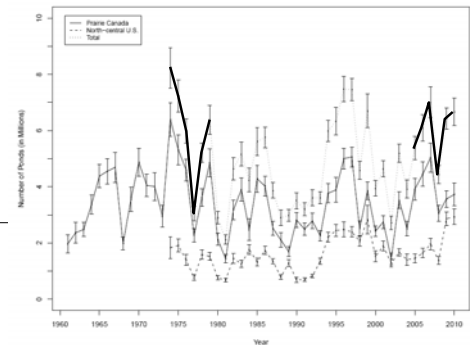


Other Waterfowl and Context Issues

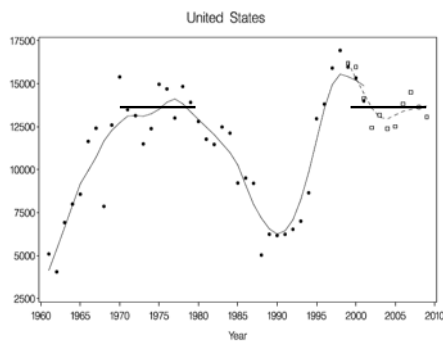
- Most goose populations at or above objectives; many goose management plans
- Sea ducks problematic – difficult to survey, but most thought to be in decline
- Moreover, context is important but sometimes inadequately specified; e.g., objectives to be met:
 - during “years of average environmental conditions”
 - under ? harvest management regime



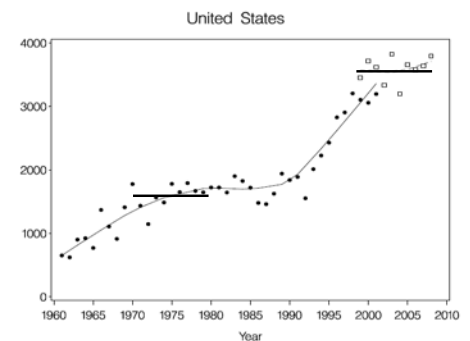
May Ponds (CA and US)



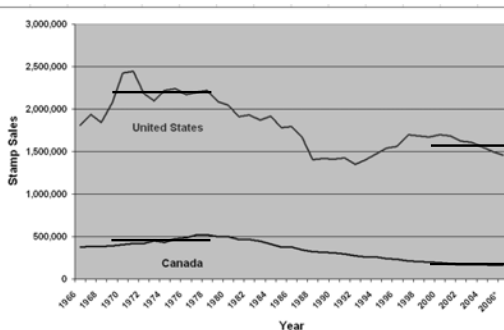
Duck Harvest



Goose Harvest



Migratory Bird Stamp Sales



Considering Measurable Objectives

Why have quantifiable objectives?

- For conservation planning (i.e., step-down to JV programs)
- To gauge progress (performance metrics)
- To inspire action (stretch goals as motivators)
- To justify resources



Considering Measurable Objectives

Characteristics of useful objectives

- Strong science foundation
- Transparent
- Measurable
- Achievable (with some stretch)



Considering Measurable Objectives

How should measurable objectives be developed?

- Based on input from those charged with achieving them
- Closely tied to goals (“fundamental” objectives)
- With an understanding of inter-relationships among objectives
- Consistent with existing plans(?)



Considering Measurable Objectives

What are special considerations in establishing numeric objectives for waterfowl?

- Boom-bust nature of many waterfowl populations
- Partial controllability in many areas
 - Populations driven by weather (precip)
 - Habitat driven by economic/social drivers
 - Participation in hunting driven by social factors



Considering the Objectives

Turning Point exercise

- Introduce issue
- Conduct poll
- Discuss responses
- No right or wrong answers
- Responses will help inform objective-setting process during 2-year implementation phase



Turning Point Exercise



Institutions and Processes





Institutions and Processes Adequate for Integrated Management

Two Basic Challenges:

- 1) Setting coherent multiple objectives that flow from the Plan's fundamental goals.
- 2) Managing adaptively toward those objectives in the years ahead.



Institutions and Processes Adequate for Integrated Management

1) Setting Objectives:

By what social process should we go about setting specific coherent multiple objectives for waterfowl management that may include elements of population size, landscape conditions, and human use? Who would do this? With what technical support?



Institutions and Processes Adequate for Integrated Management

For instance,

- How might we reconcile a desire for additional harvest opportunity with barriers to increasing carrying capacity?
- How might we decide the most appropriate approach to multi-stock harvest management and plan habitat actions accordingly?
- How might hunter participation goals be set across multiple jurisdictions?



Institutions and Processes Adequate for Integrated Management

2) Managing Adaptively:

Assuming that we accomplished this objective setting, again from a process point of view, how will we monitor progress toward achieving NAWMP goals and adapt our actions in light of those results? There are both administrative and technical aspects of this challenge.



Institutions and Processes Adequate for Integrated Management

For instance,

- What recurring decisions would need to be made? How often?
- Who would make such decisions?
- How would decisions be coordinated across scales and among jurisdictions?
- From where would technical support come?



Institutions and Processes Adequate for Integrated Management

Can we rely on existing institutions and processes to achieve coherent adaptive actions, or might we need some new overarching coordination functions?

If so, what form should that take?



Institutions and Processes Adequate for Integrated Management

- Start with a blank page.
- Assume federal governments retain the trust responsibility to manage migratory birds in partnership with the states and provinces.
- Recognize that a complex set of public and private entities are major stakeholders in waterfowl management.
- Think freely; remember form should follow function!
- Focus on necessary features more than institutional details



The NAWMP Revision Workshop Wrap-Up



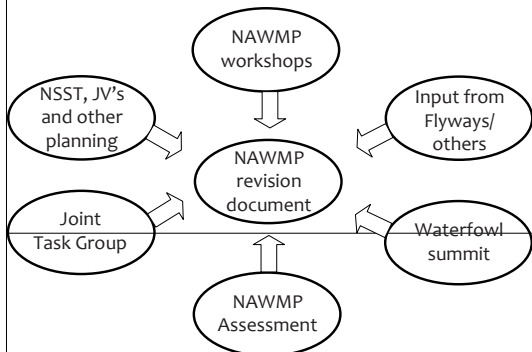
What's the Vision of a Revised NAWMP?

Set in motion changes that will establish an integrated system of waterfowl conservation featuring:

- Explicit and coherent objectives to guide habitat, harvest and human-dimension programs
- Means for coordinated actions to realize those objectives.




Informing Content of the Revision



Keeping Informed, Seeking Input


NAWMPrevision.org

- “Feedback Form” -- on-line questions
- FAQ's
- Workshop summaries
- Relevant reports (e.g., NAWMP Assessment; Joint Task Group)
- Communiqués issued periodically to update progress




Ensuring Coordination with Others

- Many entities are working on related issues. We're aware of them and talking with them.
 - NSST
 - Work Plan being revised
 - Developing demographic objectives at JV scales
 - Developing regional habitat objectives that account for environmental variation
 - Aggregating estimates of carrying capacity ("K") across populations and space




Ensuring Coordination with Others

- Many entities are working on related issues. We're aware of them and talking with them.
 - Working groups on species life cycle models
 - Northern Pintail
 - Scaup
 - Black Duck
 - Species Joint Ventures
 - Flyway goose & swan management plans



Ensuring Coordination with Others

- Many entities are working on related issues. We're aware of them and talking with them.
 - HMWG (Harvest Management Working Group... formerly the AHM WG)
 - On-going AHM analyses and recommendations
 - Considering and responding to new EIS on hunting
 - Various hunter-related work (zones & splits & hunter responses; simple vs. complex regulations)
 - The Human Dimensions Working Group



Members of the Writing Team

- Jim Ringelman (Chair) – NAWMP; DU
- Mike Anderson – NAWMP; IWWR/DUC
- Bob Clark – Env. Canada; U of SK
- John Eadie – UC Davis
- Greg Soullierre – UMR/GL JV; FWS
- Andy Raedeke – MO Dept Cons; MS flyway
- Mark Koneff -- USFWS

January	Revise and finalize outline approved by the PC in Vancouver; decide roles and responsibilities; develop firmer timeline
February	Start drafting preliminary and contextual pieces Work on "new content" text on topics that emerged consistently at workshops
March	Face-to-face meeting after RSC digest workshop results (@ North American conference?) Prepare and refine "new content" material; complete working draft
April	
May	Completed, working draft Review of draft by RSC
June	Revise draft based on RSC comments Review of draft by PC
July	Revise draft based on PC comments Distribute first draft for general review and comment

	Revise per comments received
October	
November	Second review by RSC Revise per second RSC review
December	Second review by PC
2012 dates and events:	
January	Revise per second PC review Discussions and final approval at regular PC meeting
February	Final edits and official approvals
March	Release new NAWMP at the North American conference



The NAWMP Revision: Guiding Philosophy, Form and Contents

- Provides strategic guidance; offers substantive content based on wealth of information
- Establishes momentum, and sets clear direction, for a coherent management system
- Companion “Action Plan” recommends “who does what, by when”
- Acknowledges need for coordination with other efforts also underway



The Revised NAWMP

- ✓ Relevant
- ✓ Effective
- ✓ Efficient
- ✓ Adaptable



Thank you for your contributions



Institutions and Processes Adequate for Integrated Management

Two Basic Challenges:

- 1) Setting coherent multiple objectives that flow from the Plan’s fundamental goals.
- 2) Managing adaptively toward those objectives in the years ahead.



Institutions and Processes Adequate for Integrated Management

By what social process would we go about setting specific coherent multiple objectives for waterfowl management that may include elements of population size, landscape conditions, and human use? Who would do this? With what technical approach and support?



Institutions and Processes Adequate for Integrated Management

For instance,

- How might we reconcile a desire for additional harvest opportunity with barriers to increasing carrying capacity?
- How might we decide the most appropriate approach to multi-stock harvest management and plan habitat actions accordingly?



Institutions and Processes Adequate for Integrated Management

Assuming that we accomplished this objective setting, again from a process point of view, how will we monitor progress toward achieving NAWMP goals and adapt our actions in light of those results? There are both administrative and technical aspects of this challenge.



Institutions and Processes Adequate for Integrated Management

For instance,

- Who would make such decisions?
- From where would technical support come?
- When would recurring decisions need to be made?
- How would decisions be coordinated across scales and among jurisdictions?



Institutions and Processes Adequate for Integrated Management

Can we rely on existing institutions and processes to achieve coordinated, coherent actions, or might we need to frame some new overarching coordination function? If so, what form should that take?

- Start with a blank page
- Assume federal governments retain the trust responsibility to manage migratory birds in partnership with the states and provinces
- Assume existing approval bodies (NAWCC and MBCC) retain the authority to allocate NAWCA funding
- Focus on necessary FEATURES more than institutional details
- Think freely; remember form should follow function!

NAWMP Revision Round 2 Consultation Workshops

Institutions and Processes for Integrated Management *Table Group Discussion Guide*

By what social process would we go about setting specific coherent multiple objectives for waterfowl management that may include elements of population size, landscape conditions, and human use? Who would do this? With what technical approach and support?

For instance,

- How might we reconcile a desire for additional harvest opportunity with barriers to increasing carrying capacity?
- How might we decide the most appropriate approach to multi-stock harvest management?


Assuming that we accomplished this objective setting, again from a process point of view, how will we monitor progress toward achieving NAWMP goals and adapt our actions in light of those results? There are both administrative and technical aspects of this challenge.

For instance,

- Who would make such decisions?
- From where would technical support come?
- When would recurring decisions need to be made?
- How would decisions be coordinated across scales and among jurisdictions?


Can we rely on existing institutions and processes to achieve coordinated, coherent actions, or might we need to add some sort of overarching coordination function? If so, what form should that take?


For instance, one of the decision problems we face is the spatial and temporal allocation of people and financial resources to various waterfowl management actions. Do current institutional arrangements allow this?



Welcome

Round 2 Stakeholder Input NAWMP Revision Workshop





I attended a Round 1 workshop

- Yes
- No
- I don't remember

0%


0%


0%

yes

no

I don't remember





What is your country of residence?

- Canada
- Mexico
- United States

0%


0%

0%

Canada

Mexico

United States



What is your primary employment affiliation?

- Federal agency
- Non-Government Organization
- Private business
- State/Provincial agency
- University

0%

0%

0%

0%

0%


Federal agency

Non-Government Org...

Private business

State/provincial agency

University



Which *ONE* best describes the geography for which you have waterfowl habitat responsibilities?

- Atlantic Flyway
- Mississippi Flyway
- Central Flyway
- Pacific Flyway
- National/multiple Flyways
- Don't have habitat responsibilities

0%

0%

0%

0%

0%

0%

Atlantic Flywa...


Mississippi Fl...

Central Flyway

Pacific Flyway

National/multi...

Don't have hab...



Which *ONE* best describes the geography for which you have waterfowl population responsibilities?

- Atlantic Flyway
- Mississippi Flyway
- Central Flyway
- Pacific Flyway
- National/multiple Flyways
- Don't have population responsibilities

0%

0%

0%

0%

0%

0%

Atlantic Flywa...

Mississippi Fl...

Central Flyway

Pacific Flyway

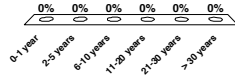
National/multi...

Don't have pop...



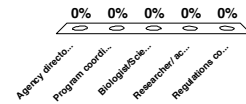
How long have you been active in waterfowl management?

1. 0-1 year
2. 2-5 years
3. 6-10 years
4. 11-20 years
5. 21-30 years
6. > 30 years



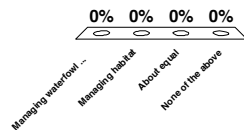
Which one hat do you most frequently wear when it comes to waterfowl management?

1. Agency director/ executive director
2. Program coordinator or administrator
3. Biologist/Scientist
4. Researcher/ academic
5. Regulations committee member



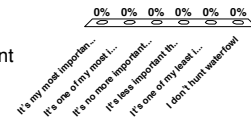
I spend most of my time on...

1. Managing waterfowl populations (sport harvest, subsistence take, take to reduce population size)
2. Managing habitat
3. About equal
4. None of the above



How important is waterfowl hunting to you?

1. It's my most important recreational activity
2. It's one of my most important recreational activities
3. It's no more important than my other recreational activities
4. It's less important than my other recreational activities
5. It's one of my least important recreational activities
6. I don't hunt waterfowl



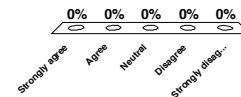
Round 2 Stakeholder Input NAWMP Revision Workshop

Objectives



It is important that NAWMP has quantitative (numerical) objectives

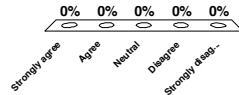
1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree





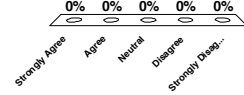
It makes sense to have quantifiable objectives for each of the four fundamental objectives.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



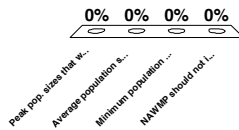
The current NAWMP population objectives are adequate to guide waterfowl conservation into the future.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



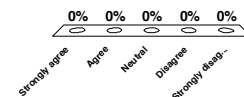
What is the most appropriate form of a numeric population objective for NAWMP?

1. Peak pop. sizes that will be achieved periodically when habitat conditions are good
2. Average population sizes over a period of years
3. Minimum population sizes maintained even when habitat conditions are poor
4. NAWMP should not include numeric population objectives



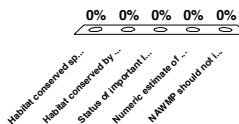
NAWMP should include continental-scale, numeric distribution objectives for breeding, migration and wintering areas.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



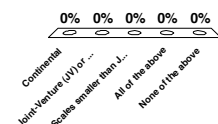
What is the most appropriate form of a numeric habitat objective for NAWMP?

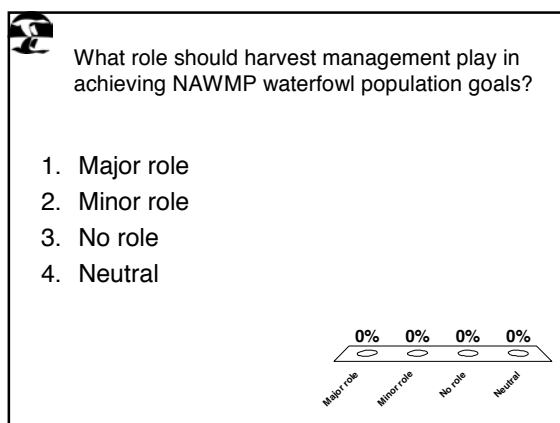
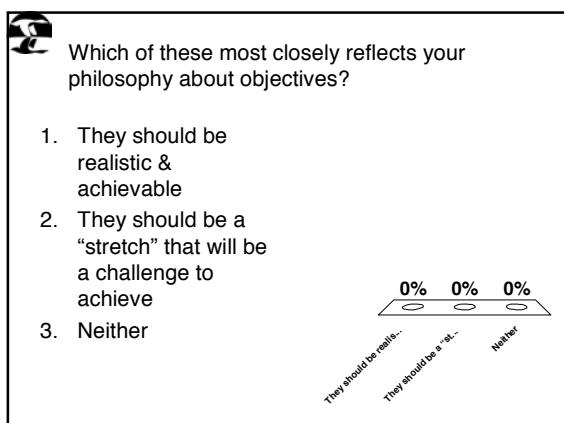
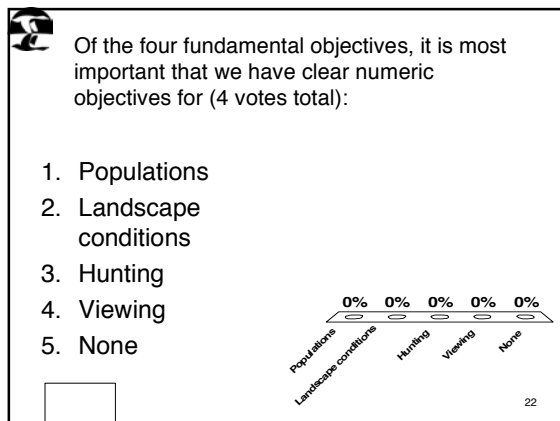
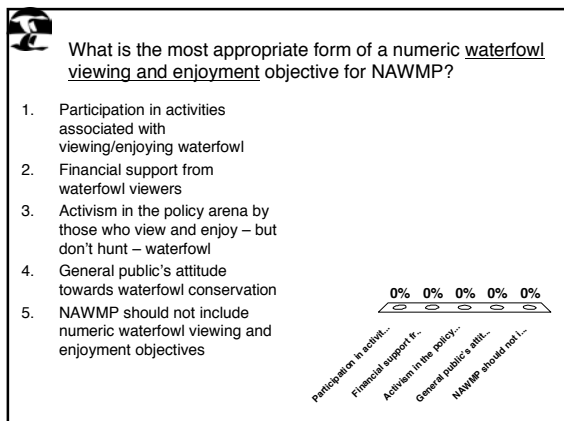
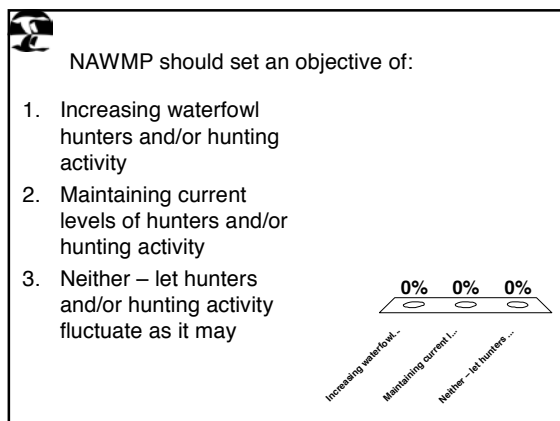
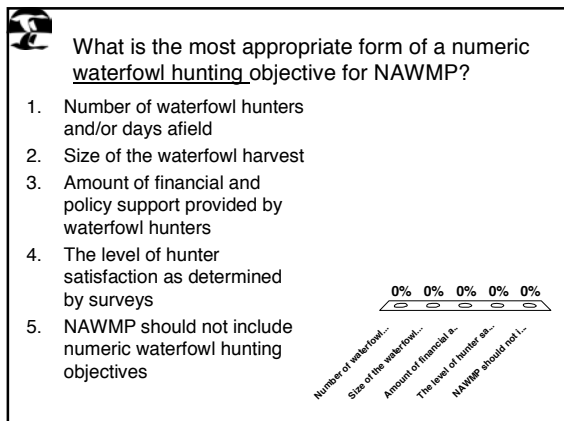
1. Habitat conserved specifically for waterfowl conservation
2. Habitat conserved by all conservation efforts, whether or not targeted for waterfowl
3. Status of important landscape features needed to sustain waterfowl pops, incorporating both habitat gains & losses
4. Numeric estimate of waterfowl carrying capacity
5. NAWMP should not include numeric habitat objectives



Numeric habitat objectives should be employed on the following scales:

1. Continental
2. Joint-Venture (JV) or Bird Conservation Region (BCR)
3. Scales smaller than JV's or BCR's
4. All of the above
5. None of the above

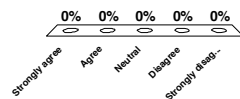






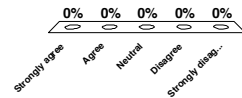
Waterfowl regulations should be set for a period of years ("stabilized") provided safeguards are in place to make changes if worrisome population declines occur.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



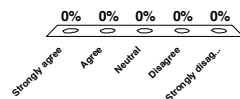
An inordinate amount of time is spent on the annual regulations setting process.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



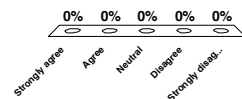
Regulations are more complex than they need to be to safeguard waterfowl populations.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



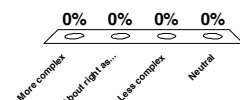
Regulations are more complex than they need to be to satisfy hunters.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



Considering desires to recruit and retain hunters, should waterfowl regulations be more or less complex than they are today?

1. More complex
2. About right as they are
3. Less complex
4. Neutral



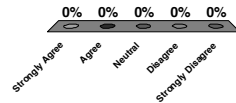
Workshop Evaluation





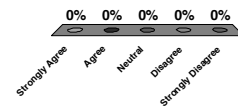
Workshop goal 1 “To summarize Round 1 workshop results and provide an update on the Plan Revision process” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



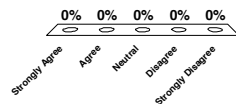
Workshop goal 2 “To clarify the fundamental objectives and associated measurable attributes” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



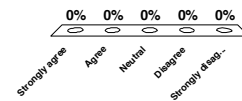
Workshop goal 3 “To seek input on the values associated with the fundamental objectives ” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



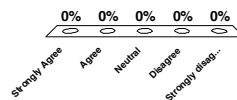
Workshop goal 4 “To discuss how best to formulate new objectives in the Plan Revision” was met.

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



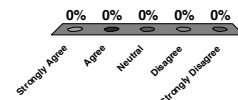
Workshop goal 5 “To initiate discussion of institutions and processes that will facilitate integrated waterfowl management” was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



Workshop goal 6 “To provide feedback to the NAWMP Plan Committee as they move forward with the Plan Revision” was met.

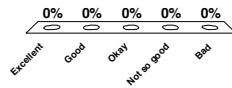
1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree





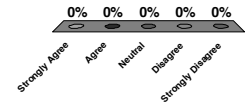
How do you feel about the Revision process as described at this meeting?

1. Excellent
2. Good
3. Okay
4. Not so good
5. Bad



Overall, I thought this workshop was a success

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



Thank you
for your participation



Appendix D – Round 2 Grand Rapids workshop materials and results

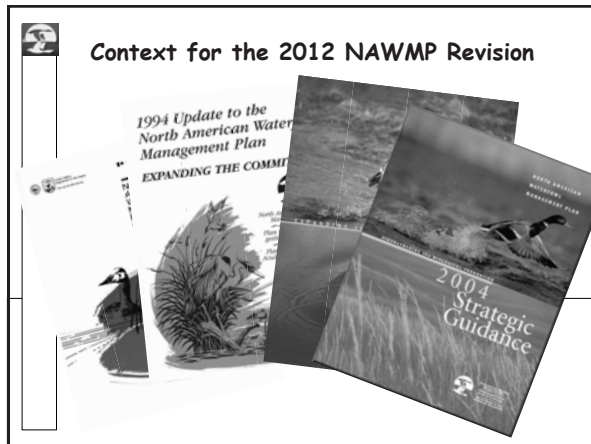
Round 2 NAWMP Revision Stakeholder Workshop September 30 Amway Grand Plaza, Haldane Room Grand Rapids, MI Agenda

Workshop Goals

- To provide a summary of Round 1 Workshop results and an update on the Plan Revision process
- To provide participants an opportunity to clarify and weight the fundamental objectives
- To provide participants an opportunity to identify key measurable attributes, causal relationships and linkages
- To initiate discussion of institutions and processes that will facilitate integrated waterfowl management
- To provide feedback to the Plan Committee as they move forward with the Plan Revision

Thursday, September 30

- 8:00 a.m. Introductions and workshop agenda review—DJ Case
- 8:15 Orientation to the NAWMP Revision Process and Review of Round 1 Workshops—Jim Ringelman, Mike Anderson, Seth Mott
- 9:15 Fundamental Objectives of the NAWMP—Fred Johnson
- Clarifying their meaning and intent
 - Describing measurable attributes
 - Exploring relative weights
- Noon Lunch
- 1:00 p.m. Review and comment on morning discussion—DJCase
- 1:05 Belief networks and the NAWMP—Fred Johnson
- Introduction to belief networks
 - Causal relationships and linkages
 - An example belief network
 - From belief network to decision framework
- 2:30 Break
- 2:45 Institutions and Processes
- 3:45 Presentation of group exercise results
- 4:15 Evaluation
- 4:30 Next steps in the NAWMP Revision
- 4:45 Adjourn



Page 2.....Principles

- 2) In waterfowl management decisions and actions, the first priority should be to perpetuate waterfowl populations and their supporting habitats...
- 7) Recreational hunting will continue to be managed under existing regulatory processes in Canada and the U.S. These processes will be subject to continuous review to ensure they are compatible and consistent with waterfowl population needs on a continental bases, and to evaluate their environmental impacts and to ensure public participation

Page 16. Increasing our Scientific Base.

For the purposes of the Plan, adaptive management is described simply as the process of using iterative cycles of planning, implementation, and evaluation to improve management performance.....To manage adaptively, managers must be able to articulate clear, quantifiable objectives for each conservation action; predict the biological outcomes.....monitor....and compare outcomes with the original predictions and objectives.

Adaptive Harvest Management (AHM) Task Force (2003)

Harvest-management objectives:

Currently, the basic management objective of the AHM process is to maximize cumulative harvest over an infinite time horizon

In one case (midcontinent mallards), an additional objective is to maintain population size at or above the goal of the NAWMP.

Are the size of the harvest and NAWMP population goals sufficient for defining the objectives of duck harvest management, or should the objectives be broadened to include other interests such as hunter satisfaction, the distribution of hunting opportunity, or the frequency of regulatory changes?

Searching for Coherence Between Harvest and Habitat Management

MEMORANDUM

TO: MIKE ANDERSON, JOHN EADIE, JEFF HERBERT, MIN HUANG, DALE HUMBURG, FRED JOHNSON, MARK KONEFF, JIM LEAFLOOR, SETH MOTT, THOMAS NUDDS, ERIC REED, JIM RINGELMAN, MICHAEL RUNGE, BARRY WILSON

FROM: DAVID A. SMITH- NAWMP COMMITTEE CO-CHAIR
FOR
STEVE WENDT - NAWMP COMMITTEE Co-CHAIR
DON CHILDRESS - IAFWA AHM TASK FORCE

SUBJECT: APPOINTING A JOINT TASK GROUP (JTG) FOR CLARIFYING NAWMP POPULATION OBJECTIVES AND THEIR USE IN HARVEST MANAGEMENT

DATE: JUNE 14 2005

Your participation in an *ad hoc* group of waterfowl scientists is requested to advance Recommendation A of AHM Task Force Status Report #5, (the establishment of a technical group to explore useful ways in which to interpret NAWMP goals for both habitat and harvest management). This Joint Task Group (JTG) is being asked to **further develop and discuss options for the future use of waterfowl population objectives in both harvest and habitat management activities**. Initial ideas along these lines were first put forth by some members of the proposed JTG in a draft manuscript entitled *Reuniting Waterfowl Management*, and have been subsequently discussed by both the AHM Task Force and NAWMP Committee.



Joint Task Group Recommendations (2007)

1. Harvest managers should adopt a shoulder strategy for Northern Pintails and Mid-Continent Mallards.
2. NAWMP should adopt the same shoulder strategy to ensure coherence.
3. Enhance the technical capacity of the AHMWG and the NSST.
4. Focus more science on reducing key uncertainties.
5. ~~Convene an HD working group to assess~~ stakeholder values and develop an approach for more explicitly incorporating HD information into management decisions.
6. Convene a waterfowl management policy summit.



NAWMP Continental Progress Assessment Report (2007) Recommendations

#3 Adaptive Management, as the way of approaching NAWMP delivery, needs to be embraced and employed more widely.

#20 The Plan Committee should advocate that waterfowl harvest and habitat managers develop a coherent and coordinated approach for setting and achieving Plan objectives.



Messages from Minneapolis Summit (August 2008)

Conclusions:

- 1) A group or venue be created to continue the work of the Human Dimensions Working Group. (94% agreed or strongly agreed)
- 2) The NAWMP update should be used to develop more coherent goals for waterfowl harvest and habitat management. (88% agreed or strongly agreed.)

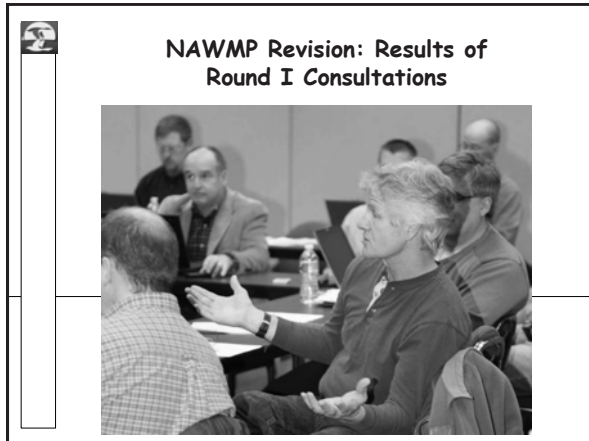


NAWMP Revision Scoping Report (August, 2009)

Desired Outcomes for the 2011 Revision (in part)

- 1) Achieve broad consensus on the fundamental goals of waterfowl conservation





Purpose of the Workshops

- Solicit responses to the NAWMP Revision "Purpose Statement" and seek input on a "Problem Statement"
- Identify fundamental and means objectives for waterfowl management
- Discuss alternative, broad-scale (high level) strategies for achieving objectives
- Identify actions and measurable attributes associated with objectives
- Inform the management community about the NAWMP revision and engage them as participants in the process

Primary participants = waterfowl management community (involved in managing populations, habitat, and hunting)

- Plan Committee, Revision Steering Committee
- NAWMP Science Support Team
- Adaptive Harvest Management working group
- Human Dimensions working group
- N.A. Wetlands Conservation Council and Staff
- Federal, state, provincial governments
- Joint Ventures (Habitat & Species)
- Flyway Councils and Technical Committees
- NGOs - DU, CA Waterfowl, Delta, WMI, others
- Minneapolis waterfowl "Summit" participants

NAWMP Revision: Round I Consultations

Formal workshops:

- Portland - Dec 1-2, 2009
- Memphis - Jan 27-28, 2010
- Edmonton - Feb 1-2, 2010
- Ottawa - Feb 16-17, 2010
- Sacramento - Feb 25-26, 2010
- Milwaukee - Mar 22, 2010

Other written input:

- Mexico
- Flyways
- Ducks Unlimited, Delta Waterfowl
- Website messages from individuals

Agenda

Day 1

- Discuss the nature of objective setting
- Group candidate list into fundamental to means objectives
- Specify relationships (linkages) among fundamental and means objectives
- List measurable attributes associated with each objective
- Identify potential actions to achieve fundamental or means objectives

Day 2

- Develop a graphical representation of the objectives hierarchy (powerpoint, white board, and sticky notes)
- Discuss the key relationships between the fundamental and means objectives
- Elicit potential actions to achieve fundamental or means objectives

Quantifying Opinions and Beliefs

"Turning Point" technology: individuals respond to questions; instantaneous feedback to the group.

How important is waterfowl hunting to you?

1. It's my most important recreational activity
2. It's one of my most important recreational activities
3. It's no more important than my other recreational activities
4. It's less important than my other recreational activities
5. It's one of my least important recreational activities
6. I don't hunt waterfowl

Response Option	Percentage
1. It's my most important recreational activity	26%
2. It's one of my most important recreational activities	42%
3. It's no more important than my other recreational activities	16%
4. It's less important than my other recreational activities	6%
5. It's one of my least important recreational activities	0%
6. I don't hunt waterfowl	10%



Following the Workshops...

D.J. Case and NAWMP Technical Team synthesized results

- NAWMP Technical Team meetings: April 20,22, 2010; August 16-19, 2010

Discussion and interpretation by the Revision Steering Committee.

- Revision Steering Committee meetings: April 28, 2010; August 18-19, 2010



Workshop Update...

- ✓ Who attended
- ✓ Purpose and Problem statements
- ✓ Fundamental objectives
- ✓ Objectives hierarchies



The Workshop Attendees

Meeting site

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portland	33	21.3	21.3	21.3
	Memphis	24	15.5	15.5	36.8
	Sacramento	16	10.3	10.3	47.1
	Milwaukee	27	17.4	17.4	64.5
	Edmonton	28	18.1	18.1	82.6
	Ottawa	27	17.4	17.4	100.0
	Total	155	100.0	100.0	

What is your country of residence?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Canada	54	34.8	36.7	36.7
	United States	93	60.0	63.3	100.0
	Total	147	94.8	100.0	
Missing	System	8	5.2		
Total		155	100.0		



The Workshop Attendees

What is your primary employment affiliation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Federal agency	69	44.5	46.6	46.6
	Non-government organization	38	24.5	25.7	72.3
	State/provincial agency	40	25.8	27.0	99.3
	University	1	.6	.7	100.0
	Total	148	95.5	100.0	
Missing	System	7	4.5		
Total		155	100.0		

How long have you been active in waterfowl management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-1 year	8	5.2	5.4	5.4
	2-5 years	19	12.3	12.8	18.1
	6-10 years	20	12.9	13.4	31.5
	11-20 years	35	22.6	23.5	55.0
	21-30 years	45	29.0	30.2	85.2
	> 30 years	22	14.2	14.8	100.0
	Total	149	96.1	100.0	
Missing	System	6	3.9		
Total		155	100.0		



The Workshop Attendees

Which one hat do you most frequently wear when it comes to waterfowl management?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agency director/executive director	18	11.6	12.0	12.0
	Program coordinator or administrator	65	41.9	43.3	55.3
	Biologist/scientist	57	36.8	38.0	93.3
	Researcher/academic	8	5.2	5.3	98.7
	Regulations Committee Member	2	1.3	1.3	100.0
	Total	150	96.8	100.0	
Missing	System	5	3.2		
Total		155	100.0		

I spend most of my time on:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managing waterfowl populations	39	25.2	26.0	26.0
	Management habitat	49	31.6	32.7	58.7
	About equal	18	11.6	12.0	70.7
	None of the above	44	28.4	29.3	100.0
	Total	150	96.8	100.0	
Missing	System	5	3.2		
Total		155	100.0		



The Workshop Attendees

How important is waterfowl hunting to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most important recreational activity	20	16.8	17.3	17.3
	One of most important recreational activities	55	35.5	36.7	54.0
	No more important than other recreational activities	23	14.8	15.3	69.3
	Less important than other recreational activities	16	10.3	10.7	80.0
	One of least important recreational activities	2	1.3	1.3	81.3
	I don't hunt waterfowl	28	18.1	18.7	100.0
	Total	150	96.8	100.0	
Missing	System	5	3.2		
Total		155	100.0		

Draft Purpose Statement

The purpose of the Plan is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America. Plan goals will be accomplished by partnerships that conserve habitats and sustain populations, guided by sound science.

Purpose Statement

The purpose of the Plan is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America. Plan goals will be accomplished by partnerships that conserve habitats and sustain populations, guided by sound science.

The purpose of the Plan is to sustain North America's waterfowl populations and their habitats at levels that satisfy human desires and perpetuate waterfowl hunting. Plan goals will be accomplished through partnerships guided by sound science.

Clarifying the "Problem"

Losing habitat faster than we are restoring/conserving it

Losing hunters despite liberal regulations and healthy populations

Interest in waterfowl conservation in agencies and among the public is waning

But why???... not for lack of effort!

- ✓ Need to do more things?
- ✓ Need to do things differently?
- ✓ Symptoms versus causation

So What are Underlying Problems?

From the "Future of Waterfowl Summit"...

- Resources dedicated to conservation are not optimally allocated among landscapes.
- Too much time is spent setting annual regulations.
- Monitoring and evaluation needs to be enhanced.
- Federal and provincial activities to conserve waterfowl and their habitats have declined.
- Too few resources are directed towards understanding waterfowl hunters.
- Universities are less attentive to waterfowl science and monitoring/evaluating.
- Federal agencies are less attentive to waterfowl science and monitoring/evaluating.

Resource Allocation

Draft problem statement presented at workshops:

"The waterfowl management community is not in consensus on the fundamental objectives of waterfowl management, the means to achieve those objectives, nor the framework necessary for integrating multiple decisions in a way that efficiently allocates resources and coordinates actions."

Draft problem statement presented at workshops:

"The waterfowl management community is not in consensus on the fundamental objectives of waterfowl management, the means to achieve those objectives, nor the framework necessary for integrating multiple decisions in a way that efficiently allocates resources and coordinates actions."

Problem statement (offered by the Atlantic Flyway Migratory Game Bird Technical Section):

"Although the waterfowl management community is in general agreement on the fundamental objectives of waterfowl management, it has not reached consensus on the means to achieve those objectives, nor the framework necessary for integrating multiple decisions in a way that efficiently allocates resources and coordinates actions."

Objectives

Candidate objectives derived from earlier meetings

- Patuxent, Mississippi Flyway, DU

Offer a starting point for discussions

- Expedite workshop flow
- Obtain quantitative data via "Turning Point" technology

Participants encouraged to edit candidate objectives or offer new ones

Edits and additions examined after workshops as part of synthesis

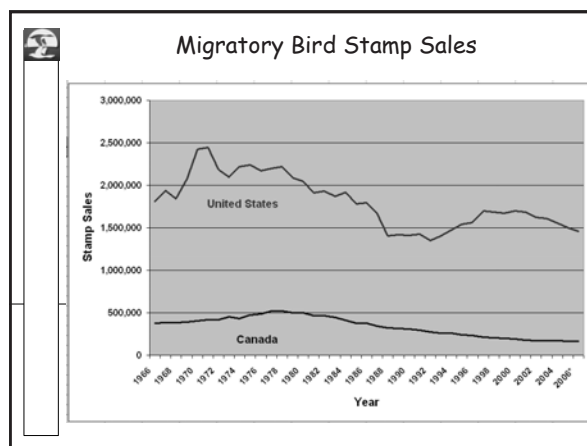
Candidate objectives

1. Promote a conservation ethic in the general public
2. Maximize waterfowl harvest
3. Maximize hunter satisfaction
4. Promote non-consumptive uses of waterfowl
5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity
6. Increase the understanding of ecological mechanisms driving changes in waterfowl abundance and waterfowl landscapes
7. Expand the sources and amount of funding for waterfowl conservation activities
8. Perpetuate the tradition of waterfowl hunting
9. Minimize harvest of under-abundant waterfowl species
10. Minimize loss and degradation of wetlands and associated uplands
11. Provide more public hunting opportunities
12. Minimize the detrimental effects of over-abundant populations (e.g. depredation, habitat destruction)
13. Maintain/establish regulations that are simple and will lead to high compliance rates among hunters
14. Maintain healthy waterfowl populations as part of the North American fauna
15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl
16. Increase public support for waterfowl conservation
17. Increase waterfowl hunter participation
18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.
19. Increase and improve duck breeding habitat
20. Ensure cooperation among jurisdictions (state, flyway, partners, etc.).
21. Increase and improve duck wintering habitat
22. Maximize the efficiency and effectiveness of the infrastructure and funding for waterfowl conservation
23. Provide maximum hunting opportunity.
24. Maintain the social license to hunt
25. Increase duck recruitment
26. Increase and improve duck migration habitat
27. Reduce mortality from disease and contaminants
28. Maintain a broad fall and winter distribution of waterfowl
29. Establish the infrastructure needed to ensure coherence in waterfowl management
30. Formalize the institutions needed to incorporate human dimensions into waterfowl management decisions
31. Increase hunter education and communications efforts

Top Fundamental Objectives

Number and percent of United States workshop participants identifying these as fundamental objectives (Total N = 93 for Canada, 97 for US)

Top US Fundamental Objectives	Canada	United States
14. Maintain healthy waterfowl populations as part of the North American fauna	91%	92%
8. Perpetuate the tradition of waterfowl hunting	36%	82%
5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity	49%	81%
15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl	26%	30%
18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.	43%	29%
1. Promote a conservation ethic in the general public	17%	21%



The Human Element: More than Hunters

1. Increase non-hunter education and communications efforts
2. Promote a waterfowl conservation ethic in the public that will enable continuation of consumptive and non-consumptive uses of, and appreciation for, waterfowl.
3. Promote the value of waterfowl to the general public.
4. Create a larger pool of informed citizens who support waterfowl conservation
5. Engage private landowners in landscape conservation
6. Create a larger group of informed citizens
7. Provide more public non-hunting opportunities
8. Outreach to non-hunting community
9. To provide waterfowl populations adequate to meet the requirements of the waterfowlers, aboriginal peoples and other users.
10. Maintain the tradition, societal values, and economic benefits of hunting and other recreational uses of waterfowl.
11. Increase support of non-consumptive users for waterfowl conservation
12. Sustain or increase the current levels of waterfowl hunter participation under the North American model of wildlife conservation, perpetuate the diverse traditions of waterfowl hunting and provide for non-consumptive uses.
13. Increase non-hunter participation
14. Maximize non-hunting recreational opportunities
15. Maximize non-hunting recreational satisfaction

U.S. Fish & Wildlife Service

Birding in the United States: A Demographic and Economic Analysis

Addendum to the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

Report 2006-4

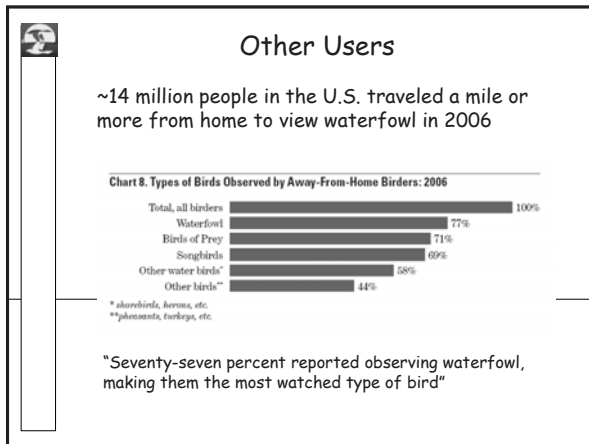


Table 9. Summary of Economic Impacts

	Birders
Birders	47,693,000
Total Expenditures	\$35,727,724,000
Total Output	\$82,176,751,000
Jobs	671,000
Employment Income	\$27,695,934,000
State Tax Revenues	\$6,157,232,000
Federal Tax Revenues	\$4,375,362,000

U.S. only

	Hunters	Birders
Birders	Waterfowl Hunters 1,306,000	47,693,000
Total Expenditures	Total Expenditures \$900,285,000	\$35,727,724,000
Total Output	Total Industry Output \$2,349,964,000	\$82,176,751,000
Jobs	Employment 27,618	671,000
Employment Income	Employment Income \$884,496,000	\$27,695,934,000
State Tax Revenues	State Tax Revenue \$153,805,000	\$6,157,232,000
Federal Tax Revenues	Federal Tax Revenue \$192,576,000	\$4,375,362,000

U.S. only

The Human Element

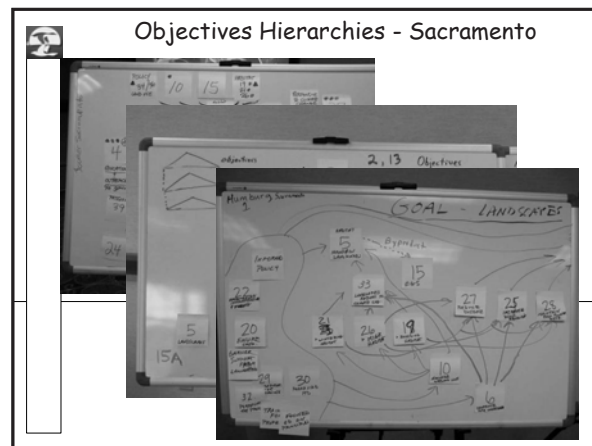
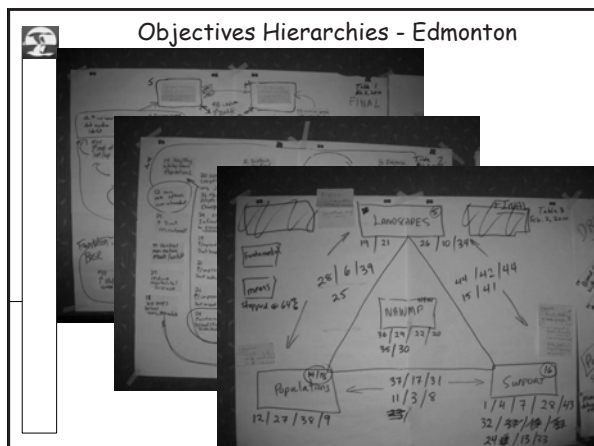
Should hunters and other users be included in one fundamental objective?

Different measurable attributes, management actions, and motivations.

Conclusion: Important to address both groups

- ### Fundamental Objectives of the NAWMP
1. To perpetuate waterfowl hunting.
 2. To sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes.
 3. To maintain healthy waterfowl populations in North America at levels sufficient to fulfill human desires (#1 & 2 above) and in harmony with the ecosystems on which waterfowl depend.
 4. To conserve landscapes capable of sustaining waterfowl populations at levels sufficient to satisfy human desires in perpetuity (#1 & 2 above).

- ### Means Objectives and Linkages
- What actions are necessary to achieve the fundamental objectives?
 - Which actions are most important?
 - How are those actions linked?
- ✓ "Objectives hierarchies"



- ### Objective Hierarchies... Important Common Threads
- Populations, landscapes and people (i.e., the fundamental objectives) were usually "linked"
 - The "people" objective was sometimes generalized to include all users, not just hunters
 - Participants clearly understood the interaction among objectives
 - Most groups did not have time to consider measurable attributes associated with objectives, nor did they prescribe actions to achieve objectives

- ### Purposes of the Workshops
- ✓ Solicit responses to the NAWMP Revision "Purpose Statement" and seek input on a "Problem Statement"
 - ✓ Identify fundamental and means objectives for waterfowl management
 - o Discuss alternative, broad-scale (high level) strategies for achieving objectives
 - o Identify actions and measurable attributes associated with objectives
 - ✓ Inform the management community about the NAWMP revision and engage them as participants in the process



So, Where is All This Going?

Clarification of the "vision" for integrated waterfowl management...



Why a Vision discussion now?

- Highlight the challenges of change and the imperative of adaptation for future success



The Challenge of Change and Adaptation

- Changes emerging since the mid-1980s
 - Social change (hunters, urbanization, population diversity)
 - Ecological (loss/modification of habitats, shifting system dynamics)
 - Physical/Climate (climate primarily with associated impacts)
 - Technological (internet, communication)
- Need for Resilience and Adaptability



Why a Vision Discussion now?

- Highlight the challenges of change and the imperative of adaptation for future success
- Waterfowl Management must be:
Relevant - Effective - Efficient - Adaptable



Why a Vision Discussion now?

- Highlight the challenges of change and the imperative of adaptation for future success
- Waterfowl Management must be:
Relevant - Effective - Efficient - Adaptable
- Provide context and encourage discussion during Round II



Why a Vision Discussion now?

- Highlight the challenges of change and the imperative of adaptation for future success
- Waterfowl Management must be:
Relevant - Effective - Efficient - Adaptable
- Provide context and encourage discussion during Round II
- Strengthen consensus on future directions for waterfowl management



A Vision for Integrated Waterfowl Management

We believe that the future of waterfowl management should consist of an integrated approach that fully considers the dimensions of habitat, populations, and human desires in decision-making and resource allocation. Such a coherent system should enable us to focus better on the things that matter most to the efficient achievement of renewed NAWMP conservation goals.



A Vision for Integrated Waterfowl Management

We believe that the future of waterfowl management should consist of an integrated approach that fully considers the dimensions of habitat, populations, and human desires in decision-making and resource allocation. Such a coherent system should enable us to focus better on the things that matter most to the efficient achievement of renewed NAWMP conservation goals.

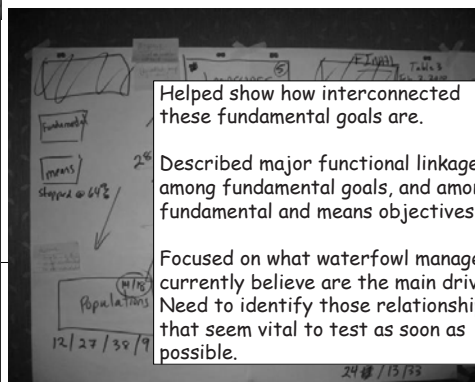
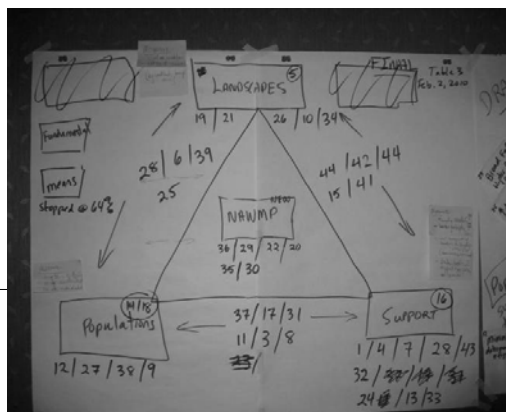


So, how will the NAWMP Revision Contribute to the Evolution of Waterfowl Management?



Fundamental Goals of Waterfowl Management

1. To perpetuate waterfowl hunting.
2. To sustain opportunities for the public to view and enjoy waterfowl and waterfowl landscapes.
3. To maintain healthy waterfowl populations in North America at levels sufficient to fulfill human desires (#1 and #2 above) and in harmony with the ecosystems on which waterfowl depend.
4. To conserve landscapes capable of sustaining waterfowl populations at levels sufficient to satisfy human desires (#1 & 2 above) in perpetuity.



Helped show how interconnected these fundamental goals are.

Described major functional linkages among fundamental goals, and among fundamental and means objectives.

Focused on what waterfowl managers currently believe are the main drivers. Need to identify those relationships that seem vital to test as soon as possible.



A Vision for Integrated Waterfowl Management

This Revision of the Plan seeks to set in motion changes that will establish a integrated system of waterfowl conservation featuring explicit and coherent objectives to guide habitat, harvest and human-dimension programs, and the means for coordinated actions to realize those objectives. Such a fully coherent management system would feature 5 elements:



A Vision for Integrated Waterfowl Management

This Revision of the Plan seeks to set in motion changes that will establish a integrated system of waterfowl conservation featuring explicit and coherent objectives to guide habitat, harvest and human-dimension programs, and the means for coordinated actions to realize those objectives. Such a fully coherent management system would feature 5 elements:



A Vision for Integrated Waterfowl Management

This Revision of the Plan seeks to set in motion changes that will establish a integrated system of waterfowl conservation featuring explicit and coherent objectives to guide habitat, harvest and human-dimension programs, and the means for coordinated actions to realize those objectives. Such a fully coherent management system would feature 5 elements:



A Vision for Integrated Waterfowl Management

- A set of widely supported fundamental goals;
- A working conceptual framework that allow managers to balance tradeoffs among goals;
- Goals that are linked and coherent across scales;
- Managers using linked decision frameworks to efficiently allocate resources to achieve those goals; and
- Institutional and cultural support to enable such integrated management actions.



What is Achievable in the Near Term?

- NAWMP has always been a high-level strategic guidance document.
- Other institutions have important roles to play in the evolution of waterfowl management.
- Many important details remain to be worked out.
- As in 1986, how far and how fast we go will depend upon our collective will.



Moving Forward

Within the 2012 Revision:

- Achieve broad consensus on the fundamental goals of waterfowl conservation.
- Reach agreement, at a conceptual level, on the desired future state of waterfowl management as an integrated enterprise.
- Achieve sufficient progress elaborating this integrated framework to develop momentum needed to establish and fully implement such a framework.
- Identify key functional linkages among fundamental objectives (and means objectives) and commit to testing these through adaptive management or directed research.



Moving Forward

Immediately Following the 2012 Revision:

- Within the next 2 years, *establish specific objectives* for population and habitat conservation, harvest opportunity, and user participation with acknowledged tradeoffs among them.
- *Implement a general integrated framework* for making linked harvest, habitat, and user management decisions.
- *Implement monitoring and evaluation programs* to track progress toward objectives and reduce uncertainties about key functional linkages among fundamental goals.



Moving Forward

Future 5-year Reviews of the Plan:

- Review progress towards achieving the renewed NAWMP objectives. Review external factors affecting NAWMP outcomes. Suggest course corrections as needed.
- Review progress in understanding functional linkages among objectives. Modify decision models as required.
- Assess commitments to monitoring and assessment. Recommend changes as required.
- Assess institutional processes for integration, effectiveness, efficiency, and responsiveness to change. Recommend adjustments as appropriate.
- At about 10-year intervals, review appropriateness of objectives themselves, governance structures, etc.



Moving Forward

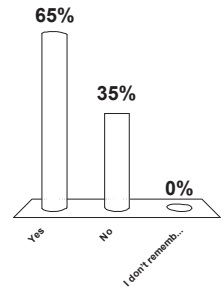
Relevant - Effective - Efficient - Adaptable

Welcome NAMWP Revision Stakeholder Input Round 2 Workshop



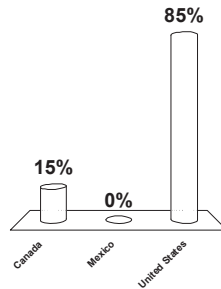
I attended a Round 1 workshop

1. Yes
2. No
3. I don't remember



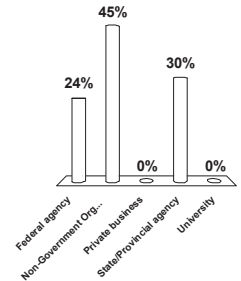
What is your country of residence?

1. Canada
2. Mexico
3. United States



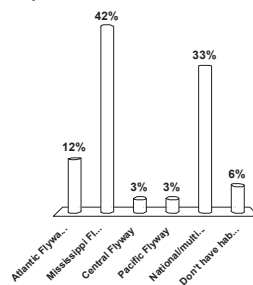
What is your primary employment affiliation?

1. Federal agency
2. Non-Government Organization
3. Private business
4. State/Provincial agency
5. University



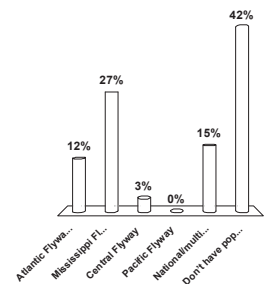
Which *ONE* best describes the geography for which you have waterfowl **habitat** responsibilities?

1. Atlantic Flyway
2. Mississippi Flyway
3. Central Flyway
4. Pacific Flyway
5. National/multiple Flyways
6. Don't have habitat responsibilities



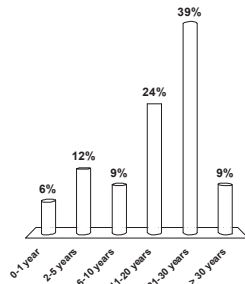
Which *ONE* best describes the geography for which you have waterfowl **population** responsibilities?

1. Atlantic Flyway
2. Mississippi Flyway
3. Central Flyway
4. Pacific Flyway
5. National/multiple Flyways
6. Don't have population responsibilities



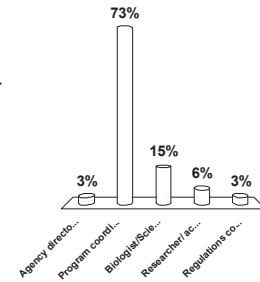
How long have you been active in waterfowl management?

1. 0-1 year
2. 2-5 years
3. 6-10 years
4. 11-20 years
5. 21-30 years
6. > 30 years



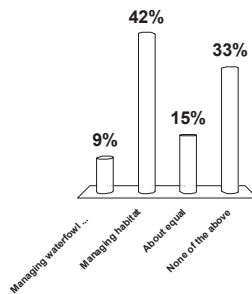
Which one hat do you most frequently wear when it comes to waterfowl management?

1. Agency director/ executive director
2. Program coordinator or administrator
3. Biologist/Scientist
4. Researcher/ academic
5. Regulations committee member



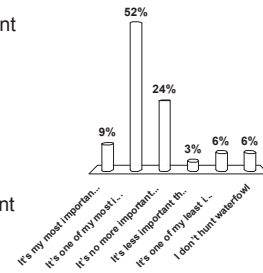
I spend most of my time on...

1. Managing waterfowl populations (sport harvest, subsistence take, take to reduce population size)
2. Managing habitat
3. About equal
4. None of the above



How important is waterfowl hunting to you?

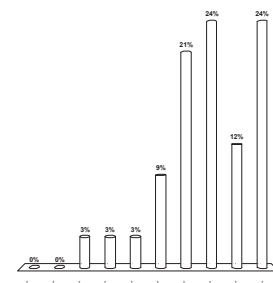
1. It's my most important recreational activity
2. It's one of my most important recreational activities
3. It's no more important than my other recreational activities
4. It's less important than my other recreational activities
5. It's one of my least important recreational activities
6. I don't hunt waterfowl

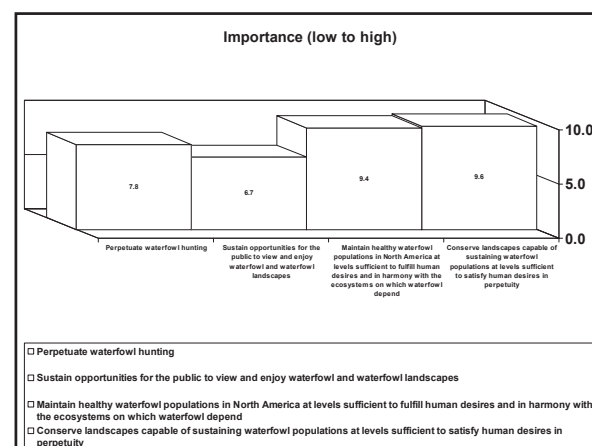
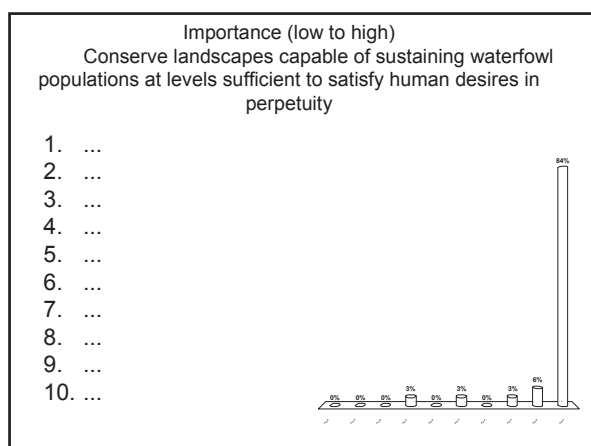
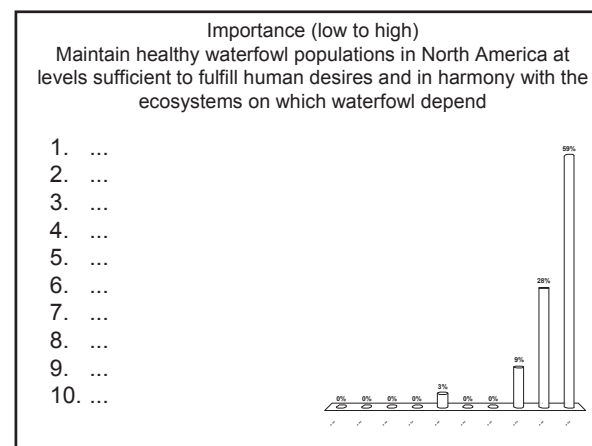
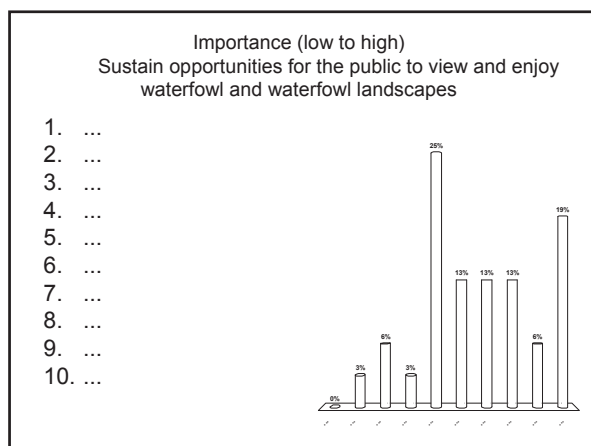


Ranking Fundamental Objectives

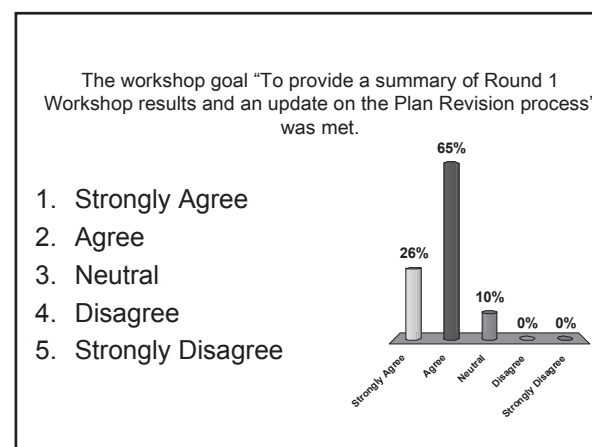
Importance (low to high)
Perpetuate waterfowl hunting

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...



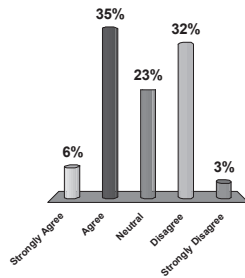


Workshop Evaluation



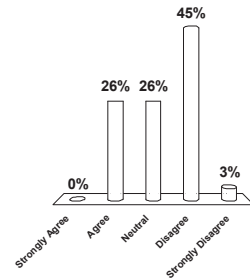
The workshop "To provide participants an opportunity to clarify and weight the fundamental objectives" was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



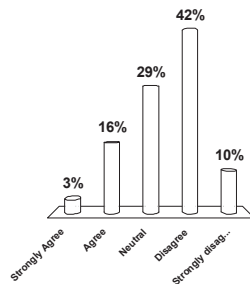
The workshop goal "To provide participants an opportunity to identify key measurable attributes, causal relationships and linkages" was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



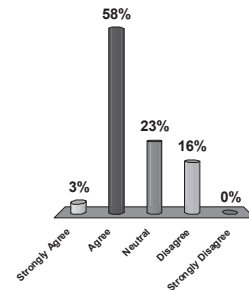
The workshop goal "To initiate discussion of institutions and processes that will facilitate integrated waterfowl management" was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree



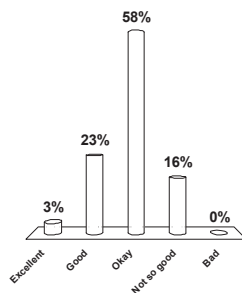
The workshop goal "To provide feedback that will be useful to the Plan Committee as they move forward with the Plan Revision" was met.

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



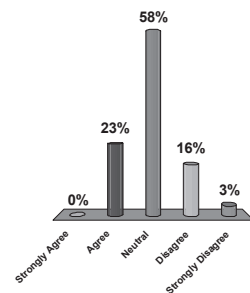
How do you feel about the Revision process as described at this meeting?

1. Excellent
2. Good
3. Okay
4. Not so good
5. Bad



Overall, I thought this workshop was a success

1. Strongly Agree
2. Agree
3. Neutral
4. Disagree
5. Strongly Disagree



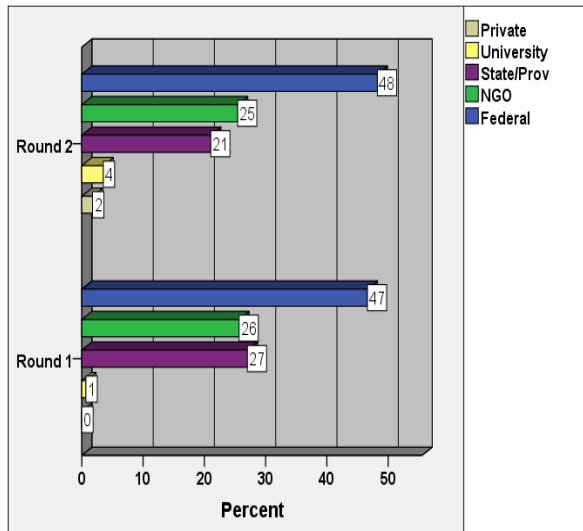
Appendix E. Demographics results cross-tabulated descriptive statistics

Comparison of participant characteristics, Round 1 versus Round 2

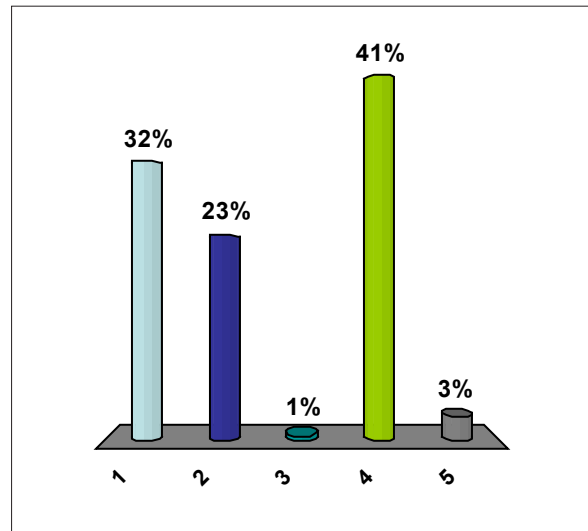
Participant Characteristic, Round 1 vs Round 2		Canada		U.S.		Total	
		Round		Round		Round	
		1	2	1	2	1	2
q3: Primary employment?	Federal agency	41%	39%	49%	55%	46%	49%
	Non-gov org	48%	37%	13%	18%	26%	26%
	Private business	0%	2%	0%	1%	0%	2%
	State/Provincial	11%	22%	37%	19%	27%	20%
	University	0%	0%	1%	6%	1%	4%
	Total	54	46	93	67	147	113
q4: Geography for which you have habitat responsibilities?	Atlantic FW	19%	26%	5%	1%	10%	12%
	Mississippi FW	2%	4%	17%	12%	12%	9%
	Central FW	6%	9%	11%	16%	9%	13%
	Pacific FW	9%	7%	30%	22%	22%	16%
	National/multiple FWs	46%	48%	19%	24%	29%	34%
	None	19%	7%	17%	24%	18%	17%
	Total	54	46	93	67	147	113
q5: Geography for which you have population responsibilities?	Atlantic FW	15%	22%	8%	4%	10%	12%
	Mississippi FW	0%	7%	19%	10%	12%	9%
	Central FW	4%	7%	9%	13%	7%	11%
	Pacific FW	4%	2%	26%	18%	18%	12%
	National/multiple FWs	33%	41%	29%	33%	31%	36%
	None	44%	22%	10%	21%	22%	21%
	Total	54	46	93	67	147	113
q6: How long active in waterfowl management?	0-1 yr	7%	2%	4%	9%	5%	6%
	2-5 yrs	6%	11%	16%	16%	12%	14%
	6-10 yrs	9%	9%	16%	12%	14%	11%
	11-20 yrs	26%	26%	22%	31%	23%	29%
	21-30 yrs	35%	33%	28%	21%	31%	26%
	>30 yrs	17%	20%	14%	10%	15%	14%
	Total	54	46	93	67	147	113
q7: Most frequent waterfowl management?	Agency/Executive director	19%	28%	9%	6%	12%	15%
	Program coordinator/admin	50%	35%	40%	45%	44%	41%
	Biologist/scientist	24%	26%	45%	37%	37%	33%
	Researcher	6%	7%	5%	10%	5%	9%
	Regulations committee member	2%	4%	1%	1%	1%	3%
	Total	54	46	93	67	147	113
q8: I spend most time:	Managing WF populations	15%	26%	31%	39%	25%	34%
	Managing habitat	43%	46%	27%	28%	33%	35%
	Equal habitat/populations	6%	2%	16%	15%	12%	10%
	None	37%	26%	26%	18%	30%	21%
	Total	54	46	93	67	147	113
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	17%	17%	17%	21%	17%	19%
	1 of most important rec-activities	31%	33%	41%	30%	37%	31%
	No more important than others	7%	17%	20%	19%	16%	19%
	Less important than others	13%	11%	9%	6%	10%	8%
	1 of least important rec-activities	2%	0%	1%	3%	1%	2%
	Don't WF hunt	30%	22%	12%	21%	18%	21%
	Total	54	46	93	67	147	113

Appendix F. Comparison of demographics, revision workshops and 2008 Future of Waterfowl Management Summit

What is your primary employment affiliation?

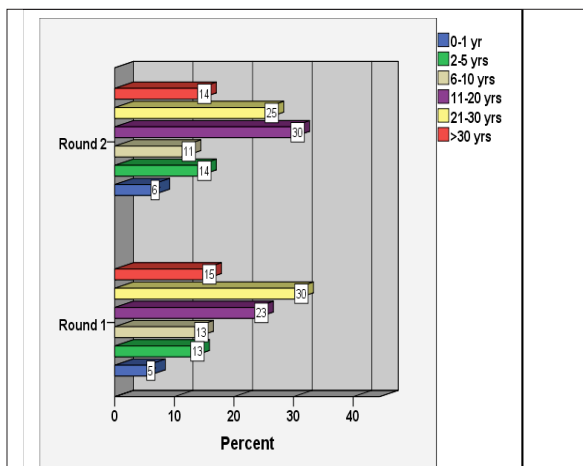


Revision Workshops:

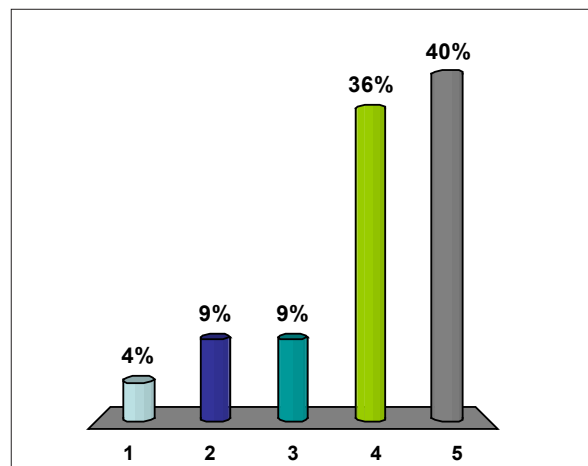


WF Summit: 1=Federal, 2=NGO, 3=private bus, 4=state/prv agency, 5=University

How long have you been active in waterfowl management?

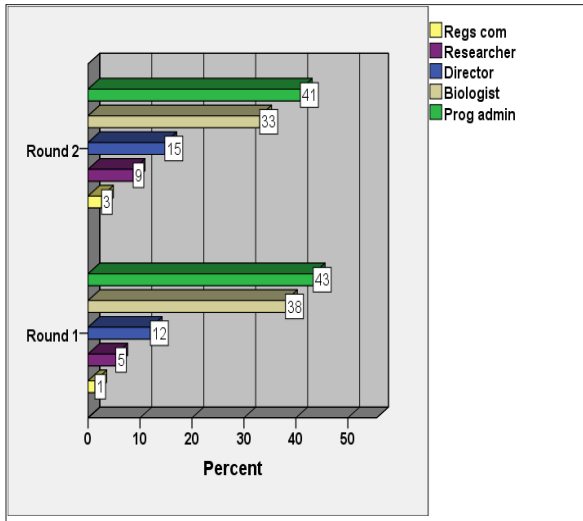


Revision workshops:

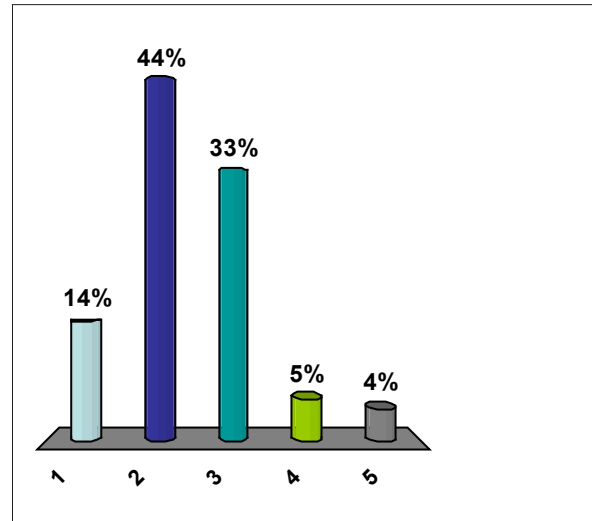


WF Summit: 1=0-1 yr, 2=2-5 yrs, 3=6-10 yrs, 4=11-20 yrs, 5=21-30 years

Which one hat do you most frequently wear when it comes to waterfowl management?

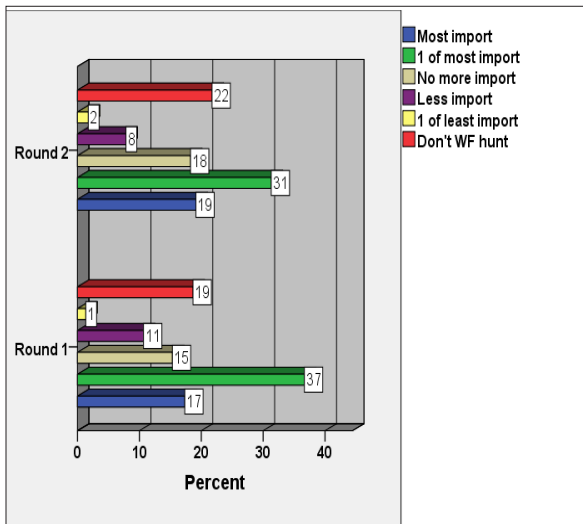


Revision workshop

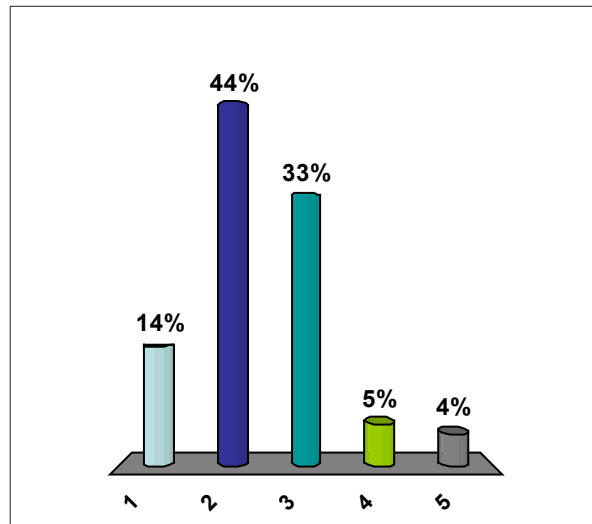


WF Summit: 1=director, 2=prog admin, 3= biologist, 4=research, 5=regs committee

How important is waterfowl hunting to you?



Revision workshop



WF Summit: 1=most import, 2=1 of most, 3=no more import, 4=less import, 5=1 of least, 6=don't hunt

Appendix G. Candidate Objectives Results

Round 1 participants' identification of objectives as either "fundamental," "means," or "not a relevant objective"

Characterize each objective...		Country of residence?		
		Canada	U.S.	Total
1. Promote a conservation ethic in the general public	Not a relevant waterfowl management objective	11%	20%	17%
	A fundamental waterfowl management objective	17%	22%	20%
	A means waterfowl management objective	72%	58%	63%
	Total	54	93	147
2. Maximize waterfowl harvest	Not a relevant waterfowl management objective	46%	23%	32%
	A fundamental waterfowl management objective	11%	2%	5%
	A means waterfowl management objective	43%	75%	63%
	Total	54	92	146
3. Maximize hunter satisfaction	Not a relevant waterfowl management objective	17%	9%	12%
	A fundamental waterfowl management objective	9%	3%	6%
	A means waterfowl management objective	74%	88%	83%
	Total	54	91	145
4. Promote non-consumptive uses of waterfowl	Not a relevant waterfowl management objective	13%	11%	12%
	A fundamental waterfowl management objective	6%	6%	6%
	A means waterfowl management objective	81%	83%	82%
	Total	53	93	146
5. Maintain landscapes capable of sustaining waterfowl populations in perpetuity	Not a relevant waterfowl management objective	0%	0%	0%
	A fundamental waterfowl management objective	93%	83%	86%
	A means waterfowl management objective	7%	17%	14%
	Total	54	92	146
6. Increase the understanding of ecological mechanisms driving changes in waterfowl abundance and waterfowl landscapes	Not a relevant waterfowl management objective	2%	4%	3%
	A fundamental waterfowl management objective	7%	2%	4%
	A means waterfowl management objective	91%	94%	93%
	Total	54	93	147
7. Expand the sources and amount of funding for waterfowl conservation activities	Not a relevant waterfowl management objective	2%	5%	4%
	A fundamental waterfowl management objective	7%	1%	3%
	A means waterfowl management objective	91%	94%	93%
	Total	54	93	147
8. Perpetuate the tradition of waterfowling	Not a relevant waterfowl management objective	6%	2%	3%
	A fundamental waterfowl management objective	41%	84%	68%
	A means waterfowl management objective	54%	14%	29%
	Total	54	93	147
9. Minimize harvest of under-abundant waterfowl species	Not a relevant waterfowl management objective	20%	26%	24%
	A fundamental waterfowl management objective	7%	1%	3%
	A means waterfowl management objective	72%	73%	73%
	Total	54	93	147
10. Minimize loss and degradation of wetlands and associated uplands	Not a relevant waterfowl management objective	0%	1%	1%
	A fundamental waterfowl management objective	28%	4%	13%
	A means waterfowl management objective	72%	95%	86%
	Total	54	93	147

Round 1 participants' identification of objectives as either "fundamental," "means," or "not a relevant objective"

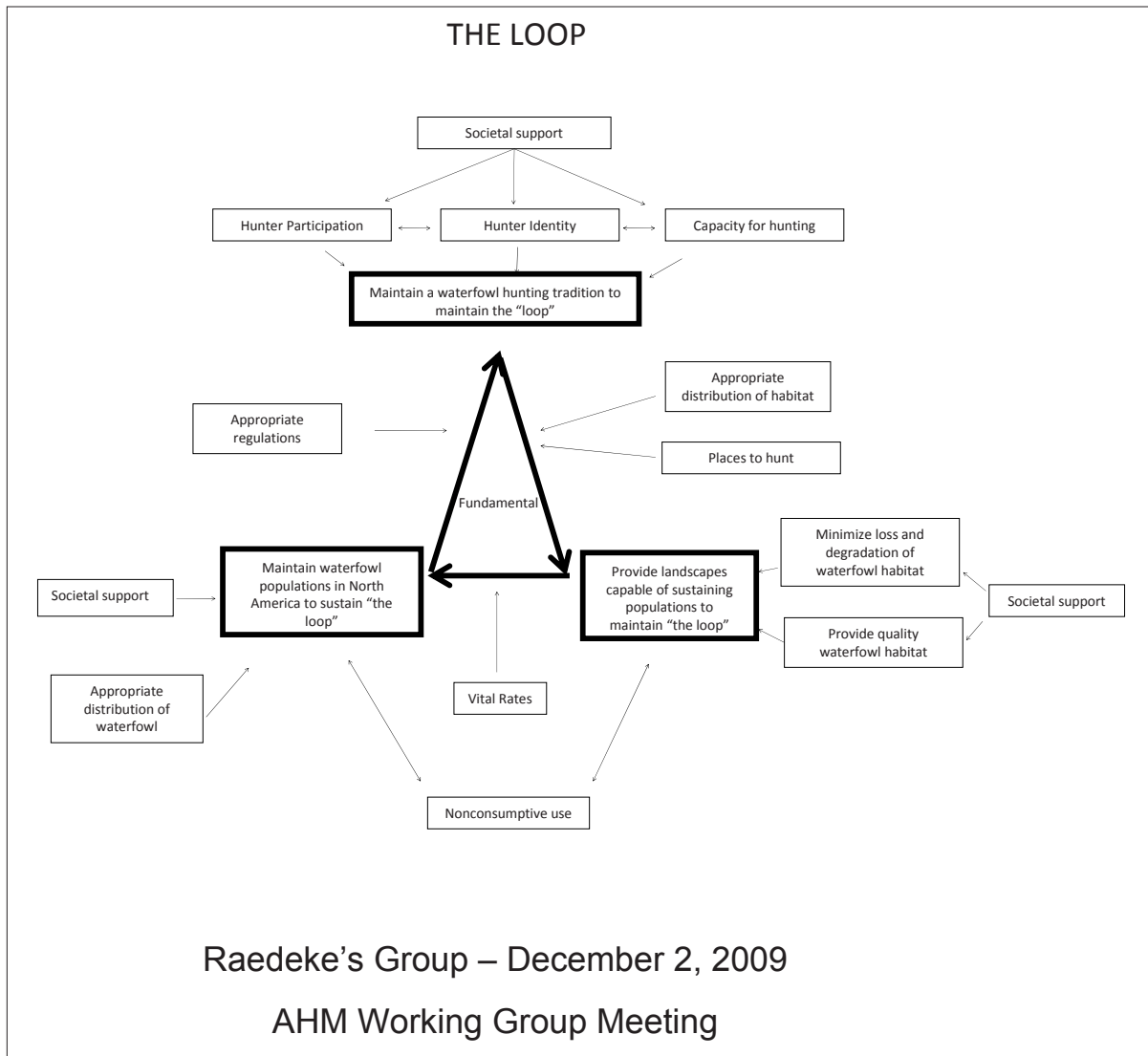
Characterize each objective...		Country of residence?		
		Canada	U.S.	Total
11. Provide more public hunting opportunities	Not a relevant waterfowl management objective	28%	12%	18%
	A fundamental waterfowl management objective	0%	0%	0%
	A means waterfowl management objective	72%	88%	82%
	Total	54	93	147
12. Minimize the detrimental effects of over-abundant populations (e.g. depredation, habitat destruction)	Not a relevant waterfowl management objective	6%	4%	5%
	A fundamental waterfowl management objective	6%	2%	3%
	A means waterfowl management objective	89%	94%	92%
	Total	54	93	147
13. Maintain/establish regulations that are simple and will lead to high compliance rates among hunters	Not a relevant waterfowl management objective	17%	13%	14%
	A fundamental waterfowl management objective	4%	1%	2%
	A means waterfowl management objective	80%	86%	84%
	Total	54	93	147
14. Maintain healthy waterfowl populations as part of the North American fauna	Not a relevant waterfowl management objective	2%	3%	3%
	A fundamental waterfowl management objective	91%	94%	93%
	A means waterfowl management objective	7%	3%	5%
	Total	54	93	147
15. Maximize ecological goods and services derived from wetlands and associated uplands managed for waterfowl	Not a relevant waterfowl management objective	11%	18%	16%
	A fundamental waterfowl management objective	26%	30%	29%
	A means waterfowl management objective	63%	52%	56%
	Total	54	93	147
16. Increase public support for waterfowl conservation	Not a relevant waterfowl management objective	2%	2%	2%
	A fundamental waterfowl management objective	20%	4%	10%
	A means waterfowl management objective	78%	94%	88%
	Total	54	93	147
17. Increase waterfowl hunter participation	Not a relevant waterfowl management objective	4%	6%	5%
	A fundamental waterfowl management objective	6%	3%	4%
	A means waterfowl management objective	91%	90%	90%
	Total	54	93	147
18. Ensure that no species of waterfowl falls below population levels necessary for long-term viability.	Not a relevant waterfowl management objective	2%	13%	9%
	A fundamental waterfowl management objective	41%	29%	33%
	A means waterfowl management objective	57%	58%	58%
	Total	54	93	147
19. Increase and improve duck breeding habitat	Not a relevant waterfowl management objective	2%	8%	5%
	A fundamental waterfowl management objective	17%	6%	10%
	A means waterfowl management objective	81%	86%	84%
	Total	54	93	147
20. Ensure cooperation among jurisdictions (state, flyway, partners, etc.)	Not a relevant waterfowl management objective	4%	22%	15%
	A fundamental waterfowl management objective	9%	6%	7%
	A means waterfowl management objective	87%	72%	78%
	Total	54	93	147

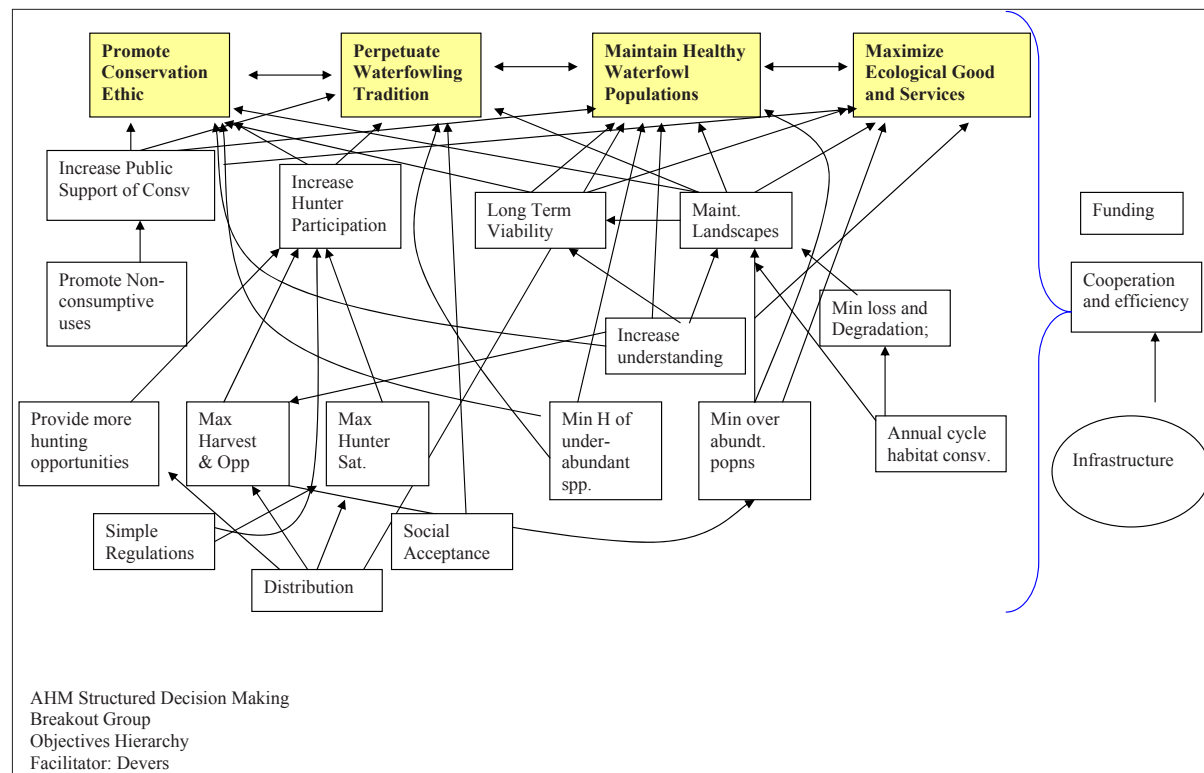
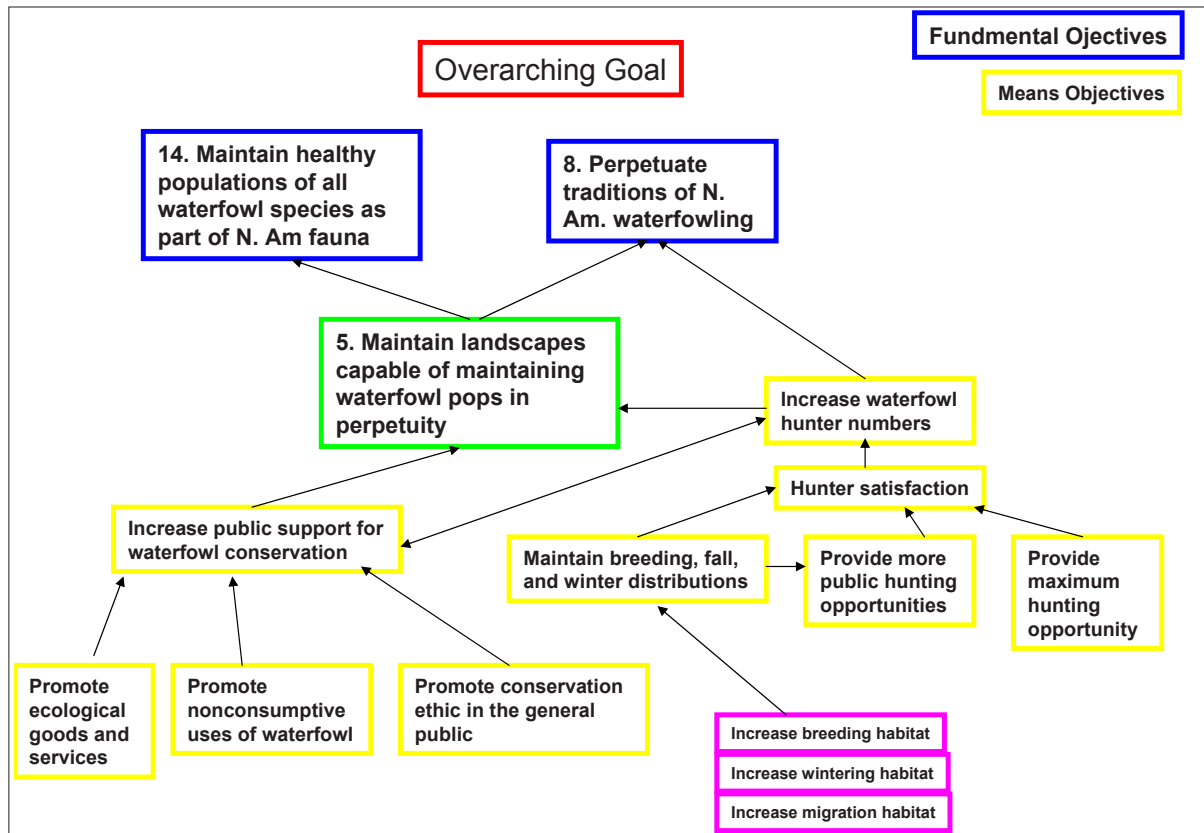
Round 1 participants' identification of objectives as either "fundamental," "means," or "not a relevant objective"

Characterize each objective...		Country of residence?		
		Canada	U.S.	Total
21. Increase and improve duck wintering habitat	Not a relevant waterfowl management objective	2%	9%	6%
	A fundamental waterfowl management objective	11%	2%	5%
	A means waterfowl management objective	87%	89%	88%
	Total	54	93	147
22. Maximize the efficiency and effectiveness of the infrastructure and funding for waterfowl conservation	Not a relevant waterfowl management objective	9%	15%	13%
	A fundamental waterfowl management objective	4%	5%	5%
	A means waterfowl management objective	87%	80%	82%
	Total	54	93	147
23. Provide maximum hunting opportunity	Not a relevant waterfowl management objective	35%	13%	21%
	A fundamental waterfowl management objective	9%	2%	5%
	A means waterfowl management objective	56%	85%	74%
	Total	54	93	147
24. Maintain the social license to hunt	Not a relevant waterfowl management objective	17%	17%	17%
	A fundamental waterfowl management objective	17%	12%	14%
	A means waterfowl management objective	67%	71%	69%
	Total	54	93	147
25. Increase duck recruitment	Not a relevant waterfowl management objective	7%	9%	8%
	A fundamental waterfowl management objective	11%	1%	5%
	A means waterfowl management objective	81%	90%	87%
	Total	54	93	147
26. Increase and improve duck migration habitat	Not a relevant waterfowl management objective	2%	8%	5%
	A fundamental waterfowl management objective	11%	1%	5%
	A means waterfowl management objective	87%	91%	90%
	Total	54	93	147
27. Reduce mortality from disease and contaminants	Not a relevant waterfowl management objective	11%	14%	13%
	A fundamental waterfowl management objective	4%	0%	1%
	A means waterfowl management objective	85%	86%	86%
	Total	54	93	147
28. Maintain a broad fall and winter distribution of waterfowl	Not a relevant waterfowl management objective	19%	13%	15%
	A fundamental waterfowl management objective	11%	1%	5%
	A means waterfowl management objective	70%	86%	80%
	Total	54	93	147
29. Establish the infrastructure needed to ensure coherence in waterfowl management	Not a relevant waterfowl management objective	15%	30%	24%
	A fundamental waterfowl management objective	7%	2%	4%
	A means waterfowl management objective	78%	68%	71%
	Total	54	93	147
30. Formalize the institutions needed to incorporate human dimensions into waterfowl management decisions	Not a relevant waterfowl management objective	39%	38%	38%
	A fundamental waterfowl management objective	4%	4%	4%
	A means waterfowl management objective	57%	58%	58%
	Total	54	93	147
31. Increase hunter education and communications efforts	Not a relevant waterfowl management objective	15%	16%	16%
	A fundamental waterfowl management objective	0%	0%	0%
	A means waterfowl management objective	85%	84%	84%
	Total	54	93	147

Appendix H. Objectives Hierarchies Diagrams

PORTLAND WORKSHOP





Maximize EG&S

- Increase Public support for conservation**
- Promote non-consumptive use**

Ensure Long-term viability

- Increase ecological understanding**
- Maintain landscapes**

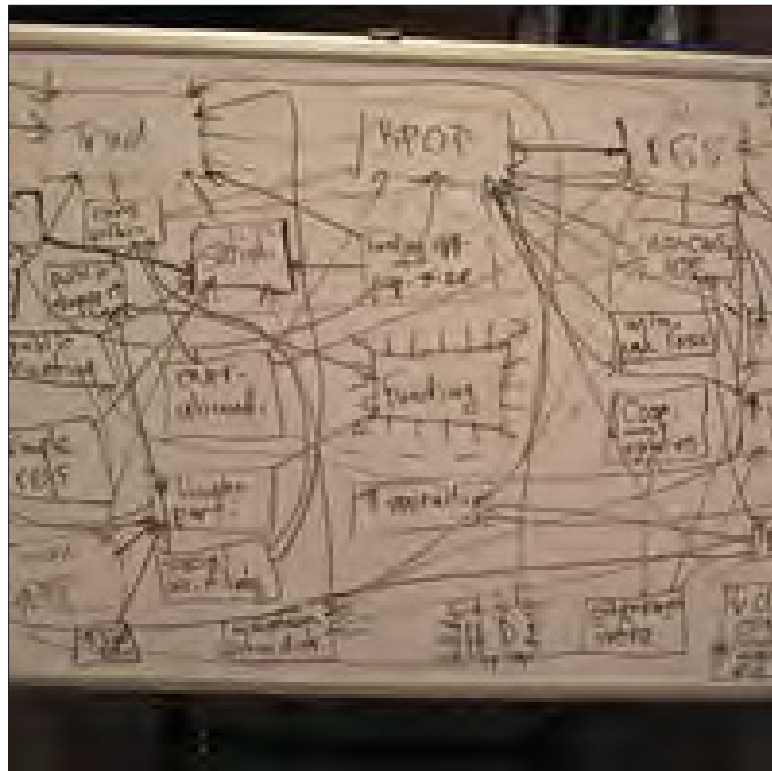
Maintain landscapes

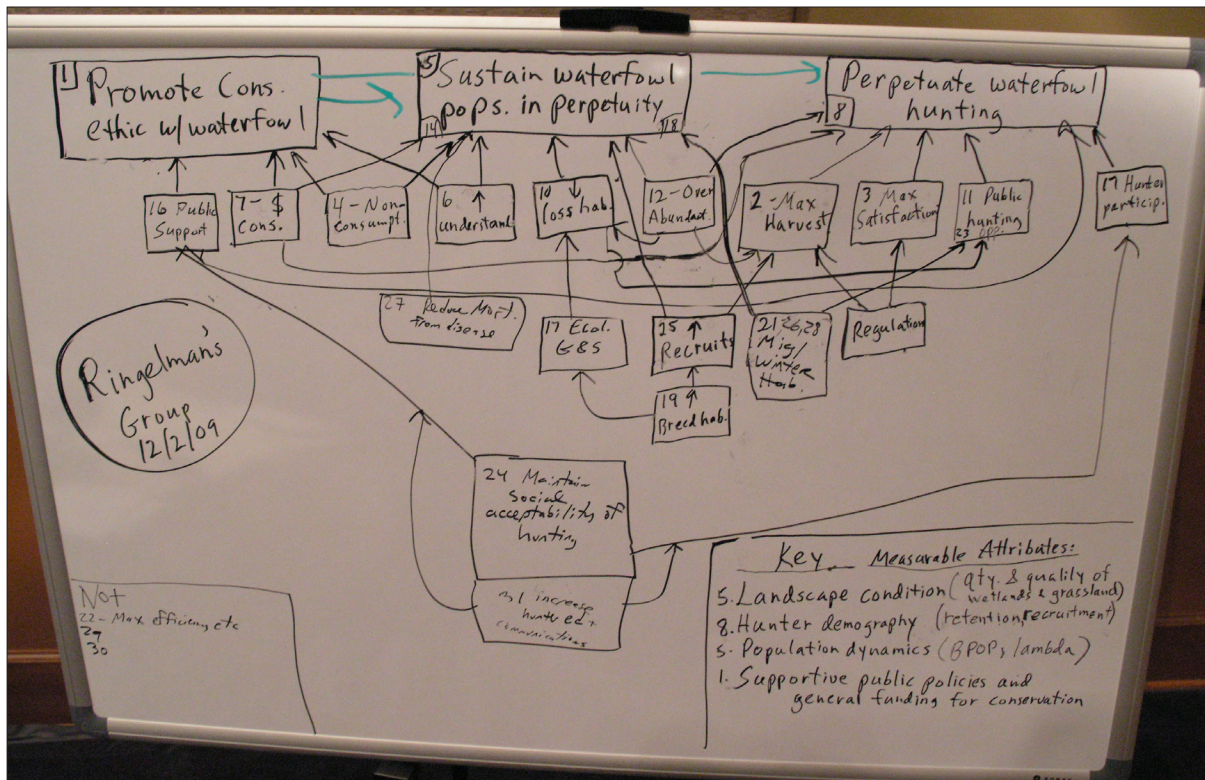
- Minimize loss and degradation**
- Increase ecological understanding**
- Minimize over abundant populations**
- Manage habitat throughout annual life cycle**

Increase ecological understanding

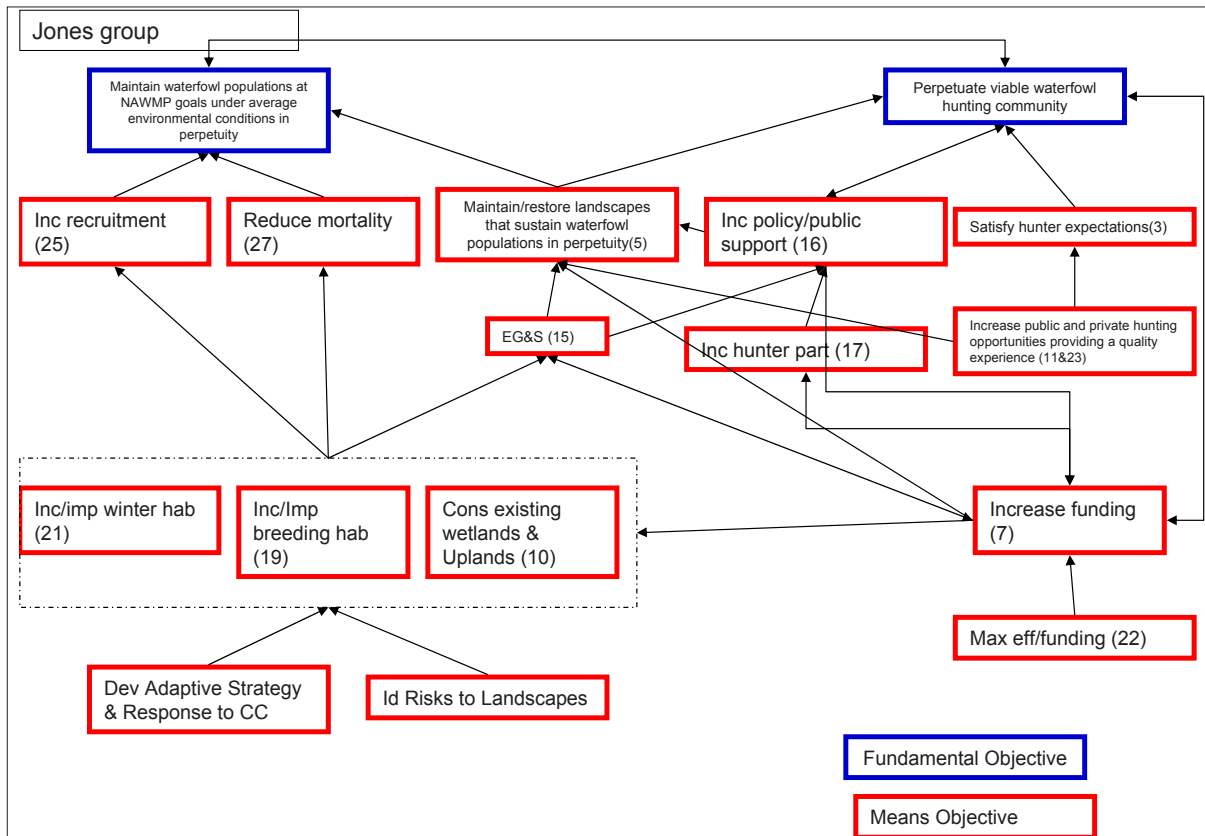
Minimize over-abundant species

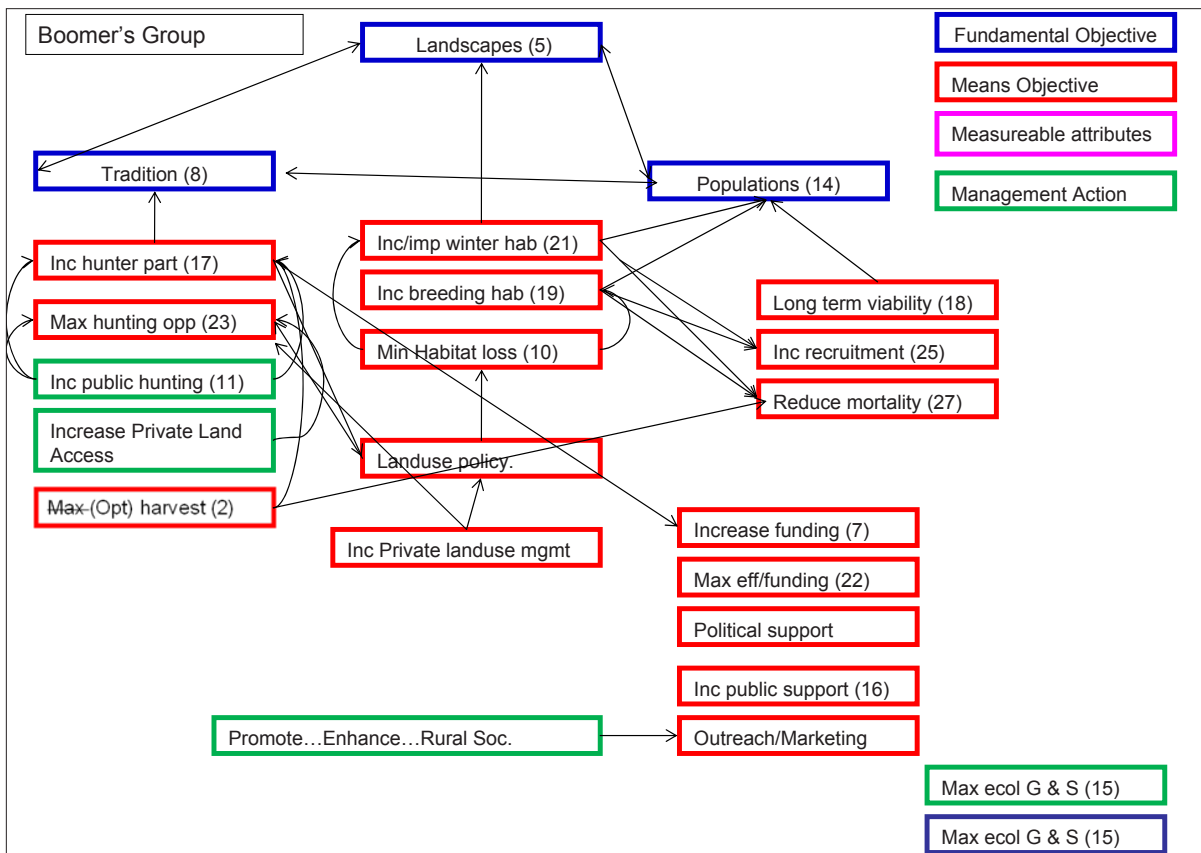
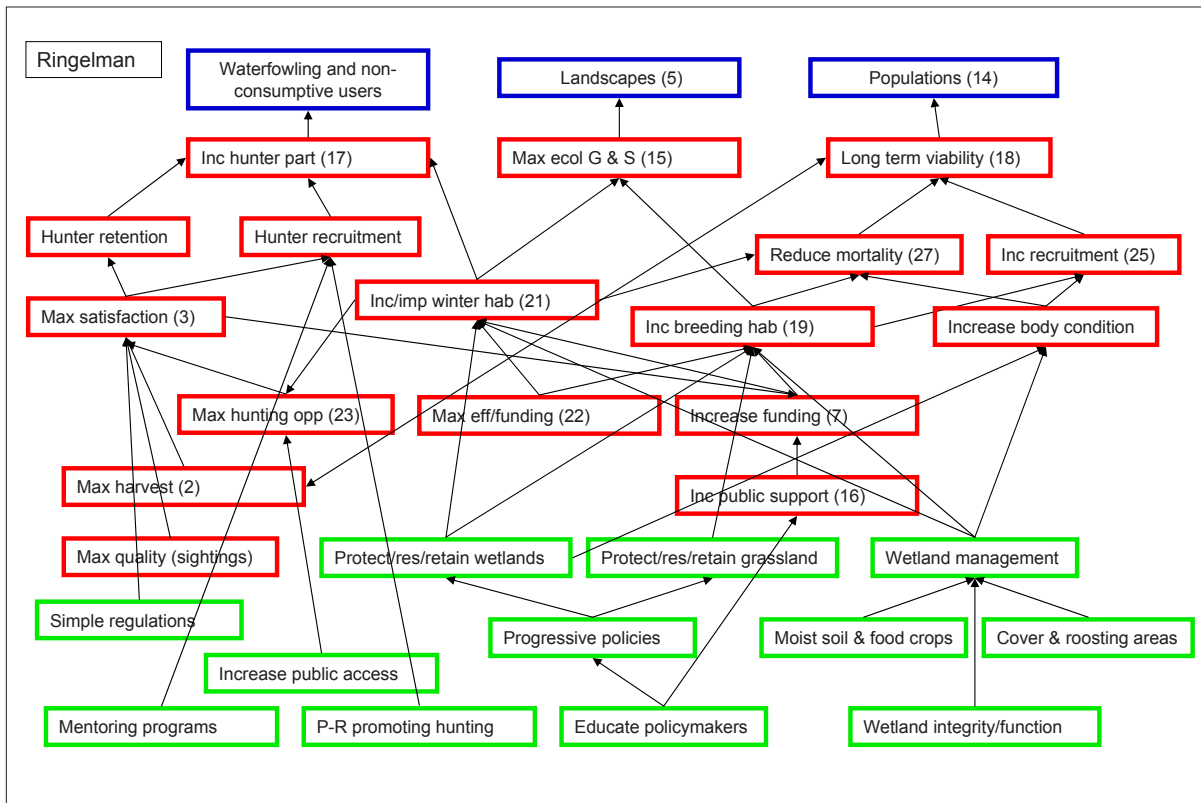
- Maximize harvest and opportunity**

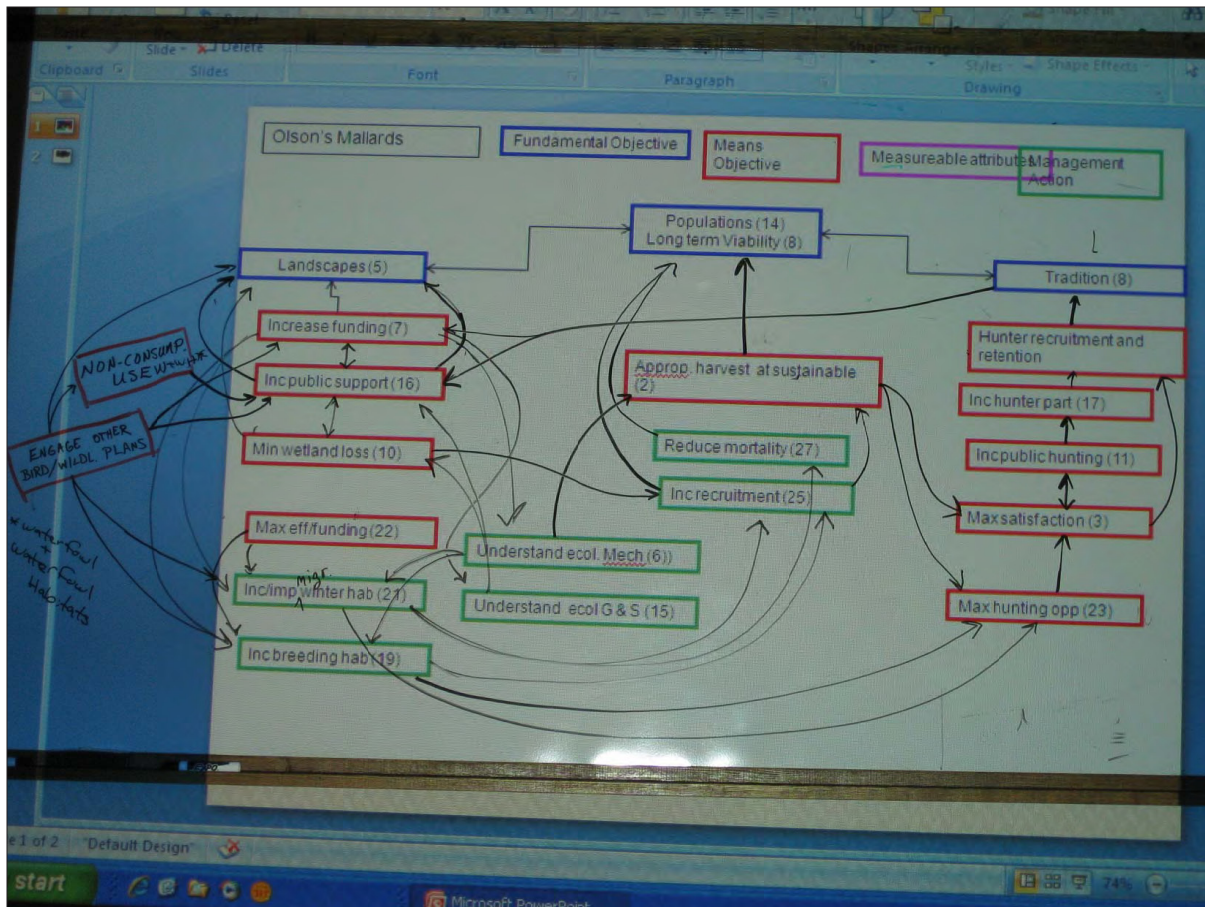


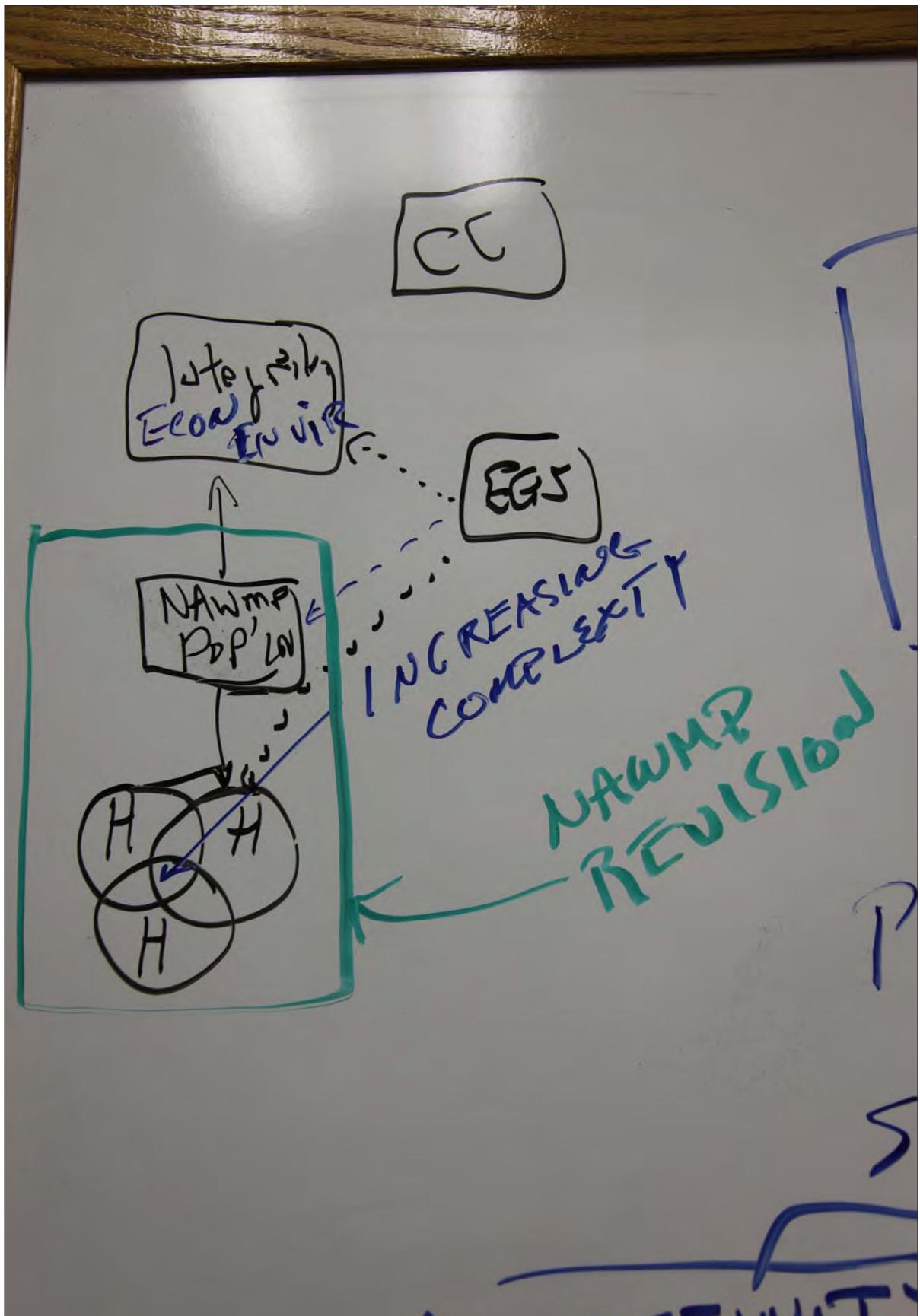


MEMPHIS WORKSHOP

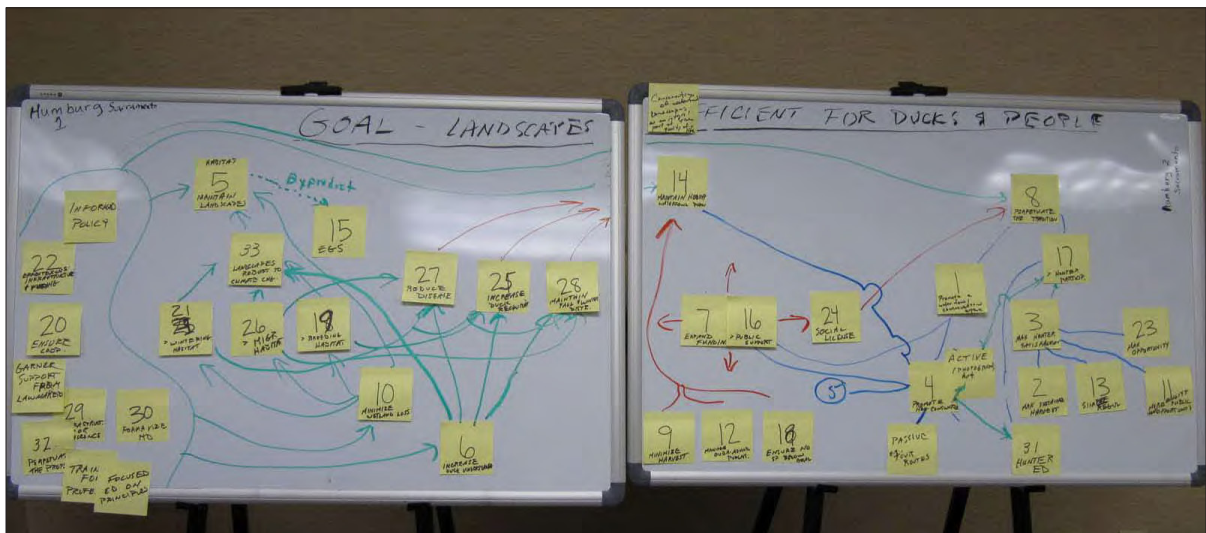
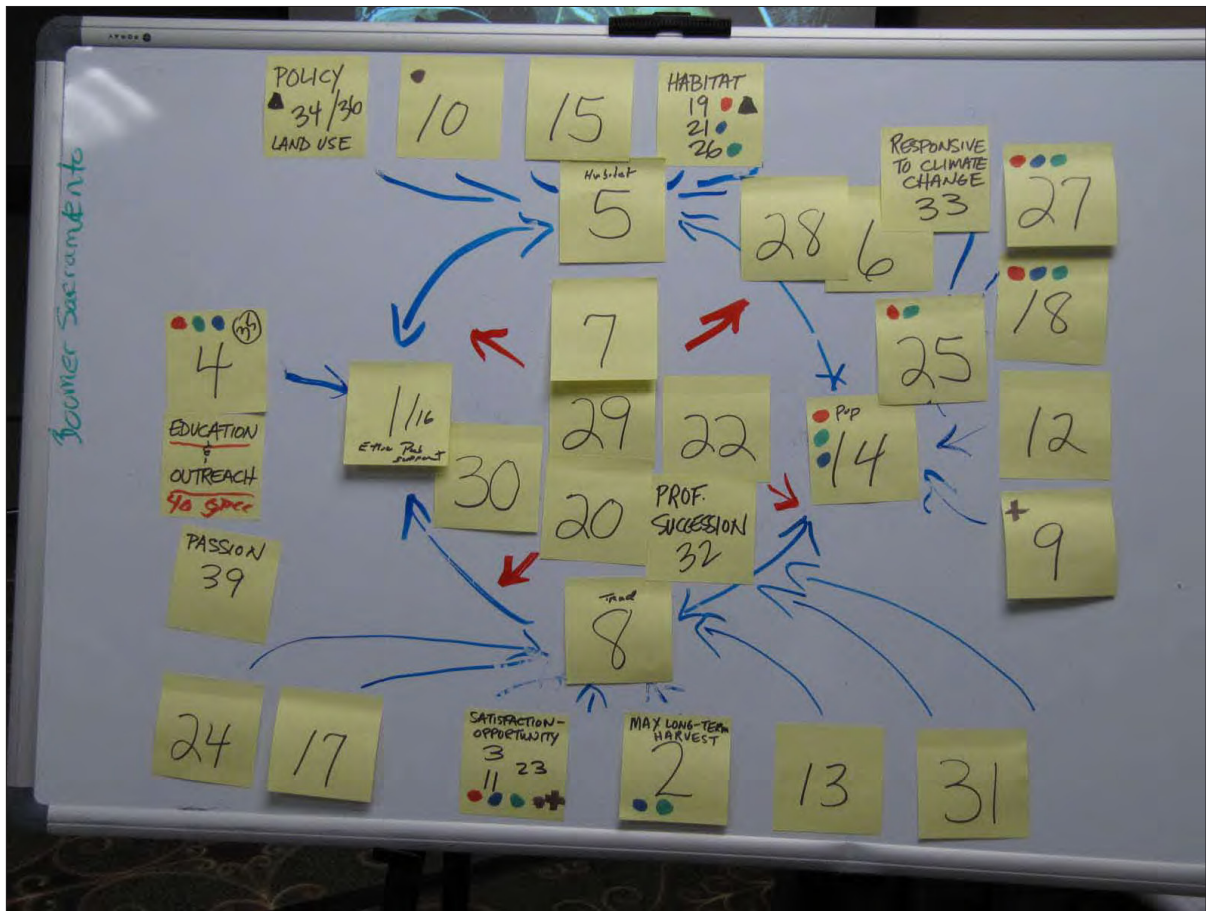


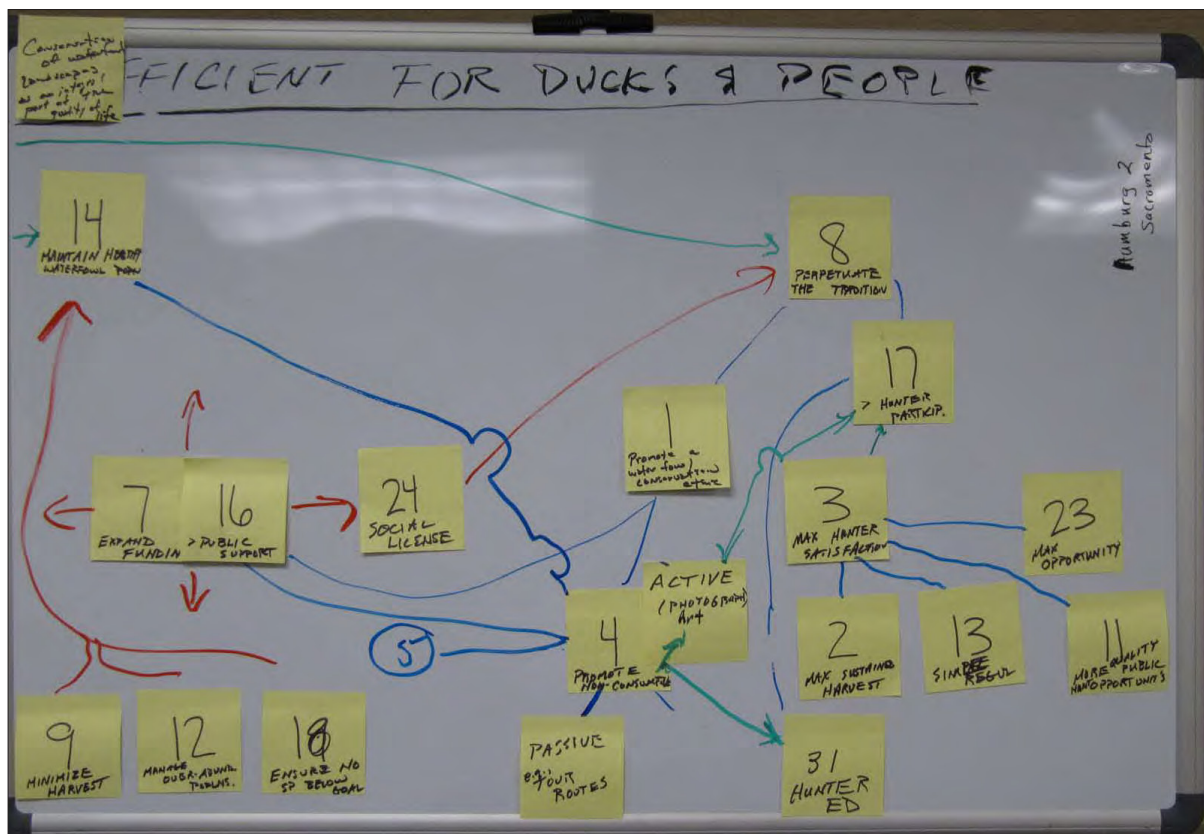
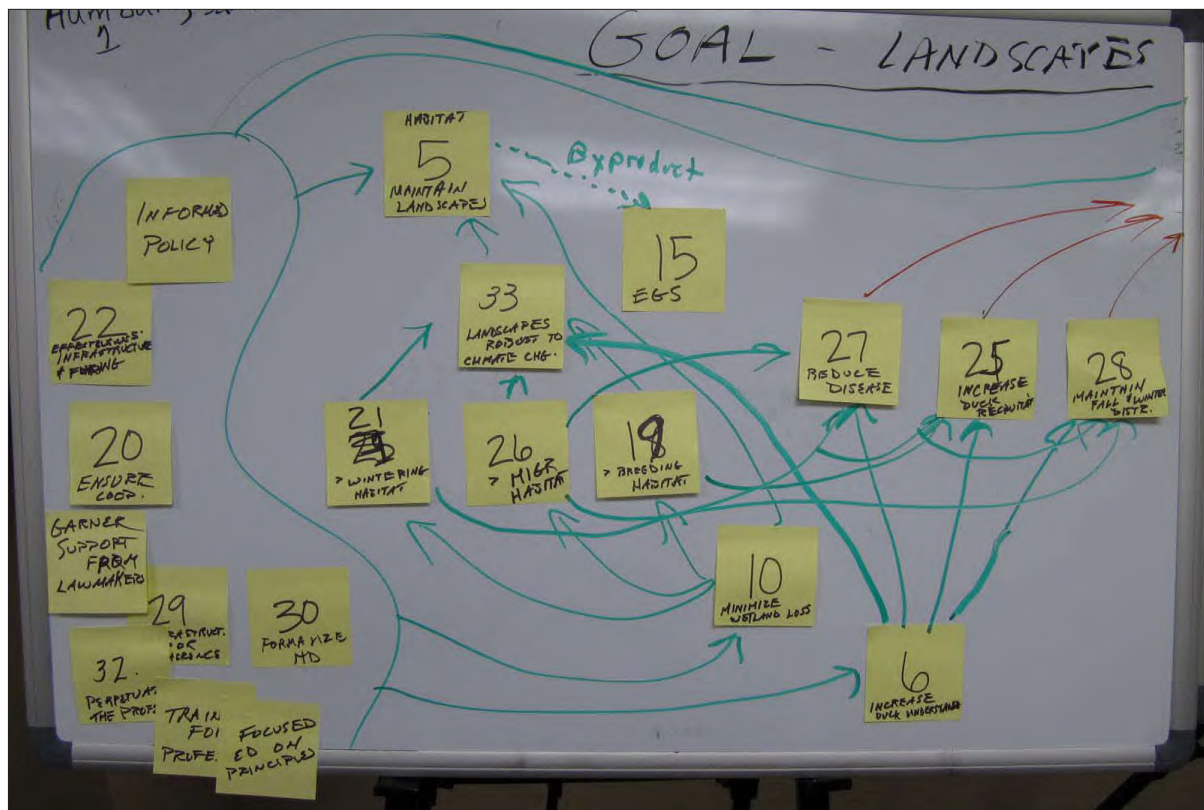


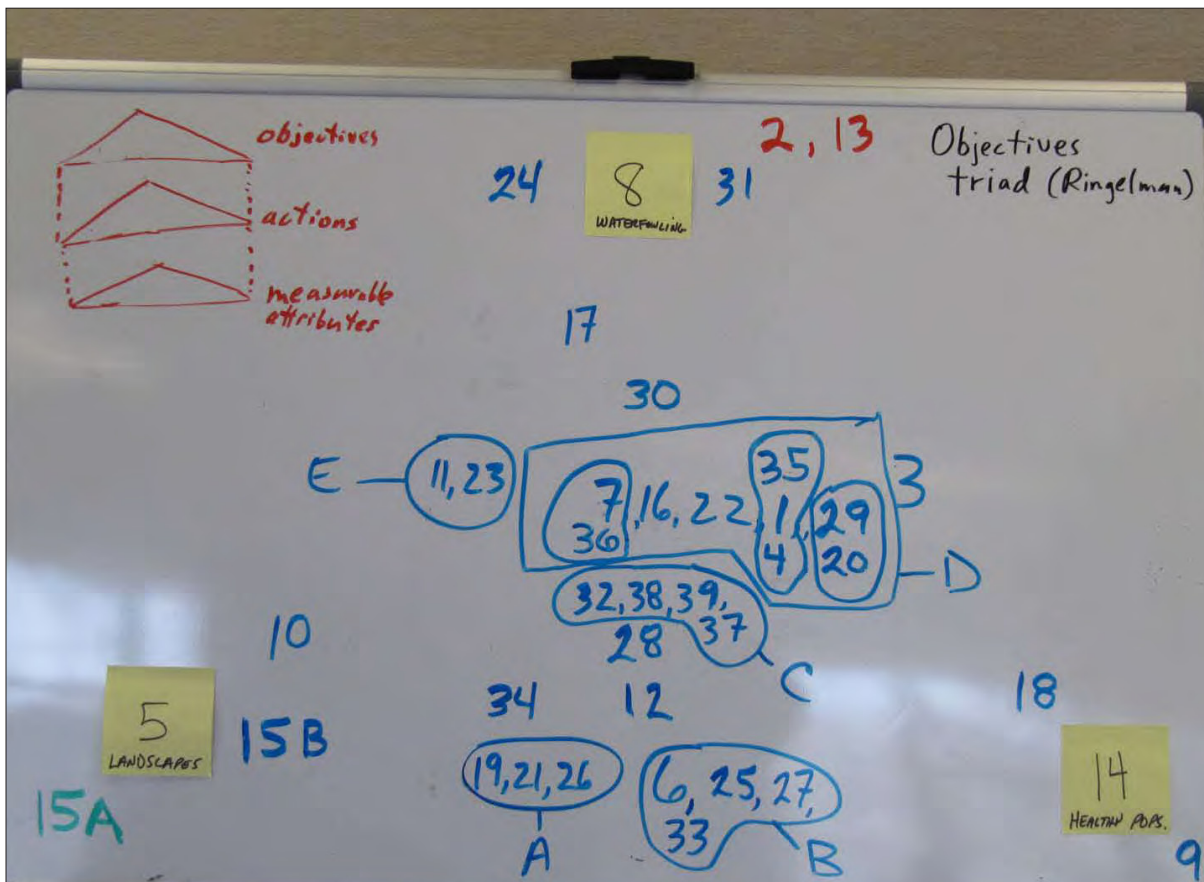
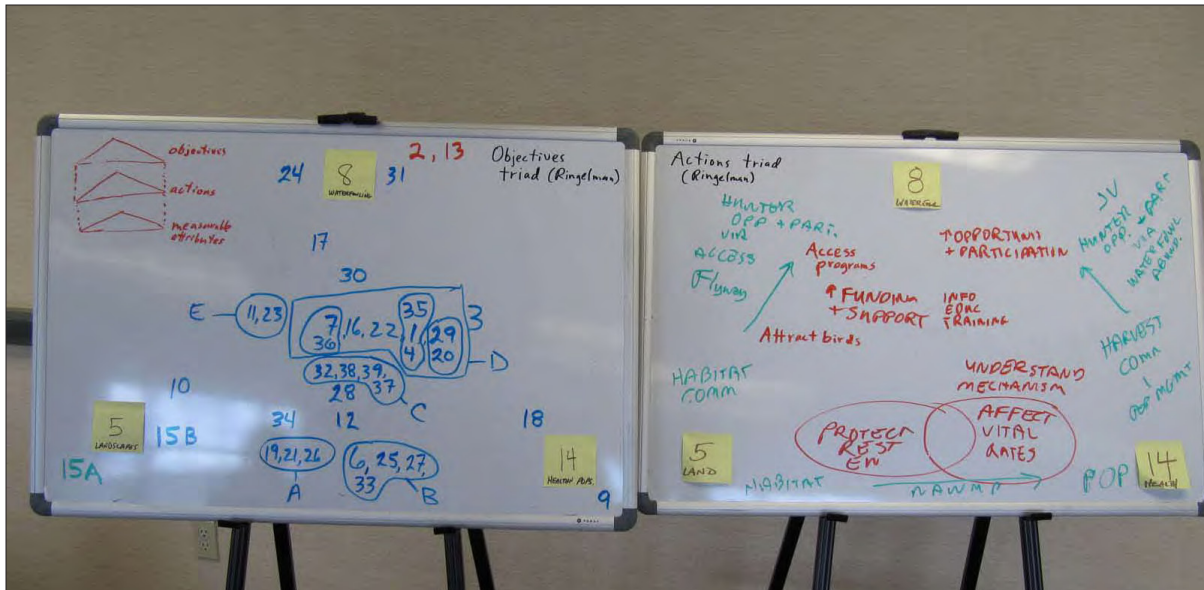


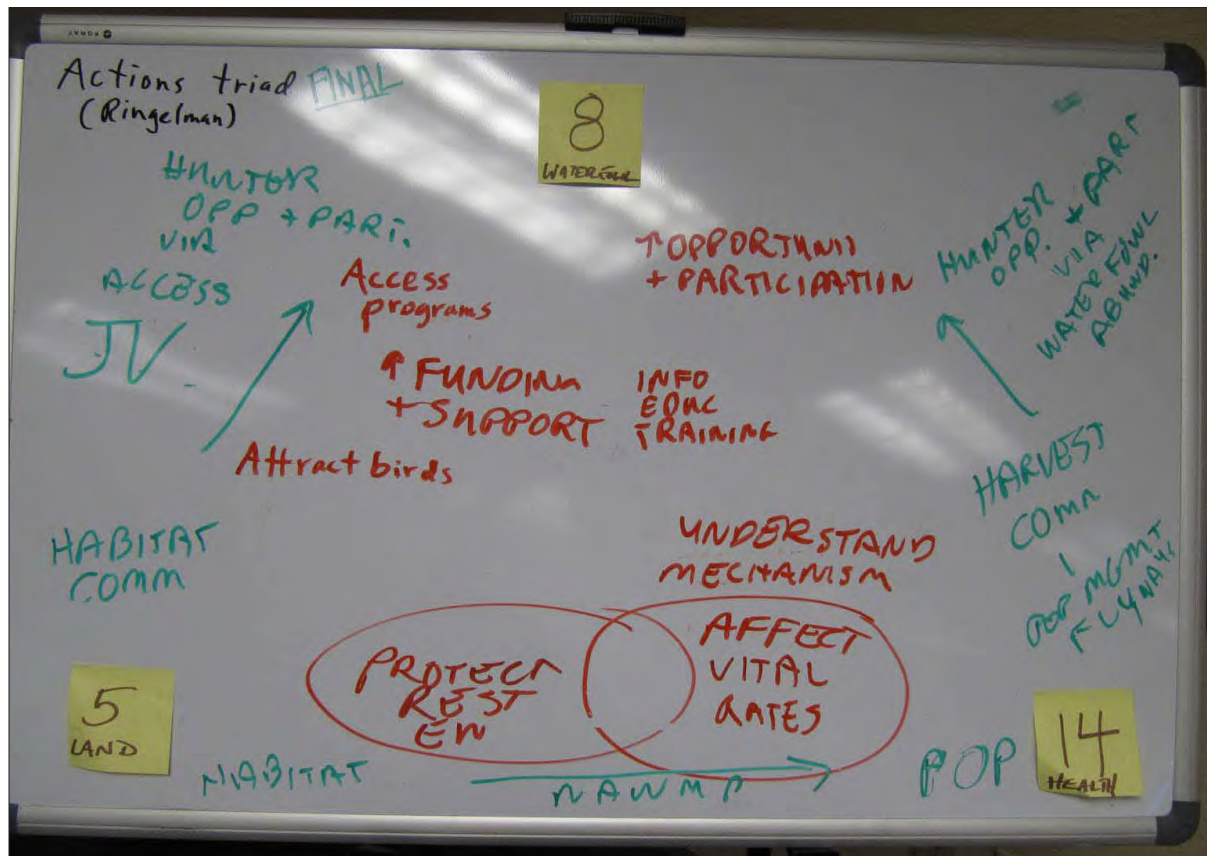


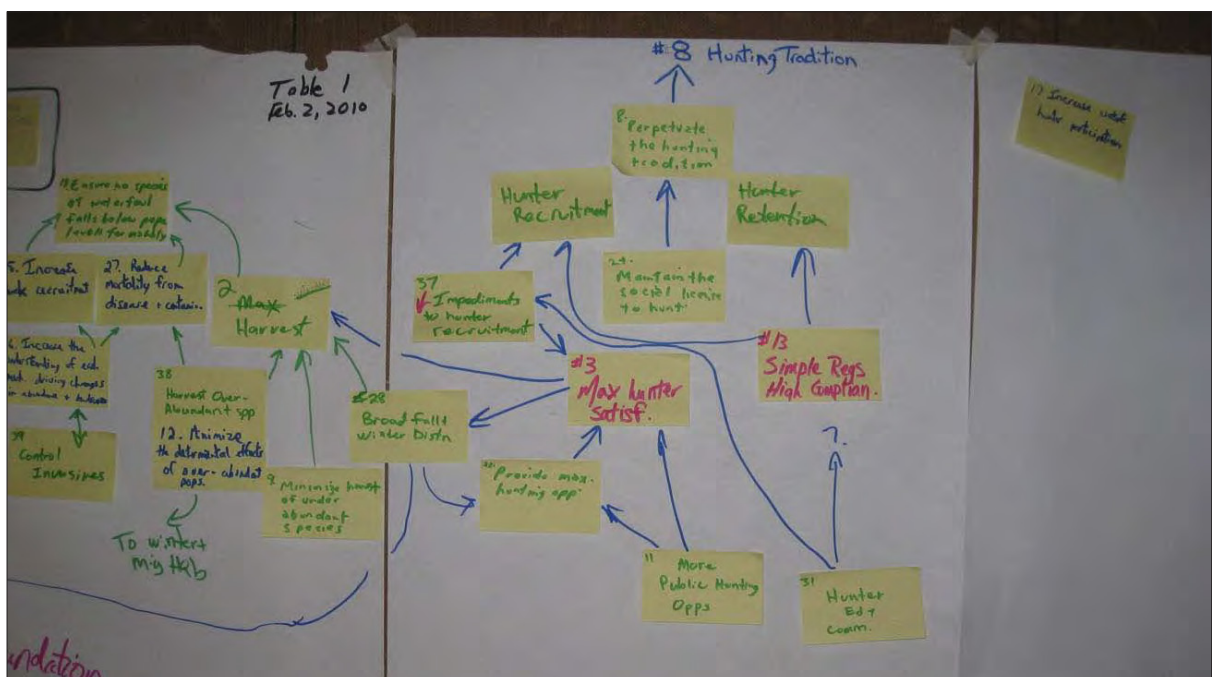
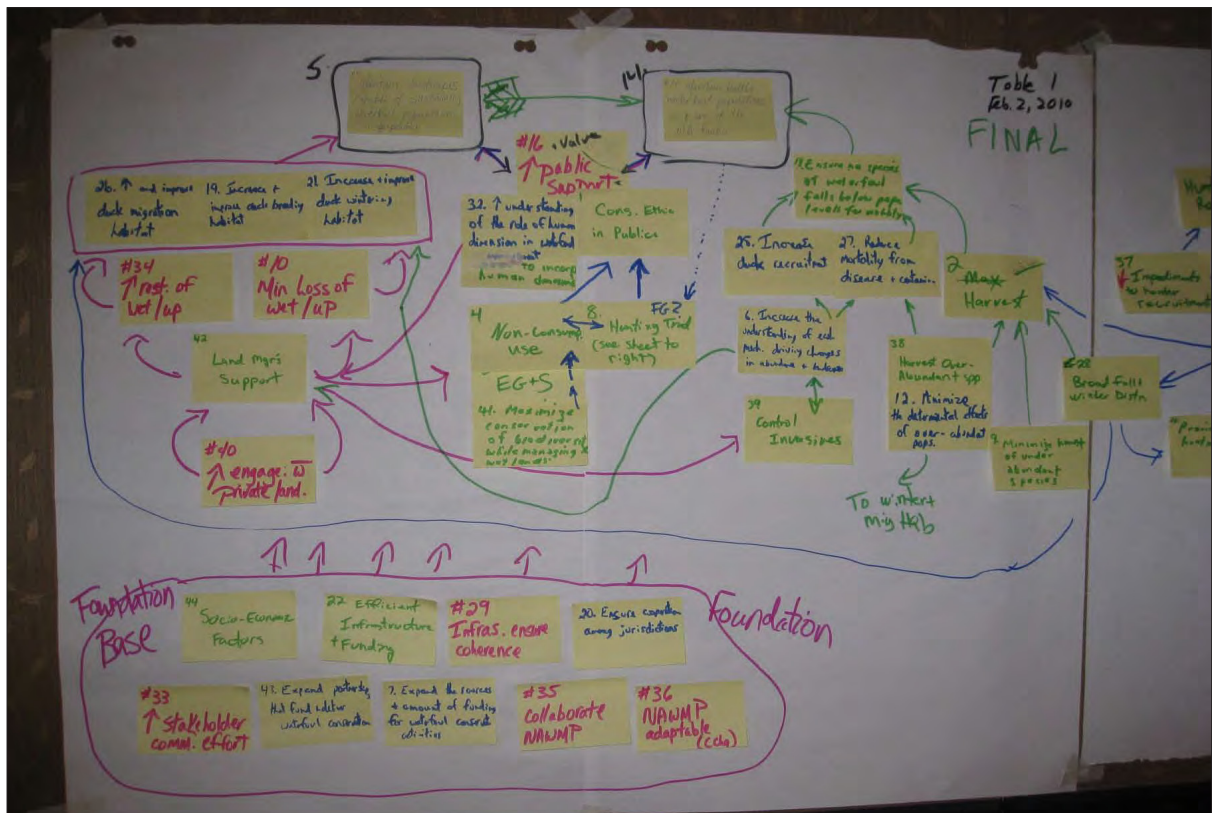
SACRAMENTO WORKSHOP

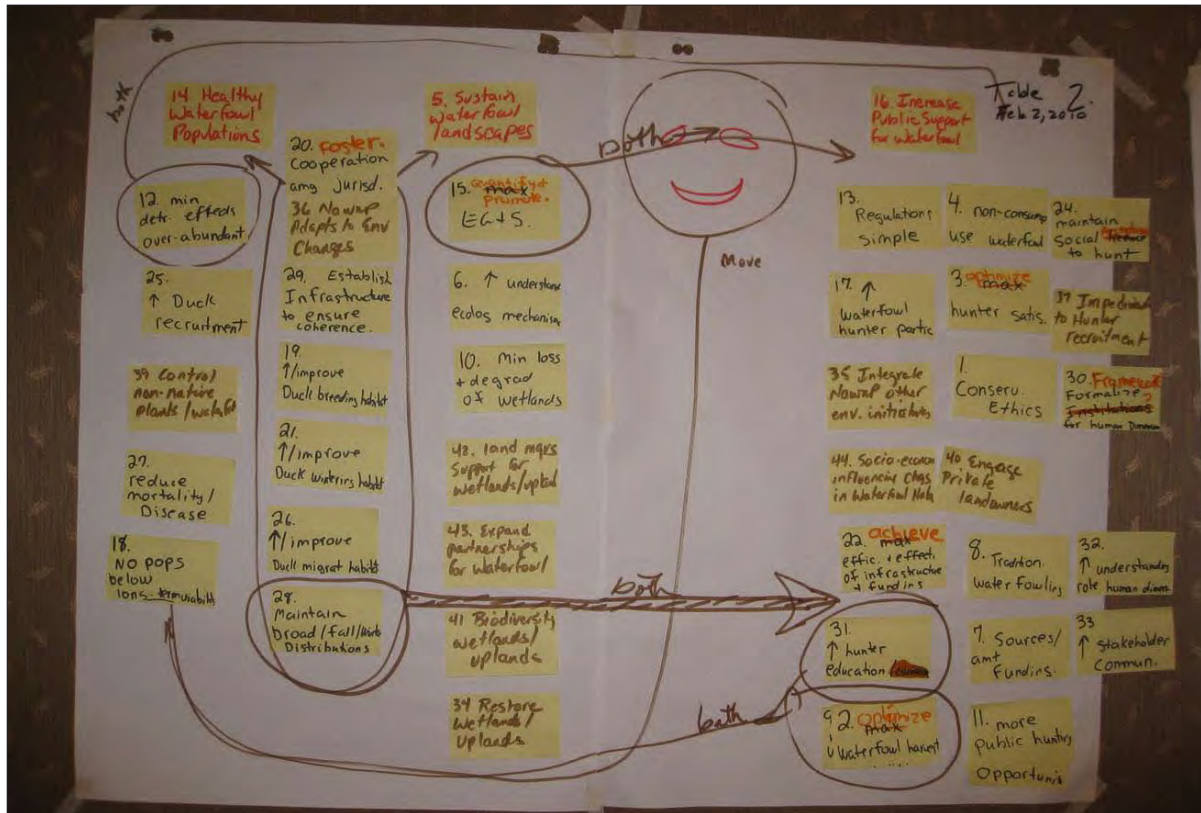




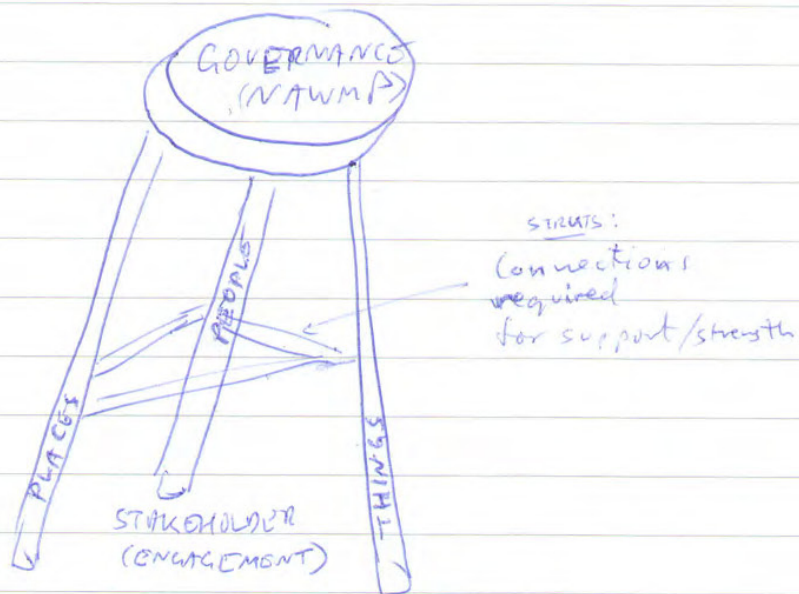






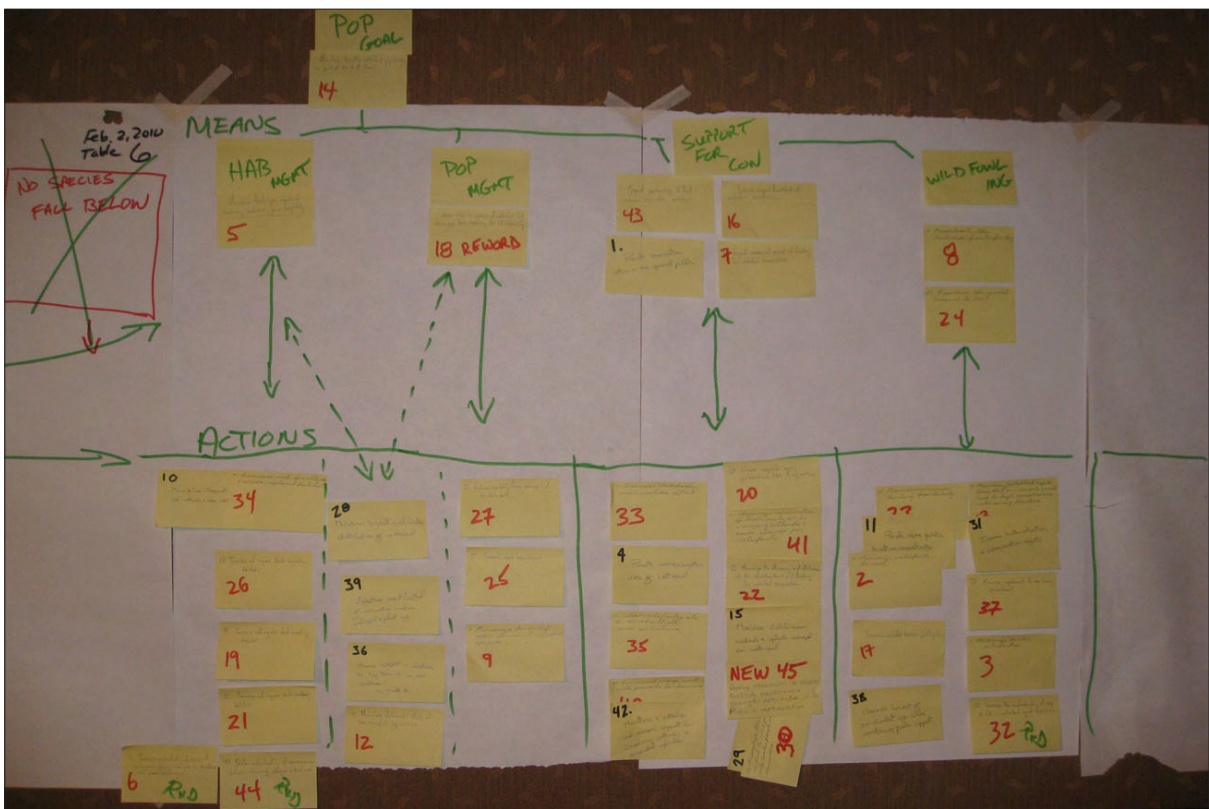
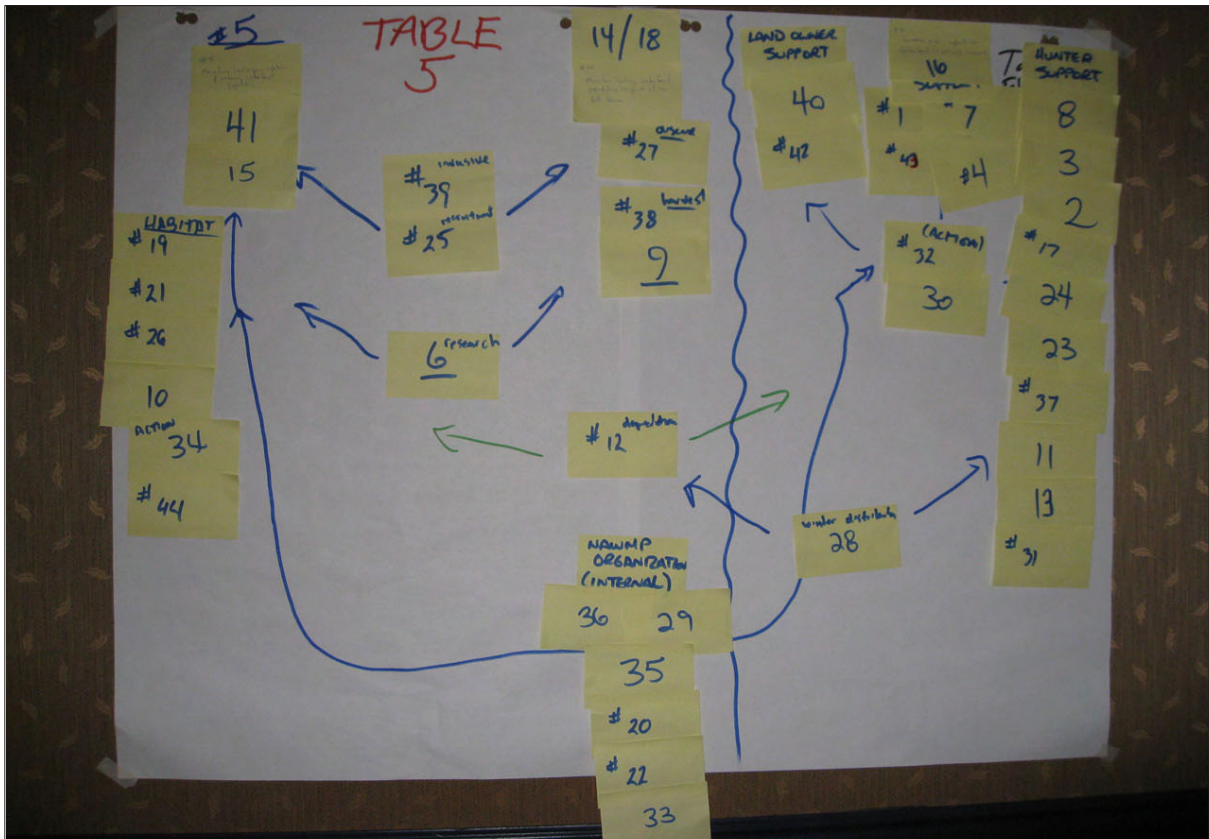


Three legged stool



HABITAT
CONSERVATION

WATERFOWL
POPULATIONS



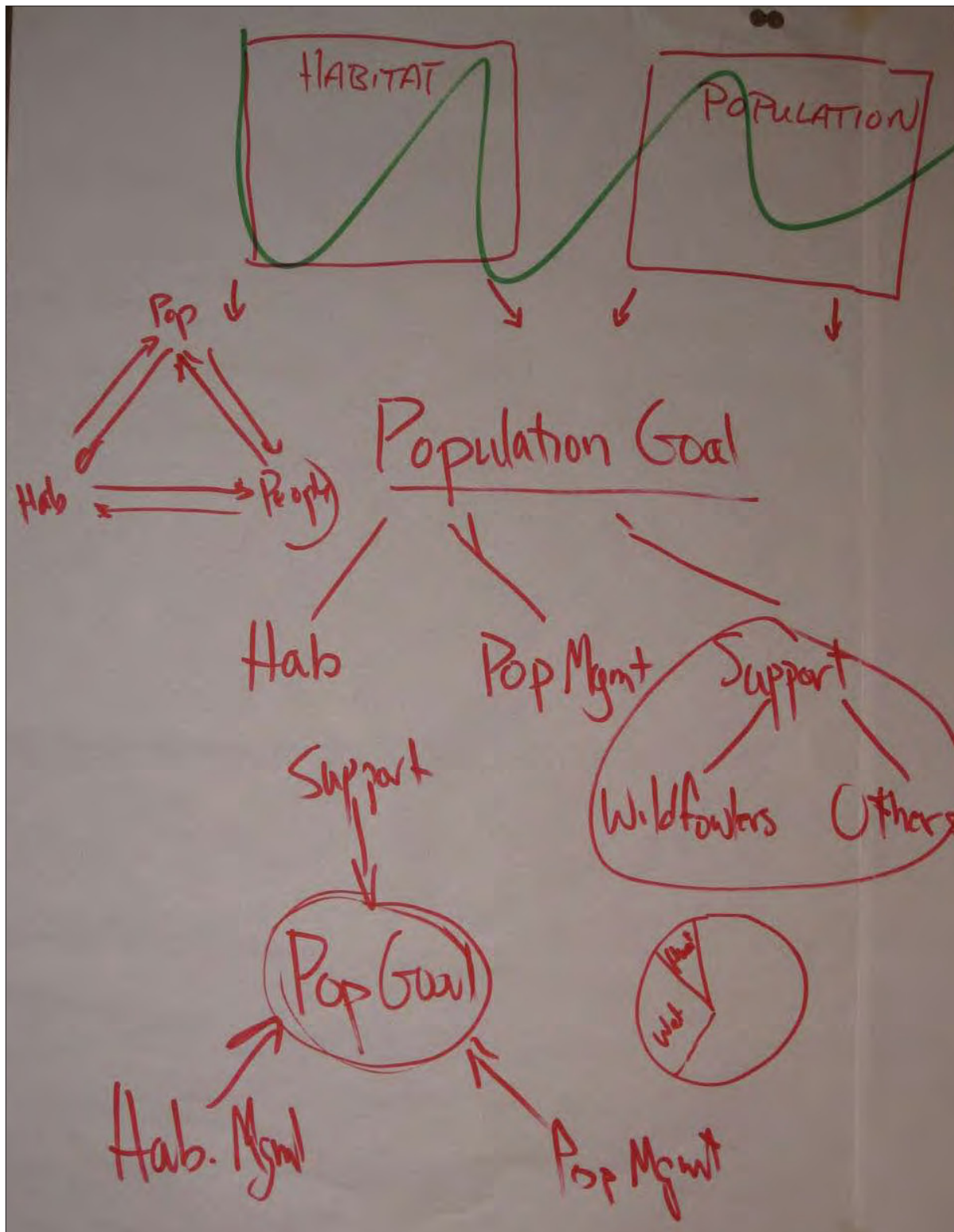




Table 1
Ottawa
Feb. 17, 2010



Table 3
Feb. 17, 2010
Ottawa



Ta

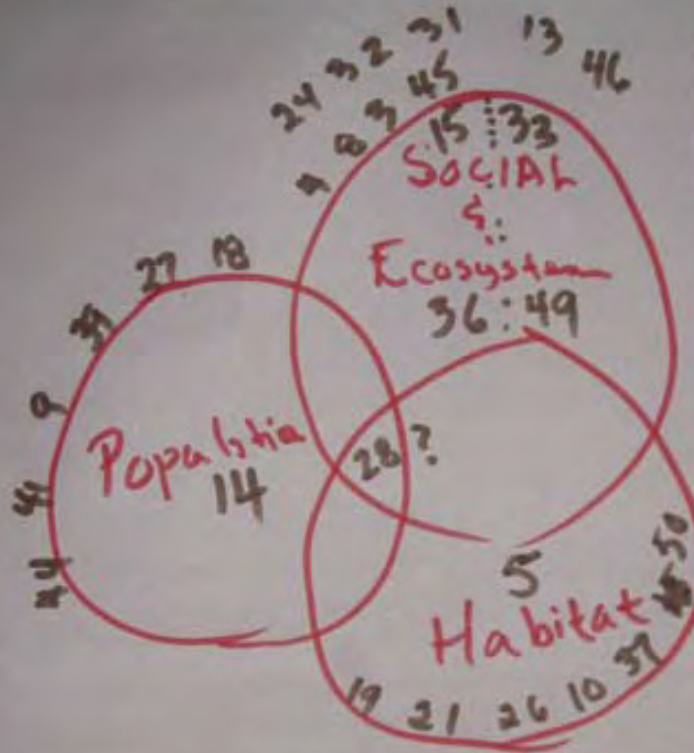
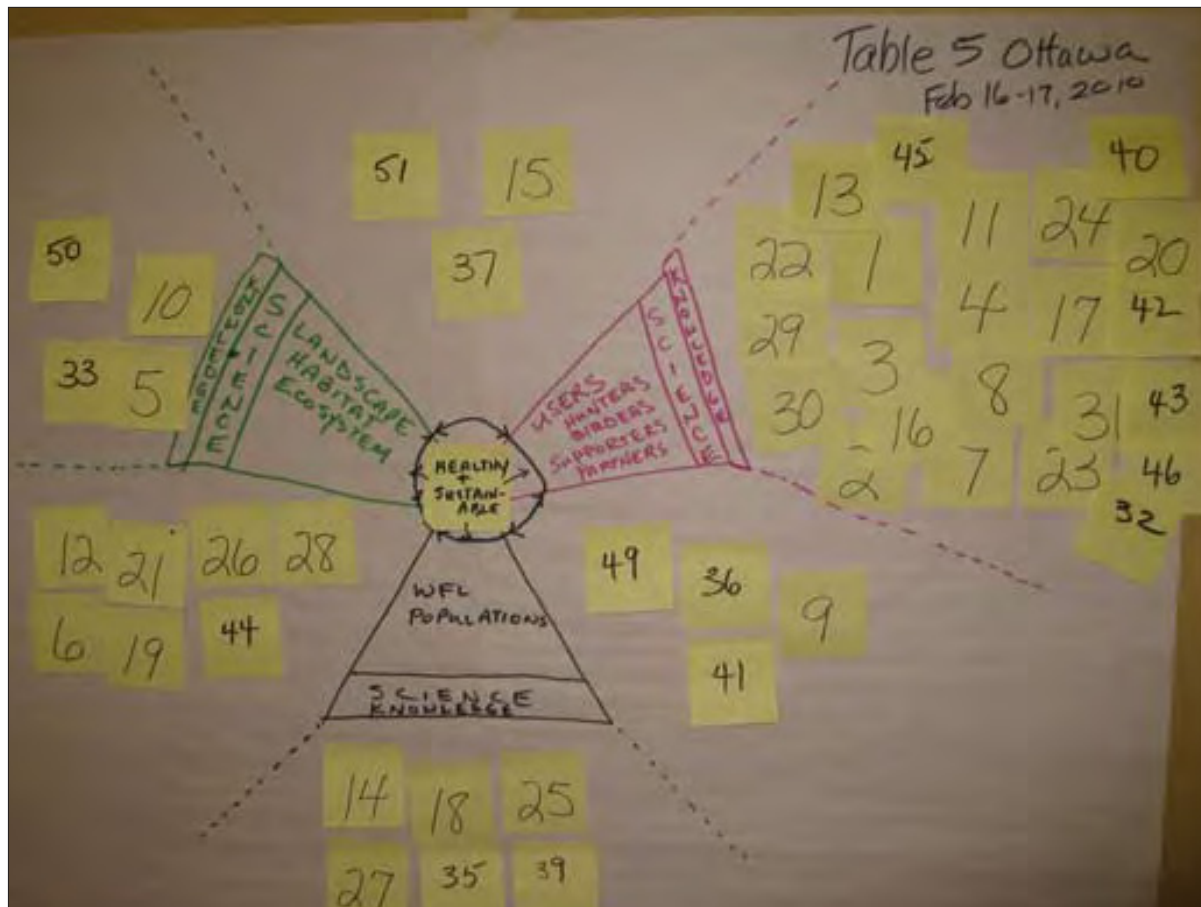
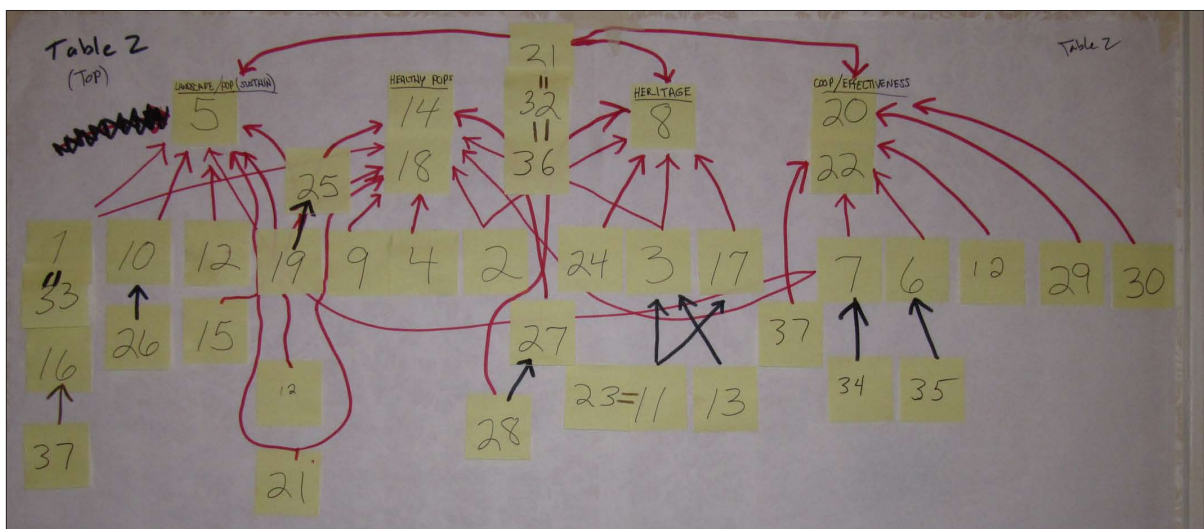
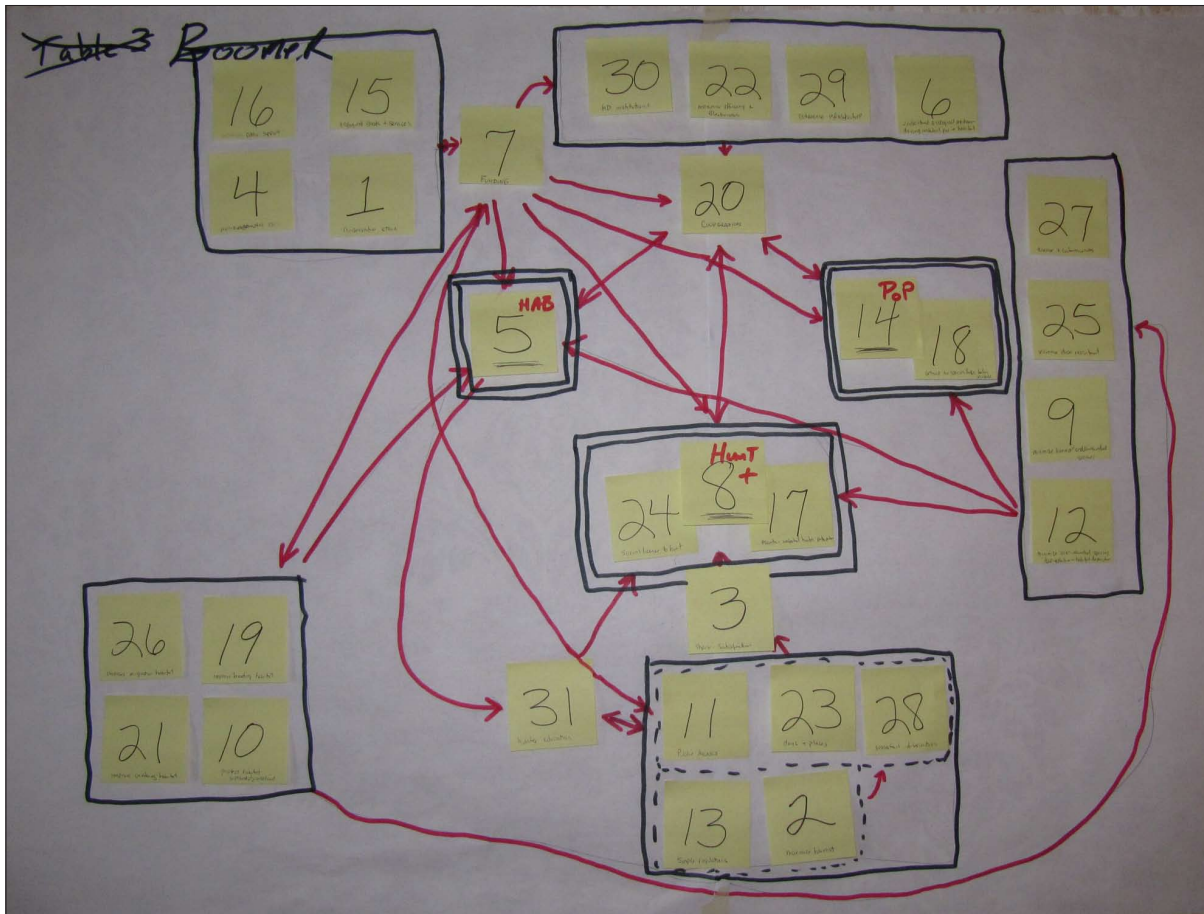


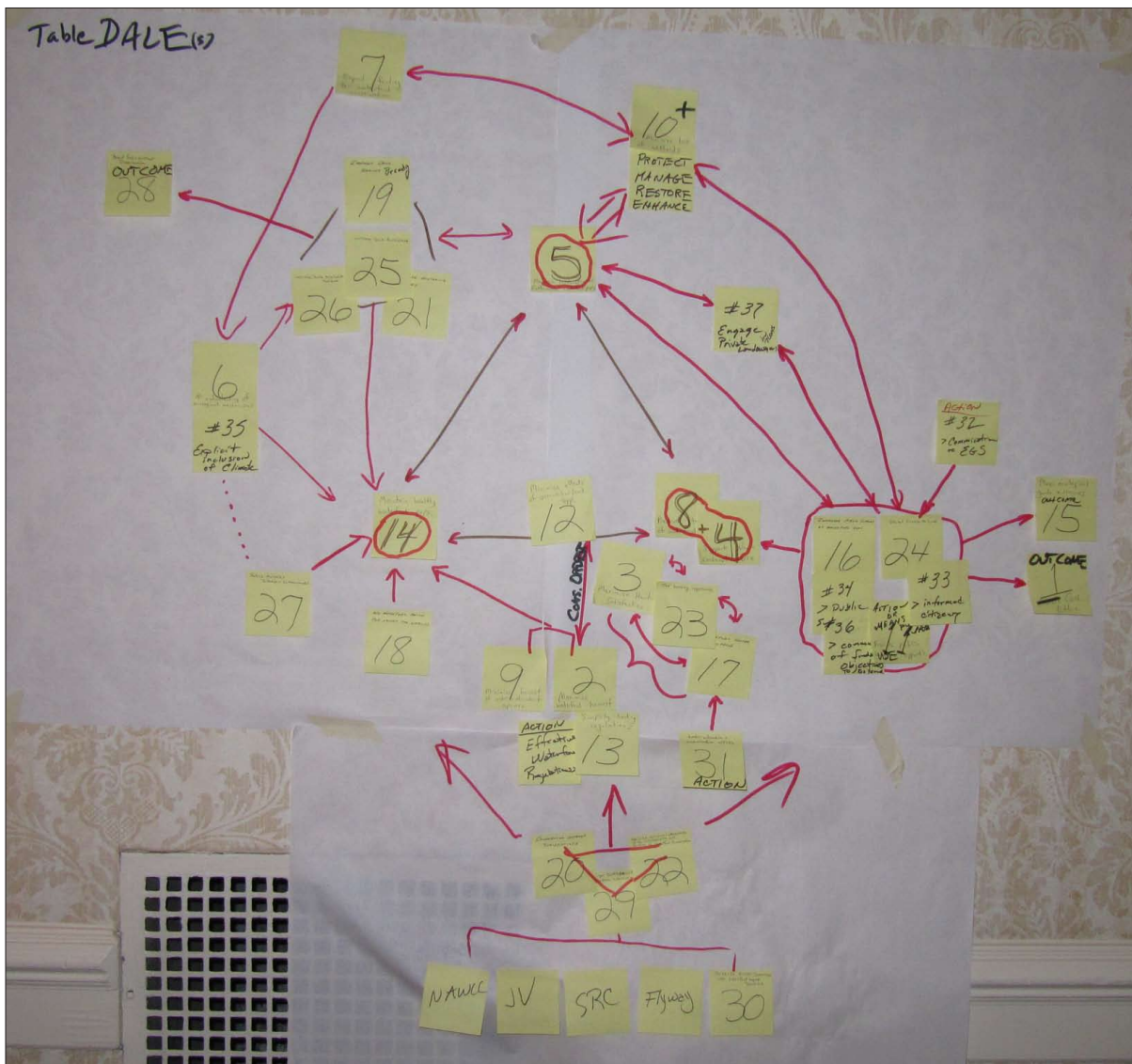
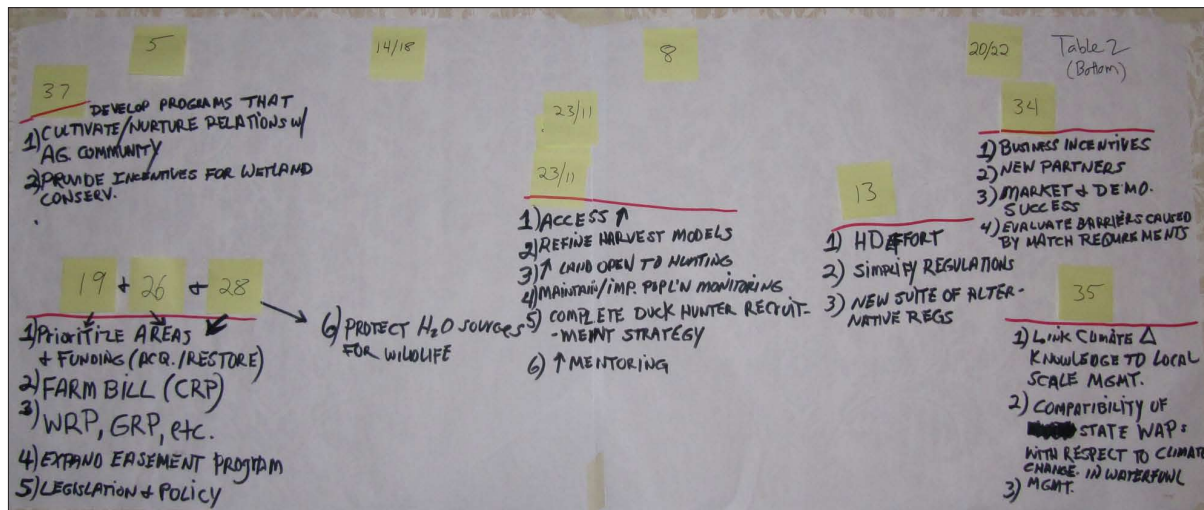
Table 4
Ottawa
Feb 16-17
2010

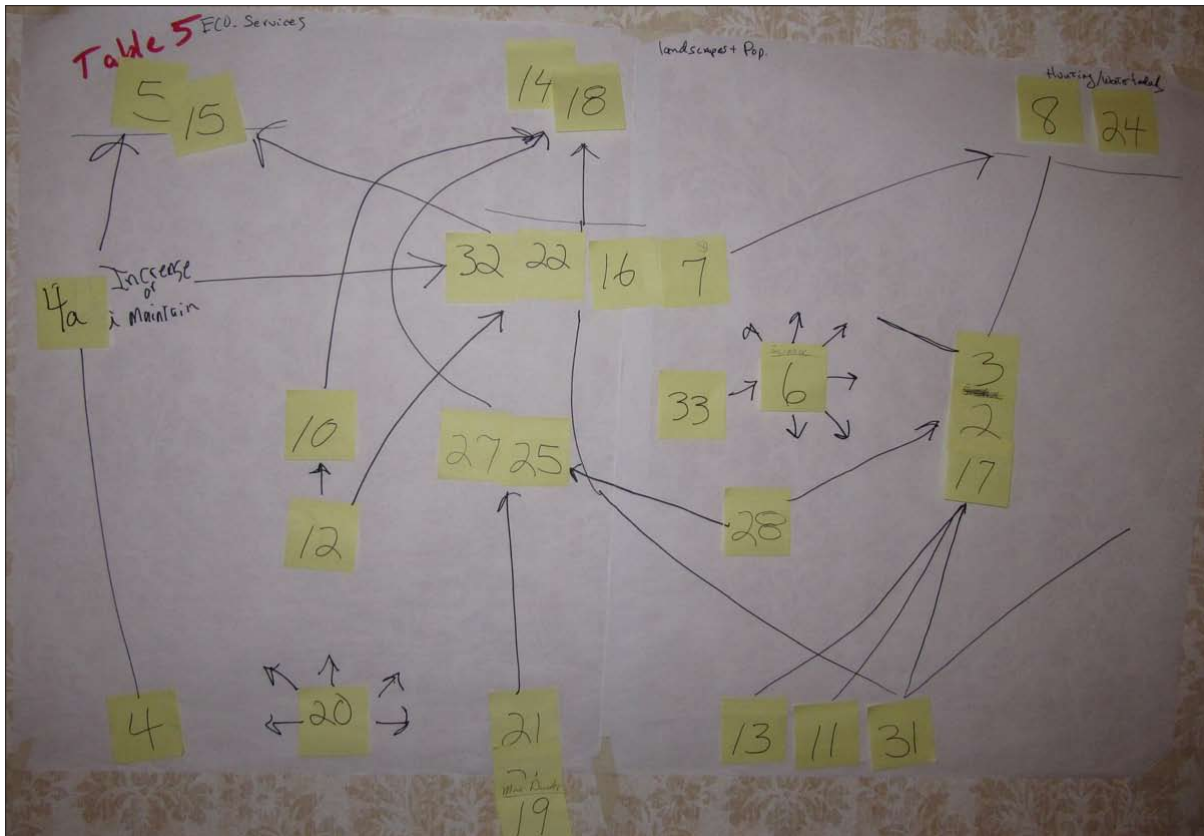
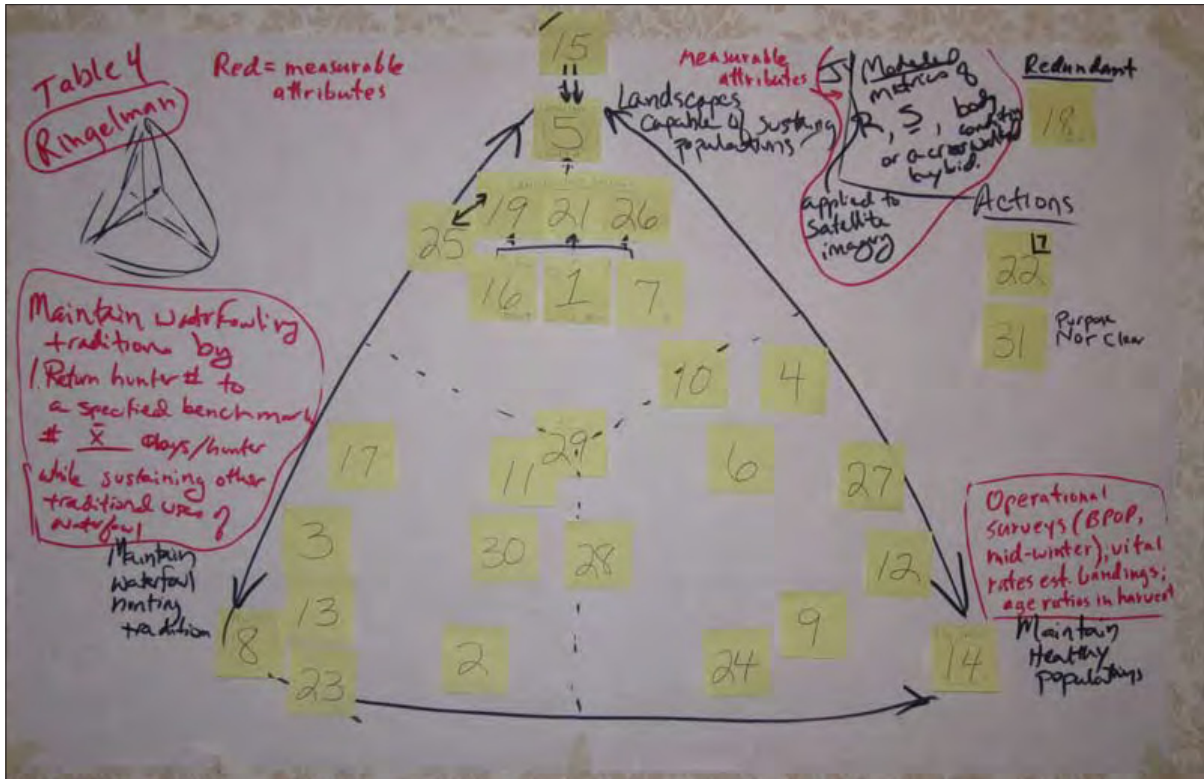
1	20 22 24 30	34 35 47
POLICY	ADMIN (incl. 16)	SCIENCE
	7	25 6 48 12

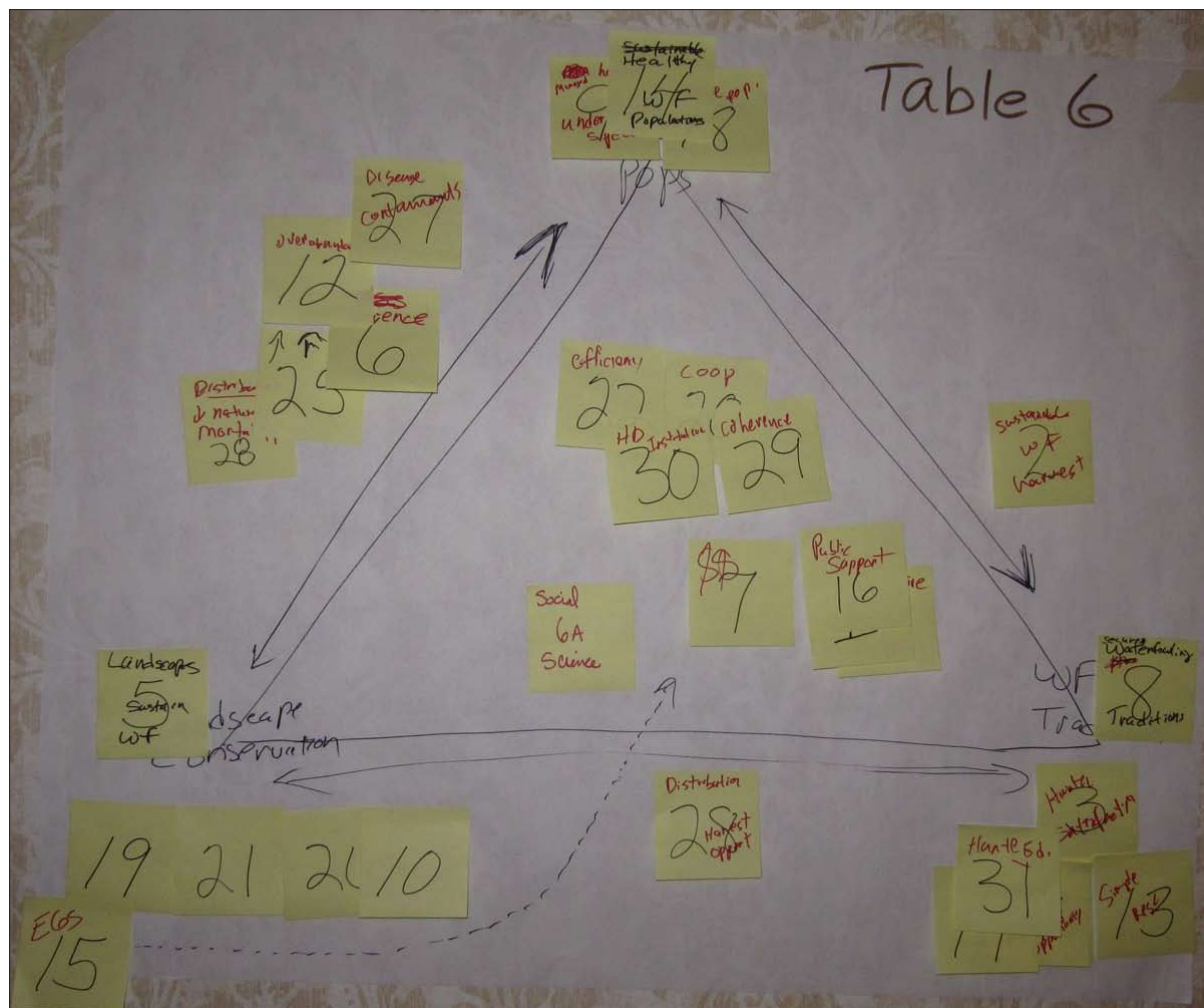
mm = Subsidiary & Means











Appendix I. Valuing exercise cross-tabulated descriptive statistics

Table I1: "Valuing waterfowl objectives exercise. (Descriptives by attendance at Round 1)

Values	q1: I attended Round 1 Wkshop?									
	Yes					No				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	62	13.45	7.99	13	10	27	11.70	10.04	10	5
L-A	62	14.58	7.42	15	10	27	15.11	6.26	15	10
L-B	62	6.82	3.51	5	5	27	6.00	2.95	5	5
L-C	62	4.95	3.54	5	5	27	4.33	2.81	5	5
Populations (P)	62	16.56	10.71	15	10	27	14.07	11.77	10	10
P-D	62	9.63	5.79	10	5	27	13.44	9.70	10	10
P-E	62	5.31	2.80	5	5	27	5.93	4.53	5	5
Hunting (H)	62	9.11	7.78	8	5	27	10.70	8.39	5	5
H-F	62	8.61	5.22	6	5	27	8.74	5.67	10	5
Viewing (V)	62	5.60	5.14	5	5	27	4.15	3.06	5	5
V-G	62	5.37	3.72	5	5	27	5.81	4.18	5	5
L-total	62	39.81	12.97	40	40	27	37.15	12.75	40	40
P-total	62	31.50	10.53	30	30	27	33.44	11.50	30	30
H-total	62	17.73	9.46	15	10	27	19.44	9.31	20	10
V-total	62	10.97	6.34	10	10	27	9.96	4.82	10	10
Grand total	62	100.00	.00	100	100	27	100.00	.00	100	100

Table I2: "Valuing waterfowl objectives exercise. (Descriptives by workshop location)

Values	Meeting location R2														
	New Orleans					Denver1					Portland				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	23	11.70	8.91	10	5	15	11.33	9.15	10	20	6	15.83	10.21	18	20
L-A	23	15.87	9.16	15	10	15	17.87	9.05	15	15	6	9.17	4.92	10	10
L-B	23	5.96	3.30	5	5	15	6.73	3.71	8	10	6	5.83	3.76	5	5
L-C	23	3.78	3.10	5	5	15	5.73	3.47	5	5	6	2.50	2.74	3	0
Populations (P)	23	24.04	12.99	20	30	15	13.27	8.87	10	10	6	13.33	7.53	15	15
P-D	23	9.87	7.29	10	5	15	12.67	11.52	8	5	6	7.50	5.24	8	5
P-E	23	4.04	2.75	5	5	15	5.40	3.79	5	5	6	2.50	2.74	3	0
Hunting (H)	23	9.43	4.74	10	10	15	6.47	5.39	5	5	6	21.67	18.35	18	10
H-F	23	7.00	5.95	5	5	15	9.87	3.81	10	10	6	6.67	2.58	5	5
Viewing (V)	23	4.70	3.72	5	5	15	3.80	3.28	5	5	6	10.00	12.25	5	5
V-G	23	3.61	2.87	4	5	15	6.87	4.05	5	5	6	5.00	3.16	5	5
L-total	23	37.30	13.99	40	40	15	41.67	16.97	40	40	6	33.33	18.62	35	30
P-total	23	37.96	12.35	40	40	15	31.33	13.56	30	20	6	23.33	12.11	30	30
H-total	23	16.43	8.12	15	10	15	16.33	6.40	15	10	6	28.33	18.07	25	10
V-total	23	8.30	4.34	10	10	15	10.67	4.58	10	10	6	15.00	12.65	10	10
Grand total	23	100.00	.00	100	100	15	100.00	.00	100	100	6	100.00	.00	100	100

Table I3: "Valuing waterfowl objectives exercise. (Descriptives by workshop location)

Values	Meeting location R2														
	Denver2					Edmonton					Ottawa				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	8	6.63	4.75	5	5	19	16.37	7.43	20	20	20	13.35	8.54	10	10
L-A	8	14.00	8.07	10	10	19	14.32	6.87	15	20	20	14.00	4.80	14	10
L-B	8	6.88	2.59	5	5	19	6.32	3.58	5	5	20	7.60	3.90	8	10
L-C	8	4.13	3.23	5	5	19	5.63	3.44	5	5	20	5.30	3.51	5	5
Populations (P)	8	10.88	8.72	10	10	19	14.37	11.14	13	10	20	13.25	8.63	13	10
P-D	8	11.63	8.52	9	5	19	9.58	5.90	10	5	20	11.15	5.24	10	10
P-E	8	4.13	1.64	5	5	19	6.05	3.12	5	5	20	7.60	3.76	5	5
Hunting (H)	8	15.63	8.21	15	10	19	8.68	7.98	5	5	20	8.25	5.39	5	5
H-F	8	11.62	6.30	10	10	19	7.26	3.80	5	5	20	9.75	6.46	7	5
Viewing (V)	8	6.50	4.07	8	10	19	4.42	3.52	4	5	20	5.65	2.98	5	5
V-G	8	8.00	5.71	7	5	19	7.00	4.29	5	5	20	4.10	1.86	5	5
L-total	8	31.63	9.91	30	30	19	42.63	11.80	45	40	20	40.25	10.45	40	40
P-total	8	26.63	6.19	28	20	19	30.00	8.50	30	30	20	32.00	7.33	30	30
H-total	8	27.25	8.22	30	30	19	15.95	8.21	15	15	20	18.00	8.80	15	10
V-total	8	14.50	8.82	13	10	19	11.42	5.08	10	10	20	9.75	3.02	10	10
Grand total	8	100.00	.00	100	100	19	100.00	.00	100	100	20	100.00	.00	100	100

Table 14: "Valuing waterfowl objectives exercise. (Descriptives by country of residence)

Values	q2: Country?									
	Canada					U.S.				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	40	14.75	8.02	15	10	51	11.27	8.79	10	5
L-A	40	14.30	5.82	15	20	51	15.29	8.82	15	10
L-B	40	6.68	3.49	5	5	51	6.53	3.55	5	5
L-C	40	5.53	3.34	5	5	51	4.18	3.32	5	5
Populations (P)	40	14.58	9.95	14	10	51	17.14	12.10	15	10
P-D	40	10.50	5.53	10	10	51	10.59	8.71	8	5
P-E	40	6.80	3.47	5	5	51	4.25	3.05	5	5
Hunting (H)	40	8.25	6.54	5	5	51	11.16	9.32	10	10
H-F	40	8.33	5.39	5	5	51	8.67	5.38	10	10
Viewing (V)	40	4.80	3.30	5	5	51	5.53	5.44	5	5
V-G	40	5.50	3.51	5	5	51	5.39	4.12	5	5
L-total	40	41.25	10.89	40	40	51	37.27	15.13	40	40
P-total	40	31.88	7.98	30	30	51	31.98	12.92	30	30
H-total	40	16.58	8.33	15	10	51	19.82	10.36	20	10
V-total	40	10.30	4.31	10	10	51	10.92	6.85	10	10
Grand total	40	100.00	.00	100	100	51	100.00	.00	100	100

Table 15: "Valuing waterfowl objectives exercise. (Descriptives by primary employment)

Values	q3: Primary employment?														
	Federal					State/Prov					Non-govt				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	43	14.02	9.83	15	20	20	13.25	8.16	15	15	28	10.61	6.44	10	10
L-A	43	13.47	7.82	10	10	20	15.90	4.96	15	20	28	16.25	8.69	15	20
L-B	43	5.60	3.28	5	5	20	6.90	2.51	5	5	28	7.89	4.04	10	10
L-C	43	5.00	3.09	5	5	20	3.95	3.00	5	5	28	5.00	4.03	5	5
Populations (P)	43	18.98	11.89	15	20	20	13.15	8.46	14	10	28	13.50	11.07	10	10
P-D	43	9.79	7.45	8	5	20	11.40	5.99	11	5	28	11.11	8.45	10	10
P-E	43	5.30	3.43	5	5	20	5.60	3.95	5	5	28	5.32	3.27	5	5
Hunting (H)	43	8.44	6.12	5	5	20	10.40	5.24	10	10	28	11.71	12.06	6	5
H-F	43	8.07	5.36	5	5	20	9.50	6.08	8	5	28	8.50	4.90	7	5
Viewing (V)	43	5.28	3.88	5	5	20	4.95	3.14	5	5	28	5.29	6.36	5	5
V-G	43	6.05	3.87	5	5	20	5.00	4.30	5	5	28	4.82	3.43	5	5
L-total	43	38.09	13.68	40	40	20	40.00	12.14	40	40	28	39.75	14.53	40	40
P-total	43	34.07	11.81	35	40	20	30.15	9.48	30	30	28	29.93	10.33	30	30
H-total	43	16.51	8.06	15	10	20	19.90	8.87	20	15	28	20.21	11.85	15	10
V-total	43	11.33	4.69	10	10	20	9.95	6.22	10	10	28	10.11	7.15	10	10
Grand total	43	100.00	.00	100	100	20	100.00	.00	100	100	28	100.00	.00	100	100

Table 16: "Valuing waterfowl objectives exercise. (Descriptives by habitat responsibilities)

Values	q4: Geography for habitat responsibilities?														
	Flyway					National					None				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	45	14.51	8.37	15	10	31	10.74	8.02	10	0	15	11.93	9.84	5	5
L-A	45	15.40	7.35	15	10	31	14.68	6.27	15	20	15	13.60	10.83	10	10
L-B	45	6.80	3.17	5	10	31	6.77	3.89	5	5	15	5.60	3.68	5	5
L-C	45	5.40	3.63	5	5	31	4.13	3.10	5	5	15	4.20	3.00	5	5
Populations (P)	45	13.76	7.48	15	15	31	15.90	12.67	12	10	15	23.00	14.86	20	10
P-D	45	9.44	6.76	10	5	31	11.61	7.69	10	5	15	11.67	8.85	10	15
P-E	45	5.42	3.61	5	5	31	5.65	3.55	5	5	15	4.67	2.87	5	5
Hunting (H)	45	8.91	7.10	5	5	31	11.61	10.49	10	5	15	9.20	6.25	5	5
H-F	45	9.16	5.47	8	5	31	8.74	5.60	7	5	15	6.13	3.98	5	5
Viewing (V)	45	5.16	3.08	5	5	31	5.10	6.62	4	0	15	5.60	3.56	5	5
V-G	45	6.04	4.13	5	5	31	5.06	3.63	5	5	15	4.40	3.25	5	5
L-total	45	42.11	12.59	40	40	31	36.32	12.87	40	40	15	35.33	16.09	40	40
P-total	45	28.62	8.32	30	30	31	33.16	11.51	30	30	15	39.33	13.21	40	40
H-total	45	18.07	8.86	15	10	31	20.35	10.67	20	15	15	15.33	9.15	10	10
V-total	45	11.20	5.32	10	10	31	10.16	7.08	10	10	15	10.00	4.63	10	10
Grand total	45	100.00	.00	100	100	31	100.00	.00	100	100	15	100.00	.00	100	100

Table 17: "Valuing waterfowl objectives exercise. (Descriptives by population responsibilities)

Values	q5: Geography for population responsibilities?														
	Flyway					National					None				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	40	14.50	8.97	15	20	32	10.16	6.42	10	10	19	13.68	10.20	15	0
L-A	40	15.05	7.73	15	10	32	14.78	7.77	15	20	19	14.58	7.57	12	10
L-B	40	6.68	3.19	5	5	32	6.19	3.39	5	5	19	7.11	4.34	10	10
L-C	40	4.78	3.45	5	5	32	4.03	2.69	5	5	19	6.00	4.04	5	10
Populations (P)	40	15.65	8.10	15	10	32	19.50	14.22	15	10	19	10.89	9.46	10	10
P-D	40	9.70	6.66	10	5	32	11.87	8.28	10	5	19	10.11	7.62	10	5
P-E	40	4.97	2.92	5	5	32	5.34	4.15	5	5	19	6.26	3.26	5	5
Hunting (H)	40	9.50	7.27	5	5	32	10.22	5.75	10	5	19	10.11	13.14	5	5
H-F	40	8.95	5.83	8	5	32	7.81	4.66	6	5	19	8.79	5.58	5	5
Viewing (V)	40	5.00	2.56	5	5	32	5.13	4.32	5	10	19	5.79	7.71	5	5
V-G	40	5.23	3.92	5	5	32	4.97	3.23	5	5	19	6.68	4.53	5	5
L-total	40	41.00	13.92	40	40	32	35.16	12.08	40	40	19	41.37	14.15	45	50
P-total	40	30.33	9.06	30	30	32	36.72	11.26	35	30	19	27.26	11.65	25	20
H-total	40	18.45	9.06	15	10	32	18.03	7.61	15	10	19	18.89	13.54	15	10
V-total	40	10.23	4.89	10	10	32	10.09	4.91	10	10	19	12.47	8.55	10	10
Grand total	40	100.00	.00	100	100	32	100.00	.00	100	100	19	100.0	.00	100	100

Table 18: "Valuing waterfowl objectives exercise. (Descriptives by years active in waterfowl management)

Values	q6: Years active in WF mgmt?														
	<11 yrs					11-20 yrs					>20 yrs				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	27	15.59	9.94	15	5	27	9.81	8.29	10	10	37	12.95	7.14	15	10
L-A	27	14.81	8.02	15	10	27	15.74	6.80	15	20	37	14.24	8.04	12	10
L-B	27	6.30	4.36	5	5	27	6.37	2.57	5	5	37	6.97	3.45	7	10
L-C	27	5.26	2.78	5	5	27	3.67	3.04	5	5	37	5.22	3.87	5	5
Populations (P)	27	15.67	9.49	15	20	27	15.59	11.52	10	10	37	16.57	12.38	15	10
P-D	27	6.78	4.67	5	5	27	13.78	7.74	15	15	37	10.95	7.81	10	5
P-E	27	6.44	4.33	5	5	27	4.56	3.26	5	5	37	5.19	2.72	5	5
Hunting (H)	27	8.48	10.35	5	5	27	11.93	7.75	10	5	37	9.41	6.84	8	5
H-F	27	8.37	5.66	5	5	27	9.30	5.93	10	10	37	8.05	4.75	5	5
Viewing (V)	27	6.37	6.46	5	5	27	4.44	4.15	4	5	37	4.92	3.00	5	5
V-G	27	5.93	3.87	5	5	27	4.81	4.62	5	5	37	5.54	3.20	5	5
L-total	27	41.96	14.39	45	40	27	35.59	12.48	35	40	37	39.38	13.37	40	40
P-total	27	28.89	11.63	30	30	27	33.93	8.66	33	30	37	32.70	11.76	30	30
H-total	27	16.85	11.36	15	10	27	21.22	8.81	20	20	37	17.46	8.53	15	10
V-total	27	12.30	7.16	10	10	27	9.26	6.27	10	5	37	10.46	4.07	10	10
Grand total	27	100.00	.00	100	100	27	100.00	.00	100	100	37	100.0	.00	100	100

Table 19: "Valuing waterfowl objectives exercise. (Descriptives by most frequent waterfowl management "hat" worn)

Values	q7: Most frequent WF mgmt hat?									
	Administrator					Biologist				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	53	12.96	8.47	10	10	38	12.58	8.87	13	20
L-A	53	14.34	7.57	15	10	38	15.58	7.75	15	10
L-B	53	6.91	3.59	5	10	38	6.16	3.38	5	5
L-C	53	4.58	3.40	5	5	38	5.03	3.37	5	5
Populations (P)	53	14.58	10.64	13	15	38	18.00	11.84	15	10
P-D	53	11.28	7.89	10	5	38	9.53	6.75	10	5
P-E	53	5.47	3.72	5	5	38	5.24	3.11	5	5
Hunting (H)	53	9.77	7.59	5	5	38	10.03	9.31	10	10
H-F	53	9.53	5.29	10	10	38	7.11	5.20	5	5
Viewing (V)	53	4.81	3.52	5	5	38	5.76	5.81	5	5
V-G	53	5.75	4.22	5	5	38	5.00	3.25	5	5
L-total	53	38.79	13.13	40	40	38	39.34	14.20	40	40
P-total	53	31.34	10.28	30	30	38	32.76	11.95	30	30
H-total	53	19.30	9.13	20	10	38	17.13	10.22	15	10
V-total	53	10.57	5.71	10	10	38	10.76	6.10	10	10
Grand total	53	100.00	.00	100	100	38	100.00	.00	100	100

Table I10: “Valuing waterfowl objectives exercise. (Descriptives by waterfowl management responsibilities)

Values	q8: I spend most time:																			
	Managing WVF populations					Managing habitat					Equal habitat/populations					None				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	34	11.91	7.40	10	5	33	14.30	8.56	15	10	8	12.88	10.91	10	10	16	11.56	10.12	10	0
L-A	34	14.32	8.56	14	10	33	15.52	6.61	15	20	8	12.13	6.79	10	10	16	16.00	8.13	15	20
L-B	34	5.91	3.48	5	5	33	7.61	3.76	10	10	8	6.13	3.04	5	5	16	6.19	2.97	5	5
L-C	34	3.82	2.84	5	5	33	5.91	3.87	5	5	8	4.25	3.77	4	0	16	4.63	2.68	5	5
Populations (P)	34	21.00	11.74	20	10	33	11.91	8.80	10	15	8	12.13	8.48	10	5	16	15.81	12.32	15	15
P-D	34	11.29	7.86	10	10	33	9.12	5.35	10	5	8	11.13	9.45	9	5	16	11.62	9.33	8	5
P-E	34	4.41	2.85	5	5	33	6.24	3.90	5	5	8	3.38	2.07	5	5	16	6.63	3.48	5	5
Hunting (H)	34	10.82	7.09	10	5	33	8.70	9.93	5	5	8	14.50	9.59	10	10	16	8.00	5.42	7	5
H-F	34	7.79	6.00	5	5	33	9.27	5.36	10	5	8	9.63	5.78	10	10	16	7.94	3.57	6	5
Viewing (V)	34	4.50	3.42	5	5	33	5.79	5.83	5	5	8	6.38	4.24	8	10	16	4.94	4.28	5	5
V-G	34	4.21	2.74	5	5	33	5.64	3.55	5	5	8	7.50	6.46	8	10	16	6.63	4.30	5	5
L-total	34	35.97	13.70	40	40	33	43.33	13.83	45	50	8	35.38	11.82	37	20	16	38.44	11.79	40	40
P-total	34	36.71	10.88	40	40	33	27.27	9.36	30	30	8	26.63	6.19	28	20	16	34.06	11.72	30	30
H-total	34	18.62	9.22	18	10	33	17.97	11.02	15	10	8	24.13	10.23	28	30	16	15.94	5.84	15	15
V-total	34	8.71	3.25	10	10	33	11.42	7.04	10	10	8	13.88	9.72	15	5	16	11.56	3.97	10	10
Grand total	34	100.00	.00	100	100	33	100.0	.00	100	100	8	100.00	.00	100	100	16	100.00	.00	100	100

Table I11: “Valuing waterfowl objectives exercise. (Descriptives by importance of waterfowl hunting to workshop participants)

Values	q9: How important WVF hunting to you?														
	Very important					Less important					Don't hunt				
	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode	Valid N	Mean	SD	Median	Mode
Landscapes (L)	43	11.00	7.48	10	10	29	13.83	8.62	15	5	19	15.32	10.34	18	20
L-A	43	15.02	7.17	15	10	29	15.21	7.74	15	10	19	13.95	8.75	10	10
L-B	43	6.77	3.34	5	5	29	7.66	3.32	6	5	19	4.58	3.47	5	5
L-C	43	3.74	3.09	5	5	29	5.62	3.67	5	5	19	5.79	3.01	5	5
Populations (P)	43	13.74	9.76	10	10	29	16.52	10.15	15	10	19	20.37	14.63	20	20
P-D	43	13.79	8.46	15	15	29	8.31	4.31	8	5	19	6.63	5.67	5	5
P-E	43	4.47	2.81	5	5	29	5.34	3.73	5	5	19	7.47	3.64	10	10
Hunting (H)	43	12.49	9.82	10	10	29	9.07	5.87	7	5	19	5.21	5.08	5	5
H-F	43	9.44	5.58	10	5	29	8.03	4.90	8	5	19	7.16	5.39	5	5
Viewing (V)	43	4.58	5.59	5	5	29	5.55	3.12	5	5	19	6.11	4.03	5	5
V-G	43	4.95	3.12	5	5	29	4.86	4.06	5	5	19	7.42	4.50	5	5
L-total	43	36.53	13.72	40	40	29	42.31	13.94	40	40	19	39.63	11.75	40	40
P-total	43	32.00	10.52	30	30	29	30.17	10.48	30	30	19	34.47	12.68	35	25
H-total	43	21.93	10.63	20	15	29	17.10	7.71	15	10	19	12.37	5.86	10	10
V-total	43	9.53	6.50	10	10	29	10.41	5.26	10	10	19	13.53	4.17	10	10
Grand total	43	100.00	.00	100	100	29	100.00	.00	100	100	19	100.00	.00	100	100

Appendix J. Objectives results cross-tabulated frequencies and descriptive statistics

Table J1: "It is important that NAWMP has quantitative (numerical) objectives." (Frequencies)

Round (R) 2 Characteristic		q10: Important that NAWMP has quantitative objectives?				
		Strongly agree	Agree	Neutral	Disagree	Total
Meeting location R2	New Orleans	35%	54%	8%	4%	26
	Denver1	69%	31%	0%	0%	16
	Portland	67%	33%	0%	0%	15
	Denver2	71%	29%	0%	0%	7
	Edmonton	71%	29%	0%	0%	17
	Ottawa	61%	39%	0%	0%	23
	Total	59%	38%	2%	1%	104
q1: I attended Round 1 Workshop?	Yes	58%	39%	1%	1%	69
	No	61%	35%	3%	0%	31
	Don't remember	67%	33%	0%	0%	3
q2: Country?	Canada	63%	37%	0%	0%	41
	U.S.	56%	39%	3%	2%	62
q3: Primary employment?	Federal agency	48%	46%	4%	2%	50
	Non-gov org	77%	23%	0%	0%	26
	Private business	100%	0%	0%	0%	2
	State/Provincial	57%	43%	0%	0%	21
	University	75%	25%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	54%	46%	0%	0%	13
	Mississippi F/W	67%	33%	0%	0%	9
	Central F/W	83%	17%	0%	0%	12
	Pacific F/W	50%	50%	0%	0%	16
	National/multiple F/Ws	67%	33%	0%	0%	36
	None	33%	50%	11%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	54%	46%	0%	0%	13
	Mississippi F/W	50%	50%	0%	0%	10
	Central F/W	80%	20%	0%	0%	10
	Pacific F/W	64%	36%	0%	0%	11
	National/multiple F/Ws	47%	47%	3%	3%	36
	None	71%	25%	4%	0%	24
q6: How long active in waterfowl management?	0-1 yr	67%	17%	17%	0%	6
	2-5 yrs	31%	69%	0%	0%	16
	6-10 yrs	58%	42%	0%	0%	12
	11-20 yrs	56%	41%	3%	0%	32
	21-30 yrs	76%	24%	0%	0%	25
	>30 yrs	62%	31%	0%	8%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	64%	36%	0%	0%	11
	Program coordinator/admin	68%	32%	0%	0%	44
	Biologist/scientist	43%	51%	5%	0%	37
	Researcher	70%	20%	0%	10%	10
	Regulations committee member	50%	50%	0%	0%	2
q8: I spend most time:	Managing W/F populations	44%	50%	3%	3%	36
	Managing habitat	69%	31%	0%	0%	35
	Equal habitat/populations	60%	40%	0%	0%	10
	None	65%	30%	4%	0%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	50%	50%	0%	0%	20
	1 of most important rec-activities	65%	32%	3%	0%	34
	No more important than others	68%	32%	0%	0%	19
	Less important than others	63%	38%	0%	0%	8
	1 of least important rec-activities	100%	0%	0%	0%	1
	Don't W/F hunt	45%	45%	5%	5%	22

Table J2: "It is important that NAWMP has quantitative (numerical) objectives." (Descriptives)

Round (R) 2 Characteristic		q10: Important that NAWMP has quantitative objectives?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	1.81	Agree	2.00	2	.75
	Denver1	16	1.31	Strongly agree	1.00	1	.48
	Portland	15	1.33	Strongly agree	1.00	1	.49
	Denver2	7	1.29	Strongly agree	1.00	1	.49
	Edmonton	17	1.29	Strongly agree	1.00	1	.47
	Ottawa	23	1.39	Strongly agree	1.00	1	.50
	Total	104	1.45	Strongly agree	1.00	1	.59
q1: I attended Round 1 Wkshop?	Yes	69	1.46	Strongly agree	1.00	1	.61
	No	31	1.42	Strongly agree	1.00	1	.56
	Don't remember	3	1.33	Strongly agree	1.00	1	.58
q2: Country?	Canada	41	1.37	Strongly agree	1.00	1	.49
	U.S.	62	1.50	Agree	1.00	1	.65
q3: Primary employment?	Federal agency	50	1.60	Agree	2.00	1	.67
	Non-gov org	26	1.23	Strongly agree	1.00	1	.43
	Private business	2	1.00	Strongly agree	1.00	1	.00
	State/Provincial	21	1.43	Strongly agree	1.00	1	.51
	University	4	1.25	Strongly agree	1.00	1	.50
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	1.46	Strongly agree	1.00	1	.52
	Mississippi F/W	9	1.33	Strongly agree	1.00	1	.50
	Central F/W	12	1.17	Strongly agree	1.00	1	.39
	Pacific F/W	16	1.50	Strongly agree	1.50	1	.52
	National/multiple F/Ws	36	1.33	Strongly agree	1.00	1	.48
	None	18	1.89	Strongly agree	2.00	2	.83
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	1.46	Strongly agree	1.00	1	.52
	Mississippi F/W	10	1.50	Agree	1.50	1	.53
	Central F/W	10	1.20	Strongly agree	1.00	1	.42
	Pacific F/W	11	1.36	Strongly agree	1.00	1	.50
	National/multiple F/Ws	36	1.61	Agree	2.00	1	.69
	None	24	1.33	Strongly agree	1.00	1	.56
q6: How long active in waterfowl management?	0-1 yr	6	1.50	Agree	1.00	1	.84
	2-5 yrs	16	1.69	Agree	2.00	2	.48
	6-10 yrs	12	1.42	Strongly agree	1.00	1	.51
	11-20 yrs	32	1.47	Strongly agree	1.00	1	.57
	21-30 yrs	25	1.24	Strongly agree	1.00	1	.44
	>30 yrs	13	1.54	Agree	1.00	1	.88
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	11	1.36	Strongly agree	1.00	1	.50
	Program coordinator/admin	44	1.32	Strongly agree	1.00	1	.47
	Biologist/scientist	37	1.62	Agree	2.00	2	.59
	Researcher	10	1.50	Agree	1.00	1	.97
	Regulations committee member	2	1.50	Agree	1.50	1	.71
q8: I spend most time:	Managing W/F populations	36	1.64	Agree	2.00	2	.68
	Managing habitat	35	1.31	Strongly agree	1.00	1	.47
	Equal habitat/populations	10	1.40	Strongly agree	1.00	1	.52
	None	23	1.39	Strongly agree	1.00	1	.58
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	20	1.50	Agree	1.50	1	.51
	1 of most important rec-activities	34	1.38	Strongly agree	1.00	1	.55
	No more important than others	19	1.32	Strongly agree	1.00	1	.48
	Less important than others	8	1.38	Strongly agree	1.00	1	.52
	1 of least important rec-activities	1	1.00	Strongly agree	1.00	1	.
	Don't W/F hunt	22	1.68	Agree	2.00	1	.78

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table J3: "It makes sense to have quantifiable objectives for each of the four fundamental objectives."
(Frequencies)

Round (R) 2 Characteristic		q11: Makes sense to have quantifiable objectives for each of 4 fundamental objectives?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	15%	54%	12%	15%	4%	26
	Denver1	13%	56%	19%	13%	0%	16
	Portland	40%	60%	0%	0%	0%	15
	Denver2	43%	43%	14%	0%	0%	7
	Edmonton	35%	65%	0%	0%	0%	17
	Ottawa	35%	52%	9%	4%	0%	23
	Total	28%	56%	9%	7%	1%	104
q1: I attended Round 1 Wkshop?	Yes	25%	55%	10%	9%	1%	69
	No	35%	55%	6%	3%	0%	31
	Don't remember	33%	67%	0%	0%	0%	3
q2: Country?	Canada	32%	59%	7%	2%	0%	41
	U.S.	26%	53%	10%	10%	2%	62
q3: Primary employment?	Federal agency	24%	54%	12%	8%	2%	50
	Non-gov org	38%	46%	8%	8%	0%	26
	Private business	50%	0%	50%	0%	0%	2
	State/Provincial	29%	67%	0%	5%	0%	21
	University	0%	100%	0%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	31%	62%	8%	0%	0%	13
	Mississippi F/W	33%	67%	0%	0%	0%	9
	Central F/W	33%	50%	0%	8%	8%	12
	Pacific F/W	31%	56%	13%	0%	0%	16
	National/multiple F/Ws	22%	64%	8%	6%	0%	36
	None	28%	33%	17%	22%	0%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	23%	54%	8%	15%	0%	13
	Mississippi F/W	30%	40%	10%	20%	0%	10
	Central F/W	20%	60%	0%	10%	10%	10
	Pacific F/W	27%	64%	9%	0%	0%	11
	National/multiple F/Ws	19%	58%	17%	6%	0%	36
	None	46%	54%	0%	0%	0%	24
q6: How long active in waterfowl management?	0-1 yr	50%	50%	0%	0%	0%	6
	2-5 yrs	25%	63%	6%	6%	0%	16
	6-10 yrs	42%	50%	0%	8%	0%	12
	11-20 yrs	25%	59%	9%	6%	0%	32
	21-30 yrs	32%	48%	12%	8%	0%	25
	>30 yrs	8%	62%	15%	8%	8%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	55%	45%	0%	0%	0%	11
	Program coordinator/admin	30%	55%	11%	5%	0%	44
	Biologist/scientist	19%	59%	5%	14%	3%	37
	Researcher	30%	50%	20%	0%	0%	10
	Regulations committee member	0%	100%	0%	0%	0%	2
q8: I spend most time:	Managing W/F populations	17%	56%	11%	14%	3%	36
	Managing habitat	34%	57%	9%	0%	0%	35
	Equal habitat/populations	40%	60%	0%	0%	0%	10
	None	30%	52%	9%	9%	0%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	30%	65%	5%	0%	0%	20
	1 of most important rec-activities	21%	59%	12%	6%	3%	34
	No more important than others	42%	47%	5%	5%	0%	19
	Less important than others	25%	50%	0%	25%	0%	8
	1 of least important rec-activities	100%	0%	0%	0%	0%	1
	Don't W/F hunt	23%	55%	14%	9%	0%	22

Table J4: "It makes sense to have quantifiable objectives for each of the four fundamental objectives." (Descriptives)

Round (R) 2 Characteristic		q11: Makes sense to have quantifiable objectives for each of 4 fundamental objectives?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	2.38	Agree	2.00	2	1.06
	Denver1	16	2.31	Agree	2.00	2	.87
	Portland	15	1.60	Agree	2.00	2	.51
	Denver2	7	1.71	Agree	2.00	1	.76
	Edmonton	17	1.65	Agree	2.00	2	.49
	Ottawa	23	1.83	Agree	2.00	2	.78
	Total	104	1.97	Agree	2.00	2	.85
q1: I attended Round 1 Wkshop?	Yes	69	2.07	Agree	2.00	2	.91
	No	31	1.77	Agree	2.00	2	.72
	Don't remember	3	1.67	Agree	2.00	2	.58
q2: Country?	Canada	41	1.80	Agree	2.00	2	.68
	U.S.	62	2.08	Agree	2.00	2	.95
q3: Primary employment?	Federal agency	50	2.10	Agree	2.00	2	.93
	Non-gov org	26	1.85	Agree	2.00	2	.88
	Private business	2	2.00	Agree	2.00	1	1.41
	State/Provincial	21	1.81	Agree	2.00	2	.68
	University	4	2.00	Agree	2.00	2	.00
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	1.77	Agree	2.00	2	.60
	Mississippi F/W	9	1.67	Agree	2.00	2	.50
	Central F/W	12	2.08	Agree	2.00	2	1.24
	Pacific F/W	16	1.81	Agree	2.00	2	.66
	National/multiple F/Ws	36	1.97	Agree	2.00	2	.74
	None	18	2.33	Agree	2.00	2	1.14
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.15	Agree	2.00	2	.99
	Mississippi F/W	10	2.20	Agree	2.00	2	1.14
	Central F/W	10	2.30	Agree	2.00	2	1.25
	Pacific F/W	11	1.82	Agree	2.00	2	.60
	National/multiple F/Ws	36	2.08	Agree	2.00	2	.77
	None	24	1.54	Agree	2.00	2	.51
q6: How long active in waterfowl management?	0-1 yr	6	1.50	Agree	1.50	1	.55
	2-5 yrs	16	1.94	Agree	2.00	2	.77
	6-10 yrs	12	1.75	Agree	2.00	2	.87
	11-20 yrs	32	1.97	Agree	2.00	2	.78
	21-30 yrs	25	1.96	Agree	2.00	2	.89
	>30 yrs	13	2.46	Agree	2.00	2	1.05
q7: Most frequent waterfowl mngrt hat?	Agency/Executive director	11	1.45	Strongly agree	1.00	1	.52
	Program coordinator/admin	44	1.91	Agree	2.00	2	.77
	Biologist/scientist	37	2.22	Agree	2.00	2	1.00
	Researcher	10	1.90	Agree	2.00	2	.74
	Regulations committee member	2	2.00	Agree	2.00	2	.00
q8: I spend most time:	Managing W/F populations	36	2.31	Agree	2.00	2	1.01
	Managing habitat	35	1.74	Agree	2.00	2	.61
	Equal habitat/populations	10	1.60	Agree	2.00	2	.52
	None	23	1.96	Agree	2.00	2	.88
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	20	1.75	Agree	2.00	2	.55
	1 of most important rec-activities	34	2.12	Agree	2.00	2	.91
	No more important than others	19	1.74	Agree	2.00	2	.81
	Less important than others	8	2.25	Agree	2.00	2	1.16
	1 of least important rec-activities	1	1.00	Strongly agree	1.00	1	.
	Don't W/F hunt	22	2.09	Agree	2.00	2	.87

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table J5: "The current NAWMP population objectives are adequate to guide waterfowl conservation into the future." (Frequencies)

Round (R) 2 Characteristic		q12: Current NAWMP pop-objectives adequate to guide WF conservation into future?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	4%	19%	27%	42%	8%	26
	Denver1	6%	44%	19%	25%	6%	16
	Portland	7%	60%	7%	27%	0%	15
	Denver2	14%	14%	0%	43%	29%	7
	Edmonton	0%	29%	12%	47%	12%	17
	Ottawa	9%	9%	22%	57%	4%	23
	Total	6%	28%	17%	41%	8%	104
q1: I attended Round 1 Wkshop?	Yes	6%	23%	16%	49%	6%	69
	No	6%	39%	19%	26%	10%	31
	Don't remember	0%	33%	33%	0%	33%	3
q2: Country?	Canada	5%	20%	17%	51%	7%	41
	U.S.	6%	34%	18%	34%	8%	62
q3: Primary employment?	Federal agency	4%	28%	20%	38%	10%	50
	Non-gov org	15%	27%	4%	46%	8%	26
	Private business	0%	50%	50%	0%	0%	2
	State/Provincial	0%	19%	24%	52%	5%	21
	University	0%	75%	25%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	0%	0%	31%	62%	8%	13
	Mississippi FW	0%	33%	33%	33%	0%	9
	Central FW	8%	50%	17%	25%	0%	12
	Pacific FW	0%	50%	19%	31%	0%	16
	National/multiple FWs	14%	19%	3%	50%	14%	36
	None	0%	28%	28%	33%	11%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	0%	0%	31%	62%	8%	13
	Mississippi FW	0%	50%	30%	20%	0%	10
	Central FW	10%	50%	20%	10%	10%	10
	Pacific FW	0%	55%	9%	36%	0%	11
	National/multiple FWs	6%	22%	8%	50%	14%	36
	None	13%	21%	21%	42%	4%	24
q6: How long active in waterfowl management?	0-1 yr	0%	17%	67%	17%	0%	6
	2-5 yrs	6%	31%	38%	25%	0%	16
	6-10 yrs	0%	33%	8%	58%	0%	12
	11-20 yrs	3%	19%	9%	50%	19%	32
	21-30 yrs	8%	36%	12%	44%	0%	25
	>30 yrs	15%	31%	8%	31%	15%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	9%	18%	27%	36%	9%	11
	Program coordinator/admin	7%	23%	14%	50%	7%	44
	Biologist/scientist	5%	30%	22%	35%	8%	37
	Researcher	0%	50%	10%	30%	10%	10
	Regulations committee member	0%	50%	0%	50%	0%	2
q8: I spend most time:	Managing WF populations	6%	28%	17%	42%	8%	36
	Managing habitat	6%	26%	17%	43%	9%	35
	Equal habitat/populations	10%	40%	10%	30%	10%	10
	None	4%	26%	22%	43%	4%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	10%	45%	5%	30%	10%	20
	1 of most important rec-activities	12%	26%	12%	44%	6%	34
	No more important than others	0%	21%	26%	47%	5%	19
	Less important than others	0%	13%	13%	75%	0%	8
	1 of least important rec-activities	0%	100%	0%	0%	0%	1
	Don't WF hunt	0%	23%	32%	32%	14%	22

Table J6: “The current NAWMP population objectives are adequate to guide waterfowl conservation into the future.” (Descriptives)

Round (R) 2 Characteristic		q12: Current NAWMP pop-objectives adequate to guide WF conservation into future?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	3.31	Neutral	3.50	4	1.01
	Denver1	16	2.81	Neutral	2.50	2	1.11
	Portland	15	2.53	Neutral	2.00	2	.99
	Denver2	7	3.57	Disagree	4.00	4	1.51
	Edmonton	17	3.41	Neutral	4.00	4	1.06
	Ottawa	23	3.39	Neutral	4.00	4	1.03
	Total	104	3.17	Neutral	3.00	4	1.10
q1: I attended Round 1 Workshop?	Yes	69	3.26	Neutral	4.00	4	1.07
	No	31	2.94	Neutral	3.00	2	1.15
	Don't remember	3	3.33	Neutral	3.00	2	1.53
q2: Country?	Canada	41	3.37	Neutral	4.00	4	1.04
	U.S.	62	3.03	Neutral	3.00	2	1.13
q3: Primary employment?	Federal agency	50	3.22	Neutral	3.00	4	1.09
	Non-gov org	26	3.04	Neutral	4.00	4	1.31
	Private business	2	2.50	Neutral	2.50	2	.71
	State/Provincial	21	3.43	Neutral	4.00	4	.87
	University	4	2.25	Agree	2.00	2	.50
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	3.77	Disagree	4.00	4	.60
	Mississippi F/W	9	3.00	Neutral	3.00	2	.87
	Central F/W	12	2.58	Neutral	2.00	2	1.00
	Pacific F/W	16	2.81	Neutral	2.50	2	.91
	National/multiple F/Ws	36	3.31	Neutral	4.00	4	1.33
	None	18	3.28	Neutral	3.00	4	1.02
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	3.77	Disagree	4.00	4	.60
	Mississippi F/W	10	2.70	Neutral	2.50	2	.82
	Central F/W	10	2.60	Neutral	2.00	2	1.17
	Pacific F/W	11	2.82	Neutral	2.00	2	.98
	National/multiple F/Ws	36	3.44	Neutral	4.00	4	1.16
	None	24	3.04	Neutral	3.00	4	1.16
q6: How long active in waterfowl management?	0-1 yr	6	3.00	Neutral	3.00	3	.63
	2-5 yrs	16	2.81	Neutral	3.00	3	.91
	6-10 yrs	12	3.25	Neutral	4.00	4	.97
	11-20 yrs	32	3.63	Disagree	4.00	4	1.10
	21-30 yrs	25	2.92	Neutral	3.00	4	1.08
	>30 yrs	13	3.00	Neutral	3.00	2	1.41
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	11	3.18	Neutral	3.00	4	1.17
	Program coordinator/admin	44	3.27	Neutral	4.00	4	1.11
	Biologist/scientist	37	3.11	Neutral	3.00	4	1.10
	Researcher	10	3.00	Neutral	2.50	2	1.15
	Regulations committee member	2	3.00	Neutral	3.00	2	1.41
q8: I spend most time:	Managing WF populations	36	3.19	Neutral	3.50	4	1.12
	Managing habitat	35	3.23	Neutral	4.00	4	1.11
	Equal habitat/populations	10	2.90	Neutral	2.50	2	1.29
	None	23	3.17	Neutral	3.00	4	1.03
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	20	2.85	Neutral	2.00	2	1.27
	1 of most important rec-activities	34	3.06	Neutral	3.50	4	1.20
	No more important than others	19	3.37	Neutral	4.00	4	.90
	Less important than others	8	3.63	Disagree	4.00	4	.74
	1 of least important rec-activities	1	2.00	Neutral	2.00	2	.
	Don't WF hunt	22	3.36	Neutral	3.00	3	1.00

a. Based on round mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table J7: "What is the most appropriate form of a numeric population objective for NAWMP?" (Frequencies)

Round (R) 2 Characteristic		q13: Most appropriate form of numeric pop-objective for NAWMP?				
		Peak pop-sizes achieved periodically when habitat is good	Average pop-sizes over period of years	Minimum pop-sizes even when habitat is poor	NAWMP should not include pop-objectives	Total
Meeting location R2	New Orleans	15%	54%	23%	8%	26
	Denver1	24%	59%	18%	0%	17
	Portland	0%	87%	13%	0%	15
	Denver2	0%	100%	0%	0%	7
	Edmonton	24%	71%	6%	0%	17
	Ottawa	9%	78%	9%	4%	23
	Total	13%	70%	13%	3%	105
q1: I attended Round 1 Workshop?	Yes	15%	75%	10%	0%	68
	No	9%	67%	21%	3%	33
	Don't remember	33%	33%	0%	33%	3
q2: Country?	Canada	15%	76%	7%	2%	41
	U.S.	13%	68%	17%	2%	63
q3: Primary employment?	Federal agency	14%	69%	14%	2%	49
	Non-gov. org	14%	75%	11%	0%	28
	Private business	0%	100%	0%	0%	2
	State/Provincial	14%	67%	14%	5%	21
	University	0%	75%	25%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	23%	69%	8%	0%	13
	Mississippi FW	22%	67%	0%	11%	9
	Central FW	15%	69%	15%	0%	13
	Pacific FW	0%	94%	6%	0%	17
	National/multiple FWs	11%	69%	17%	3%	35
	None	17%	56%	22%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	31%	62%	8%	0%	13
	Mississippi FW	20%	60%	10%	10%	10
	Central FW	9%	64%	27%	0%	11
	Pacific FW	0%	83%	17%	0%	12
	National/multiple FWs	14%	66%	14%	6%	35
	None	8%	83%	8%	0%	24
q6: How long active in waterfowl management?	0-1 yr	0%	86%	14%	0%	7
	2-5 yrs	0%	50%	44%	6%	16
	6-10 yrs	8%	67%	17%	8%	12
	11-20 yrs	19%	69%	9%	3%	32
	21-30 yrs	24%	72%	4%	0%	25
	>30 yrs	8%	92%	0%	0%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	9%	82%	9%	0%	11
	Program coordinator/admin	13%	78%	9%	0%	45
	Biologist/scientist	16%	57%	19%	8%	37
	Researcher	10%	70%	20%	0%	10
	Regulations committee member	0%	100%	0%	0%	2
q8: I spend most time:	Managing WF populations	14%	64%	17%	6%	36
	Managing habitat	17%	78%	6%	0%	36
	Equal habitat/populations	10%	80%	10%	0%	10
	None	9%	65%	22%	4%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	25%	65%	10%	0%	20
	1 of most important rec-activities	12%	79%	9%	0%	34
	No more important than others	5%	68%	16%	11%	19
	Less important than others	13%	88%	0%	0%	8
	1 of least important rec-activities	100%	0%	0%	0%	1
	Don't WF hunt	9%	61%	26%	4%	23

Table J8: “NAWMP should include continental-scale, numeric distribution objectives for breeding, migration and wintering areas.” (Frequencies)

Round (R) 2 Characteristic		q14: NAWMP should include continental-scale, numeric distribution objectives for breeding, migration, & wintering areas.					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	12%	23%	23%	27%	15%	26
	Denver1	33%	61%	0%	6%	0%	18
	Portland	7%	73%	20%	0%	0%	15
	Denver2	0%	50%	17%	17%	17%	6
	Edmonton	18%	47%	18%	12%	6%	17
	Ottawa	17%	35%	17%	26%	4%	23
	Total	16%	45%	16%	16%	7%	105
q1: I attended Round 1 Wkshop?	Yes	13%	44%	13%	22%	7%	68
	No	21%	52%	21%	3%	3%	33
	Don't remember	33%	0%	0%	33%	33%	3
q2: Country?	Canada	17%	41%	17%	20%	5%	41
	U.S.	16%	48%	14%	14%	8%	63
q3: Primary employment?	Federal agency	14%	48%	16%	14%	8%	50
	Non-gov org	25%	46%	7%	14%	7%	28
	Private business	50%	50%	0%	0%	0%	2
	State/Provincial	5%	35%	25%	30%	5%	20
	University	25%	50%	25%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	8%	54%	15%	23%	0%	13
	Mississippi FW	25%	38%	13%	13%	13%	8
	Central FW	38%	31%	15%	8%	8%	13
	Pacific FW	12%	65%	18%	0%	6%	17
	National/multiple FWs	11%	47%	11%	25%	6%	36
	None	17%	28%	28%	17%	11%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	15%	46%	23%	15%	0%	13
	Mississippi FW	33%	22%	11%	33%	0%	9
	Central FW	36%	36%	9%	9%	9%	11
	Pacific FW	8%	67%	25%	0%	0%	12
	National/multiple FWs	11%	36%	14%	25%	14%	36
	None	13%	58%	17%	8%	4%	24
q6: How long active in waterfowl management?	0-1 yr	14%	71%	14%	0%	0%	7
	2-5 yrs	13%	56%	13%	13%	6%	16
	6-10 yrs	23%	54%	8%	15%	0%	13
	11-20 yrs	19%	39%	19%	16%	6%	31
	21-30 yrs	8%	44%	20%	20%	8%	25
	>30 yrs	23%	23%	15%	23%	15%	13
	Total	14%	56%	14%	13%	6%	16
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	45%	18%	18%	18%	0%	11
	Program coordinator/admin	13%	49%	16%	16%	7%	45
	Biologist/scientist	8%	51%	16%	14%	11%	37
	Researcher	20%	40%	20%	20%	0%	10
	Regulations committee member	50%	0%	0%	50%	0%	2
q8: I spend most time:	Managing WF populations	8%	39%	17%	25%	11%	36
	Managing habitat	19%	51%	14%	8%	8%	37
	Equal habitat/populations	22%	56%	11%	11%	0%	9
	None	22%	39%	22%	17%	0%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	15%	30%	20%	25%	10%	20
	1 of most important rec-activities	21%	38%	12%	18%	12%	34
	No more important than others	17%	50%	11%	17%	6%	18
	Less important than others	0%	63%	13%	25%	0%	8
	1 of least important rec-activities	100%	0%	0%	0%	0%	1
	Don't WF hunt	13%	58%	25%	4%	0%	24

Table J9: "NAWMP should include continental-scale, numeric distribution objectives for breeding, migration and wintering areas." (Descriptives)

Round (R) 2 Characteristic		q14: NAWMP should include continental-scale, numeric distribution objectives for breeding, migration, & wintering areas.					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	3.12	Neutral	3.00	4	1.28
	Denver1	18	1.78	Agree	2.00	2	.73
	Portland	15	2.13	Agree	2.00	2	.52
	Denver2	6	3.00	Neutral	2.50	2	1.26
	Edmonton	17	2.41	Agree	2.00	2	1.12
	Ottawa	23	2.65	Neutral	2.00	2	1.19
	Total	105	2.52	Neutral	2.00	2	1.14
q1: I attended Round 1 Workshop?	Yes	68	2.66	Neutral	2.00	2	1.18
	No	33	2.15	Agree	2.00	2	.91
	Don't remember	3	3.33	Neutral	4.00	1	2.08
q2: Country?	Canada	41	2.54	Neutral	2.00	2	1.14
	U.S.	63	2.51	Neutral	2.00	2	1.16
q3: Primary employment?	Federal agency	50	2.54	Neutral	2.00	2	1.15
	Non-gov org	28	2.32	Agree	2.00	2	1.22
	Private business	2	1.50	Agree	1.50	1	.71
	State/Provincial	20	2.95	Neutral	3.00	2	1.05
	University	4	2.00	Agree	2.00	2	.82
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	2.54	Neutral	2.00	2	.97
	Mississippi F/W	8	2.50	Neutral	2.00	2	1.41
	Central F/W	13	2.15	Agree	2.00	1	1.28
	Pacific F/W	17	2.24	Agree	2.00	2	.90
	National/multiple F/Ws	36	2.67	Neutral	2.00	2	1.15
	None	18	2.78	Neutral	3.00	2	1.26
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.38	Agree	2.00	2	.96
	Mississippi F/W	9	2.44	Agree	2.00	1	1.33
	Central F/W	11	2.18	Agree	2.00	1	1.33
	Pacific F/W	12	2.17	Agree	2.00	2	.58
	National/multiple F/Ws	36	2.94	Neutral	3.00	2	1.29
	None	24	2.33	Agree	2.00	2	.96
q6: How long active in waterfowl management?	0-1 yr	7	2.00	Agree	2.00	2	.58
	2-5 yrs	16	2.44	Agree	2.00	2	1.09
	6-10 yrs	13	2.15	Agree	2.00	2	.99
	11-20 yrs	31	2.52	Neutral	2.00	2	1.18
	21-30 yrs	25	2.76	Neutral	2.00	2	1.13
	>30 yrs	13	2.85	Neutral	3.00	1	1.46
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	11	2.09	Agree	2.00	1	1.22
	Program coordinator/admin	45	2.53	Neutral	2.00	2	1.12
	Biologist/scientist	37	2.68	Neutral	2.00	2	1.16
	Researcher	10	2.40	Agree	2.00	2	1.07
	Regulations committee member	2	2.50	Neutral	2.50	1	2.12
q8: I spend most time:	Managing WF populations	36	2.92	Neutral	3.00	2	1.20
	Managing habitat	37	2.35	Agree	2.00	2	1.14
	Equal habitat/populations	9	2.11	Agree	2.00	2	.93
	None	23	2.35	Agree	2.00	2	1.03
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	20	2.85	Neutral	3.00	2	1.27
	1 of most important rec-activities	34	2.62	Neutral	2.00	2	1.33
	No more important than others	18	2.44	Agree	2.00	2	1.15
	Less important than others	8	2.63	Neutral	2.00	2	.92
	1 of least important rec-activities	1	1.00	Agree	1.00	1	.
	Don't WF hunt	24	2.21	Agree	2.00	2	.72

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table J10: "What is the most appropriate form of a numeric habitat objective for NAWMP?" (Frequencies)

Round (R) 2 Characteristic		q15: What is most appropriate form of NAWMP numeric habitat objective?					
		Habitat conserved specifically for W/F conservation	Habitat conserved by all conservation efforts, whether or not targeted for W/F	Status of important landscape features needed to sustain W/F pops, incorporating habitat gains & losses	Numeric estimate of W/F carrying capacity	NAWMP should not include numeric habitat objectives	Total
Meeting location R2	New Orleans	15%	0%	54%	19%	12%	26
	Denver1	0%	11%	56%	22%	11%	18
	Portland	0%	40%	47%	13%	0%	15
	Denver2	17%	0%	83%	0%	0%	6
	Edmonton	0%	18%	76%	6%	0%	17
	Ottawa	9%	13%	70%	9%	0%	23
	Total	7%	13%	62%	13%	5%	105
q1: I attended Round 1 Wkshop?	Yes	9%	7%	66%	12%	6%	68
	No	0%	24%	58%	18%	0%	33
	Don't remember	0%	33%	33%	0%	33%	3
q2: Country?	Canada	5%	15%	71%	10%	0%	41
	U.S.	6%	13%	57%	16%	8%	63
q3: Primary employment?	Federal agency	6%	8%	58%	22%	6%	50
	Non-gov org	4%	14%	75%	7%	0%	28
	Private business	0%	100%	0%	0%	0%	2
	State/Provincial	10%	5%	75%	0%	10%	20
	University	0%	75%	0%	25%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	8%	23%	62%	0%	8%	13
	Mississippi F/W	0%	0%	88%	13%	0%	8
	Central F/W	0%	8%	77%	8%	8%	13
	Pacific F/W	6%	35%	53%	6%	0%	17
	National/multiple F/Ws	8%	3%	64%	19%	6%	36
	None	11%	17%	44%	22%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	8%	23%	54%	8%	8%	13
	Mississippi F/W	11%	0%	67%	22%	0%	9
	Central F/W	0%	18%	64%	9%	9%	11
	Pacific F/W	0%	42%	50%	8%	0%	12
	National/multiple F/Ws	14%	3%	58%	17%	8%	36
	None	0%	13%	75%	13%	0%	24
q6: How long active in waterfowl management?	0-1 yr	0%	29%	43%	29%	0%	7
	2-5 yrs	6%	19%	63%	13%	0%	16
	6-10 yrs	8%	31%	38%	15%	8%	13
	11-20 yrs	6%	0%	68%	16%	10%	31
	21-30 yrs	8%	8%	72%	12%	0%	25
	>30 yrs	8%	23%	62%	0%	8%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	9%	9%	82%	0%	0%	11
	Program coordinator/admin	4%	11%	67%	9%	9%	45
	Biologist/scientist	11%	14%	59%	16%	0%	37
	Researcher	0%	20%	30%	40%	10%	10
	Regulations committee member	0%	50%	50%	0%	0%	2
q8: I spend most time:	Managing W/F populations	8%	6%	61%	17%	8%	36
	Managing habitat	5%	14%	62%	14%	5%	37
	Equal habitat/populations	0%	33%	56%	11%	0%	9
	None	9%	17%	65%	9%	0%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	10%	15%	55%	10%	10%	20
	1 of most important rec-activities	3%	9%	65%	21%	3%	34
	No more important than others	11%	11%	78%	0%	0%	18
	Less important than others	13%	13%	63%	13%	0%	8
	1 of least important rec-activities	0%	0%	100%	0%	0%	1
	Don't W/F hunt	4%	21%	50%	17%	8%	24

Table J11: "Numeric habitat objectives should be employed on the following scales." (Frequencies)

Round (R) 2 Characteristic		q16: What scales for numeric habitat objectives?					
		Continental	JV or BCR	Scales smaller than JVs or BCRs	All scales	None of scales	Total
Meeting location R2	New Orleans	4%	38%	0%	54%	4%	26
	Denver1	0%	44%	6%	44%	6%	18
	Portland	0%	40%	7%	47%	7%	15
	Denver2	0%	50%	0%	50%	0%	6
	Edmonton	0%	41%	18%	41%	0%	17
	Ottawa	4%	70%	17%	9%	0%	23
	Total	2%	48%	9%	39%	3%	105
q1: I attended Round 1 Wkshop?	Yes	3%	47%	10%	35%	4%	68
	No	0%	45%	6%	48%	0%	33
	Don't remember	0%	67%	0%	33%	0%	3
q2: Country?	Canada	2%	54%	17%	27%	0%	41
	U.S.	2%	43%	3%	48%	5%	63
q3: Primary employment?	Federal agency	2%	48%	6%	40%	4%	50
	Non-gov org	0%	46%	11%	39%	4%	28
	Private business	0%	0%	50%	50%	0%	2
	State/Provincial	5%	45%	10%	40%	0%	20
	University	0%	75%	0%	25%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	0%	54%	23%	23%	0%	13
	Mississippi F/W	0%	63%	0%	38%	0%	8
	Central F/W	0%	31%	15%	46%	8%	13
	Pacific F/W	0%	35%	0%	65%	0%	17
	National/multiple F/Ws	6%	61%	8%	19%	6%	36
	None	0%	33%	6%	61%	0%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	0%	69%	15%	15%	0%	13
	Mississippi F/W	0%	56%	11%	33%	0%	9
	Central F/W	0%	36%	9%	55%	0%	11
	Pacific F/W	0%	25%	0%	75%	0%	12
	National/multiple F/Ws	6%	47%	11%	31%	6%	36
	None	0%	50%	4%	42%	4%	24
q6: How long active in waterfowl management?	0-1 yr	0%	43%	14%	43%	0%	7
	2-5 yrs	0%	50%	13%	31%	6%	16
	6-10 yrs	0%	31%	0%	62%	8%	13
	11-20 yrs	3%	58%	10%	26%	3%	31
	21-30 yrs	0%	44%	8%	48%	0%	25
	>30 yrs	8%	46%	8%	38%	0%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	0%	64%	0%	36%	0%	11
	Program coordinator/admin	2%	49%	4%	42%	2%	45
	Biologist/scientist	0%	49%	11%	35%	5%	37
	Researcher	10%	20%	20%	50%	0%	10
	Regulations committee member	0%	50%	50%	0%	0%	2
q8: I spend most time:	Managing W/F populations	0%	53%	6%	39%	3%	36
	Managing habitat	0%	43%	8%	46%	3%	37
	Equal habitat/populations	0%	56%	0%	44%	0%	9
	None	9%	43%	17%	26%	4%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	0%	45%	10%	45%	0%	20
	1 of most important rec-activities	0%	44%	9%	38%	3%	34
	No more important than others	6%	39%	11%	44%	0%	18
	Less important than others	13%	63%	0%	25%	0%	8
	1 of least important rec-activities	0%	0%	0%	100%	0%	1
	Don't W/F hunt	0%	58%	8%	33%	0%	24

Table J12: "What is the most appropriate form of a numeric waterfowl hunting objective for NAWMP?" (Frequencies)

Round (R) 2 Characteristic		q17: Most appropriate NAWMP numeric WF-hunting objective					Total
		Number WF-hunters &/or days afield	Size of WF-harvest	Amount of financial/policy support provided by WF-hunters	Level of hunter satisfaction as determined by surveys	NAWMP should not include numeric WF-hunting objectives	
Meeting location R2	New Orleans	35%	8%	4%	12%	42%	26
	Denver1	56%	0%	11%	6%	28%	18
	Portland	27%	47%	0%	13%	13%	15
	Denver2	83%	0%	0%	0%	17%	6
	Edmonton	35%	6%	18%	29%	12%	17
	Ottawa	30%	26%	0%	13%	30%	23
	Total	39%	15%	6%	13%	27%	105
q1: I attended Round 1 Wkshop?	Yes	31%	13%	4%	15%	37%	68
	No	55%	21%	6%	12%	6%	33
	Don't remember	67%	0%	33%	0%	0%	3
q2: Country?	Canada	32%	15%	7%	20%	27%	41
	U.S.	44%	16%	5%	10%	25%	63
q3: Primary employment?	Federal agency	40%	14%	0%	10%	36%	50
	Non-gov org	32%	18%	18%	14%	18%	28
	Private business	0%	0%	0%	50%	50%	2
	State/Provincial	60%	0%	5%	20%	15%	20
	University	0%	100%	0%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	31%	23%	0%	31%	15%	13
	Mississippi FW	75%	0%	0%	0%	25%	8
	Central FW	46%	8%	15%	15%	15%	13
	Pacific FW	29%	18%	12%	6%	35%	17
	National/multiple FWs	44%	11%	6%	14%	25%	36
	None	22%	28%	0%	11%	39%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	23%	15%	0%	31%	31%	13
	Mississippi FW	56%	0%	0%	0%	44%	9
	Central FW	36%	9%	18%	18%	18%	11
	Pacific FW	33%	25%	17%	0%	25%	12
	National/multiple FWs	44%	8%	3%	11%	33%	36
	None	38%	29%	4%	17%	13%	24
q6: How long active in waterfowl management?	0-1 yr	43%	43%	0%	14%	0%	7
	2-5 yrs	38%	25%	6%	6%	25%	16
	6-10 yrs	31%	8%	8%	23%	31%	13
	11-20 yrs	52%	6%	3%	13%	26%	31
	21-30 yrs	32%	16%	8%	16%	28%	25
	>30 yrs	31%	15%	8%	8%	38%	13
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	27%	18%	0%	36%	18%	11
	Program coordinator/admin	49%	9%	7%	7%	29%	45
	Biologist/scientist	38%	8%	5%	19%	30%	37
	Researcher	10%	70%	0%	0%	20%	10
	Regulations committee member	50%	0%	50%	0%	0%	2
q8: I spend most time:	Managing WF populations	33%	8%	6%	11%	42%	36
	Managing habitat	41%	14%	8%	19%	19%	37
	Equal habitat/populations	56%	22%	0%	11%	11%	9
	None	39%	26%	4%	9%	22%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	50%	10%	10%	10%	20%	20
	1 of most important rec-activities	35%	24%	3%	9%	29%	34
	No more important than others	56%	6%	0%	22%	17%	18
	Less important than others	13%	13%	13%	25%	38%	8
	1 of least important rec-activities	0%	0%	0%	100%	0%	1
	Don't WF hunt	33%	17%	8%	8%	33%	24

Table J13: "NAWMP should set an objective of:" (Frequencies)

Round (R) 2 Characteristic		q18: NAWMP should set objective of:			
		Increase W/F-hunters &/or hunting	Maintain current hunters &/or hunting	Neither: let hunters &/or hunting fluctuate	Total
Meeting location R2	New Orleans	19%	15%	65%	26
	Denver1	33%	11%	56%	18
	Portland	40%	27%	33%	15
	Denver2	83%	17%	0%	6
	Edmonton	53%	35%	12%	17
	Ottawa	32%	18%	50%	22
	Total	37%	20%	43%	104
q1: I attended Round 1 Wkshop?	Yes	37%	19%	43%	67
	No	33%	24%	42%	33
	Don't remember	67%	0%	33%	3
q2: Country?	Canada	38%	28%	35%	40
	U.S.	37%	16%	48%	63
q3: Primary employment?	Federal agency	30%	14%	56%	50
	Non-gov org	57%	25%	18%	28
	Private business	100%	0%	0%	1
	State/Provincial	25%	35%	40%	20
	University	25%	0%	75%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	17%	17%	67%	12
	Mississippi F/W	25%	25%	50%	8
	Central F/W	54%	23%	23%	13
	Pacific F/W	18%	24%	59%	17
	National/multiple F/Ws	53%	22%	25%	36
	None	28%	11%	61%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	8%	8%	83%	12
	Mississippi F/W	22%	22%	56%	9
	Central F/W	45%	27%	27%	11
	Pacific F/W	25%	25%	50%	12
	National/multiple F/Ws	36%	25%	39%	36
	None	58%	13%	29%	24
q6: How long active in waterfowl management?	0-1 yr	29%	14%	57%	7
	2-5 yrs	25%	25%	50%	16
	6-10 yrs	23%	8%	69%	13
	11-20 yrs	39%	29%	32%	31
	21-30 yrs	48%	12%	40%	25
	>30 yrs	42%	25%	33%	12
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	55%	18%	27%	11
	Program coordinator/admin	38%	20%	42%	45
	Biologist/scientist	25%	22%	53%	36
	Researcher	40%	20%	40%	10
	Regulations committee member	100%	0%	0%	2
q8: I spend most time:	Managing W/F populations	22%	22%	56%	36
	Managing habitat	50%	19%	31%	36
	Equal habitat/populations	33%	33%	33%	9
	None	39%	13%	48%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	65%	20%	15%	20
	1 of most important rec-activities	44%	21%	35%	34
	No more important than others	24%	24%	53%	17
	Less important than others	25%	25%	50%	8
	1 of least important rec-activities	100%	0%	0%	1
	Don't W/F hunt	13%	17%	71%	24

Table J14: “What is the most appropriate form of a numeric waterfowl viewing and enjoyment objective for NAWMP?” (Frequencies)

Round (R) 2 Characteristic		q19: Most appropriate form of NAWMP numeric WF viewing & enjoyment objective?					Total
		Participation in WF viewing/enjoyment activities	Financial support from WF viewers	Activism in policy arena by those who view/enjoy (don't hunt) WF	General public's attitude toward WF conservation	NAWMP should not include numeric WF-viewing/enjoyment objectives	
Meeting location R2	New Orleans	23%	0%	4%	4%	69%	26
	Denver1	39%	6%	6%	33%	17%	18
	Portland	33%	27%	7%	27%	7%	15
	Denver2	50%	0%	17%	33%	0%	6
	Edmonton	35%	12%	12%	18%	24%	17
	Ottawa	35%	13%	0%	26%	26%	23
	Total	33%	10%	6%	21%	30%	105
q1: I attended Round 1 Wkshop?	Yes	29%	4%	6%	19%	41%	68
	No	45%	18%	3%	21%	12%	33
	Don't remember	0%	33%	33%	33%	0%	3
q2: Country?	Canada	32%	12%	5%	22%	29%	41
	U.S.	35%	8%	6%	19%	32%	63
q3: Primary employment?	Federal agency	38%	4%	4%	16%	38%	50
	Non-gov org	29%	14%	11%	29%	18%	28
	Private business	0%	50%	50%	0%	0%	2
	State/Provincial	35%	5%	0%	20%	40%	20
	University	25%	50%	0%	25%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	31%	8%	0%	15%	46%	13
	Mississippi FW	63%	13%	0%	13%	13%	8
	Central FW	38%	15%	8%	15%	23%	13
	Pacific FW	35%	6%	6%	35%	18%	17
	National/multiple FWs	31%	6%	8%	22%	33%	36
	None	22%	17%	6%	17%	39%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	31%	8%	0%	15%	46%	13
	Mississippi FW	44%	22%	0%	11%	22%	9
	Central FW	27%	27%	0%	18%	27%	11
	Pacific FW	33%	0%	8%	33%	25%	12
	National/multiple FWs	22%	3%	8%	19%	47%	36
	None	50%	13%	8%	25%	4%	24
q6: How long active in waterfowl management?	0-1 yr	71%	14%	0%	14%	0%	7
	2-5 yrs	38%	19%	6%	6%	31%	16
	6-10 yrs	31%	8%	0%	31%	31%	13
	11-20 yrs	32%	6%	6%	16%	39%	31
	21-30 yrs	32%	0%	4%	36%	28%	25
	>30 yrs	15%	23%	15%	15%	31%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	45%	18%	0%	18%	18%	11
	Program coordinator/admin	31%	4%	9%	22%	33%	45
	Biologist/scientist	32%	8%	5%	19%	35%	37
	Researcher	30%	20%	0%	30%	20%	10
	Regulations committee member	50%	50%	0%	0%	0%	2
q8: I spend most time:	Managing WF populations	22%	8%	3%	8%	58%	36
	Managing habitat	41%	8%	8%	32%	11%	37
	Equal habitat/populations	67%	0%	11%	0%	22%	9
	None	26%	17%	4%	30%	22%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	40%	10%	10%	25%	15%	20
	1 of most important rec-activities	26%	12%	6%	26%	29%	34
	No more important than others	28%	17%	6%	11%	39%	18
	Less important than others	25%	0%	13%	25%	38%	8
	1 of least important rec-activities	100%	0%	0%	0%	0%	1
	Don't WF hunt	42%	4%	0%	17%	38%	24

Table J15: Of the four fundamental objectives, it is most important that we have clear numeric objectives for (4 votes total)...Votes for "1": Populations (each respondent could cast total of 4 votes; that is, 0 for "1", 1 vote for "1", 2 votes for "1", 3 votes for "1", or 4 votes for "1"). (Frequencies)

Round (R) 2 Characteristic		Number of votes for "1" Populations					
		0	1	2	3	4	Total Voters
Meeting location R2	New Orleans	3	4	10	5	4	26
	Denver1	3	3	5	4	3	18
	Portland	1	10	4	0	0	15
	Denver2	0	1	3	0	0	4
	Edmonton	3	5	9	0	0	17
	Ottawa	1	9	9	2	2	23
	Total	11	32	40	11	9	103
q1: I attended Round 1 Wkshop?	Yes	7	18	28	7	7	67
	No	4	13	9	4	2	32
	Don't remember	0	1	2	0	0	3
q2: Country?	Canada	4	13	20	2	2	41
	U.S.	7	19	19	9	7	61
q3: Primary employment?	Federal agency	5	10	21	8	5	49
	Non-gov org	3	11	11	1	2	28
	Private business	1	1	0	0	0	2
	State/Provincial	1	8	6	2	2	19
	University	1	2	1	0	0	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	1	5	4	1	2	13
	Mississippi F/W	0	5	2	1	0	8
	Central F/W	3	1	4	1	3	12
	Pacific F/W	2	8	5	2	0	17
	National/multiple F/Ws	1	7	21	3	3	35
	None	4	6	4	3	1	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	2	3	3	3	2	13
	Mississippi F/W	0	5	2	2	0	9
	Central F/W	2	2	3	1	3	11
	Pacific F/W	1	7	3	1	0	12
	National/multiple F/Ws	4	7	18	3	3	35
	None	2	8	11	1	1	23
q6: How long active in waterfowl management?	0-1 yr	1	3	2	1	0	7
	2-5 yrs	2	6	6	1	1	16
	6-10 yrs	1	5	5	0	2	13
	11-20 yrs	3	7	11	5	4	30
	21-30 yrs	3	7	9	4	1	24
	>30 yrs	1	4	7	0	1	13
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	1	3	7	0	0	11
	Program coordinator/admin	6	11	14	7	5	43
	Biologist/scientist	4	10	15	4	4	37
	Researcher	0	6	4	0	0	10
	Regulations committee member	0	2	0	0	0	2
q8: I spend most time:	Managing W/F populations	3	9	11	8	5	36
	Managing habitat	3	13	16	2	2	36
	Equal habitat/populations	0	5	3	0	0	8
	None	5	5	10	1	2	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	0	9	10	0	1	20
	1 of most important rec-activities	4	9	13	3	4	33
	No more important than others	3	7	4	3	0	17
	Less important than others	1	1	4	2	0	8
	1 of least important rec-activities	0	0	1	0	0	1
	Don't W/F hunt	3	6	8	3	4	24

Table J16: Of the four fundamental objectives, it is most important that we have clear numeric objectives for (4 votes total)...Votes for "2": Landscape conditions (each respondent could cast total of 4 votes; that is, 0 for "2", 1 vote for "2", 2 votes for "2", 3 votes for "2", or 4 votes for "2"). (Frequencies)

Round (R) 2 Characteristic		Number of votes for "2" Landscape conditions					
		0	1	2	3	4	Total \oters
Meeting location R2	New Orleans	23%	35%	27%	8%	8%	26
	Denver1	28%	22%	44%	6%	0%	18
	Portland	0%	33%	40%	27%	0%	15
	Denver2	0%	75%	25%	0%	0%	4
	Edmonton	6%	12%	59%	18%	6%	17
	Ottawa	9%	35%	48%	9%	0%	23
	Total	14%	30%	42%	12%	3%	103
q1: I attended Round 1 Workshop?	Yes	12%	30%	43%	12%	3%	67
	No	9%	34%	41%	13%	3%	32
	Don't remember	67%	0%	33%	0%	0%	3
q2: Country?	Canada	7%	24%	54%	12%	2%	41
	U.S.	16%	34%	34%	11%	3%	61
q3: Primary employment?	Federal agency	14%	37%	37%	8%	4%	49
	Non-gov org	11%	32%	46%	11%	0%	28
	Private business	0%	50%	0%	50%	0%	2
	State/Provincial	16%	16%	53%	11%	5%	19
	University	0%	0%	50%	50%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	15%	31%	38%	15%	0%	13
	Mississippi FW	0%	25%	50%	25%	0%	8
	Central FW	33%	8%	58%	0%	0%	12
	Pacific FW	0%	35%	41%	18%	6%	17
	National/multiple FWs	20%	29%	43%	6%	3%	35
	None	6%	44%	28%	17%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	15%	38%	23%	15%	8%	13
	Mississippi FW	0%	44%	44%	11%	0%	9
	Central FW	36%	18%	36%	9%	0%	11
	Pacific FW	0%	33%	58%	8%	0%	12
	National/multiple FWs	20%	20%	46%	11%	3%	35
	None	4%	39%	39%	13%	4%	23
q6: How long active in waterfowl management?	0-1 yr	0%	57%	29%	14%	0%	7
	2-5 yrs	13%	19%	44%	13%	13%	16
	6-10 yrs	23%	23%	46%	8%	0%	13
	11-20 yrs	17%	30%	37%	17%	0%	30
	21-30 yrs	8%	38%	46%	4%	4%	24
	>30 yrs	15%	23%	46%	15%	0%	13
q7: Most frequent waterfowl mgnt hat?	Agency/Executive director	0%	36%	55%	9%	0%	11
	Program coordinator/admin	16%	33%	42%	5%	5%	43
	Biologist/scientist	16%	27%	32%	22%	3%	37
	Researcher	0%	30%	60%	10%	0%	10
	Regulations committee member	50%	0%	50%	0%	0%	2
q8: I spend most time:	Managing WF populations	22%	28%	36%	8%	6%	36
	Managing habitat	8%	33%	39%	17%	3%	36
	Equal habitat/populations	0%	38%	50%	13%	0%	8
	None	13%	26%	52%	9%	0%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	10%	45%	35%	10%	0%	20
	1 of most important rec-activities	18%	21%	45%	15%	0%	33
	No more important than others	6%	29%	35%	24%	6%	17
	Less important than others	0%	38%	50%	0%	13%	8
	1 of least important rec-activities	0%	0%	100%	0%	0%	1
	Don't WF hunt	21%	29%	42%	4%	4%	24

Table J17: Of the four fundamental objectives, it is most important that we have clear numeric objectives for (4 votes total)...Votes for "3": Hunting (each respondent could cast total of 4 votes; that is, 0 for "3", 1 vote for "3", 2 votes for "3", 3 votes for "3", or 4 votes for "3"). (Frequencies)

Round (R) 2 Characteristic		Number of votes for "3" Hunting				
		0	1	2	3	Total Voters
Meeting location R2	New Orleans	69%	27%	4%	0%	26
	Denver1	67%	22%	11%	0%	18
	Portland	40%	47%	13%	0%	15
	Denver2	25%	75%	0%	0%	4
	Edmonton	71%	24%	0%	6%	17
	Ottawa	57%	43%	0%	0%	23
	Total	60%	34%	5%	1%	103
q1: I attended Round 1 Workshop?	Yes	66%	33%	1%	0%	67
	No	53%	41%	6%	0%	32
	Don't remember	33%	0%	33%	33%	3
q2: Country?	Canada	66%	32%	0%	2%	41
	U.S.	57%	36%	7%	0%	61
q3: Primary employment?	Federal agency	67%	29%	4%	0%	49
	Non-gov org	50%	39%	7%	4%	28
	Private business	0%	100%	0%	0%	2
	State/Provincial	68%	32%	0%	0%	19
	University	50%	50%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	69%	31%	0%	0%	13
	Mississippi FW	63%	38%	0%	0%	8
	Central FW	67%	17%	8%	8%	12
	Pacific FW	59%	41%	0%	0%	17
	National/multiple FWs	60%	31%	9%	0%	35
	None	50%	44%	6%	0%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	77%	23%	0%	0%	13
	Mississippi FW	56%	44%	0%	0%	9
	Central FW	64%	18%	9%	9%	11
	Pacific FW	42%	58%	0%	0%	12
	National/multiple FWs	60%	34%	6%	0%	35
	None	61%	30%	9%	0%	23
q6: How long active in waterfowl management?	0-1 yr	43%	57%	0%	0%	7
	2-5 yrs	69%	19%	13%	0%	16
	6-10 yrs	54%	38%	8%	0%	13
	11-20 yrs	67%	30%	3%	0%	30
	21-30 yrs	54%	42%	4%	0%	24
	>30 yrs	62%	31%	0%	8%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	55%	45%	0%	0%	11
	Program coordinator/admin	60%	35%	5%	0%	43
	Biologist/scientist	68%	27%	5%	0%	37
	Researcher	50%	40%	10%	0%	10
	Regulations committee member	0%	50%	0%	50%	2
q8: I spend most time:	Managing WWF populations	69%	28%	0%	3%	36
	Managing habitat	64%	31%	6%	0%	36
	Equal habitat/populations	38%	63%	0%	0%	8
	None	48%	39%	13%	0%	23
q9: How important a recreational activity is WWF hunting to you?	Most important rec-activity	35%	60%	5%	0%	20
	1 of most important rec-activities	64%	24%	9%	3%	33
	No more important than others	53%	47%	0%	0%	17
	Less important than others	88%	13%	0%	0%	8
	1 of least important rec-activities	100%	0%	0%	0%	1
	Don't WWF hunt	71%	25%	4%	0%	24

Table J18: Of the four fundamental objectives, it is most important that we have clear numeric objectives for (4 votes total)...Votes for "4": Viewing (each respondent could cast total of 4 votes; that is, 0 for "4", 1 vote for "4", 2 votes for "4", 3 votes for "4", or 4 votes for "4"). (Frequencies)

Round (R) 2 Characteristic		Number of votes for "4" Viewing		
		0	1	Total Voters
Meeting location R2	New Orleans	88%	12%	26
	Denver1	83%	17%	18
	Portland	87%	13%	15
	Denver2	75%	25%	4
	Edmonton	88%	12%	17
	Ottawa	87%	13%	23
	Total	86%	14%	103
q1: I attended Round 1 Wkshop?	Yes	85%	15%	67
	No	88%	13%	32
	Don't remember	100%	0%	3
q2: Country?	Canada	88%	12%	41
	U.S.	85%	15%	61
q3: Primary employment?	Federal agency	84%	16%	49
	Non-gov org	86%	14%	28
	Private business	50%	50%	2
	State/Provincial	95%	5%	19
	University	100%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	85%	15%	13
	Mississippi F/W	88%	13%	8
	Central F/W	83%	17%	12
	Pacific F/W	82%	18%	17
	National/multiple F/Ws	94%	6%	35
	None	78%	22%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	85%	15%	13
	Mississippi F/W	78%	22%	9
	Central F/W	91%	9%	11
	Pacific F/W	75%	25%	12
	National/multiple F/Ws	91%	9%	35
	None	87%	13%	23
q6: How long active in waterfowl management?	0-1 yr	57%	43%	7
	2-5 yrs	94%	6%	16
	6-10 yrs	92%	8%	13
	11-20 yrs	90%	10%	30
	21-30 yrs	83%	17%	24
	>30 yrs	85%	15%	13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	91%	9%	11
	Program coordinator/admin	81%	19%	43
	Biologist/scientist	92%	8%	37
	Researcher	80%	20%	10
	Regulations committee member	100%	0%	2
q8: I spend most time:	Managing WF populations	92%	8%	36
	Managing habitat	89%	11%	36
	Equal habitat/populations	75%	25%	8
	None	78%	22%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	80%	20%	20
	1 of most important rec-activities	91%	9%	33
	No more important than others	94%	6%	17
	Less important than others	100%	0%	8
	1 of least important rec-activities	100%	0%	1
	Don't WF hunt	75%	25%	24

Table J19: "Which of these most closely reflects your philosophy about objectives?" (Frequencies)

Round (R) 2 Characteristic		q21: Which most closely reflects your philosophy about objectives?			
		Should be realistic & achievable	Should be "stretch" -challenge to achieve	Neither	Total
Meeting location R2	New Orleans	58%	31%	12%	26
	Denver1	44%	50%	6%	18
	Portland	47%	53%	0%	15
	Denver2	33%	67%	0%	6
	Edmonton	53%	47%	0%	17
	Ottawa	78%	22%	0%	23
	Total	56%	40%	4%	105
q1: I attended Round 1 Wkshop?	Yes	56%	43%	1%	68
	No	55%	36%	9%	33
	Don't remember	67%	33%	0%	3
q2: Country?	Canada	71%	29%	0%	41
	U.S.	46%	48%	6%	63
q3: Primary employment?	Federal agency	60%	34%	6%	50
	Non-gov org	50%	46%	4%	28
	Private business	50%	50%	0%	2
	State/Provincial	55%	45%	0%	20
	University	50%	50%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	85%	15%	0%	13
	Mississippi F/W	38%	63%	0%	8
	Central F/W	46%	46%	8%	13
	Pacific F/W	59%	35%	6%	17
	National/multiple F/Ws	53%	44%	3%	36
	None	56%	39%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	85%	15%	0%	13
	Mississippi F/W	44%	56%	0%	9
	Central F/W	36%	55%	9%	11
	Pacific F/W	67%	25%	8%	12
	National/multiple F/Ws	58%	39%	3%	36
	None	46%	50%	4%	24
q6: How long active in waterfowl management?	0-1 yr	29%	57%	14%	7
	2-5 yrs	69%	31%	0%	16
	6-10 yrs	69%	23%	8%	13
	11-20 yrs	52%	45%	3%	31
	21-30 yrs	60%	40%	0%	25
	>30 yrs	46%	46%	8%	13
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	36%	64%	0%	11
	Program coordinator/admin	58%	40%	2%	45
	Biologist/scientist	57%	35%	8%	37
	Researcher	70%	30%	0%	10
	Regulations committee member	50%	50%	0%	2
q8: I spend most time:	Managing W/F populations	67%	28%	6%	36
	Managing habitat	51%	46%	3%	37
	Equal habitat/populations	56%	44%	0%	9
	None	48%	48%	4%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	55%	45%	0%	20
	1 of most important rec-activities	44%	53%	3%	34
	No more important than others	67%	33%	0%	18
	Less important than others	50%	50%	0%	8
	1 of least important rec-activities	100%	0%	0%	1
	Don't W/F hunt	67%	21%	13%	24

Appendix K. Evaluation results cross-tabulated frequencies and descriptive statistics

Table K1: Workshop goal 1 “To summarize Round 1 workshop results and provide an update on the Plan Revision process” was met.

Round (R) 2 Characteristic		q22: Wkshp goal 1 (summarize Rd 1 wkshp & update revision process) was met?			
		Strongly agree	Agree	Neutral	Total
Meeting location R2	New Orleans	4%	73%	23%	26
	Denver1	22%	72%	6%	18
	Portland	20%	73%	7%	15
	Denver2	38%	63%	0%	8
	Edmonton	53%	47%	0%	17
	Ottawa	42%	58%	0%	24
	Total	28%	65%	7%	108
q1: I attended Round 1 Wkshp?	Yes	31%	61%	7%	70
	No	18%	76%	6%	34
	Don't remember	67%	33%	0%	3
q2: Country?	Canada	43%	55%	2%	42
	U.S.	18%	72%	9%	65
q3: Primary employment?	Federal agency	27%	65%	8%	52
	Non-gov org	39%	54%	7%	28
	Private business	0%	100%	0%	2
	State/Provincial	19%	76%	5%	21
	University	25%	75%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	31%	69%	0%	13
	Mississippi F/W	25%	75%	0%	8
	Central F/W	7%	79%	14%	14
	Pacific F/W	28%	67%	6%	18
	National/multiple F/Ws	43%	54%	3%	37
	None	11%	67%	22%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	38%	62%	0%	13
	Mississippi F/W	22%	56%	22%	9
	Central F/W	8%	75%	17%	12
	Pacific F/W	8%	85%	8%	13
	National/multiple F/Ws	27%	68%	5%	37
	None	46%	50%	4%	24
q6: How long active in waterfowl management?	0-1 yr	29%	57%	14%	7
	2-5 yrs	38%	56%	6%	16
	6-10 yrs	8%	85%	8%	13
	11-20 yrs	29%	68%	3%	31
	21-30 yrs	27%	69%	4%	26
	>30 yrs	33%	47%	20%	15
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	8%	92%	0%	13
	Program coordinator/admin	43%	54%	2%	46
	Biologist/scientist	16%	68%	16%	37
	Researcher	20%	70%	10%	10
	Regulations committee member	50%	50%	0%	2
q8: I spend most time:	Managing W/F populations	16%	70%	14%	37
	Managing habitat	41%	59%	0%	39
	Equal habitat/populations	33%	67%	0%	9
	None	22%	65%	13%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	25%	70%	5%	20
	1 of most important rec-activities	23%	74%	3%	35
	No more important than others	28%	67%	6%	18
	Less important than others	44%	44%	11%	9
	1 of least important rec-activities	0%	100%	0%	2
	Don't W/F hunt	33%	50%	17%	24

TableK2: Workshop goal 1 “To summarize Round 1 workshop results and provide an update on the Plan Revision process” was met. (Descriptives)

Round (R) 2 Characteristic		q22: Wkshp goal 1 (summarize Rd 1 wkshp & update revision process) was met?				
		Valid N	Mean	Word anchor ^a	Median	Mode
Meeting location R2	New Orleans	26	2.19	Agree	2.00	2
	Denver1	18	1.83	Agree	2.00	2
	Portland	15	1.87	Agree	2.00	2
	Denver2	8	1.63	Agree	2.00	2
	Edmonton	17	1.47	Strongly agree	1.00	1
	Ottawa	24	1.58	Agree	2.00	2
	Total	108	1.80	Agree	2.00	2
q1: I attended Round 1 Wkshp?	Yes	70	1.76	Agree	2.00	2
	No	34	1.88	Agree	2.00	2
	Don't remember	3	1.33	Strongly agree	1.00	1
q2: Country?	Canada	42	1.60	Agree	2.00	2
	U.S.	65	1.91	Agree	2.00	2
q3: Primary employment?	Federal agency	52	1.81	Agree	2.00	2
	Non-gov org	28	1.68	Agree	2.00	2
	Private business	2	2.00	Agree	2.00	2
	State/Provincial	21	1.86	Agree	2.00	2
	University	4	1.75	Agree	2.00	2
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	1.69	Agree	2.00	2
	Mississippi F/W	8	1.75	Agree	2.00	2
	Central F/W	14	2.07	Agree	2.00	2
	Pacific F/W	18	1.78	Agree	2.00	2
	National/multiple F/Ws	37	1.59	Agree	2.00	2
	None	18	2.11	Agree	2.00	2
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	1.62	Agree	2.00	2
	Mississippi F/W	9	2.00	Agree	2.00	2
	Central F/W	12	2.08	Agree	2.00	2
	Pacific F/W	13	2.00	Agree	2.00	2
	National/multiple F/Ws	37	1.78	Agree	2.00	2
	None	24	1.58	Agree	2.00	2
q6: How long active in waterfowl management?	0-1 yr	7	1.86	Agree	2.00	2
	2-5 yrs	16	1.69	Agree	2.00	2
	6-10 yrs	13	2.00	Agree	2.00	2
	11-20 yrs	31	1.74	Agree	2.00	2
	21-30 yrs	26	1.77	Agree	2.00	2
	>30 yrs	15	1.87	Agree	2.00	2
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	13	1.92	Agree	2.00	2
	Program coordinator/admin	46	1.59	Agree	2.00	2
	Biologist/scientist	37	2.00	Agree	2.00	2
	Researcher	10	1.90	Agree	2.00	2
	Regulations committee member	2	1.50	Agree	1.50	1
q8: I spend most time:	Managing W/F populations	37	1.97	Agree	2.00	2
	Managing habitat	39	1.59	Agree	2.00	2
	Equal habitat/populations	9	1.67	Agree	2.00	2
	None	23	1.91	Agree	2.00	2
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	20	1.80	Agree	2.00	2
	1 of most important rec-activities	35	1.80	Agree	2.00	2
	No more important than others	18	1.78	Agree	2.00	2
	Less important than others	9	1.67	Agree	2.00	1
	1 of least important rec-activities	2	2.00	Agree	2.00	2
	Don't W/F hunt	24	1.83	Agree	2.00	2

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K3: Workshop goal 2 “To clarify the fundamental objectives and associated measurable attributes” was met. (Frequencies)

Round (R) 2 Characteristic		q23: Wkshp goal 2 (clarify fundamental objectives & associated measurable objectives) was met?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	0%	8%	35%	46%	12%	26
	Denver1	11%	50%	28%	11%	0%	18
	Portland	7%	60%	27%	7%	0%	15
	Denver2	25%	75%	0%	0%	0%	8
	Edmonton	18%	59%	18%	6%	0%	17
	Ottawa	4%	63%	29%	4%	0%	24
	Total	8%	47%	26%	16%	3%	108
q1: I attended Round 1 Wkshop?	Yes	9%	40%	29%	19%	4%	70
	No	6%	65%	18%	12%	0%	34
	Don't remember	33%	33%	33%	0%	0%	3
q2: Country?	Canada	10%	57%	26%	7%	0%	42
	U.S.	8%	42%	25%	22%	5%	65
q3: Primary employment?	Federal agency	8%	40%	31%	19%	2%	52
	Non-gov org	11%	64%	18%	7%	0%	28
	Private business	0%	100%	0%	0%	0%	2
	State/Provincial	10%	29%	29%	24%	10%	21
	University	0%	100%	0%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic FW	8%	46%	31%	15%	0%	13
	Mississippi FW	13%	25%	38%	13%	13%	8
	Central FW	29%	21%	29%	21%	0%	14
	Pacific FW	0%	67%	22%	11%	0%	18
	National/multiple FWs	5%	59%	24%	8%	3%	37
	None	6%	33%	22%	33%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic FW	8%	38%	31%	23%	0%	13
	Mississippi FW	0%	33%	33%	22%	11%	9
	Central FW	25%	33%	25%	17%	0%	12
	Pacific FW	0%	69%	15%	15%	0%	13
	National/multiple FWs	5%	43%	30%	16%	5%	37
	None	13%	58%	21%	8%	0%	24
q6: How long active in waterfowl management?	0-1 yr	0%	57%	14%	29%	0%	7
	2-5 yrs	6%	31%	38%	19%	6%	16
	6-10 yrs	0%	54%	46%	0%	0%	13
	11-20 yrs	10%	39%	29%	23%	0%	31
	21-30 yrs	8%	62%	15%	12%	4%	26
	>30 yrs	20%	47%	13%	13%	7%	15
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	15%	54%	23%	8%	0%	13
	Program coordinator/admin	9%	57%	17%	15%	2%	46
	Biologist/scientist	0%	32%	38%	24%	5%	37
	Researcher	10%	60%	30%	0%	0%	10
	Regulations committee member	100%	0%	0%	0%	0%	2
q8: I spend most time:	Managing WF populations	8%	19%	32%	32%	8%	37
	Managing habitat	5%	72%	21%	3%	0%	39
	Equal habitat/populations	0%	56%	33%	11%	0%	9
	None	17%	48%	22%	13%	0%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	5%	60%	15%	20%	0%	20
	1 of most important rec-activities	14%	49%	20%	14%	3%	35
	No more important than others	0%	33%	39%	22%	6%	18
	Less important than others	0%	56%	22%	11%	11%	9
	1 of least important rec-activities	0%	50%	50%	0%	0%	2
	Don't WF hunt	13%	42%	33%	13%	0%	24

Table K4: Workshop goal 2 “To clarify the fundamental objectives and associated measurable attributes” was met. (Descriptives)

Round (R) 2 Characteristic		q23: Wkshp goal 2 (clarify fundamental objectives & associated measurable objectives) was met?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	3.62	Disagree	4.00	4	.80
	Denver1	18	2.39	Agree	2.00	2	.85
	Portland	15	2.33	Agree	2.00	2	.72
	Denver2	8	1.75	Agree	2.00	2	.46
	Edmonton	17	2.12	Agree	2.00	2	.78
	Ottawa	24	2.33	Agree	2.00	2	.64
	Total	108	2.57	Neutral	2.00	2	.95
q1: I attended Round 1 Wkshp?	Yes	70	2.70	Neutral	3.00	2	1.01
	No	34	2.35	Agree	2.00	2	.77
	Don't remember	3	2.00	Agree	2.00	1	1.00
q2: Country?	Canada	42	2.31	Agree	2.00	2	.75
	U.S.	65	2.74	Neutral	3.00	2	1.03
q3: Primary employment?	Federal agency	52	2.67	Neutral	3.00	2	.94
	Non-gov. org	28	2.21	Agree	2.00	2	.74
	Private business	2	2.00	Agree	2.00	2	.00
	State/Provincial	21	2.95	Neutral	3.00	2	1.16
	University	4	2.00	Agree	2.00	2	.00
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	2.54	Neutral	2.00	2	.88
	Mississippi F/W	8	2.88	Neutral	3.00	3	1.25
	Central F/W	14	2.43	Agree	2.50	1	1.16
	Pacific F/W	18	2.44	Agree	2.00	2	.70
	National/multiple F/Ws	37	2.43	Agree	2.00	2	.83
	None	18	3.00	Neutral	3.00	2	1.08
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.69	Neutral	3.00	2	.95
	Mississippi F/W	9	3.11	Neutral	3.00	2	1.05
	Central F/W	12	2.33	Agree	2.00	2	1.07
	Pacific F/W	13	2.46	Agree	2.00	2	.78
	National/multiple F/Ws	37	2.73	Neutral	3.00	2	.99
	None	24	2.25	Agree	2.00	2	.79
q6: How long active in waterfowl management?	0-1 yr	7	2.71	Neutral	2.00	2	.95
	2-5 yrs	16	2.88	Neutral	3.00	3	1.02
	6-10 yrs	13	2.46	Agree	2.00	2	.52
	11-20 yrs	31	2.65	Neutral	3.00	2	.95
	21-30 yrs	26	2.42	Agree	2.00	2	.95
	>30 yrs	15	2.40	Agree	2.00	2	1.18
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	13	2.23	Agree	2.00	2	.83
	Program coordinator/admin	46	2.46	Agree	2.00	2	.94
	Biologist/scientist	37	3.03	Neutral	3.00	3	.90
	Researcher	10	2.20	Agree	2.00	2	.63
	Regulations committee member	2	1.00	Agree	1.00	1	.00
q8: I spend most time:	Managing WF populations	37	3.14	Neutral	3.00	3	1.08
	Managing habitat	39	2.21	Agree	2.00	2	.57
	Equal habitat/populations	9	2.56	Neutral	2.00	2	.73
	None	23	2.30	Agree	2.00	2	.93
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	20	2.50	Neutral	2.00	2	.89
	1 of most important rec-activities	35	2.43	Agree	2.00	2	1.01
	No more important than others	18	3.00	Neutral	3.00	3	.91
	Less important than others	9	2.78	Neutral	2.00	2	1.09
	1 of least important rec-activities	2	2.50	Neutral	2.50	2	.71
	Don't WF hunt	24	2.46	Agree	2.00	2	.88

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K5: Workshop goal 3 “To seek input on the values associated with the fundamental objectives” was met.
(Frequencies)

Round (R) 2 Characteristic		q24: Wkshp goal 3 (seek input on values associated with fundamental objectives) was met?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	8%	42%	27%	19%	4%	26
	Denver1	6%	61%	28%	6%	0%	18
	Portland	13%	60%	20%	7%	0%	15
	Denver2	13%	88%	0%	0%	0%	8
	Edmonton	35%	53%	0%	12%	0%	17
	Ottawa	21%	58%	21%	0%	0%	24
	Total	16%	56%	19%	8%	1%	108
q1: I attended Round 1 Wkshp?	Yes	19%	53%	19%	9%	1%	70
	No	12%	59%	21%	9%	0%	34
	Don't remember	0%	100%	0%	0%	0%	3
q2: Country?	Canada	24%	55%	14%	7%	0%	42
	U.S.	11%	57%	22%	9%	2%	65
q3: Primary employment?	Federal agency	15%	58%	19%	6%	2%	52
	Non-gov org	21%	54%	14%	11%	0%	28
	Private business	0%	100%	0%	0%	0%	2
	State/Provincial	14%	48%	24%	14%	0%	21
	University	0%	75%	25%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	15%	62%	23%	0%	0%	13
	Mississippi F/W	25%	50%	13%	13%	0%	8
	Central F/W	0%	64%	29%	7%	0%	14
	Pacific F/W	11%	50%	28%	11%	0%	18
	National/multiple F/Ws	24%	54%	14%	8%	0%	37
	None	11%	61%	11%	11%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	15%	62%	23%	0%	0%	13
	Mississippi F/W	22%	67%	11%	0%	0%	9
	Central F/W	0%	50%	33%	17%	0%	12
	Pacific F/W	8%	38%	38%	15%	0%	13
	National/multiple F/Ws	14%	59%	14%	11%	3%	37
	None	29%	58%	8%	4%	0%	24
q6: How long active in waterfowl management?	0-1 yr	14%	71%	14%	0%	0%	7
	2-5 yrs	25%	38%	25%	13%	0%	16
	6-10 yrs	8%	46%	31%	15%	0%	13
	11-20 yrs	16%	65%	16%	3%	0%	31
	21-30 yrs	15%	54%	23%	8%	0%	26
	>30 yrs	13%	67%	0%	13%	7%	15
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	23%	46%	15%	15%	0%	13
	Program coordinator/admin	17%	59%	17%	7%	0%	46
	Biologist/scientist	11%	57%	22%	11%	0%	37
	Researcher	10%	60%	20%	0%	10%	10
	Regulations committee member	50%	50%	0%	0%	0%	2
q8: I spend most time:	Managing W/F populations	8%	43%	30%	16%	3%	37
	Managing habitat	18%	62%	15%	5%	0%	39
	Equal habitat/populations	33%	67%	0%	0%	0%	9
	None	17%	65%	13%	4%	0%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	25%	50%	25%	0%	0%	20
	1 of most important rec-activities	11%	66%	11%	11%	0%	35
	No more important than others	0%	67%	11%	22%	0%	18
	Less important than others	33%	56%	0%	11%	0%	9
	1 of least important rec-activities	0%	100%	0%	0%	0%	2
	Don't W/F hunt	21%	38%	38%	0%	4%	24

Table K6: Workshop goal 3 “To seek input on the values associated with the fundamental objectives” was met. (Descriptives)

Round (R) 2 Characteristic		q24: Wkshp goal 3 (seek input on values associated with fundamental objectives) was met?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	2.69	Neutral	2.50	2	1.01
	Denver1	18	2.33	Agree	2.00	2	.69
	Portland	15	2.20	Agree	2.00	2	.77
	Denver2	8	1.88	Agree	2.00	2	.35
	Edmonton	17	1.88	Agree	2.00	2	.93
	Ottawa	24	2.00	Agree	2.00	2	.66
	Total	108	2.22	Agree	2.00	2	.85
q1: I attended Round 1 Wkshp?	Yes	70	2.21	Agree	2.00	2	.90
	No	34	2.26	Agree	2.00	2	.79
	Don't remember	3	2.00	Agree	2.00	2	.00
q2: Country?	Canada	42	2.05	Agree	2.00	2	.82
	U.S.	65	2.34	Agree	2.00	2	.85
q3: Primary employment?	Federal agency	52	2.21	Agree	2.00	2	.85
	Non-gov org	28	2.14	Agree	2.00	2	.89
	Private business	2	2.00	Agree	2.00	2	.00
	State/Provincial	21	2.38	Agree	2.00	2	.92
	University	4	2.25	Agree	2.00	2	.50
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	2.08	Agree	2.00	2	.64
	Mississippi F/W	8	2.13	Agree	2.00	2	.99
	Central F/W	14	2.43	Agree	2.00	2	.65
	Pacific F/W	18	2.39	Agree	2.00	2	.85
	National/multiple F/Ws	37	2.05	Agree	2.00	2	.85
	None	18	2.39	Agree	2.00	2	1.04
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.08	Agree	2.00	2	.64
	Mississippi F/W	9	1.89	Agree	2.00	2	.60
	Central F/W	12	2.67	Neutral	2.50	2	.78
	Pacific F/W	13	2.62	Neutral	3.00	2	.87
	National/multiple F/Ws	37	2.30	Agree	2.00	2	.94
	None	24	1.87	Agree	2.00	2	.74
q6: How long active in waterfowl management?	0-1 yr	7	2.00	Agree	2.00	2	.58
	2-5 yrs	16	2.25	Agree	2.00	2	1.00
	6-10 yrs	13	2.54	Neutral	2.00	2	.88
	11-20 yrs	31	2.06	Agree	2.00	2	.68
	21-30 yrs	26	2.23	Agree	2.00	2	.82
	>30 yrs	15	2.33	Agree	2.00	2	1.11
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	13	2.23	Agree	2.00	2	1.01
	Program coordinator/admin	46	2.13	Agree	2.00	2	.78
	Biologist/scientist	37	2.32	Agree	2.00	2	.82
	Researcher	10	2.40	Agree	2.00	2	1.07
	Regulations committee member	2	1.50	Agree	1.50	1	.71
q8: I spend most time:	Managing W/F populations	37	2.62	Neutral	2.00	2	.95
	Managing habitat	39	2.08	Agree	2.00	2	.74
	Equal habitat/populations	9	1.67	Agree	2.00	2	.50
	None	23	2.04	Agree	2.00	2	.71
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	20	2.00	Agree	2.00	2	.73
	1 of most important rec-activities	35	2.23	Agree	2.00	2	.81
	No more important than others	18	2.56	Neutral	2.00	2	.86
	Less important than others	9	1.89	Agree	2.00	2	.93
	1 of least important rec-activities	2	2.00	Agree	2.00	2	.00
	Don't W/F hunt	24	2.29	Agree	2.00	2	.95

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K7: Workshop goal 4 “To discuss how best to formulate new objectives in the Plan Revision” was met.
(Frequencies)

Round (R) 2 Characteristic		q25: Wkshp goal 4 (discuss how to formulate new objectives in revision) was met?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	0%	8%	35%	46%	12%	26
	Denver1	11%	22%	44%	22%	0%	18
	Portland	7%	40%	47%	0%	7%	15
	Denver2	0%	75%	25%	0%	0%	8
	Edmonton	6%	41%	47%	6%	0%	17
	Ottawa	0%	38%	54%	8%	0%	24
	Total	4%	31%	44%	18%	4%	108
q1: I attended Round 1 Wkshp?	Yes	4%	27%	44%	20%	4%	70
	No	3%	41%	38%	15%	3%	34
	Don't remember	0%	33%	67%	0%	0%	3
q2: Country?	Canada	2%	38%	50%	7%	2%	42
	U.S.	5%	28%	38%	25%	5%	65
q3: Primary employment?	Federal agency	4%	33%	44%	15%	4%	52
	Non-gov org	7%	32%	39%	21%	0%	28
	Private business	0%	50%	50%	0%	0%	2
	State/Provincial	0%	29%	43%	24%	5%	21
	University	0%	25%	50%	0%	25%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	0%	31%	69%	0%	0%	13
	Mississippi F/W	0%	38%	25%	38%	0%	8
	Central F/W	14%	21%	43%	21%	0%	14
	Pacific F/W	11%	28%	33%	17%	11%	18
	National/multiple F/Ws	0%	46%	41%	11%	3%	37
	None	0%	11%	50%	33%	6%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	0%	23%	69%	8%	0%	13
	Mississippi F/W	0%	33%	22%	44%	0%	9
	Central F/W	8%	17%	42%	33%	0%	12
	Pacific F/W	8%	31%	23%	23%	15%	13
	National/multiple F/Ws	3%	38%	38%	16%	5%	37
	None	4%	33%	58%	4%	0%	24
q6: How long active in waterfowl management?	0-1 yr	0%	14%	57%	29%	0%	7
	2-5 yrs	6%	19%	50%	19%	6%	16
	6-10 yrs	0%	23%	54%	23%	0%	13
	11-20 yrs	3%	39%	45%	13%	0%	31
	21-30 yrs	8%	27%	46%	15%	4%	26
	>30 yrs	0%	53%	13%	20%	13%	15
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	8%	23%	54%	15%	0%	13
	Program coordinator/admin	7%	37%	41%	15%	0%	46
	Biologist/scientist	0%	27%	41%	27%	5%	37
	Researcher	0%	20%	60%	0%	20%	10
	Regulations committee member	0%	100%	0%	0%	0%	2
q8: I spend most time:	Managing W/F populations	0%	24%	38%	30%	8%	37
	Managing habitat	0%	36%	51%	10%	3%	39
	Equal habitat/populations	11%	44%	33%	11%	0%	9
	None	13%	30%	43%	13%	0%	23
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	0%	50%	45%	5%	0%	20
	1 of most important rec-activities	6%	34%	37%	17%	6%	35
	No more important than others	6%	22%	39%	28%	6%	18
	Less important than others	0%	33%	44%	22%	0%	9
	1 of least important rec-activities	0%	50%	50%	0%	0%	2
	Don't W/F hunt	4%	17%	54%	21%	4%	24

Table K8: Workshop goal 4 “To discuss how best to formulate new objectives in the Plan Revision” was met. (Descriptives)

Round (R) 2 Characteristic		q25: Wkshp goal 4 (discuss how to formulate new objectives in revision) was met?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	3.62	Disagree	4.00	4	.80
	Denver1	18	2.78	Neutral	3.00	3	.94
	Portland	15	2.60	Neutral	3.00	3	.91
	Denver2	8	2.25	Agree	2.00	2	.46
	Edmonton	17	2.53	Neutral	3.00	3	.72
	Ottawa	24	2.71	Neutral	3.00	3	.62
	Total	108	2.86	Neutral	3.00	3	.88
q1: I attended Round 1 Wkshp?	Yes	70	2.93	Neutral	3.00	3	.91
	No	34	2.74	Neutral	3.00	2	.86
	Don't remember	3	2.67	Neutral	3.00	3	.58
q2: Country?	Canada	42	2.69	Neutral	3.00	3	.75
	U.S.	65	2.97	Neutral	3.00	3	.95
q3: Primary employment?	Federal agency	52	2.83	Neutral	3.00	3	.88
	Non-gov org	28	2.75	Neutral	3.00	3	.89
	Private business	2	2.50	Neutral	2.50	2	.71
	State/Provincial	21	3.05	Neutral	3.00	3	.86
	University	4	3.25	Neutral	3.00	3	1.26
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	2.69	Neutral	3.00	3	.48
	Mississippi F/W	8	3.00	Neutral	3.00	2	.93
	Central F/W	14	2.71	Neutral	3.00	3	.99
	Pacific F/W	18	2.89	Neutral	3.00	3	1.18
	National/multiple F/Ws	37	2.70	Neutral	3.00	2	.78
	None	18	3.33	Neutral	3.00	3	.77
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.85	Neutral	3.00	3	.55
	Mississippi F/W	9	3.11	Neutral	3.00	4	.93
	Central F/W	12	3.00	Neutral	3.00	3	.95
	Pacific F/W	13	3.08	Neutral	3.00	2	1.26
	National/multiple F/Ws	37	2.84	Neutral	3.00	2	.93
	None	24	2.63	Neutral	3.00	3	.65
q6: How long active in waterfowl management?	0-1 yr	7	3.14	Neutral	3.00	3	.69
	2-5 yrs	16	3.00	Neutral	3.00	3	.97
	6-10 yrs	13	3.00	Neutral	3.00	3	.71
	11-20 yrs	31	2.68	Neutral	3.00	3	.75
	21-30 yrs	26	2.81	Neutral	3.00	3	.94
	>30 yrs	15	2.93	Neutral	2.00	2	1.16
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	13	2.77	Neutral	3.00	3	.83
	Program coordinator/admin	46	2.65	Neutral	3.00	3	.82
	Biologist/scientist	37	3.11	Neutral	3.00	3	.88
	Researcher	10	3.20	Neutral	3.00	3	1.03
	Regulations committee member	2	2.00	Agree	2.00	2	.00
q8: I spend most time:	Managing W/F populations	37	3.22	Neutral	3.00	3	.92
	Managing habitat	39	2.79	Neutral	3.00	3	.73
	Equal habitat/populations	9	2.44	Agree	2.00	2	.88
	None	23	2.57	Neutral	3.00	3	.90
q9: How important a recreational activity is W/F hunting to you?	Most important rec-activity	20	2.55	Neutral	2.50	2	.60
	1 of most important rec-activities	35	2.83	Neutral	3.00	3	.98
	No more important than others	18	3.06	Neutral	3.00	3	1.00
	Less important than others	9	2.89	Neutral	3.00	3	.78
	1 of least important rec-activities	2	2.50	Neutral	2.50	2	.71
	Don't W/F hunt	24	3.04	Neutral	3.00	3	.86

a. Based on rounded mean score where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K9: Workshop goal 5 “To initiate discussion of institutions and processes that will facilitate integrated waterfowl management” was met. (Frequencies)

Round (R) 2 Characteristic		q26: Wkshp goal 5 (initiate discussion of institutions & processes facilitating integrated WF mngt) was met?					
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Total
Meeting location R2	New Orleans	4%	38%	35%	15%	8%	26
	Denver1	11%	61%	22%	6%	0%	18
	Portland	7%	73%	20%	0%	0%	15
	Denver2	13%	75%	13%	0%	0%	8
	Edmonton	0%	71%	24%	6%	0%	17
	Ottawa	0%	54%	29%	17%	0%	24
	Total	5%	58%	26%	9%	2%	108
q1: I attended Round 1 Wkshp?	Yes	3%	53%	30%	11%	3%	70
	No	6%	74%	15%	6%	0%	34
	Don't remember	0%	33%	67%	0%	0%	3
q2: Country?	Canada	0%	57%	31%	12%	0%	42
	U.S.	6%	60%	23%	8%	3%	65
q3: Primary employment?	Federal agency	4%	56%	29%	10%	2%	52
	Non-gov org	4%	57%	29%	7%	4%	28
	Private business	0%	50%	50%	0%	0%	2
	State/Provincial	0%	71%	14%	14%	0%	21
	University	25%	50%	25%	0%	0%	4
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	0%	54%	31%	15%	0%	13
	Mississippi F/W	0%	88%	0%	13%	0%	8
	Central F/W	14%	43%	29%	14%	0%	14
	Pacific F/W	6%	72%	17%	6%	0%	18
	National/multiple F/Ws	5%	57%	30%	8%	0%	37
	None	0%	50%	33%	6%	11%	18
q5: Geography for which you have population responsibilities?	Atlantic F/W	0%	54%	31%	15%	0%	13
	Mississippi F/W	0%	78%	11%	0%	11%	9
	Central F/W	8%	42%	33%	17%	0%	12
	Pacific F/W	0%	69%	31%	0%	0%	13
	National/multiple F/Ws	8%	51%	27%	11%	3%	37
	None	4%	67%	21%	8%	0%	24
q6: How long active in waterfowl management?	0-1 yr	0%	71%	14%	14%	0%	7
	2-5 yrs	6%	56%	31%	6%	0%	16
	6-10 yrs	8%	62%	23%	8%	0%	13
	11-20 yrs	6%	55%	29%	10%	0%	31
	21-30 yrs	4%	62%	27%	8%	0%	26
	>30 yrs	0%	53%	20%	13%	13%	15
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	0%	77%	15%	8%	0%	13
	Program coordinator/admin	7%	65%	22%	7%	0%	46
	Biologist/scientist	3%	49%	32%	14%	3%	37
	Researcher	10%	50%	20%	10%	10%	10
	Regulations committee member	0%	0%	100%	0%	0%	2
q8: I spend most time:	Managing WF populations	0%	43%	35%	16%	5%	37
	Managing habitat	0%	72%	21%	8%	0%	39
	Equal habitat/populations	11%	56%	33%	0%	0%	9
	None	17%	61%	17%	4%	0%	23
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	0%	50%	45%	5%	0%	20
	1 of most important rec-activities	6%	57%	23%	14%	0%	35
	No more important than others	6%	56%	28%	6%	6%	18
	Less important than others	0%	78%	11%	11%	0%	9
	1 of least important rec-activities	0%	100%	0%	0%	0%	2
	Don't WF hunt	8%	58%	21%	8%	4%	24

Table K10: Workshop goal 5 “To initiate discussion of institutions and processes that will facilitate integrated waterfowl management” was met. (Descriptives)

Round (R) 2 Characteristic		q26: Wkshp goal 5 (initiate discussion of institutions & processes facilitating integrated WF mngt) was met?					
		Valid N	Mean	Word anchor ^a	Median	Mode	SD
Meeting location R2	New Orleans	26	2.85	Neutral	3.00	2	1.01
	Denver1	18	2.22	Agree	2.00	2	.73
	Portland	15	2.13	Agree	2.00	2	.52
	Denver2	8	2.00	Agree	2.00	2	.53
	Edmonton	17	2.35	Agree	2.00	2	.61
	Ottawa	24	2.63	Neutral	2.00	2	.77
	Total	108	2.45	Agree	2.00	2	.80
q1: I attended Round 1 Wkshp?	Yes	70	2.59	Neutral	2.00	2	.84
	No	34	2.21	Agree	2.00	2	.64
	Don't remember	3	2.67	Neutral	3.00	3	.58
q2: Country?	Canada	42	2.55	Neutral	2.00	2	.71
	U.S.	65	2.42	Agree	2.00	2	.85
q3: Primary employment?	Federal agency	52	2.50	Neutral	2.00	2	.80
	Non-gov org	28	2.50	Neutral	2.00	2	.84
	Private business	2	2.50	Neutral	2.50	2	.71
	State/Provincial	21	2.43	Agree	2.00	2	.75
	University	4	2.00	Agree	2.00	2	.82
q4: Geography for which you have habitat responsibilities?	Atlantic F/W	13	2.62	Neutral	2.00	2	.77
	Mississippi F/W	8	2.25	Agree	2.00	2	.71
	Central F/W	14	2.43	Agree	2.00	2	.94
	Pacific F/W	18	2.22	Agree	2.00	2	.65
	National/multiple F/Ws	37	2.41	Agree	2.00	2	.72
	None	18	2.78	Neutral	2.50	2	1.00
q5: Geography for which you have population responsibilities?	Atlantic F/W	13	2.62	Neutral	2.00	2	.77
	Mississippi F/W	9	2.44	Agree	2.00	2	1.01
	Central F/W	12	2.58	Neutral	2.50	2	.90
	Pacific F/W	13	2.31	Agree	2.00	2	.48
	National/multiple F/Ws	37	2.49	Agree	2.00	2	.90
	None	24	2.33	Agree	2.00	2	.70
q6: How long active in waterfowl management?	0-1 yr	7	2.43	Agree	2.00	2	.79
	2-5 yrs	16	2.38	Agree	2.00	2	.72
	6-10 yrs	13	2.31	Agree	2.00	2	.75
	11-20 yrs	31	2.42	Agree	2.00	2	.76
	21-30 yrs	26	2.38	Agree	2.00	2	.70
	>30 yrs	15	2.87	Neutral	2.00	2	1.13
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	13	2.31	Agree	2.00	2	.63
	Program coordinator/admin	46	2.28	Agree	2.00	2	.69
	Biologist/scientist	37	2.65	Neutral	2.00	2	.86
	Researcher	10	2.60	Neutral	2.00	2	1.17
	Regulations committee member	2	3.00	Neutral	3.00	3	.00
q8: I spend most time:	Managing WF populations	37	2.84	Neutral	3.00	2	.90
	Managing habitat	39	2.36	Agree	2.00	2	.63
	Equal habitat/populations	9	2.22	Agree	2.00	2	.67
	None	23	2.09	Agree	2.00	2	.73
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	20	2.55	Neutral	2.50	2	.60
	1 of most important rec-activities	35	2.46	Agree	2.00	2	.82
	No more important than others	18	2.50	Neutral	2.00	2	.92
	Less important than others	9	2.33	Agree	2.00	2	.71
	1 of least important rec-activities	2	2.00	Agree	2.00	2	.00
	Don't WF hunt	24	2.42	Agree	2.00	2	.93

a. Based on round mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K11: Workshop goal 6 “To provide feedback to the NAWMP Plan Committee as they move forward with the Plan Revision” was met. (Descriptives)

Round (R) 1 and 2 Characteristic		Round								
		1			2			Total		
		q27: Feedback to NAWMP met?			q27: Feedback to NAWMP met?			q27: Feedback to NAWMP met?		
		Valid N	Mean	Word anchor ^a	Valid N	Mean	Word anchor	Valid N	Mean	Word anchor
Meeting location R1	Portland	27	3.26	Neutral	0	.	.	27	3.26	Neutral
	Memphis	18	2.22	Agree	0	.	.	18	2.22	Agree
	Sacramento	13	1.69	Agree	0	.	.	13	1.69	Agree
	Milwaukee	23	1.83	Agree	0	.	.	23	1.83	Agree
	Edmonton	25	1.48	Strongly Agree	0	.	.	25	1.48	Strongly agree
	Ottawa	25	1.84	Agree	0	.	.	25	1.84	Agree
Meeting location R2	New Orleans	0	.	.	26	2.58	Neutral	26	2.58	Neutral
	Denver1	0	.	.	18	2.22	Agree	18	2.22	Agree
	Portland	0	.	.	15	2.00	Agree	15	2.00	Agree
	Denver2	0	.	.	8	2.38	Agree	8	2.38	Agree
	Edmonton	0	.	.	17	2.12	Agree	17	2.12	Agree
	Ottawa	0	.	.	24	2.08	Agree	24	2.08	Agree
q2: Country?	Canada	51	1.71	Agree	42	2.19	Agree	93	1.92	Agree
	U.S.	76	2.36	Agree	65	2.26	Agree	141	2.31	Agree
q3: Primary employment?	Federal agency	56	2.05	Agree	52	2.25	Agree	108	2.15	Agree
	Non-gov org	37	1.92	Agree	28	2.32	Agree	65	2.09	Agree
	Private business	0	.	.	2	2.50	Neutral	2	2.50	Neutral
	State/Provincial	34	2.35	Agree	21	2.14	Agree	55	2.27	Agree
	University	1	2.00	Agree	4	1.75	Agree	5	1.80	Agree
q4: Geography for which you have habitat responsibilities?	Atlantic FW	15	1.87	Agree	13	1.77	Agree	28	1.82	Agree
	Mississippi FW	12	2.50	Neutral	8	2.25	Agree	20	2.40	Agree
	Central FW	9	2.44	Agree	14	2.36	Agree	23	2.39	Agree
	Pacific FW	26	2.04	Agree	18	2.33	Agree	44	2.16	Agree
	National/multiple FWs	43	1.88	Agree	37	2.27	Agree	80	2.06	Agree
	None	23	2.35	Agree	18	2.33	Agree	41	2.34	Agree
q5: Geography for which you have population responsibilities?	Atlantic FW	15	2.00	Agree	13	1.85	Agree	28	1.93	Agree
	Mississippi FW	13	2.31	Agree	9	2.33	Agree	22	2.32	Agree
	Central FW	8	2.50	Neutral	12	2.50	Neutral	20	2.50	Neutral
	Pacific FW	20	2.15	Agree	13	2.46	Agree	33	2.27	Agree
	National/multiple FWs	41	2.22	Agree	37	2.27	Agree	78	2.24	Agree
	None	31	1.74	Agree	24	2.13	Agree	55	1.91	Agree
q6: How long active in waterfowl management?	0-1 yr	7	2.43	Agree	7	2.43	Agree	14	2.43	Agree
	2-5 yrs	16	2.38	Agree	16	2.38	Agree	32	2.37	Agree
	6-10 yrs	17	2.00	Agree	13	2.08	Agree	30	2.03	Agree
	11-20 yrs	29	1.86	Agree	31	1.94	Agree	60	1.90	Agree
	21-30 yrs	42	2.07	Agree	26	2.31	Agree	68	2.16	Agree
	>30 yrs	18	2.22	Agree	15	2.67	Neutral	33	2.42	Agree
q7: Most frequent waterfowl mngt hat?	Agency/Executive director	16	1.88	Agree	13	2.31	Agree	29	2.07	Agree
	Program coordinator/admin	57	1.75	Agree	46	2.15	Agree	103	1.93	Agree
	Biologist/scientist	48	2.50	Neutral	37	2.30	Agree	85	2.41	Agree
	Researcher	8	2.38	Agree	10	2.30	Agree	18	2.33	Agree
	Regulations committee member	1	2.00	Agree	2	2.50	Neutral	3	2.33	Agree
	Managing WF populations	34	2.59	Neutral	37	2.32	Agree	71	2.45	Agree
q8: I spend most time:	Managing habitat	43	1.79	Agree	39	2.23	Agree	82	2.00	Agree
	Equal habitat/populations	16	2.19	Agree	9	2.11	Agree	25	2.16	Agree
	None	37	1.92	Agree	23	2.17	Agree	60	2.02	Agree
	Most important rec-activity	23	2.30	Agree	20	2.15	Agree	43	2.23	Agree
q9: How important a recreational activity is WF hunting to you?	1 of most important rec-activities	46	2.20	Agree	35	2.23	Agree	81	2.21	Agree
	No more important than others	18	2.17	Agree	18	2.44	Agree	36	2.31	Agree
	Less important than others	15	1.80	Agree	9	2.33	Agree	24	2.00	Agree
	1 of least important rec-activities	2	1.50	Agree	2	3.50	Neutral	4	2.50	Neutral
	Don't WF hunt	26	1.85	Agree	24	2.04	Agree	50	1.94	Agree

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree

Table K12: “How do you feel about the Revision process as described at this meeting?” (Descriptives)

Round (R) 1 and 2 Characteristic		Round								
		1			2			Total		
		q28:Revision process?			q28:Revision process?			q28: Revision process?		
		Valid N	Mean	Word anchor ^a	Valid N	Mean	Word anchor	Valid N	Mean	Word anchor
Meeting location R1	Portland	27	3.93	Not so good	0	.	.	27	3.93	Not so good
	Memphis	18	2.61	OK	0	.	.	18	2.61	OK
	Sacramento	13	2.15	OK	0	.	.	13	2.15	Good
	Milwaukee	23	2.43	Good	0	.	.	23	2.43	Good
	Edmonton	25	2.32	Good	0	.	.	25	2.32	Good
	Ottawa	25	2.40	Good	0	.	.	25	2.40	Good
Meeting location R2	New Orleans	0	.	.	26	3.81	Not so good	26	3.81	Not so good
	Denver1	0	.	.	18	3.00	OK	18	3.00	OK
	Portland	0	.	.	15	2.47	Good	15	2.47	Good
	Denver2	0	.	.	8	2.13	Good	8	2.13	Good
	Edmonton	0	.	.	17	2.18	Good	17	2.18	Good
	Ottawa	0	.	.	24	2.54	OK	24	2.54	OK
q2: Country?	Canada	51	2.37	Good	42	2.48	Good	93	2.42	Good
	U.S.	76	2.91	OK	65	3.05	OK	141	2.97	OK
q3: Primary employment?	Federal agency	56	2.82	OK	52	2.98	OK	108	2.90	OK
	Non-gov org	37	2.35	Good	28	2.46	Good	65	2.40	Good
	Private business	0	.	.	2	2.50	OK	2	2.50	OK
	State/Provincial	34	2.94	OK	21	2.95	OK	55	2.95	OK
	University	1	1.00	Excellent	4	2.75	OK	5	2.40	Good
q4: Geography for which you have habitat responsibilities?	Atlantic FW	15	2.47	Good	13	2.54	OK	28	2.50	OK
	Mississippi FW	12	3.00	OK	8	3.25	OK	20	3.10	OK
	Central FW	9	2.89	OK	14	2.86	OK	23	2.87	OK
	Pacific FW	26	2.58	OK	18	2.67	OK	44	2.61	OK
	National/multiple FWs	43	2.51	OK	37	2.73	OK	80	2.61	OK
	None	23	3.13	OK	18	3.17	OK	41	3.15	OK
q5: Geography for which you have population responsibilities?	Atlantic FW	15	2.67	OK	13	2.77	OK	28	2.71	OK
	Mississippi FW	13	3.15	OK	9	3.22	OK	22	3.18	OK
	Central FW	8	3.25	OK	12	3.00	OK	20	3.10	OK
	Pacific FW	20	2.45	Good	13	2.77	OK	33	2.58	OK
	National/multiple FWs	41	2.80	OK	37	2.97	OK	78	2.88	OK
	None	31	2.42	Good	24	2.42	Good	55	2.42	Good
q6: How long active in waterfowl management?	0-1 yr	7	2.43	Good	7	2.71	OK	14	2.57	OK
	2-5 yrs	16	2.69	OK	16	2.88	OK	32	2.78	OK
	6-10 yrs	17	2.76	OK	13	2.62	OK	30	2.70	OK
	11-20 yrs	29	2.69	OK	31	2.94	OK	60	2.82	OK
	21-30 yrs	42	2.81	OK	26	2.65	OK	68	2.75	OK
	>30 yrs	18	2.50	OK	15	3.07	OK	33	2.76	OK
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	16	2.25	Good	13	2.54	OK	29	2.38	Good
	Program coordinator/admin	57	2.61	OK	46	2.74	OK	103	2.67	OK
	Biologist/scientist	48	2.98	OK	37	3.11	OK	85	3.04	OK
	Researcher	8	2.50	OK	10	2.70	OK	18	2.61	OK
	Regulations committee member	1	3.00	OK	2	2.00	Good	3	2.33	Good
q8: I spend most time:	Managing WF populations	34	3.24	OK	37	3.38	OK	71	3.31	OK
	Managing habitat	43	2.42	Good	39	2.44	Good	82	2.43	Good
	Equal habitat/populations	16	2.63	OK	9	2.56	OK	25	2.64	OK
	None	37	2.54	OK	23	2.70	OK	60	2.60	OK
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	23	2.83	OK	20	2.70	OK	43	2.77	OK
	1 of most important rec-activities	46	2.83	OK	35	2.83	OK	81	2.83	OK
	No more important than others	18	2.78	OK	18	2.89	OK	36	2.83	OK
	Less important than others	15	2.67	OK	9	2.56	OK	24	2.63	OK
	1 of least important rec-activities	2	2.00	Good	2	2.50	OK	4	2.25	Good
	Don't WF hunt	26	2.38	Good	24	3.00	OK	50	2.68	OK

a. Based on rounded mean where 1=Excellent, 2=Good, 3=OK, 4=Not so good, 5=Bad

TableK13: "Overall, I thought the workshop was a success?" (Descriptives)

Round (R) 1 and 2 Characteristic		Round								
		1			2			Total		
		q29: Wkshp was a success?			q29: Wkshp was a success?			q29: Wkshp was a success?		
		Valid N	Mean	Word anchor ^a	Valid N	Mean	Word anchor	Valid N	Mean	Word anchor
Meeting location R1	Portland	26	3.00	Neutral	0	.	.	26	3.00	Neutral
	Memphis	18	2.28	Agree	0	.	.	18	2.28	Agree
	Sacramento	13	1.69	Agree	0	.	.	13	1.69	Agree
	Milwaukee	23	2.04	Agree	0	.	.	23	2.04	Agree
	Edmonton	25	1.84	Agree	0	.	.	25	1.84	Agree
	Ottawa	25	1.92	Agree	0	.	.	25	1.92	Agree
Meeting location R2	New Orleans	0	.	.	26	3.08	Neutral	26	3.08	Neutral
	Denver1	0	.	.	18	2.33	Agree	18	2.33	Agree
	Portland	0	.	.	15	2.20	Agree	15	2.20	Agree
	Denver2	0	.	.	8	2.13	Agree	8	2.13	Agree
	Edmonton	0	.	.	17	2.06	Agree	17	2.06	Agree
	Ottawa	0	.	.	24	2.17	Agree	24	2.17	Agree
q2: Country?	Canada	51	1.88	Agree	42	2.19	Agree	93	2.02	Agree
	U.S.	75	2.33	Agree	65	2.52	Neutral	140	2.42	Agree
q3: Primary employment?	Federal agency	56	2.23	Agree	52	2.52	Neutral	108	2.37	Agree
	Non-gov org	36	1.94	Agree	28	2.14	Agree	64	2.03	Agree
	Private business	0	.	.	2	2.50	Neutral	2	2.50	Neutral
	State/Provincial	34	2.29	Agree	21	2.48	Agree	55	2.36	Agree
	University	1	1.00	Strongly agree	4	2.00	Agree	5	1.80	Agree
q4: Geography for which you have habitat responsibilities?	Atlantic FW	14	1.71	Agree	13	2.15	Agree	27	1.93	Agree
	Mississippi FW	12	2.58	Neutral	8	2.00	Agree	20	2.35	Agree
	Central FW	10	1.80	Agree	14	2.50	Agree	24	2.21	Agree
	Pacific FW	26	2.00	Agree	18	2.39	Agree	44	2.16	Agree
	National/multiple FWs	42	2.19	Agree	37	2.32	Agree	79	2.25	Agree
	None	23	2.48	Agree	18	2.83	Neutral	41	2.63	Neutral
q5: Geography for which you have population responsibilities?	Atlantic FW	14	1.93	Agree	13	2.31	Agree	27	2.11	Agree
	Mississippi FW	13	2.54	Neutral	9	2.44	Agree	22	2.50	Neutral
	Central FW	9	2.00	Agree	12	2.58	Neutral	21	2.33	Agree
	Pacific FW	20	2.00	Agree	13	2.69	Neutral	33	2.27	Agree
	National/multiple FWs	41	2.44	Agree	37	2.43	Agree	78	2.44	Agree
	None	30	1.87	Agree	24	2.13	Agree	54	1.98	Agree
q6: How long active in waterfowl management?	0-1 yr	7	2.00	Agree	7	2.57	Neutral	14	2.29	Agree
	2-5 yrs	16	2.56	Neutral	16	2.38	Agree	32	2.47	Agree
	6-10 yrs	16	2.25	Agree	13	2.62	Neutral	29	2.41	Agree
	11-20 yrs	30	2.00	Agree	31	2.39	Agree	61	2.20	Agree
	21-30 yrs	41	2.20	Agree	26	2.19	Agree	67	2.19	Agree
	>30 yrs	18	1.94	Agree	15	2.53	Neutral	33	2.21	Agree
q7: Most frequent waterfowl mgmt hat?	Agency/Executive director	17	1.94	Agree	13	2.23	Agree	30	2.07	Agree
	Program coordinator/admin	55	2.05	Agree	46	2.24	Agree	101	2.14	Agree
	Biologist/scientist	48	2.38	Agree	37	2.68	Neutral	85	2.51	Neutral
	Researcher	8	2.00	Agree	10	2.40	Agree	18	2.22	Agree
	Regulations committee member	1	2.00	Agree	2	2.00	Agree	3	2.00	Agree
q8: I spend most time:	Managing WF populations	33	2.52	Neutral	37	2.78	Neutral	70	2.66	Neutral
	Managing habitat	42	1.90	Agree	39	2.13	Agree	81	2.01	Agree
	Equal habitat/populations	16	2.44	Agree	9	2.22	Agree	25	2.36	Agree
	None	38	2.00	Agree	23	2.30	Agree	61	2.11	Agree
q9: How important a recreational activity is WF hunting to you?	Most important rec-activity	22	2.45	Agree	20	2.45	Agree	42	2.45	Agree
	1 of most important rec-activities	45	2.20	Agree	35	2.34	Agree	80	2.26	Agree
	No more important than others	18	2.11	Agree	18	2.44	Agree	36	2.28	Agree
	Less important than others	16	1.94	Agree	9	2.22	Agree	25	2.04	Agree
	1 of least important rec-activities	2	2.00	Agree	2	2.00	Agree	4	2.00	Agree
	Don't WF hunt	26	2.00	Agree	24	2.50	Neutral	50	2.24	Agree

a. Based on rounded mean where 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree, 5=Strongly disagree