



# **The Future of Waterfowl Management Workshop**

Framing Future Decisions for Linking Harvest, Habitat, and Human Dimensions

August 26-28. 2008

# The Future of Waterfowl Management Workshop

Framing Future Decisions for Linking Harvest, Habitat, and Human Dimensions

Summary Report 10-9-08

#### Submitted by:

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## **Executive Summary**

The Future of Waterfowl Management Workshop was held in Minneapolis, Minnesota on August 26-28, 2008. The workshop was an important step in the evolution of waterfowl management in North America. Throughout its history, the waterfowl management community has shown great capacity for innovative thinking and action in the interest of improving waterfowl management according to specific objectives, as witnessed by creation of the Flyway Councils, the North American Waterfowl Management Plan, Adaptive Harvest Management, and the National Duck Hunter Survey. The Workshop marks yet another key point in the continuing development of a scientifically-based and socially-responsive management framework.

Conducting this workshop (or a "policy summit") was one of six specific recommendations for improving waterfowl management in the 2007 Joint Task Group Report Clarifying North American Waterfowl Management Plan Population Objectives and their Use in Harvest Management The need to develop such improvements had been identified previously in documents such as the NAWMP Continental Assessment Report and the LAFWA Adaptive Harvest Management Task Force Report.

The objectives of the Workshop were that as a result of attending the Workshop, participants would:

- Know enough about the features and workings of a coherent framework to understand how
  enhanced coherence could lead to increased benefits for administrators, managers, and
  hunters.
- Feel that they have a stake and a responsibility in the outcome, and should play a role in enhancing coherence in waterfowl management.
- In their respective agencies and organizations; help identify and support the decisions and actions necessary to advance the habitat, harvest, and human dimensions components of a more coherent framework.

Planning for the Workshop was overseen by a Steering Committee composed of administrative and technical experts in waterfowl management and conservation. The Committee consulted with the broader waterfowl management community and incorporated suggestions and addressed concerns to ensure its recommendations for the Workshop had broad support. Prior to the workshop, a website was setup (http://www.djcase.com/futureworkshop/) to share information and background materials with participants and a Web-based survey of pre-registrants was used to solicit feedback and help inform refinement of meeting objectives and the final agenda.

In total, 192 individuals representing a cross-section of waterfowl management administrators, technicians, and stakeholders attended. The National Flyway Council, the North American Waterfowl Management Plan Committee, and the Association of Fish and Wildlife Agencies sponsored the Workshop.

The Workshop consisted of both plenary and breakout sessions and was facilitated to help achieve pre-established objectives and to maximize participation by all attendees. Overall, 80 percent of attendees felt the Workshop met the objectives set forth at the outset.

At the conclusion of the Workshop, a significant majority of participants agreed that two key recommendations born in Workshop discussions should be pursued as immediate next steps:

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

#### **Background**

"Coherent framework" refers to a structured approach for making waterfowl management decisions that integrates current scientific understanding of waterfowl population dynamics, the collective ability to provide suitable habitats, and consideration of human elements such as hunter satisfaction. Such a framework would require identification of meaningful, measurable objectives that connect goals for habitat conservation, harvest management, and stakeholder support and help the waterfowl management community use human and financial resources as efficiently as possible. Conducting this workshop (or a "policy summit") was one of six specific recommendations for improving waterfowl management in the 2007 Joint Task Group Report Clarifying North American Waterfowl Management Plan Population Objectives and their Use in Harvest Management The need to develop such improvements had been identified previously in documents such as the NAWMP Continental Assessment Report and the LAFWA Adaptive Harvest Management Task Force Report.

There is a need and desire to improve the "status quo" approach of making disjunctive decisions on harvest regulations, habitat conservation strategies, and hunter retention and recruitment in the face of current trends and issues including:

- Declining waterfowl hunting participation
- High commodity prices, loss of CRP acres and potential reduction in waterfowl production
- Continuing wetland loss and degradation
- Potential effects of climate change
- Imperatives for efficient and cost-effective conservation investments
- Growing monitoring requirements and limited budgets
- AHM strategies for scaup, pintails, western mallards

The Workshop was not designed to *resolve* all of these issues; however, it was hoped that consensus achieved at the Workshop would set the course for creative work in waterfowl management for the next several years.

# **Pre-Workshop Planning**

A Steering Committee (Committee) composed of administrative and technical experts in waterfowl management and conservation was charged to develop the goals, expected outcomes, format, attendance, location, and timing of the Workshop (See Appendix A for list of members). The Committee consulted with the broader waterfowl management community and incorporated suggestions and addressed concerns to ensure its recommendations for the Workshop had broad support.

Identified desired outcomes of this Workshop were:

- A collective understanding of how an enhanced coherent framework could produce meaningful benefits for administrators, managers, and hunters.
- Identification of key concerns and uncertainties (technical or policy-level) and how they can be appropriately addressed.
- Agreement on a process for addressing long-term issues, such as remaining Joint Task Group recommendations, or other needs as identified by participants.
- Policy decisions that should be considered by agencies and organizations with the appropriate authority.

Objectives — as a result of attending the Workshop, participants would:

- Know enough about the features and workings of a coherent framework to understand how
  enhanced coherence could lead to increased benefits for administrators, managers, and
  hunters
- Feel that they have a stake and a responsibility in the outcome, and should play a role in enhancing coherence in waterfowl management.
- In their respective agencies and organizations; help identify and support the decisions and actions necessary to advance the habitat, harvest, and human dimensions components of a more coherent framework.

D.J. Case & Associates (DJ Case), a communications consulting firm specializing in natural resources conservation issues, was hired to assist the Committee in the development of the Workshop's structure and process, including the agenda and breakout session format. A website was setup (http://www.djcase.com/futureworkshop/) to share information and background materials with participants prior to the Workshop.

In May 2008, DJ Case administered a Web-based survey to pre-registrants of the Workshop to solicit feedback. The survey results helped inform refinement of meeting objectives and the final agenda. The survey was developed through collaborative consultation among Committee members and oversight from invited human dimensions specialists. Of 188 Workshop pre-registrants contacted, 162 (86 percent) completed the survey.

A report of the survey results is available at http://www.djcase.com/futureworkshop/materials/index.html

## **Workshop Overview**

The Workshop was held in Minneapolis, Minnesota on August 26-28, 2008. In total, 192 individuals representing a cross-section of waterfowl management administrators, technicians, and stakeholders attended. See Appendix B for a list of participants.

The National Flyway Council, the North American Waterfowl Management Plan Committee, and the Association of Fish and Wildlife Agencies sponsored the Workshop. Ducks Unlimited, Inc. served as the Workshop's host, coordinating the registration process and providing on-site logistics management. DJ Case provided facilitation and recording for the Workshop, including moderating the introductory presentations, facilitating full group discussions and overseeing breakout groups.

The Workshop consisted of both plenary and breakout sessions and was facilitated to help achieve pre-established objectives and to maximize participation by all attendees (See Appendix C for the agenda).

#### PLENARY PRESENTATIONS

The Workshop opened on Day 1 with a series of welcome and introductory presentations to set the stage for the Workshop (see Appendix C for a list of presentations and speakers).

The following four technical presentations made up the balance of Day 1.

- From Concept to Implementation: Moving Towards Coherence in Waterfowl Management, by Jim Ringelman, Ducks Unlimited, Inc.
- Harvest Management in an Integrated Framework by Michael C. Runge, USGS Patuxent Wildlife Research Center

- Habitat Management in an Integrated Framework by John Eadie, University of California, Davis
- Human Dimensions in an Integrated Framework, by Andy Raedeke, Missouri Department of Conservation

PowerPoint slides from these presentations are available at: http://www.djcase.com/futureWorkshop/presentations/index.html

#### **BREAKOUT SESSIONS**

The "work" part of the Workshop began in earnest on Day 2, and consisted of three breakout sessions designed to provide participants an opportunity to share their views and hear the views of others, particularly in relation to the information presented on Day 1. The breakout sessions were not intended to achieve consensus or resolve the questions or topics at hand; rather they were designed to identify the areas of agreement, disagreement, misunderstanding, etc. Participants were asked to discuss the following questions in the breakout sessions:

#### Breakout session 1:

• What are the goals of waterfowl management?

#### Breakout Session 2

- What are the technical challenges to integration (i.e "coherence"?
- What are the policy/structural issues with integration?

#### Breakout Session 3:

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

For breakout sessions one and three, participants were pre-assigned into groups of approximately 14-18 people, selected to provide a diversity of backgrounds and expertise in each group. In breakout session two, participants were pre-assigned into different groups, based on whether their background/expertise was "policy-related" or "technical." This allowed participants of similar backgrounds to grapple with issues within their area of expertise.

Each breakout group was assigned a discussion leader and recorder. These discussion leaders and recorders were all selected and notified prior to the Workshop. DJ Case and the Committee also shared some of the breakout process information with the leaders and recorders on conference calls prior to the Workshop. Discussion leaders were charged with helping the groups work through the process of discussing and answering the questions above. Pre-assigned recorders took summary notes in each group. Notes from each breakout group for each of the three sessions are available in Appendix D (Separate Cover).

After each breakout session, the full group reconvened to hear reports from the small groups. In the interest of time, the 12 small group reporters compiled their findings into four "joint reports." To accomplish this, recorders from each small group met in groups of three immediately after the small group sessions and compiled the primary issues and items from their respective groups into a single joint report. One reporter then made a five-minute summary presentation of each joint report to the full group, followed by questions from the full group, as appropriate. The summary presentations from all sessions are available in Appendix E, F, and G.

#### FULL GROUP FEEDBACK (TURNINGPOINT)

A major challenge of any large working group is finding a way to get meaningful feedback from the group on how the process is going, where it is headed, and the quality of the content. In order to expedite the flow of information and allow full participation, DJ Case implemented TurningPoint software and remote voting devices at the Workshop. TurningPoint is a PowerPoint-based application that allows participants to anonymously "vote" on issues and questions presented on the screen in real-time.

All participants received a TurningPoint remote voting device upon registration at the Workshop. Facilitators assured participants that their responses would remain anonymous; however, by assigning specific remote devices to every individual, facilitators were able to group responses by occupation, gender, or other demographic factors. Cross-tabulations of the resulting responses can provide great insight into how the various participant stakeholder groups see the world of waterfowl management, and how they propose to move forward.

Facilitators used TurningPoint to assess how well the Workshop was meeting participant expectations at various points during the workshop. More importantly, facilitators used it throughout the Workshop to assess how the group felt about coherence (existing and proposed) of the population, habitat, and human dimensions aspects of the future of waterfowl management. Complete Turning Point results from the Workshop are located in Appendix H.

# Workshop evaluation

At the conclusion of the Workshop, attendees were asked to evaluate the Workshop and the process used to implement it (via TurningPoint questions). Overall, 80 percent of attendees felt the Workshop met the objectives set forth at the outset. Complete results of the evaluation are located in Appendix I.

#### Next steps

The Workshop was an important step in the evolution of waterfowl management in North America. Throughout its history, the waterfowl management community has shown great capacity for innovative thinking and action in the interest of improving waterfowl management according to specific objectives, as witnessed by creation of the Flyway Councils, the North American Waterfowl Management Plan, Adaptive Harvest Management, and the National Duck Hunter Survey. The Workshop marks yet another key point in the continuing development of a scientifically-based and socially-responsive management framework.

At the conclusion of the Workshop, a significant majority of participants agreed that two key recommendations born in Workshop discussions should be pursued as immediate next steps:

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# **Appendix A: Steering Committee Members**

## **Steering Committee members:**

Mike Anderson, Ducks Unlimited Canada Ken Babcock, Ducks Unlimited, Inc.

Phil Bowman, Louisiana Department of Wildlife and Fisheries

Bob Clark, Environment Canada

Kathy Dickson, Canadian Wildlife Service

Bob Ellis, Virginia Department of Game and Inland Fisheries

Dale Humburg, Ducks Unlimited, Inc.

Ralph Morgenweck, U.S. Fish and Wildlife Service

Seth Mott, U.S. Fish and Wildlife Service

| First Name | <u>Last Name</u> | <u>Organization</u>                            |
|------------|------------------|--|
| Kenneth    | Abraham          | Ontario Ministry of Natural Resources          |
| Michael    | Anderson         | Ducks Unlimited Canada                         |
| Ron        | Anglin           | Oregon Dept of Fish & Wildlife                 |
| Jimmy      | Anthony          | Louisiana Department Wildlife & Fisheries      |
| Brad       | Arner            | Ducks Unlimited Canada                         |
| Todd       | Arnold           | University of Minnesota                        |
| Jane       | Austin           | USGS Northern Prairie Wildlife Research Center |
| Ken        | Babcock          | Ducks Unlimited                                |
| Brad       | Bales            | Oregon Dept of Fish & Wildlife                 |
| Greg       | Balkcom          | Georgia Department of Natural Resources        |
| Ian        | Barnett          | Ducks Unlimited Canada                         |
| Hugh       | Bateman          | Ducks Unlimited-Retired                        |
| Bruce      | Batt             | Ducks Unlimited                                |
| Vernon     | Bevill           | Texas Parks & Wildlife                         |
| Doug       | Bliss            | Environment Canada, Canadian Wildlife Service  |
| Robert     | Blohm            | US Fish & Wildlife Service                     |
| G. Scott   | Boomer           | U.S. Fish and Wildlife Service                 |
| Brad       | Bortner          | U.S. Fish and Wildlife Service                 |
| Mike       | Brasher          | Gulf Coast Joint Venture                       |
| John       | Buhnerkempe      | Illinois Dept of Natural Resources             |
| Eric       | Butterworth      | Ducks Unlimited Canada                         |
| Robert     | Byrne            | DJ Case & Associates                           |
| Breck      | Carmichael       | SC Department of Natural Resources             |
| Mike       | Carter           | Playa Lakes Joint Venture                      |
| Dave       | Case             | DJ Case & Associates                           |
| Paul       | Castelli         | New Jersey Division of Fish and Wildlife       |
| Dale       | Caswell          | Canadian Wildlife Service                      |
| Greg       | Chasko           | Connecticut Dept Wildlife Division             |
| Alan       | Clark            | Utah Div of Wildlife Resources                 |
| Robert     | Clark            | Environment Canada, Canadian Wildlife Service  |
| Ronald     | Clarke           | Alaska Department of Fish and Game             |
| David      | Cobb, Ph.D.      | North Carolina Wildlife Resources Commission   |
| Tom        | Collom           | Oregon Dept of Fish & Wildlife                 |
| Jorge      | Coppen           | U.S. Fish and Wildlife Service                 |
| Steve      | Cordts           | Minnesota DNR                                  |
| Patrick    | Devers           | U.S. Fish and Wildlife Service                 |
| Jim        | Devries          | Ducks Unlimited Canada                         |
| Kathy      | Dickson          | Canadian Wildlife Service                      |
| James      | Dubovsky         | U.S. Fish and Wildlife Service                 |
| Calvin     | DuBrock          | Pennsylvania Game Commission                   |
| John       | Dunn             | Pennsylvania Game Commission                   |
| Chris      | Dwyer            | U.S. Fish and Wildlife Service                 |
| John       | Eadie            | University of California Davis                 |
| Diane      | Eggeman          | FL Fish & Wildlife Conservation Commission     |
| Robert     | Ellis            | VA Department of Game & Inland Fisheries       |
| Jody       | Enck             | Cornell University                             |
| Dave       | Erickson         | Missouri Department of Conservation            |
| Arthur     | Feinstein        | San Francisco Bay Joint Venture                |
| Kathy      | Fleming          | U.S. Fish and Wildlife Service                 |
|            | 8                | 2.3.1 Ion and idnie out 100                    |

| First Name | Last Name    | <u>Organization</u>                              |
|------------|--------------|--|
| Joe        | Fleskes      | USGS Western Ecological Research Center          |
| Jamie      | Fortune      | Ducks Unlimited Canada                           |
| John       | Frampton     | SC Department of Natural Resources               |
| Joe        | Fuller       | North Carolina Wildlife Resources Commission     |
| Jim        | Gammonley    | Colorado Division of Wildlife                    |
| Dale       | Garner       | Iowa Department of Natural Resources             |
| Jonathan   | Gassett      | KY Dept of Fish & Wildlife Resources             |
| Mark       | Gloutney     | Ducks Unlimited Canada                           |
| David      | Goad         | Arkansas Game and Fish Commission                |
| Dave       | Graber       | Missouri Department of Conservation              |
| Karla      | Guyn         | Ducks Unlimited Canada                           |
| Dale       | Hall         | US Fish & Wildlife Service                       |
| Sam        | Hamilton     | FWS, Southeast Region                            |
| Susan      | Haseltine    | U.S. Geological Survey                           |
| Jeff       | Haskins      | U.S. Fish and Wildlife Service                   |
| Tom        | Hauge        | Wisconsin Department of Natural Resources        |
| David      | Hayden       | Alabama Wildlife & Freshwater Fisheries          |
| Jeff       | Herbert      | Montana Fish, Wildlife & Parks                   |
| Robert     | Hoffman      | Ducks Unlimited                                  |
| Rob        | Holbrook     | DOI USFWS Region 8 CVJV                          |
| Dr. Curtis | Hopkins      | Ducks Unlimited                                  |
| John       | Hoskins      | Missouri Department of Conservation              |
| Rob        | Hossler      | Delaware Div of Fish and Wildlife                |
| David      | Howerter     | Ducks Unlimited Canada                           |
| Min        | Huang        | CT Dept of Environmental Protection              |
| Jack       | Hughes       | Canadian Wildlife Service                        |
| Dale       | Humburg      | Ducks Unlimited                                  |
| Beth       | Huning       | San Francisco Bay Joint Venture                  |
| Kevin      | Hunt         | Mississippi State University                     |
| Paul       | Johansen     | West Virginia Division of Natural Resources      |
| Fred       | Johnson      | U.S. Fish and Wildlife Service                   |
| Michael    | Johnson      | North Dakota Game & Fish Department              |
| Michael    | Johnson      | U.S. Fish and Wildlife Service                   |
| Rex        | Johnson      | U.S. Fish and Wildlife Service                   |
| Tim        | Jones        | USFWS/ACJV                                       |
| 11111      | Jones        | U.S. Geological Survey Northern Prairie Wildlife |
| Dennis     | Jorde        | Research Center                                  |
| Pat        | Kehoe        | Ducks Unlimited Canada                           |
| James      | Kelley       | U.S. Fish and Wildlife Service                   |
| Sean       | Kelly        | U.S. Fish and Wildlife Service                   |
| Tom        | Kirschenmann | SD Game, Fish & Parks Department                 |
| Mark       | Koneff       | US Fish & Wildlife Service                       |
| Kevin      | Kraai        | Texas Parks & Wildlife                           |
| Don        | Kraege       | Washington Dept of Fish and Wildlife             |
| Joe        | Kramer       | Kansas Department of Wildlife and Parks          |
| Larry      | Kruckenberg  | Intermountain Joint Venture                      |
| Tony       | Leif         | SD Game, Fish & Parks Department                 |
| Richard    | Leopold      | Iowa Department of Natural Resources             |
|            | •            | U.S. Fish and Wildlife Service                   |
| Andy       | Loranger     | O.S. 13811 and whente service                    |

| First Name | <u>Last Name</u> | <u>Organization</u>                             |
|------------|------------------|---|
| Dave       | Luukkonen        | Michigan Dept of Natural Resources              |
| Wayne      | MacCallum        | Massachusetts Div of Fisheries & Wildlife       |
| John       | Major            | New York State DEC Bureau of Wildlife           |
| Ray        | Marshalla        | Illinois Dept of Natural Resources              |
| Ken        | Mayer            | Nevada Department of Wildlife                   |
| Bob        | McLandress       | California Waterfowl Association                |
| Glen       | McMaster         | Saskatchewan Watershed Authority                |
| Faye       | McNew            | Kansas Department of Wildlife and Parks         |
| Ross       | Melinchuk        | Ducks Unlimited                                 |
| Thomas     | Melius           | DOI USFWS Regional Directors Office             |
| Randy      | Milton           | Nova Scotia Dept of Natural Resources           |
| Tim        | Mitchusson       | NM Dept of Game & Fish                          |
| Eugene     | Moore            | Delaware Div of Fish and Wildlife               |
| Dr. Tom    | Moorman          | Ducks Unlimited                                 |
| Steve      | Moran            | Rainwater Basin Joint Venture                   |
| Ralph      | Morgenweck       | U.S. Fish and Wildlife Service                  |
| Marvin     | Moriarty         | US Fish & Wildlife Service                      |
| Dave       | Morrison         | Texas Parks & Wildlife                          |
| Craig      | Mortimore        | Nevada Department of Wildlife                   |
| Seth       | Mott             | U.S. Fish and Wildlife Service                  |
| Henry      | Murkin           | Ducks Unlimited Canada                          |
| Luke       | Naylor           | Arkansas Game and Fish Commission               |
| Harvey K.  | Nelson           | Trumpeter Swan Society                          |
| Jeff       | Nelson           | Ducks Unlimited Canada                          |
| Kirk       | Nelson           | Nebraska Game and Parks Commission              |
| Tom        | Nudds            | University of Guelph                            |
| Russell    | Oates            | U.S. Fish and Wildlife Service                  |
| Paul       | Padding          | U.S. Fish and Wildlife Service                  |
| Barbara    | Pardo            | US Fish & Wildlife Service                      |
| Sara       | Pauley           | DJ Case & Associates                            |
| Ed         | Penny            | MS Dept of Wildlife, Fisheries and Parks        |
| Mark       | Petrie           | Ducks Unlimited                                 |
| Adam       | Phelps           | Indiana Division of Fish & Wildlife             |
|            |                  | Ohio Division of Wildlife Department of Natural |
| Matt       | Pieron           | Resources                                       |
| Bruce      | Pollard          | Environment Canada, Canadian Wildlife Service   |
| Rocky      | Pritchert        | Kentucky Dept of Fish & Wildlife Resources      |
| Jeff       | Raasch           | Texas Parks & Wildlife                          |
| Michael    | Rabe             | Arizona Game and Fish Dept.                     |
| Andy       | Raedeke          | Missouri Department of Conservation             |
| Ryan       | Reker            | Rainwater Basin Joint Venture/USFWS             |
| Larry      | Reynolds         | Louisiana Dept Wildlife & Fisheries             |
| Kenneth    | Richkus          | U.S. Fish and Wildlife Service                  |
| Jim        | Ringleman        | Ducks Unlimited                                 |
| Larry      | Roberts          | Wyoming Game and Fish Department                |
| Dr. Frank  | Rohwer           | Delta Waterfowl Foundation                      |
| Rudy       | Rosen            | Ducks Unlimited                                 |
| Bill       | Rudd             | Wyoming Fish and Game Dept                      |
| Michael    | Runge            | USGS Patuxent Wildlife Research Center          |
|            |                  |   |

| First Name     | Last Name           | Organization   |
|----------------|---------------------|--|
| Ken            | Sambor              | Ducks Unlimited, Inc.  |
| Sarah          | Sanders             | DJ Case & Associates   |
| Dave           | Schad               | MN DNR Division of Fish and Wildlife                                     |
| Paul           | Schmidt             | U.S. Fish and Wildlife Service   |
| Dave           | Scott               | Ohio Division of Wildlife  |
| Phil           | Seng                | DJ Case & Associates   |
| Robert         | Shaffer             | DOI USFWS Region 8 CVJV  |
| Chuck          | Sharp               | Alabama Wildlife & Freshwater Fisheries                                  |
| Dave           | Sharp               | U.S. Fish and Wildlife Service   |
| Stuart         | Slattery            | Ducks Unlimited Canada   |
| Carey          | Smith               | U.S. Fish and Wildlife Service   |
| Dave           | Smith               | Intermountain Joint Venture  |
| Gregory        | Soulliere           | U.S. Fish and Wildlife Service   |
| Casey          | Stemler             | US Fish & Wildlife Service   |
| Scott          | Stephens            | Ducks Unlimited  |
| Marie          | Strassburger        | U.S. Fish and Wildlife Service   |
| Scott          | Sutherland          | Ducks Unlimited  |
| Scott          | Sutherland          | New York Division of Fish, Wildlife & Marine                             |
| Bryan          | Swift               | Resources  |
| Robyn          | Thorson             | U.S. Fish and Wildlife Service   |
| Nicholas       | Throckmorton        | U.S. Fish and Wildlife Service   |
|                |                     |  |
| John<br>Robert | Tirpak<br>Trost     | Lower Mississippi Valley Joint Venture<br>U.S. Fish and Wildlife Service |
|                |                     | US Fish & Wildlife Service   |
| Dr. Benjamin   | Tuggle              |  |
| Len            | Ugarenko<br>Uihlein | Association of Fish & Wildlife Agencies                                  |
| Bill           |                     | Lower MS Valley Joint Venture  |
| Dr. James      | Unsworth            | Idaho Department of Fish and Game  |
| Kent           | Van Horn            | WI Dept of Natural Resources   |
| George         | Vandel              | SD Game, Fish & Parks Department   |
| William        | Vander Zouwen, Jr.  | WI Dept of Natural Resources   |
| Jeffrey        | Ver Steeg           | Colorado Division of Wildlife  |
| David          | Viker               | U.S. Fish and Wildlife Service   |
| Mark           | Vrtiska             | Nebraska Game and Parks Commission                                       |
| Johann         | Walker              | Ducks Unlimited  |
| Rick           | Warhurst            | Ducks Unlimited  |
| Greg           | Wathen              | Tennessee Wildlife Resources Agency                                      |
| Alan           | Wentz               | Ducks Unlimited  |
| Jane           | West                | US Fish & Wildlife Service   |
| Mark           | Whitney             | Georgia Department of Natural Resources                                  |
| Emily Jo       | Williams            | U.S. Fish and Wildlife Service   |
| Ken            | Williams            | US Geological Survey   |
| Steve          | Williams            | Wildlife Management Institute  |
| Barry          | Wilson              | Gulf Coast Joint Venture/USGS  |
| Scott          | Yaich               | Ducks Unlimited  |
| Greg           | Yarris              | California Waterfowl Association   |
| Tina           | Yerkes              | Ducks Unlimited  |
| Dan            | Yparraguirre        | California Dept Fish & Game  |
| Guy            | Zenner              | Iowa Department of Natural Resources                                     |

# The Future of Waterfowl Management Workshop Framing Future Decisions for Linking Harvest, Habitat, and Human Dimensions

The Minneapolis Marriott City Center Minneapolis, Minnesota August 26-28, 2008

#### Tuesday, August 26

#### 11:30 Registration Opens in Registration Area outside of Ballrooms 3 & 4.

#### 12:45 Registration Closes

\*\*\*All group sessions will be held in Ballrooms 3 & 4 on the 4<sup>th</sup> floor of the Marriott. Breakout sessions will held in various rooms on the 4<sup>th</sup> floor and will be shared during the workshop.

#### 1:00 Call to Order

#### Welcome and Introductions

Seth Mott, U.S. Fish & Wildlife Service Alan Wentz, Ducks Unlimited, Inc.

#### Welcome on behalf of Sponsors

John Frampton, South Carolina Department of Natural Resources

#### **Workshop Content and Process**

Dave Case, DJ Case & Associates

#### 2:15 An Incoherent Truth

Steve Williams, Wildlife Management Institute

#### 2:35 A Look at the Past with Focus on the Future

Ken Babcock, Ducks Unlimited, Inc.

#### 3:00 **Break**

\*\*\* The following presentations include 5 minutes of Q&A for each.

# 3:20 From Concept to Implementation: Moving Towards Coherence in Waterfowl Management

Jim Ringelman, Ducks Unlimited, Inc.

#### 3:40 Harvest Management in an Integrated Framework

Michael C. Runge, USGS Patuxent Wildlife Research Center

# Appendix C: Workshop Agenda

| 4:00  | Habitat Management in an Integrated Framework John Eadie, University of California, Davis; Michael Anderson, Ducks Unlimited Canada and Jim Ringelman, Ducks Unlimited, Inc. |
|-------|--|
| 4:20  | Human Dimensions in an Integrated Framework Andy Raedeke, Missouri Department of Conservation and Dale Humburg, Ducks Unlimited, Inc.  |
| 4:40  | Feedback on Day 1 and review Day 2 agenda  |
| 5:00  | Reception & NAWMP Awards until 6:00 p.m. in Atrium   |
| Wedn  | esday, August 27   |
| 8:00  | Convene as full group  |
| 8:30  | Break out Session 1: Goals of Waterfowl Management   |
| 9:45  | Break  |
| 10:00 | Convene as full group  |
| 10:50 | Break out Session 2: Challenges of Integration   |
| Noon  | Lunch in Atrium  |
| 1:00  | Convene as full group  |
| 2:00  | Break out Session 3: Moving Forward  |
| 3:15  | Break  |
| 3:45  | Convene as full group  |
| 4:45  | Feedback on Day 2  |
| 5:00  | Adjourn—dinner on your own   |
| Thurs | day, August 28   |
| 8:00  | Convene as full group  |
| 8:15  | Summary presentations: Results from Days 1 and 2   |

# **Appendix C: Workshop Agenda**

- Full group discussion: Workshop Outcomes, Potential Actions, and/or 9:15 Recommendations
- 10:15 **Break**
- 10:30 **Closing**

Paul Schmidt, U.S. Fish & Wildlife Service; Doug Bliss, Canadian Wildlife Service and Dale Hall; U.S. Fish & Wildlife Service

- 11:30 Workshop evaluation and Wrap-up
- Noon Adjourn Workshop

# Appendix D: Breakout Sessions Group Notes

Breakout Session Group Notes for Sessions 1, 2 and 3 are under a Separate Cover.

# **Ballrooms 1, 2, and 3 Summary Presentation**

- Waterfowl management in the future should continue to be in a framework that waterfowl hunting is the primary driver
- Unification/integration/convergence of the habitat, population and hunter components should guide policy decisions in the immediate and longer terms
- To unify waterfowl management, we must balance habitat objectives, hunter satisfaction, and population objectives.
- As we face declining habitat, and waterfowl objectives are harder to meet, the crisis of "professional credibility" forces us to find new ways to approach transparent mgmt.
- Setting goals driven by public satisfaction is difficult.
  - o Hunter harvest is but one component.
  - o Credibility needs to incorporate goals that are "achieveable".
- Stepwise needs:
  - O State of pops (models tracking landscape change, harvest, & impact of landscape variables on productivity)
  - o What are habitat objectives needed to sustain populations
  - o Work on satisfying & retaining user groups
- Financial & political support emanates from hunters so focusing on hunter satisfaction is important...need to connect/orient hunter enthusiasm to the political & financial issues that affect their future use.
- General agreement that the ultimate objective is to produce enough birds at the continental scale, with the right distribution, to satisfy hunter needs (human consumption) at the local scale
- Conclusion: objectives are scale-dependent
  - o What contributes to satisfaction?
- Unfulfilled expectations
  - o Mentoring very important to recruitment
- Is shooting a limit of birds part of an expectation leading to satisfaction?
  - Not universal, but pertains to some of the hunting population
  - O A high bag limit sets some unrealistic expectations and sets the hunter up for a disappointing experience
  - o Are there certain segments of the hunting populace that should be the focus of our attentions because of what they provide

# **Ballroom Areas 4, 5, and Prefunction Area 1 Summary Presentation**

- Concept of sustainability: many definitions, many facets populations, habitats, hunters; how
  do we go about defining/organizing this concept?
- Most discussion revolved around human dimensions what are values/needs/desires of stakeholders and how does they influence population and habitat objectives?
- Focus on human dimensions is perhaps appropriate, because mgmt objectives/policy flows from social values and needs; w/f mgmt has to be viewed in the larger context of landscape conservation and broader constituencies
- Hunters probably should be viewed as principal stakeholder because they foot the bill and, at least to date, efforts to secure other major funding sources have seen limited success; and hunting tradition is a fundamental objective
- However, incorporating hunter-oriented objectives must recognize that:
  - o Hunter-demographics (and expectations) are changing
  - We don't know enough about hunters
  - There is an opportunity cost: hunter's can't foot the bill, so what role should other stakeholders have (who are they, how do you market conservation to them?)
- Coherence has to reflected in clearer and mutually understood goals; then harvest, habitat, and HD interests can deliver programs consistent with those goals

# **Cedar Pine Birch Maple Lakes Summary Presentation**

- Objective is to have healthy landscapes (ecosystems function), that support sustainable harvest but valued by a broader audience of supporters
- Recognition that habitat conservation is the key, and an important mechanism to ensure habitat conservation is to incorporate the human dimension
- concern about declining hunter community, and how to engage other audiences to take up the charge to generate political support, financial support, for habitat conservation, etc.
- the current funding model needs to change, to provide not only the funding support but the political support
- to-date, most attention has been paid to habitat and harvest management, but the motivations and objectives of the public have not been explicitly incorporated
- some groups have found a successful formula for increasing participation in outdoor activities, how to expand that more broadly?
- objective is not so much to increase hunters per se, but the question is how to raise funds and support for habitat conservation for its broader values more generally
- Habitat is clearly important what should be our habitat goals?
- NAWMP habitat goals must be realistic, must be achievable, but not easy.
- The system is changing (Climate change etc), when we set goals for the future what is a 20-year goal (where will we be with # hunters, landscape pressures, etc.)?
- How can broader habitat objectives for other birds be integrated? Role for NABCI and goals for other species which share wetlands habitat, as well as other objectives for wetlands (flood control, etc.).
- Did not discuss harvest management much, are we just tired out of talking about harvest!?!
- But, harvest management is important, populations must be able to respond to improved habitat availability.

# Prefunction Area 2, 3 and Deer Lake Summary Presentation

- What is the third leg of the stool: Humans or hunter?
- Is it hunters to get the habitat or is it habitat to satisfy the hunters?
- Habitat outcomes need to be broader then waterfowl
- Access is a key issue for hunter
- Understanding of human dimension limited.
- Objectives
  - o Prevent extinction of waterfowl population
  - o Preserve waterfowl hunting tradition
  - o Sustainable harvest
  - o Provide hunting opportunity
  - o Motivate habitat conservation
  - o Ecological Goods and Services of wetlands
  - o Appropriate distribution of waterfowl
  - o Keep hunting regulation simple
  - o Habitat is solution to achieving waterfowl goals.
- Primary objective: Need to focus on sustaining waterfowl populations through the protection and
  conservation of habitat base. The human dimension aspect is important aspect of why and how we
  do this.

#### SUMMARY PRESENTATIONS

# **Ballroom 1 and 2 Summary Presentation**

What are the policy/structural issues with integration?

#### **Diversity Challenges**

- Individual state mandates likely influence level of championing hunter satisfaction
- Administrative policy challenge is that agencies are driven by incongruent goals and so focusing on hunter satisfaction may not be primary need.
- Need to embrace broader communities of potential constituents that we can convert into stakeholders (beyond waterfowl hunters). This remains a challenge we must focus on.
- Number of partnerships, Complex community of users/values and Diverse waterfowl management landscape (interests, stakeholders, nations).
- Tendency to seek groups with similar values at the local level makes it difficult to scale up (fragmentation in conservation community).
- Three legs of the stool conduct business differently.

#### **Institutional Challenges**

- State control versus national and international control of waterfowl management
- Institutional barriers (ownership). Power goes with budget, difficult to convince factions to give up something.
- Institutional inertia. Acknowledge its existence and deal with it.
- Potential lack of commitment of agencies to the concept of integration?
- Disconnect between what administrators/policy decision-makers want and what the technicians want.

#### **Administrative Challenges**

- Need to embrace broader communities of potential constituents that we can convert into stakeholders (beyond waterfowl hunters).
  - o 1. Better marketing of policy to appropriate audience. More importantly, need to determine what we are marketing.
  - o 2. Better performance metrics needed to measure success and how to allocate public funds efficiently.
  - o 3. Determining what's possible for all the components of integration. If we do not succeed in habitat improvements, can we criticize others if they are unsuccessful in changing public attitude? Need to target marketing efficiently in our individual silos.
  - O 4. Marketing strategy may need to be indirect to be inclusive of nature enthusiasts that may not be waterfowl enthusiasts. Challenge includes creating awareness among populace of broader issues (benefits of wetlands).
  - 5. How do we translate environmental interest into wetland conservation action. Need to apply focus to the marketing needed to convert interest to supportive stakeholders by improving the knowledge base.
  - o 6. We don't have the tools to recruit audiences (including waterfowl hunters) to our cause. We need to broaden the constituencies how we do that is the challenge.

#### **SUMMARY PRESENTATIONS**

#### **Communication Challenges**

- Lack of a consensus rallying cry e.g., more duck for hunting isn't accepted. Is there one thing that the public can't do without?
- Communication among multiple jurisdictions needs improvement (isolationist tendencies).
- Communication in jurisdictions where there are a lot of non-hunters, if we are to sell the integration of the 3 components and a hunting framework.
- Potential backlash among non-consumptive users if they see a pre-dominance of hunter influence on wetland management, e.g., instead of management for biodiversity or other ecological goods & services.
- Education challenge (getting non-hunters to understand the broader aspects of hunting's connection to conservation).
- Legislators don't understand the business and needs of waterfowl management. Their interest is in how it impacts their constituents, e.g., economic impact specific measures of social impact.
- We have to figure out what hunter numbers respond to.
- Funders are facing their own challenges in terms of core funding when we make requests.
- Education challenge (getting non-hunters to understand the broader aspects of hunting's connection to conservation).

#### **Technical Challenges**

- Need to set GOALS first before struggling direction on policy/structural issues.
- Need to do a better job of tying expenditures on habitat to measures of public values.
- Lack of ability at present to step down population objectives to JV level
- Need to do a better job of tying expenditures on habitat to measures of public values.
- Lack of ability at present to step down population objectives to JV level.

#### **SUMMARY PRESENTATIONS**

# **Ballrooms 3, 4, 5 Summary Presentation**

What are the technical challenges to integration?

"Silos" are a problem, and develop in part because professional conservation staff are not comfortable – or do not desire – to take on challenges like integrating H-D

- Silos of our own creation. If we created them we can solve them
  - Need to blow up silos, similar to the "game", "non-game" situation

We need to build up our H-D component/capacity

- Just doing surveys will not help the problem
  - Need to do more outreach and communications so hunters better understand the waterfowl management process

Need to utilize and build on the capacity to understand what hunters want

• Build our capacity for communications and outreach so the decisions we make are not a mystery to hunters

What are the policy / structural issues with integration?

How do we build a structure that considers the needs of states to accommodate populations and therefore hunter desires?

• A suggestion that every flyway should have a habitat sub-committee, and JV's should be represented on those committees

NAWMP is an excellent model for working across organizational barriers; we simply need to look at key areas where integration with other waterfowl programs is necessary/beneficial.

Sense is that major restructuring is not needed; fine-tune the system in place; tools are largely available

Sense that focus and priority on NAWMP in Canada has seriously eroded, and that creates an impediment to integration

Need to sustain waterfowl populations for all user groups

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

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

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

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

#### **SUMMARY PRESENTATIONS**

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

Are we looking far enough ahead?

#### **SUMMARY PRESENTATIONS**

# Deer, Elk, Cedar, Birch Summary Presentation

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

- Clear objectives
- Conceptual framework for integration
- Developing the technical details
- Monitoring needs in an integrated framework
- Limited technical capacity
- Institutional framework to support integrated technical work

#### **Objectives**

- The starting point for technical work is a clear set of overarching objectives
- Despite the good discussion this morning, there's still a long way to go
- We don't know how to weight objectives, and the effects of that weighting
  - o Need a mechanism for dealing with tradeoffs
- Turning Point questions....

#### Conceptual Framework

- Need a conceptual framework for the linkages between the three focus areas
  - o Need to identify assumptions about HD
- Need to define integration
- Need to develop a common currency
  - o K may be inadequate (or at least, not understood)
  - o Can K incorporate societal preferences?
- Scale issues are a huge challenge—we don't really know how to think about the interactions
  across scales yet

#### Technical Challenges

- Large number of challenges to developing the technical details
- Especially on the HD side, which is the youngest of the disciplines

#### **Technical Challenges (Metrics)**

- Lack metrics for many important aspects:
  - o Landscape change
  - Hunter satisfaction

#### **SUMMARY PRESENTATIONS**

#### Technical Challenges (HD)

Don't understand basic aspects of HD, let alone how those might change over time, and in response to management actions

- Hunter aren't homogeneous
- What factors affect hunter participation and satisfaction?

#### Technical Challenges (Population)

- Seasonally-segmented survival rates at small spatial scale
- Movement probabilities
- Identification of appropriate species to monitor
- Monitoring changes in distribution
- Scale and relationship of density-dependence
- Improve harvest rate predictions

#### Technical Challenges (Habitat)

- Refining linkages between habitat work and vital rates
- Refining linkages between vital rates and continental K
- Incorporating climate change

#### Monitoring Needs

- Eventually, we'll have to ask what data streams are needed to support an integrated framework
- This may require redesign of existing monitoring programs and development of new ones

#### **Technical Capacity**

- There is limited technical capacity within the three disciplines, let alone between them
- How do we find, attract, and/or nuture this capacity?
- How to we engage organizations (like USGS) that might have technical capacity?

#### Institutional Structure

- We have institutional structures for technical development within two of the legs of the stool (AHMWG, NSST)
- But not for integrated work
- Other policy impediments
  - o Difficult to reallocate resources among competing priorities

#### **SUMMARY PRESENTATIONS**

# **PreFunction Areas 1, 2, 3 Summary Presentation**

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

- Not complete consensus need move down this path − 2 groups felt it needed to happen, 1 not sure worth the investment of resources
- We could easily id many "functional" impediments to moving forward with integration:
  - o many came down to limited resources to support current programs
  - o efforts to provide more coherent decision frameworks will also require
  - o reallocation of these same resources
  - o how can we combine and/or refocus resources to meet challenges
  - o potential for growing conflict for multiple constituencies

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

- Given all the functional impediments, are there structural (institutional) changes necessary? What are the structural challenges?
  - o For integrating human elements? Or even effectively interacting with public?
    - Not matter of minor adjustment no structures in place, or current processes weak
    - Shortage of HD expertise
    - No explicit framework for identifying and evaluating implications of multiple competing objectives.
  - o For integrating habitat and harvest infrastructures?
    - Minor adjustments or wholesale changes needed?
  - Future loss of institutional memory will likely increase and maybe change the nature of the challenges.
    - Related to that managed systems and systems managing for are changing under our feet – how deal with these system changes in decision-making frameworks
  - Has existing structure and explicit decision making, processes associated with it, throttled the ability of the mgt community to consider and incorporate other societal values?
    - o AHM: removed collaborative aspects of wf mgt?
      - shouldnt' have but has it given lack of explict framework for crafting and evaluating objectives
    - o Is the strict regs process a barrier? Are we asking too much of it.
  - Now only have capacity to move toward integration for handful of spp is this a barrier or an opportunity?
  - Major difficulties in understanding how to link habitat capacity to a demographers continental K?
  - But, is the culture open to really incorporating human dimensions into waterfowl harvest and habitat mgt decision making?

#### **SUMMARY PRESENTATIONS**

- O Are we ready to be more directly accountable for both the harvest AND the habitat decisions we make...wrt public desires (performance metrics based on public desires).
- O Do we really want to know...
  - might not be able to meet what they want,
  - may drain resources from habitat and harvest,
  - might wake up a sleeping giant...force realization that we want something different than what wf mgt community doing

#### **SUMMARY PRESENTATIONS**

# **Ballrooms 1, 2, 3 Summary Presentation**

#### How do we move forward with coherence?

#### Questions:

- Do we need more explicit goals re: hunters, habitat capacity first?
- Is it a foregone conclusion we will pursue coherence with all three legs? If so, Need explicit objectives upfront.
- If there is buy-in, coherence will need to include goals & measureable objectives as part of the package.
- Who will call the shots?
- Can we have a common population objective for harvest and habitat management?
- May need a continental K and a JV K
  - O JV's look to achieve long-term gains in potential K ("potential" as when moisture conditions are favorable), and harvest management looks at annual changes in K driven mostly by uncontrollable factors like wet ponds

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

#### Needs:

- Need to make a recommendation re: who makes that decision.
- Need a broader definition of what the HD component is.
- Make progress on harvest & habitat coherence but uncertainty re: HD component may force us to define objectives for HD first.
- We have a conceptual example in the JTG report for unifying harvest & habitat mgmt. and a discussion of trade-offs between these two. But judging the trade-off must include a component of HD in making choices.
- Pursue collective buy-in from institutional leadership in the waterfowl community.
- Provide decision-making tools for our leadership:
- Provide information re: the costs/benefits of the pursuing a process of achieving coherence. Articulate obstacles, information needs, cost of achievement...put the decision back on the leadership for an informed decision.
- Need to identify the leadership structure for the decision making exercise.

#### **Recommendations:**

- A revolutionary idea:
- A more inclusive decision-making entity (consortium) would bring down the "Silo" effect and increase the ownership needed. (overall umbrella organization).
- This new leadership structure would craft the overall goals of waterfowl management
- Not that revolutionary...The existing sub-groups of our current infrastructure would still be functional.

#### **SUMMARY PRESENTATIONS**

- Take a close look at Plan Committee structure to reconstitute and provide the authority required. Build a new consortium for coherence with the authority needed for considering and, defining the mgmt. goals & objectives of waterfowl mgmt. ...and with the oversight of the management framework required to support coherence of waterfowl management.
- Developing strategies & objectives to pursue coherence must flow from the leadership revolution.
- What are the covariates related to hunter expectations? How well is the system addressing those expectations?
- Need a permanent HD work group to identify key constituencies and bring to the new consortium the explicit definitions of the components of the HD aspects in linking habitat & harvest.
- Next update of the NAWMP should explicitly incorporate all three components. Start with a Scoping Exercise for Plan revision to be completed over a 6 month period.
- What do we have to do to achieve coherence?
  - o Identify a process through which objectives of waterfowl management can be determined
    - Setting objectives is a policy decision
      - What do policymakers need to know to inform their decision?
      - How can technical people help?
        - Provide analyses that demonstrate the implications and tradeoffs that may occur as a result of alternative management objectives
- Develop the technical competence in all three areas
- Set in place institutional structures to make sure that we can make headway on the technical issues to achieve coherence
- Task the technical groups (Flyway Technical Committees, NSST, and waterfowl H-D group with conceptualizing their "leg of the stool", as well as assessing what they need to do to achieve coherence with the other groups
- What are the ramifications re: reaction of All-bird JVs? Will it serve as an impetus for other bird initiatives to step things up...or will they day "sorry we are all-bird entities"...

#### **SUMMARY PRESENTATIONS**

# **Ballrooms 4, 5, and Pre-Function 1 Summary Presentation**

How do we move forward with coherence?

- We need a better collective understanding of what coherence and/or integration is.
- How would we recognize it if we saw it?
- What are the tangible benefits, and do they outweigh the (likely significant) costs?
- We probably have technical expertise (not necessarily capability) to integrate harvest and habitat management (for improved efficiency)
- But that has to be guided by societal values and needs
  - o Where do they come from?
  - o How are they used to guide integration/coherence?
  - o Are we prepared to be guided by those (possibly, non-traditional) values?
- Clearly, HD expertise is required to help define/clarify goals & objectives of w/f management, but the scope of the HD effort necessary is far from clear.
- 3-legged stool perhaps not best metaphor, because HD provides the necessary foundation for harvest and habitat objectives, tactical approaches to planning, implementation, and evaluation
- But agreement that we need to be more accountable (marketable) to all stakeholders.
- Our major challenge is to determine how we would measure mgmt success / performance? i.e., what are we trying to accomplish as a mgmt community?

#### **SUMMARY PRESENTATIONS**

# Elk, Cedar, Birch Summary Presentation

What recommendations do participants have?

- Need a more common understanding of what coherence and integration mean; could be an important objective for tomorrow morning
- Need to balance the unknowns associated with moving forward with the unknowns of maintaining the status quo
- Need to better articulate the synergistic benefits of integrating all 3 legs of the stool
- Establish a small, blue ribbon panel to explore ways for the 3 legs to interact institutionally
- Recognize that financial resources are finite
  - o absent a new infusion of resources, growth in one area means contraction in another
- Need to re-design infrastructure to economize; some of this can come from integration of capacities
- Need to better job of accessing and integrating assets of each component and partners

#### Flyway Councils/Regs Process:

- Need to simplify the regulations process
- Charge Flyways with simplifying the process in order to spend more intellectual capacity on the things that are most important to waterfowl populations
- Incorporate an HD metric into harvest decisions

#### NAWMP and JVs:

- Use NAWMP update as an opportunity to put together the conceptual framework for integration
- Use NAWMP update as a focal point for organizing needs, action items, use as an instrument to develop the road map for moving forward
- Need to develop timeline for revision of NAWMP goals

#### Human Dimensions:

- Develop and charge a HD Working Group to scope potential costs of moving forward
- Get better understanding of hunters and hunter segments
- Better define segments of human population and their relevance to waterfowl conservation

#### **SUMMARY PRESENTATIONS**

# **Prefunction Areas 2, 3 and Deer Lake Summary Presentation**

#### How do we move forward with coherence?

- Need to build and explore agreement for pursuing coherence
  - O Need to understand where the push back is coming from
  - o What are the benefits and risk coherence
  - o HD is not well known and there are concerns about impacts on resources.
- 2 legged stool
  - Comfort in integration of habitat and population management within a social context
  - o HD informs the social context. Not necessarily managing the HD dimension.
    - Don't know how to do this yet.
    - Need to function on the hunters first then the other
- Belief that we are looking at tweaking existing structures not rebuilding from scratch.
  - o Adaptively update the process over time.

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

- Needs to be leadership that sets clear vision with clear defined expectations, and keep it fresh and in the fore front over time.
- Need to build a HD plan with clear vision and expectation, similarly robust to NAWMP and AHM plans.
- Each JV should include a HD chapter into there plans. They should decide how it is applied.
- Need to look at our communication capability. Need to address sudden and important issues.
- Refuge system regulations affecting waterfowl management and hunters should come through SRC.
- Form HD committees within all 4 flyways.
- Create a "flyway consultant role for CWS regulation process similar to USFWS process (goal: increase integration across borders).
- Increase human dimensions training for waterfowl management biologists. (goal: improve human dimension considerations).

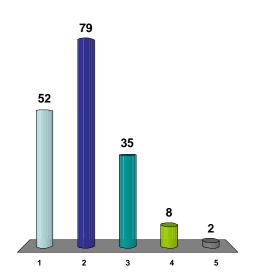
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Day 1 – 1 p.m. Session Turning Point

Slide 1:

# I am happy to be here

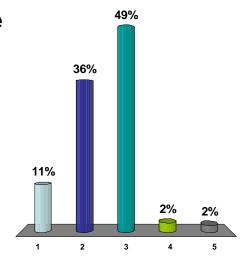
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 2:

# So far, this workshop is meeting my expectations

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

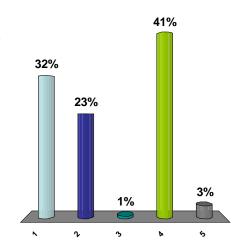


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#### Slide 3:

# What is your *primary* employment affiliation?

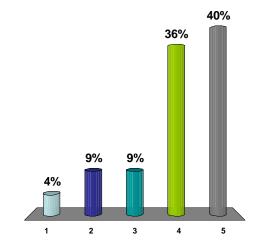
- 1. Federal Agency
- 2. Non-Government Organization
- 3. Private Business
- 4. State/Provincial Agency
- 5. University



#### Slide 4:

# How long have you been active in waterfowl management?

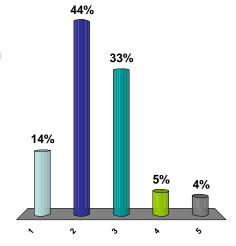
- 1. 0-1 years
- 2. 2-5 years
- 3. 6-10 years
- 4. 11-20 years
- 5. 21-30 years



#### Slide 5:

Which *ONE* hat do you most frequently find yourself wearing when it comes to waterfowl management?

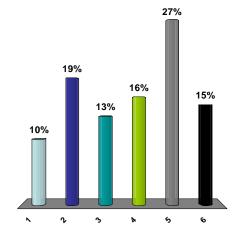
- 1. Agency Director/Executive Director
- 2. Administrator/Program Coordinator
- 3. Biologist/Scientist
- 4. Researcher/Academic
- 5. Regulations Committee Member



#### Slide 6:

Which *ONE* best describes the geography for which you have waterfowl <u>habitat</u> responsibilities?

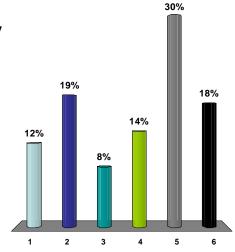
- 1. Atlantic Flyway
- 2. Mississippi Flyway
- 3. Central Flyway
- 4. Pacific Flyway
- 5. National/multiple Flyways
- 6. Don't have habitat responsibilities



#### Slide 7:

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

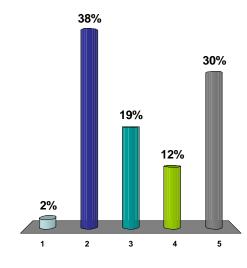
- 1. Atlantic Flyway
- 2. Mississippi Flyway
- 3. Central Flyway
- 4. Pacific Flyway
- 5. National/multiple Flyways
- 6. Don't have population responsibilities



#### Slide 8:

On average, about what percent of your duty time do you usually spend on waterfowl management each month?

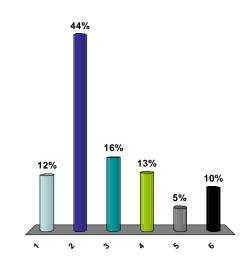
- 1.0%
- 2. 1% to 25%
- 3. 26% to 50%
- 4. 51% to 75%
- 5. 76% to 100%



#### Slide 9:

# How important is waterfowl hunting to you?

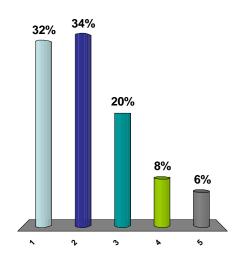
- 1. It's my most important recreational activity
- 2. It's one of my most important recreational activities
- 3. It's no more important than my other recreational activities
- It's less important than my other recreational activities
- 5. It's one of my least important recreational activities
- 6. I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



#### Slide 10:

# When did you start hunting waterfowl?

- 1. Before 1970
- 2. 1970 to 1979
- 3. 1980 to 1988
- 4. 1989 to 1996
- 5. 1997 to 2008

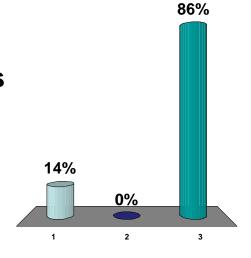


Slide 11:

### What is your Country:



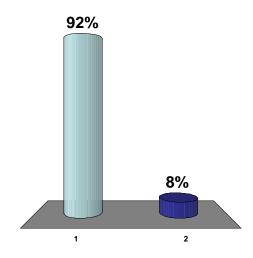
- 2. Mexico
- 3. United States



Slide 12:

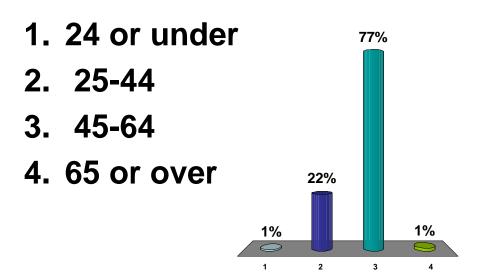
### You are:

- 1. Male
- 2. Female



Slide 13:

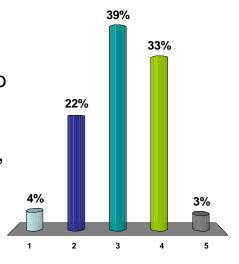
### You are:



Slide 14: (Jim Ringelman Presentation Turning Point Question)

# When you have a choice of whether or not to use information from models, you:

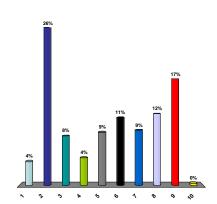
- 1. Use models a little
- 2. Use models some; mostly other factors
- Give equal weight to models and other factors
- Use models heavily, along with other factors
- 5. Use models almost exclusively



Slide 15: (Mike Runge Presentation Turning Point Question)

### What are your top TWO objectives for waterfowl harvest management?

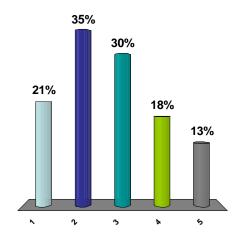
- 1. maximize harvest
- keep harvest sustainable for all species
- 3. avoid closed or partial seasons
- 4. maximize the frequency of long seasons
- 5. have relatively stable regulations
- 6. have relatively simple regulations
- 7. keep populations near the NAWMP goals
- 8. motivate hunter participation
- 9. motivate habitat conservation
- 10.other



Slide 16: (Andy Raedeke Presentation Turning Point Question)

### Which of the following would you prefer for a hunter participation objective?

- 1. Focus on habitat and populations
- 2. Stabilize hunter numbers
- 3. Increase by 10%
- 4. Increase to 1970s levels
- 5. None of the above

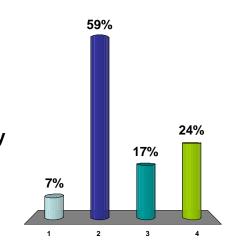


#### Day 1 – End of Session (5 p.m.) Turning Point Slides

Slide 17:

Which of the following is the most important objective for waterfowl management?

- Hunter numbers sufficient to ensure hunting traditions
- 2. Habitat sufficient to maintain waterfowl populations
- 3. Populations necessary to ensure hunter participation
- 4. Hunter numbers sufficient to support habitat programs

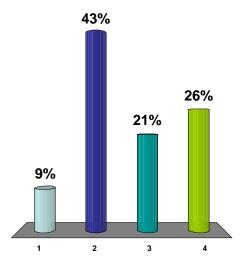


Slide 18:

Which of the following are the most important objectives for waterfowl management?

- (3 votes)

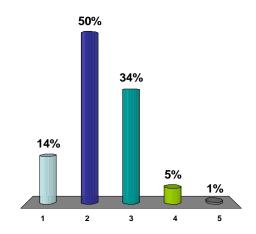
  1. Hunter numbers
  sufficient to ensure
  hunting traditions
- 2. Habitat sufficient to maintain waterfowl populations
- 3. Populations necessary to ensure hunter participation
- 4. Hunter numbers sufficient to support habitat programs



Slide 19:

# So far, this workshop is meeting my expectations

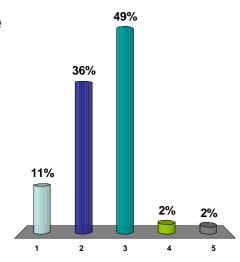
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 20:

# So far, this workshop is meeting my expectations

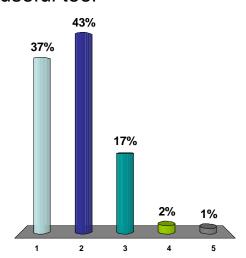
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 21:

### The Turning Point technology (voting things) are a useful tool

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

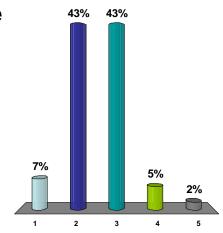


#### Day 2 – 8 a.m. Session Turning Point Slides

#### Slide 22:

So far, this workshop is meeting my expectations (Wed. a.m.)

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

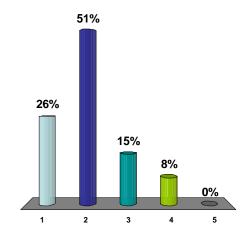


#### **Breakout Session 2 Turning Point Questions (from groups)**

Slide 23:

The concept of integrating habitat, harvest and HD is conceptually sound

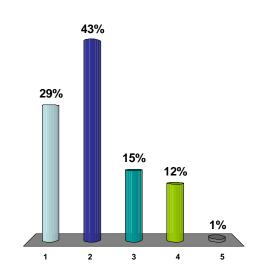
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 24:

It is technically practical AND a wise use of resources to integrate <u>habitat and harvest</u>

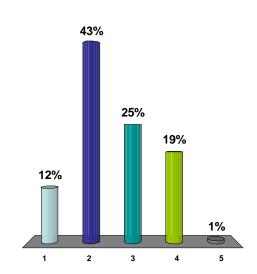
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 25:

It is technically practical AND a wise use of resources to integrate <u>habitat and HD</u>

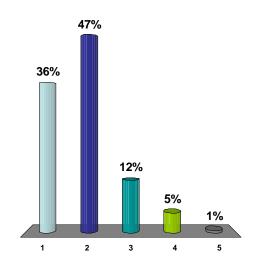
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 26:

It is technically practical AND a wise use of resources to integrate <u>harvest and HD</u>

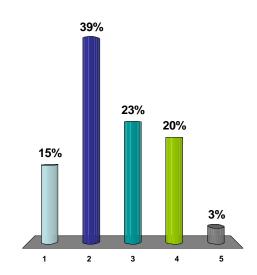
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



#### Slide 27:

It is technically practical AND a wise use of resources to integrate <u>harvest, habitat & HD</u>

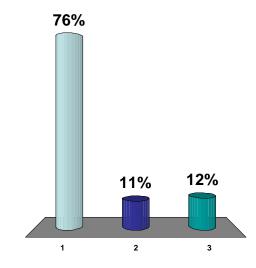
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 28:

## Should NAWMP population goals be revisted?

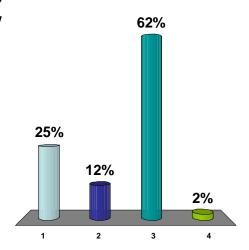
- 1. Yes
- 2. No
- 3. Don't know



Slide 29:

### If the goals were revisited, whose input should be considered?

- 1. Tech Biologists
- 2. Administrators/ Policy Makers
- 3. Negotiated among stakeholders
- 4. Based on duck hunters expectations

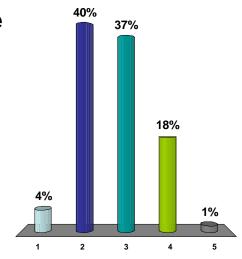


Day 2 – 1 p.m. Session Turning Point Slides

Slide 30:

So far, this workshop is meeting my expectations (Wed. 1p.m.)

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



Slide 31:

### Objective #1

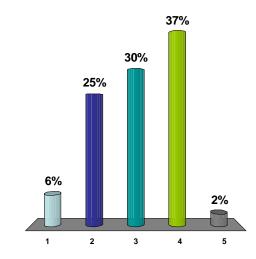
As a result of attending the Workshop, we want participants to:

 Know enough about the features and workings of a coherent framework to understand how enhanced coherence could lead to increased benefits for administrators, managers, and hunters.

#### Slide 32:

# We are making good progress in achieving Objective #1.

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



Slide 33:

### Objective #2

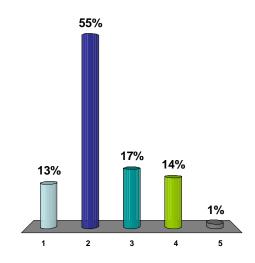
As a result of attending the Workshop, we want participants to:

 Feel that they have a stake and a responsibility in the outcome, and should play a role in enhancing coherence in waterfowl management.

#### Slide 34:

# We are making good progress in achieving Objective #2.

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



Slide 35:

### Objective #3

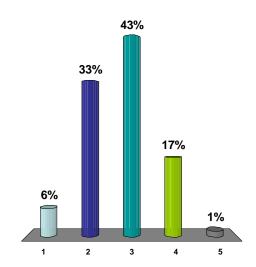
As a result of attending the Workshop, we want participants to:

 In their respective agencies and organizations; help identify and support the decisions and actions necessary to advance the habitat, harvest, and human dimensions components of a more coherent framework.

#### Slide 36:

# We are making good progress in achieving Objective #3.

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

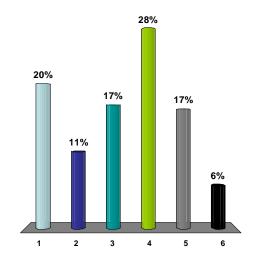


#### **Breakout Session #3 Turning Point Questions (from groups)**

Slide 37:

The most appropriate entity to be charged with the leadership role in moving coherence forward is:

- 1. CWS/USFWS
- 2. AFWA
- 3. Flyway Councils
- 4. NAWMP Plan Committee
- 5. Other
- 6. None of the Above

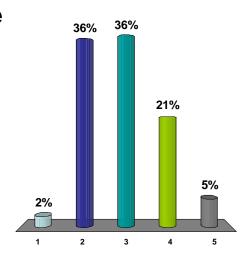


Day 3 - 8 a.m. Session Turning Point Slides

Slide 38:

# So far, this workshop is meeting my expectations

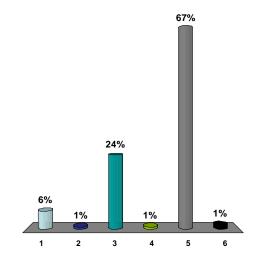
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 39:

### If the NAWMP goals were revisited, whose input should be considered?

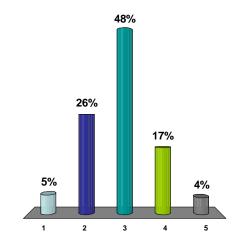
- 1. Tech Biologists
- 2. Administrators/ Policy Makers
- 3. Negotiated among stakeholders
- 4. Based on duck hunters expectations
- 5. All of the above
- 6. Other



Slide 40:

# How knowledgeable are you about yield curves, and how they relate to population size and sustainable annual harvest?

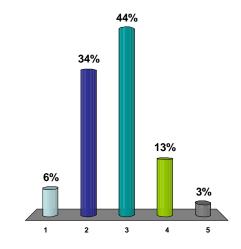
- 1. Extremely
- 2. Very
- 3. Somewhat
- 4. Slightly
- 5. Not



Slide 41:

### How knowledgeable are you about "Coherence" as a waterfowl management concept?

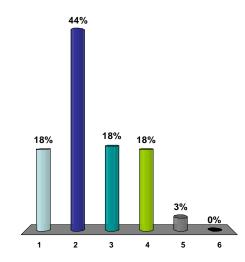
- 1. Extremely
- 2. Very
- 3. Somewhat
- 4. Slightly
- 5. Not



Slide 42:

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

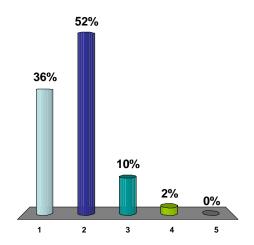
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree
- 6. Don't Know



Slide 43:

The waterfowl management community should continue investigating incorporation of HD elements into waterfowl mgt decision-making processes

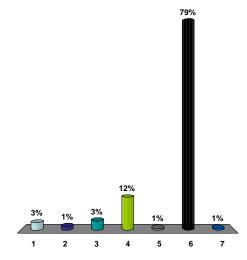
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 44:

If it is determined that "coherence" is warranted, what is the most appropriate entity to take a leadership role in moving it forward:

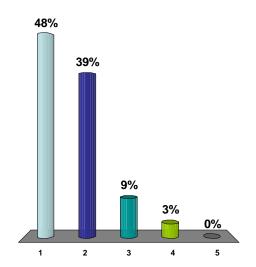
- 1. CWS/USFWS
- 2. AFWA
- 3. Flyway Councils
- 4. NAWMP Plan Committee
- 5. NGO(s)
- 6. Collaboration of one or more (1-5)
- 7. Other



Slide 45:

### We should continue down the path toward integration of <u>habitat and harvest</u>

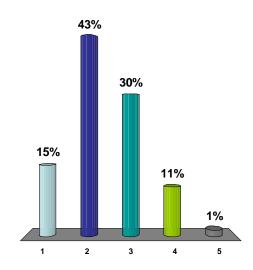
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 46:

# We should continue down the path toward integration of *habitat and HD*

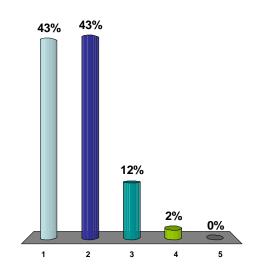
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 47:

## We should continue down the path toward integration of <u>harvest and HD</u>

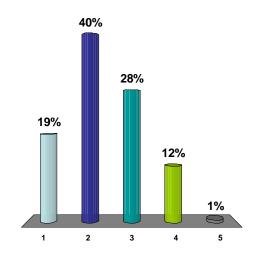
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 48:

### We should continue down the path toward integration of <u>harvest, habitat & HD</u>

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

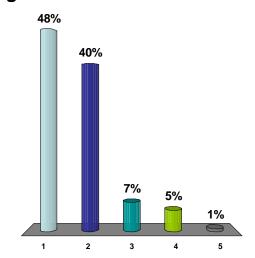


#### Slide 49:

I am comfortable with a recommendation that the NAWMP update should be used to develop more coherent goals for WF harvest and habitat

#### management

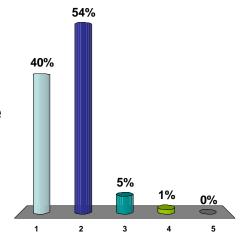
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



#### Slide 50:

### I am comfortable with a group or venue be created to continue the work of the HDWG

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



Day 3 - 11 a.m. Workshop Evaluation Turning Point Slides

Slide 1:

### **Objective #1**

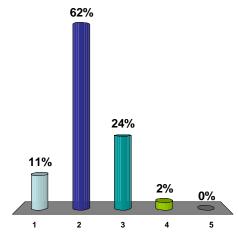
As a result of attending the Workshop, we want participants to:

 Know enough about the features and workings of a coherent framework to understand how enhanced coherence could lead to increased benefits for administrators, managers, and hunters.

Slide 2:

### We achieved Objective #1.

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



Slide 3:

### **Objective #2**

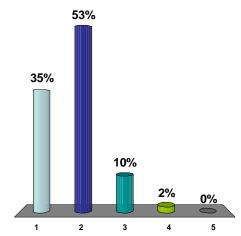
As a result of attending the Workshop, we want participants to:

 Feel that they have a stake and a responsibility in the outcome, and should play a role in enhancing coherence in waterfowl management.

#### Slide 4:

### We achieved Objective #2.

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



Slide 5:

### **Objective #3**

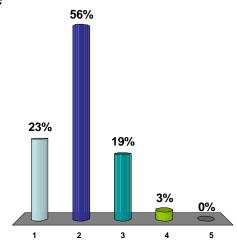
As a result of attending the Workshop, we want participants to:

 In their respective agencies and organizations; help identify and support the decisions and actions necessary to advance the habitat, harvest, and human dimensions components of a more coherent framework.

Slide 6:

### We achieved Objective #3.

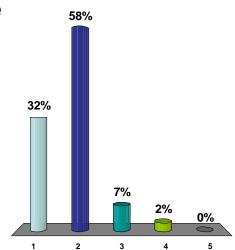
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 7:

### The necessary people were in attendance to meet the objectives.

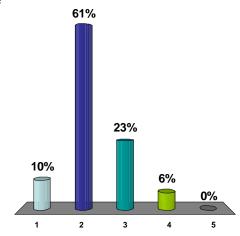
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 8:

# Overall, this workshop met my expectations

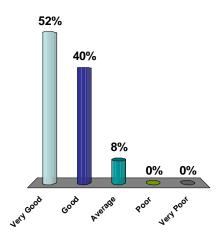
- 1. Strongly Agree
- 2. Agree
- 3. Neutral
- 4. Disagree
- 5. Strongly Disagree



Slide 9:

# The workshop's facilitation was:

- 1. Very Good
- 2. Good
- 3. Average
- 4. Poor
- 5. Very Poor



Slide 10:

### The workshop's facility was:

- 1. Very Good
- 2. Good
- 3. Average
- 4. Poor
- 5. Very Poor

