Central Flyway Comments on NAWMP Objectives and Integration -DRAFT summary of Central Flyway Waterfowl Technical Committee discussion only – December 2013

The Central Flyway has previously recognized the close linkages among the goals identified in the 2012 NAWMP revision: waterfowl populations, habitats, and people/uses (particularly waterfowling traditions). A major purpose of the NAWMP is to rally people to support habitat conservation, which will support waterfowl populations, which will sustain opportunities for people to interact with waterfowl and support habitat conservation, etc. In this respect the NAWMP has been very successful and continues to be. The 2012 revision focuses on the linkages among these goals and advocates formalizing the integration of these goals using a structured, informed decision-making approach. There is also particular emphasis on strengthening the "people" goal of the NAWMP, with clearly stated objectives, measurable attributes, and explicitly stated relationships to the other goals. A first step in the revision process is to identify and agree upon specific, measurable objectives associated with each of the goals, and recognizing the relationships among these objectives.

In considering NAWMP objectives and the "integration" focus of the 2012 revision, the Central Flyway identified several over-arching perspectives:

- 1) We agree that it is important to keep reviewing and improving our management programs, and support efforts to improve coordination and test important assumptions use by waterfowl managers. However, our system of continental waterfowl conservation, though large and cumbersome, is not badly broken. As noted in the NAWMP Action Plan, we are already making strides toward greater management integration: formation of the HDWG with involvement by representatives from all other established institutions, revisiting harvest management approaches, communication among working groups, etc. Trying to develop a unified "theory of everything" that ties all aspects of waterfowl management together may not be the best way to address the challenges of waterfowl conservation. A comprehensive set of closely linked, model-driven decision processes are not possible in the short term and it is arguable whether it is needed at all. Rather, we advocate an exploratory period to better define objectives, examine linkages, and further build coordination and communication.
- 2) We need to be mindful of limits on our collective capacity (funding and manpower) to support new technical, monitoring, and institutional efforts in waterfowl conservation. We must always consider whether the incremental management gains from a new initiative or project will justify the costs. In some cases the most efficient approach may be to conduct smaller-scale "laboratories" to test hypotheses and explore new ideas and methods (e.g., within a few states, a Joint venture, a flyway) before incorporating into continental direction and objectives.
- 3) Current and impending loss and degradation of habitat is the greatest challenge to waterfowl conservation. Habitat threats are in part masked by the relatively wet conditions that have occurred for nearly two decades, which have helped support high waterfowl populations. Large-scale land use policies (e.g., Farm Bill programs, commodity prices, energy development policies) are in a period of change that could result in dramatic, widespread, and rapid reductions in the quantity and quality of habitat available for North American waterfowl. However, many existing and potential supporters of waterfowl conservation have not recognized these impending threats (again, in part because of a long period of favorable environmental conditions), and communicating a message of habitat conservation may be particularly challenging in the near term. For this reason, the newly created

Public Engagement Team may become an essential component of waterfowl conservation, and requires people with skills and experience that are not currently present in the waterfowl management community.

4) Meeting the needs and desires of hunters, and sustaining waterfowling traditions under the North American Model, are the key distinguishing features that has separated the NAWMP from all other continental bird conservation plans. While working to expand the base of supporters (viewers, the general public), we need to focus on sustaining a significant population of hunters who are actively engaged in waterfowl conservation.

The Central Flyway offers the following comments as NAWMP objectives are reconsidered.

Population objectives

This is a complex topic and there was not strong consensus on how to approach waterfowl population objectives, in part because perspectives differ on the main purpose of population objectives. Some ideas that were discussed include:

- Population objectives are seen by many as useful and necessary to inspire and motivate conservation. We need to be able to answer the question "what do we want?" when trying to influence policy, funding, etc. For this purpose, it is desirable to establish high objectives relative to observed historical variation. These aspirational objectives may be based in part on some analysis of what current carrying capacity is, recognizing there is a lot of variation around that level. There must also be a recognition that we are unlikely to greatly to be able to greatly expand "average" carrying capacity. For example, we need an understanding of how much populations may vary, given current carrying capacity, within the normal range of environmental variation (e.g., wet versus dry years); upper population objectives may be what we expect to see under good environmental conditions, given an achievable target for carrying capacity. Recognizing that harvest can affect equilibrium population size, establishment of upper population objectives should also account for desired harvest levels.
- It may also be useful to establish lower threshold levels below which we don't want populations to decline. These lower thresholds would likely be tied to observed historical lows, based on the rationale that populations have shown they can rebound from these levels (under fluctuations in environmental conditions and while being harvested). Populations declining toward these lower thresholds, likely because of declines in habitat quantity/quality, would be the focus of increased efforts to garner public and political support for conservation. For the purposes of harvest management, mangers would not worry too much about populations (i.e., through regulation changes to adjust harvest rates) that remain above these lower thresholds.
- A tie to recruitment would be very useful in developing population objectives, at least for ducks. We want high populations, but more importantly we want a large proportion of the fall flight to be young of the year (particularly for harvest management). We need to develop reliable and useful metrics of annual recruitment that can be used as measurable attributes in evaluating success in managing populations.
- Individual species-specific objectives may not be necessary, and lead to unnecessary technical complication and expense in conservation efforts. Species-specific NAWMP objectives also have led to an unsustainable approach to harvest management (for ducks), with multiple data-hungry stock-

specific strategies that are tied to population objectives. Aggregate population objectives (e.g., ducks, sea ducks, light geese) are still useful for communicating conservation needs.

 While it is relatively straightforward to relate waterfowl population objectives to habitat objectives, the linkages between populations and people are less clear. The historical relationship between duck numbers and hunter numbers appears to have broken down in recent decades. Support for conservation from some parts of the public may not increase until waterfowl populations decline far below levels desired for hunting. Population-people linkages need further exploration.

Habitat objectives

- Habitat objectives can be stepped down from upper population objectives, and translated to regional JV-level objectives.
- Maximizing duck recruitment, and related aspects of habitat quality, should be a focus of setting habitat objectives.
- Hunting access is currently or increasingly becoming a prominent issue in many parts of the Central Flyway, but we are uncertain whether or how this issue can be incorporated into habitat objectives (some coordination at large scales may be beneficial, but this issue will likely be most effectively addressed at the state scale).

People objectives

- There are concerns about capacity to support substantial increases in hunter numbers, given access and crowding issues in many areas. Hunter-related objectives might be approached in a similar way to waterfowl population objectives: an upper level objective could be established, based on historical highs; a lower threshold could be established below which greater management emphasis would be placed on sustaining hunter participation. This lower threshold would be based on the premise that some critical mass of hunter numbers is necessary to maintain political support for waterfowl conservation, and maintain the North American Model of hunting.
- Understanding "population dynamics" of hunters (and viewers) is important. As with ducks, a recruitment measure may be a particularly useful measure of the overall health of hunter populations. In addition, metrics that measure hunter/viewer support and involvement in conservation are important to develop.
- Ecological goods and services of waterfowl habitats may be an important communication and marketing tool for garnering broad public support for waterfowl conservation, and effective programs potentially could be developed via the Public Engagement Team.
- With respect to harvest management, there is desire to make the regulations setting process simpler. Elements of this might include multi-stock harvest strategies (rather than an increasing number of separate strategies that are each aimed at making the optimal decision for a single stock, all of which must be reconciled into a single set of annual regulations) and establishing upper threshold target rates as harvest management objectives. There is also some support for somewhat less liberal duck frameworks in order to reduce the likelihood of restrictive or closed seasons. A longstanding issue in harvest management is the trade-off (in terms of effects on hunter numbers

and population dynamics) between the simplicity of hunting regulations and maximizing hunting opportunity – addressing this issue directly with well-designed experiments would be beneficial.