

Ducks Unlimited Canada (DUC) comments on draft NAWMP objectives and integration – March 2014

Ducks Unlimited Canada strongly supports the concept of integrated goals for duck populations, habitat and people and congratulates the Interim Integration Committee (IIC) for proposing draft objectives for each of these goals. The North American Waterfowl Management Plan (NAWMP) has been a tremendously successful public-private partnership for focussing attention and resources from a broad sweep of interests on the life-cycle needs of waterfowl. Accordingly, NAWMP often is held as a model of successful wildlife management, and is lauded for continuing to adapt to the needs of stakeholders. The greater integration proposed in the 2012 Revision is a logical step for improving the efficiency and relevance of waterfowl conservation throughout North America, though care must be taken to ensure technical complexities do not alienate important audiences.

DUC respectfully offers the following perspectives on the draft objectives as presented in the IIC Workplan dated 15 July 2013:

- Waterfowl Objectives:
 - DUC believes that numerical population objects are critical for communicating to a variety of audiences about the abundances of waterfowl we desire, as a basis for habitat and harvest planning, and to inspire the waterfowl community and external audiences about the importance of wetland and waterfowl conservation. Stepped-down population goals at the joint-venture scale also serve as an important mechanism to ensure that distributions of birds in addition to abundances are considered. Maintenance of regional distributions is likely important to ensure population resiliency, and has important implications for a variety of human-dimension considerations.
 - We understand the rationale for selecting the period from 1997-2012 as a new benchmark for establishing population objectives. Clearly, objectives should be realistic. However, we are concerned about both the precedent this establishes and the signal lowering objectives for species whose populations currently are below the level of the 1970's (specifically scaup and pintails) sends to segments of the stakeholder community that hold these populations in high regard (potentially reduces the inspirational nature of the goal). Essentially we would be indicating that current pintail (25% below LTA) and scaup (22% below LTA) populations are acceptable; we find this message demotivational and essentially would remove the incentive to target actions specifically designed to improve pintail reproduction (e.g., winter wheat) or, more generally perhaps, to restore habitats where they have been lost. Lowering population objectives may be justified in instances where "system change" has occurred beyond the scope of the waterfowl management activity, however, defining and measuring when that has transpired may be difficult. Regardless, we would be especially concerned about signalling that we will be willing to lower population objectives in instances where our management efforts simply were unsuccessful in reversing a declining population

trend. We hope, too, that the willingness to lower objectives following a “system change” will not diminish the incentive to invest in research to understand large-scale drivers of waterfowl population dynamics that fall outside traditional waterfowl management.

- A more contemporary period for establishing population goals would have the benefit of allowing a consistent framework for both mid-continent and eastern populations that have only been included in the WBPBS since 1990.
- We recognize and agree that a static goal that failed to incorporate environmental variability was a substantial shortcoming of the previous ‘average of the 70’s’ goal. This failing limited its utility for evaluating population status. However, we are not convinced that a ‘range’ goal is substantially better. First, maintaining populations within a certain range seems to imply that management actions to control populations will occur if populations exceed the upper bound. For many species, that seems unlikely unless it is determined that abundances have reached the level where habitats are being imperilled. If the upper bound does not signify management action, it’s not clear what purpose it serves. Second, we think there are better approaches for incorporating environmental variability into annual assessments of population status. For example, we wonder if the waterfowl community would be satisfied if populations were hovering near the lower bound of the range even when environmental conditions suggested populations should be approaching the upper bound. A different approach (and an improvement, in our estimation) would be to establish a single goal to inspire action, and to allow regional planning, but use a model-based approach for annual assessments of species-specific population status. With nearly 60 years of waterfowl survey data for much of the continent, we suspect that rather robust models relating environmental conditions and landscape condition to waterfowl population abundances and production could be developed. On an annual basis, it would be possible to determine whether there were more or less birds than predicted given current environmental conditions. A series of years with fewer than expected birds could trigger management action. Of course, there are many possible choices for the selection of a single objective. Selecting the mid-point of a given range of years as representing the population objective under ‘average’ environmental conditions, is one option that might have the advantage of being familiar to many stakeholders. A different approach might be to select species-specific population levels below which we would want populations to fall only rarely. From these ‘floors’, and given observed population variability, it would be possible to specify objectives to meet these conditions (including the frequency that population would be expected to fall below the floor). Ginsberg et al (1982) and Burgman et al (1993) discuss this process under the rubric of ‘quasiextinction’.
- We encourage setting new objectives for all duck species for which we have survey data over the selected time period (including species whose distributions fall outside the mid-continent) not just the 10 species highlighted.

- Environmental variability may be less of a driver of population dynamics outside the mid-continent. Are there other drivers we should be considering for certain populations?
- Habitat Objectives
 - Currently, as stated, the “draft habitat objectives” are really just a statement that these will be developed later. We wonder why objectives for this goal are handled differently than objectives for the other goals? The Joint Task Group made substantial progress in expressing the connection between habitat carrying capacity, density dependence and harvest rates based on the long-held concept of maximum sustained yield (JTG report, but see Bayliss 1989). Though we acknowledge that substantially increasing ‘K may be difficult given ongoing risks to habitat, we do not favor stepping back from these advances and suggest that establishing habitat objectives should follow closely after the establishment of population objectives. Incorporating human dimensions considerations introduces additional complexity, but we believe it is possible to extend the models developed in the JTG report to include humans (short of the “model of everything”). The Scaup Action Team has made some progress in developing these ideas.
- People Objectives
 - We generally agree with the proposed objectives for waterfowl supporters. However; as resources are allocated to accomplish these objectives we encourage the development of an adaptive framework to deliberately evaluate the accompanying assumptions relative to relationships between both habitat and harvest objectives on supporters as identified in the IIC workplan. As indicated in the IIC document, we too wonder about the implications of these new objectives to funding sources like NAWCA.
 - While the objectives specify goals for several different supporter groups, the dialog, including examples of integration, consistently focuses on a single group. While hunters have long been the primary supporters of wildlife conservation in North America and remain important, in Canada, they may not be the most influential stakeholder group. Thus we continue to encourage a more deliberate inclusion of other groups in all communication products. Persistent focus on a single group seems likely to alienate certain important stakeholders--including those within Canadian federal and provincial wildlife management agencies--that, mostly, do not rely on hunting licence sales for revenues.
 - Given the fact that most resources in waterfowl management are focussed on populations or habitat, we were a bit surprised that these HD objectives were most developed. Again, we favor moving forward with developing objectives for populations and habitat using the framework developed by the JTG, even if that means delaying the integration of HD objectives.
- Integration Framework

- We agree with recent conversations that integration between population, habitat and supporter goals are most important at the scale of primary decision nodes. Nevertheless, we view the ability to inform allocation decisions among the three goals as a primary reason to seek increased integration. It seems, therefore, that a conceptual quantitative framework needs to be developed to allow the quantification of the impact of trade-off decisions. We think this can be accomplished without a fully parameterized model of all possible interactions.

Ducks Unlimited Canada appreciates the opportunity to comment on these draft objectives. We acknowledge the scope of the process, and recognize the amount of effort that has been devoted to developing a new integrated set of objectives. However we urge rapid progress toward establishing a set of objectives, even if these prove to be interim. Important opportunities to incorporate new goals are quickly passing. For example, the PHJV is currently updating its Implementation Plan. Because of the tremendous amount of work required to complete the modelling in support of these plans, the JV has recently decided to extend the planning horizon; the currently developed plan will not be revised until 2020. While this implementation plan might be considered a 'living document', because of the aforementioned work required, new objectives likely will not be completely incorporated until the next full revision. More importantly however, after the progression from JTG Report to Waterfowl Summit, to 2012 Revision, to Action Plan to IIC, we are deeply concerned that interest in the process is rapidly waning. This certainly seems to be the case for our partners, and even for DUC staff. We urge the IIC to quickly demonstrate progress by agreeing to a set of interim goals. Even if final integration is not complete, coherent objectives for populations and habitat should be attainable within a relatively short timeframe. These interim goals could be revised to more completely integrate HD objectives following completion of the "Discrete Choice" study.

Literature:

- Bayliss, P. 1989. Population dynamics of magpie geese in relation to rainfall and density: implications for harvest models in a fluctuating environment. *Journal of applied Ecology* 26:913-924
- Burgman, M. A., S. Ferson, and H. R. Akçakaya. 1996. *Risk assessment in conservation biology*. Chapman & Hall, London. 314pp.
- Ginzburg, L. R., L. B. Slobodkin, K. Johnson, and A. G. Bindman. 1982. Quasiextinction probabilities as a measure of impact on population growth. *Risk Analysis* 21:171-181.