

Mark Koneff Input:

My overall impression was that the draft objectives proposed in the work plan do little to resolve the ambiguity in NAWMP objectives that motivated the work of the Joint Task Group and led to the themes incorporated in the Revision. Of particular concern is that the work plan does not describe (even conceptually) an assessment framework that would provide a basis for resolving long-standing ambiguities, as recommended by the Joint Task Group. The required modeling framework would forge hypothesized linkages among population, habitat, and supporter dynamics and would provide a basis for evaluating tradeoffs among objectives and, essentially, allow planners to ‘derive’ objectives that strike an appropriate balance among population, habitat, and supporter metrics. Perhaps, the IIC and NAWMP Committee have developed a conceptual framework which has resulted in the recommendations for draft objectives, but have chosen not to present it in the work plan. If not, I’d respectfully suggest that the focus of the IIC and subcommittees be on developing and proposing this conceptual, model-based framework that would allow a more informed and targeted dialogue regarding objectives rather than on draft objectives that do not resolve long-standing ambiguities.

In 2006, the Joint Task Group was formed to address concerns over the ambiguity in the interpretation of NAWMP population objectives (at the time expressed for several species of ducks as the mean 1970s population sizes in the traditional survey area). Concern had been raised within the waterfowl management community that these objectives lacked an explicit biological interpretation and were not linked to a specific harvest policy. This was problematic because it limited the objectives utility in i) guiding harvest management, ii) setting cohesive habitat conservation objectives, and iii) measuring conservation success using ongoing monitoring programs. Whether these population objectives were interpreted to represent carrying capacity ( $K$ ; implying zero harvest) or some other long-term equilibrium state ( $N_{eq}$ ; implying some explicit harvest policy applied within a stochastically fluctuating, but otherwise stationary environment) has very large implications for their use in harvest management and their utility as planning benchmarks and metrics of success for habitat conservation.

Accordingly, the Joint Task Group recommended a ‘shoulder strategy’ as a means to explicitly interpret NAWMP population objectives and directly link continental objectives for both harvest and habitat management. That strategy is based on an underlying modeling framework that, at the continental scale, is useful because it would more directly tie harvest decisions to prevailing population status and breeding habitat conditions, and defines habitat objectives with respect to continental carrying capacity, ensuring, at least, a consistent continental-level planning metric across JVs and LCCs. It also enables estimates from the Waterfowl Breeding Population and Habitat Survey (WBPHS) to be used as direct measures of the NAWMP’s success. While the proposed framework could not be equally applied to all species, it could be constructed, in at least a crude manner, for many of the 10 duck species with goals currently based on WBPHS traditional survey area estimates.

The proposed waterfowl population objectives, expressed as an acceptable range of population sizes (benchmark 1997-2012) seems to be a step backward in reducing ambiguity in population

objectives and providing a coherent framework for interpreting population, habitat, and supporter objectives. While the draft population objectives can be clearly associated with a specific harvest policy in the US (codified in AHM), they fail to provide the explicit biological interpretation necessary to directly link them to habitat objectives.

With respect to supporter objectives, the metrics under consideration seem a reasonable starting place, though there are obviously many questions about the kinds of actions managers can take to achieve these objectives and tradeoffs among supporter objectives as well as with population and habitat objectives. Recommendations for revising habitat objectives are not offered in the draft work plan. Again, I submit that attempts to specify supporter or habitat objectives, lacking a model-based (at least conceptual) framework that links the dynamics of waterfowl populations, waterfowl habitats, and supporters will not result in the unambiguous and coherent objectives envisioned in the 2012 NAWMP Revision.