and the TTSS regarding number of permits, areas open to hunting, and a quota on trumpeter swans and these are reflected in the frameworks. However, considering the significance of the general swan season, the Service will establish a season ending date of the first Sunday in December. This would allow the ending date to range between December 1 and 7, with the season ending on December 3 this year and, if changes are not deemed essential, December 1 in 1997, etc.

There is nothing biologically or phenologically precise about a swan season ending date of the "first Sunday in December"; but the same can be said for ending dates of "Sunday closest to December 15", "the Saturday closest to January 20", or "the first Sunday in January" as Utah typically selected prior to 1994. The earlier closing date is intended to minimize, not prevent, the likelihood of trumpeter swans that might be forced because of freezing to move from closed areas in Utah or from the Tristate area into areas where they could be shot. Considering the vagaries of weather and habitat, it would be impossible to pick a date that would for each year either optimize hunting or avoid trumpeters moving into hunt areas. Rather than either some earlier or later ending dates, the Service believes the "first Sunday in December" provides a reasonable balance between safeguards for the population of trumpeter swans and opportunity for hunters.

The changes in frameworks are not intended to keep swan hunting opportunity and harvest success unchanged from that which occurred prior to 1994. Opportunity as measured by "hunter days" may be reduced, but some hunters will undoubtedly redirect their activity to earlier in the season and, therefore, offset that reduction to some unknown extent. Opportunity as measured by "number of hunters" will increase in Utah with the 250 additional permits. Average success may also increase over previous years because hunter effort will be focused in the area and at the time of peak tundra swan

The potential loss of hunting opportunity resulting from the changes in frameworks may not be as great as suggested by data on harvest and effort occurring after November 30. For example, in Utah, during the 1994 season when the season ended on December 15, which was 19 days earlier than the 1969-93 average ending date of January 3, when 4 counties had been closed to swan hunting, and when there was no increase in number of permits issued, hunters killed an estimated 888

swans. This harvest was more than twice that of the preceding year, the third highest harvest in 11 years, and only 7 percent below the average harvest during 1969-93 when also only 2,500 permits were authorized. Utah's hunter-days were unchanged between 1994 (9,948) and the 1969-93 average (9,958).

The Service believes the use of a season ending date and a quota that limits potential take of trumpeter swans are complementary means of providing adequate protection to the trumpeter population during this trial period. Regarding the biological appropriateness of a "1 percent" quota on RMP trumpeter swans, experience with Arctic-nesting tundra swans suggests that a harvest rate upwards of 10 percent for the Western Population allows for a stable to slightly increasing population while a harvest rate of about 3 percent for the Eastern Population allows a growth averaging about 2-3

percent per year.

Timely classification of swans and a high degree of hunter compliance are important if the trumpeter quota is to be used effectively. Because in 1994, only about 63 and 87 percent, respectively, of the estimated number of successful Utah and Nevada swan hunters submitted birds for classification, the Service must insist upon assurances from Utah and Nevada that swans or determinant swan parts will be examined by biologists and that maximum compliance with reporting be sought. Because each State differs in administering controlled hunts and obtaining hunter compliance of hunt requirements, the Service does not specify how this should be done. However, it seems reasonable that speciation could be accomplished within 3 working days of a swan being taken and the rate of compliance be at least as high as that for controlled biggame hunts.

The need or lack of need for Montana to have a season without a quota or to use a different method of reporting harvest will be reviewed annually. Departure from the requirements in Utah and Nevada will likely be contingent upon the continued healthy status of that segment of the trumpeter swan population that has the most potential for be impacted by the Montana season.

The "adaptive management process" was suggested as a means of determining the effects of swan hunting, if any, on range expansion of trumpeter swans within the traditionally longer and later-closing tundra swan season. Those involved with the process for duck hunting know that it has taken 3 years to get to where we are today, with

concerns remaining about managing various stocks of mallards much less other species. Evaluation of a management action or "data driven" management is indeed a key aspect of the adaptive management process, but the process entails more than simply "learning by doing." The adaptive management process among many things requires an explicit statement of the objective, an effective means of measuring results of the action, and consideration being given to "risks" and "constraints." Adaptive management could include reducing risk of an action on one resource while forgoing opportunity with another or making self-imposed restrictions in order to limit fiscal costs to monitoring programs. The States' comments suggest a strategy that places a lopsided emphasis at minimizing the risk to swan hunting rather than reducing the risk to trumpeter range expansion. The frameworks reflect constraints that reduce the risk to late-winter, pioneering swans which are valuable because of their potentially learned trait of moving out of problem sites in the Tristate area and the costs incurred by the Service and the States of Idaho, Wyoming, and Oregon in the restoration efforts. If monitoring costs are prohibitive, consideration should be given to either increasing permit fees or having fewer hunt days in a week so as to reduce costs of operating check stations as is commonly done in several States that conduct controlled goose or crane hunts.

The Service acknowledges and appreciates the efforts of the Council's Study Committee and several swan subcommittees in developing species and population management plans and annually collecting, reporting, and analyzing information on the status and harvest of swans and commends them for it. Information that they and others provide will be considered by the Service each year, with the possibility of season modifications should circumstance warrant; however, the intent would be to make few if any changes during the 5-year trial period.

Lastly, the Service encourages the Pacific Flyway Council and all member States to actively participate in the cooperative efforts to enhance the status and distribution of RMP trumpeter swans.

23. Other

Written Comments: The Andover Sportsmen's Club and the Concerned Coastal Sportsmen's Association, both local organizations in Massachusetts, requested compensatory days for those States that prohibit Sunday hunting.