discards are accounted for before implementing carry-over provisions. The NS1 guidelines advise that managers consider the likely reason for an ACL underage prior to implementing carry-over (50 CFR 600.310(f)(2)(ii)(B)). Therefore, for stocks with substantial uncertainty in catch data, if a Council, or the Secretary in the case of Secretarial managed stocks, wants to apply carry-over ABC control rules, additional precautionary measures such as triggers to prohibit carry-over in risky circumstances may be needed to ensure that catches do not exceed ACLs on average. Overages and underages may also be addressed through AMs, as opposed to carry-over provisions, in order to average out the fluctuations in the estimated catch. The NS1 guidelines provide for AMs based on multi-year average data using a comparison of average catch to average ACL over a three-year moving average period (50 CFR 600.310(g)(5)).

4.7 Limitations on ABC Adjustments

As described above, an ABC control rule is a policy set by the Council, in consultation with its SSC, or by the Secretary for Secretarial managed stocks, that articulates how the ABC will be set compared to the associated OFL. ABC control rules account for scientific uncertainty as well as the Council's risk policy (e.g., the acceptable probability that catch equal to the ABC would not result in overfishing). Because the ABC cannot exceed the OFL, ABC control rules generally specify the amount by which the ABC should be reduced from the OFL[18], based on the level of scientific uncertainty and the preferred probability that such a catch level could result in overfishing. Most of the Councils have established a tiered ABC control rule, where different approaches are used to specify the OFL and ABC depending on the data that is available for a given stock. In many of the higher data quality tiers, P* will be applied to the probability distribution of OFL to generate the ABC. In general, the buffer between the OFL and ABC for these higher data quality tiers will be smaller than for the lower data quality tiers. The amount of carry-over that can be applied is limited by the difference between the OFL and the ABC. This may allow for larger increases in the ABC for stocks subject to relatively high scientific uncertainty because those stocks are likely to have a large margin between the OFL and ABC in the first place. In such cases, when considering carry-over, it may still be appropriate to allow ABC increases, but managers should consider the reasons for the underage. Putting limits on the percentage of the ACL that can be carried over may be advisable as a means to limit risk. If there is reason to believe the underage was due to a decline in the stock, it may be unwise to allow carry-over. However, there may be cases where assessment results are uncertain but carry-over serves an important purpose with limited risk. As noted previously, because the OFL provides the upper bound on ABC, we do not recommend applying carry-over or phase-in provisions for stocks that do not have a specified OFL.

4.8 The Broader Fishery Management Context

The benefits and risks of carry-over and phase-in provisions should be evaluated in the context of the broader fishery management approach. As mentioned earlier, carry-over policies may be particularly useful in multispecies fisheries managed with individual quotas. They can be an important part of catch-balancing regimes that reduce the need for individuals to fish right up to their quota (and potentially discard overages), and make it easier to balance catch with quota portfolios in multispecies fisheries without having to buy or sell quota. Carry-over may be useful

[18] Note: For some data limited stocks, OFL is not specified.