

Issues with visual detection of CWTs by observers were discussed. ~~A and also that a sampling rate of 10% for genetics, even with electronic detection, would be an inadequate sampling rate for estimating total numbers from hatchery releases for a given area and time; 20% sampling fraction is considered an adequate sampling rate for to~~ detect CWTs (Nandor et al, 2010). Observers collect salmon genetics and CWT from all Chinook and Chum salmon they encounter in their at-sea samples in all GOA fisheries. In addition, for catcher vessels in the GOA trawl pollock fishery, the observer monitors the offload and takes genetics from all Chinook and Chum salmon encountered as well as examines these for CWT. At-sea sampling rates at the trip for each fishery are determined by which vessels participate in the fishery, the deployment strata they belong in for each year, and the sampling rates in that year. Observer program deployment strata and deployment rates are defined in Annual Deployment Plans.

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The overall percentage of the catch that was estimated to originate from hatchery release groups, by expanding observed numbers with sampling and marking expansion factors, was approximately 18%. Some basic assumptions of the estimation method used include tagged fish from release groups represent untagged fish in catches, the marking fraction of juveniles in release groups is a fair estimate of the tagged and untagged ratio in catches, and tagged and untagged fish experience similar mortality.

~~The group discussed the implications of a combined sampling design for GOA genetics and CWT presence. The sampling objectives of the two are not necessarily compatible. The present sampling of every 10th fish is arguably sufficient for genetics work and stock group estimation, but if CWTs are meant to provide satisfactory information on the total numbers from hatchery releases for a given area and time, then additional sampling would be required. As such the Council would need to articulate the goal of the sampling program and the modified objective from the current sampling scheme.~~