

a/ ACLs, ACTs and HGs are specified as total catch values.

b/Fishery harvest guidelines means the harvest guideline or quota after subtracting from the ACL or ACT Pacific Coast treaty Indian tribes allocations and projected catch, projected research catch, deductions for fishing mortality in non-groundfish fisheries, and deductions for EFPs.

c/ Arrowtooth flounder. The stock was last assessed in 2007 and was estimated to be at 79 percent of its unfished biomass in 2007. The OFL of 6,912 mt is based on the 2007 assessment with an  $F_{30\%} F_{MSY}$  proxy. The ABC of 5,758 mt is a 17 percent reduction from the OFL ( $\sigma=0.72/P^*=0.40$ ) as it's a category 2 stock. Because the stock is above  $B_{25\%}$ , the ACL is set equal to the ABC. 2,087.39 mt is deducted from the ACL for the Tribal fishery (2,041 mt), the incidental open access fishery (30 mt), and research catch (16.39 mt), resulting in a fishery HG of 3,671 mt.

d/ Black rockfish north (Washington). A stock assessment was prepared for black rockfish north of  $45^{\circ}46'$  N. lat. (Cape Falcon, Oregon) in 2007. The biomass in the north was estimated to be at 53 percent of its unfished biomass in 2007. The OFL from the assessed area is based on the 2007 assessment with a harvest rate proxy of  $F_{50\%}$ . The resulting OFL for the area north of  $46^{\circ}16'$  N. lat. is 428 mt and is 97 percent of the OFL from the assessed area based on the area distribution of historical catch. The ABC of 409 mt for the north is a 4 percent reduction from the OFL ( $\sigma=0.36/P^*=0.45$ ) as it's a category 1 stock. The ACL was set equal to the ABC since the stock is above  $B_{40\%}$ . 14 mt is deducted from the ACL for the Tribal fishery, resulting in a fishery HG of 395 mt.

e/ Black rockfish south (Oregon and California). A stock assessment was prepared for black rockfish south of  $45^{\circ}46'$  N. lat. (Cape Falcon, Oregon) to Central California in 2007. The biomass