

in the south was estimated to be at 70 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  $F_{50\%}$  plus 3 percent of the OFL from the stock assessment prepared for black rockfish north of  $45^{\circ}46'$  N. lat. The resulting OFL for the area south of  $46^{\circ}16'$  N. lat. is 1,159 mt. The ABC of 1,108 mt is a 4 percent reduction from the OFL ( $\sigma=0.36/P^*=0.45$ ) as it's a category 1 stock. The 2013 and 2014 ACL is 1,000 mt, which maintains the constant catch strategy designed to keep the stock biomass above  $B_{40\%}$ . There are no deductions from the ACL, thus the fishery HG is equal to the ACL. The black rockfish ACL in the area south of  $46^{\circ}16'$  N. lat. (Columbia River), is subdivided with separate HGs being set for the waters off Oregon (580 mt/58 percent) and for the waters off California (420 mt/42 percent).

f/ Bocaccio. A bocaccio stock assessment update was prepared in 2011 for the bocaccio stock between the U.S.-Mexico border and Cape Blanco. The stock is managed with stock-specific harvest specifications south of  $40^{\circ}10'$  N. lat. and within the minor shelf rockfish complex north of  $40^{\circ}10'$  N. lat. Historical catch distribution of approximately 6 percent was used to apportion the assessed stock to the area north of  $40^{\circ}10'$  N. lat. The bocaccio stock was estimated to be at 26 percent of its unfished biomass in 2011. The OFL of 884 mt is based on the 2011 stock assessment STAT model with an  $F_{MSY}$  proxy of  $F_{50\%}$ . The ABC of 845 mt is a 4 percent reduction from the OFL ( $\sigma=0.36/P^*=0.45$ ) as it's a category 1 stock. The 320 mt ACL is based on a rebuilding plan with a target year to rebuild of 2022 and an SPR harvest rate of 77.7 percent. 8.4 mt is deducted from the ACL for the incidental open access fishery (0.7 mt), EFP catch (6.0 mt) and research catch (1.7 mt), resulting in a fishery HG of 311.6 mt. The California recreational fishery has an HG of 163.5.