## 2018 September

contacto@aquabench.com +56 65 2278985 Pje. Elizardo Bravo N°80 Puerto Montt - Chile www.aquabench.com





#### 2017 SALMON INDUSTRY BALANCE \*:

# 2017 Productive Results: Better Productivity and Low Mortality

The industry productive results showed an increase in productivity for the 3 species farmed compared with 2016, which was mainly associated with the reduction of mortality, better growth and, as a result, increase in harvested kilos / transferred smolt.

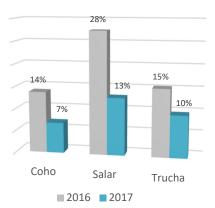
#### **Mortality**

**Atlantic Salmon** had a 13.0% of accumulated mortality in closed groups in 2017, 54% less than the previous year, difference that can be explained mainly by the low presence of Algae Bloom, compared with 2016. In the case of **Rainbow Trout** and **Coho Salmon**, accumulated mortality also reduced in 2017, reaching 9.6% (vs. 15.3% in 2016) and 6.9% (vs. 13.8% in 2016) respectively.

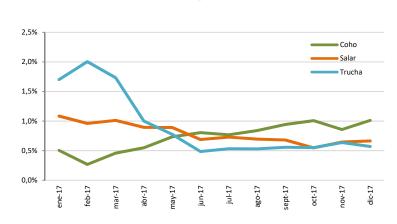
The analysis shows that the average monthly mortality in 2017 for **Atlantic Salmon** was 0.79%, that of **Coho Salmon** was 0.76% and 0.91% for **Rainbow Trout**. This monthly mortality was lower than in 2016 for the three species: Atlantic Salmon (2.1%), Coho Salmon (1.7%) and Rainbow Trout (1.5%)

Therefore, 2017 productivity balance shows a total amount of dead fish equivalent to 20.7 million during the growout stage. Per species, 14.3 million correspond to **Atlantic Salmon**, 3.9 million to **Coho Salmon** and 2.5 million to **Rainbow Trout**. 20% of this mortality was caused by infections.





## Monthly Mortality 2017



<sup>\*</sup> The numbers mentioned in this document correspond to those obtained directly from our own Databases (DB). To extrapolate to 100% of the industry, it is necessary to use the estimated DB representativeness, which is 89.3% in average (Coho Salmon: 100%; Atlantic Salmon: 82.7% and Rainbow Trout: 100%). All the information presented includes the 3 farming regions.

# 2018 September

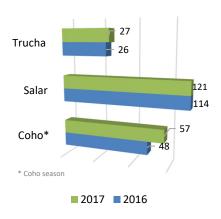
contacto@aquabench.com +56 65 2278985 Pje. Elizardo Bravo N°80 Puerto Montt – Chile www.aquabench.com





#### **Smolt stocking**

Jan - Dec 2016 vs 2017 (million smolt per species)



### **Smolt Stocking**

In 2017, there was an average increase of 6% in smolt stocking, in relation to the previous year, reaching a total amount of 203.9 million smolt transferred to the sea compared with 191.7 recorded during 2016 for the three species farmed.

Per species, the numbers show an increase of 6% in **Atlantic Salmon**, 7% in **Rainbow Trout** and 18.3% in **Coho Salmon** (as a season).

The weight of the fish when transferred to the sea in 2017 did not vary much in relation to the previous year for the three species: Atlantic Salmon 154 g. ( $\uparrow$  2%), Rainbow Trout 214 g. ( $\downarrow$  9%) and Coho Salmon 177 g. ( $\downarrow$ 3%).

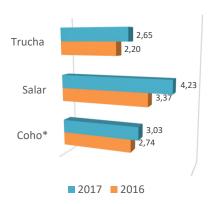
#### Biomass and the Number of Fish

The information shows that, at the end of 2017 (December), there was an increase of 4% (compared with the previous year) of the number of live fish, with an estimation of a total of 184 million fish (considering the 3 species). This positive variation can be greatly explained by **Atlantic Salmon**, which showed an increase of 6% in the number of live fish in December 2017, compared with the same month of the previous year. **Rainbow Trout** and **Coho Salmon** showed a slight reduction of the number of live fish (-4% and -3% respectively), reaching 23.8 million in the case of **Rainbow Trout** and 12.9 million in **Coho Salmon** at the end of December 2017.

Regarding living biomass during the growout stage, the analysis reveals an increase of 15% in relation to December 2016, with a total of 385,500 tons at the end of 2017 for the three species. Per species, **Atlantic Salmon** – that represents 81% of the total living biomass – shows an increase of 20% up to December 2017, in relation to the same month of the previous year, reaching 313,778 tons. Likewise, the biomass of **Rainbow Trout** decreased 21% and **Coho Salmon** increased 25%.

#### **Industry productivity**

(kg harvested / smolt)



## **Productivity**

The low presence of Algae Bloom during 2017 (compared with 2016) was reflected in the increase of productivity in **Atlantic Salmon**, which reached **4.23** kg (at the end of 2017) harvested per smolt transferred to the sea, amount that is 26% higher than the amount registered in 2016. In the case of **Rainbow Trout**, an improvement in productivity of 21% was also observed, reaching **2.65** kg harvested per smolt, whereas for **Coho Salmon**, it increased 11%, reaching **3.03** kg harvested per smolt (as a season).

## 2018 September

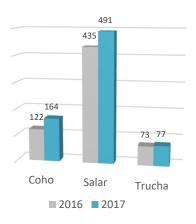
contacto@aquabench.com +56 65 2278985 Pje. Elizardo Bravo N°80 Puerto Montt - Chile www.aquabench.com





#### **Industry harvest**

Jan - Dec 2016 vs 2017 (thousand tons WFE)



#### Harvest

The total biomass harvested by the whole industry for the three species in 2017 reached 732 thousand tons (WFE\*), amount which is 16% higher than the previous year. Per species, the accumulated harvested volumes (WFE) at the end of the year reached 491,119 tons for Atlantic Salmon, 76,934 tons for Rainbow Trout and 164,372 tons for Coho Salmon. These numbers represent an increase in harvest for the period of 42,676 tons for Coho Salmon, 56,247 tons for Atlantic Salmon and 3,988 tons for Trout.

In 2017, the average harvest weight for Atlantic Salmon was 4.9 kg, it was 3.2 kg for Coho Salmon and 3.0 kg for Rainbow Trout.

WFE = Whole Fish Equivalent: Unit used to measure the raw material, it corresponds to round bled live weight
% Accumulated Mortality = Total N° of dead fish / initial N° of fish transferred
Biomass Produced = Dead biomass + Harvested biomass + Living biomass at the end of a period
% Dead Biomass = Kg of dead biomass / Kg of biomass produced
°Smolt Stocking: transfer of fish (called smolts at this stage of their life cycle) to sea water farming sites to begin the
growout stage

Subscribe to this Newsletter at www.aquabench.com

<sup>\*</sup> The numbers mentioned in this document correspond to those obtained directly from our own Databases (DB). To extrapolate to 100% of the industry, it is necessary to use the estimated DB representativeness, which is 89.3% in average (Coho Salmon: 100%; Atlantic Salmon: 82.7% and Rainbow Trout: 100%). All the information presented includes the 3 farming regions.