

Reasons to close the Outer Port Heiden commercial fishery and not to allow an Outer Cinder River commercial fishery for sockeye salmon.

1. The BOF erred in opening the Outer Port Heiden (OPH) Section to commercial fishing in 2007.

- a. The BOF created a liberal proposal out of a restrictive proposal with no public notice (**RC 80 (1970 Proposal 210) RC 28 (transcripts of the 2007 BOF deliberations)**);
- b. ADF&G provided incorrect information and led the BOF to believe that the harvest in the OPH Section would be dominated by North Peninsula-origin salmon (**RC 80 (p.2 ADF&G comments)**).
- c. The Bristol Bay sockeye salmon stock was fully allocated in 2006.
- d. Therefore, the establishment of the OPH by the BOF in 2007 violated the **5 AAC 39.220, Policy for the management of mixed stock salmon fisheries** (<http://www.legis.state.ak.us/basis/aac.asp#5.39.212>).

2. The Northern District Salmon Management Plan for the Outer Port Heiden Section is fatally flawed.

- a. The OPH harvest does little in anything to control escapement to the Meshik River.
 - i. Meshik River-origin salmon was a very small component (7% and 14% in 2007 and 2008) of the Outer Port Heiden Section harvest
 - ii. The combined samples from the Open Area of the OPH Section observed 0% Meshik-River salmon in 2014 and 2015 (Boatright et al. 2016).
- b. It is obvious that the OPH Section commercial fishery cannot be managed on the abundance of Meshik River-origin salmon because it is an extremely small component of the harvest or may not be in the harvest at all. It is a farce.

3. Continuation of the OPH commercial fishery will result in a higher number and a higher proportional harvest to the Northern District total harvest.

- a. The new Outer Port Heiden commercial fishery catches more fish that originate in Bristol Bay than any other Northern Peninsula commercial fishery. The Outer Port Heiden Section now accounts for as much as 41.5% of the total Northern District Harvest.
- b. The increasing proportion of the Outer Port Heiden commercial harvest to the total Northern District harvest, combined with the highest interception rate of Bristol Bay-origin salmon among Northern District Fishing Sections, will no doubt result in more and a higher proportion of Bristol Bay-origin salmon being harvested in the Northern District fisheries.
- c. Expanding the open area of the OPH Section to include waters out to the 3 mi boundary will no doubt increase effort and catch from this section and will no

doubt increase the number and proportion of Bristol Bay-origin salmon in the Northern District harvest.

The Northern District Management plan for the Outer Port Heiden Section is fatally flawed. The management of the OPH Section is supposedly based on the abundance of Meshik River sockeye salmon. Management of the OPH fishery, based on a stock that contributes very little to nothing at all, is a farce. Because the Bristol Bay-origin salmon stock is fully allocated and was fully allocated prior to the BOF action in 2007 to open the OPH commercial fishery the establishment of this fishery was against the [5 AAC 39.220, Policy for the management of mixed stock salmon fisheries](#)

During the 2007 BOF meeting, there appeared to be a huge available surplus of Meshik River sockeye salmon over and above subsistence and escapement needs. Changes to the Meshik River SEG basically eliminated that huge available surplus. Up through 2006, the SEG was 10K to 20K sockeye salmon. In 2007, ADF&G changed the escapement goal to 20k to 60K; in 2013 ADF&G again changed the SEG to 25K to 100K and just recently in 2016, ADF&G again changed the escapement goal to 48K to 86K. These changes in the Meshik River sockeye salmon SEG basically eliminated the huge surplus that the BOF identified in February 2007 (Figure 1).

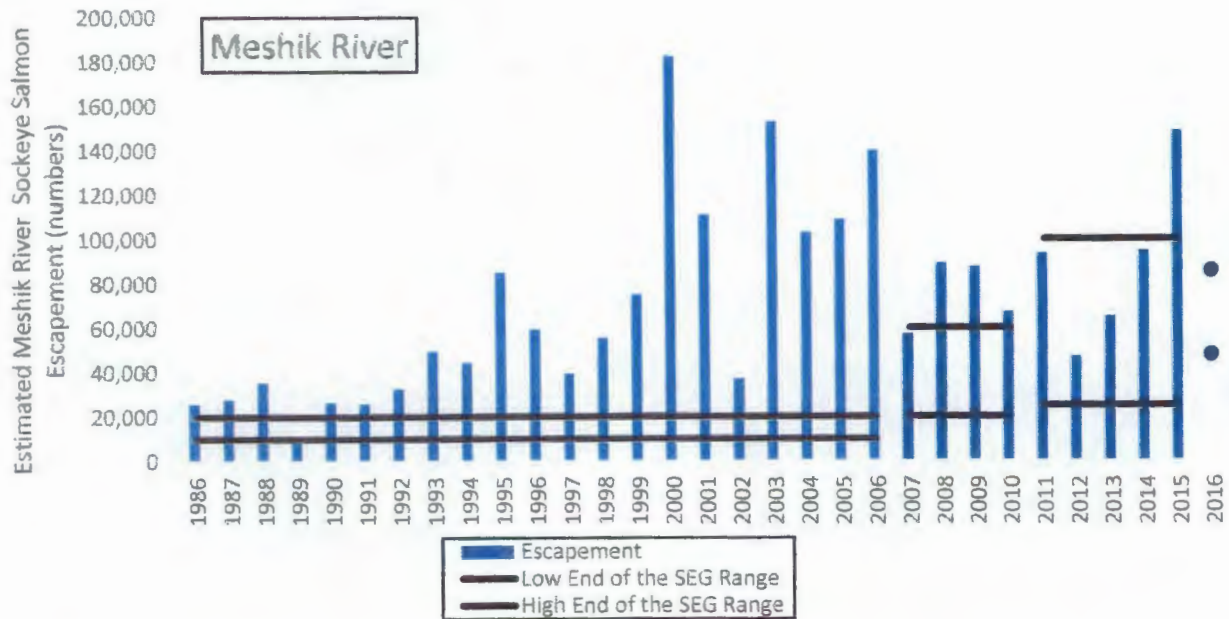


Figure 1. Estimated Meshik River sockeye salmon escapement and associated Sustainable Salmon Escapement (SEG) ranges, 1986-2015. The dots in 2016 represent the new ADF&G recommended SEG for this stock.

The WASSIP study used an expansion factor of 2.47 to expand aerial survey counts into actual numbers of fish. Note that the catch is in actual numbers of fish. In order to translate actual fish

into aerial survey counts, you multiply by 0.404 (1/2.47). In other words, every fish that is caught translates into less than a half of aerial survey fish. So, to truly determine the impact of the harvest on the escapement, you need to either translate the harvest into aerial survey counts or expand the escapement into actual number of fish. Either method will result in a decrease impact of the harvest on the escapement.

Based on observing the huge surplus of fish in the Meshik River and the belief by ADF&G that Bristol Bay salmon are far offshore and not available to North Peninsula fisheries, in February 2007, the BOF took a restrictive proposal, Proposal 210 (**RC 80**), and during BOF deliberations on that proposal (**RC 28**), either amended or brought in substitute language that was designed to open the Outer Port Heiden Section to commercial fishing by Area M fishers. There was no public notice regarding this drastic change to the status of the Outer Port Heiden Section. Note, all the Area M ACs were against Proposal 210 while all the out-of-Area M ACs were in favor of the original proposal. Also there was no public testimony either during the BOF meeting or during the committee meeting that addressed the status of the OPH Section. It was a complete surprise to both the public as well as some of the BOF members when the substitute language or the amendment was introduced by the BOF and subsequently discussed. Further still, the department led the BOF to believe that Bristol Bay salmon were far offshore and not available to be caught in the OPH Section. In the Department's comments within the BACKGROUND section regarding Proposal 210, the department stated that according to ***Past tagging, migration, and genetic studies indicate that Bristol Bay sockeye salmon are well offshore of North Peninsula fisheries (RC 80 p2)***. However, a research project by C.O. Swanton and R. Murphy (1992; **RC 142**) on the stock composition of the 1990 harvest between Harbor Point to Strongonof Point observed a higher contribution of Bristol Bay-origin salmon than WASSIP documented. This was not mentioned by the department in their staff comments. The stock composition of the harvest between Harbor Point to Cape Seniavin (Bear River Section) contained a Bristol Bay-origin contribution of 42%. From Cape Seniavin to Strogonof Point (Three Hills and Ilnek Sections), the contribution of Bristol Bay-origin salmon was 78%.

Two genetic studies, covering 4 years in 2 separate decades documented similar stock composition of the harvest (2007 and 2007 WASSIP) and the fish within the OPH section during the June and July fishery in 2014 and 2015 (Boatright et al. 2016). Bristol Bay-origin salmon dominated the OPH harvest in 2007 and 2008, contributing 73% and 82%, respectively. In 2014 and 2015, Bristol Bay-origin salmon dominated the combined samples in the Open Area of the OPH, contributing 92% in 2014 and 83% in 2015 to the combined sample. Meshik River-origin salmon contributed 6% in 2007 and 14% in 2008 to the OPH harvest, while Meshik River-origin salmon contributed 0% to the combined samples collected in the Open Area of the OPH Section in 2014 and 2015 (Figure 2).

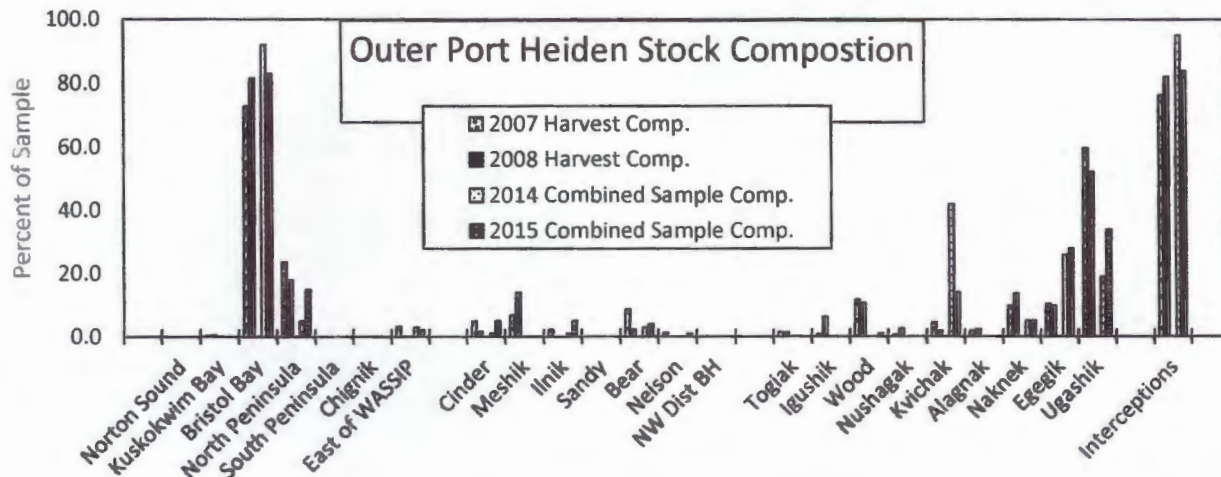


Figure 2. Comparison between stock composition of the Outer Port Heiden harvest (from WASSIP 2007 and 2008) and the combined samples taken from the Open Area of the Outer Port Heiden Section (Boatright et al. (2016) for 2014 and 2015.

The new Outer Port Heiden commercial fishery catches more fish that originate in Bristol Bay than any other Northern Peninsula commercial fishery (Figure 3). The Outer Port Heiden Section harvest now dominates the Northern Peninsula District harvest and now accounts for as much as 41.5% of the total Northern District Harvest (Figure 4). A new Outer Cinder River fishery will probably catch a higher proportion of Bristol Bay-origin salmon than is currently harvested in the OPH Section fishery. The Bristol Bay stock is fully allocated. We believe that allowing this fishery would violate the [5 AAC 39.220, Policy for the management of mixed stock salmon fisheries](#)

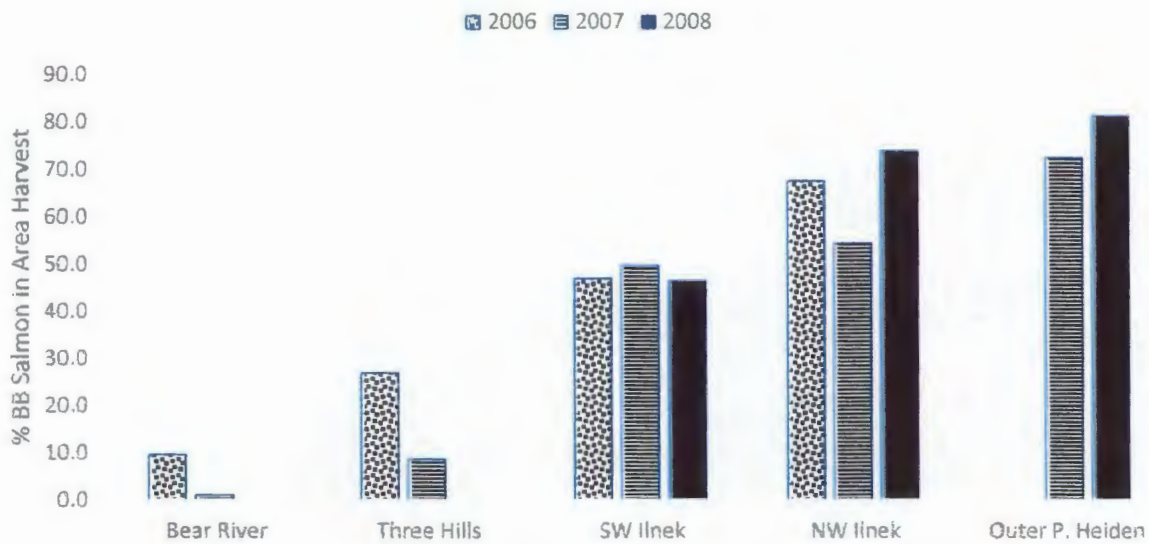


Figure 3. Proportion of Bristol Bay-origin sockeye salmon in the sockeye salmon fisheries from the most southwestern Section, Bear River Section, to the most Northeastern Section, Outer Port Heiden Section. Note the increasing trend from southwest to northeast. Outer Port Heiden fishery commenced in 2007.

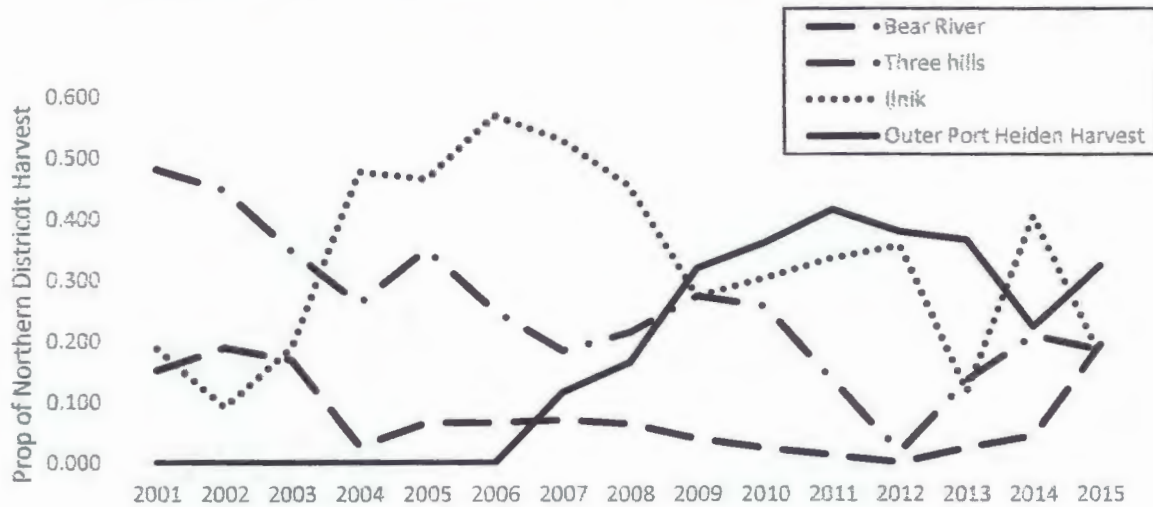


Figure 4. Comparative commercial sockeye salmon harvest from the Bear River, Three Hills, Ilnik, and Outer Port Heiden Sections of the Northern District, 2001-2015.