Salmon do get to the Mat-Su. Submitted by Catherine Cassidy

7.10-2

At 2:46 on Wed. 2/12 a member of the audience testified to the Board that "the vast majority of Northern district fish don't make it back to the Northern district." I have heard this type of statement many times during this meeting.

This is fundamentally untrue.

An ADF&G study by T.M. Willette, et al, used mark-recapture techniques to estimate total population sizes, escapements and exploitation rates for coho, pink and chum salmon returning to UCI in 2002. (Mark-Recapture Population Estimates of Coho, Pink, and Chum to Upper Cook Inlet, 2002, ADF&G Regional Information Report No.2A03-20)

Excerpts from the Abstract page ix - (emphases mine)

Regarding coho:

"Our best PIT tag estimate of the total population size of coho salmon returning to UCI was 2.52 million (95% CI: 2.16-2.87 million). Given a commercial harvest of 0.25 million, the total escapement of coho salmon into all UCI streams was 2.27 million (95% CI: 1.91-2.62 million), and the exploitation rate in the commercial fishery was about 10%." [With only part of the Kenai run counted.]

Regarding pinks:

"Therefore, we estimated a maximum exploitation rate on pink salmon in the commercial fishery by simply summing escapements that were actually enumerated in 3 streams. Given a commercial harvest of 0.45 million, the <u>maximum exploitation rate in the commercial fishery was about 12%</u>. However, the actual exploitation rate must have been much lower, because we did not include escapements into numerous other streams around UCI."

Regarding coho:

"Our PIT tag estimate of the total population size of chum salmon returning to UCI was 3.88 million (95% CI: 3.30-4.47 million). Given a commercial harvest of 0.24 million, the total escapement of chum salmon into all UCI streams was 3.64 million (95% CI: 3.06-4.23 million), and the exploitation rate in the commercial fishery was about 6%."

These exploitation rates have only been further reduced since then due to the significantly increased restrictions on the commercial fisheries.

In my opinion, this is an example of the kind of <u>altered</u> facts and reality I heard far too much of during this meeting regarding how much salmon reaches the northern inlet. Yes, it is difficult to count fish in the Mat-Su, but that does not excuse blatant mistruths or facts like coho returns are only counted in the most accessible and heavily fished streams or that the Little Susitna should have returned to its previous coho enhancement program long ago.

The following page has a graphic example of the data regarding coho from the T.M. Willette, et al, report (Mark-Recapture Population Estimates of Coho, Pink, and Chum to Upper Cook Inlet, 2002, ADF&G Regional Information Report No.2A03-20).

Figure 5

Upper Cook Inlet Coho Salmon

In 2015 the commercial harvest of coho was 123,000 fish. This indicates a total coho return to Cook Inlet of 1.2 million, leaving over one million coho for sport harvest, escapement and a large harvestable surplus.

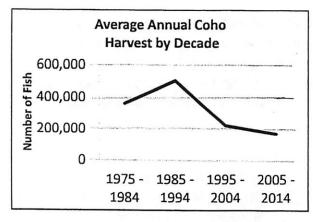
Commercial Harvest

10%

90% return

to rivers

Source: 2002 ADF&G mark & recapture study: Willette, et al, 2003, ADF&G . Regional Report No. 2A03-20.



Regulatory changes have significantly reduced recent harvests.

Source: ADF&G 2014 Annual Managment Report.

Year	Cohos Harvested	Ex-Vessel Value	Estimated First
			Wholesale Value
2014	137,200	\$777,431	\$1,555,000
2015	123,258	\$465,915	\$ 931,800

The unharvested surplus is costing the regional and state economies millions of dollars.