Warm Waters May Be Culprit In Higher Salmon Mortality

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Brianna Gibbs/KMXT

Back in July KMXT told you about the effects Kodiak’s unusually sunny summer may have on salmon. The weather has since turned to the wet downpour islanders are used to, but repercussions from the sunny stretches are still visible, most recently on Afognak Island.

Kodiak Regional Aquaculture Association crews conducted their annual egg take of sockeye salmon in Afognak Lake this week and noticed higher than normal mortality rates among the adult salmon. Tina Fairbanks is the production and operations manager for KRAA and said she wasn’t there during the take, but also isn’t concerned about the higher mortality.

“That’s not going to keep us from meeting our egg take goal. You know we had hoped to conduct only a single egg take this season, but to conduct two egg takes for a single stock is not uncommon. When we have larger production goals we collect more brood stock and plan to do additional egg takes. In this circumstance we had hoped to be able to do it in one, but we will be conducting a second egg take and have every anticipation we will meet our production goal.”

She said the increased deaths are definitely a result of greater amounts of sun this summer, which warms the water and can often create a breeding ground for disease.

“As with anything, you know Kodiak is an area that is used to having a lot of water. And so when we go for long, dry periods, water levels tend to drop fairly rapidly and as we’ve had recently, water tends to warm up. And when you’re looking at what effects those warmer water temperatures may have on fish, you’re going to see higher rates of infection with bacteria, more rapid spread of any disease, and that’s going to be true in the wild and in a hatchery setting.”

The king salmon KRAA collects at Monashka Creek are moved to an above ground hatchery setting, which Fairbanks says is an environment

that is easier to control and mortality is rather low. Sockeye at Afognak Lake, however, are kept in the lake until the egg take.

“And as we’ve discussed, with these warm water conditions, with the low water and lack of rain, it can be difficult to operate under those circumstances when you’re trying to collect salmon broodstock, sockeye salmon broodstock, that are moving up into tributaries of lakes in order to spawn. Sockeye do require a lake in order to ripen and then typically tend to spawn in the tributaries or along the edges of the shore of the lake.”

The fish are typically collected in the net pens until they are ready to be harvested, but Fairbanks said this year the crew has made adjustments to typical procedures. She said that includes placing the pens in cooler areas, allowing fewer fish in each pen or waiting to collect the broodstock, or parent fish, closer to the time of the egg take.

“You can’t control every aspect of a project, but you do your best to make adjustments that will be the best for your operations, the best for the fish that you hope to conduct an egg take on and the best for the area in which you operate.”

Fairbanks didn’t have the numbers for how many fish died, or how many were collected during the egg take. She said the return of the rain makes her even more optimistic that KRAA will reach its egg take goal this year.