

## **Kenai Kings Need More In-river Spawning Protection**

Dwight Kramer - Alaska Dispatch - Dec. 15, 2013

In recent years we have seen a troubling pattern of near record low returns of both early and late run Kenai River Chinook salmon. We believe the declines in statewide Chinook fisheries are largely due to marine survival issues, however, we also feel that part of our Kenai River decline can be linked to in-river harvest patterns, fishing on middle river mainstem spawning fish throughout July, insufficient spawning area protections, selective harvest of our larger age-class fish, and multiple years of over-harvest of the population due to biased high sonar counts.

History seems pretty clear that factors such as population growth, increased use, commercialization and development make it difficult for us to sustain indigenous wild Chinook salmon populations. Unless we alter our behavior we will join the long list of streams dependent on hatchery-produced fish. We will not be able to sustain the high-density fishery that has developed on the Kenai unless we consider a more conservationist approach of protecting production to secure future run strength sustainability.

In order to provide for recovery and certainty in future Kenai River King salmon production, Kenai Area Fisherman's Coalition, a private angler "Joe Fisherman" group, has forwarded proposal #219 to the Board of Fisheries (BOF) for consideration during their February Upper Cook Inlet (UCI) BOF meeting.

This proposal would allow the season to start normally so that everyone along the river has an opportunity to fish for Kings, but then as the season progresses two permanent spawning conservation areas would occur, in a timely fashion, as fish move upriver to the middle section. The lower river would remain open throughout the entire season for a vibrant sport fishery to continue.

The first, Spawning Conservation Area 1, would commence starting July 1 and would close the waters from the Moose River to Skilak Lk. for fishing for King salmon. This closure is designed mainly to protect Early Run (ER) Chinook stocks which have seen a much steeper decline than the Late Run (LR). Funny River weir data indicates about a 70% decline since 2006 and Slikok Creek weir data shows an 80% decline since 2004 with very few females returning. We believe the mainstem component of the ER may be in even more peril because they enter the fishery in May and June and are vulnerable to harvest longer than any other segment of the Kenai R. King salmon population. They are also the largest fish in the ER and have been targeted throughout the years by selective harvest.

ADF&G research indicates that the median spawning date for ER mainstem fish is around July 20. This means that they are the only segment of our Chinook return that isn't afforded protection during spawning. All of our tributary fish are protected once they reach the sanctuary areas of the tributary mouths and the LR Chinook don't spawn

until around the middle of August and the season closes July 31 so they are protected. We even have a spawning closure period for rainbow trout.

The, Spawning Conservation Area 2, would commence July 10, from the Sterling Hwy. Bridge in Soldotna upstream to Moose River. This closure would protect both ER and LR fish that spawn in that area. Almost all LR Kings are mainstem spawners and there is currently no spawning sanctuary area afforded to them. This closure would provide an area of certainty for LR spawning production.

We believe these types of pro-active conservation measures are both prudent and necessary as we face the future of a growing population with increased demands on our King salmon resources. This more conservative management approach reduces several current aspects of our fishery that continue to jeopardize our ability to protect the quality and sustainability of our King salmon stocks.

1) Selective harvest of our largest fish would be greatly reduced because of these protective spawning areas. Recent data suggests there may be a link between multiple generations of selective harvest practices causing a shift in the genetic character of the stocks, resulting in a general reduction in the size of fish because of a shift in the age / sex composition of returning adults. Additionally, smaller returning fish producing fewer eggs reduce the aggregate spawning contributions and future recruitment. Researchers also suggest that improvements would be slow to materialize and require multiple generations within a new selection regime.

2) Catch and release (C&R) mortality would also be reduced by establishment of these spawning conservation areas because fishing for Kings would no longer occur in these important spawning areas. C&R mortality occurs often in our fisheries because we sort through a lot of fish looking for the big “bragging rights” and trophy fish. It also occurs more often lately by regulation when our fisheries are limited to C&R restrictions. Research also indicates that there are several negative factors that can occur when fish are disturbed on their spawning beds and some released fish are stressed to the point that they may not spawning at all.

3) Sonar counting irregularities would not matter as much if we had established spawning protected areas. Sonar counting issues bring into question what our actual mainstem spawning component really is on an annual basis. Until we can have more confidence in sonar reliability it is paramount that we operate on a more conservative path. Our inability to accurately count our Kings by the use of sonar and test netting are well documented and bring into question our production models. We have changed our Kenai king escapement goals four times in the last decade alone.

Our organization believes this will be the most important Kenai River proposal before the BOF at their upcoming UCI meeting. It presents us with a real opportunity to change our management philosophy on the Kenai to a strategy that offers the best chance at recovering our King populations, bring back the larger age class fish and provide long-term sustainability for future generations to enjoy.

We don't know what the future holds for our King salmon populations in the marine environment so it becomes our responsibility to provide this resource with the best options we can for in-river survival and future propagation.