From: <u>Marilyn Dahlheim</u>
To: <u>Haight, Glenn E (DFG)</u>

Cc: Phillip Clapham; Robyn Angliss; jon.kurland@noaa.gov; Greg Balogh - NOAA Federal

Subject: Killer whale population assessment

Date: Tuesday, August 02, 2016 10:29:40 AM

Good morning Glenn.

As I mentioned on the phone to you last week, the ecotype involved with longline depredation is the resident killer whale ecotype. The location of the interactions that are occurring in SE Alaska (to the best of my knowledge) occurs in Lower Clarence Strait/Dixon Entrance areas. Based on 25 years of killer whale data from the inland waters of SE Alaska, our SE Alaska resident killer whales are not known to occupy these southern waters. Back in 2010, a northern resident whale (from British Columbia area) was satellite tagged and was known to be in the vicinity of longline operations. In speaking to our Canadian researchers, they mentioned that the northern resident killer whales have been in this area and most likely are involved with these interactions.

We checked the current population status of the northern resident community of whales. As of 2014, there are currently 16 pods of whales totaling 290 individuals (numbers obtained via photo-identification studies).

Killer whales do not migrate and can be better described as having a home range. Their movements are tied to movements in their prey (primarily salmon). I have documented northern residents in SE Alaska in both the spring and fall periods. It would be difficult at best to determine the best month to fish to avoid killer whales in the area. Seasonal killer whale movement data in this particular area is sparse.

There is another ecotype that may possibly be involved. It is called the offshore ecotype. I suspect it is the resident whales causing the problem but wanted you to know there are approximately 300 or so offshore killer whales that we've documented. We don't see this ecotype very often but they have been known to range from California to the Bering Sea. I have a publication on them if you need it.

I hope this helps and please let me know if you have any other questions. Best regards. Marilyn