John O'Connor:



## **TESTEMONY SUPPORTING PROPOSAL #41:**

The original regulations for the seaward boundary of the set gillnet gear for this area was established before GPS technology was available for the fleet to utilize. Visually identifiable land marks were necessary. The 18-foot tide mark and mean high water were used to measure the outer limit from. As we noticed the position of creeks where they intersect beaches changing do to erosion, we placed Latitudes and Longitudes at these to establish permanent positions at 1st and 3rd creeks. This gave fishermen and enforcement definite places to base their measurements from. The 18-foot tide mark and the mean high water marks position on the beach vary as the wind and tidal move the gravel. Depending on the strength of the storms these can very quiet significantly. This makes it vary difficult for both the fishermen and enforcement to have a consistent point to base the outer boundary measurement from.

Since the original outer limits were set, and the first site lease surveys were done there has been significant erosion along Ekuk beach, as much as 146 feet in many places. Since the first surveys of the set net sites the relative position of the -3-foot tide and the outer anchors have stayed relatively the same. The outer ends of the sites are not getting deeper but the bluff is moving away. The result in many places is the sites are getting shallower near the beach. If these sites have to continue to move shoreward as the bluff erodes, they will become less efficient as they lose fishing time on the tide. To keep the allocative balance, it is important to establish an outer boundary that represents the current water depth.

We propose to utilize GPS waypoint lines for the seaward boundary for the set net sites along Ekuk beach to solve these problems. I have surveyed the mean highwater line. Based on the NOAA tidal benchmark at Clarks Point that the 2012 Nushagak Bay tidal study is based on and



an NGS OPUS latitude and longitude position. I then plotted a 600' offset line from the coast guard rang marker south to 1st Creek and 800' from 1st to 3rd Creeks and 1100' from 3rd Creek to Etolin point. I then calculated some waypoints and put a draft map together and sent it to an enforcement officer from the Nushagak Bay area. We then discussed what might be a practical amount of GPS waypoints to enforce. With this information in mind, I calculated fewer GPS waypoints and plotted lines between them and showed this relative to the offset lines from the mean high water as surveyed in 2022. We thought it would be more practical not to do 90-degree jogs at 1st and 3rd Creeks. We tapered the transitions from the 600' to 800' and 800' to 1100'. We felt this would be more practical for the fishermen and enforcement.