

PROPOSAL 55

5 AAC 06.200. Fishing districts and sections.

Align Naknek Section southern boundary line with Naknek-Kvichak District southern boundary line, as follows:

Change the definition of the Naknek Section south-western waypoint (ADF&G “south marker” coordinates) as follows:

(1) Kvichak Section: all waters of the Naknek-Kvichak District north and west of a line from the shore, along the dock, and to the outer end of Libbyville Dock at 58° 46.76' N. lat., 157° 03.57' W. long., to 58° 38.50' N. lat., 157° 22.23' W. long., continuing on this line to the point of intersection of the line described in 5 AAC 06.200(b); [58° 38.50' N. LAT., 157° 22.23' W. LONG. TO THE OUTER END OF LIBBYVILLE DOCK AT 58° 46.76' N. LAT., 157° 03.57' W. LONG., THEN ALONG THE DOCK TO THE SHORE]

What is the issue you would like the board to address and why?

Modification of Naknek Section south-western boundary definition

Clarifies Naknek Section fishing boundary line.

There is an obvious point of confusion surrounding the southern boundary line of the Naknek Section, compared to the Naknek/Kvichak district southern boundary line. These lines differ from each other ranging from just a few feet, to close to 300 feet. The difference occurs because the “straight” line “drawn” from the N/K southern boundary is actually curved, a result of drawing geographic lines on our curved earth.

The real problem is the waypoint initially used for the south-western corner of the Naknek Section, which was originally established by locating the intersection of the Naknek sideline and the N/K southern boundary. This worked well initially, when it was drawn on a flat paper chart, since the N/K line was established from the old Loran-C signal and that “synched” up with the drawing. When GPS technology entered the picture, it gave a more accurate location of both the N/K line, and the placement of the Naknek Section SW ADF&G waypoint. A decent estimate of this difference is that the SE waypoint is approximately 250 feet north of the N/K line.

The situation as it currently exists:

The problem exists when the open fishing area switches from the entire N/K district to the Naknek Section only, at which time it is necessary for every fisherman AND fisheries enforcement to switch their plotters to match the proper district for the opening at hand (it is still necessary to switch when the openings switch the other way, but there is no consequence of a fishing violation). Since we’re all human, sometimes people forget to do this switch, and because of the difference between the two lines, the result become an undisputable fishing violation (if fishing with the N/K line on your plotter during a Naknek Section opening, you could be up to 250-feet over the line when your plotter says you’re legal, which is no excuse for fisheries enforcement); there are several tickets each year attributed to this error.

Situation if this proposal were enacted:

If this proposal were to become regulation, there would exist a 100% accurate definition of the Naknek Section and the entire N/K district, using the already-existing waypoints that are currently used for this purpose. There would be no confusion as to which lines to use, because it would always be the same line; neither fishermen nor enforcement would have to switch their plotters when the openings switch from N/K to Naknek Section, or visa-versa.

This is a simple geometry problem. A point with two defined lines going away from it holds the same definition as a point on a defined line which is intersected by another defined line. So instead of trying to pinpoint a waypoint upon the N/K southern boundary line (which has proven infeasible from the limitations of the GPS plotters), the SW “corner” of the Naknek Section can be determined by using the existing waypoints for the already-existing two lines used to determine the (1) N/K southern line, and (2) the Naknek Section sideline.

With this regulation in place, during Naknek Section openings ONLY, it would be necessary for fishery enforcement, and any fishermen seeking the accurate location of the Naknek Section southern boundary “corner” location, and the Naknek Section “sideline,” to either operate two plotters simultaneously to display the two intersecting lines (one for the southern boundary and another for the “sideline” boundary), or have a plotter that is capable of showing two independently programmed lines at once (some plotters can do this). The cost of a modest GPS that can show the distance from the line is about \$100.

The effective use of locating the “corner” (point of Naknek Section SW boundary intersection) with this method is to observe the cross-track error, or “off-course” distance, from the two-waypoint line programmed into a GPS plotter, which is either the N-K southern boundary, or the Naknek Section “sideline” boundary (the sideline incorporates the existing “corner” waypoint, which will no longer represent the corner, but rather constitutes the second point of an infinite line). The cross-track information will display the distance from its designated line in the form of nautical miles or fractions thereof, and then will switch to readings in feet at 600-foot or 1,000-foot from the designated line. The fishermen (or enforcement officer) will know they are on “on the corner” when both cross-track errors read zero feet; finding the “corner” isn’t important; what is important is to recognize the geographic distance from the line.

This is the exact same technology currently used by fishery enforcement when determining if a fisher is set over the line, so Enforcement will have no problem using the technology. Since Enforcement has two plotters already placed on their enforcement assets, there will be absolutely NO DIFFERENCE in determining whether fishers are in legal waters (they won’t even have to re-program the equipment).

The adoption of this regulation will relieve stress and confusion to a great degree when fishing the Naknek Section only openings.

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(HQ-F22-009)
