

PROPOSAL 302

5 AAC 31.214. Shrimp pot guideline harvest level for Registration Area E.

Modify the Prince William Sound shrimp pot fishery guideline harvest level, as follows

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~~[The estimated total allowable harvest for the waters described in 5 AAC 31.210(a) must be more than 110,000 pounds of spot shrimp by round weight before a commercial shrimp pot fishery may be opened.]~~ **The total allowable harvest for the waters described in 5 AAC 31.210(a) is set at 150,000 pounds of spot shrimp by round weight.** The guideline harvest level for the commercial pot gear fishery in the waters described in 5 AAC 31.210(a) is 40 percent of the total allowable harvest for the area. The department will, to the extent practicable, manage the fishery to allow no more than 50 percent of the guideline harvest level to be taken from any one statistical area. The commissioner will open and close fishing seasons by emergency order, during which pot limits, time, or area may be adjusted to achieve the 50 percent statistical area harvest target.

What is the issue you would like the board to address and why? Currently, the PWS total allowable harvest (TAH) is determined each year by a surplus production model. This is difficult to encapsulate in a proposal and I am sure it will be explained and discussed in detail during the Board meeting. The impetus of this proposal is that the model for the TAH is using only as variable inputs 1) Catch per unit effort (CPUE) from the department annual survey, 2) Total Harvest in the Recreational Fishery, and 3) Total harvest in the Commercial Fishery. While at first glance this seems reasonable, a closer investigation reveals that the two most impactful inputs to the model (Recreational and Commercial Harvest) are in fact determined by the model. Theoretically, the model estimates a surplus production, sets a TAH, the fishery is then actively managed to achieve that TAH, which then puts back into the model exactly what it puts out. This is reflected in the TAHs that we have had over the years being remarkably consistent. They seem to be mostly unaffected by changes in survey cpue and in fact almost all the fluctuations in TAH year to year correspond with harvest levels in the previous year sport fishery. This is because the non-commercial fishery is not able to be managed as precisely and consequently fluctuates a good bit. These fluctuations seem to be the primary influence in the TAH. This is problematic as the non-commercial harvest is not really an indice of abundance. It is an indice of angler days on the water which is heavily influenced by weather, fishing opportunities elsewhere in the state, and socio-economic factors. CPUE is consistent year to year for the most part and harvest is subsequently largely a function of effort.

I am not complaining about the model. I have intense investment in this fishery and want it to be managed to the best degree possible in order to preserve the fishery and the resource for years to come. It has been the best available science, and I have always supported it. Recently, fluctuations in the cpue of the department annual survey that have not been observed in the cpue or harvest of the sport and commercial fisheries, along with other existing factors like the one I mentioned in the previous paragraph, have led to discussions with multiple staff members where they have expressed dissatisfaction in the current method of assigning the TAH. It is my hope that by the time of the meeting we will have some sort of an idea as to a better way of assessing shrimp populations in PWS and can move forward with the best available science.

I am putting this proposal in largely as a "placeholder" in the hope that a new and better method for setting the TAH will be brought forward by the department by the time of the meeting. However, if the department no longer has confidence in the current model and a new method has

not been decided upon; the best course of action seems to be to set a fixed GHL the same way we do in most other small state waters fishery without accurate enumeration. This is very common and almost all small state waters fin fish fisheries have GHLS set in this fashion. Usually this has been done by assessing historical harvests. Fortunately in the PWS shrimp fishery historical harvests have been overall fairly consistent. We can see that setting a TAH of 150,000 pounds, which would then be allocated 60% to the sport fishery and %40 to the commercial fishery as it currently is, would be in line with historical harvests that have been sustainable for the 14 years since the fishery reopened.

In general, this fishery is currently in a state of flux and there is a lot of uncertainty surrounding many aspects of it. I have participated extensively in this fishery since its reopening in 2010 and have been heavily involved with the board of fish process regarding the current management plan. This proposal is part of a suite of proposals in which I attempt to anticipate potential issues that exist currently, may arise during the 2024 season or ongoing CFEC process regarding potential limited entry for this fishery, continued uncertainty from the department regarding the current survey and biometric surplus population model, and narratives coming into the 2025 regulatory meeting. I feel that there is significant likelihood of the need to review and adapt much of the current regulatory plan and am submitting proposals concerning several aspects of the plan in order to foster discussion, and serve as a starting point if the need for serious revision of the plan is thought necessary.

Did you develop your proposal in coordination with others, or with your local Fish and Game Advisory Committee? Explain. I have discussed the management of this shrimp fishery with multiple ACs, other participants in both the recreational and commercial fisheries, and ADFG staff many times and will continue to do so leading up to the 2025 meeting.

PROPOSED BY: Joseph Person

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