2019 TOGIAK HERRING OUTLOOK

The 2019 Togiak District herring biomass is forecast to be 217,548 tons, a 63% increase over the 2018 biomass forecast. This forecast is based on an age-structured analysis (ASA) model that has been used for all Togiak herring forecasts produced since 1993. Herring ages 4–6 are expected to comprise 50% of the projected biomass, ages 7–10 are expected to make up 32% and the remaining 18% are expected to be age 1+ fish.

The commercial fishery and spawn timing of Togiak herring are related to several factors including water temperatures at the spawning grounds in Togiak District and sea surface temperatures in the southeastern Bering Sea. The department uses a sea surface temperature model (SST) based on temperatures near Unalaska to predict the Togiak herring run timing. Additionally, the department tracks ice coverage of the Bering Sea throughout February and March to help inform predictions in run timing as we consider this a useful index for predicting the maturity of herring bound for the Togiak District to spawn. Based on our SST model, the 2019 fishery could commence as early as the third week of April; however, it is important to consider that sea surface temperatures are approximately 1°C warmer than historical averages for this time of year and about 0.3°C warmer than last year. The region of the Bering Sea that we use to predict run timing based on ice coverage is currently ice free. As these conditions are far from normal, it is necessary to note that we have reduced confidence in our ability to accurately forecast timing this year.

The Bristol Bay Herring Management Plan (5 AAC 27.865) sets a maximum exploitation rate of 20% for the Togiak District stock. However, based on three years of poor aerial surveys and one year of missing age composition data, the department has applied a conservative exploitation rate of 14% for 2019. The biomass forecast for 2019 is 217,548 tons. Applying the 14% exploitation rate to that biomass yields a quota of 30,457 tons of herring that will be available for harvest in 2019. Harvest allocation, in accordance with the management plan will be:
Participants are reminded that the Board of Fisheries met in December 2018 and changed the allocation plan for the Togiak sac roe herring fishery. The changes, reflected above, now allocate 80% of the Togiak sac roe quota to the purse seine fishery and 20% to the gillnet fishery. The allocation was 70% and 30% previously. Additionally, up to 50% of any unharvested gillnet quota may also be reallocated to the purse seine fishery in season. The department expects to make all quota available for harvest in 2019 according to these new regulations. With the spawn on kelp roll over also included, up to 24,837 tons of herring will potentially be available for harvest by the purse seine fleet in 2019.

### SAC ROE FISHERY

The management strategy for the Togiak herring fishery is designed to provide for maximum sustained yield. In 2019, sac roe fisheries will again be managed to maximize product quality through long openings which allow permit holders to make smaller sets and harvest the highest quality fish. Long openings also allow processors to have flexible control of harvest volume so that holding time between harvest and processing is optimal. Based on a preseason poll, processing capacity is expected to be approximately 2,375 tons per day. The preseason poll also indicates that four processors will participate in the Togiak sac roe herring fishery with a fleet size of three gillnet and 19 purse seine vessels. For the last decade, the department has opened the herring fishery as soon as the threshold biomass of 35,000 tons has been documented and will use this strategy again in 2019. This strategy allows individual companies to maximize their processing capacity and decide what quality fish is suitable for their individual market.

### Purse Seine

For at least the last decade, the seine fishery has operated as individual processor-controlled fleets. Indications are that this will be the case again in 2019, and therefore, fishing time and area will be liberal allowing for the harvest of market quality herring. This approach should result in fresher, higher quality roe, thereby maximizing product quality and value. The department will not be coordinating any test fishing efforts however, the department will work with processors that want to make test sets to monitor roe quality prior to the threshold biomass being documented. Based on a preseason poll, there are 19 purse seine vessels expected to participate in the 2019 Togiak sac roe herring fishery.
**Gillnet**

Management of the gillnet fishery will be similar to past years. Ample fishing time and area will be allowed in an effort to take as much gillnet herring as possible. In 2019, the department will primarily focus the gillnet fleet in the area east of Right Hand Point. The department will consider opening areas west of Right Hand Point to the gillnet fleet if weather conditions are unfavorable in the eastern section. As in past years, the plan is to open the gillnet area to fishing when threshold biomass is documented. Processors and fishermen may organize test fishing to monitor product quality once the area is open to determine when to begin fishing for production. Until it is determined that commercial quality fish are present, participants should test cautiously with a small portion of gear to reduce waste. Based on a preseason poll, there are three gillnet vessels expected to participate in the 2019 Togiak sac roe herring fishery.

**ADFG OPERATIONS 2019**

Beginning in mid-April, current fishery information will be available by calling the telephone recorder in Dillingham at (907) 842-5226. Recordings will be updated regularly throughout the season as information becomes available. The department will conduct aerial surveys of the Togiak District beginning in mid-April, depending on weather conditions. The department will monitor marine VHF channel 7 from Dillingham and be available at the phone number listed at the top of this document. Fishing announcements and regular fishery updates will be communicated directly to each processor, published on the web, and distributed by fax and email. The harvest will be sampled from Naknek shore plants. The department will seek to coordinate directly with plant managers as the season progresses to meet our sampling needs.

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