Overview of Escapement Goal Policy and Processes

A Presentation to the Alaska Board of Fisheries October 20, 2021

William Templin and Andrew Munro
Division of Commercial Fisheries
and
James Hasbrouck
Division of Sport Fish





Providing for Sustained Yield

Constitution:

Article VIII, Sec(4). Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the State shall be utilized, developed, and maintained on the sustained yield principle, subject to preferences among beneficial uses.

Statute:

AS 16.05.020(2). The commissioner (of the Department of Fish and Game) shall manage, protect, maintain, improve and extend the fish, game and aquatic plant resources of the state in the interest of the economy and general well-being of the state.

Providing for Sustained Yield

Policies and regulations

- Policy for management of mixed stock fisheries, 5 AAC 39.220
- Policy for the management of sustainable salmon fisheries, [SSFP] 5 AAC 39.222
- Policy for statewide salmon escapement goals, [EGP] 5 AAC 39.223
- Salmon Management Plans

Escapement Goal Policy

(b) Department responsibilities:

- (1) Document salmon escapement goals
- (2-5) Establish BEG's, SEG's and SET's for salmon stocks or population aggregates
- (6) Review goals on the Board of Fisheries cycle
- (7) Prepare scientific analyses for goals
- (8) Notify public when goals are established or modified
- (9) Report allocative impacts of goals to the Board of Fisheries

Escapement Goal Policy

(c) The Board of Fisheries responsibilities:

- (1) Take regulatory action to address allocative issues
- (2) Review goals and consider establishing Optimal Escapement Goals or in-river run goals

Sustainable Salmon Fisheries Policy

(c) (2) Fisheries managed for escapement necessary to conserve and sustain salmon production

- (A) Escapement monitoring appropriate to scale, intensity and importance of stock
- (B) Goals established in a manner consistent with sustained yield; to the extent possible, fisheries managed for maximum sustained yield
- (C) Goal ranges to consider uncertainty and environmental variability
- (D) Escapement managed to maintain genetic and phenotypic characteristics
- (F) Escapement and management decisions should protect non-target stocks
- (G) Ecosystem function considered in escapement goal setting

Definition of Terms

- Stock, escapement, run, return, yield
- Sustained yield, maximum sustained yield, and optimum sustained yield
- > Stock of concern

Types of Escapement Goals

- Biological Escapement Goal (BEG)
- Sustainable Escapement Goal (SEG)
- Optimal Escapement Goal (OEG)
- Sustained Escapement Threshold (SET)

Biological Escapement Goal (BEG)

- Determined by the Department
- Escapement with greatest potential for maximum sustained yield (MSY)
- Based on best available biological information
- Scientifically defensible
- Always a range
- Department will maintain evenly distributed escapements within the bounds

Sustainable Escapement Goal (SEG)

- Determined by the Department
- Escapement known to provide for sustained yields over a five to ten-year period
- Used where a BEG cannot be estimated
- Based on best available biological information
- Scientifically defensible
- Can be a range or a bound
- Department will maintain escapements within the bounds of a range or above a lower bound

Optimal Escapement Goal (OEG)

- Set in regulation by the Board of Fisheries
- Considers biological and allocative factors
- > Can differ from BEG or SEG, but must be sustainable
- May be expressed as a range
- Department will maintain evenly distributed escapements within the bounds of the range

Sustained Escapement Threshold (SET)

- Established as needed by the Department in consultation with the Board of Fisheries
- Escapement level, below which sustainability is jeopardized
- Lower than the lower bound of BEG or SEG
- Can be based on lower levels of escapement that consistently sustain themselves

ADF&G Escapement Goal Development Process

Regional Escapement Goal Review Team

- Create work assignments
- •Review regional/area escapement goals
- Draft stock escapement goal analyses
- Draft escapement goal report



ADF&G staff and public review



Approval of escapement goal recommendations by Regional Supervisor



Presentation of recommendations
to Board of Fisheries
Board may adopt OEG's or in-river run
goals based on biological or allocative factors



Formal adoption by Division Directors

Questions?

