

Summary

Meeting dates: March 24, 2016

Agenda item: Grays Harbor Salmon Management

Presenter(s): Ron Warren, Assistant Director, Fish Program
Jim Scott, Special Assistant, Director's Office
Steve Thiesfeld, Region 6 Fish Program Manager

Background summary:

- 1) The purpose of the Grays Harbor Basin Salmon Management policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, and provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin.
- 2) The policy includes a risk control provision that presumptively limits the impacts of WDFW-managed fisheries to 5% if a spawner goal has not been achieved for 3 of the last 5 years.
- 3) The forecasted return of 19,503 Chinook salmon to the Chehalis River in 2016 is more than twice the spawner goal. Despite this large predicted return, the risk control provision, if applied without any flexibility, would limit fishery impacts for WDFW-managed fisheries to 5%.
- 4) The Department evaluated potential adaptive management actions that would relax the 5% risk control provision but still result in a high likelihood of achieving the spawner goal.
- 5) Preliminary analysis indicates that an 85% probability of achieving the spawner goal could be maintained with a 8% nontreaty harvest rate, and a 77% probability of achieving the spawner goal could be maintained with a 12% nontreaty harvest rate.
- 6) A key assumption of the analysis is that the Quinault tribal fishery will be managed to achieve 50% of the harvestable number of Chinook salmon as determined by the preseason forecast of abundance.

Additional information is provided in the attached briefing paper.

Policy issue(s) you are bringing to the Commission for consideration:

During the North of Falcon preseason planning process, the Department proposes to explore adaptively managing the state-managed Grays Harbor fishery to provide a high likelihood of achieving the Chehalis Chinook salmon spawner goal and providing a limited recreational Chinook fishery with a target harvest rate of 8%-10%.

Public involvement process used and what you learned:

N/A

Action requested:

Public input and Fish and Wildlife Commission discussion of proposed adaptive management actions.

Draft motion language:

N/A

Justification for Commission action:

N/A

Communications Plan:

Adaptive management proposal will be discussed with stakeholders during the North of Falcon pre-season fishery planning process.

Adaptive Management of Grays Harbor Basin Chinook Salmon

Draft March 22, 2016

Synopsis

- 1) The purpose of the Grays Harbor Basin Salmon Management policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, and provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin.
- 2) The policy includes a risk control provision that presumptively limits the impacts of WDFW-managed fisheries to 5% if a spawner goal has not been achieved for 3 of the last 5 years.
- 3) The forecasted return of 19,503 Chinook salmon to the Chehalis River in 2016 is more than twice the spawner goal. Despite this large predicted return, the risk control provision, if applied without any flexibility, would limit fishery impacts for WDFW-managed fisheries to 5%.
- 4) The Department evaluated potential adaptive management actions that would relax the 5% risk control provision but still result in a high likelihood of achieving the spawner goal.
- 5) Preliminary analysis indicates that an 85% probability of achieving the spawner goal could be maintained with a 8% nontreaty harvest rate, and a 77% probability of achieving the spawner goal could be maintained with a 12% nontreaty harvest rate.
- 6) A key assumption of the analysis is that the Quinault tribal fishery will be managed to achieve 50% of the harvestable number of Chinook salmon as determined by the preseason forecast of abundance.
- 7) During the North of Falcon preseason planning process, the Department proposes to explore adaptively managing the state-managed Grays Harbor fishery to provide a high likelihood of achieving the Chehalis Chinook salmon spawner goal and providing a limited recreational Chinook fishery with a target harvest rate of 8%-10%.

Summary of Grays Harbor Policy

The purpose of the Grays Harbor Basin Salmon Management policy is to advance the conservation and restoration of wild salmon. Where consistent with this conservation objective, the policy also seeks to maintain or enhance the economic well-being and stability of the fishing industry in the state, and provide the public with outdoor recreational experiences and a fair distribution of fishing opportunities throughout the Grays Harbor Basin.

To promote the achievement of these objectives, the policy provides a general policy statement, guiding principles, and fishery and species-specific guidance. The policy also recognizes that adaptive management “will be essential to achieve the purpose of this policy”. The policy states that “Department staff may implement actions to manage adaptively to achieve the objectives of this policy and will coordinate with the Commission, as need, in order to implement corrective action”.

Priority of Achieving Spawner Goals

During the development of the policy, Commissioners and stakeholders frequently stated the importance of achieving the spawner goal for Chehalis River Chinook salmon. The policy includes a number of provisions intended to promote this outcome, including improved fishery management and technical tools, enhanced monitoring and enforcement, and an increased emphasis on in-season management. In addition, to increase the

certainty of meeting spawner goals, the Policy also includes a provision to limit the impacts of WDFW-managed fisheries to 5% if the spawner goal has not been achieved for 3 of the last 5 years.

This risk control provision is a strong, but relatively blunt tool, for increasing the certainty of achieving spawner goals. The spawner goal for Chehalis Chinook salmon has been achieved in 1 of the 2 years since passage of the policy, and in 1 of the last 5 years.

2016 Adaptive Management

The forecasted return of 19,503 Chinook salmon to the Chehalis River in 2016 is more than twice the spawner goal. Despite this large predicted return, fishery impacts for WDFW-managed fisheries would presumptively be limited to 5% by the risk control provision absent adaptive management action.

The Department evaluated potential adaptive management actions that would relax the 5% risk control provision but still result in a high likelihood of achieving the spawner goal. An important source of management imprecision is the preseason forecast of Chinook salmon to Grays Harbor. Since 1990, the actual run has ranged from 62% to 212% of the preseason forecast. The distribution of these forecast errors was used to evaluate the likelihood of meeting the Chehalis Chinook spawner goal under various management options.

Preliminary analysis indicated that the 5% risk control provision can be loosened slightly and still provide a high likelihood that the spawner goal would be achieved for Chehalis Chinook salmon. The analysis indicates that an 85% probability of achieving the spawner goal could be maintained with a 8% nontreaty harvest rate, and a 77% probability could be maintained with a 12% nontreaty harvest rate.

Key assumptions of the analysis are:

- 1) The Quinault tribal fishery will be managed to achieve 50% of the harvestable number of Chinook salmon as determined by the preseason forecast of abundance.
- 2) The harvest rate in the nontreaty fishery will not exceed the specified level.
- 3) The performance of preseason forecasts is consistent with the pattern observed from 1990 through 2015.

During the North of Falcon preseason planning process, the Department proposes to explore adaptively managing the state-managed Grays Harbor fishery to provide a high likelihood of achieving the spawner goal and providing a limited recreational Chinook fishery with a target harvest rate of 8%-10%.