AGENDA D-3(e)
APRIL 2010

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
6 HOURS
ALL D-3 ITEMS

DATE: April 1, 2010

SUBJECT: Misc groundfish issues – BS Chinook salmon excluder EFP

ACTION REQUIRED

(b) Receive report of EFP testing of Chinook salmon excluder

BACKGROUND

This report will present the findings from the most recent fieldwork on EFP 08-02, which was dedicated to testing "flapper-style" salmon excluder devices. On behalf of the North Pacific Fisheries Research Foundation, the permit holder John Gauvin, with assistance from Dr. Craig Rose of NMFS' RACE Division and John Gruver of United Catcher Boats Association, tested a flapper excluder design last February which sought to address shortcomings in earlier flapper excluder designs (i.e., inconsistent escape rates and extreme weighting needed to ensure the panel remains open at normal towing speeds). As such, the current excluder was placed aft of other flapper excluders, where slower water flow was expected to help achieve the performance objective of having the panel remains approximately 50% down (open) while towing, and hence allow salmon escapement while towing. Additionally, the new design included a floated hood to create additional room for salmon to move out of the flow of pollock through the net, thereby facilitating their access to the escapement hole.

Results from the EFP trials this winter demonstrated that shape and performance parameters from the design work were achieved in the field on both EFP vessels. Chinook escapement rates in the primary experiments ranged from 25% to 34%, pollock escapement rates ranging from 0.4% to 1.6%, and no significant negative effects were apparent in terms of bulging of the net, loss of door spread, or gilling and clogging issues. Salmon escapement rates were relatively consistent between tows and confidence intervals around mean escapement rates are relatively tight, with even the low end of the range of values high enough to likely justify the costs of installing and using/maintaining the excluder. Second stage tests on each vessel showed improvement in Chinook escapement rates through adjustments that the researchers thought would improve escapement given the test results and video and sonar data from the primary tests. Unfortunately, catch allowances available for the EFP did not allow achievement of minimum sample sizes for the second stage tests, and therefore confidence intervals on secondary test results are not as tight as for the primary results.

The EFP investigator, John Gauvin will be on hand to discuss these results.