

FRSSI 2010

Technical Updates & 2010 Escapement Memo

First Nations Forum – FRSSI Workshop
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March 17, 2010

Presentation Overview

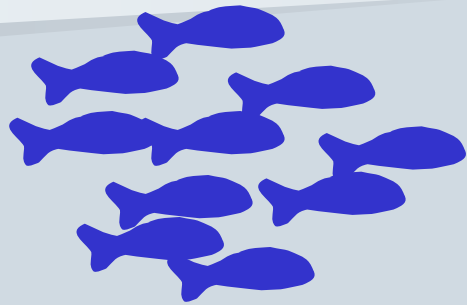
- 2010 Updates - Overview
- FRSSI flow diagram
- Applying TAMs
 - how TAM rules are implemented
- 2010 FR SK Forecast
- 2010 Escapement Memo

2010 Updates

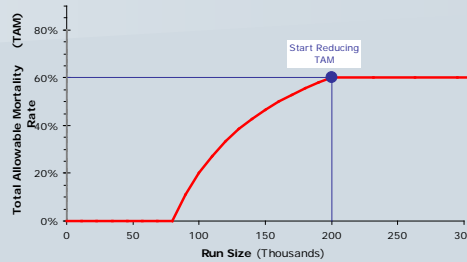
Explore the impacts of:

- implementing an ER floor for all management groups
 - from 2% to 30%
- different productivity assumptions
 - what if productivity is reduced to half, or one quarter or one tenth of long term average (and stays that way for 50 years)?
- combination of the above
 - what if productivity is reduced AND we implemented a TAM floor of X%?

FRSSI Flow Diagram

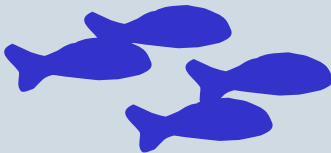


run returning



TAM Curve + MA

4-5 yrs



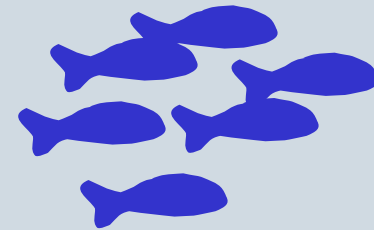
spawners

Repeat for 48 years

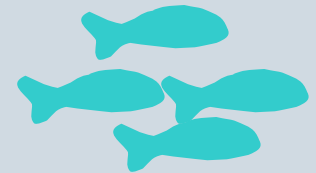
DBE



"en-route mortalities"



escapement by Mission

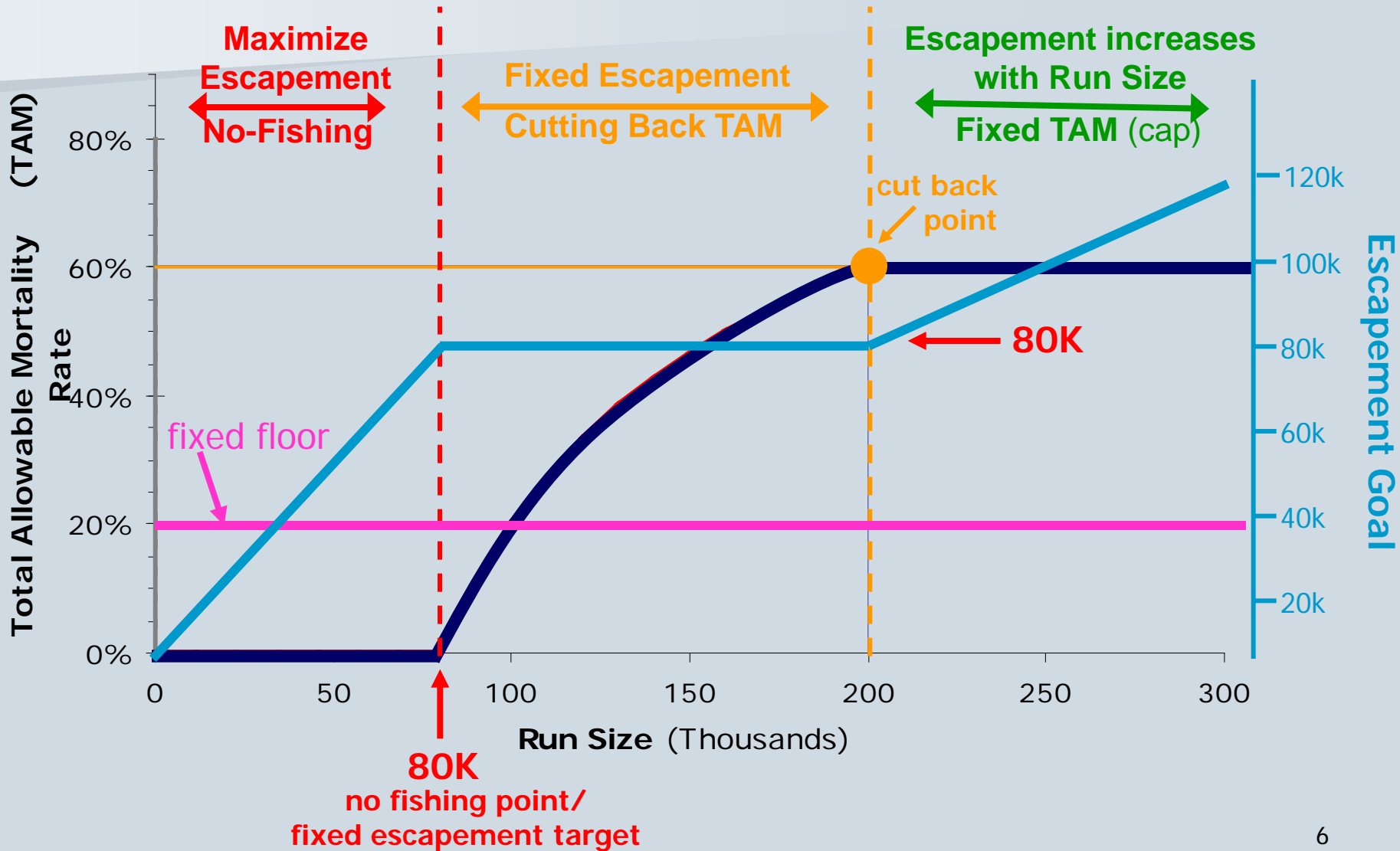


catch

Application of TAM Rules

A Review

From TAMs to Escapement



Steps to Determine Escapement Goal & Allowable ER

1. take the **run size**
2. apply **TAM rule** to get:
 - **escapement goal**
 - “allowable mortality”
3. take the “**allowable mortality**” and subtract the **MA** to get:
 - exploitation rate after MA
4. Compare “**ER after MA**” to the “**fixed ER floor**”
 - whichever is *larger* becomes the:
 - **allowable exploitation rate**

Run Size = 100K

Esc. Goal = 1-TAM = 40K fish

pMA = 30% = esc.goal*30% = 12K fish

TAM = 60% = 60K fish

ER = run size - (esc. goal + MA) = 48K fish = 48%

2010 Forecast

- updated methodology
 - take into account recent declines in productivity (i.e., recruits per EFF)
 - document will be available on PSARC website
- “flipped” p-levels
 - “old” 75p = “new” p25
 - lower p-level → lower forecast
 - lower p-level → lower probability of run returning less than forecast

2010 FR SK Forecast

Run timing group	Probability that Return will be at/or Below Specified Run Size ^a				
	10%	25%	50%	75%	90%
Early Stuart	17,000	26,000	41,000	66,000	101,000
Early Summer	174,000	374,000	783,000	1,601,000	3,047,000
Summer	1,045,000	1,605,000	2,612,000	4,343,000	6,984,000
Late	3,331,000	5,023,000	8,003,000	12,305,000	19,695,000
TOTAL	4,567,000	7,028,000	11,439,000	18,315,000	29,827,000

2010 Escapement Memo

Details

2010 Escapement Memo

- 2010 draft Escapement Options at different forecast levels – p23
- Performance of Escapement Options – p17
 - BK & Cultus – stocks that fall “outside” of FRSSI
- Alternative Productivity Scenarios – p27
- Combined Productivity + ER floor effects – p29

Feedback on 2010 Escapement Options Requested

- which escapement option for each management aggregate (or if a new option is preferred)
- which ER floor for each management aggregate