Fraser River Sockeye Spawning Initiative (FRSSI)

2015/16 summary & next steps

presented to: FN Forum
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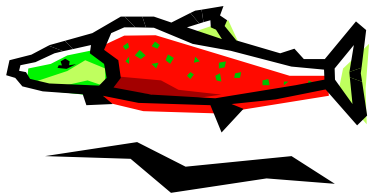
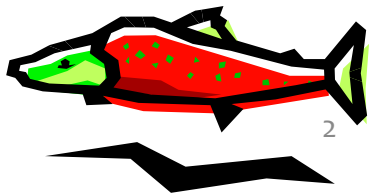


What is "FRSSI"?

- There are 2 parts to what we commonly refer to as "FRSSI":
  - the Model, which explores a wide range of assumptions and escapement options (TAM rules) and provides expected range of outcomes for each assumption/TAM rule
  - the Process, which evaluates the range of outcomes provided by the Model & provides guidance and feedback to the technical team

- There is also:
  - the annual escapement plan
    - which used to fall under the "annual FRSSI process" (which we no longer do)
    - Takes into account information specific to current year (e.g. run size forecast, recent & cycle line escapements)
    - is now determined by IFMP process

…all of these continue to evolve with feedback.



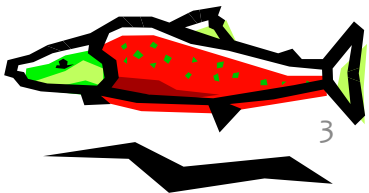
Spawning Initiative Review

The Challenge

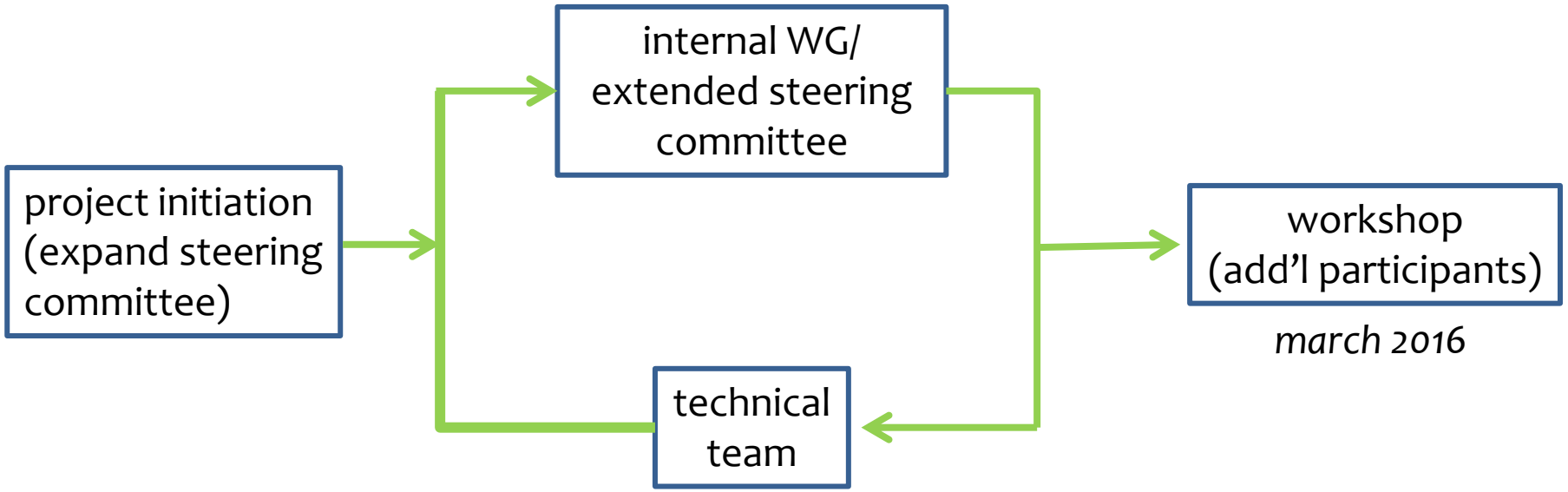
- Find a Balance between Catch and Escapement at different abundances

Goals

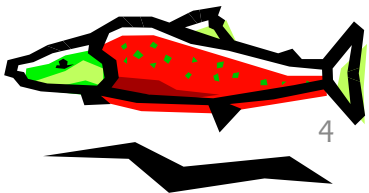
- Participatory process to evaluate long term Fraser River sockeye escapement plans
- Long-term strategy based on clear objectives and assumptions
- Improve consultation by focusing on proactive discussion of escapement targets under different scenarios
- Develop implementation guidelines (in-season adjustment mechanisms)



2015/16 FRSSI Process

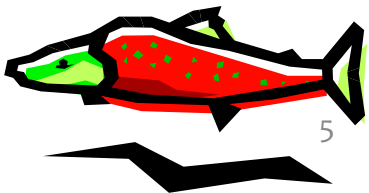


note: the technical work currently underway won't be done in time to be incorporated into the 2016 Fraser Sockeye escapement plan/IFMP process.



2015/16 FRSSI Extended Steering Committee Timeline

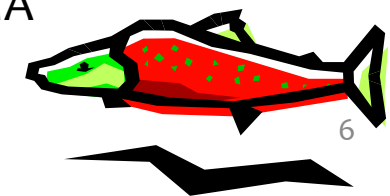
- april 2015 – identified four priority short term (1 yr) technical items
- june 2015 – approved technical team workplan
- december 2015 & february 2016 – technical team check-in
- workshop March 2016



What are the priorities? (pt 1)

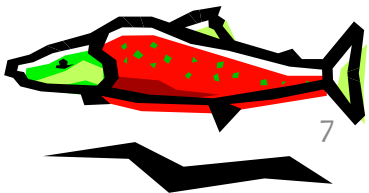
Last time we spoke about FRSSI, the model did NOT…

- Spatial Component
  - FRSSI outputs total allowable mortality, does not model *where* the mortalities take place (e.g. marine vs in-river / mixed stock fisheries vs terminal)
  - FRSSI will not develop an annual fishing plan (i.e. it does not tell you what will happen next year or the year after or…)
    - currently, annual fishing plans are done using the Pacific Salmon Commission pre-season model and IFMP development
  - work to develop a model which will include a geographic component is being conducted at SFU
- Allocations
- make annual adjustments to escapement strategy based on forecast
  - e.g. will not model this year, Option 1; next year, Option 3…
- assume there is any implementation error in applying TAMs
  - i.e., assumes that if there is 2.325M fish to catch, 2.325M fish will be caught
  - note that there IS implementation error in applying DBE/MA



What are the priorities? (pt 2)

- Spatial component & improve modelling of overlap constraints
  - tech items: develop spatial proxy (as opposed to spatial model); include allocations; alternate method of determining “foregone catch”; evaluate options for additional terminal harvest
- Biological modelling/analysis & alternate stock-specific harvest strategies
  - tech items: test interactions between biological models (e.g. Ricker/Larkin/stock specific) and alternate harvest strategies (e.g. cycle-specific, adaptive, etc.)



next steps/timelines

- FRSSI
  - extended steering committee mtg (feb 2016)
  - all participants workshop (march 2016)
- 2016 annual escapement plan
  - see IFMP schedule!