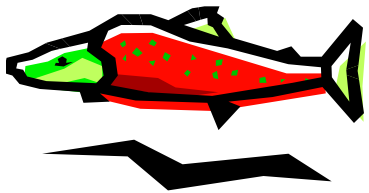
COMMUNICATING RESULTS TO THE DECISION MAKERS

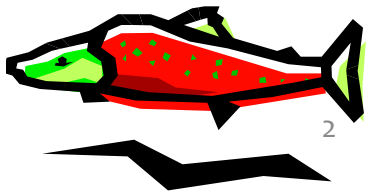
Lessons learned: the good, the bad and the intractable

Ann-Marie Huang
Fisheries & Oceans Canada



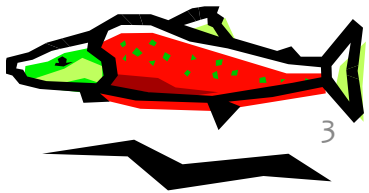
- what worked
- what didn't work
- new things we're trying
- intractable problem

WHY BOTHER? WHY ME?

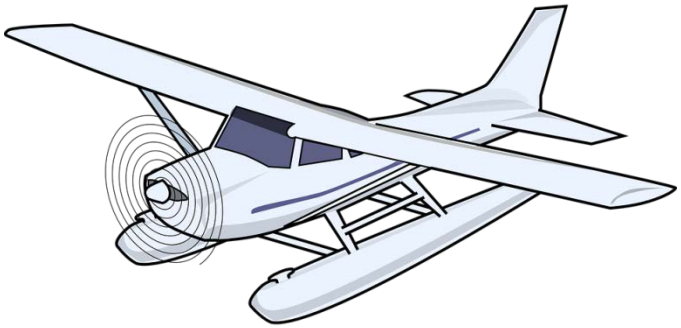


- analogies
- having a plan B re: feedback/workplan/priorities
- send .pdfs not .xls

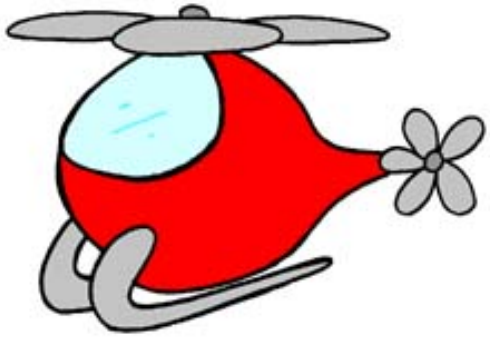
WHAT WORKED



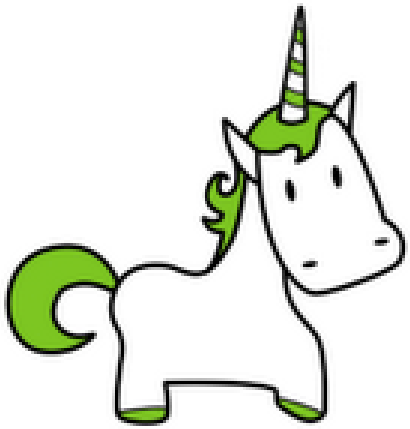
Project Purpose:



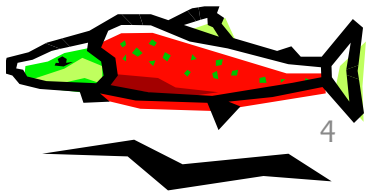
no engine = safe fail



no engine = spectacular fail



fail safe
(i.e. doesn't exist)
(… sorry…)



- analogies
- having a plan B re: feedback/workplan/priorities
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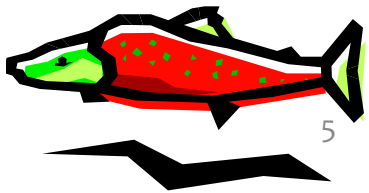
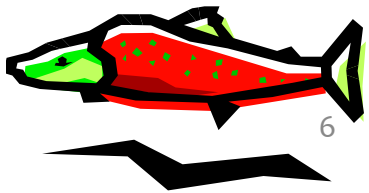
WHAT WORKED



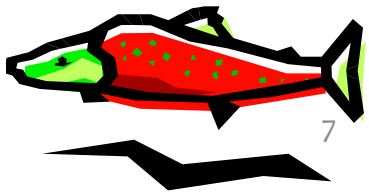
- doing the “what” without addressing the “why”
- providing too much context
- expecting people to prepare ahead of time
- not repeating new concepts

WHAT DIDN’T WORK

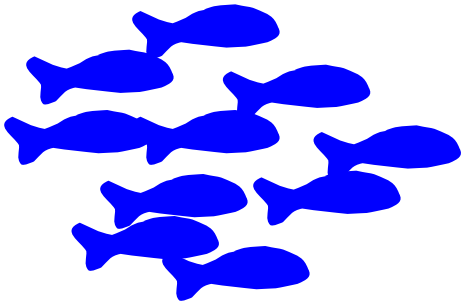


fewer words, marbles & Dr. Suess

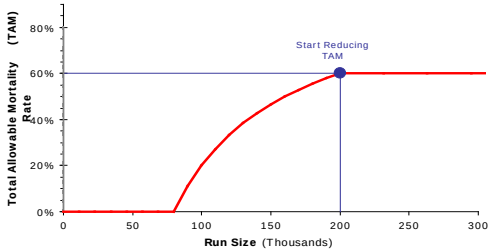
TRYING NEW THINGS



Old Way: Model Flow Diagram

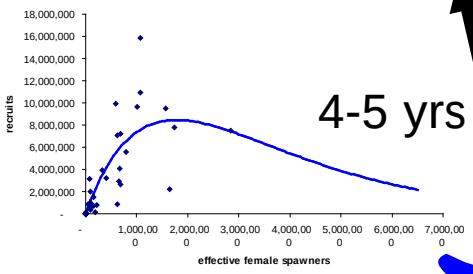


run returning

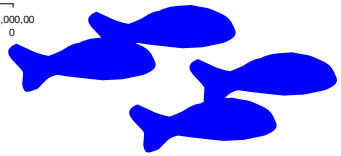


TAM Curve + MA

Repeat for 48 years

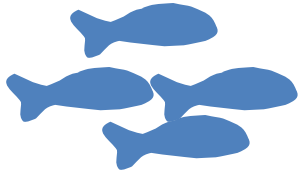


4-5 yrs

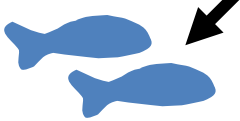


spawners

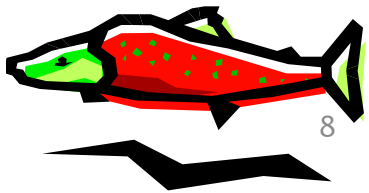
DBE



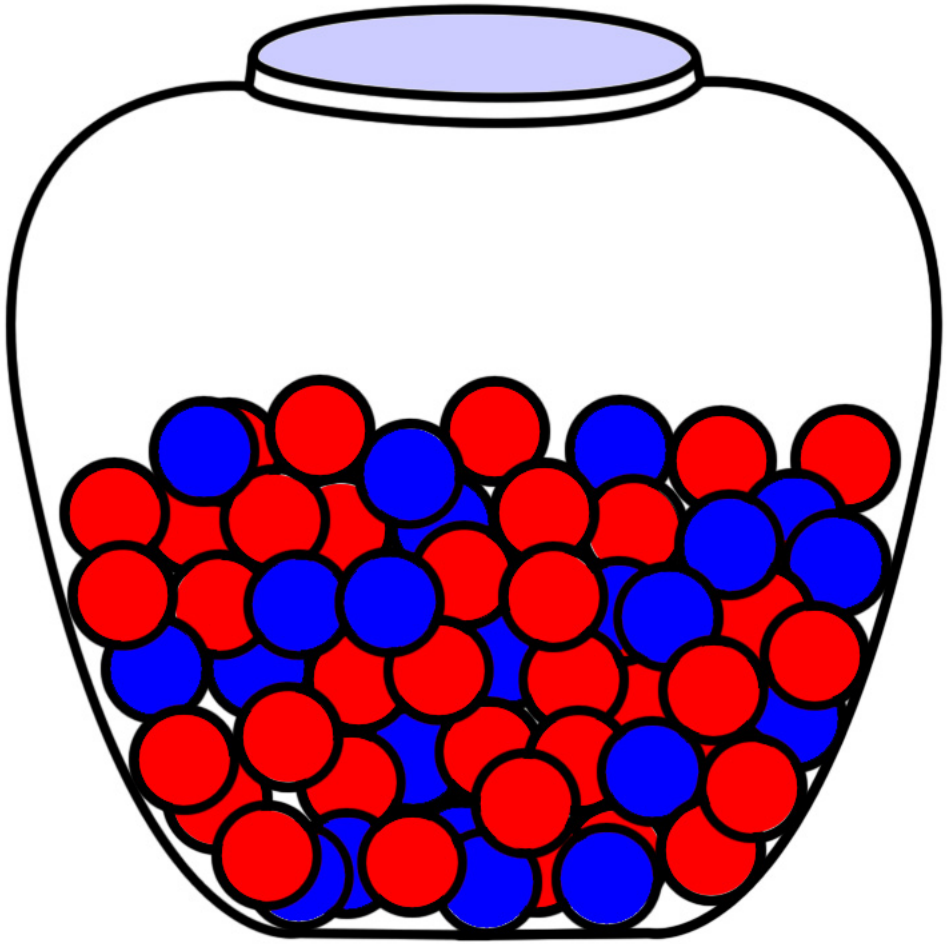
catch

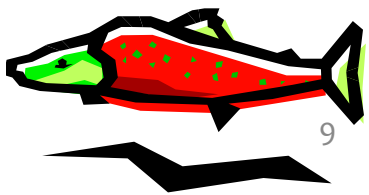


"en-route mortalities"



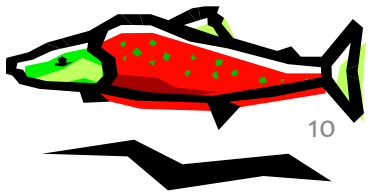
new way: marbles!



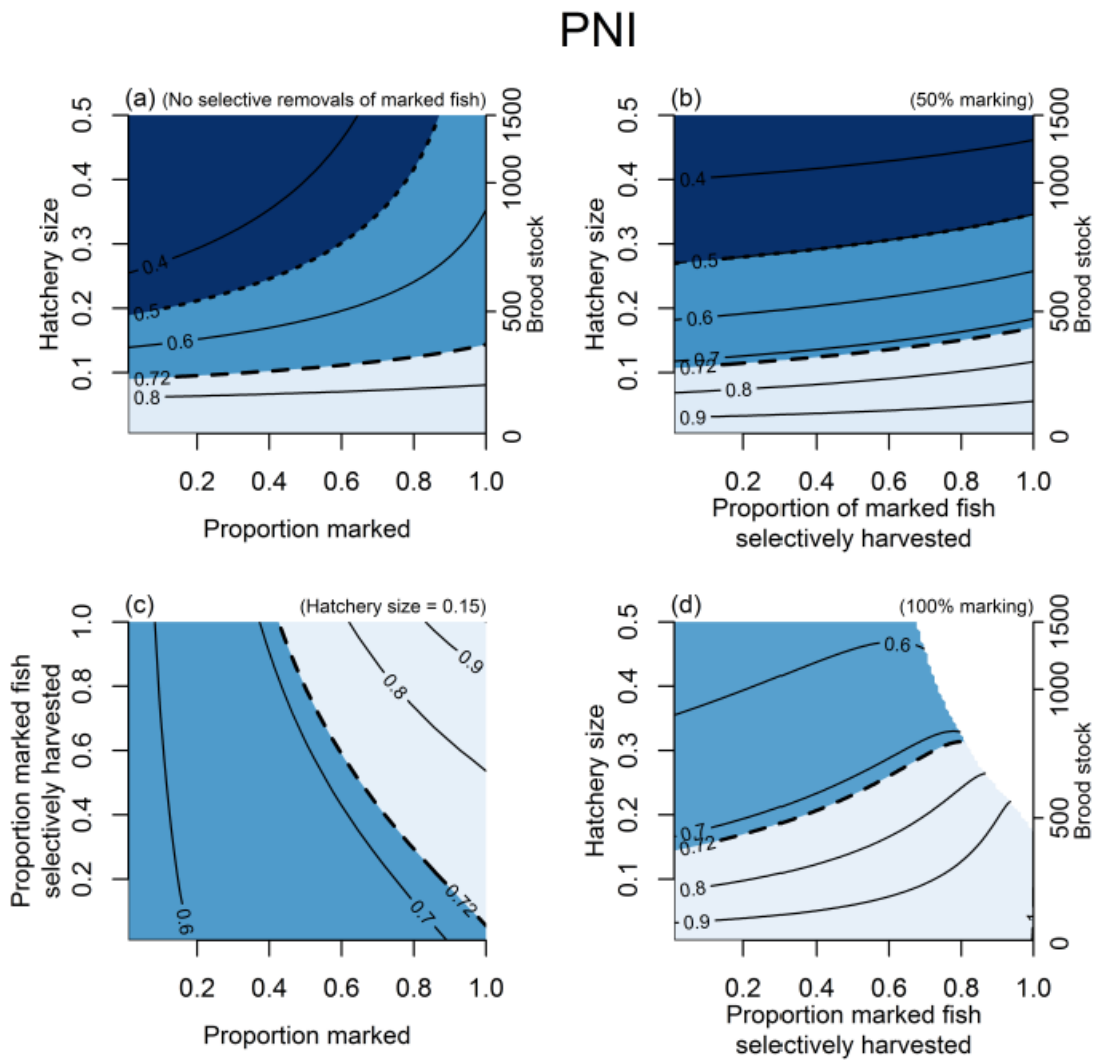


Old way: “what do you think?”

- as part of the end of meeting wrap-up
  - what plots preferred?
  - any plots you’re not enamoured with?
  - etc.

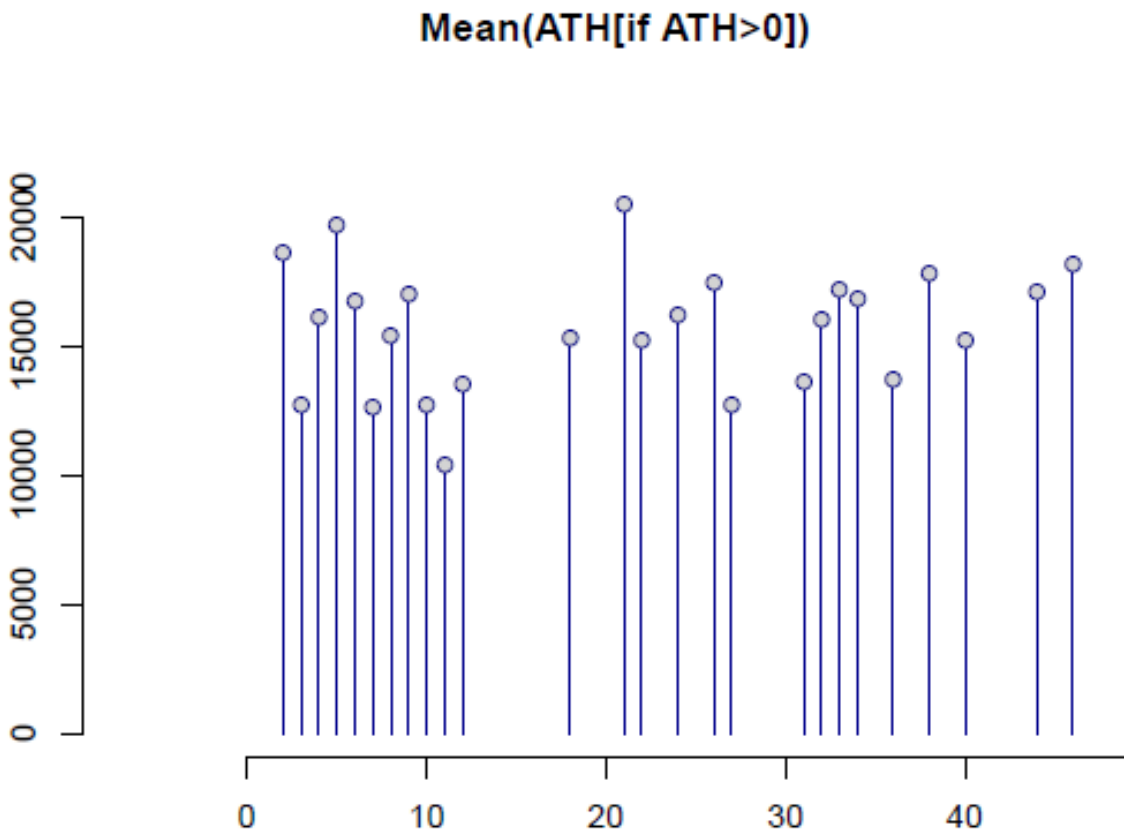


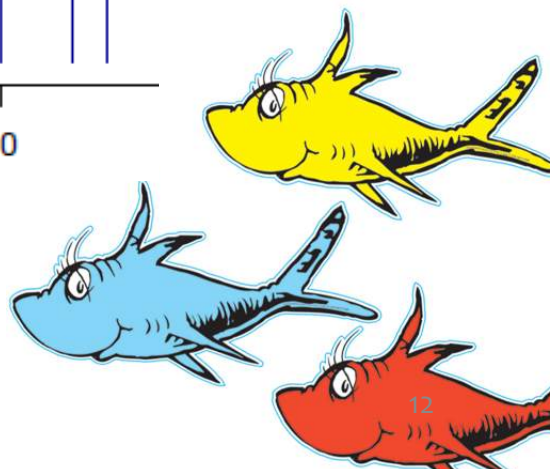
NEW WAY: THOUGHTS ON PLOTS

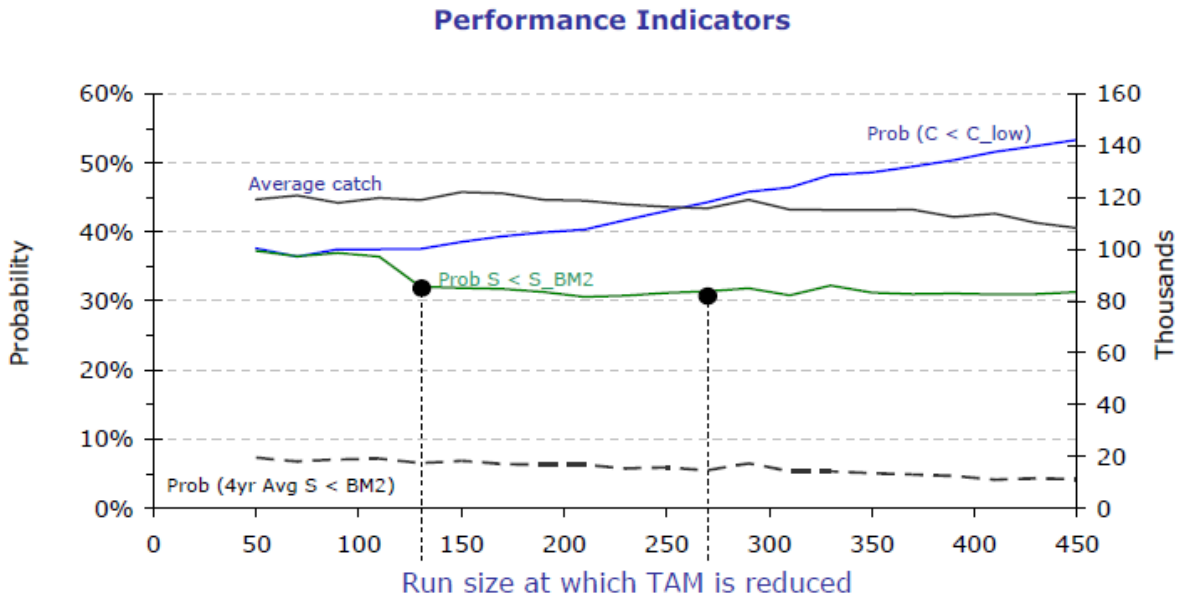


source: CSAS working paper (Withler et al.)

one plot







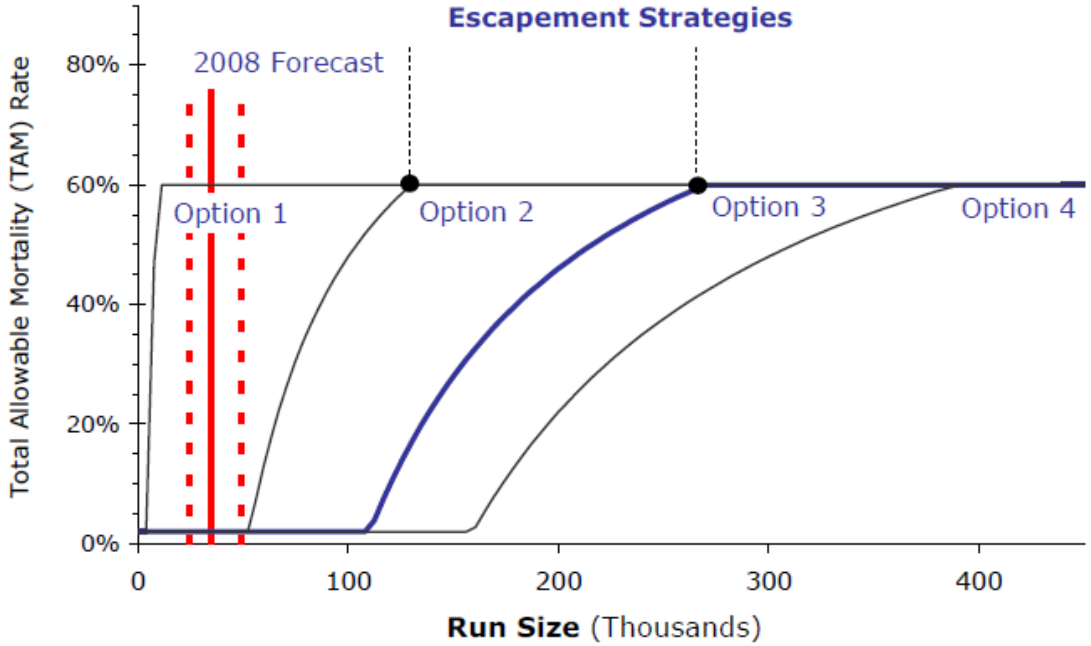
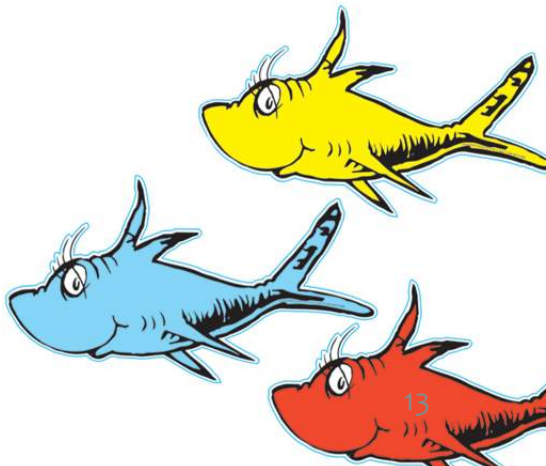
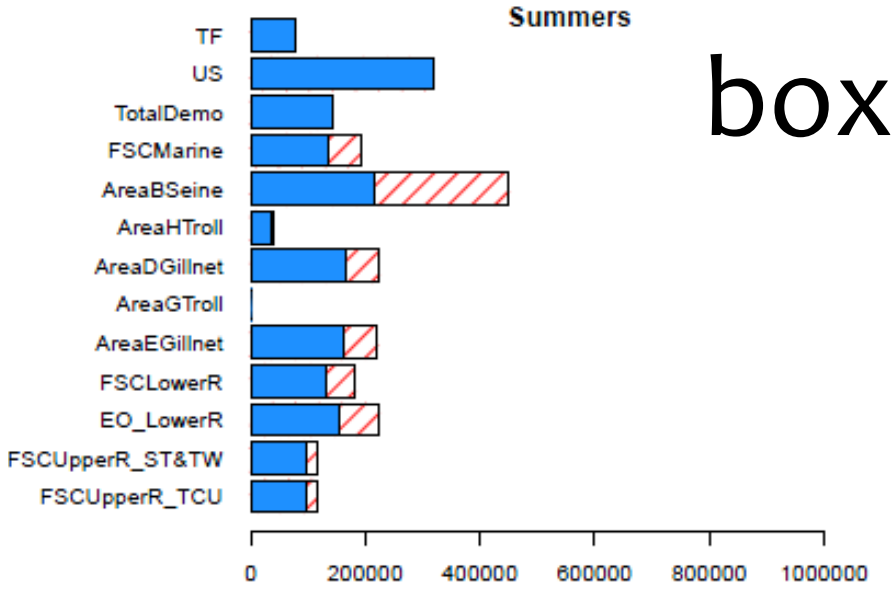


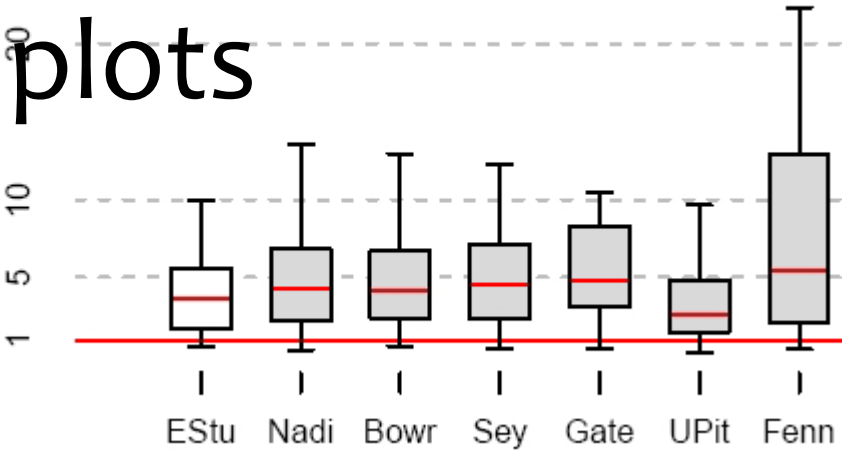
Figure 9: Sample simulation results and options for Early Stuart sockeye.

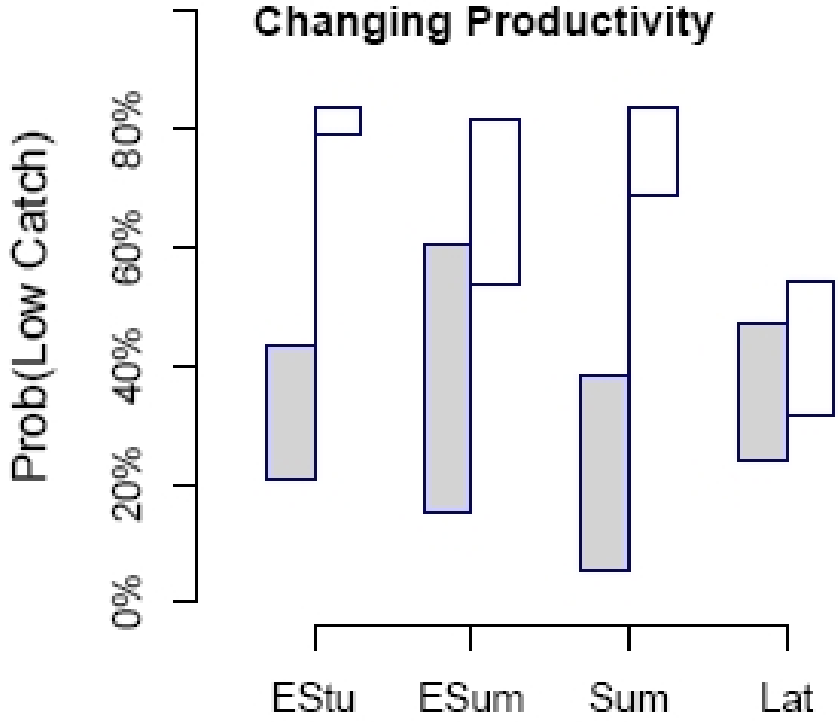
two plots

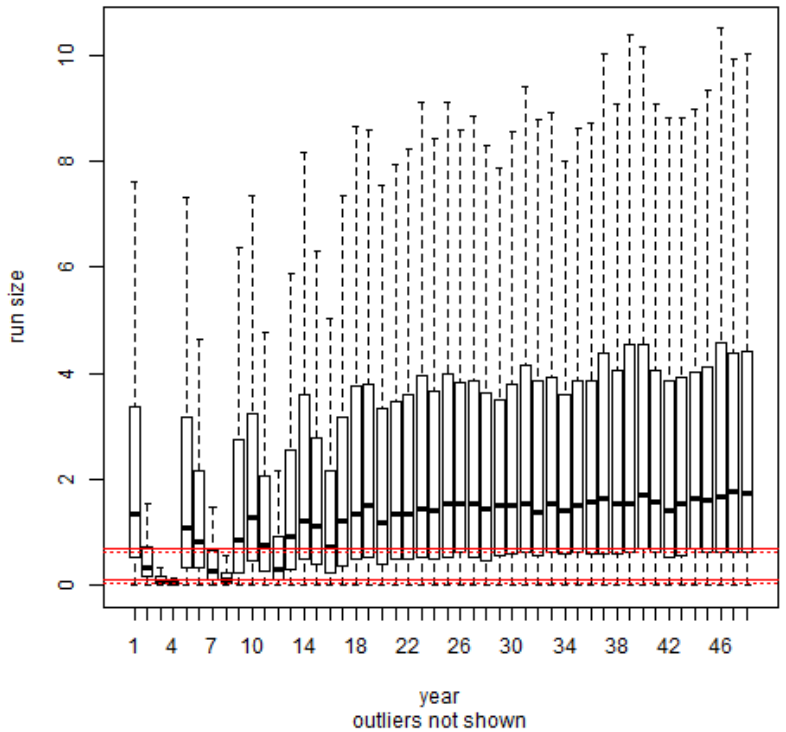


box plots

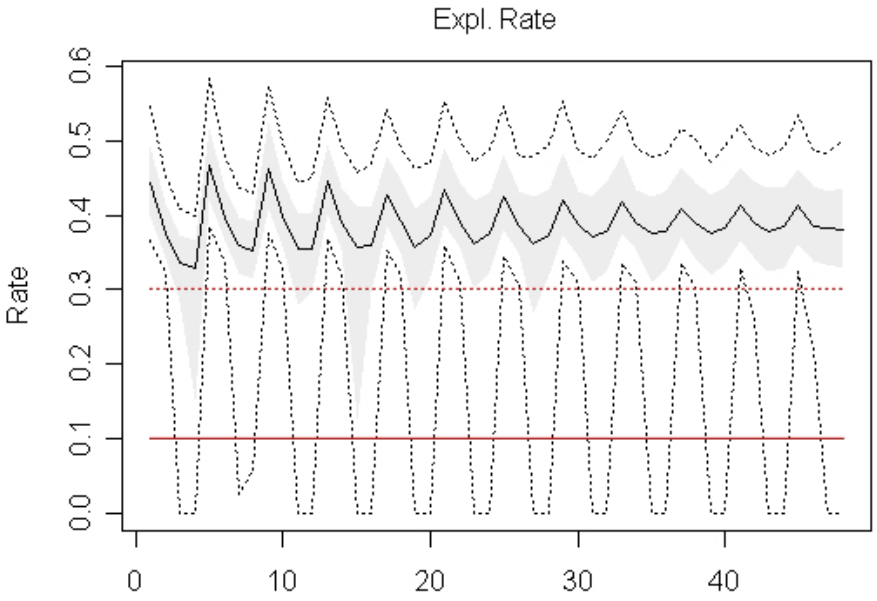

Summers
TF
US
TotalDemo
FSCMarine
AreaBSeine
AreaHTroll
AreaDGillnet
AreaGTroll
AreaEGillnet
FSCLowerR
EO_LowerR
FSCUpperR_ST&TW
FSCUpperR_TCU
0
200000
400000
600000
800000
1000000

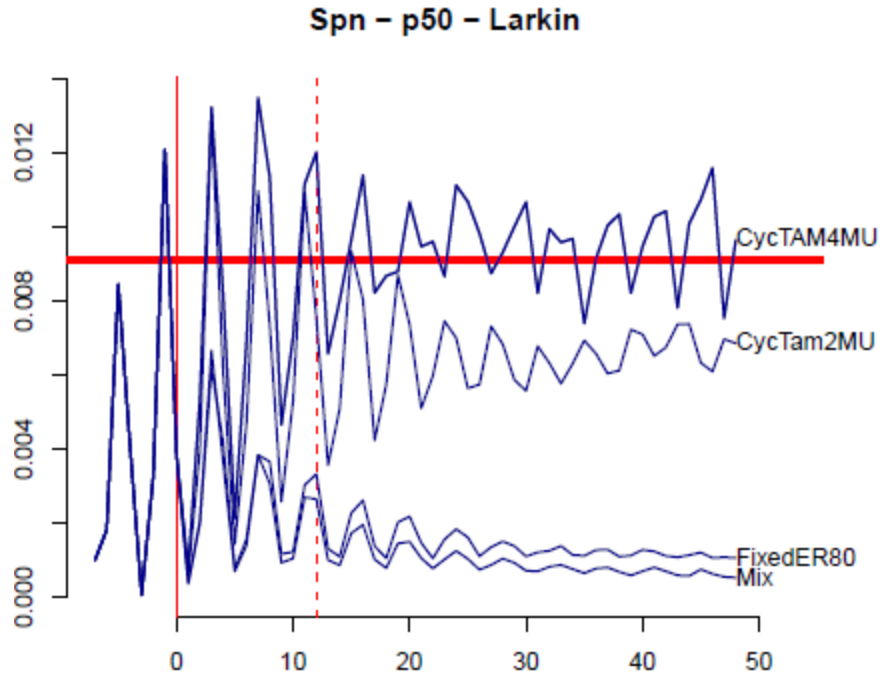

1
5
10
20
EStu
Nadi
Bowr
Sey
Gate
UPit
Fenn

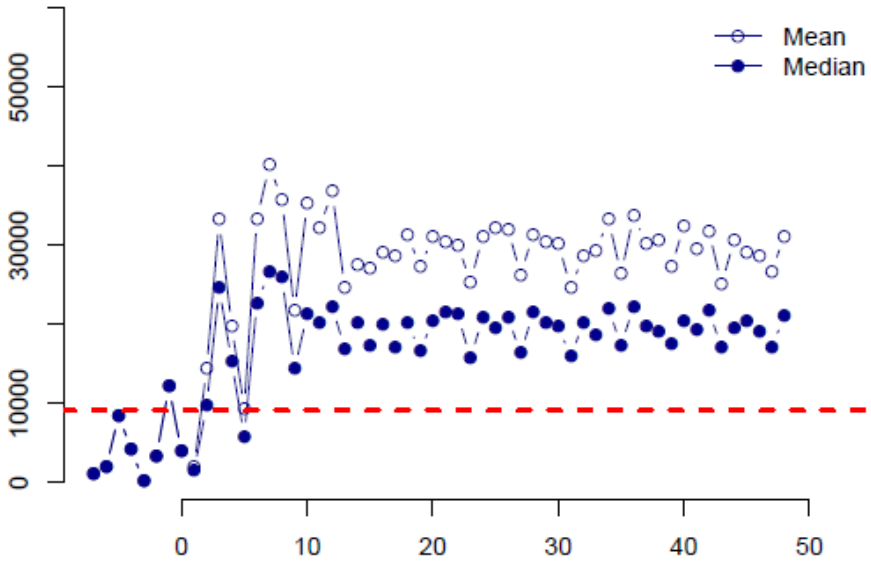

Changing Productivity
Prob(Low Catch)
0%
20%
40%
60%
80%
EStu
ESum
Sum
Lat

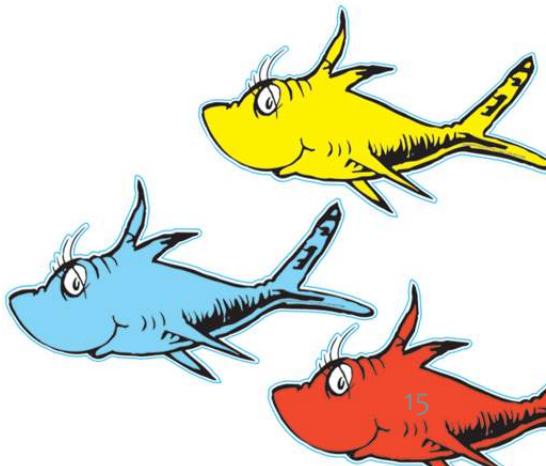

run size
0
2
4
6
8
10
1
4
7
10
14
18
22
26
30
34
38
42
46
year
outliers not shown

line plots

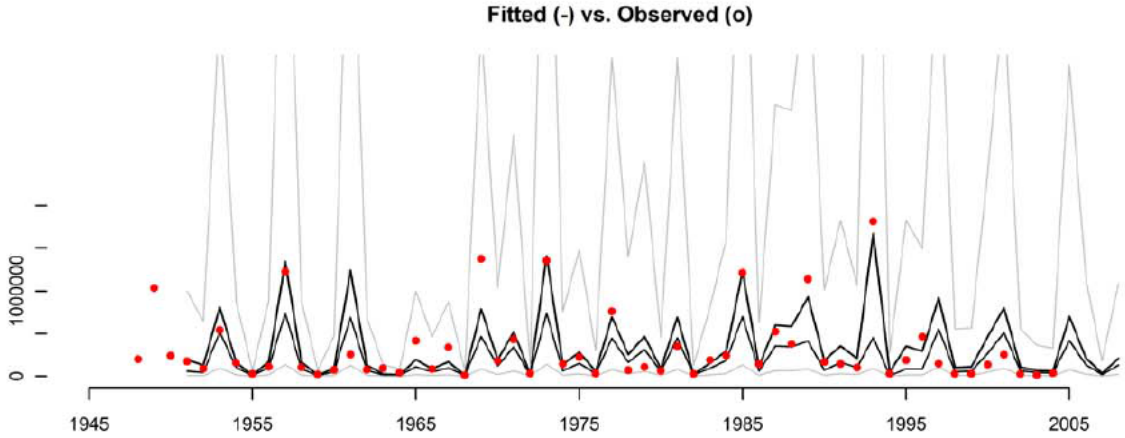

Expl. Rate
Rate
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0
10
20
30
40

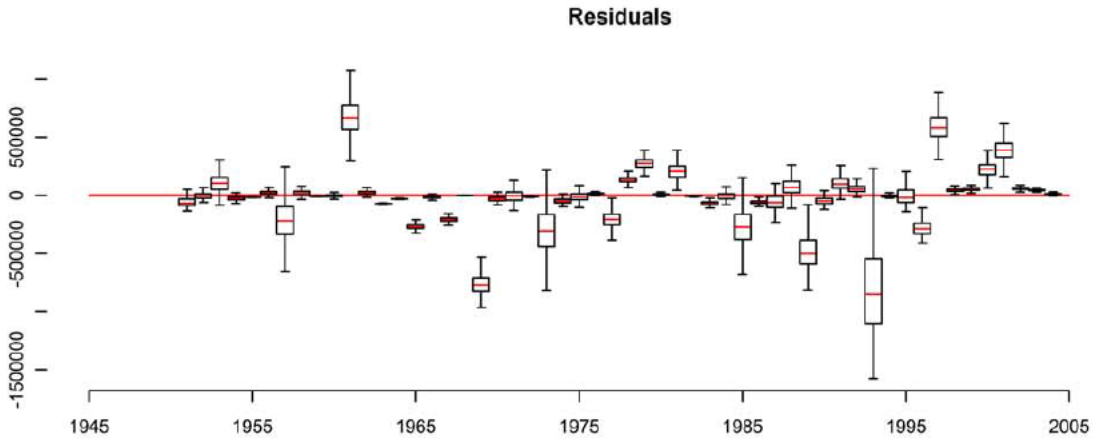

Spn – p50 – Larkin
0.000
0.004
0.008
0.012
CycTAM4MU
CycTam2MU
FixedER80
Mix
0
10
20
30
40
50

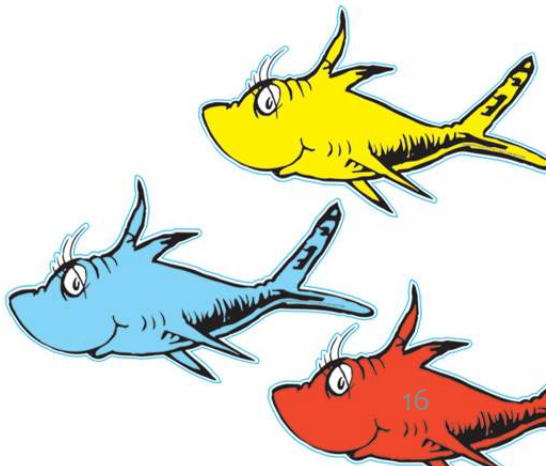

Mean
Median
0
10000
30000
50000
0
10
20
30
40
50



this one has the years displayed



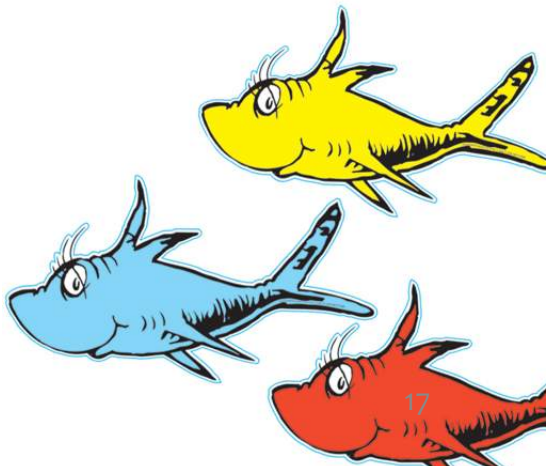




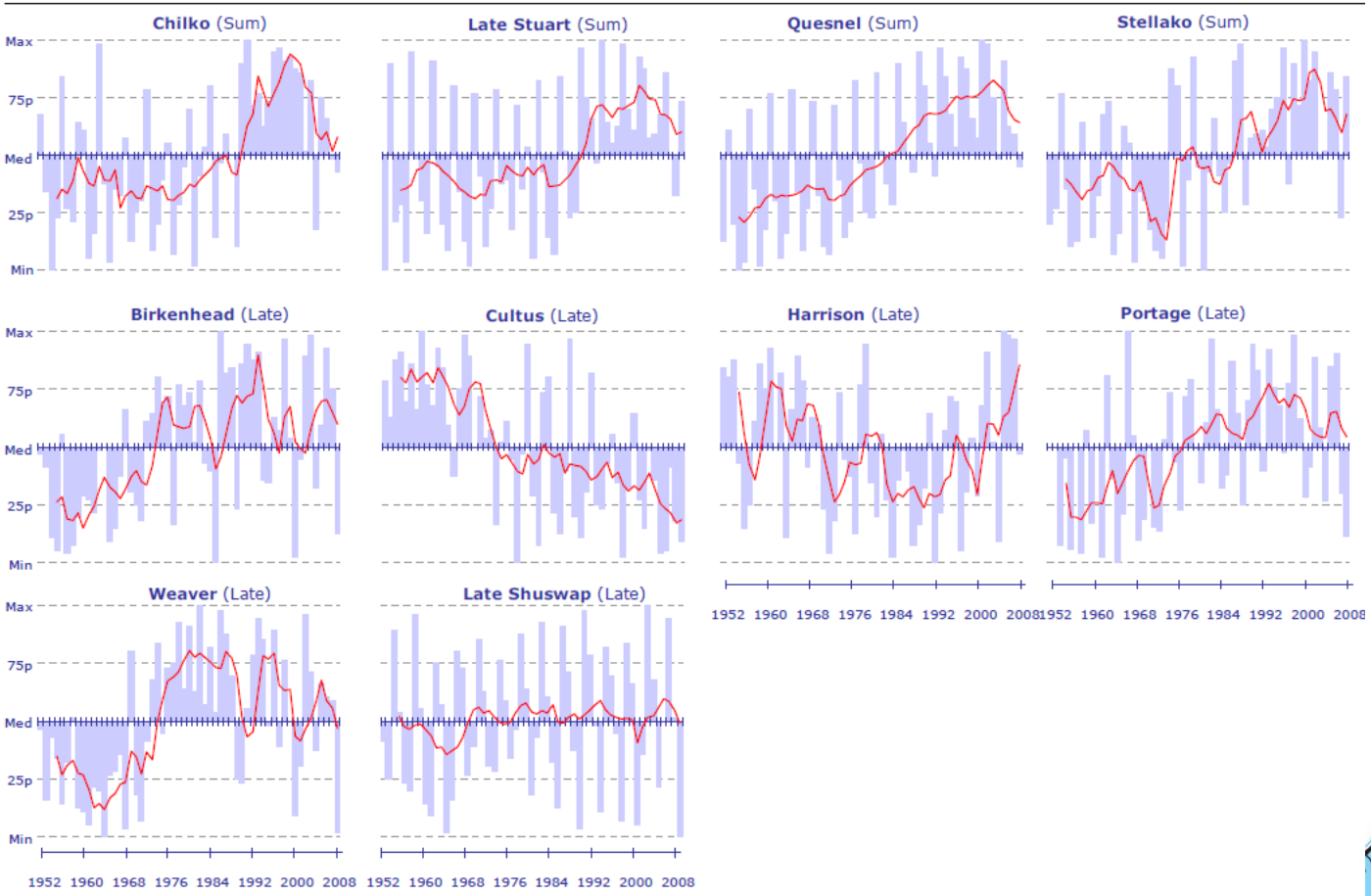
this one has a color fade

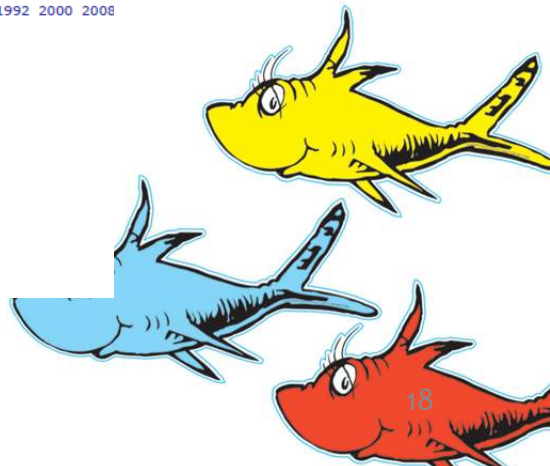
	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400	5600
16.5	0.17	0.09	0.03	-0.02	-0.06	-0.09	-0.12	-0.13	-0.15	-0.15	-0.15	-0.14	-0.12	-0.10	-0.07	-0.03	0.01	0.07
16.8	0.17	0.10	0.04	-0.01	-0.06	-0.09	-0.11	-0.13	-0.14	-0.15	-0.15	-0.14	-0.12	-0.10	-0.07	-0.03	0.02	0.07
17.0	0.18	0.11	0.05	-0.01	-0.05	-0.08	-0.11	-0.12	-0.14	-0.14	-0.14	-0.13	-0.11	-0.09	-0.06	-0.02	0.02	0.08
17.3	0.20	0.12	0.06	0.01	-0.04	-0.07	-0.09	-0.11	-0.12	-0.13	-0.13	-0.12	-0.10	-0.08	-0.05	-0.01	0.04	0.10
17.5	0.22	0.14	0.08	0.03	-0.02	-0.05	-0.08	-0.10	-0.11	-0.11	-0.11	-0.10	-0.09	-0.06	-0.03	0.01	0.06	0.12
17.8	0.25	0.17	0.10	0.05	0.00	-0.03	-0.06	-0.08	-0.09	-0.09	-0.09	-0.08	-0.07	-0.04	-0.01	0.03	0.08	0.14
18.0	0.28	0.20	0.13	0.08	0.03	0.00	-0.03	-0.05	-0.06	-0.07	-0.07	-0.06	-0.04	-0.02	0.02	0.06	0.11	0.17
18.3	0.33	0.24	0.17	0.11	0.07	0.03	0.00	-0.02	-0.03	-0.04	-0.03	-0.02	-0.01	0.02	0.05	0.09	0.15	0.21
18.5	0.38	0.29	0.22	0.16	0.11	0.07	0.04	0.02	0.01	0.00	0.00	0.01	0.03	0.06	0.09	0.14	0.19	0.26
18.8	0.43	0.34	0.27	0.21	0.15	0.11	0.08	0.06	0.05	0.04	0.05	0.06	0.07	0.10	0.14	0.18	0.24	0.31
19.0	0.50	0.41	0.33	0.26	0.21	0.17	0.14	0.11	0.10	0.09	0.10	0.11	0.13	0.15	0.19	0.24	0.30	0.38
19.3	0.58	0.48	0.40	0.33	0.27	0.23	0.20	0.17	0.16	0.15	0.15	0.16	0.19	0.22	0.26	0.31	0.37	0.45
19.5	0.68	0.57	0.48	0.41	0.35	0.30	0.27	0.24	0.22	0.22	0.22	0.23	0.25	0.29	0.33	0.38	0.45	0.53
19.8	0.78	0.67	0.57	0.50	0.43	0.38	0.35	0.32	0.30	0.29	0.30	0.31	0.33	0.37	0.41	0.47	0.54	0.63
20.0	0.90	0.78	0.68	0.60	0.53	0.48	0.44	0.41	0.39	0.38	0.39	0.40	0.42	0.46	0.51	0.57	0.65	0.74
20.3	1.04	0.91	0.81	0.72	0.64	0.59	0.54	0.51	0.49	0.48	0.49	0.50	0.53	0.57	0.62	0.69	0.77	0.87
20.5	1.20	1.06	0.95	0.85	0.77	0.71	0.66	0.63	0.61	0.60	0.61	0.62	0.65	0.69	0.75	0.82	0.91	1.02

source: psc

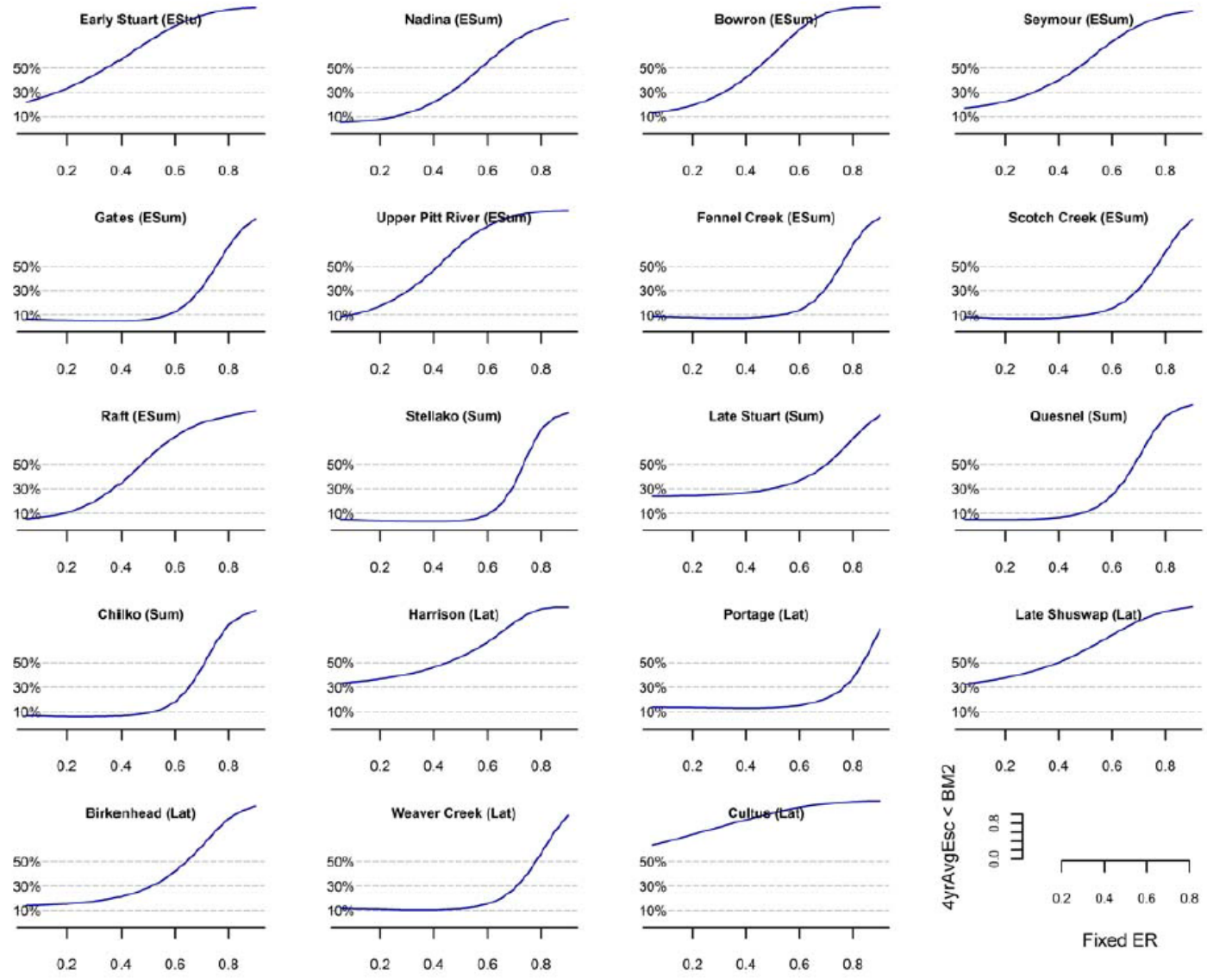


SAY.

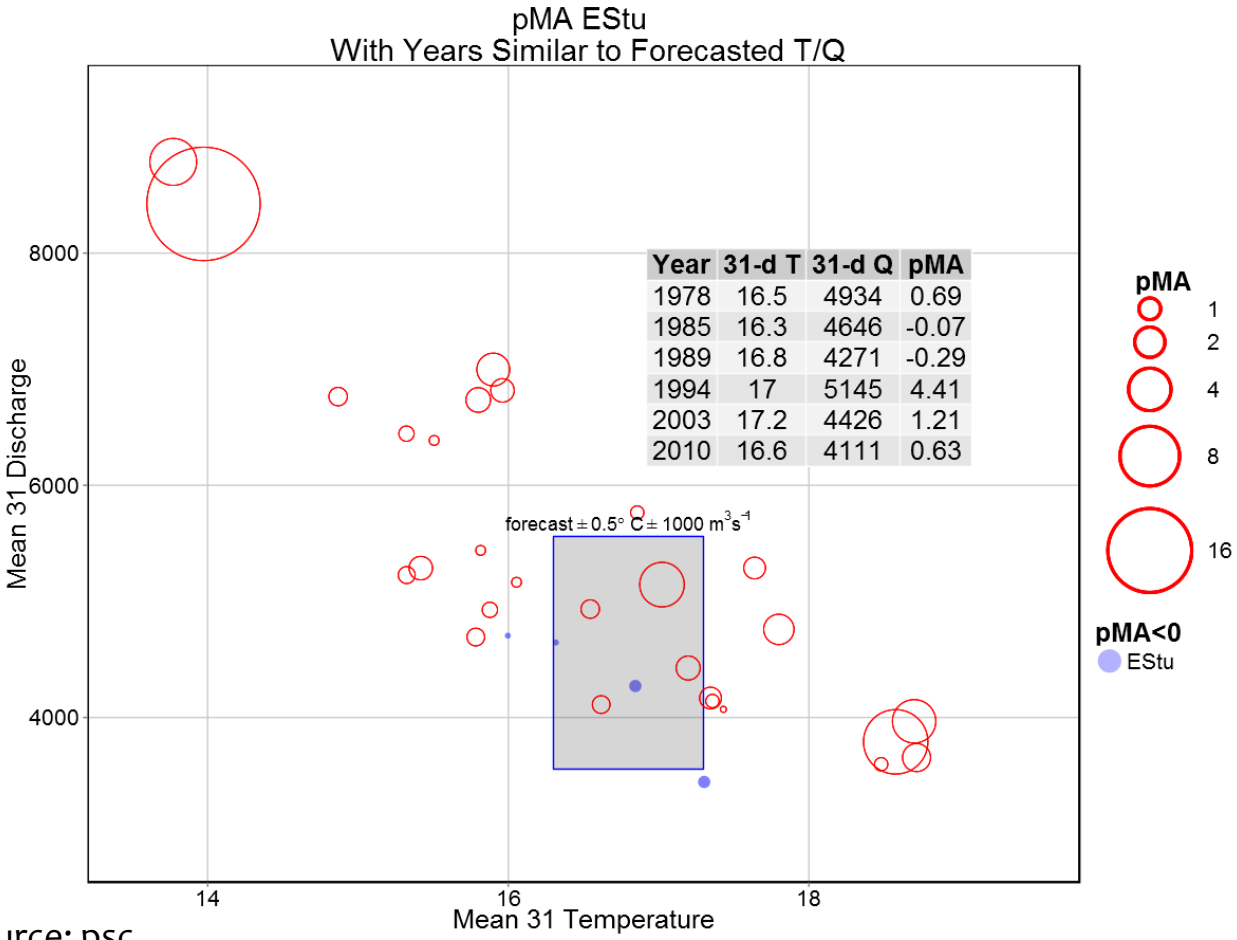

Chilko (Sum)
Late Stuart (Sum)
Quesnel (Sum)
Stellako (Sum)
Birkenhead (Late)
Cultus (Late)
Harrison (Late)
Portage (Late)
Weaver (Late)
Late Shuswap (Late)
Max
75p
Med
25p
Min
1952 1960 1968 1976 1984 1992 2000 2008



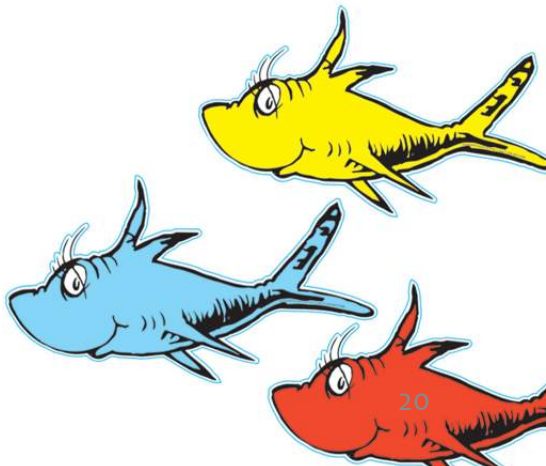
WHAT A LOT OF PLOTS WE'VE MADE!



Some are red

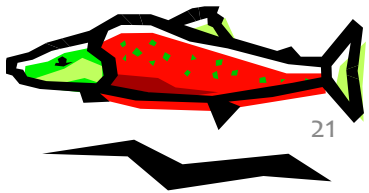


source: psc



- how to explain probabilities/uncertainty/risk and implications to decision makers?

TRYING TO GET A HANDLE ON THOSE INTRACTABLE PROBLEMS



ANY ANSWERS???