2014 Smolt Monitoring Program

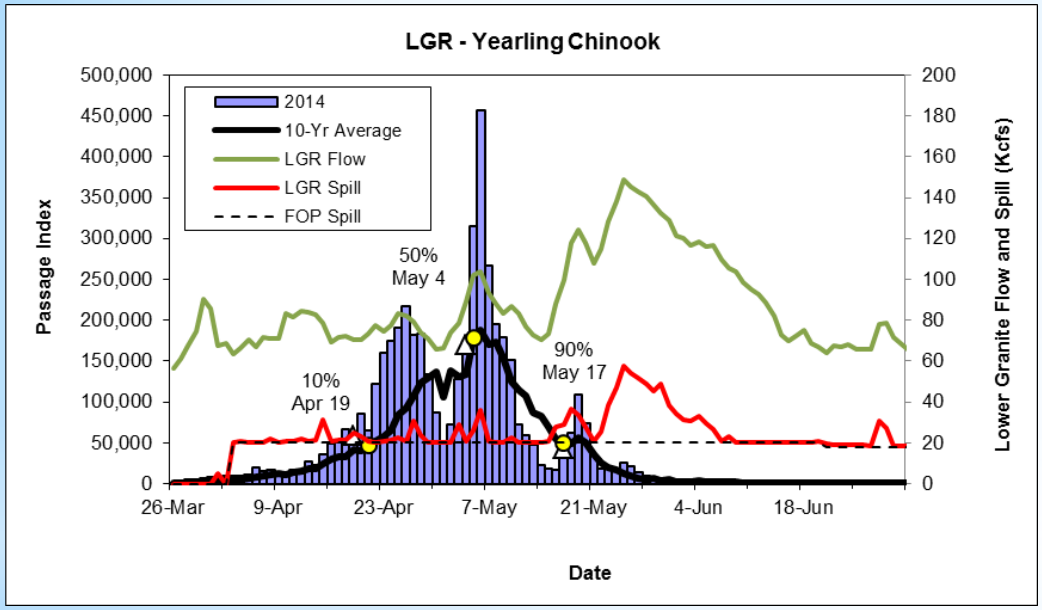
Juvenile Passage Data and Noteworthy Events

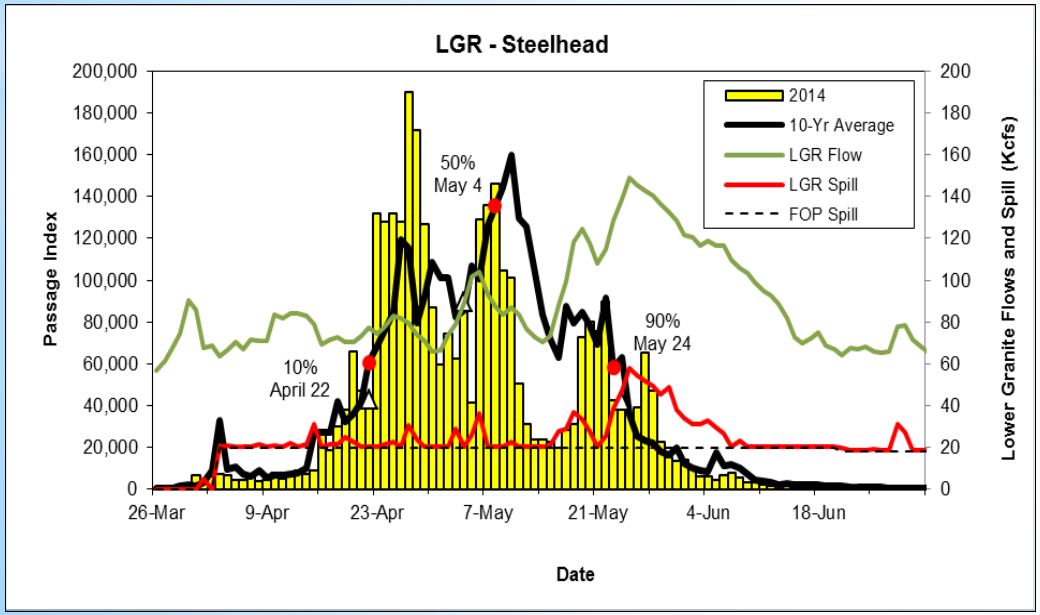
2014 TMT Year-end Review

December 4, 2014

Paul Wagner
NOAA

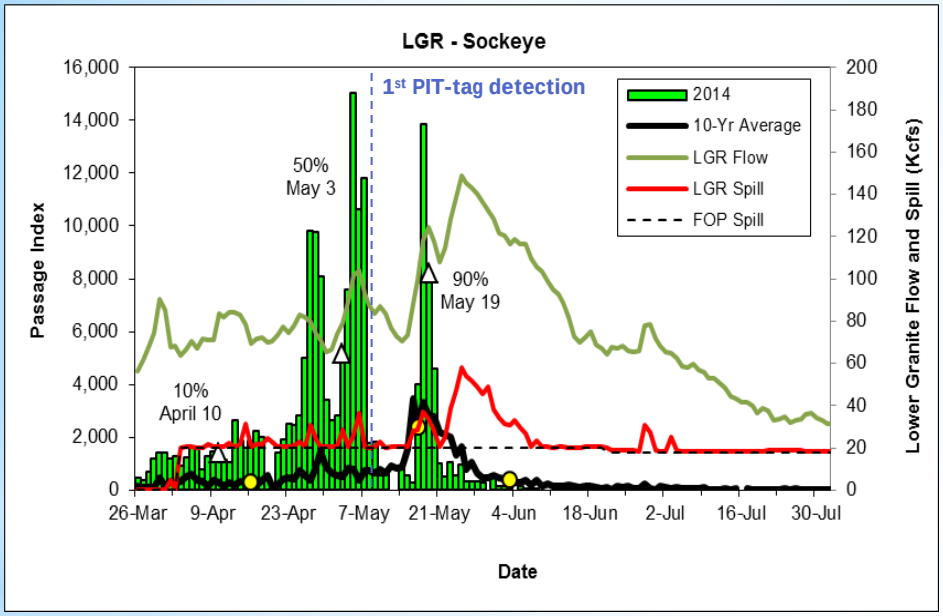
Lower Granite Dam

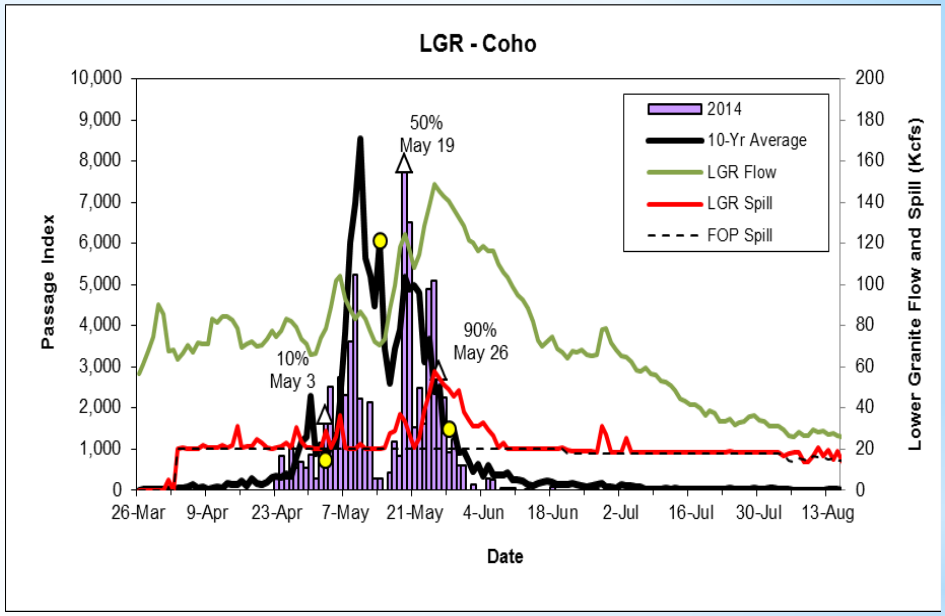


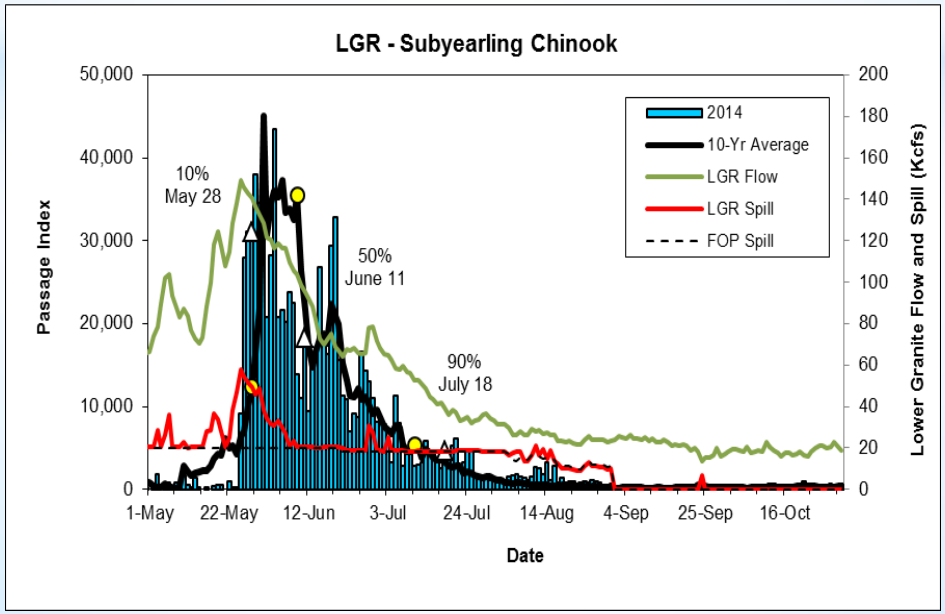


- Spill in excess of FOP intermittent in April & May; Longer period from mid-May to early June
- Collections for transportation began on May 1, first barge May 2
  - ~45% of CH1 and ST passed LGR prior to start of transport

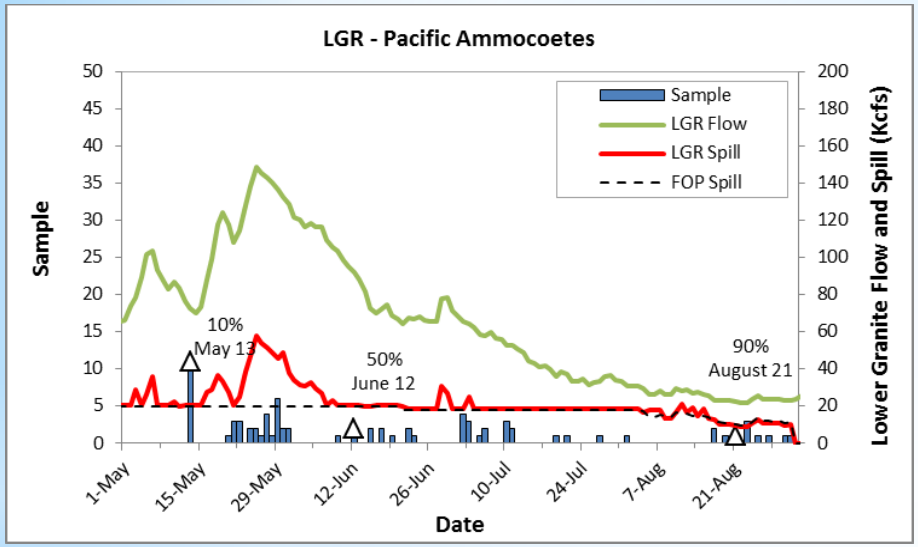
Lower Granite Dam

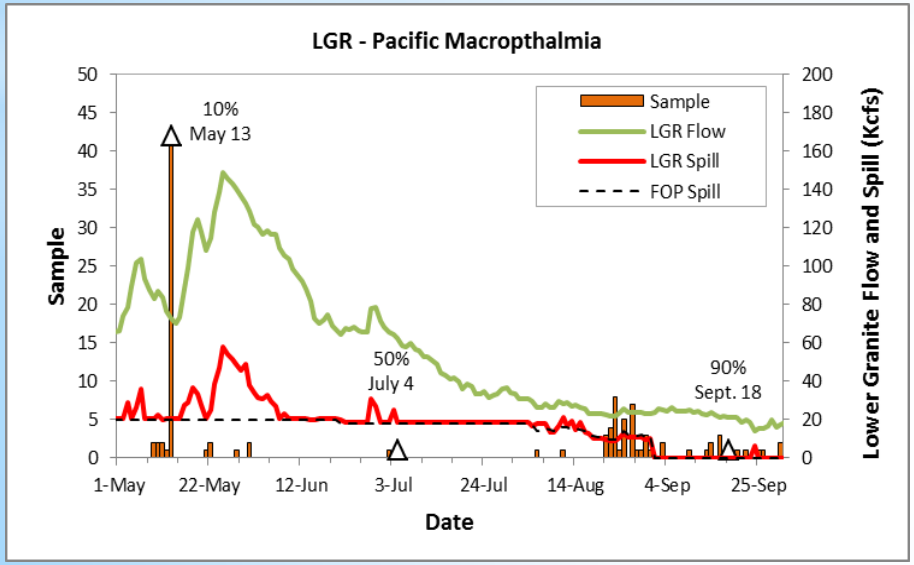






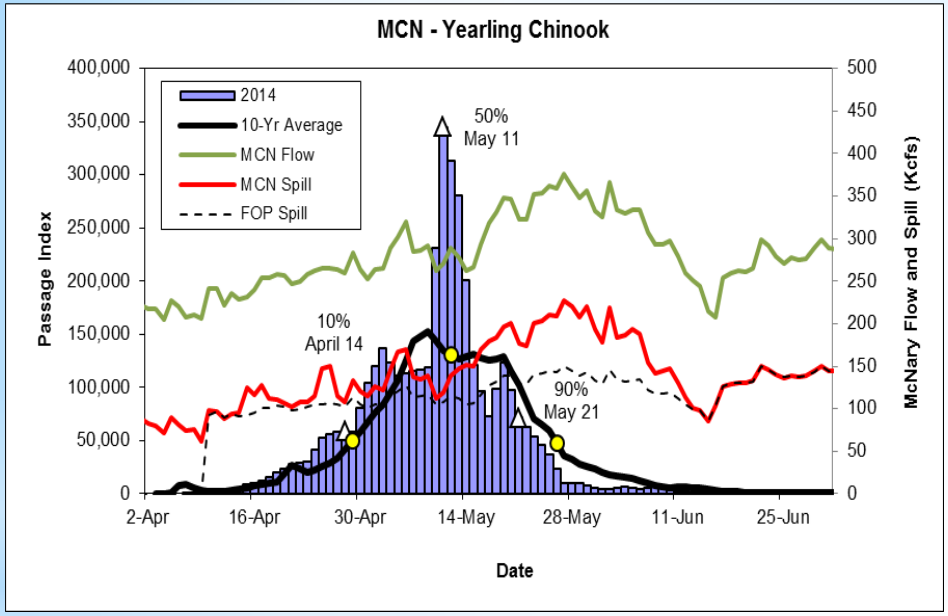
Lower Granite Dam

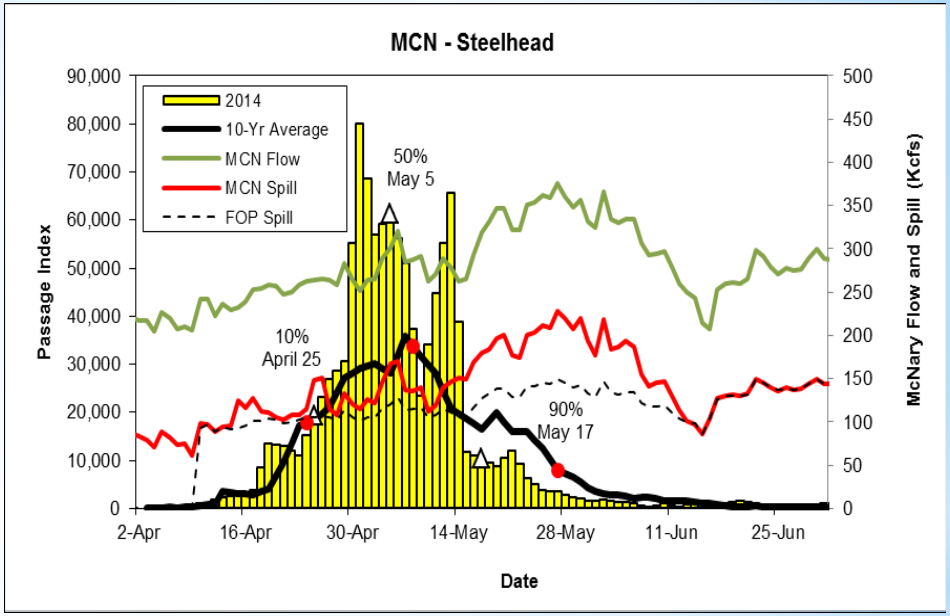


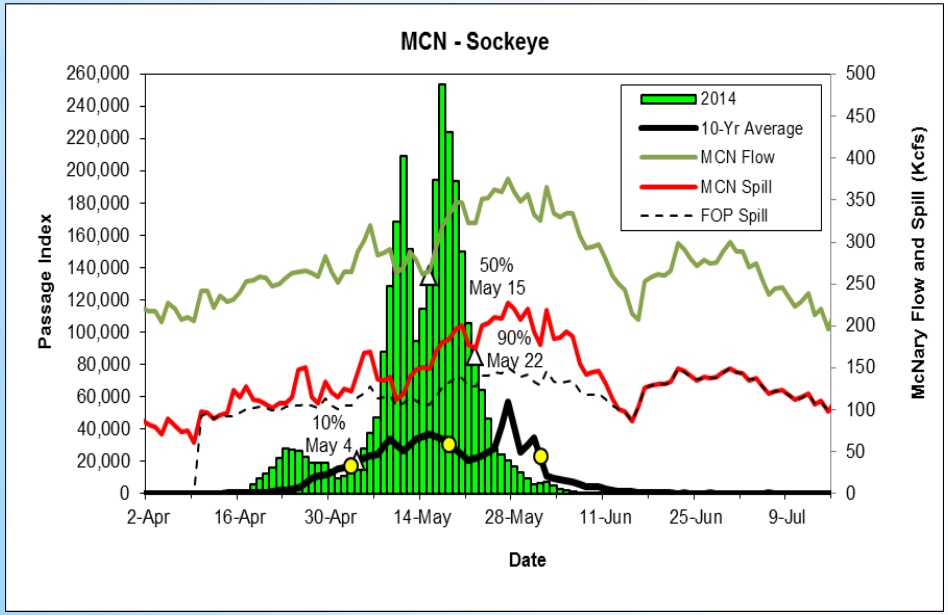


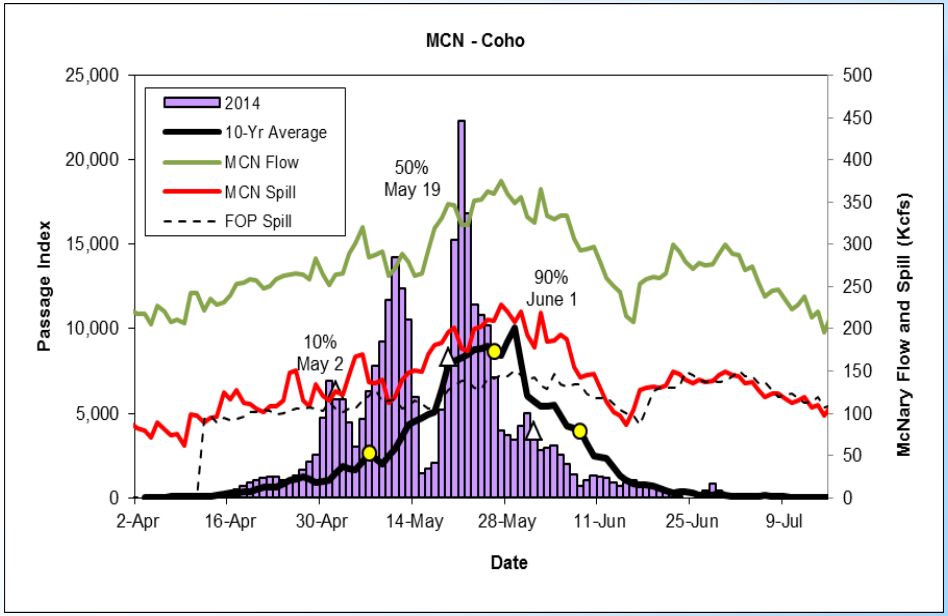
- 2013 PIT-tag study confirmed lamprey juveniles can escape LGR sample tank
- Estimates of lamprey collections at LGR unreliable
- Sample counts presented here, likely underestimates

McNary Dam

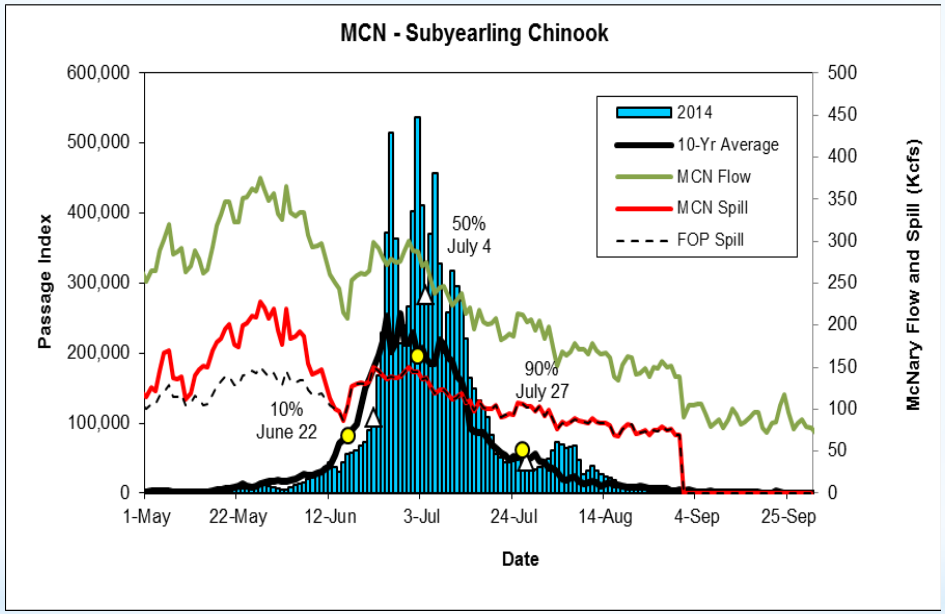

MCN - Yearling Chinook
2014
10-Yr Average
MCN Flow
MCN Spill
FOP Spill
50%
May 11
10%
April 14
90%
May 21
Passage Index
McNary Flow and Spill (Kcfs)
Date
2-Apr
16-Apr
30-Apr
14-May
28-May
11-Jun
25-Jun


MCN - Steelhead
2014
10-Yr Average
MCN Flow
MCN Spill
FOP Spill
50%
May 5
10%
April 25
90%
May 17
Passage Index
McNary Flow and Spill (Kcfs)
Date
2-Apr
16-Apr
30-Apr
14-May
28-May
11-Jun
25-Jun

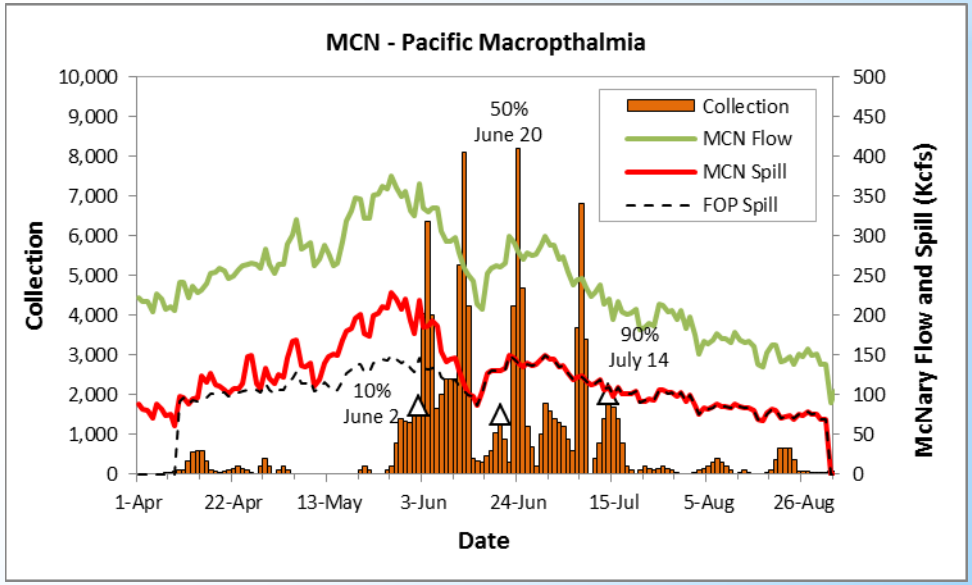

MCN - Sockeye
2014
10-Yr Average
MCN Flow
MCN Spill
FOP Spill
50%
May 15
90%
May 22
10%
May 4
Passage Index
McNary Flow and Spill (Kcfs)
Date
2-Apr
16-Apr
30-Apr
14-May
28-May
11-Jun
25-Jun
9-Jul


MCN - Coho
2014
10-Yr Average
MCN Flow
MCN Spill
FOP Spill
50%
May 19
90%
June 1
10%
May 2
Passage Index
McNary Flow and Spill (Kcfs)
Date
2-Apr
16-Apr
30-Apr
14-May
28-May
11-Jun
25-Jun
9-Jul

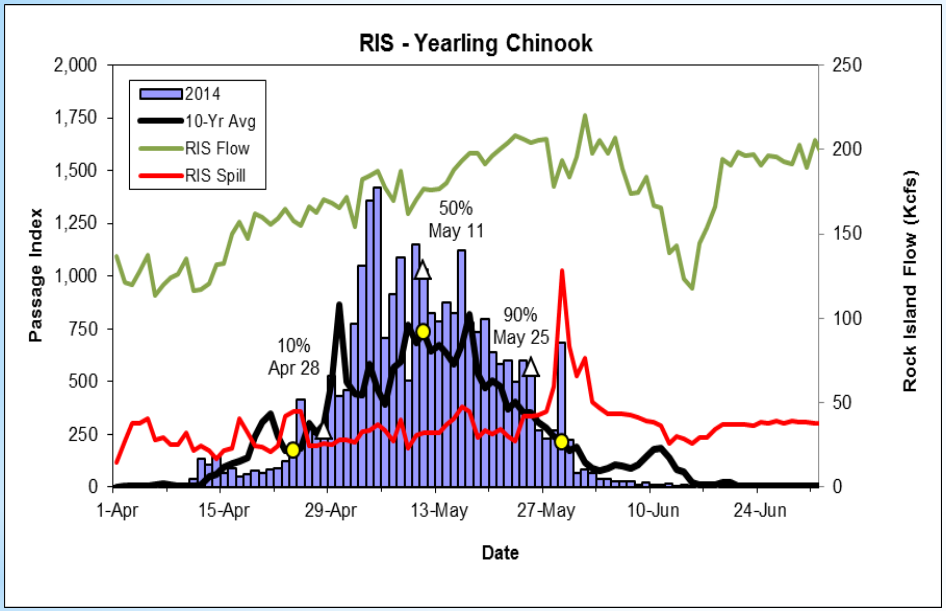
McNary Dam

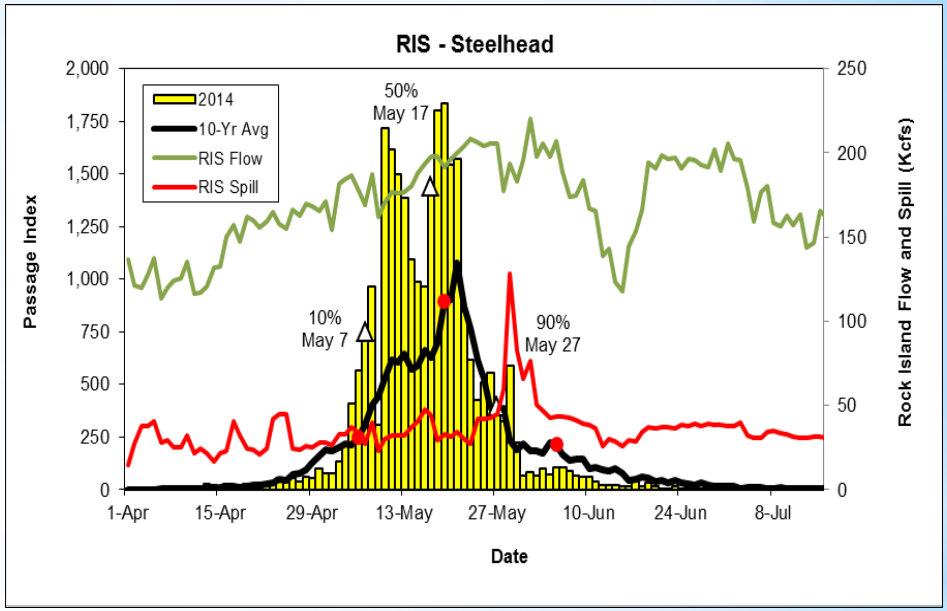


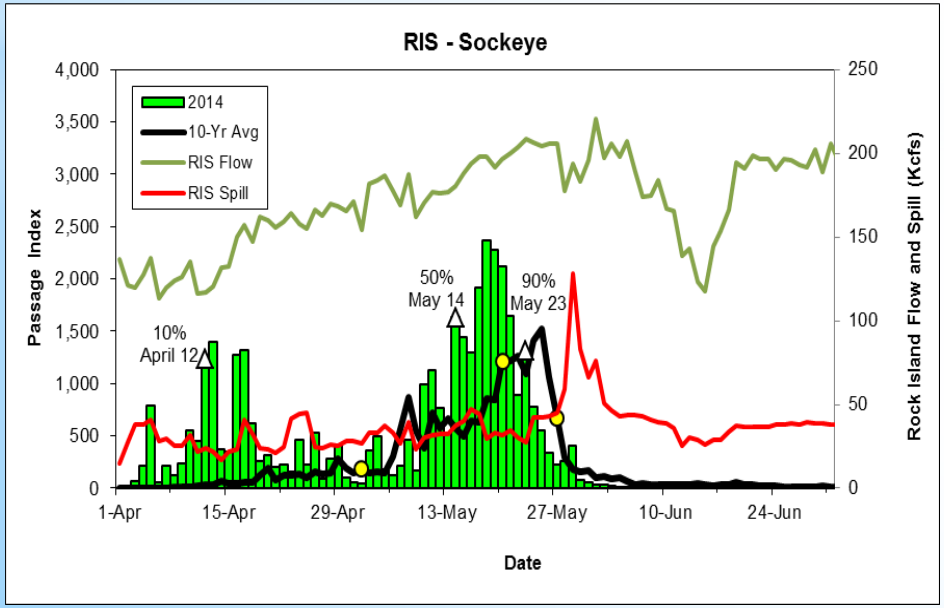
- Very few Pacific ammocoetes sampled in 2014

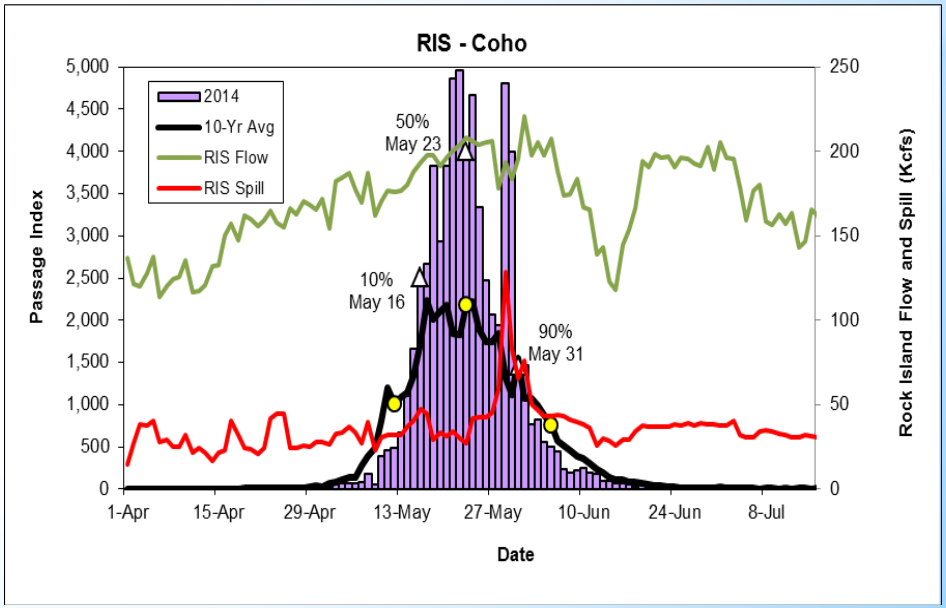


Rock Island Dam

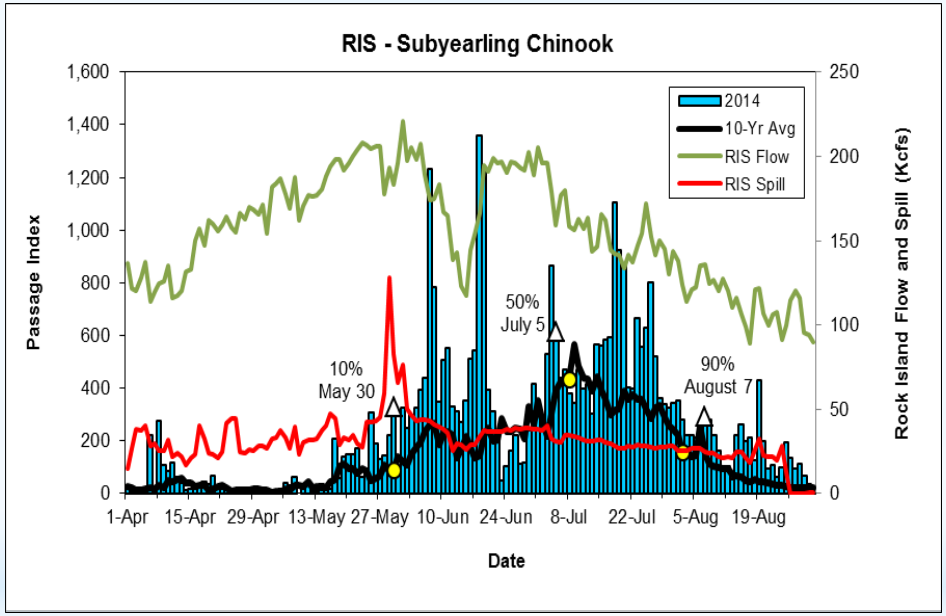


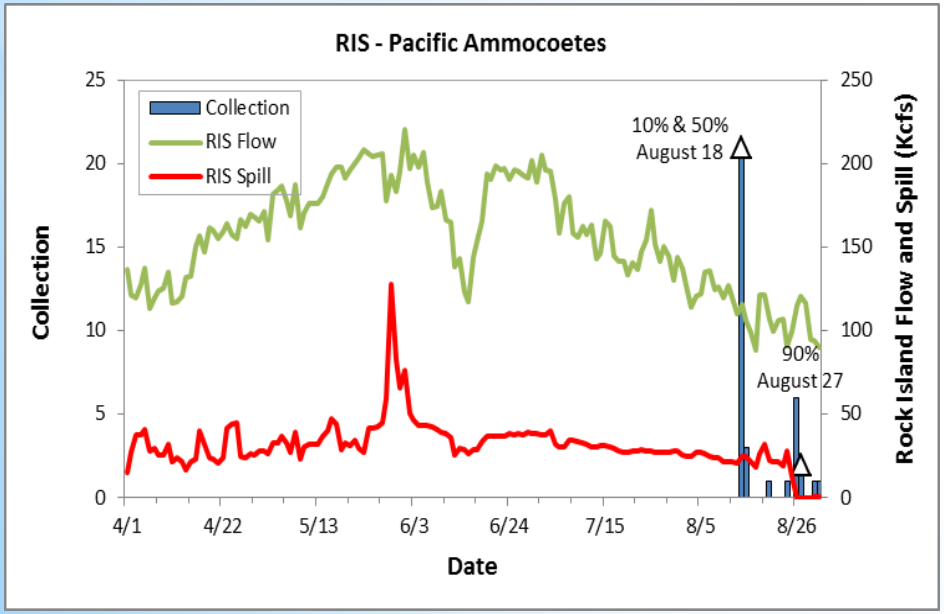


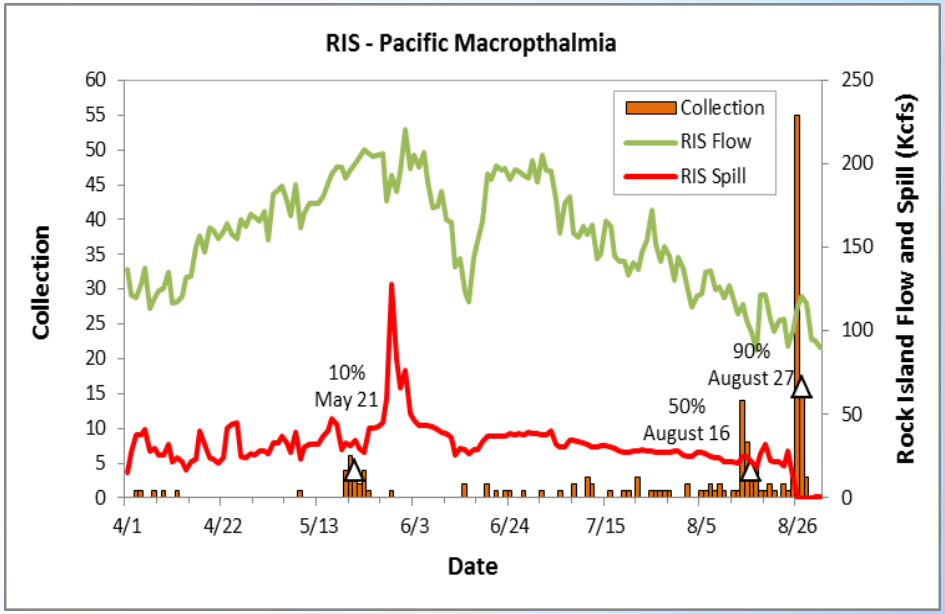




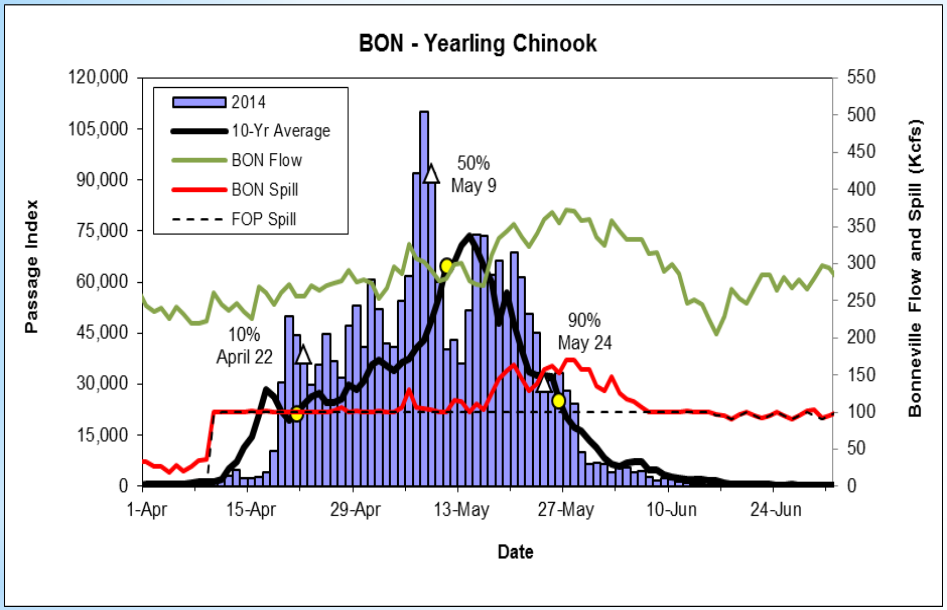
Rock Island Dam

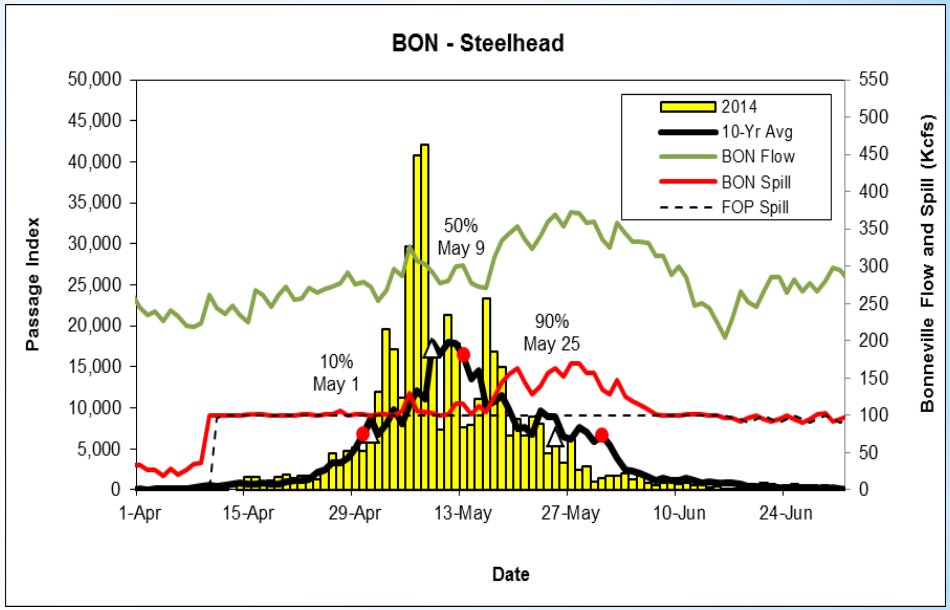


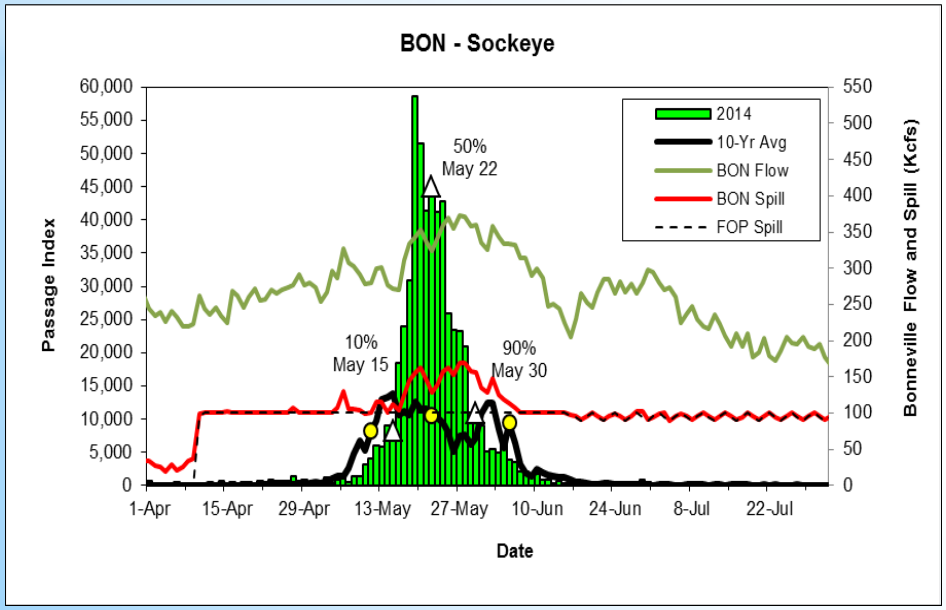


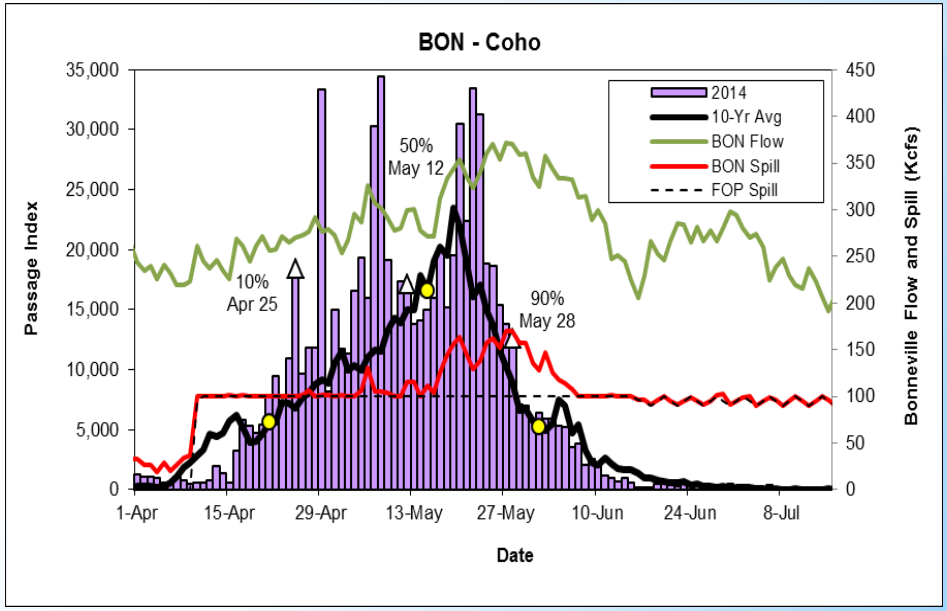


Bonneville Dam

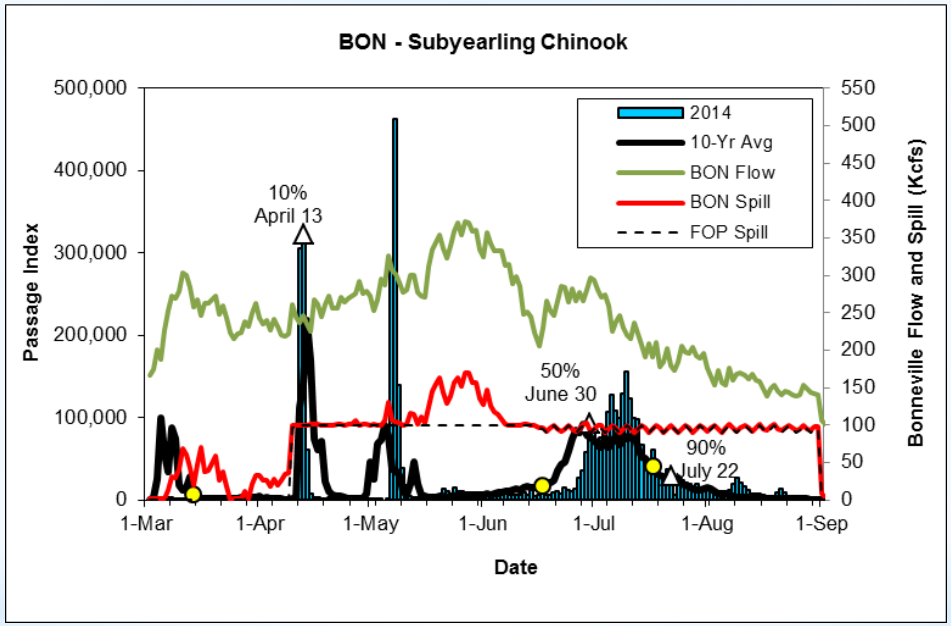


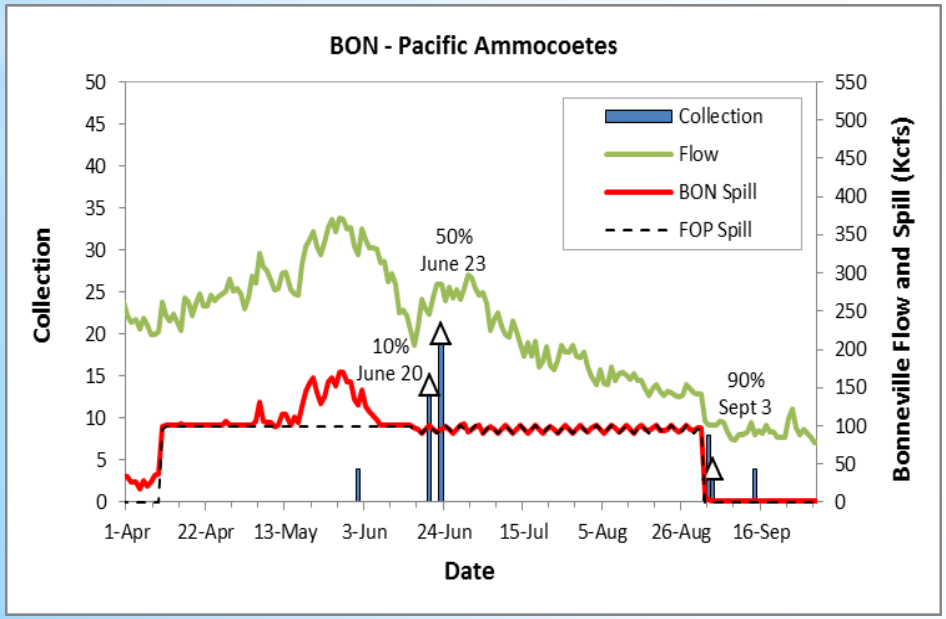


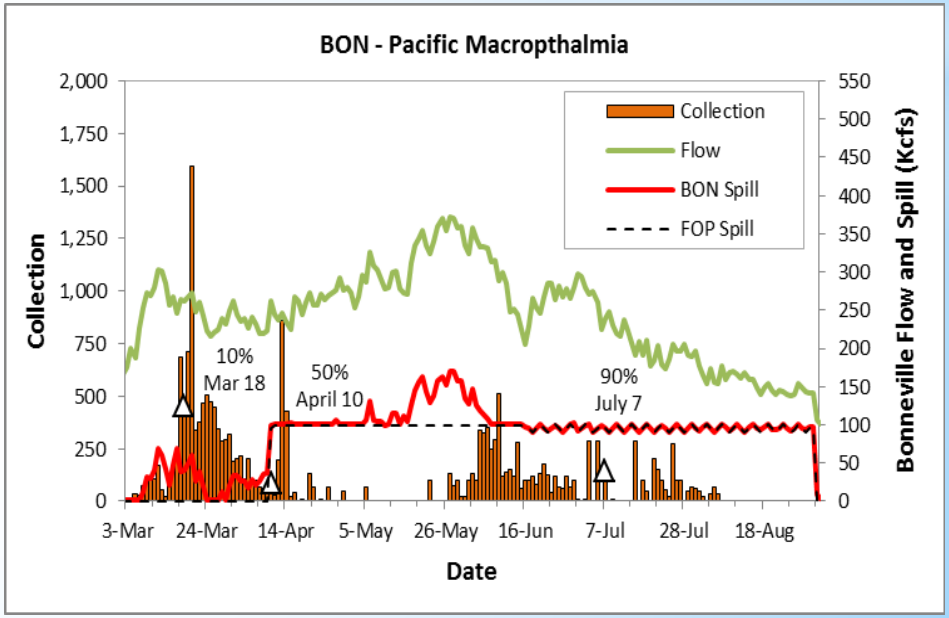




Bonneville Dam







Noteworthy Events - Mortalities

- Weighted average morality for Pacific macropthalmia at BON, MCN, and LGS higher than all salmonids species

Site	CH0	CH1	CO	SO	ST	MP†
LGR*	1.4	0.5	0.0	2.5	0.4	N/A
LGS	0.4	0.2	1.1	0.1	0.1	**1.9**
LMN	0.3	0.3	N/A	N/A	0.3	0.0
MCN	1.4	0.7	0.5	0.9	0.2	**3.2**
JDA	0.6	0.2	0.0	0.8	0.2	0.4
BON	1.4	0.3	0.3	1.7	0.1	**5.8**
RIS	0.1	0.0	0.0	0.2	0.0	N/A

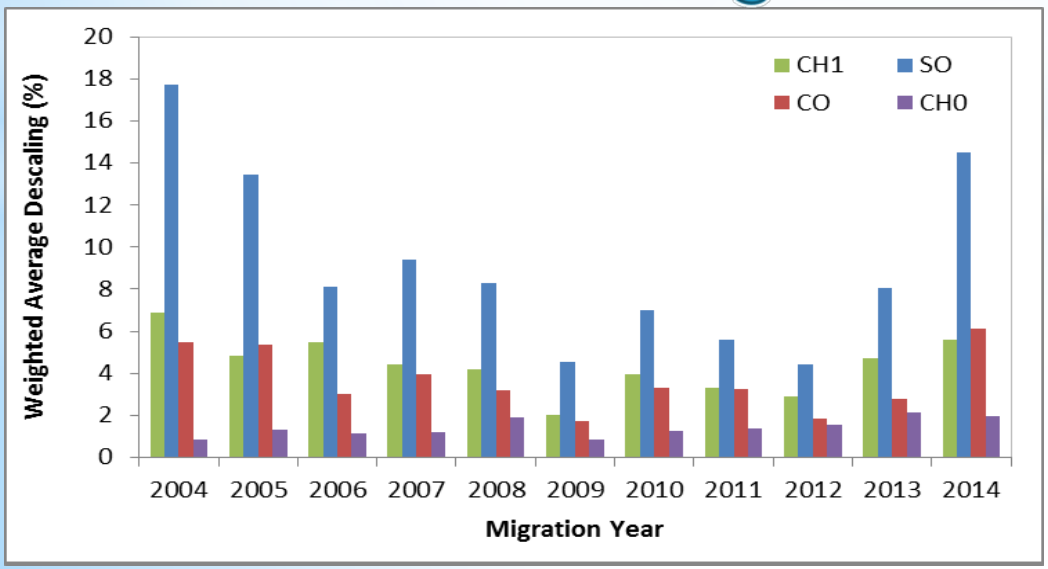
*** Mortality recorded on 5/13/2014 sample removed from estimation of weighted average**

† Weighted by estimated collection, instead of passage index

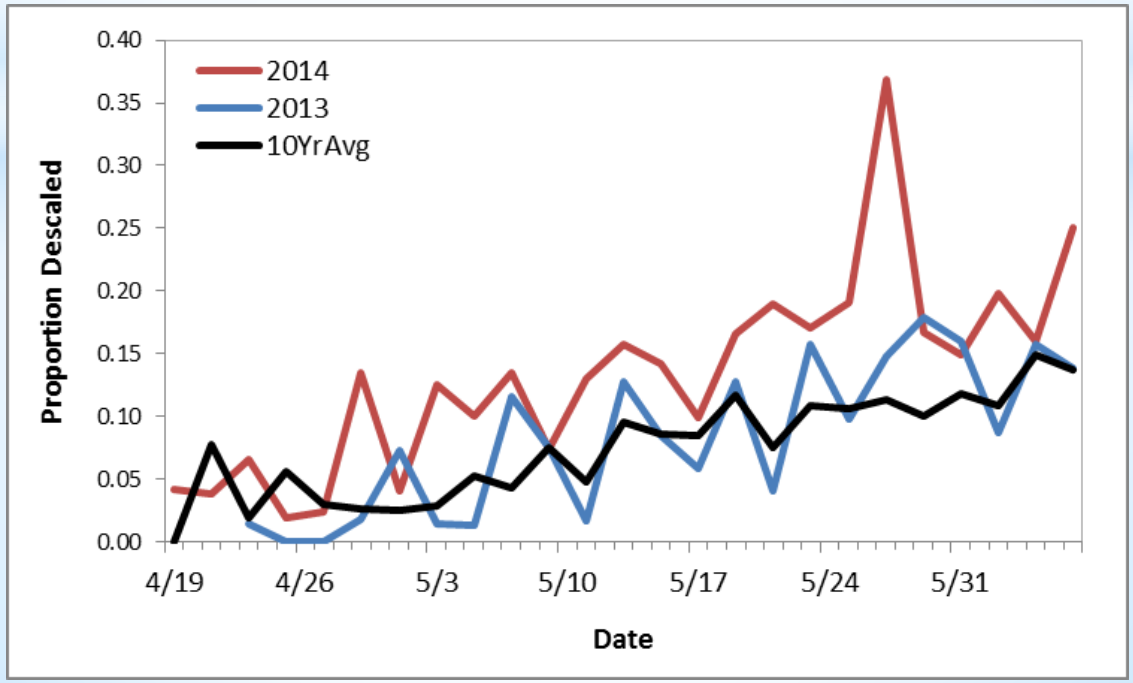
Noteworthy Events - Descaling

- High descaling at MCN in 2014 compared to previous 10 years
  - Descaling for CO highest
  - Descaling for CH1, CH0, and SO second highest

Site	CH0	CH1	CO	SO	ST
LGR	0.4	0.8	2.8	1.2	1.4
LGS	0.8	1.2	1.3	1.9	1.2
LMN	1.1	2.4	N/A	N/A	3.0
MCN	1.9	**5.6**	**6.1**	**14.5**	3.7
JDA	1.0	0.9	0.8	4.0	**1.2**
BON	0.3	2.0	1.0	6.2	1.6
RIS	**0.6**	0.4	0.4	1.3	0.3



- Descaling for ST at JDA and CH0 at RIS lowest compared to previous 10 years

Noteworthy Events
Sockeye Descaling at MCN

- Throughout most of 2014, descaling for sockeye was generally higher than 2013 and 10-year average
- Cause of elevated descaling still unclear