

Lower Deschutes River Fish Population Status Update



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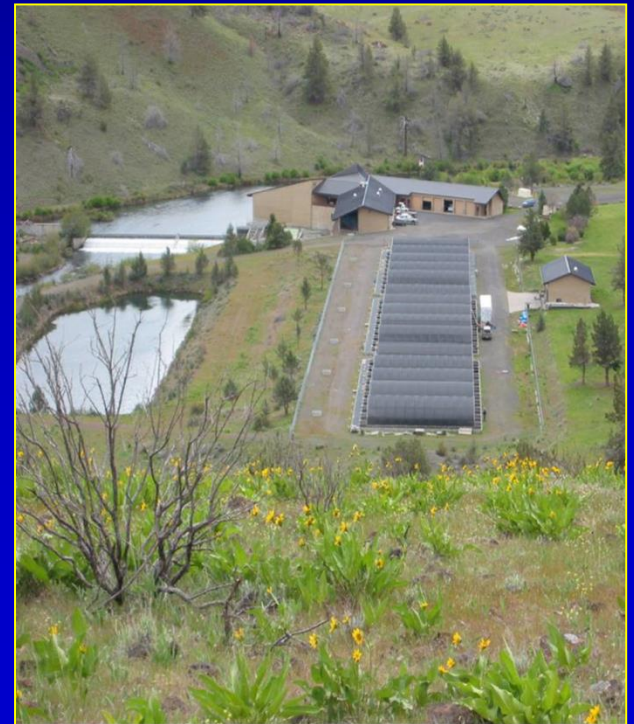


Updates

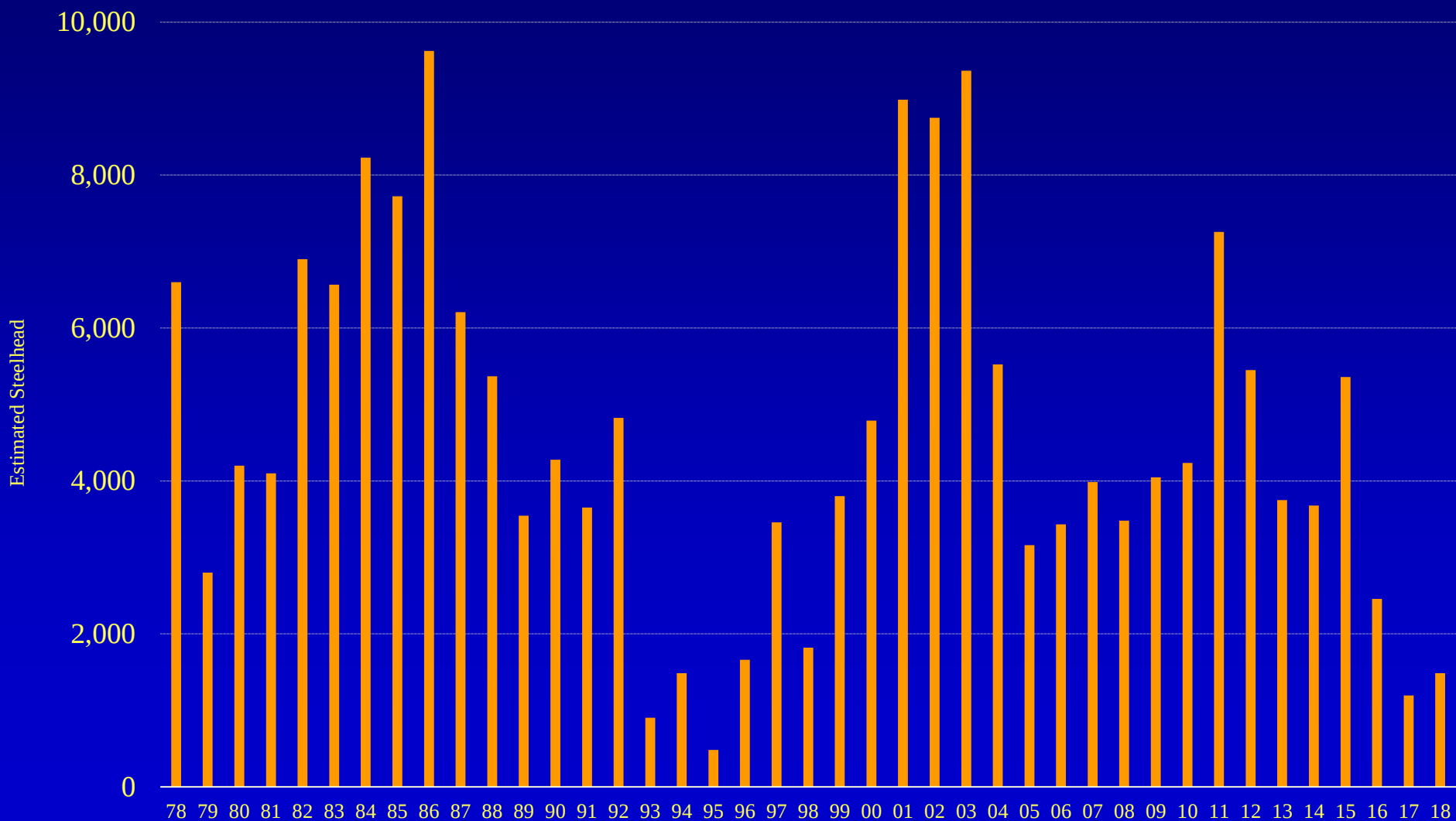
- Steelhead
- Spring and Fall Chinook
- Trout Monitoring Efforts
- Smallmouth Bass Monitoring

Sampling Sites/Methods

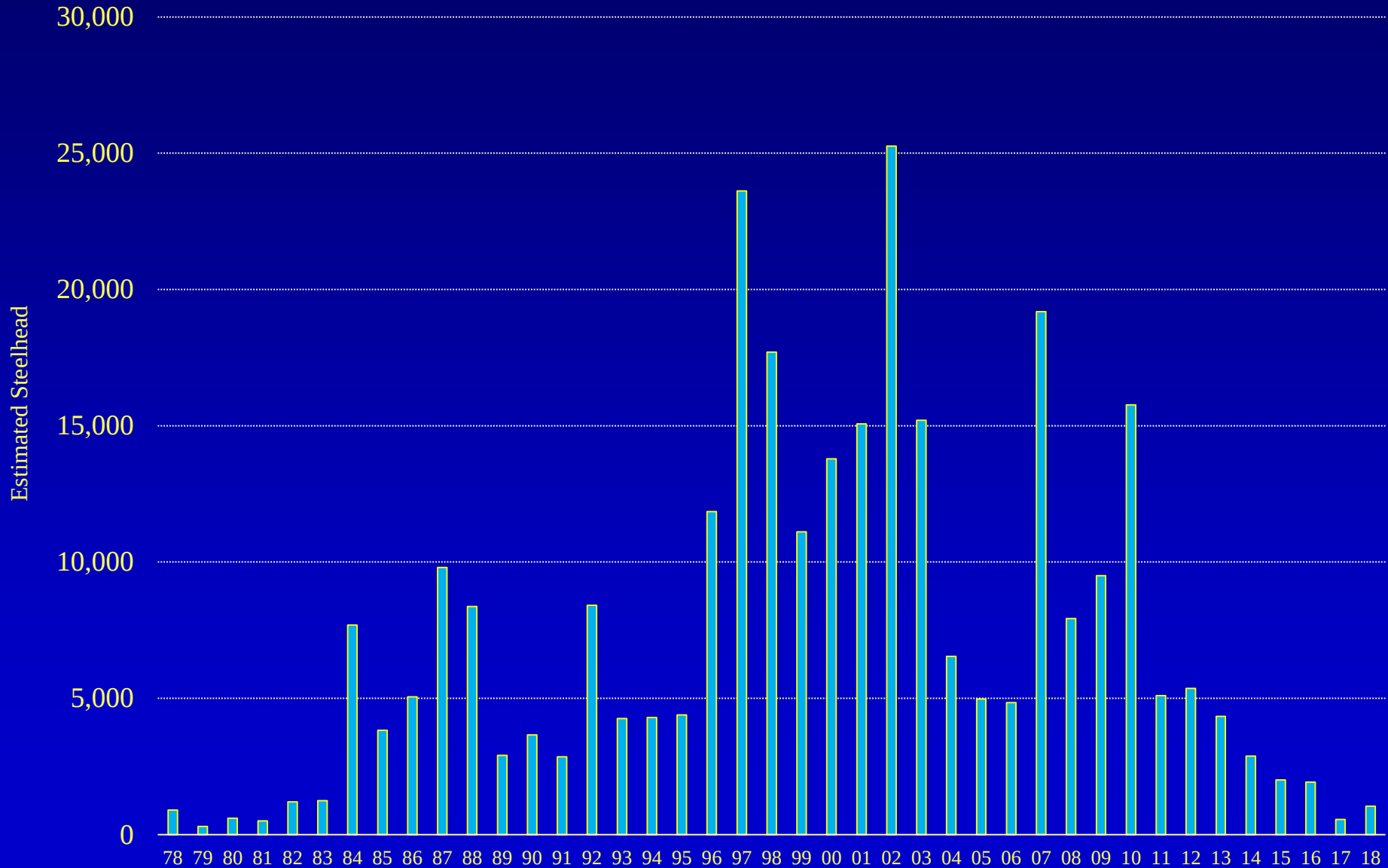
- Sherars Trap
- Mark-Recapture
- Pelton Trap
- Trap Counts
- WSNFH
- Carcass



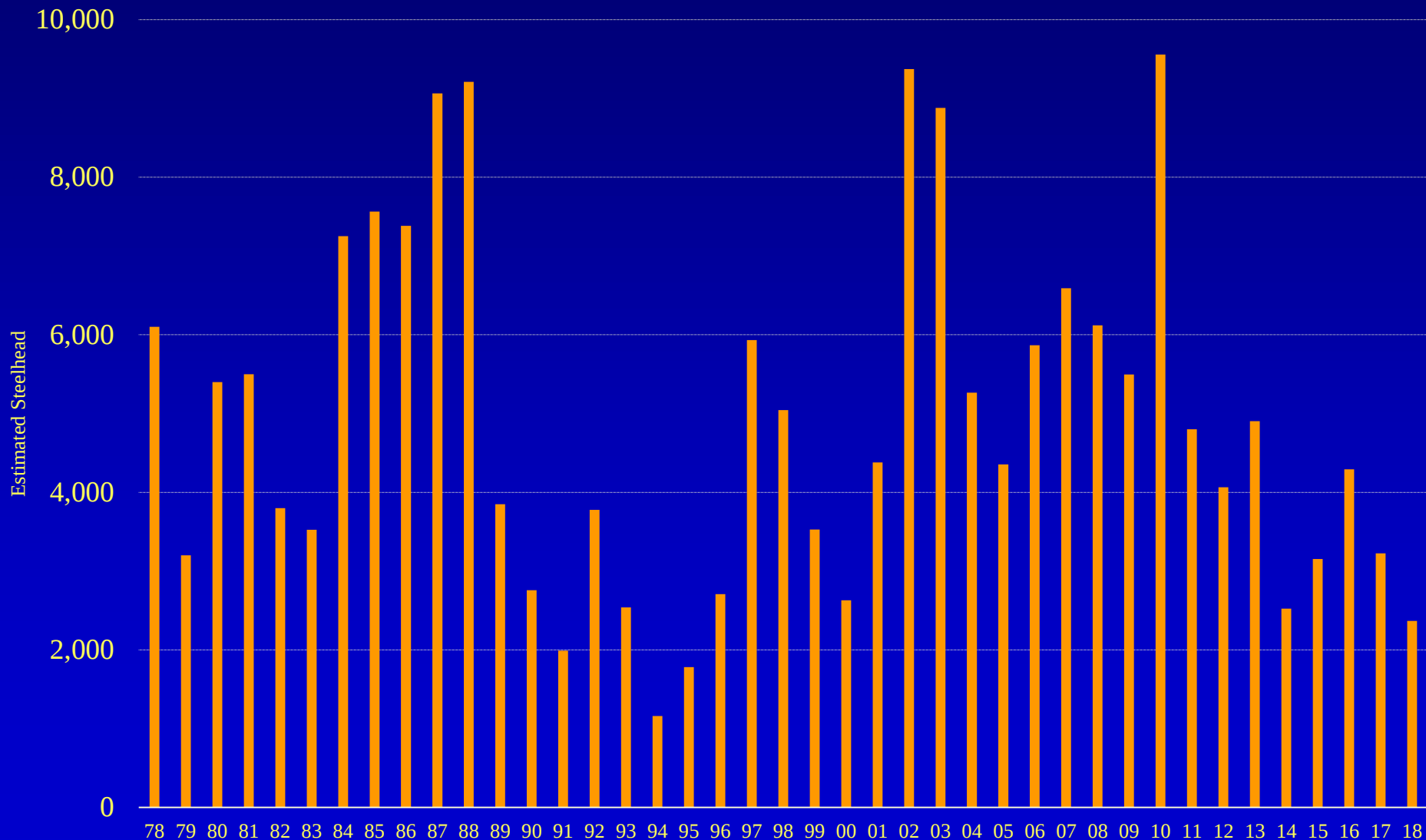
WILD STEELHEAD ESCAPEMENT ABOVE SHERARS



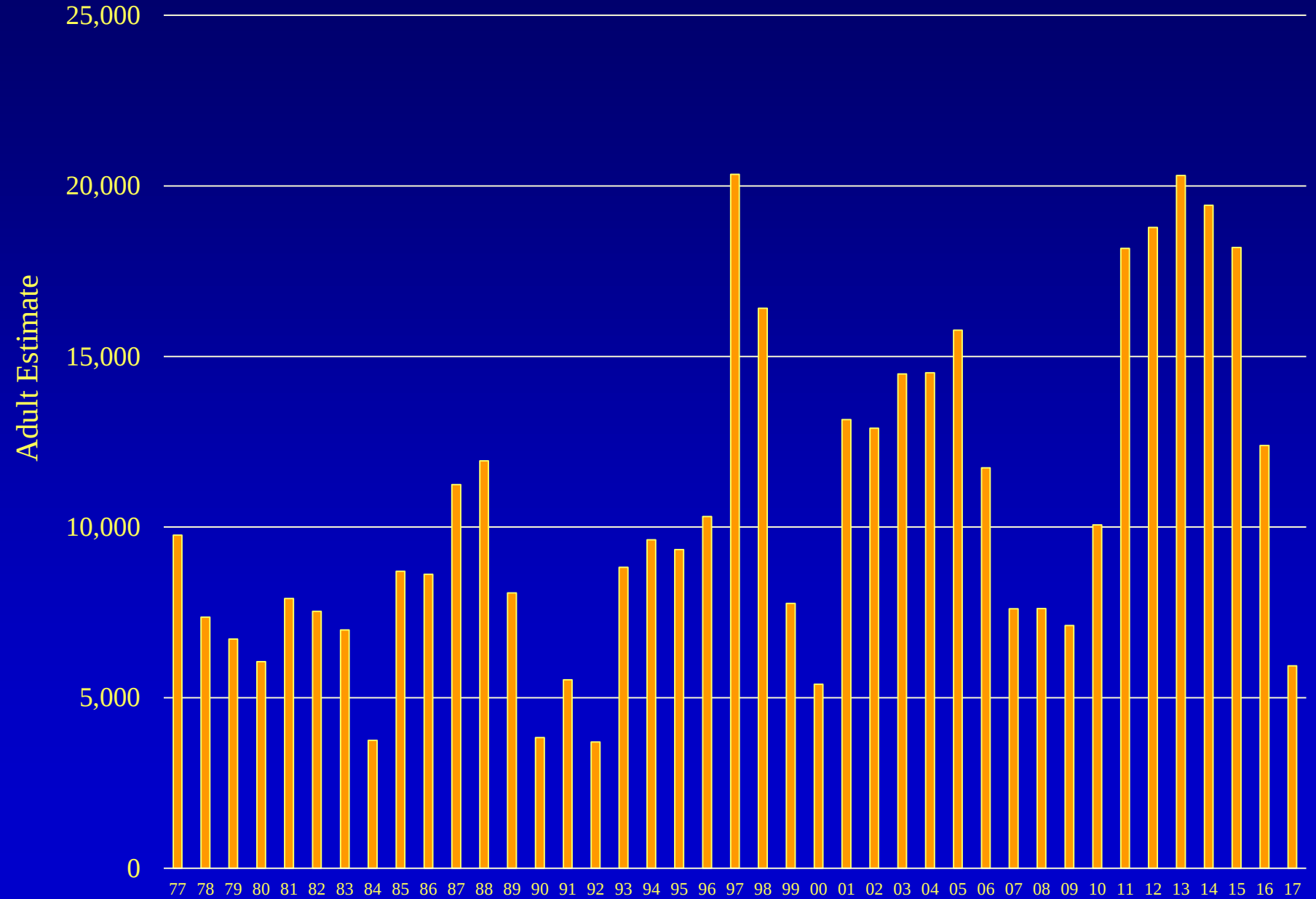
STRAY HATCHERY STS ESCAPEMENT ABOVE SHERARS



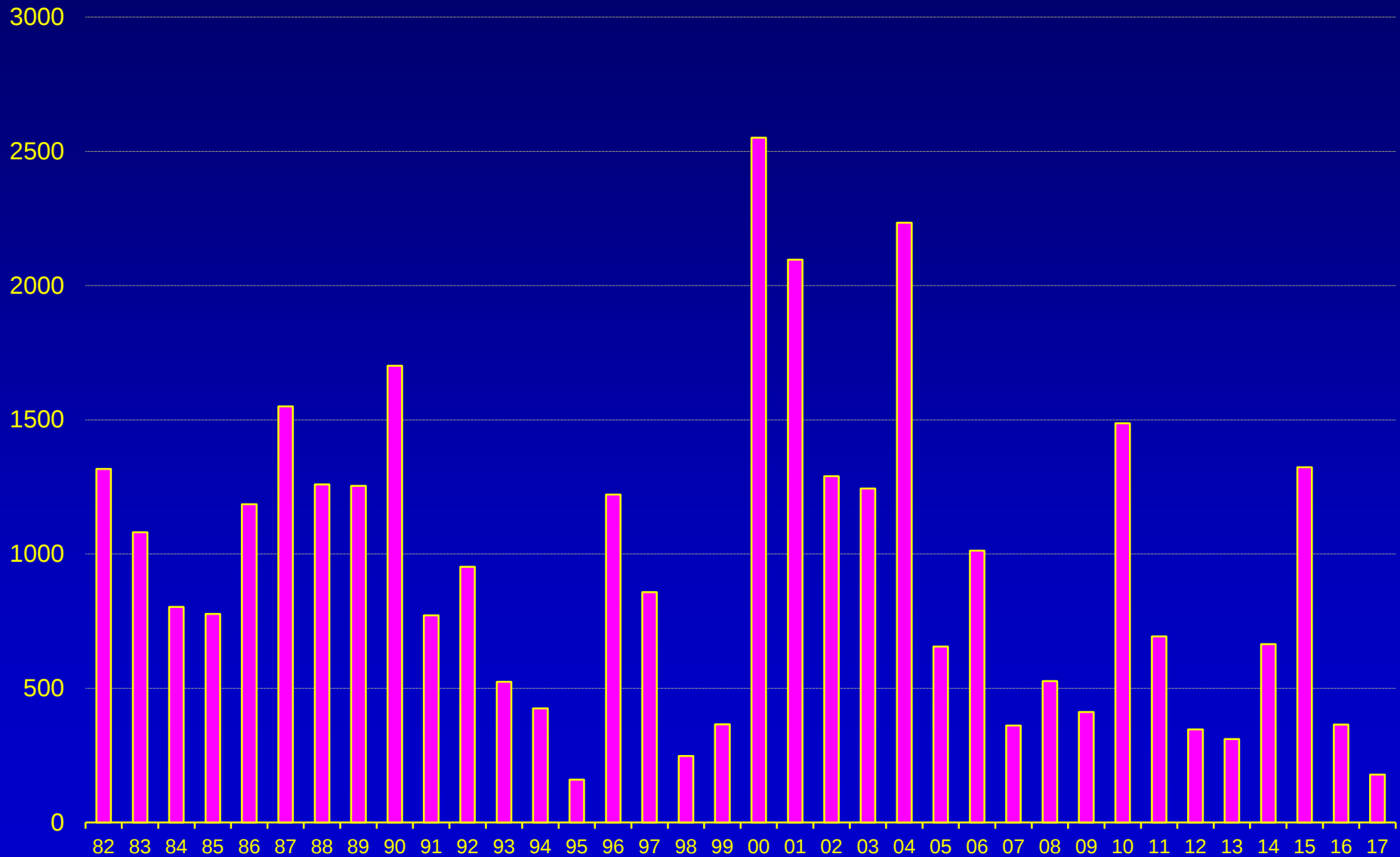
Round Butte Steelhead Above Sherars Falls



Wild Fall Chinook

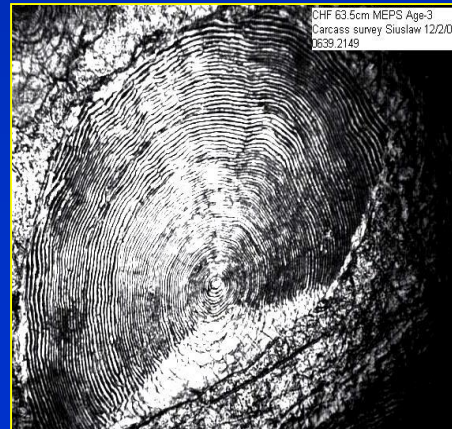


Wild Spring Chinook at WSNFH



Deschutes Trout Monitoring

- Growth
- Age structure
- Food consumption
- Condition
- Disease



BLACKSPOT

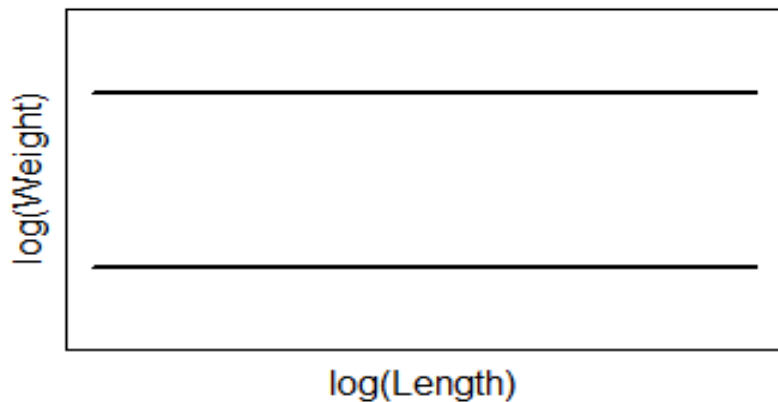
- Noted Presence or Absence of BS in 2018
- Fulton-type condition factors (K) were calculated for both populations (Froese 2006):
- $K = (W/L^3) \times 100,000$.
- Where,

K is the condition factor

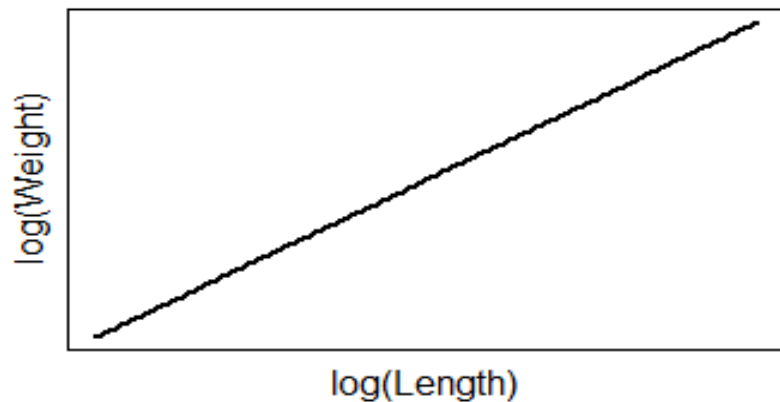
W is the weight of fish in grams

L is the fork length of fish in mm

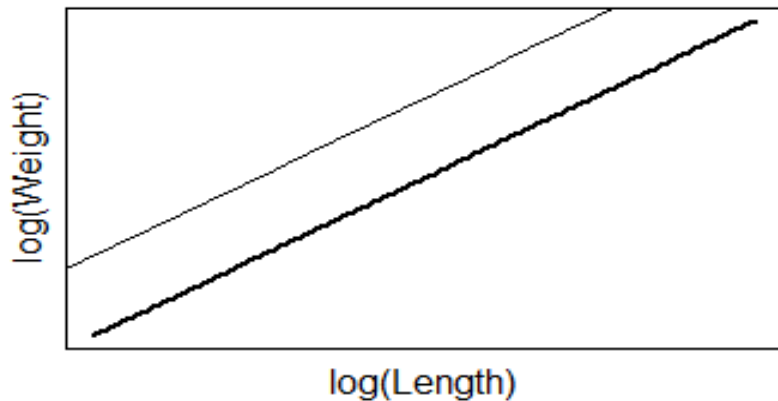
Hypothesis



M1. Intercept Model



M2. No Effect

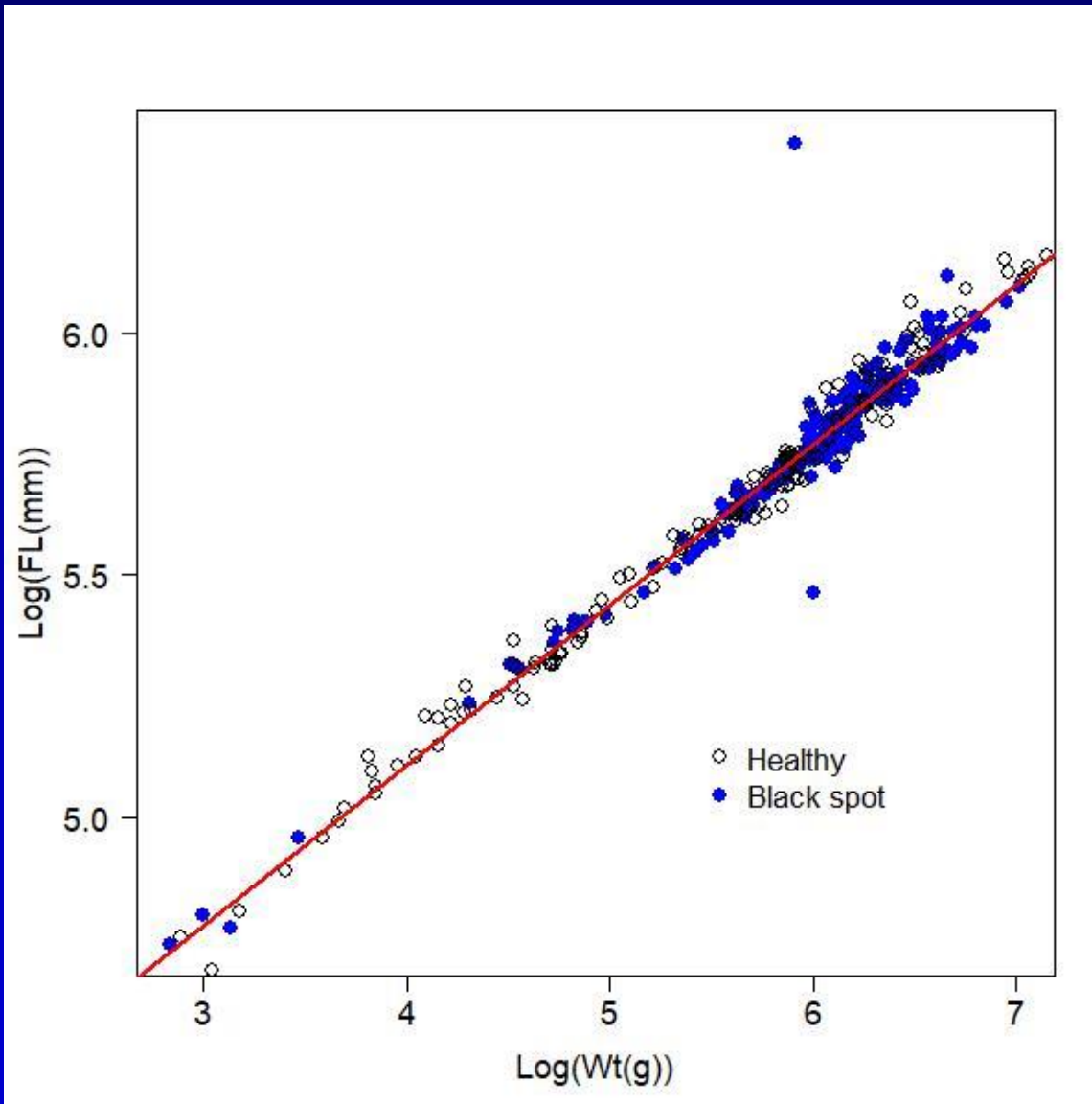


M3. Pathway 1

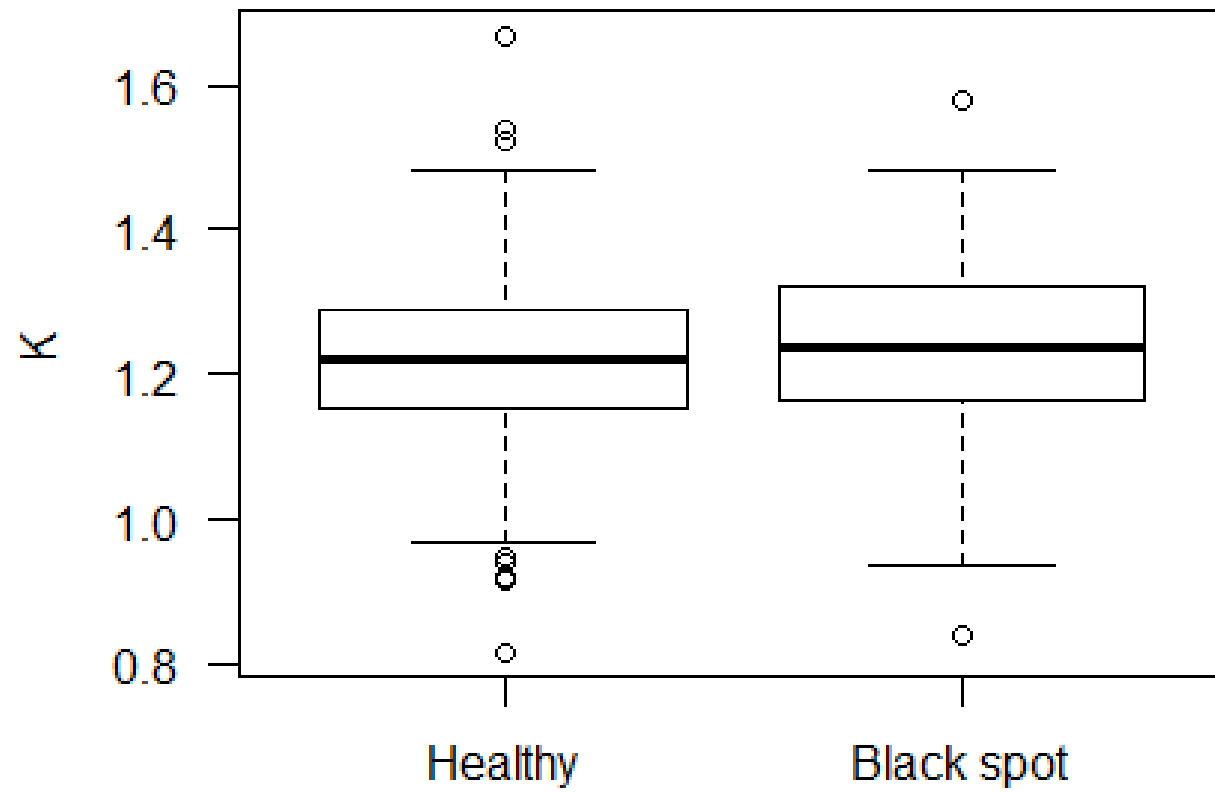


M4. Pathway 2

No Effect



(K) DISTRIBUTION



Deschutes Trout Creel 2016-2018



Deschutes Trout Creel

- Design: Standard access-access based
- Creel period: April – June.
- Area sampled: Maupin Access Rd.
upstream to Mecca Flat.
- Parameters: Effort, Catch, Boat, Bank,
Guided, Non-guided, gear type.

Results

	Effort	Rb Kept	Rb Released	Combined Catch Rate
2016	85,553	28	56,884	0.78
2017	55,280	82	22,899	0.43
2018	-	-	-	0.87

Catch Rate Comparison (0.69)

- Lower Deschutes - (1989-2015) = 0.55
- South Junction (1978-79) = 0.69
- Locked Gate (1978-79) = 0.89

Catch Rate Comparison (0.69)

- Madison – (2016) 0.25, (1981) 0.63
- Crooked – (2013) 1.07
- Kootenai – (2015) 0.37
- Boise – (2008) 0.6
- Crane Prairie Res- (2015) 0.21
- Diamond Lake – (2014) 0.31

Smallmouth bass



Bass Background

- Before 2010- Bass Regularly Reported
- 2010-2017 Snorkel and electrofishing surveys
- 2010-2015 surveys captured no bass.

Bass Background

- Anglers report increasing smallmouth catch in 2016 and 2017.
- Electrofishing Surveys confirmed increase
- 2017 Capture and PIT Tagged 295 Bass

Distribution

- Ferry Canyon (RM 26) to Mouth
- Concentrated from Harris Canyon (RM 12) to Mouth

PIT TAGGING

- N=295 from July to September
- N= 24 Detected at the DRM
- N= 14 Detected at John Day Dam

FINDINGS

- Leaving the Deschutes in Late August and September
- Dispersing in the Columbia
- Re-entering the Deschutes April-June
- No evidence of Natural Reproduction

Questions

