TEANAWAY RIVER LONG-TERM FLOW RESTORATION:
A PERMANENT STRATEGY

June 18, 2014

Yakima Basin S&M Conf.

WASHINGTON WATER TRUST

Working to restore our state's rivers and streams.

Summary

- Background
- Limiting Factors
- Past/Present Trust Water
- Habitat and Hydrology
- Permanent Restoration
- Beyond Trust Water


Friends of the Teanaway

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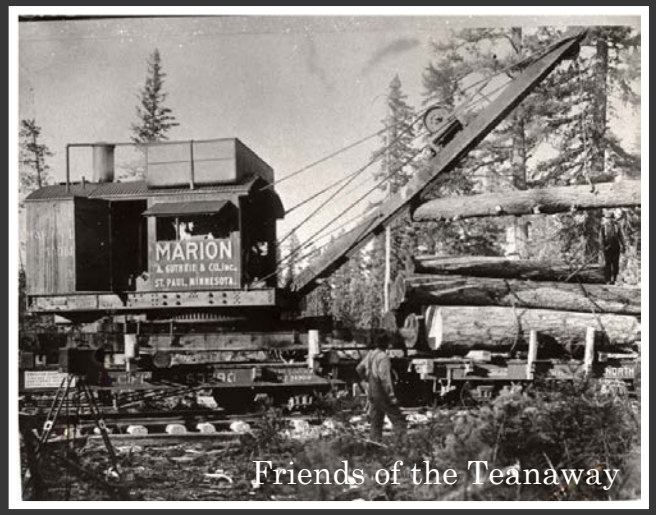
Mission of Washington Water Trust

We are a neutral, non-regulatory nonprofit, dedicated to improving and protecting stream flows and water quality throughout Washington state. We use voluntary, market-based transactions and cooperative partnerships to create balanced solutions so fish, agriculture, business and wildlife—upon which we all depend—can thrive.


Friends of the Teanaway



Friends of the Teanaway

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Washington Water Trust has been developing instream flow projects in the Teanaway Basin since 2000. In many ways, the Teanaway has been a model for the Columbia Basin Water Transactions Program. What began out of opportunity during drought years has become an enduring icon of instream flow restoration.

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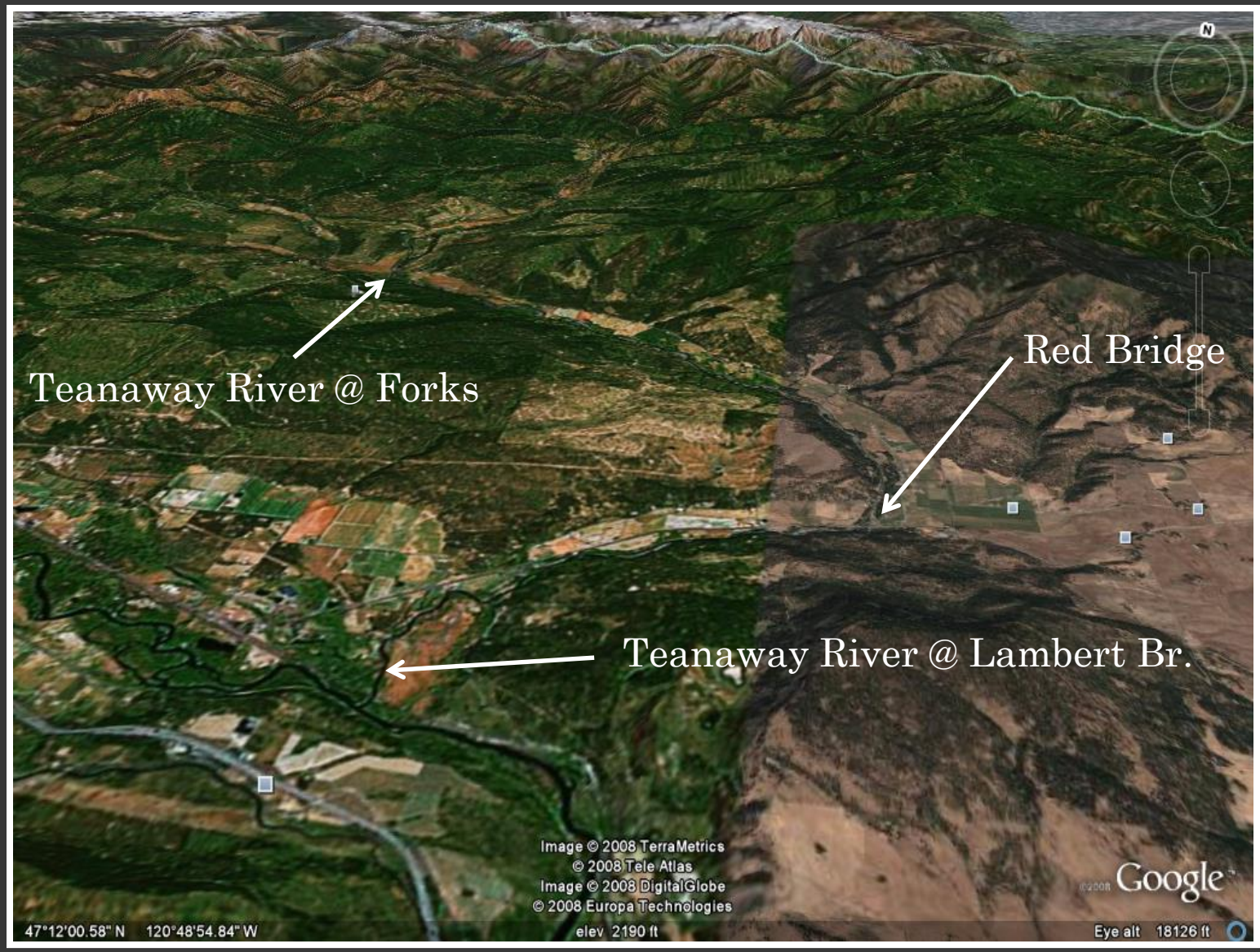

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Limiting Factors

- Instream Flows
- Passage
- Temperature
- Instream Habitat

Masterson Diversion – Full Passage Blockage and low (no) flows – 1990's

3M Diversion – Full Passage Blockage and low flows - 2008

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Past/Present Trust Water

- Committed resources since 2000
- Invested $2 m in leasing and purchases
- Worked with over 21 landowners
- Acquired 5.9 cfs
- Leasing 5.8 cfs
- May 1 to Sept. 15 period
- Goal: Continue to move from short and long-term leasing to permanent.

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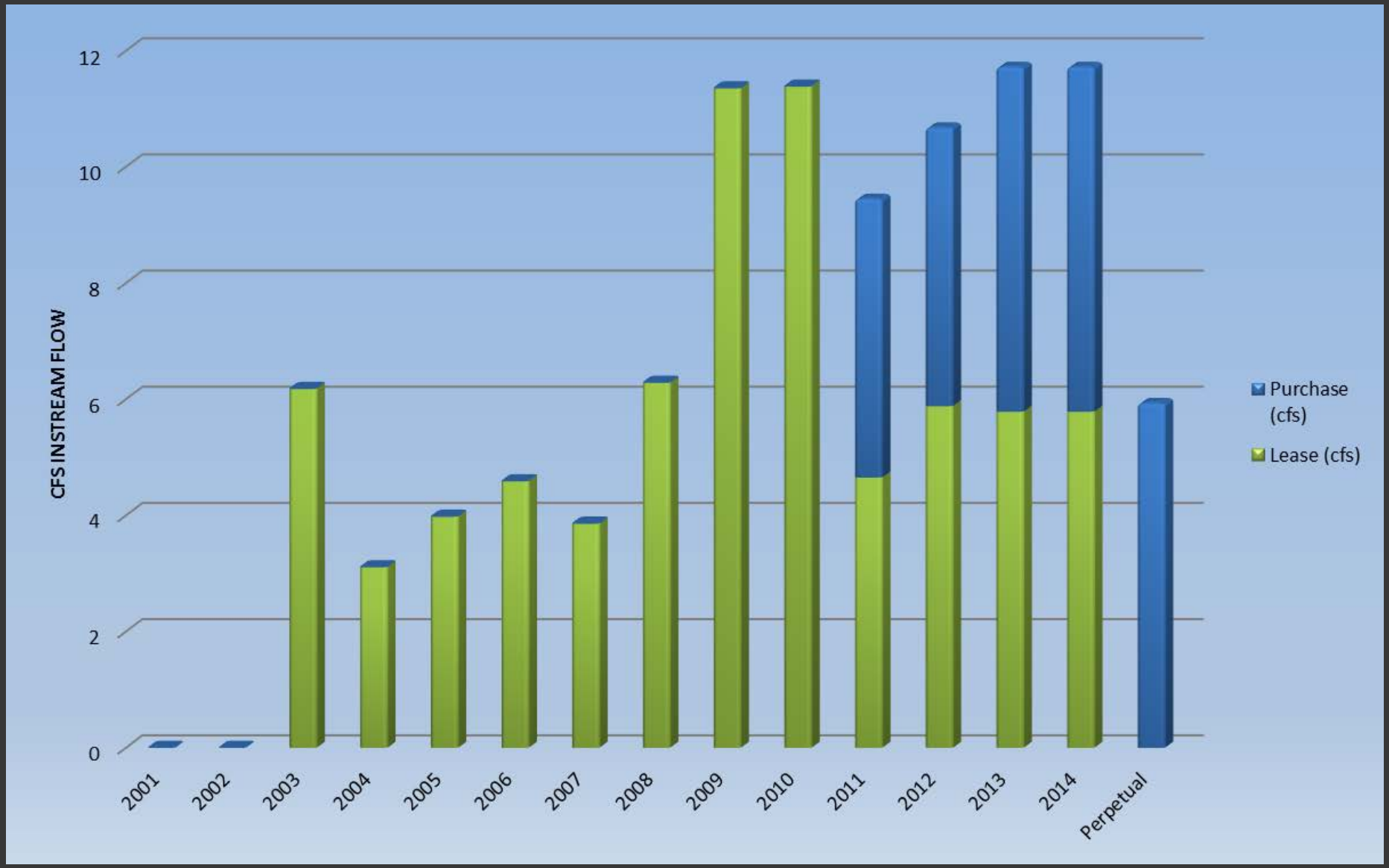
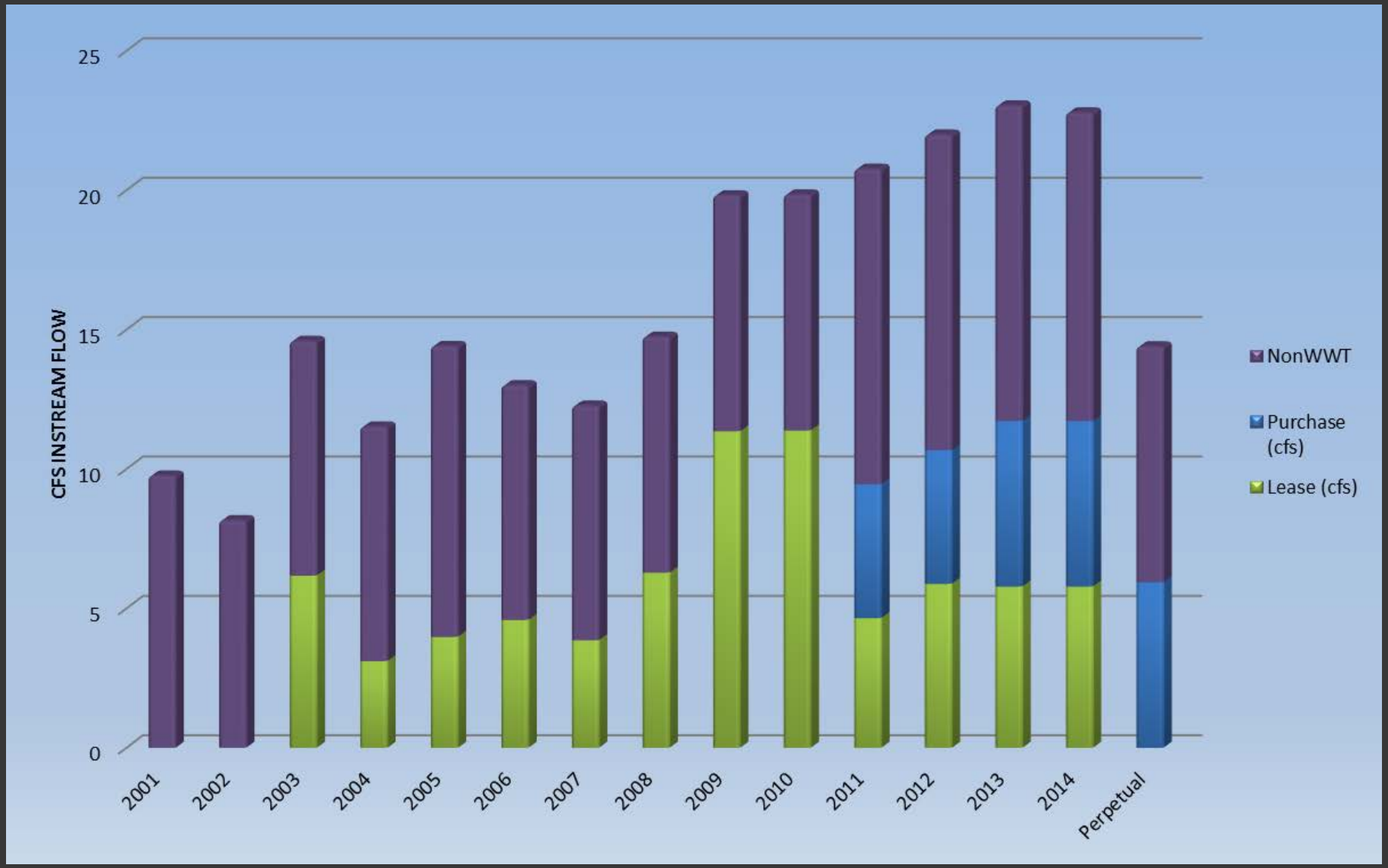
Past/Present Trust Water - WWT



Past/Present Trust Water – All



Habitat and Hydrology

- Monitoring Partnerships
- Funded by BPA/CBWTP and Ecology
- Credit to WDFW Water Team

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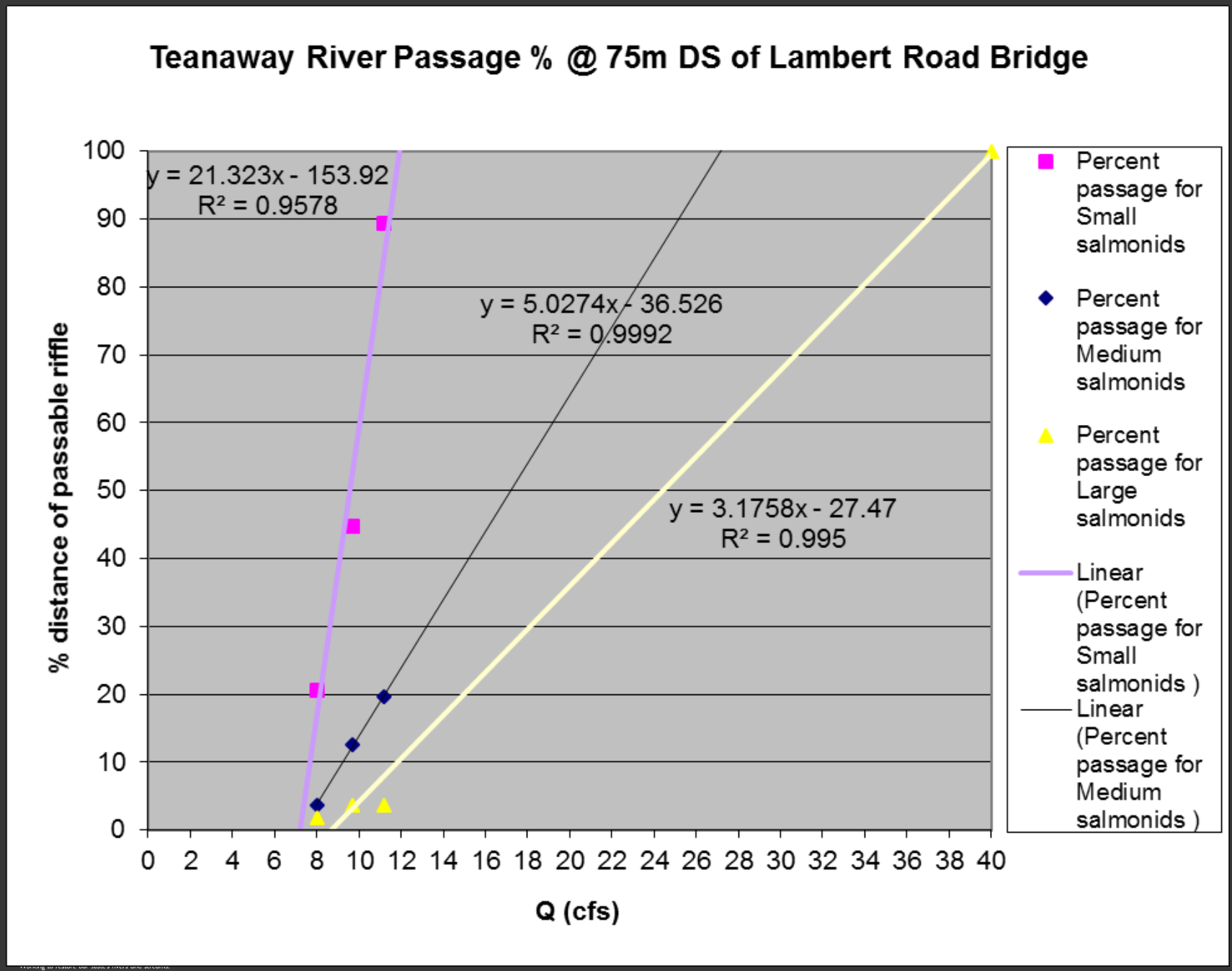
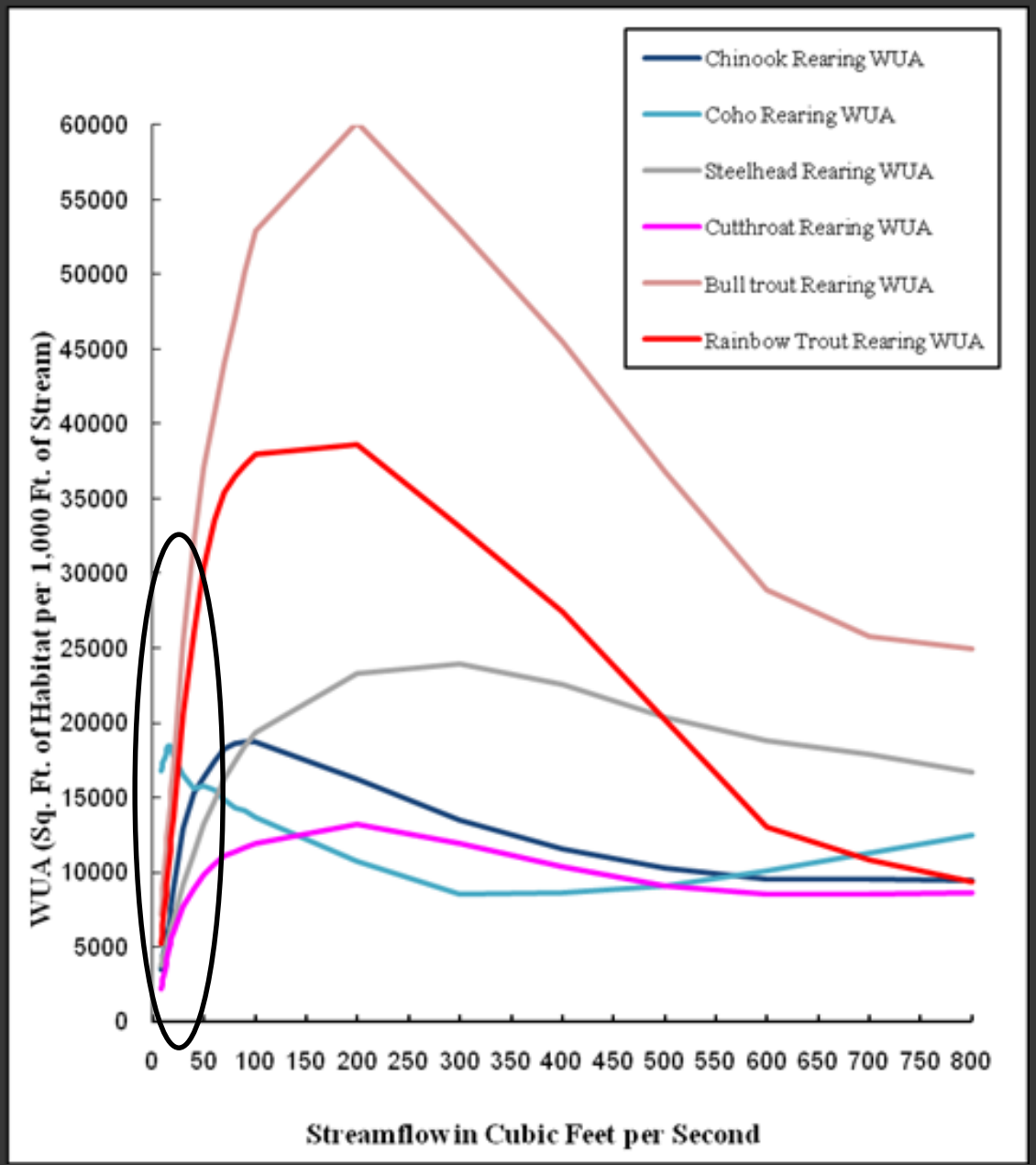

Teanaway River Passage % @ 75m DS of Lambert Road Bridge
y = 21.323x - 153.92
R² = 0.9578
y = 5.0274x - 36.526
R² = 0.9992
y = 3.1758x - 27.47
R² = 0.995
% distance of passable riffle
Q (cfs)
0
10
20
30
40
50
60
70
80
90
100
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40
Percent passage for Small salmonids
Percent passage for Medium salmonids
Percent passage for Large salmonids
Linear (Percent passage for Small salmonids)
Linear (Percent passage for Medium salmonids)

Rearing Weighted Usable Area



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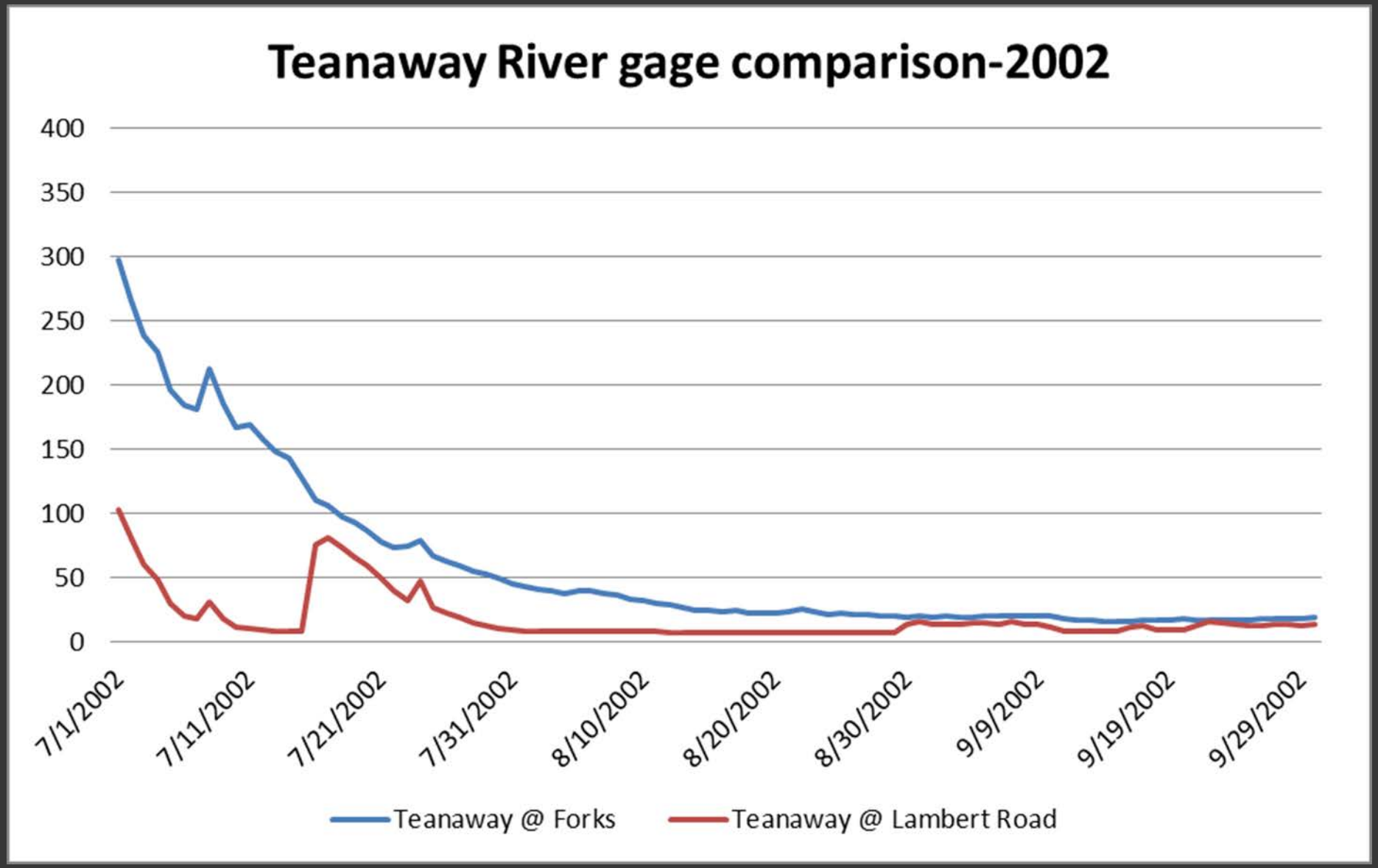
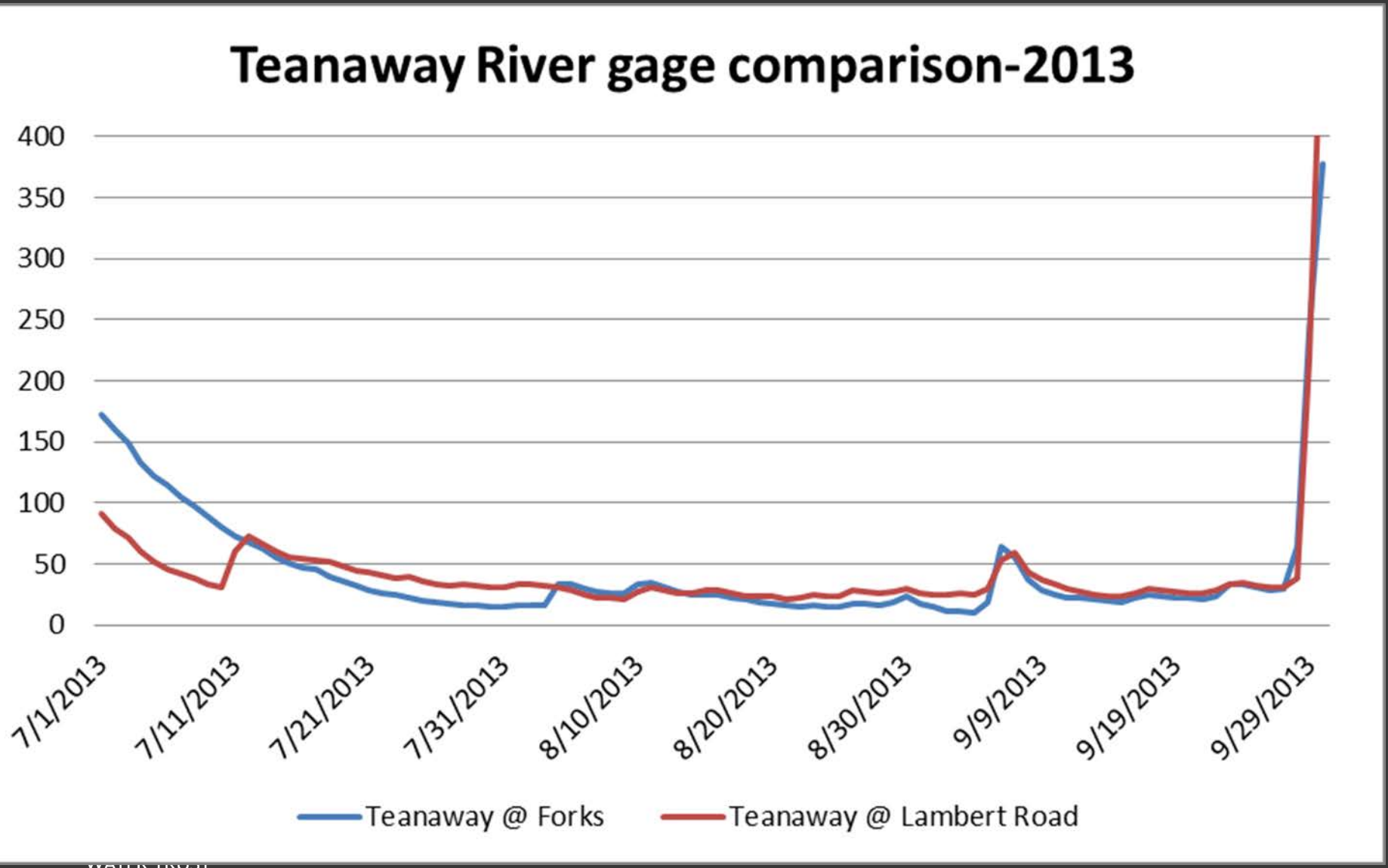
Teanaway 2002 – 0% gaining reach



Teanaway 2013 – 74% gaining reach



Permanent Restoration

- Restoration goal of 12-20 cfs
  - Specie and life stage dependent
- Permanently held instream flows
- Continued focus until goal is met
- Lasting legacy

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Beyond Trust Water

- Low flows beyond instream flow period
- Repairing floodplains, habitat, and hydrology
- YBIP Investment and TCF
- Indian Creek, test treatment
- Expansive restoration through the headwaters

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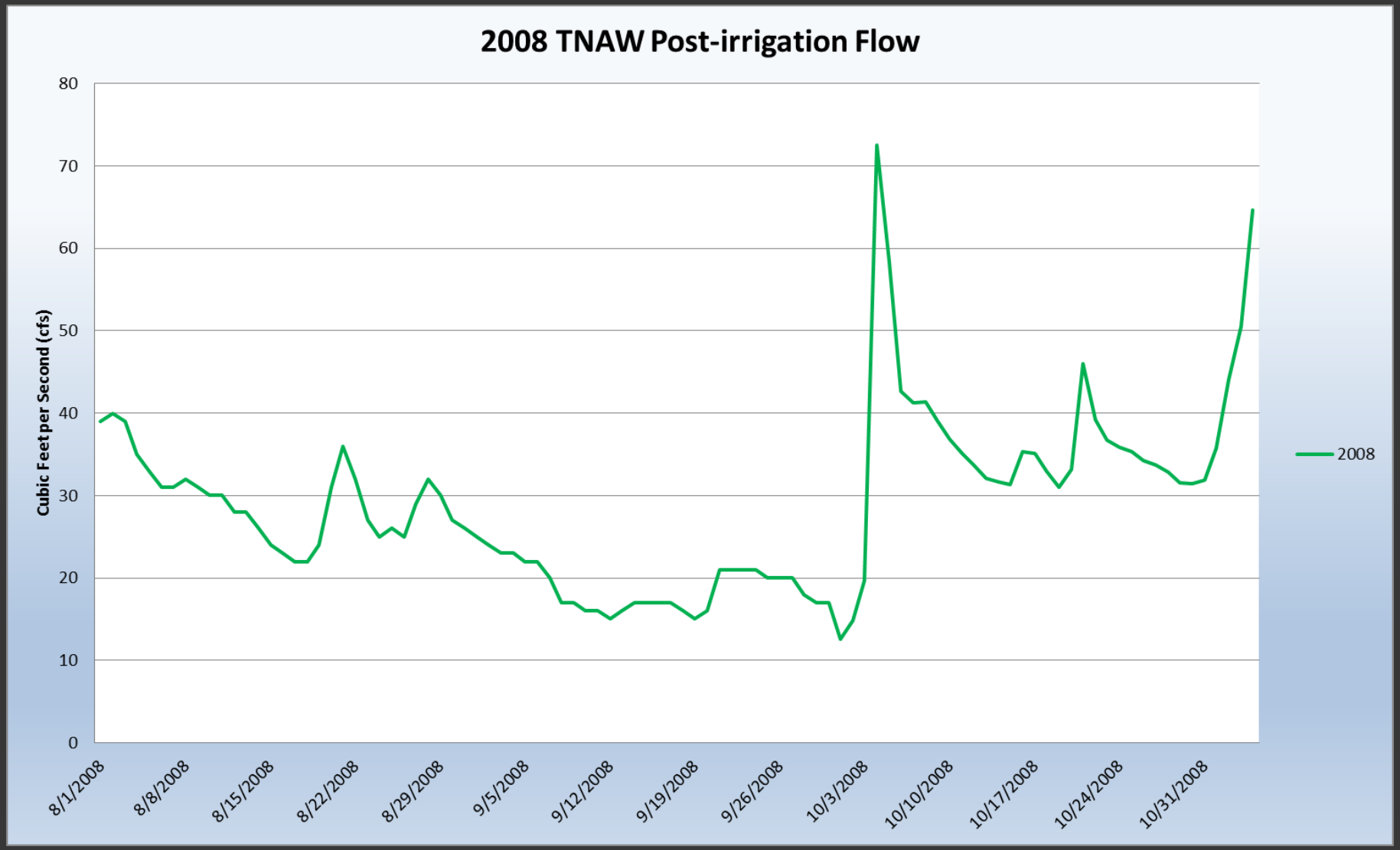

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