

Migration Survival of Yearling Chinook Salmon and Coho Salmon in Reaches of the Lower Yakima River

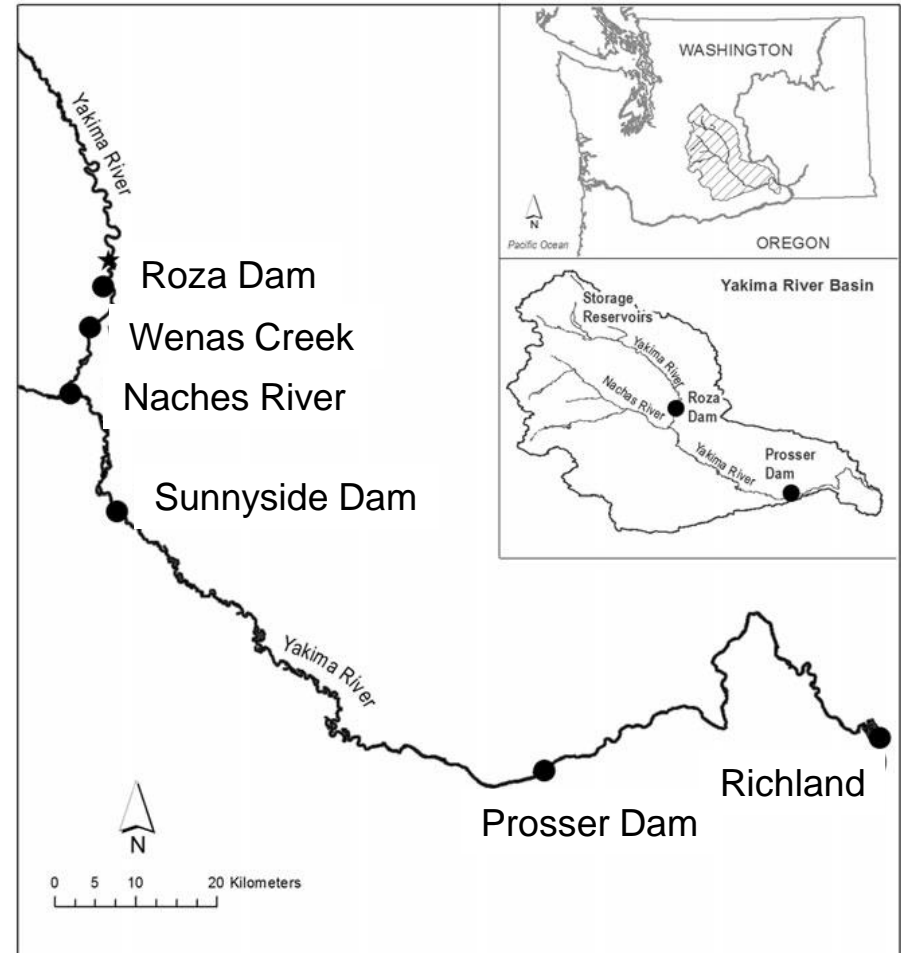


Tobias Kock, Russell Perry, and Ian Courter

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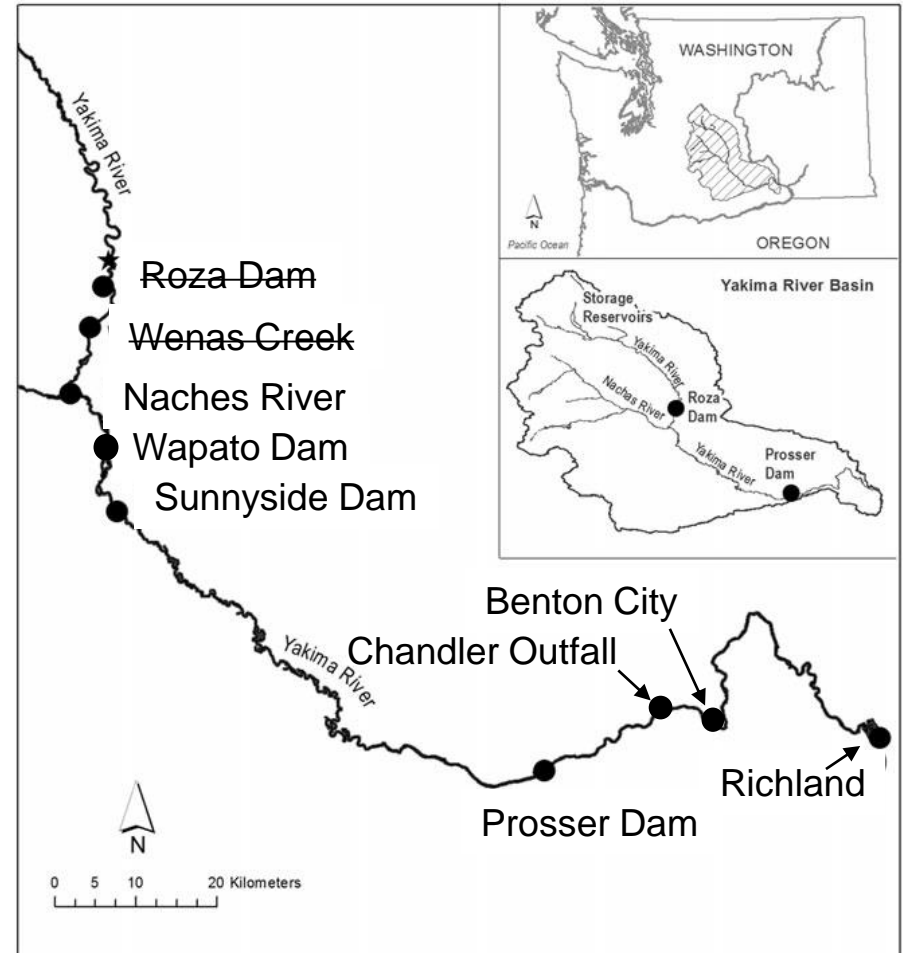
Overview of Past Research

- 2012-2014
 - Focus on Roza Reach and Roza Dam
 - 895 yearling Chinook salmon
 - Radiotelemetry

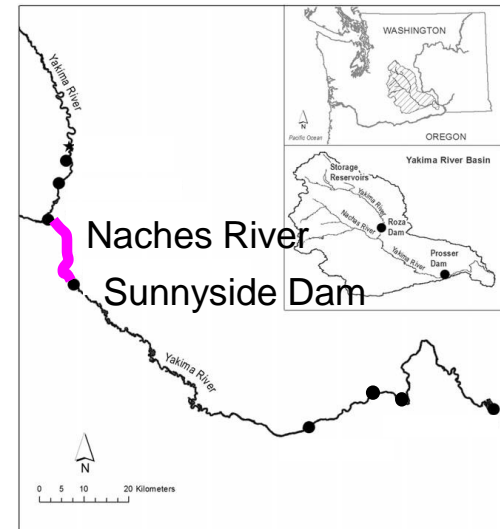
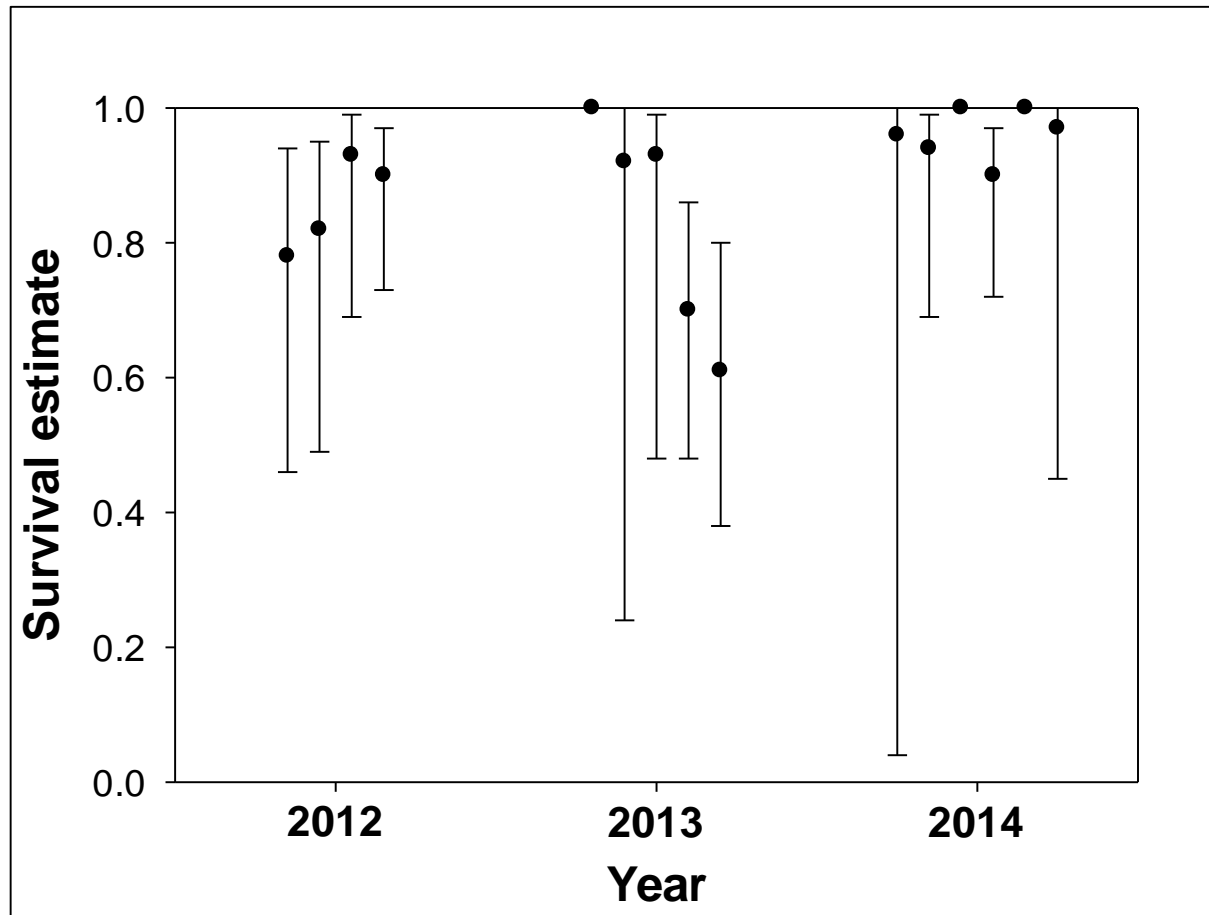


Overview of Past Research

- 2012-2014
 - Focus on Roza Reach and Roza Dam
 - 895 yearling Chinook salmon
 - Radiotelemetry
- 2016
 - Focus on Roza Dam fish bypass
 - 549 yearling Chinook salmon
 - 260 coho salmon
 - Acoustic telemetry

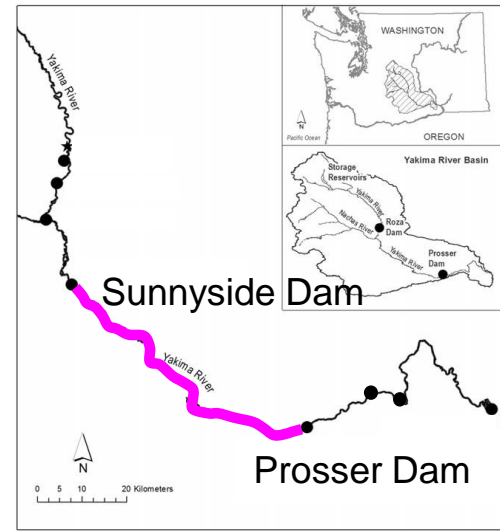
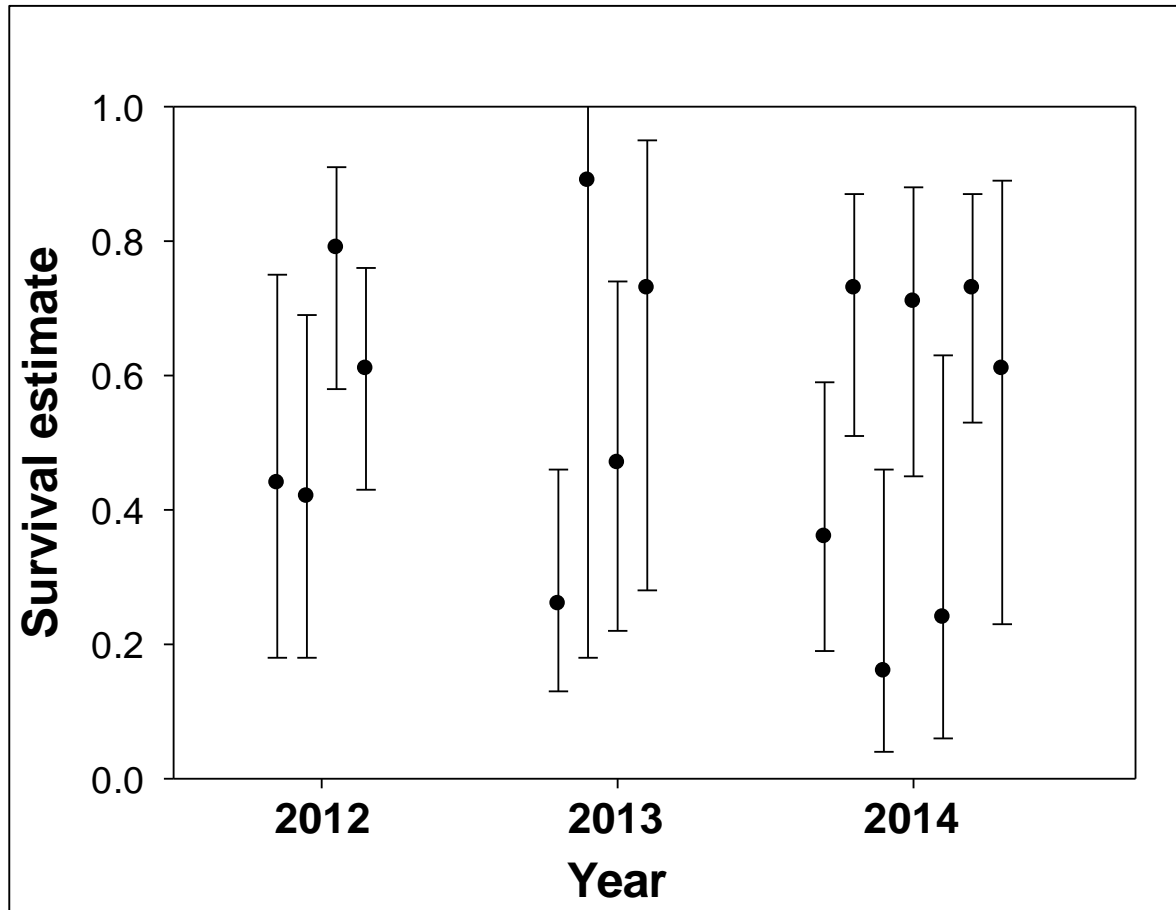


Naches Reach



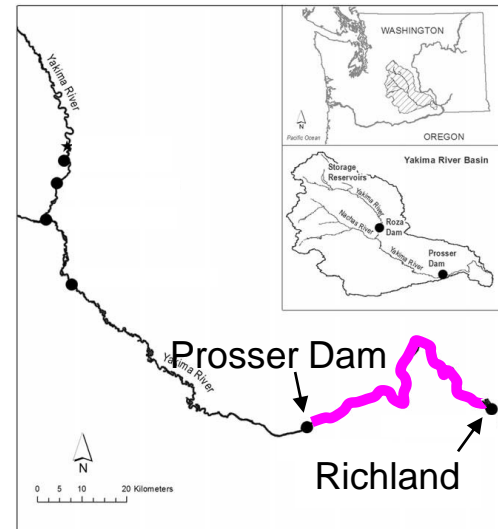
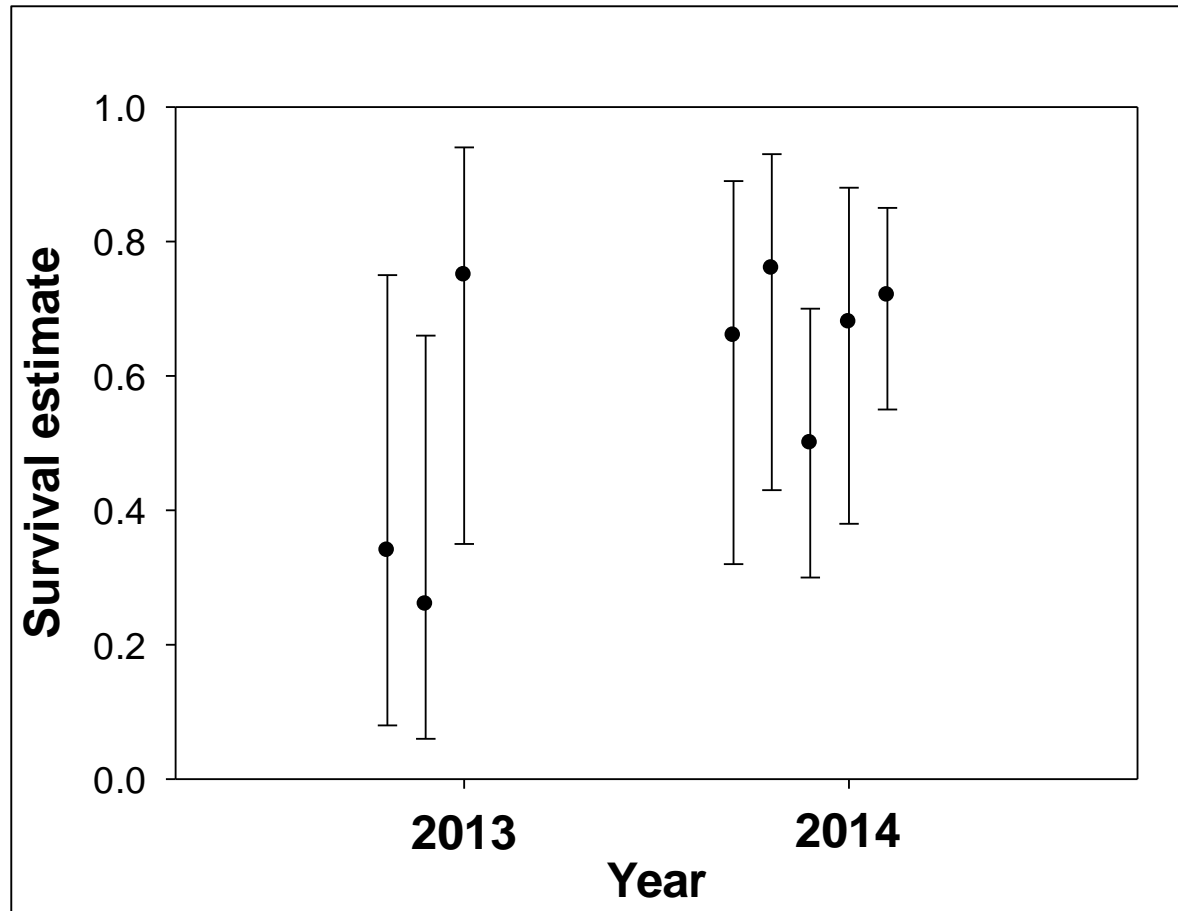
Average = 0.89
($n = 15$)

Sunnyside Reach



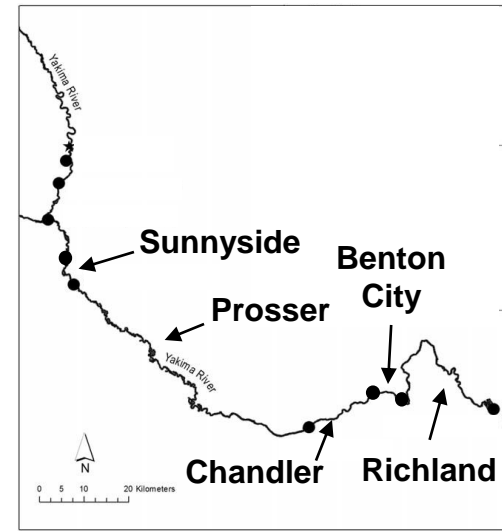
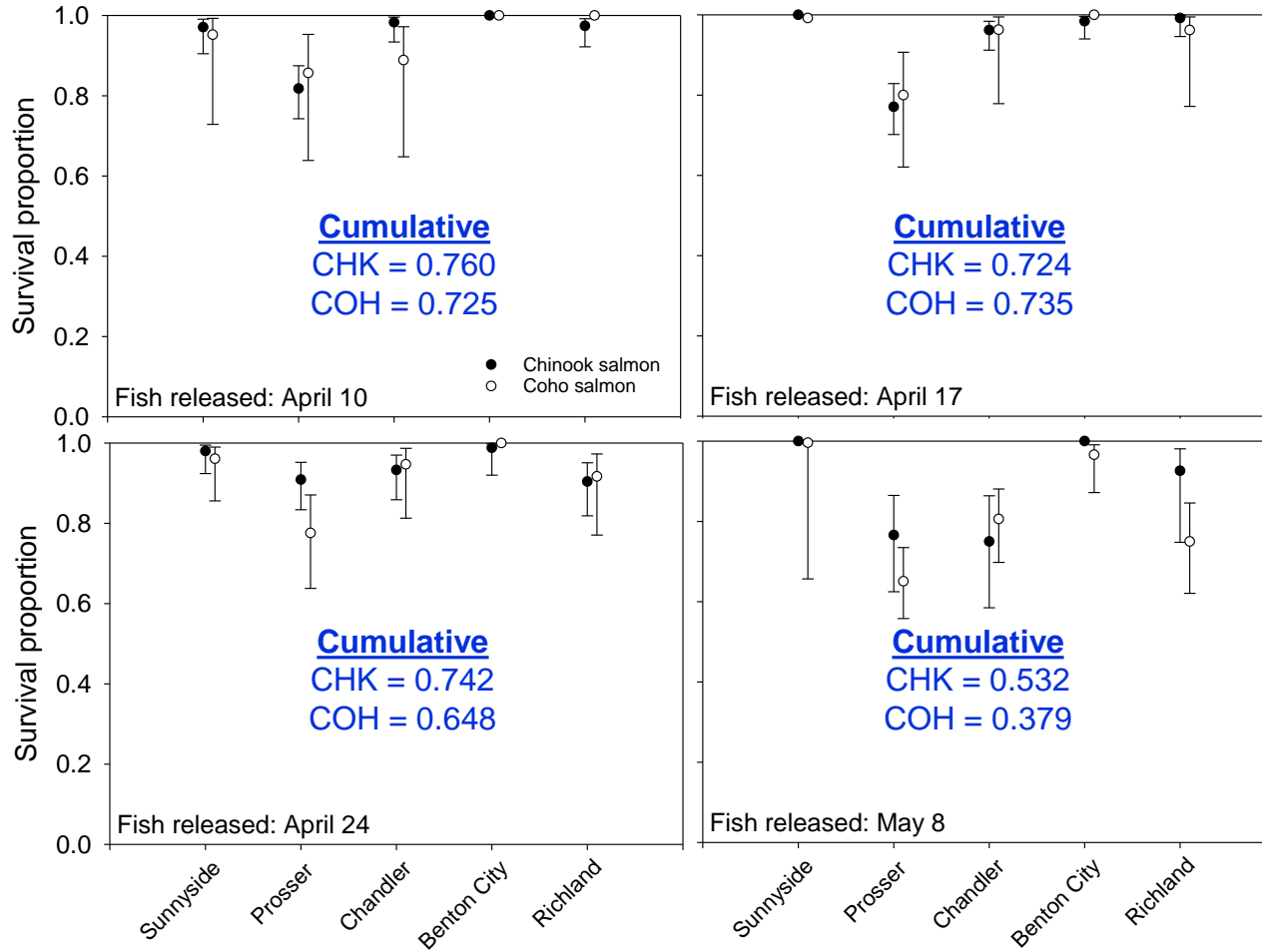
Average = 0.61
($n = 15$)

Prosser Reach

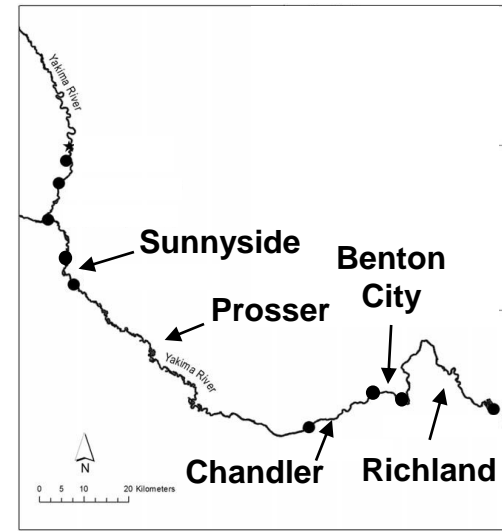
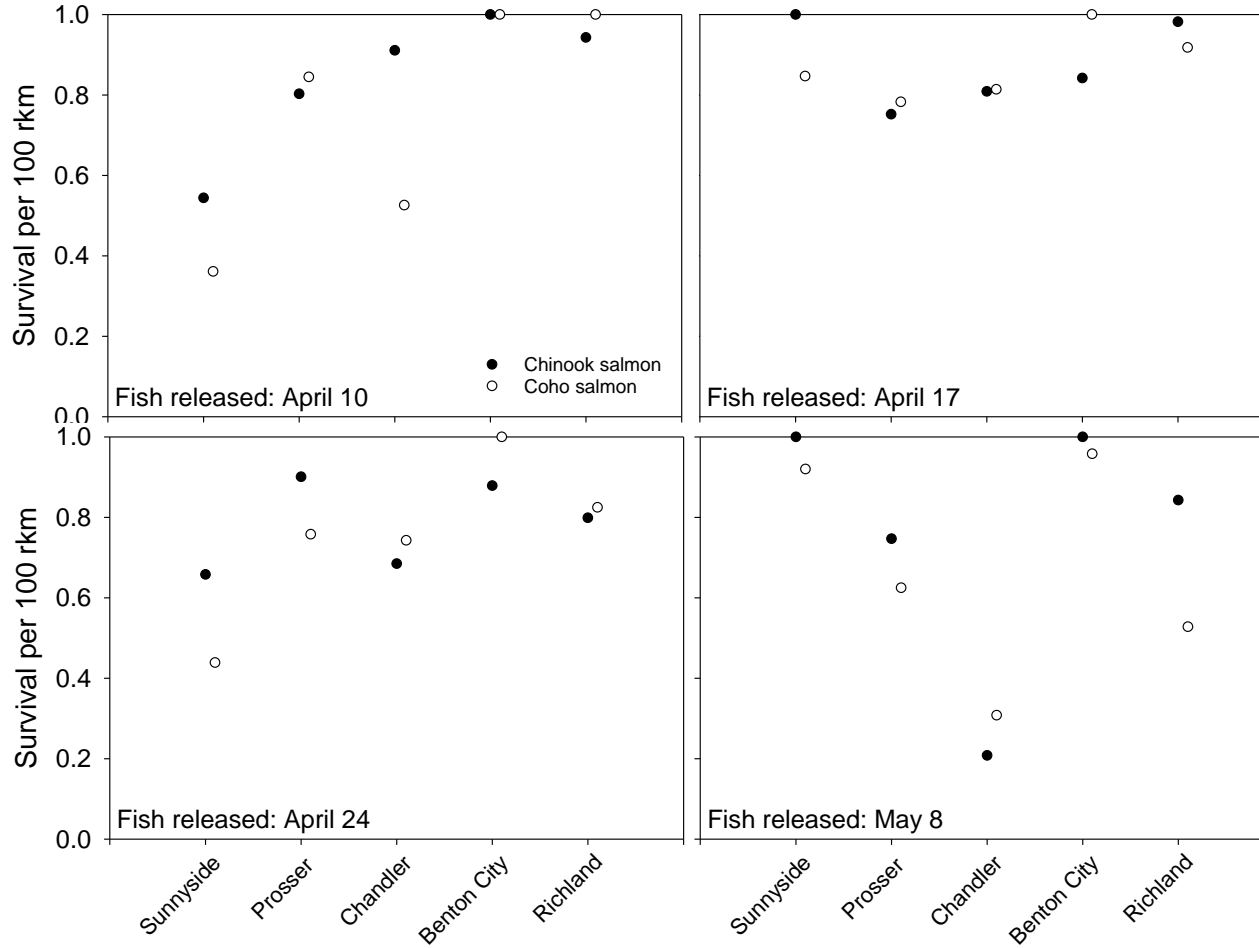


Average = 0.58
($n = 8$)

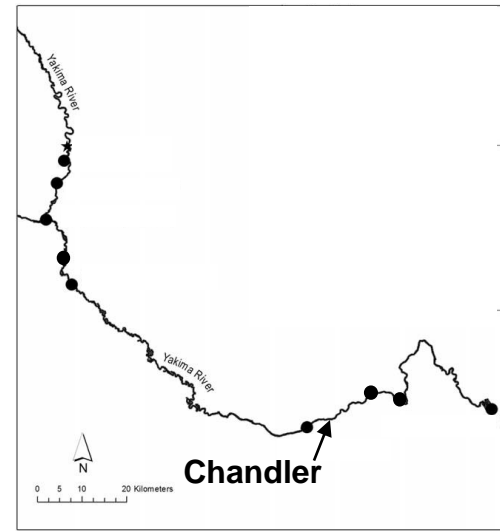
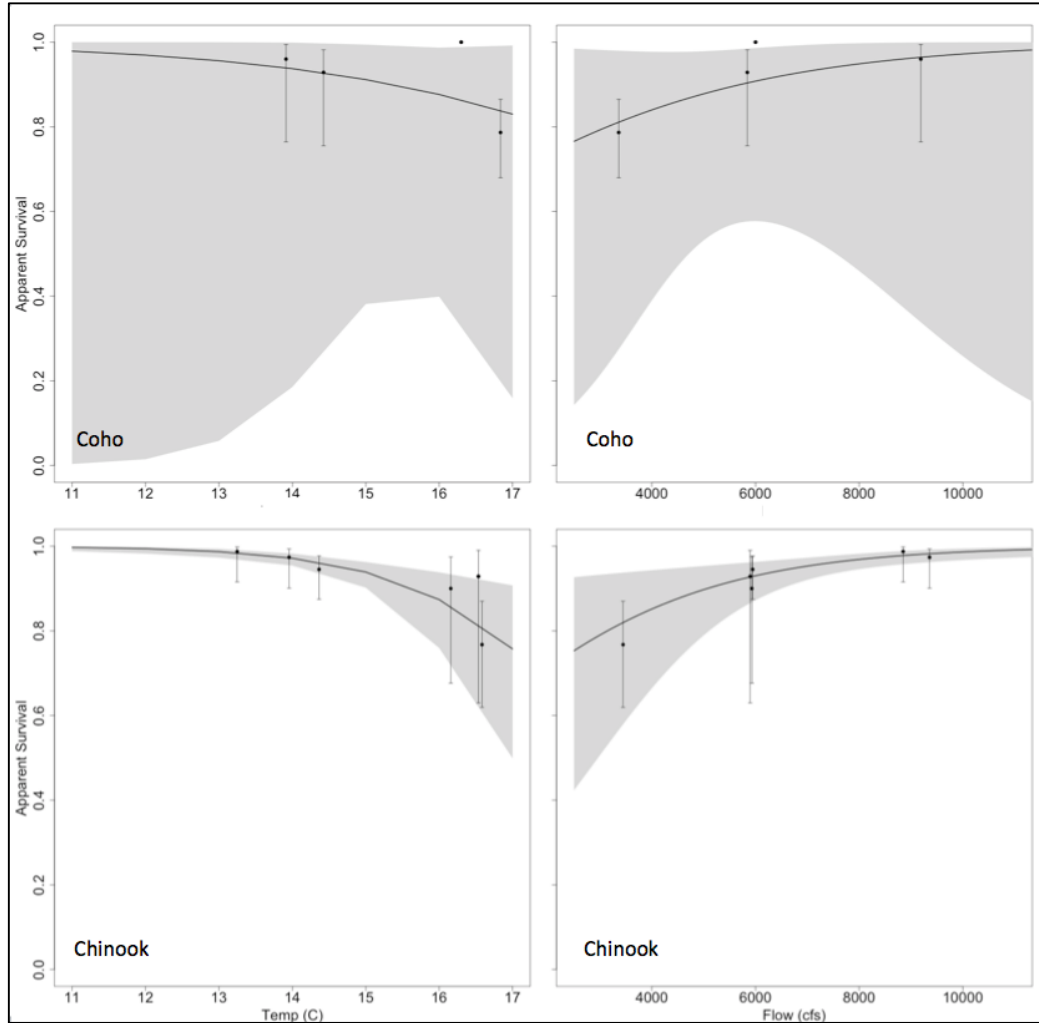
2016 Lower River Survival



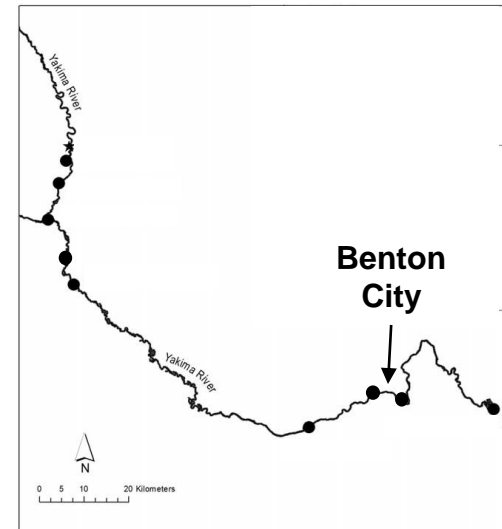
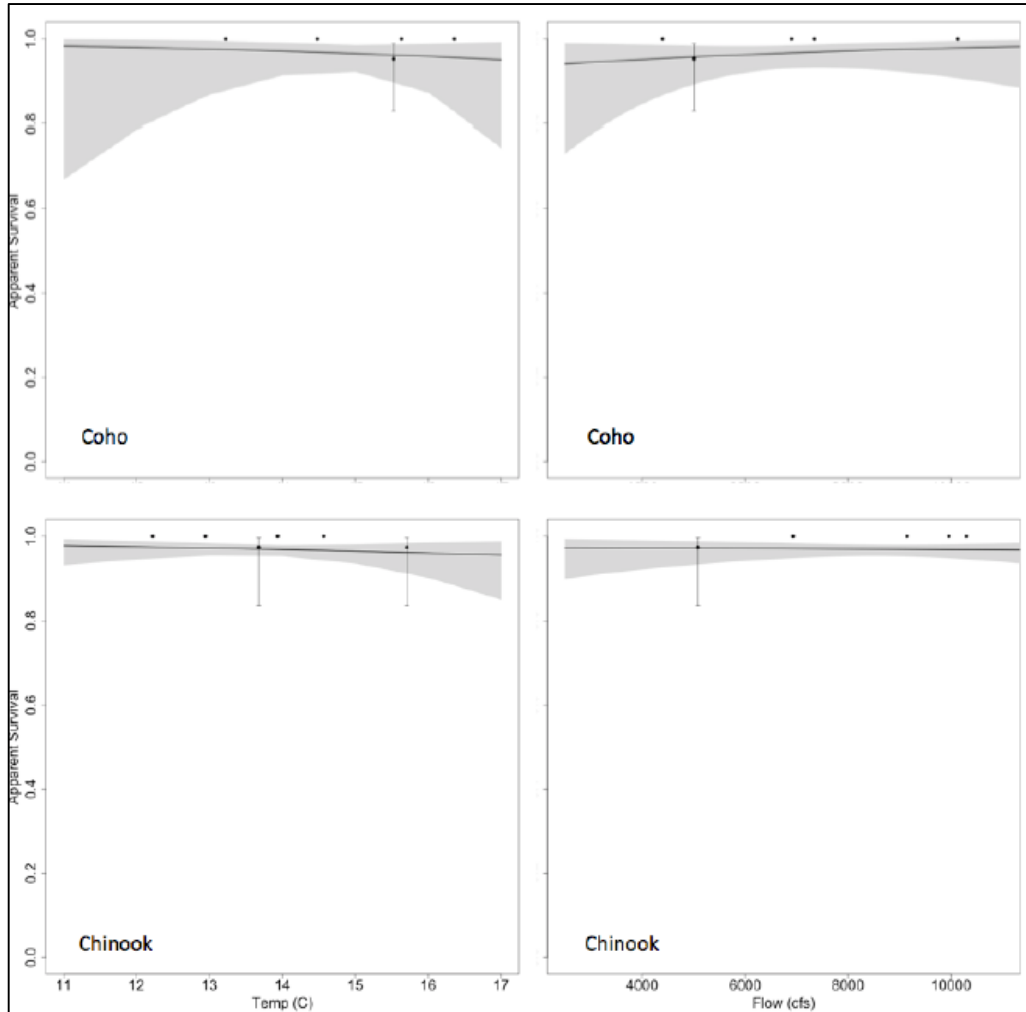
2016 Lower River Survival



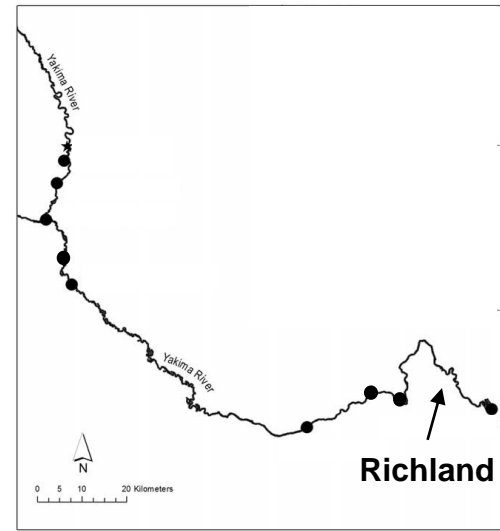
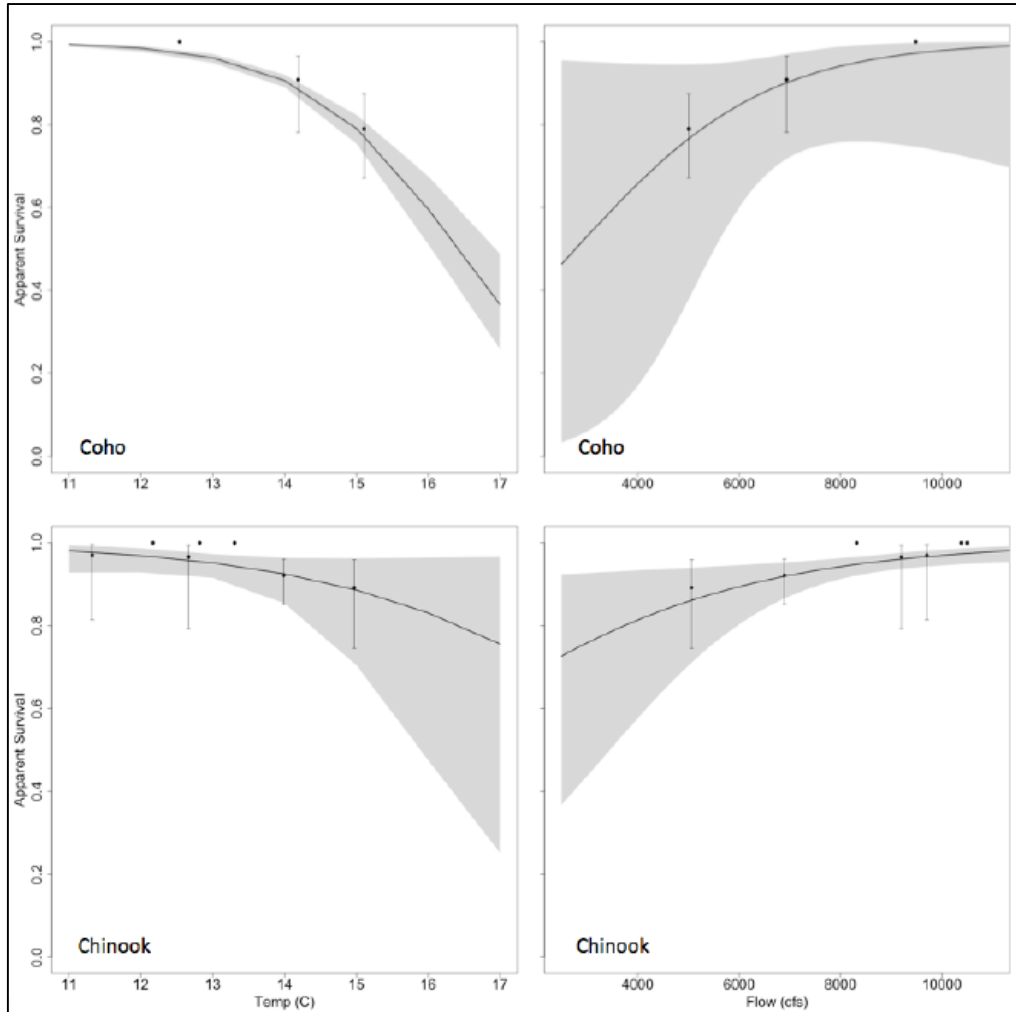
Temperature and Flow



Temperature and Flow



Temperature and Flow



Roza to Richland

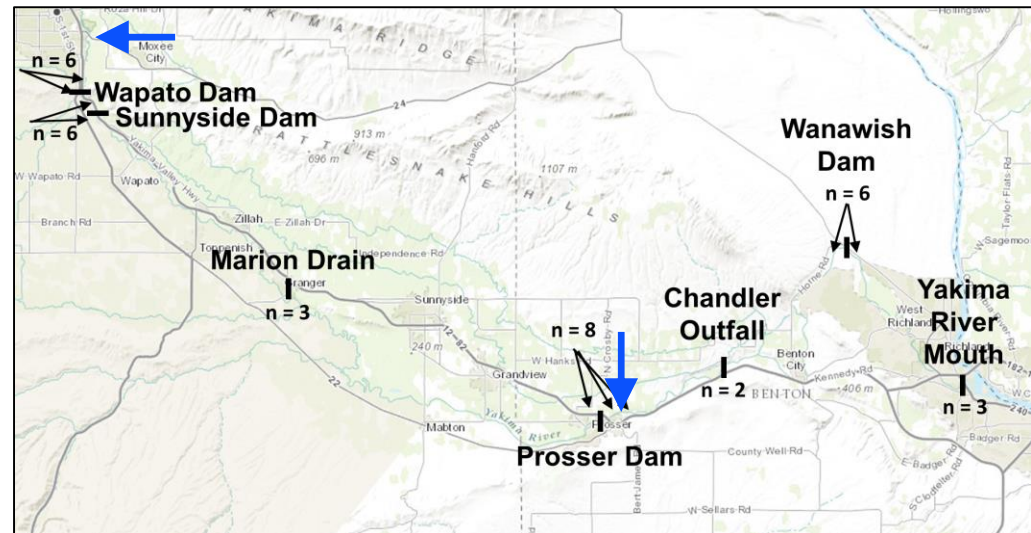
CHK: 0.549-0.678

COH: 0.551-0.627

2012-2014 CHK: 0.320

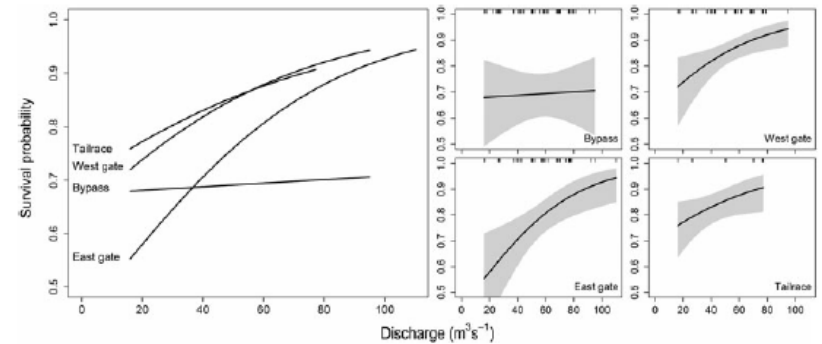
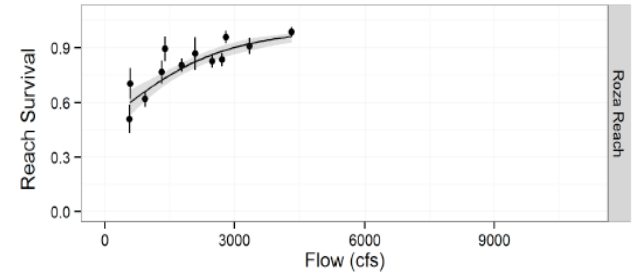
2018 and Beyond

- 2018 study planning underway
 - Yearling Chinook salmon
 - n = 350
 - late-March to mid-May
 - Subyearling Chinook salmon
 - n = 400
 - mid-May to late-June
 - Steelhead
 - n = 350
 - mid-April to late-May



2018 and Beyond

- Covariate effects on survival
 - Fish size
 - Water temperature
 - Discharge
 - Predator densities
 - Fish
 - Avian
 - Day of year
 - Turbidity
- Create a decision support tool



Acknowledgements



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