

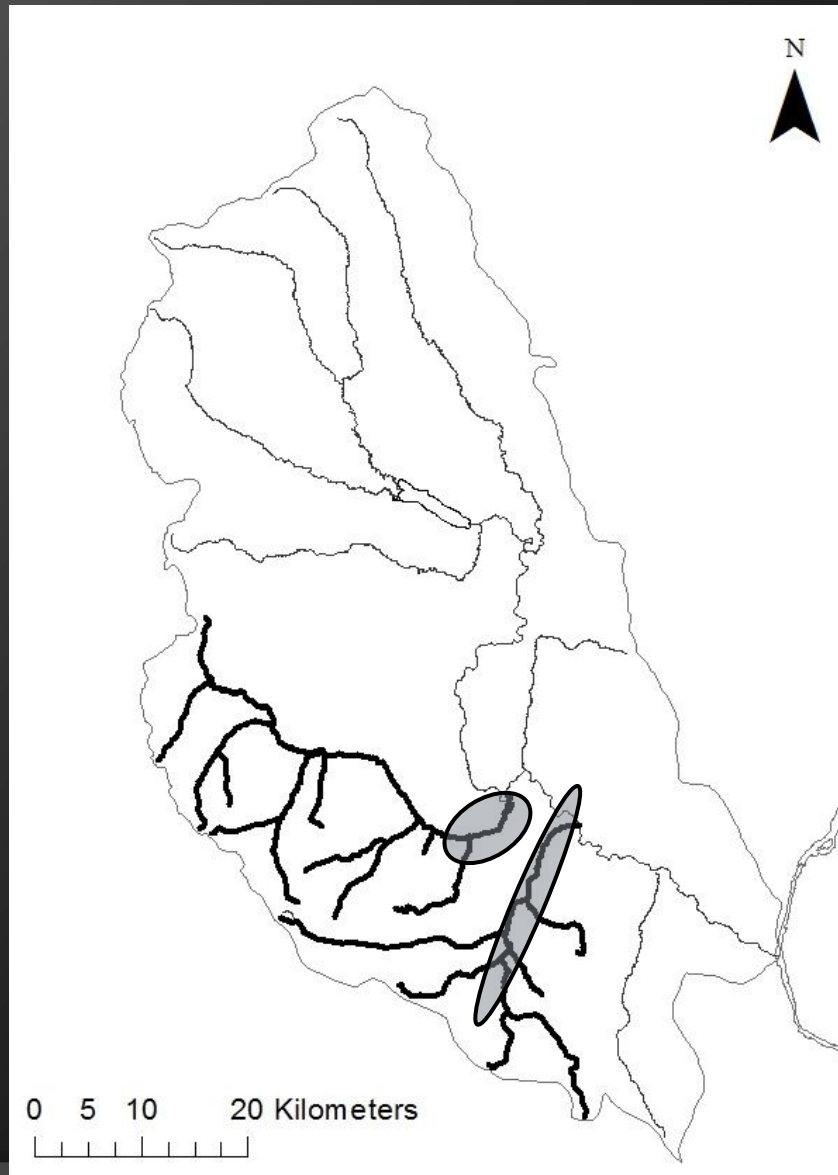
# Fish passage and survival assessment: Icicle and Peshastin Creeks

Total estimated cost: \$116,829

March 2015 – June 2017

## Winter 2017 update

# Project area



# Project goals

- Evaluate the movement and survival of bull trout and steelhead under current conditions
- Identify baseline life history diversity that may be affected by management actions

# Tagging summary 2015

<b>Stream</b>	<b>Steelhead</b>	<b>Chinook Salmon</b>	<b>Coho Salmon</b>	<b>Bull trout</b>
<b>Peshastin Cr.</b>				
<b>captured</b>	<b>25,583</b>	<b>56</b>	<b>692</b>	<b>21</b>
<b>PIT-tagged</b>	<b>2,946</b>	<b>35</b>	<b>86</b>	<b>21</b>
<b>Icicle Cr.</b>				
<b>captured</b>	<b>703</b>	<b>47</b>	<b>114</b>	<b>0</b>
<b>PIT-tagged</b>	<b>703</b>	<b>47</b>	<b>114</b>	<b>0</b>

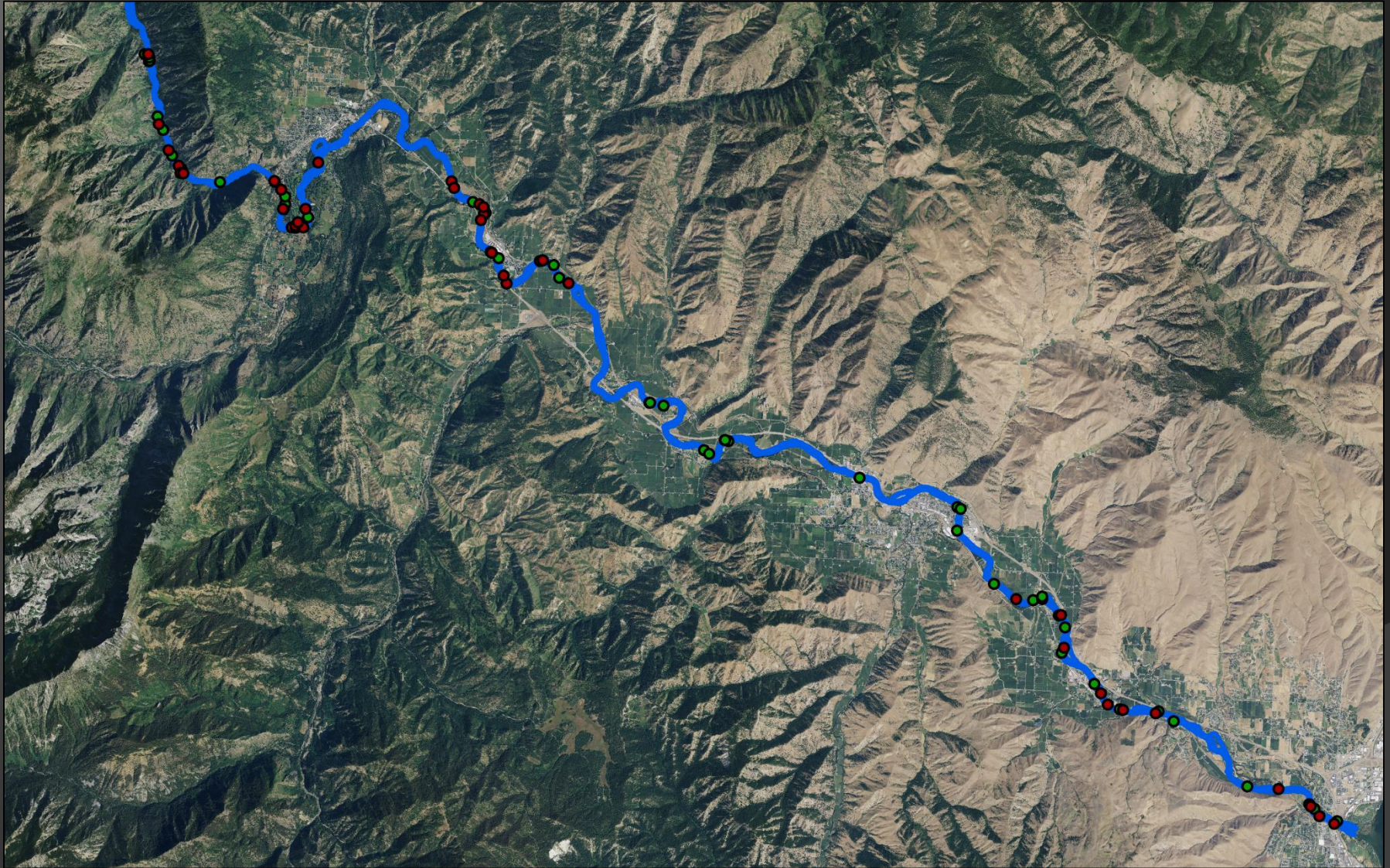
# Tagging summary 2016

<b>Stream</b>	<b>Steelhead</b>	<b>Chinook Salmon</b>	<b>Coho Salmon</b>	<b>Bull trout</b>
<b>Peshastin Cr.</b>				
<b>captured</b>	<b>20,794</b>	<b>1</b>	<b>0</b>	<b>20</b>
<b>PIT-tagged</b>	<b>2,821</b>	<b>1</b>	<b>0</b>	<b>20</b>
<b>Icicle Cr.</b>				
<b>captured</b>	<b>1,054</b>	<b>174</b>	<b>174</b>	<b>4</b>
<b>PIT-tagged</b>	<b>1,054</b>	<b>174</b>	<b>174</b>	<b>4</b>

# Preliminary findings

- Extensive fall migration of juveniles
- Juveniles continue to rear throughout Icicle and Peshastin, but substantial downstream movement in both years
- Icicle-Peshastin fish have utilized habitat in other tribs – Chumstick, Mission, Entiat
- Most emigrants overwintered in mainstem Wenatchee River

# Preliminary findings



# Preliminary findings

- ◎ **2015 juvenile abundance estimate in Peshastin Creek ~70,000**
  - 40,000 age 0
  - 26,000 age 1
  - 4,000 age 2+
- ◎ **74 juveniles tagged in 2015 were recaptured in 2016**
- ◎ **25 steelhead and 4 coho survived to BON**
- ◎ **2015 and 2016 seasons were very different in terms of weather, flow, etc.**



# Wild Adult Steelhead

Brood Year	Icicle	Peshastin
2011	N/A	106
2012	111	234
2013	72	147
2014	81	209
2015	78*	200
2016	72*	151*

# Remaining questions

- ① How do distribution, abundance, and life history traits change with management actions?
- ① Are passage and flow improvements having intended biological benefits?
- ① How have the 2015- and 2016-tagged steelhead survived?
- ① Need to secure funding to continue this project long term!

# Thanks!



Photo: Ryan Klett