

# **Appendix F      Juvenile Salmonid Monitoring, Sampling, and Salvage Timing Summary from SacPAS**

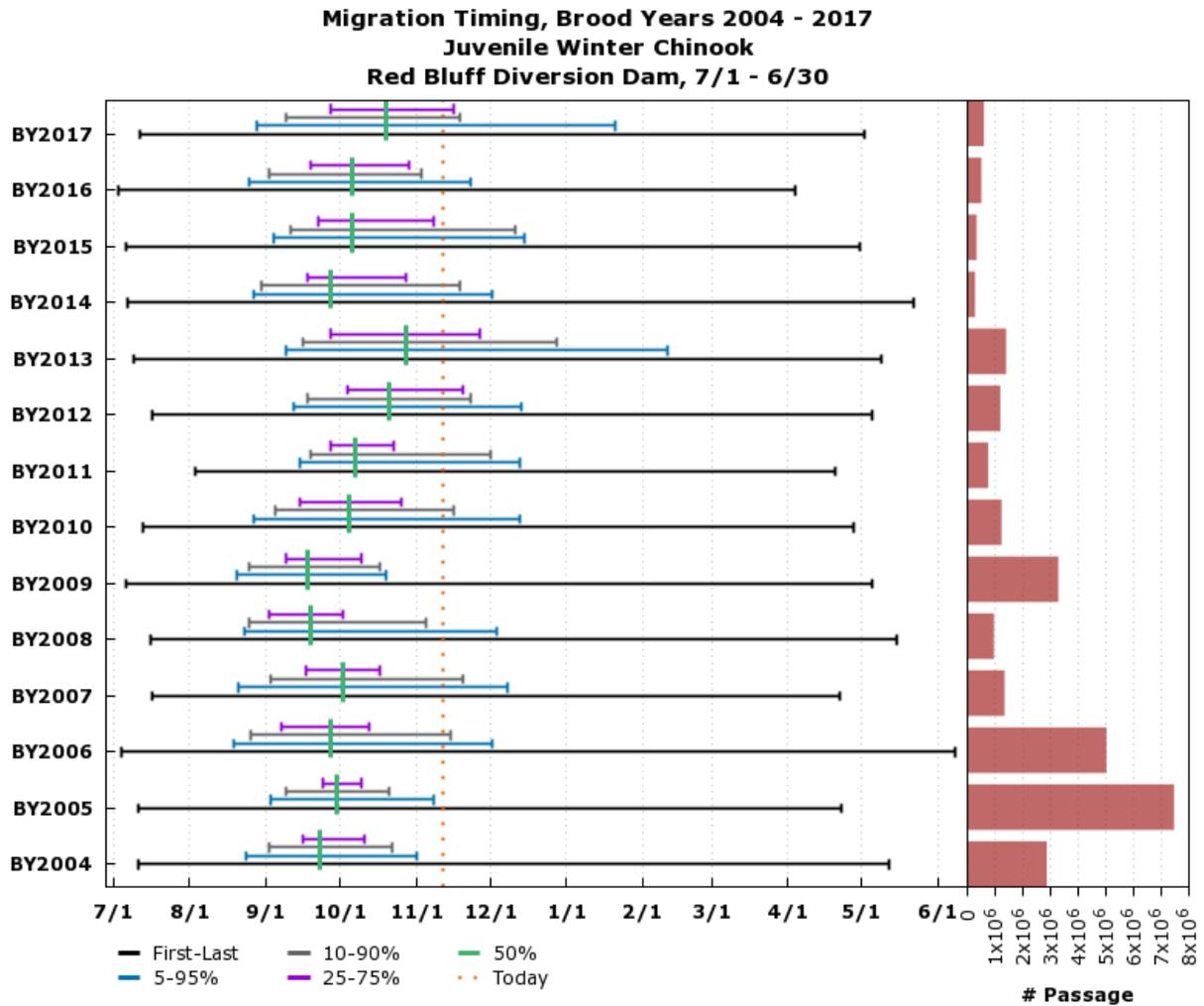
## **Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project**

### **F.1 Introduction**

This appendix contains graphical summaries of juvenile salmonid monitoring, sampling, and salvage timing in the Central Valley, as produced by the Central Valley Prediction and Assessment of Salmon database (SacPAS; <http://www.cbr.washington.edu/sacramento/>). The appendix is organized by species, monitoring location, and hatchery origin (clipped or unclipped). The maximum number of years (25) was selected in each case, giving summaries from 1993 onwards where available. Trawl and beach seine data are presented as catch indices (trawls = 10 tows/day; each seines = 8 hauls/day). Beach seine data represent stations in the vicinity of Sacramento (Verona, Elkhorn, Sand Cove, Miller Park, Sherwood Harbor, Discovery Park, American River, and Garcia Bend).

## F.2 Winter-Run Chinook Salmon

### F.2.1 Winter-Run Chinook Salmon: Red Bluff Diversion Dam

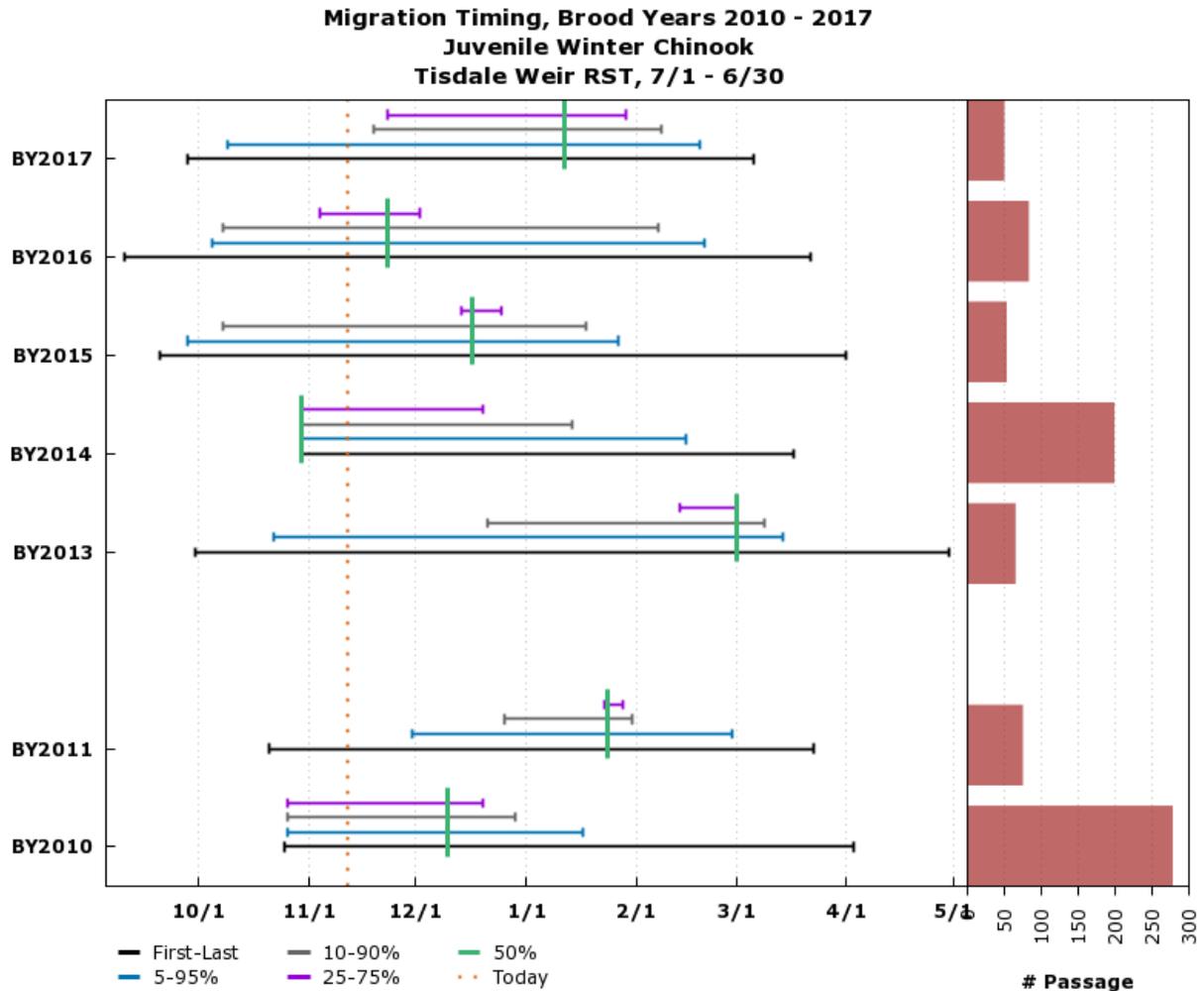


Based on Daily Estimated Passage. Preliminary data from USFWS Red Bluff; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:56:33 PST

**Figure WR\_RBRST. Timing and Number of Juvenile Winter-Run Chinook Salmon in Red Bluff Diversion Dam Rotary Screw Traps.**

**F.2.2 Winter-Run Chinook Salmon: Tisdale Weir Rotary Screw Traps**

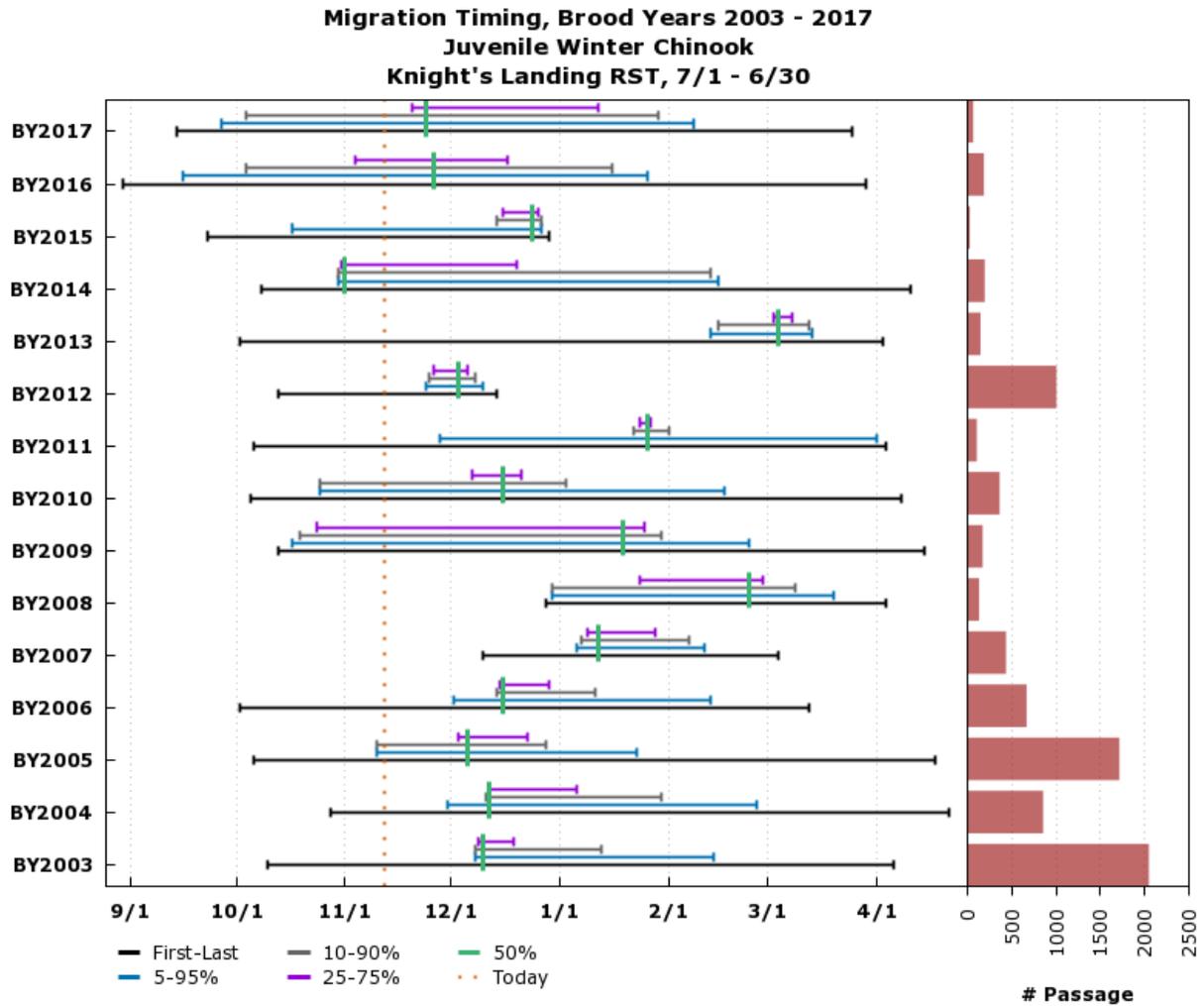


Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:53:33 PST

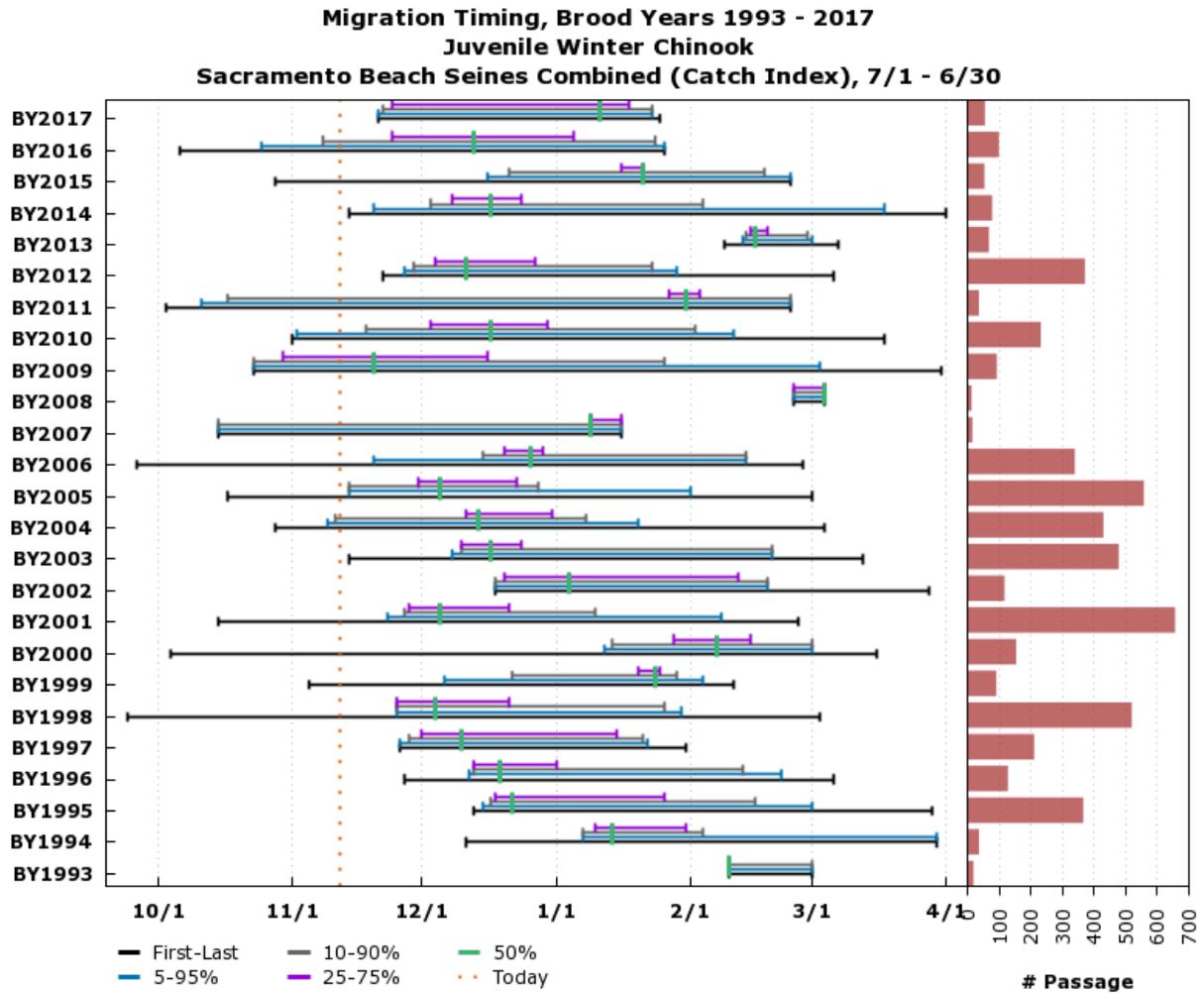
**Figure WR\_TWRST. Timing and Number of Juvenile Winter-Run Chinook Salmon in Tisdale Weir Rotary Screw Traps.**

**F.2.3 Winter-Run Chinook Salmon: Knights Landing Rotary Screw Traps**



**Figure WR\_KLRST. Timing and Number of Juvenile Winter-Run Chinook Salmon in Knights Landing Rotary Screw Traps.**

**F.2.4 Winter-Run Chinook Salmon: Sacramento Beach Seines Combined**

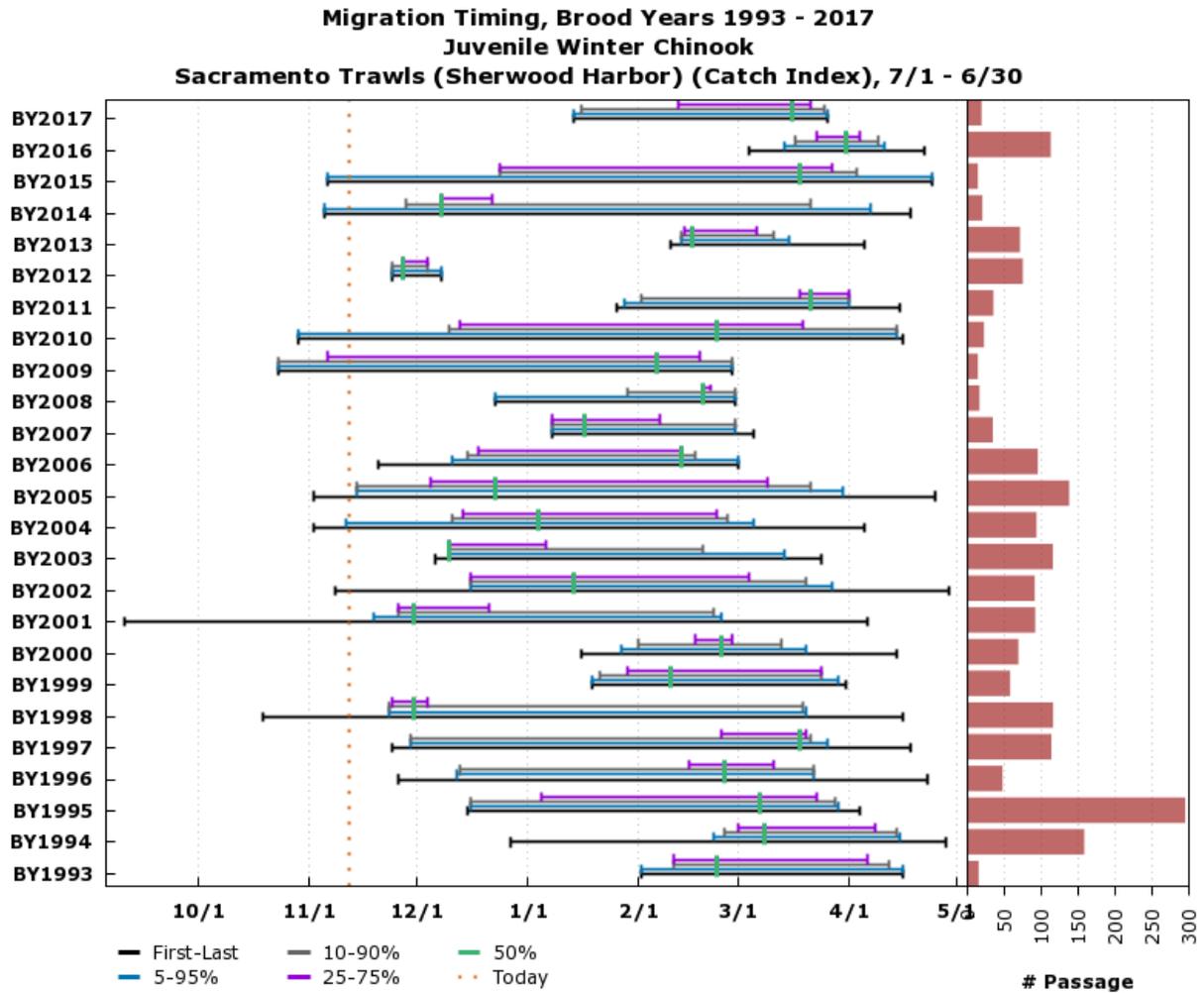


Based on 8 hauls/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:49:55 PST

**Figure WR\_Seines. Catch Index Timing and Number of Juvenile Winter-Run Chinook Salmon in Sacramento Beach Seines.**

**F.2.5 Winter-Run Chinook Salmon: Sacramento Trawls (Sherwood Harbor)**

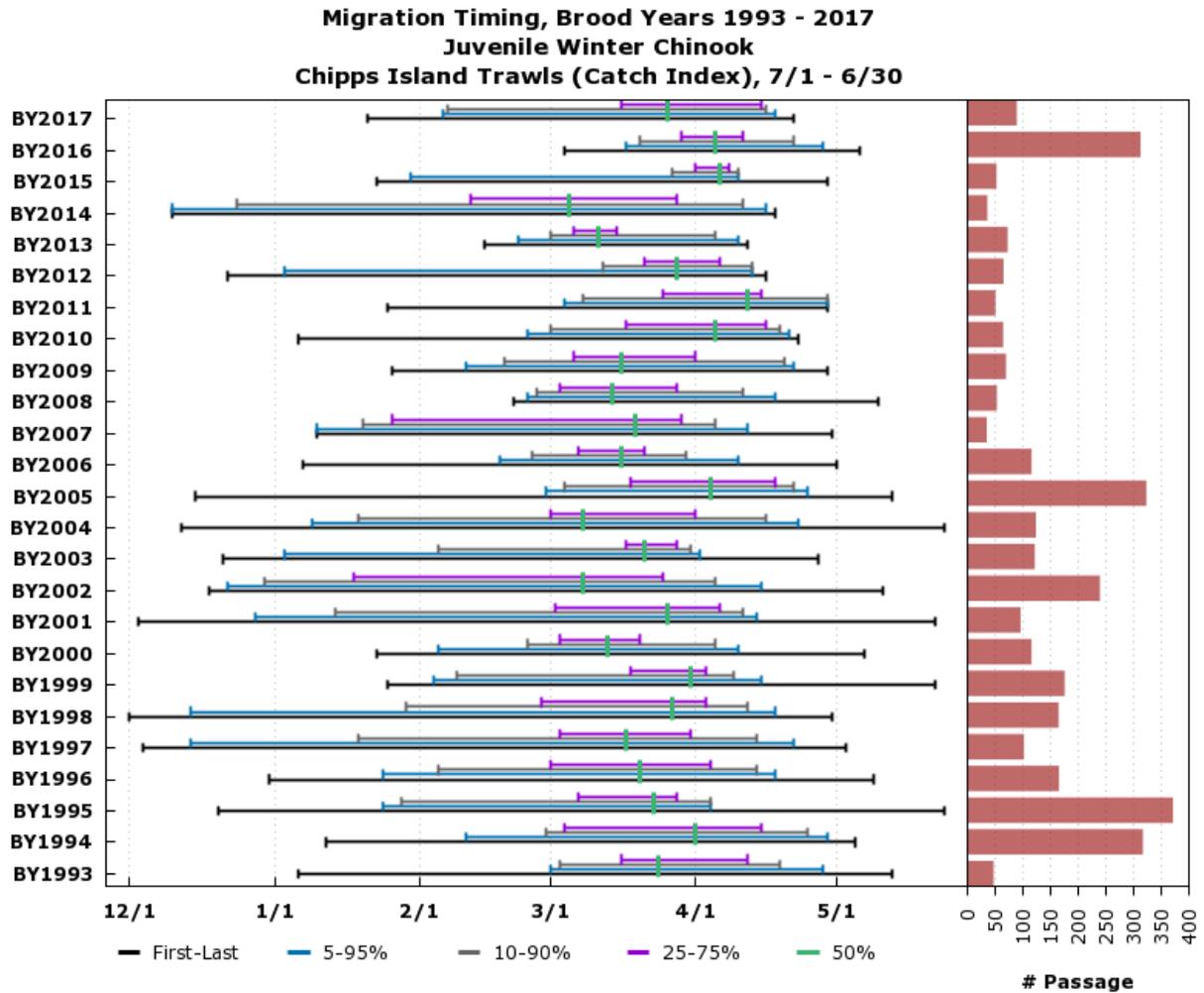


Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:48:36 PST

**Figure WR\_Sherwood. Catch Index Timing and Number of Juvenile Winter-Run Chinook Salmon in Sacramento Trawls at Sherwood Harbor.**

**F.2.6 Winter-Run Chinook Salmon: Chipps Island Trawls**

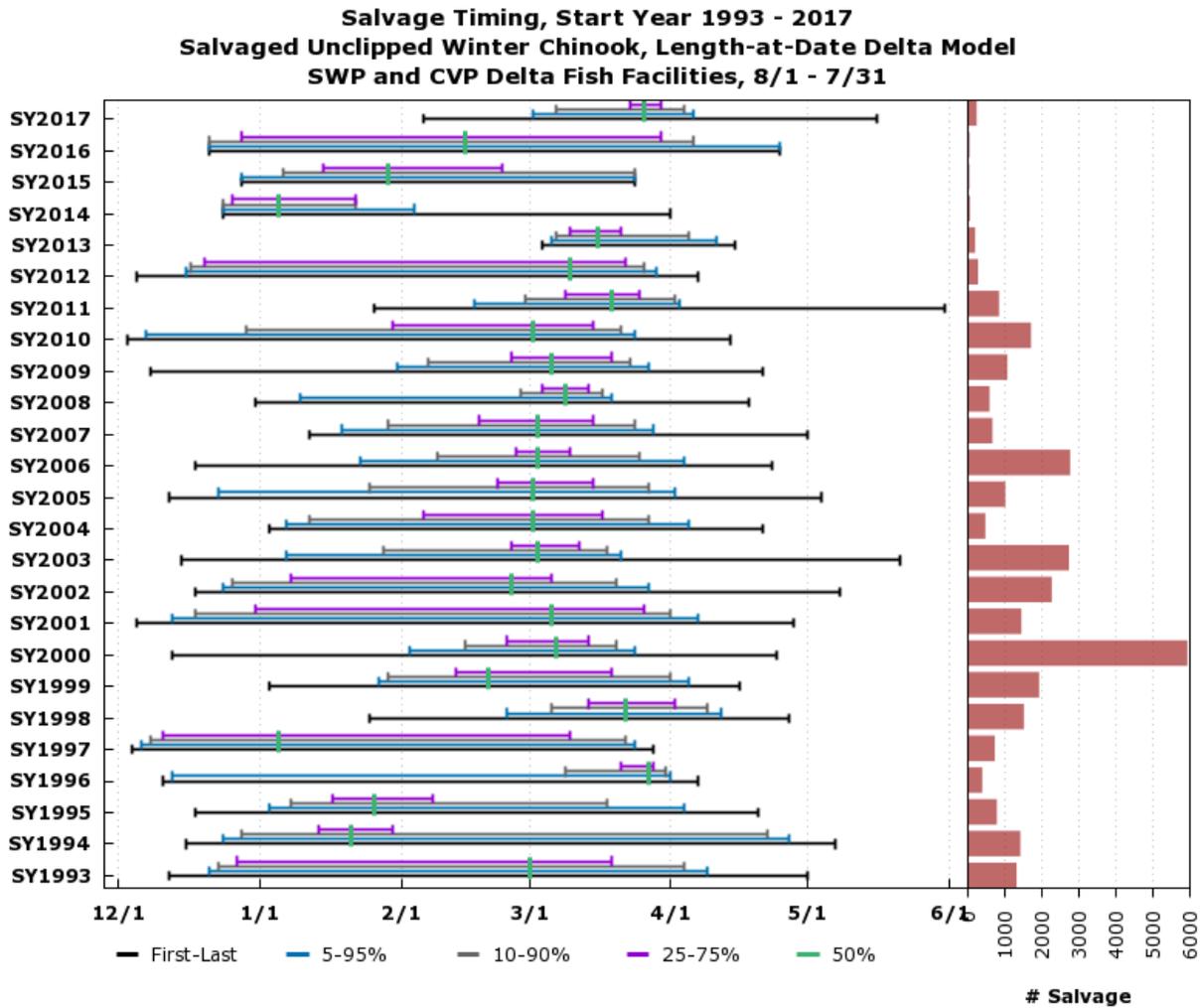


Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:44:44 PST

**Figure WR\_Chipps. Catch Index Timing and Number of Juvenile Winter-Run Chinook Salmon in Chipps Island Trawls.**

**F.2.7 Winter-Run Chinook Salmon Salvage: Unclipped (Length-at-Date)**

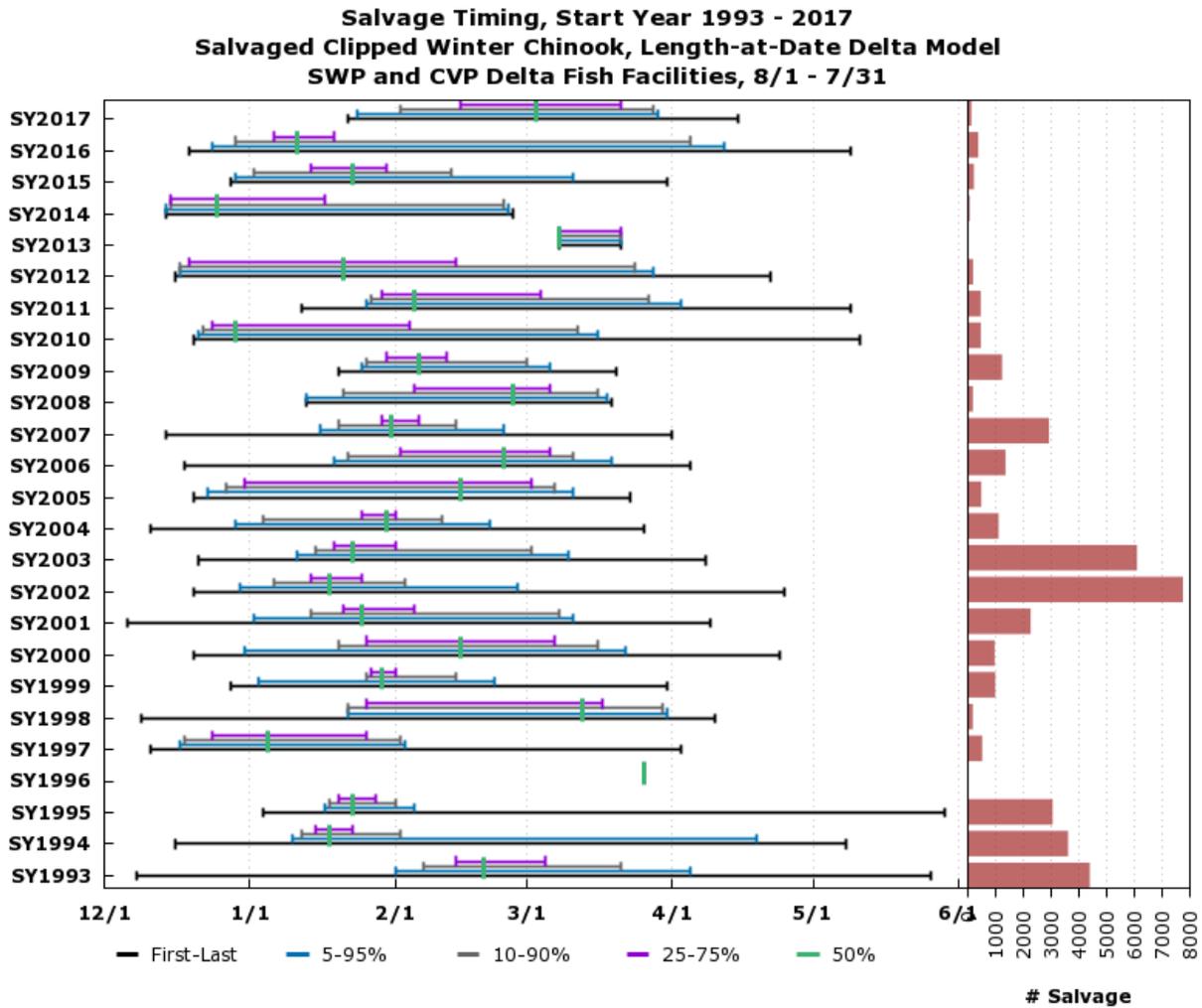


[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:43:15 PST

**Figure WR\_salvage\_unclipped\_date. Timing and Number of Unclipped Juvenile Winter-Run Chinook Salmon (Race Determined from Length at Date) at the State Water Project and Central Valley Project South Delta Fish Salvage Facilities.**

**F.2.8 Winter-Run Chinook Salmon Salvage: Clipped (Length-at-Date)**

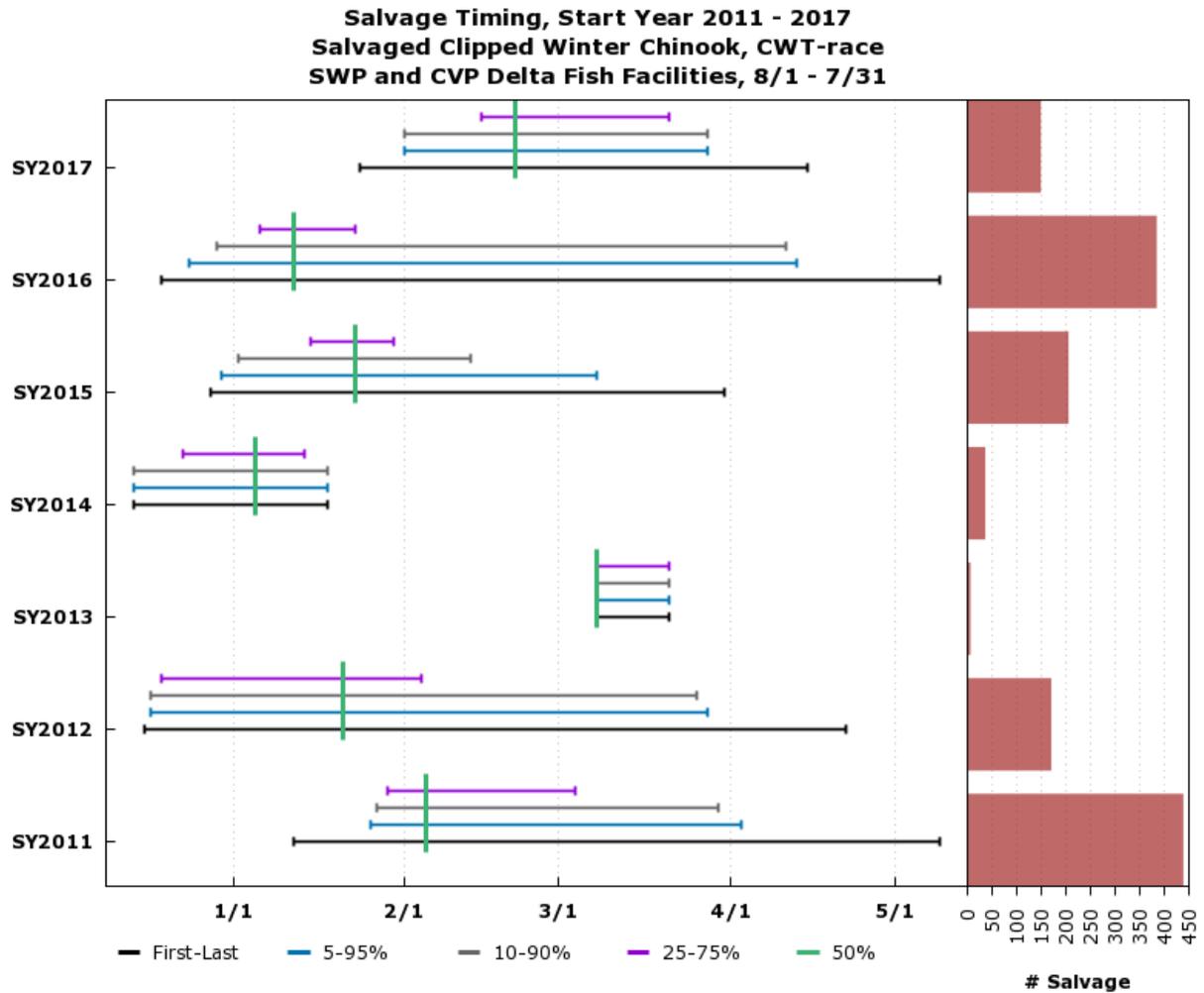


[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:42:15 PST

**Figure WR\_salvage\_clipped\_date. Timing and Number of Clipped Juvenile Winter-Run Chinook Salmon (Race Determined from Length at Date) at the State Water Project and Central Valley Project South Delta Fish Salvage Facilities.**

**F.2.9 Winter-Run Chinook Salmon Salvage: Clipped (CWT-Race)**



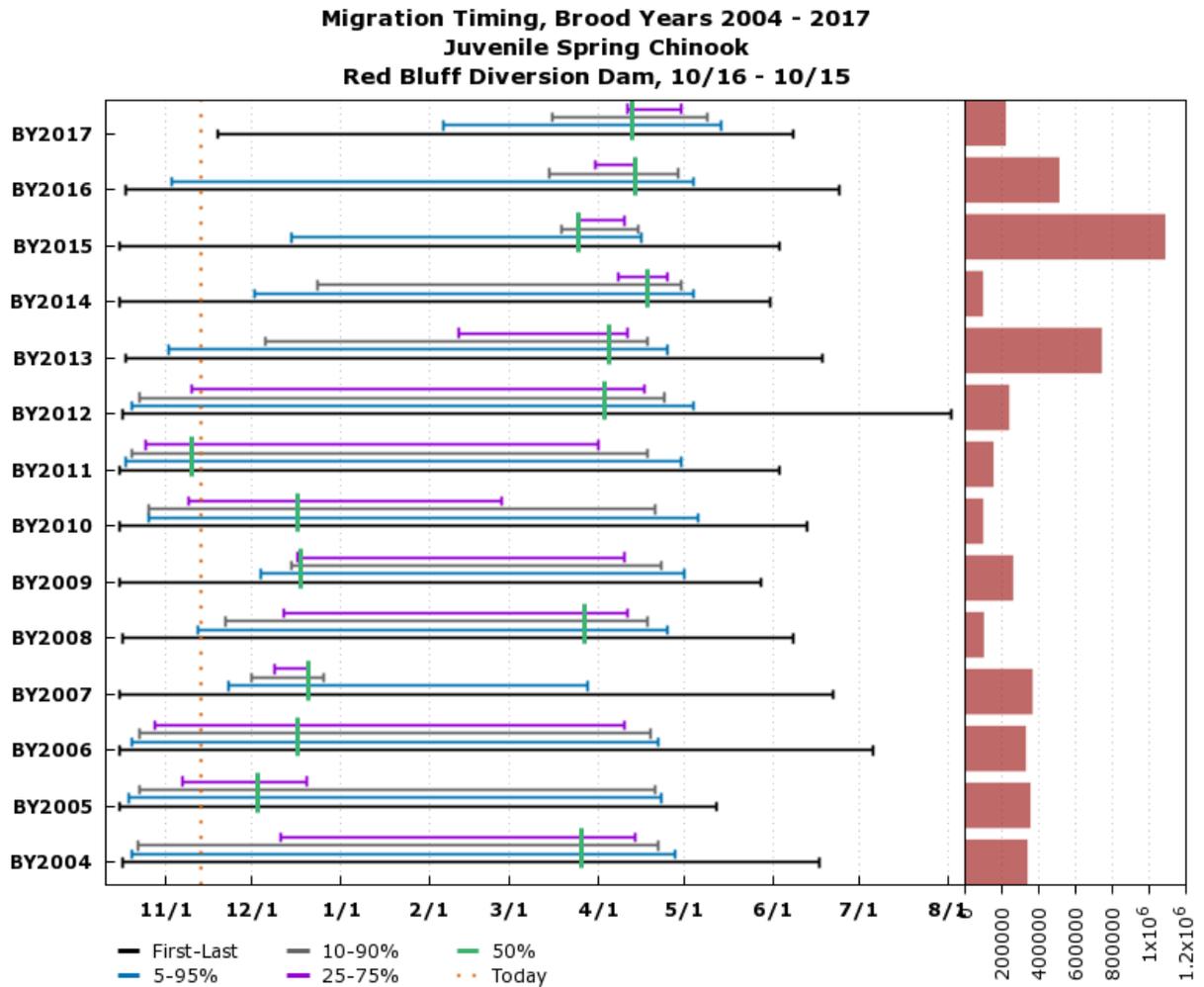
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

13 Nov 2018 12:36:31 PST

**Figure WR\_salvage\_clipped\_CWT\_race. Timing and Number of Clipped Winter-Run Juvenile Chinook Salmon (Race Determined from Coded Wire Tag) at the State Water Project and Central Valley Project South Delta Fish Salvage Facilities.**

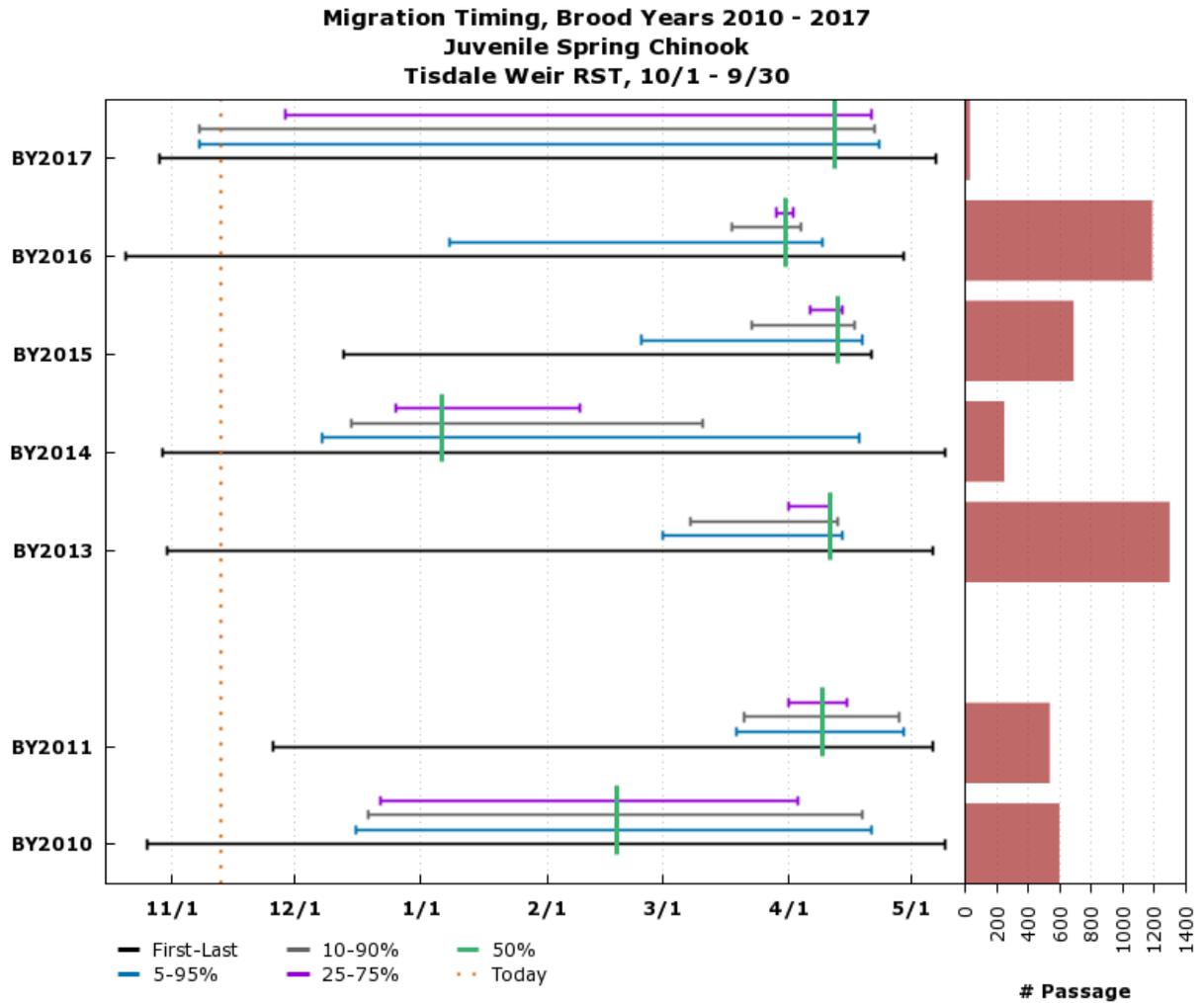
### F.3 Spring-Run Chinook Salmon

#### F.3.1 Spring-Run Chinook Salmon: Red Bluff Diversion Dam



Based on Daily Estimated Passage. Preliminary data from USFWS Red Bluff; subject to revision. [www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/) 14 Nov 2018 09:22:09 PST

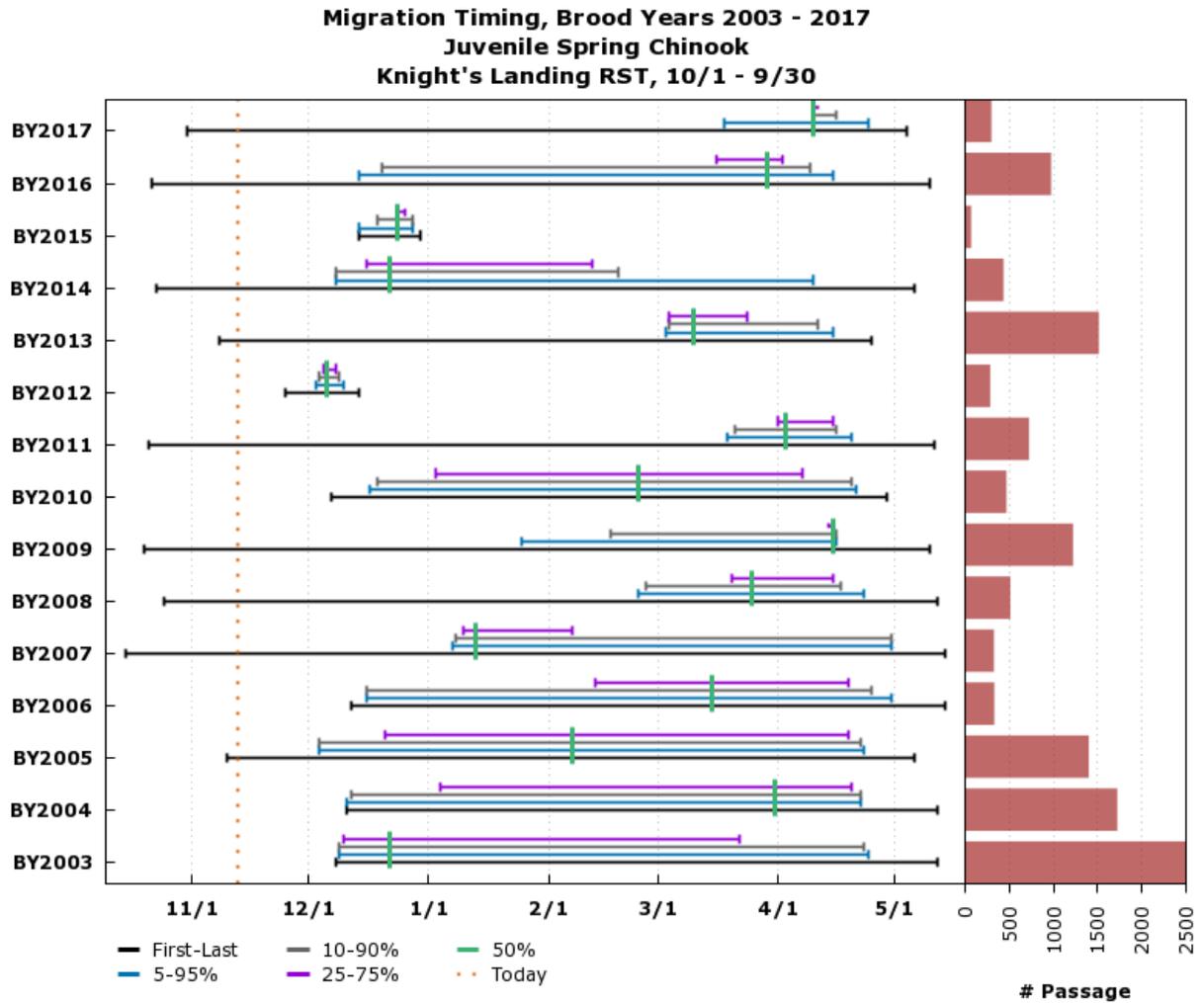
**F.3.2 Spring-Run Chinook Salmon: Tisdale Weir Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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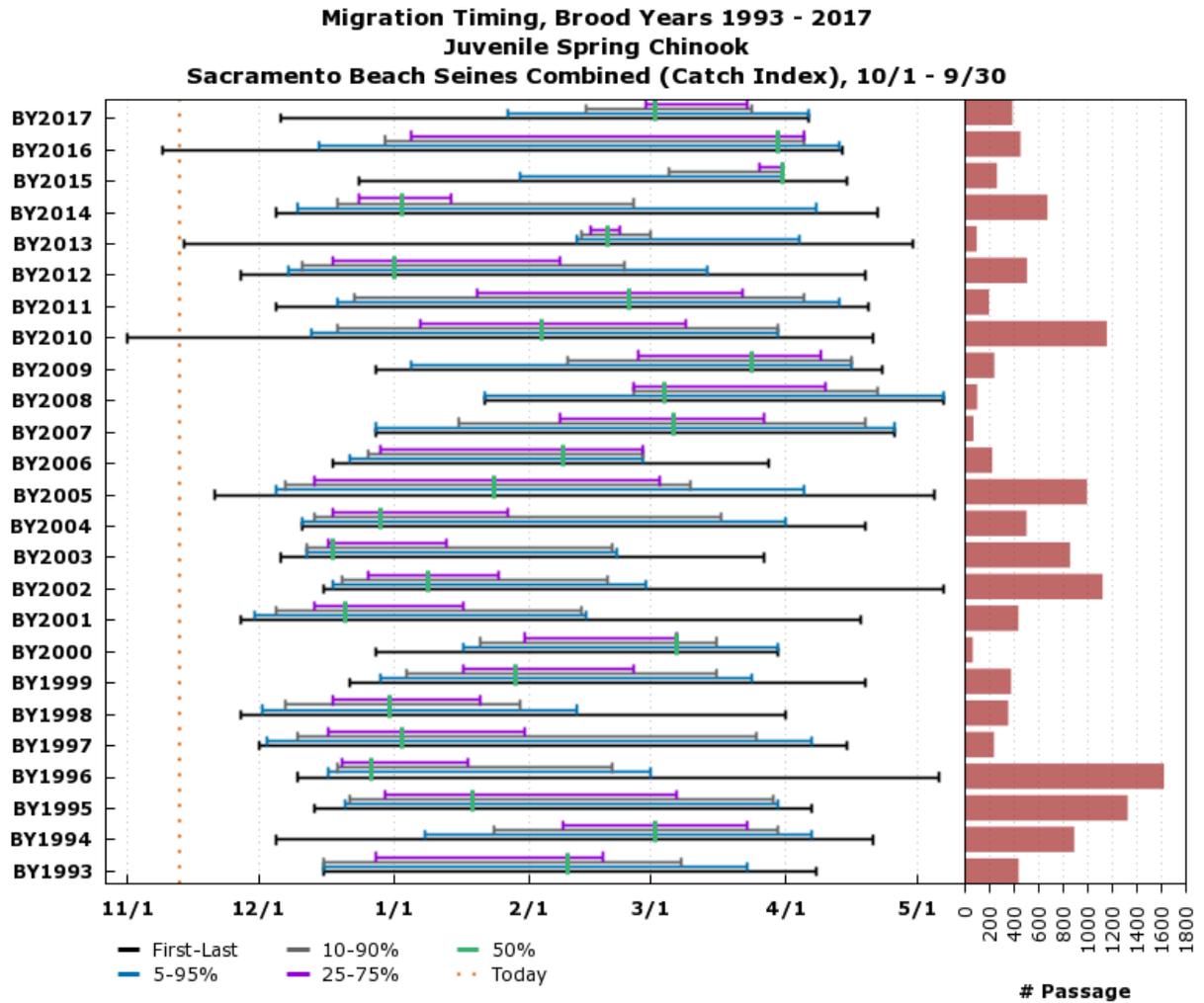
**F.3.3 Spring-Run Chinook Salmon: Knights Landing Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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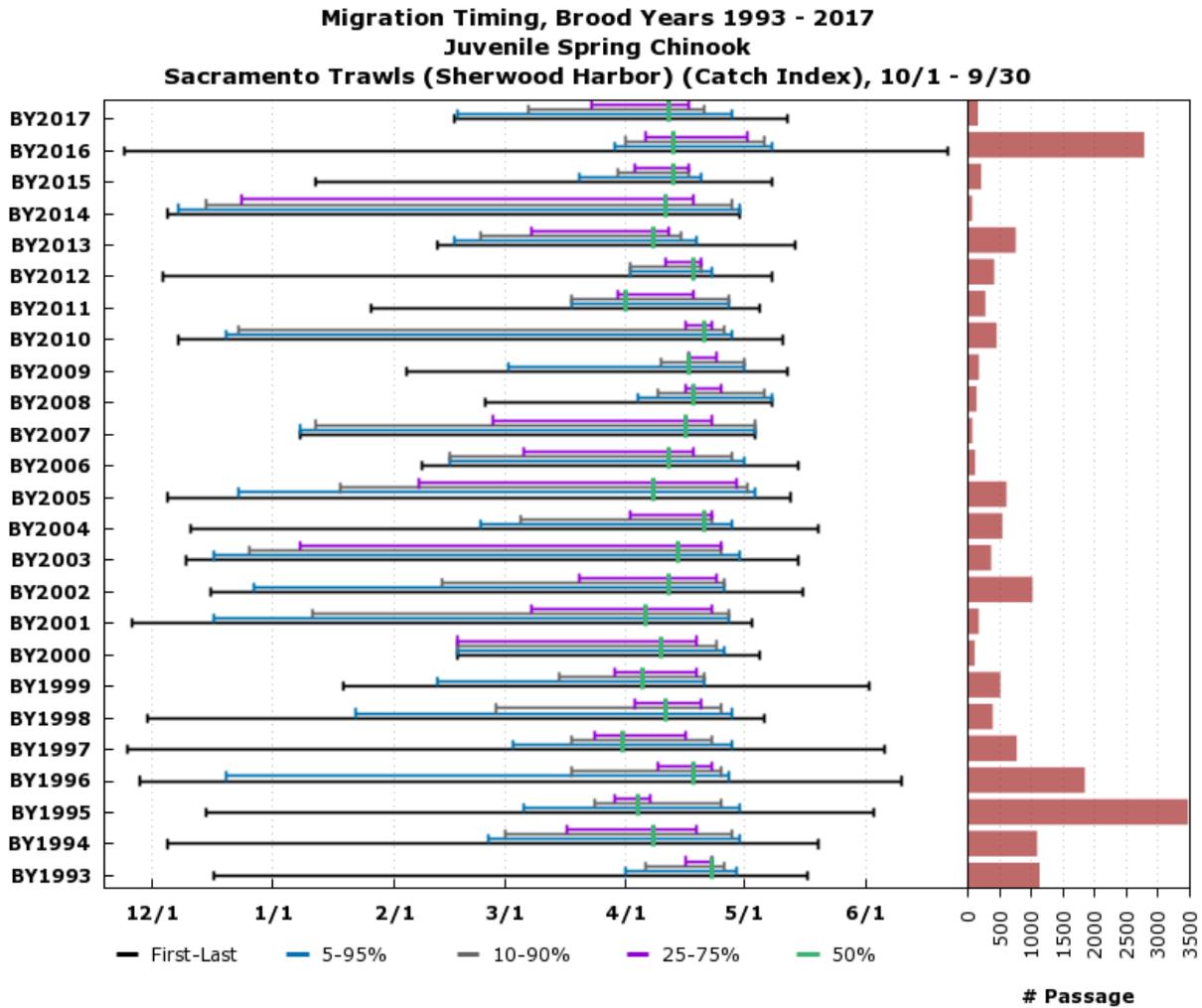
**F.3.4 Spring-Run Chinook Salmon: Sacramento Beach Seines Combined**



Based on 8 hauls/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:26:26 PST

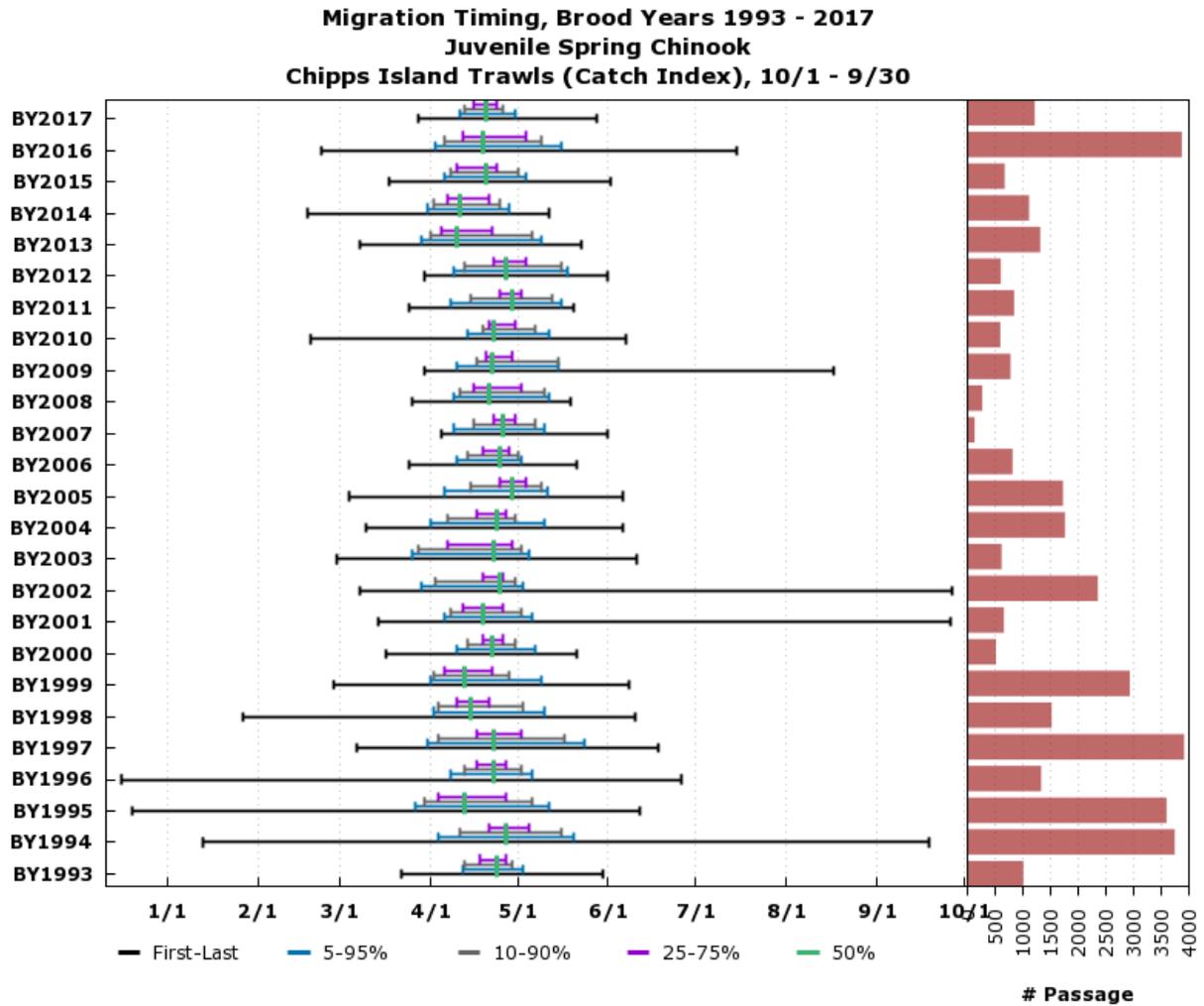
**F.3.5 Spring-Run Chinook Salmon: Sacramento Trawls (Sherwood Harbor)**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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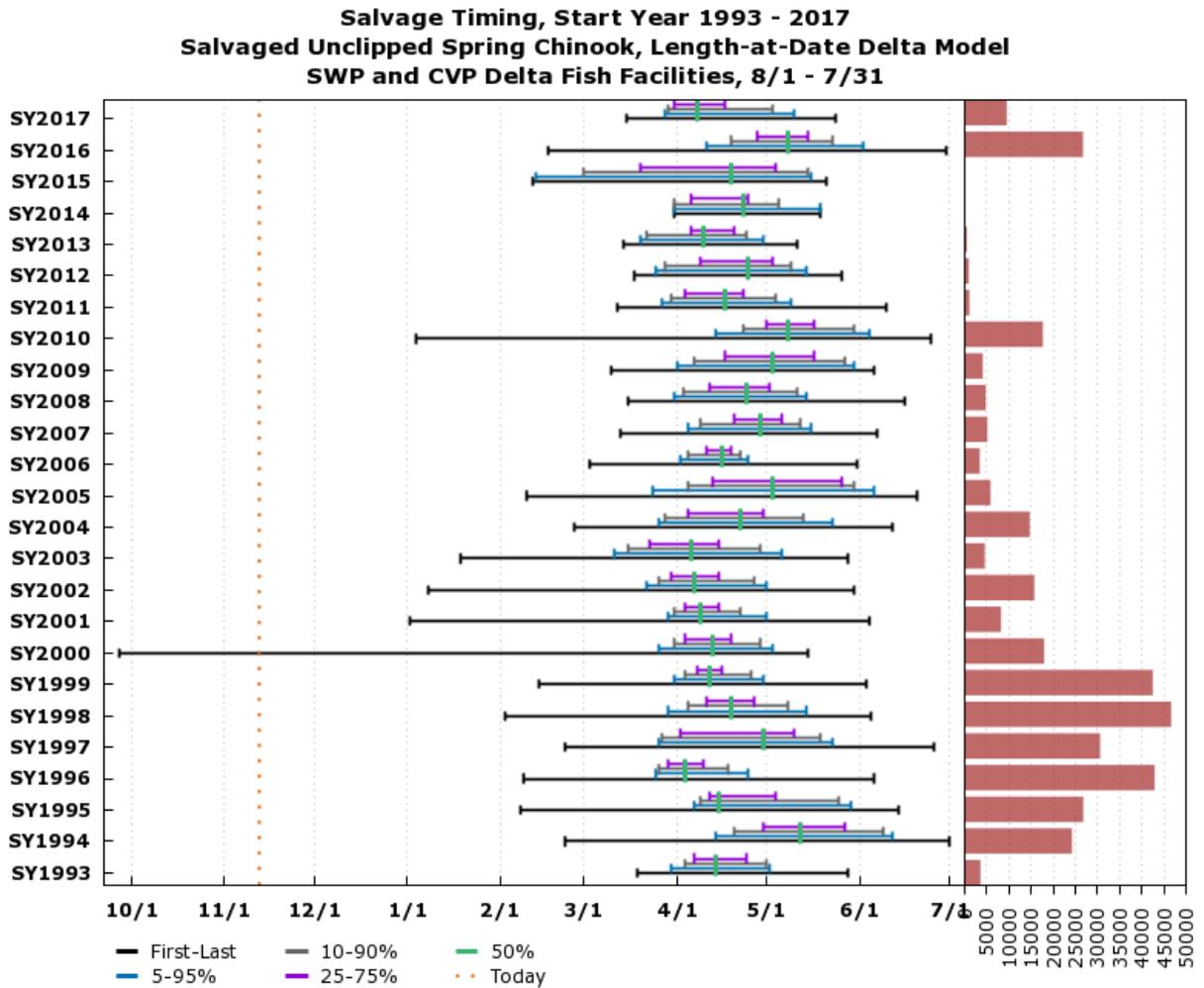
**F.3.6 Spring-Run Chinook Salmon: Chipps Island Trawls**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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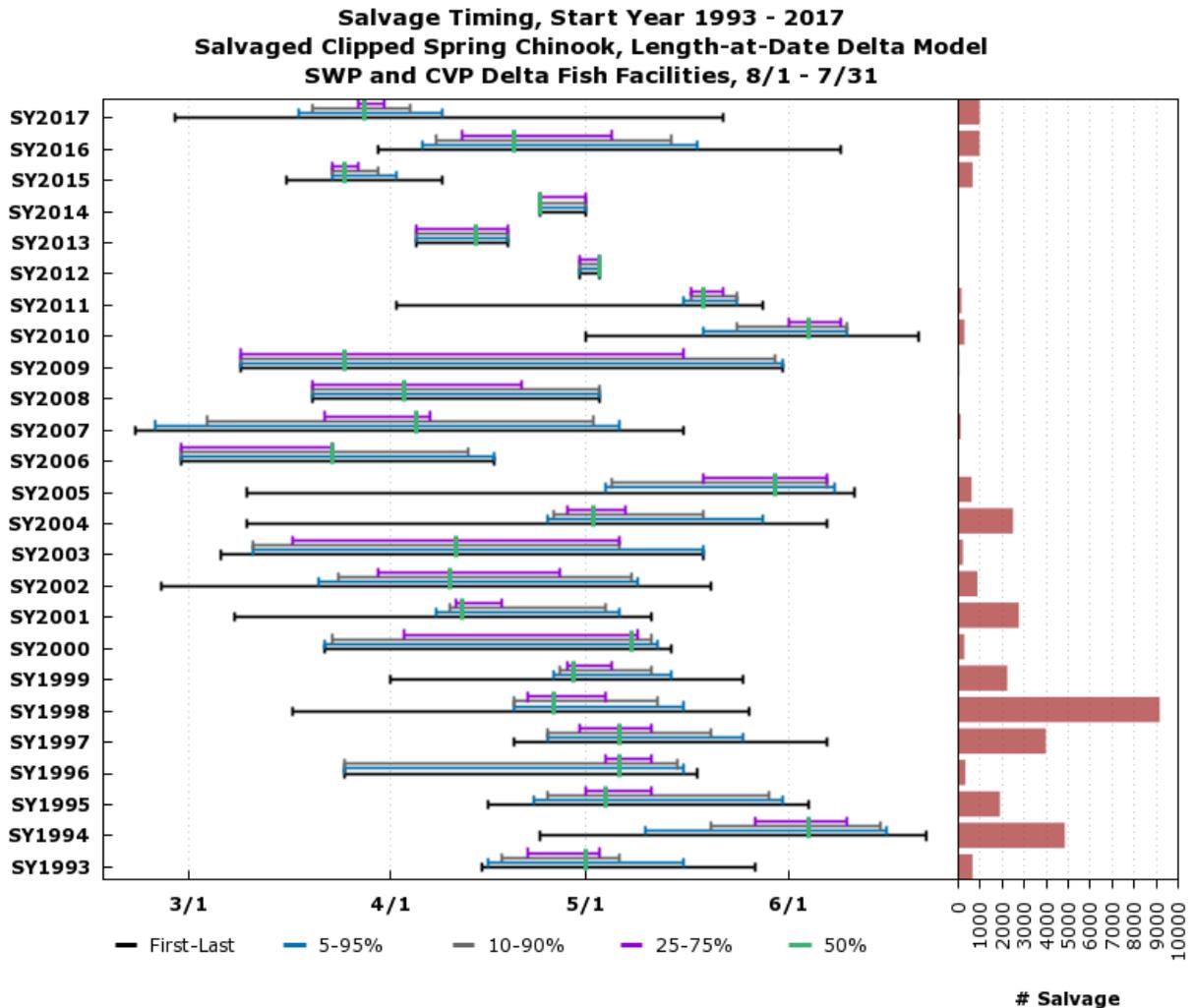
**F.3.7 Spring-Run Chinook Salmon Salvage: Unclipped (Length-at-Date)**



[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:29:43 PST

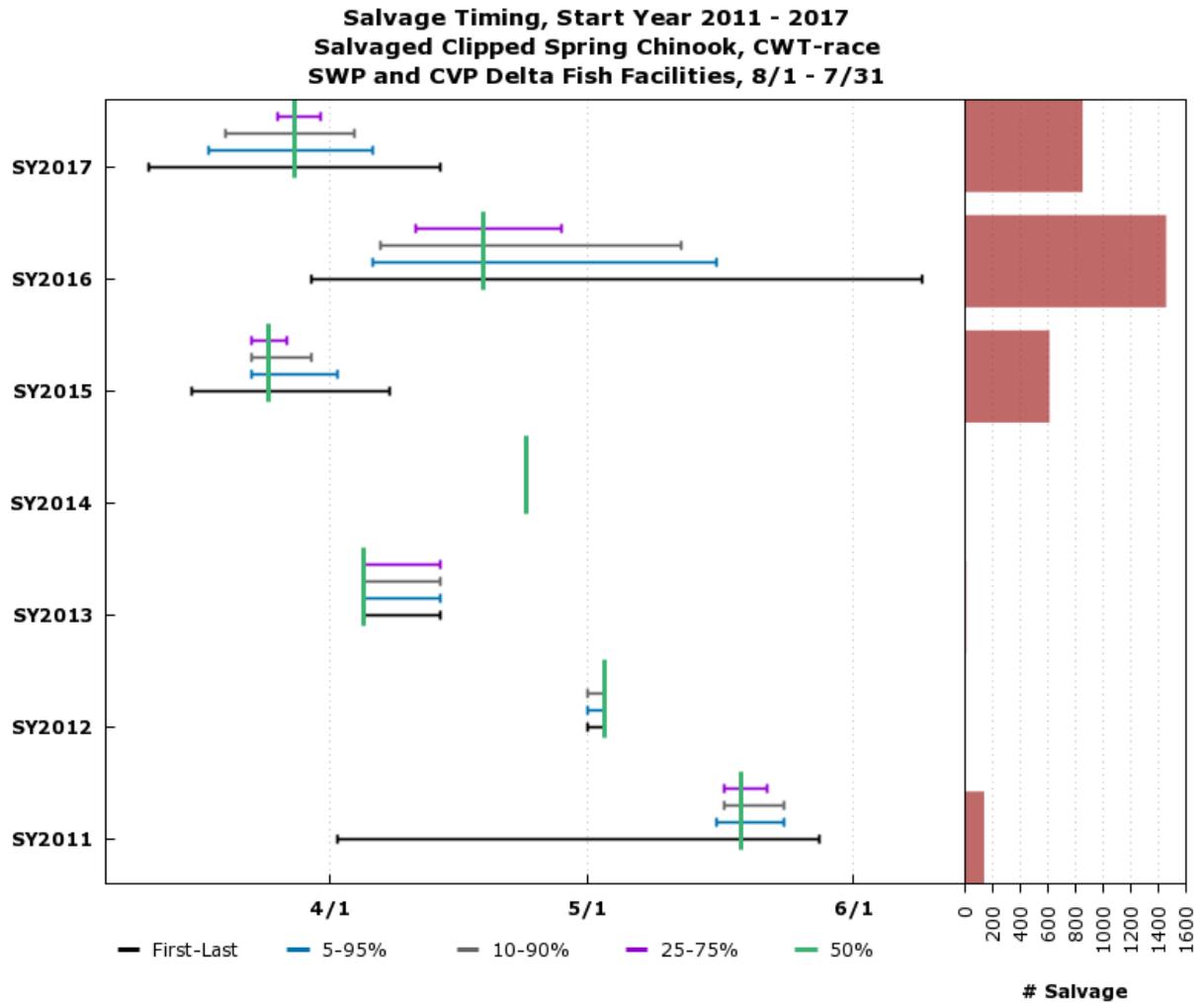
**F.3.8 Spring-Run Chinook Salmon Salvage: Clipped (Length-at-Date)**



[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

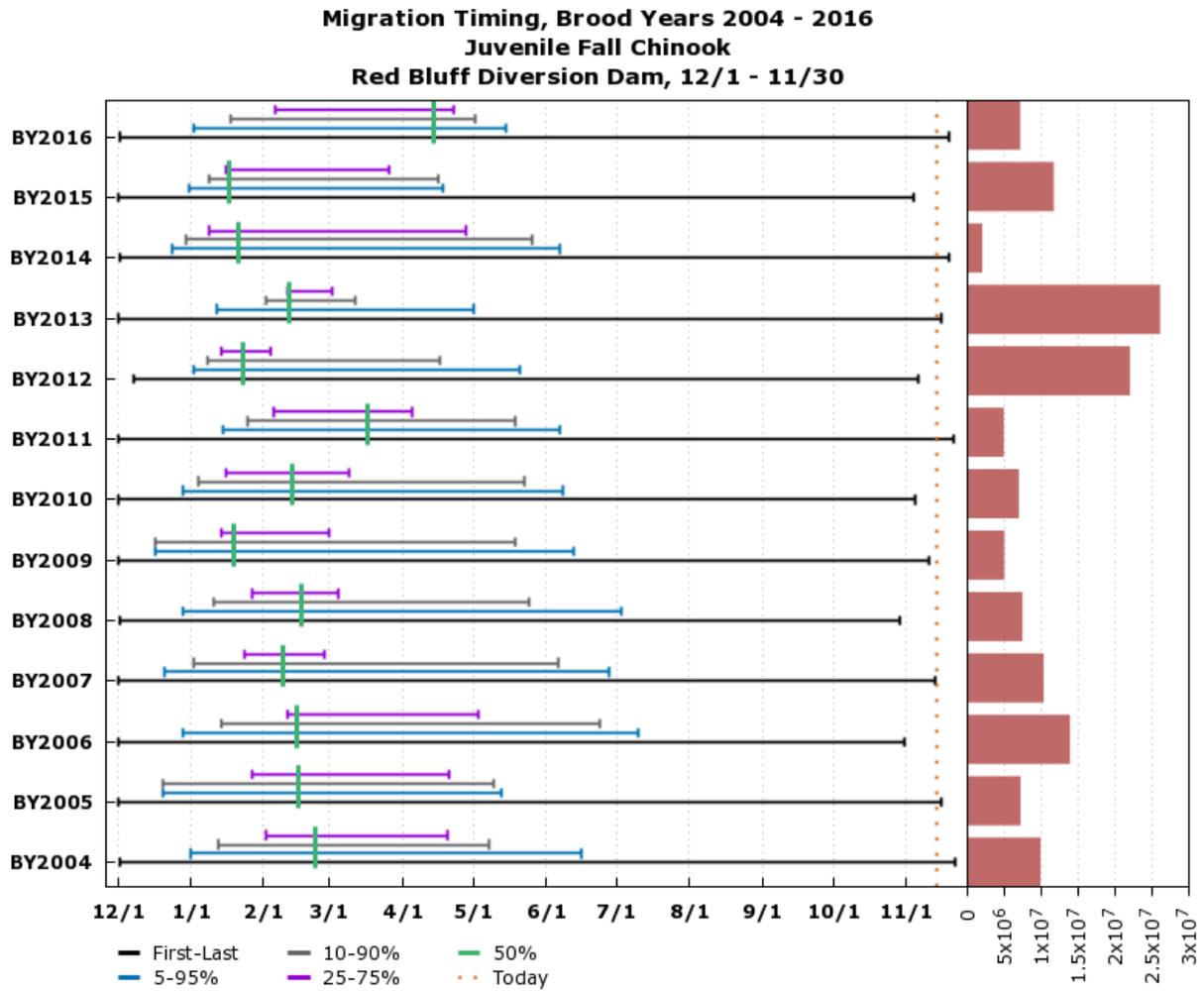
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**F.3.9 Spring-Run Chinook Salmon Salvage: Clipped (CWT-Race)**



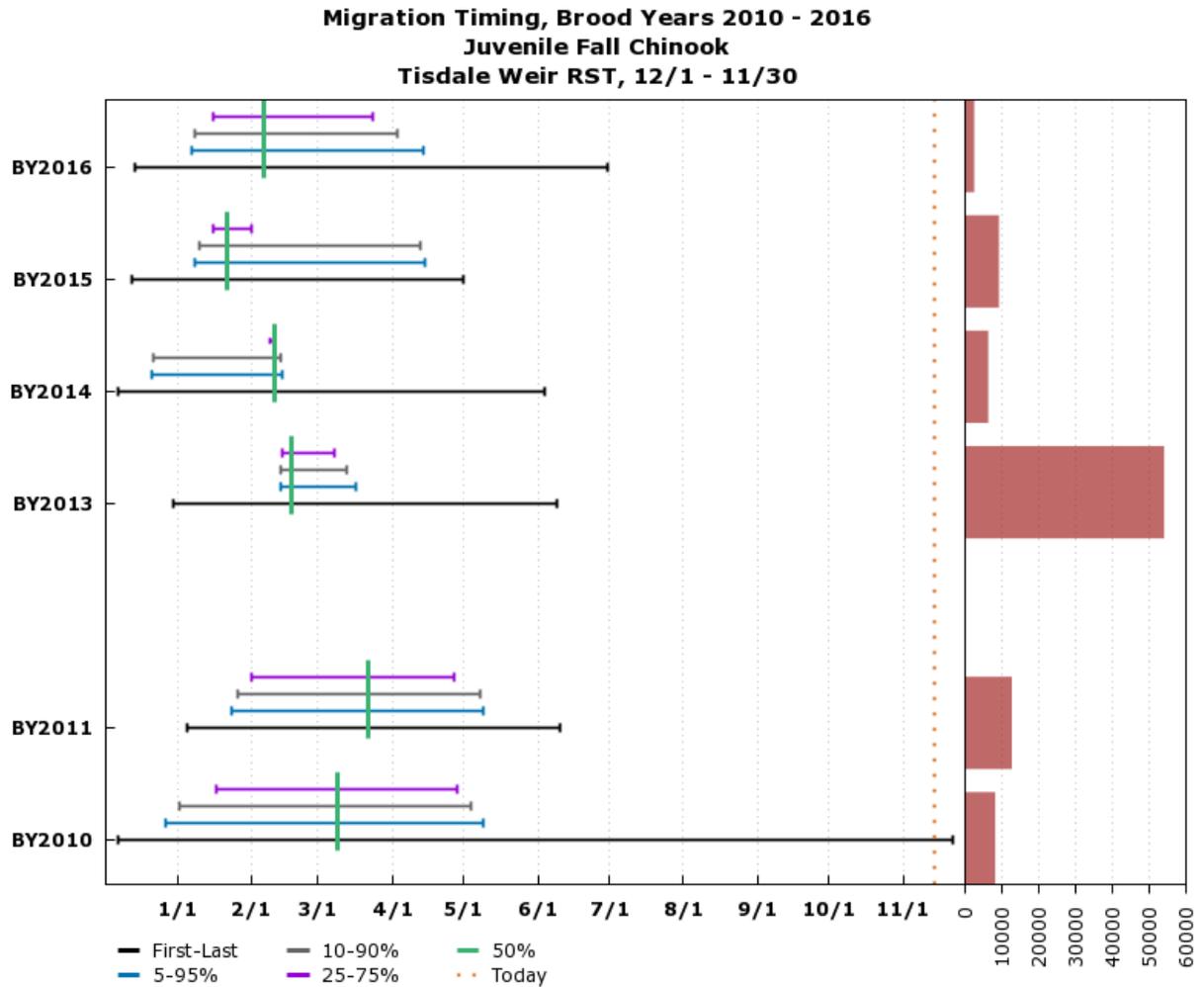
## F.4 Fall-Run Chinook Salmon

### F.4.1 Fall-Run Chinook Salmon: Red Bluff Diversion Dam



Based on Daily Estimated Passage. Preliminary data from USFWS Red Bluff; subject to revision. **# Passage**  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/) 14 Nov 2018 09:32:49 PST

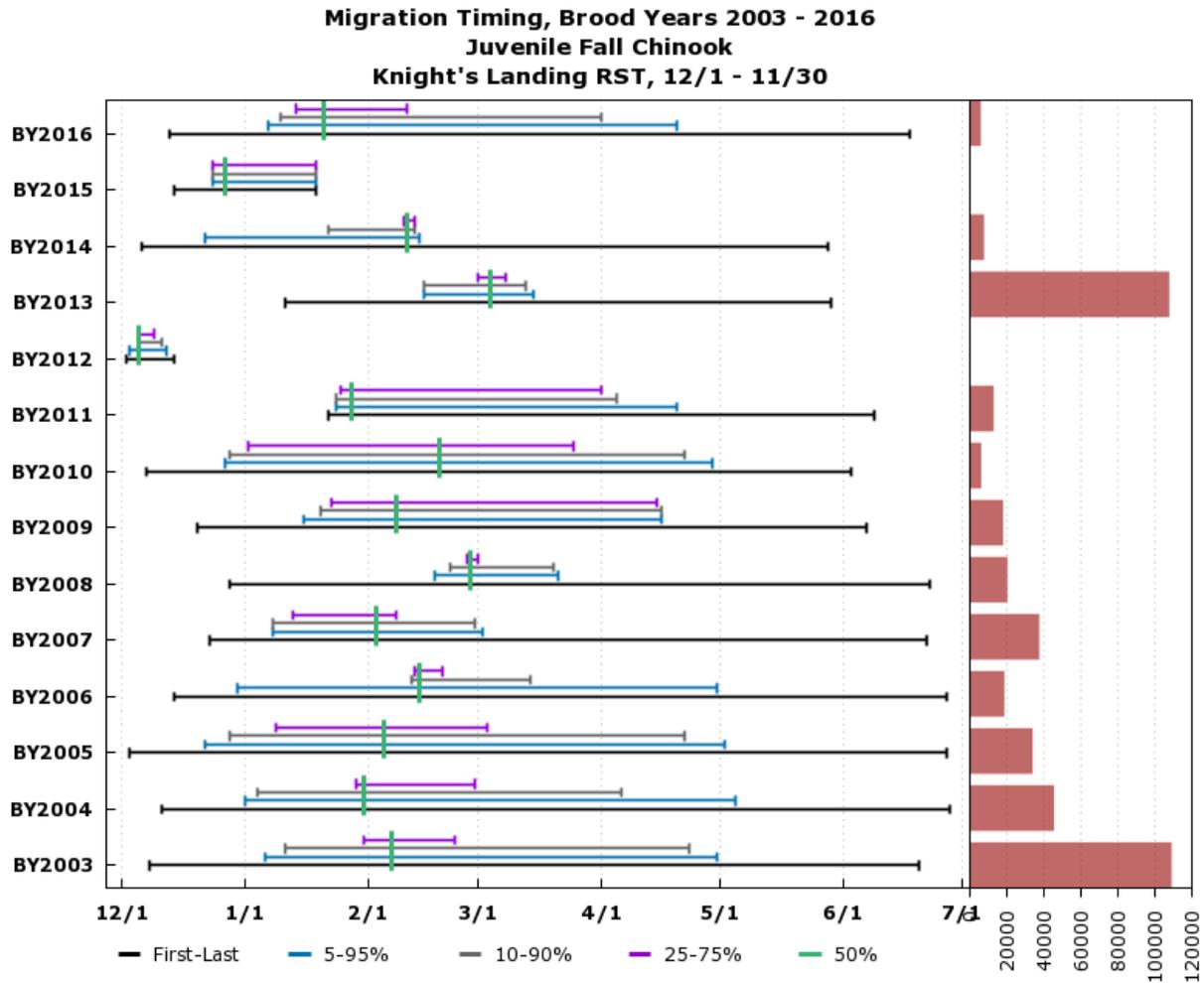
**F.4.2 Fall-Run Chinook Salmon: Tisdale Weir Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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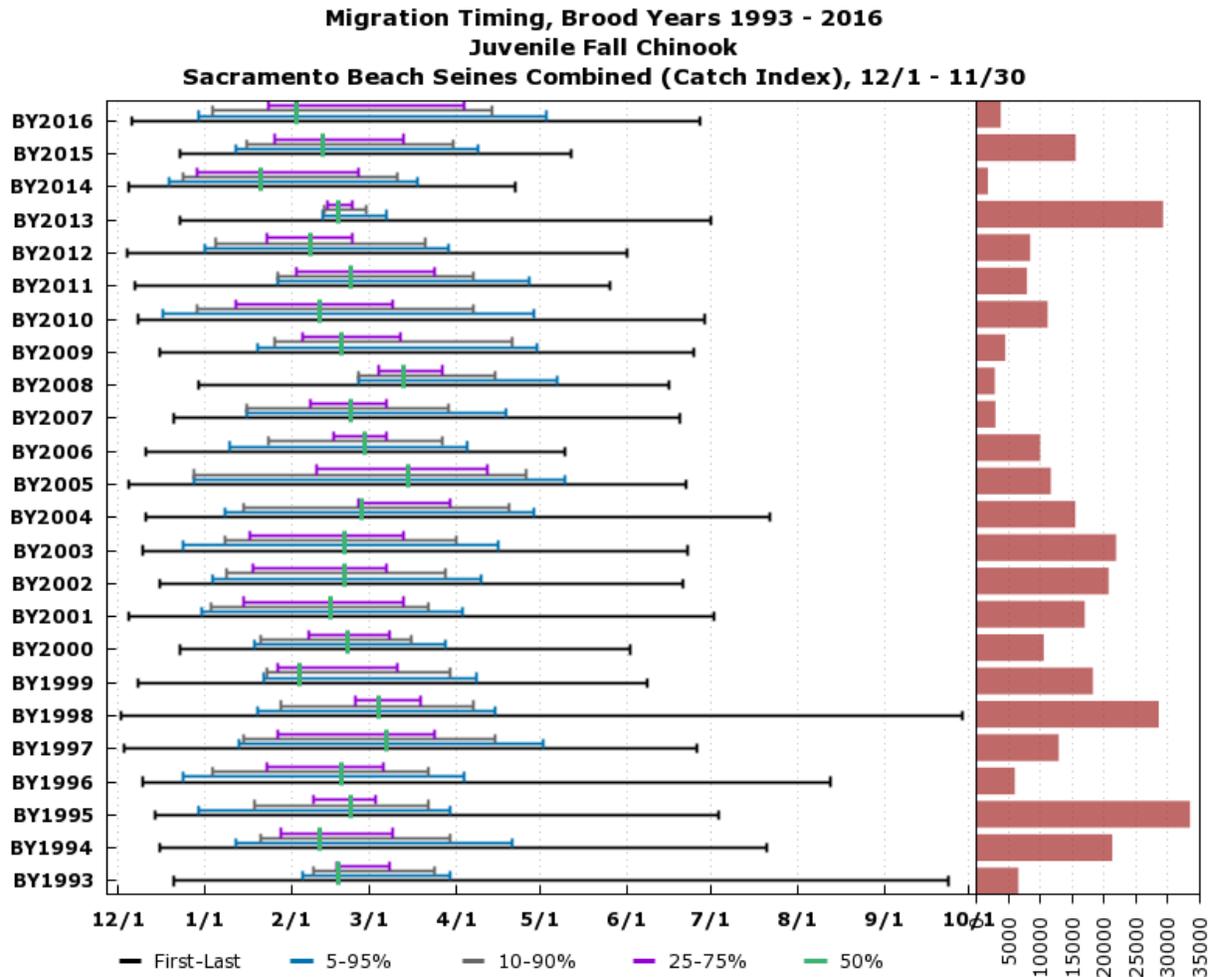
**F.4.3 Fall-Run Chinook Salmon: Knights Landing Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:34:42 PST

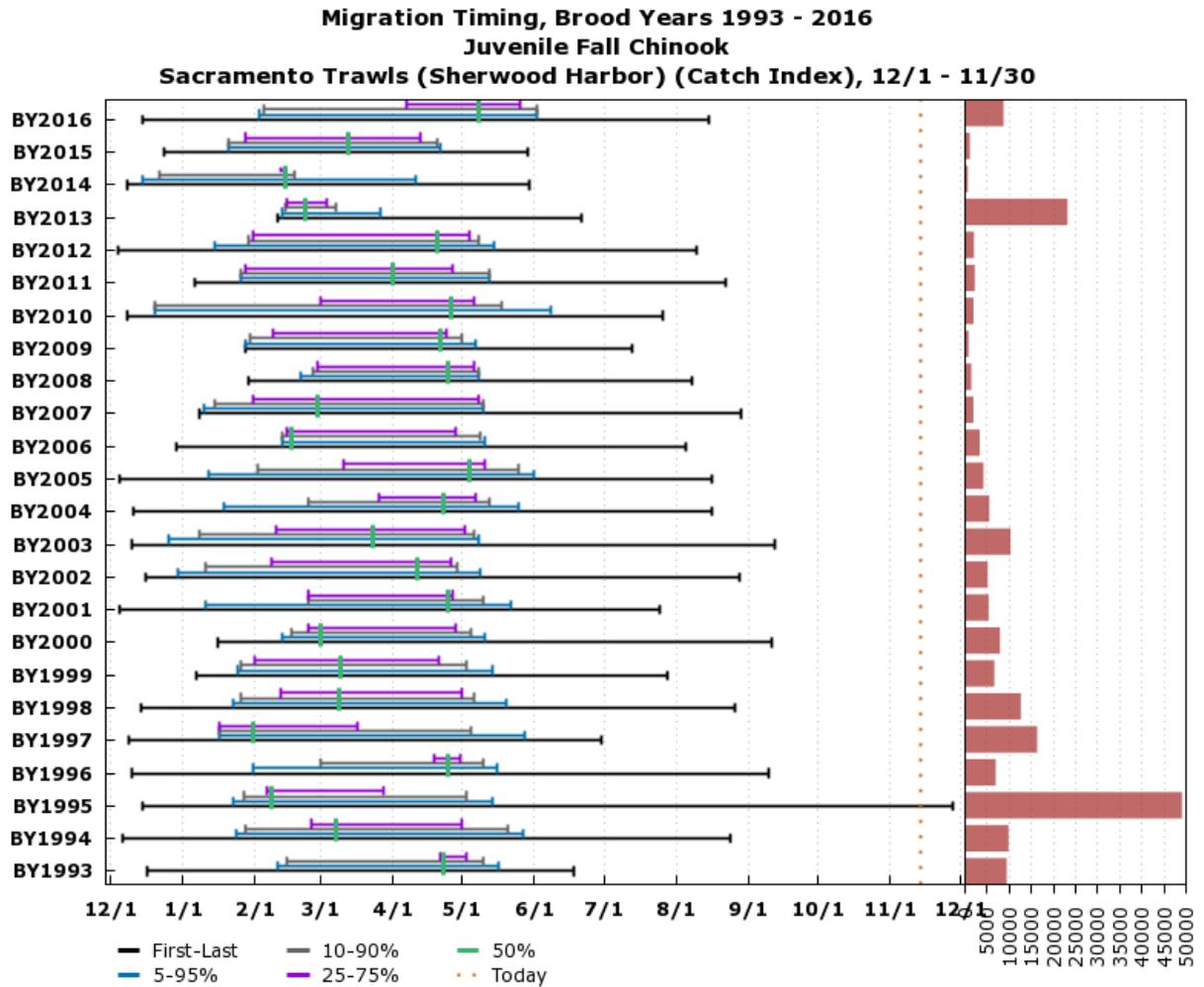
**F.4.4 Fall-Run Chinook Salmon: Sacramento Beach Seines Combined**



Based on 8 hauls/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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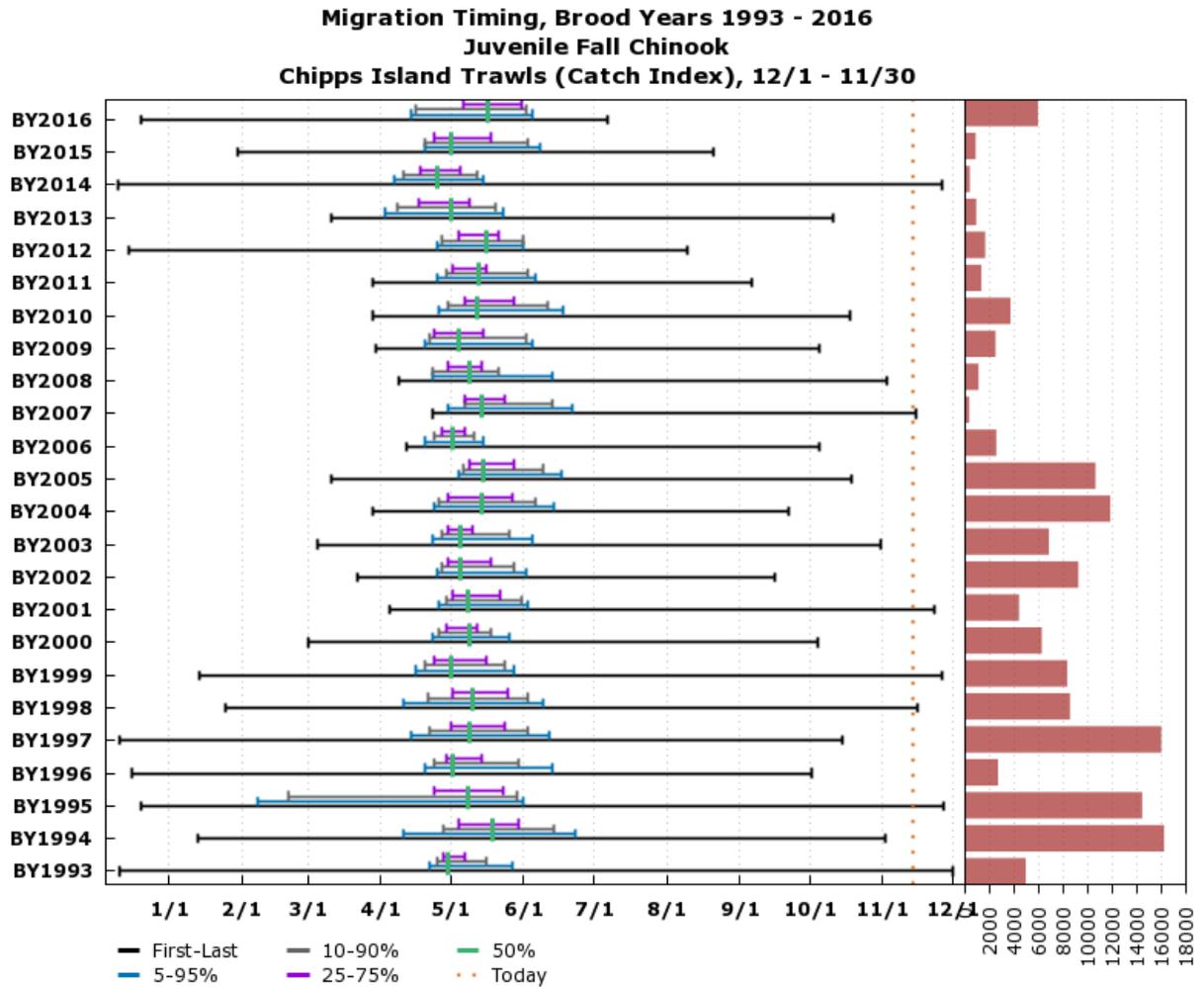
**F.4.5 Fall-Run Chinook Salmon: Sacramento Trawls (Sherwood Harbor)**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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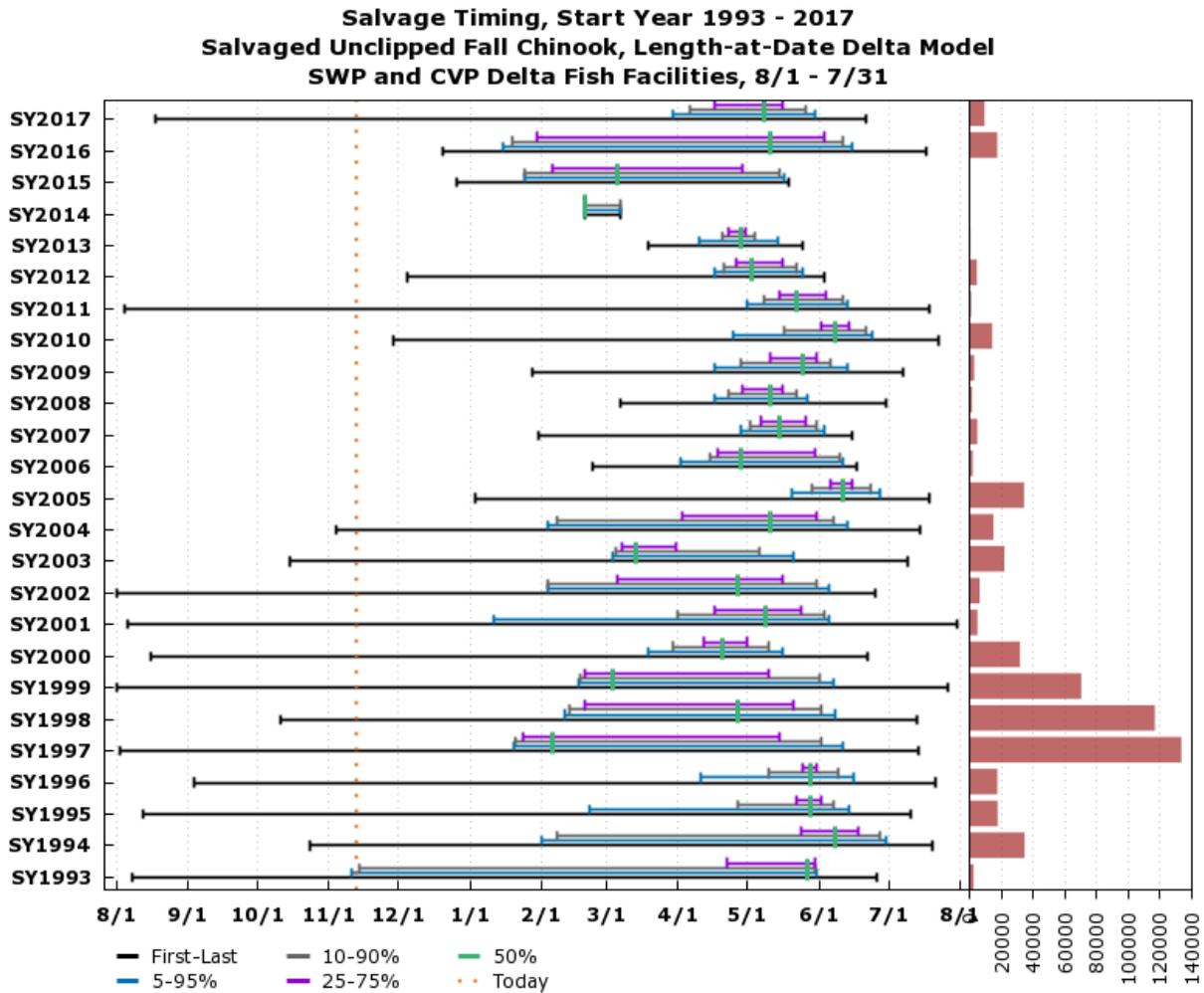
**F.4.6 Fall-Run Chinook Salmon: Chipps Island Trawls**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

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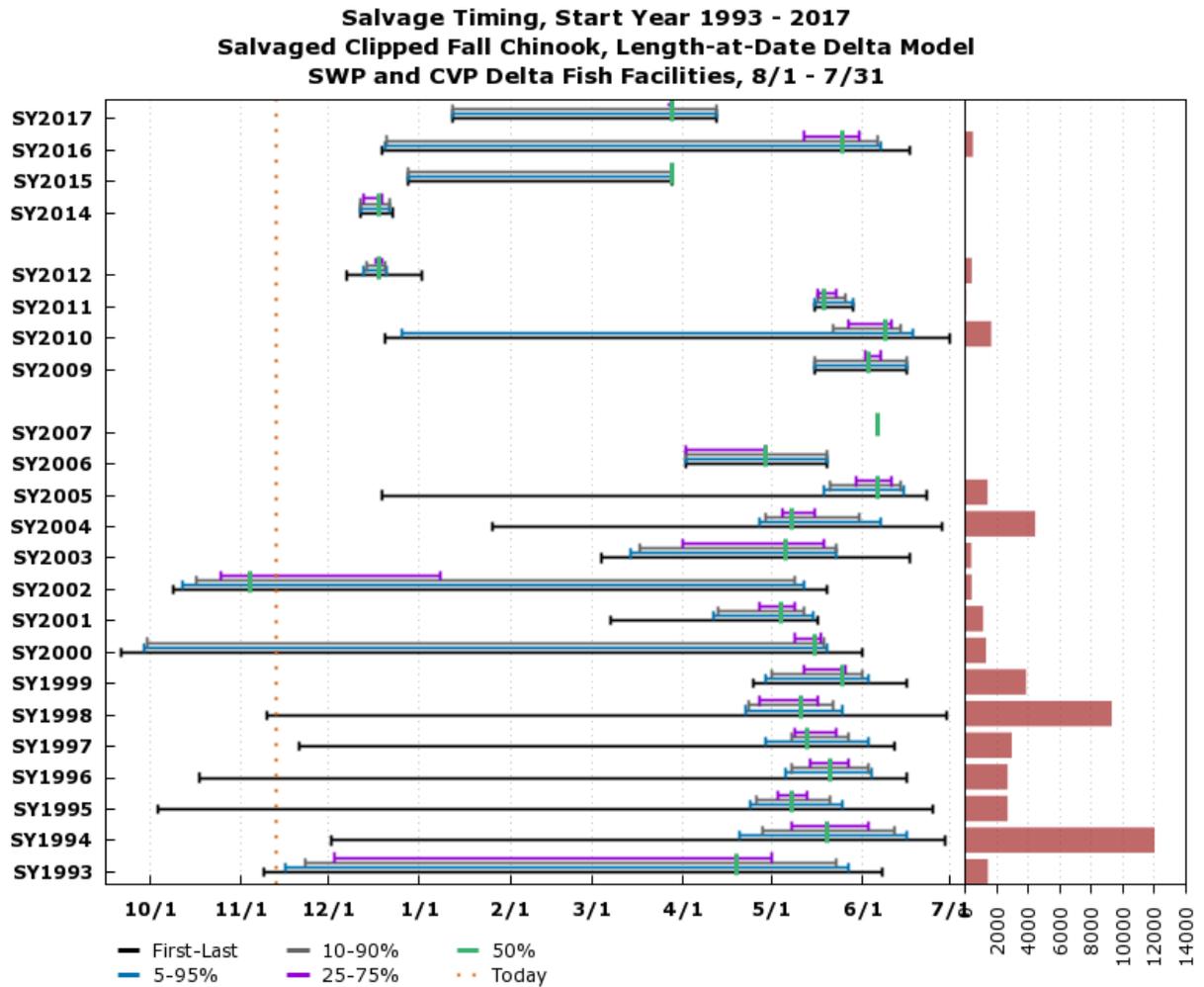
**F.4.7 Fall-Run Chinook Salmon Salvage: Unclipped (Length-at-Date)**



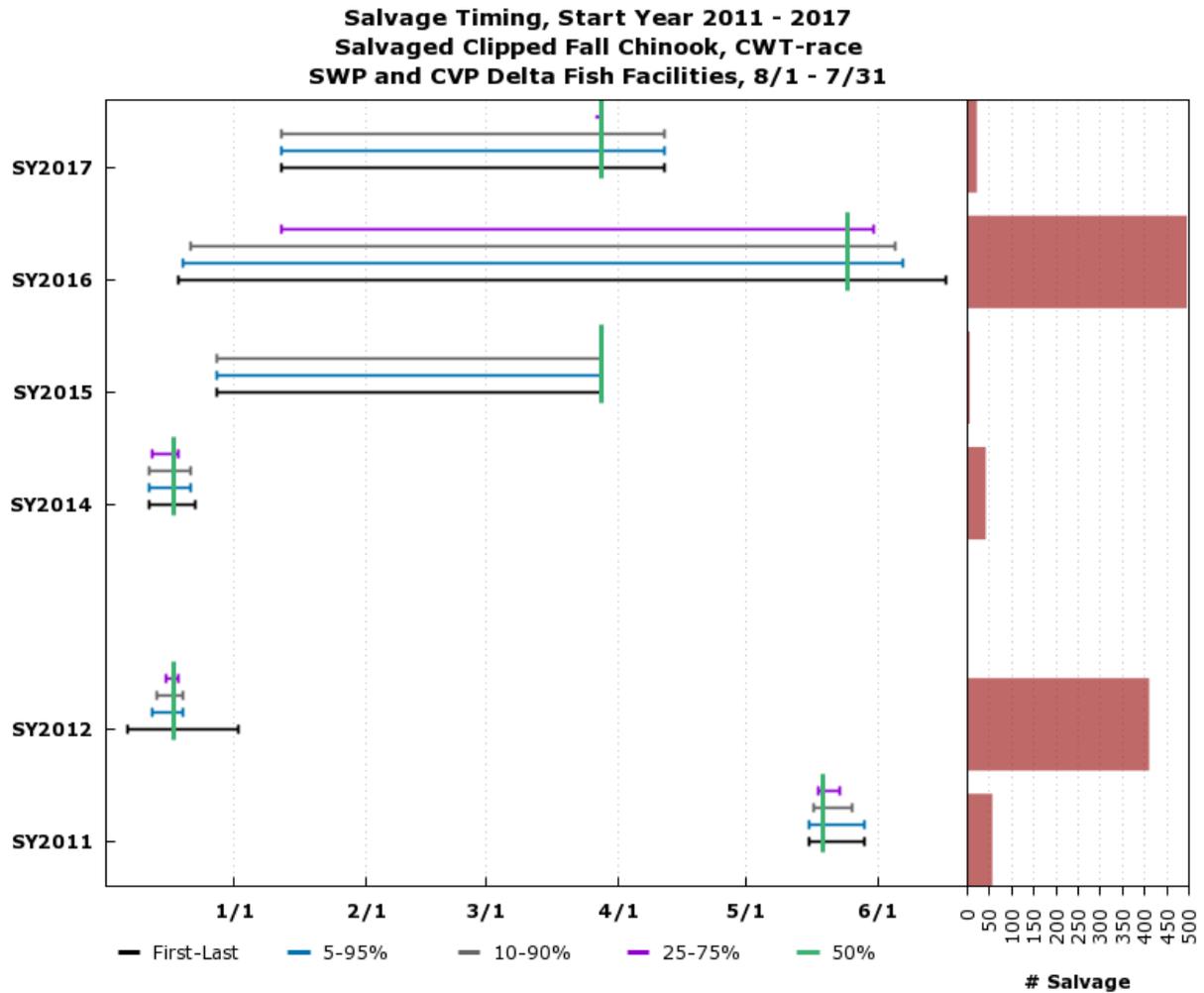
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:37:08 PST

**F.4.8 Fall-Run Chinook Salmon Salvage: Clipped (Length-at-Date)**

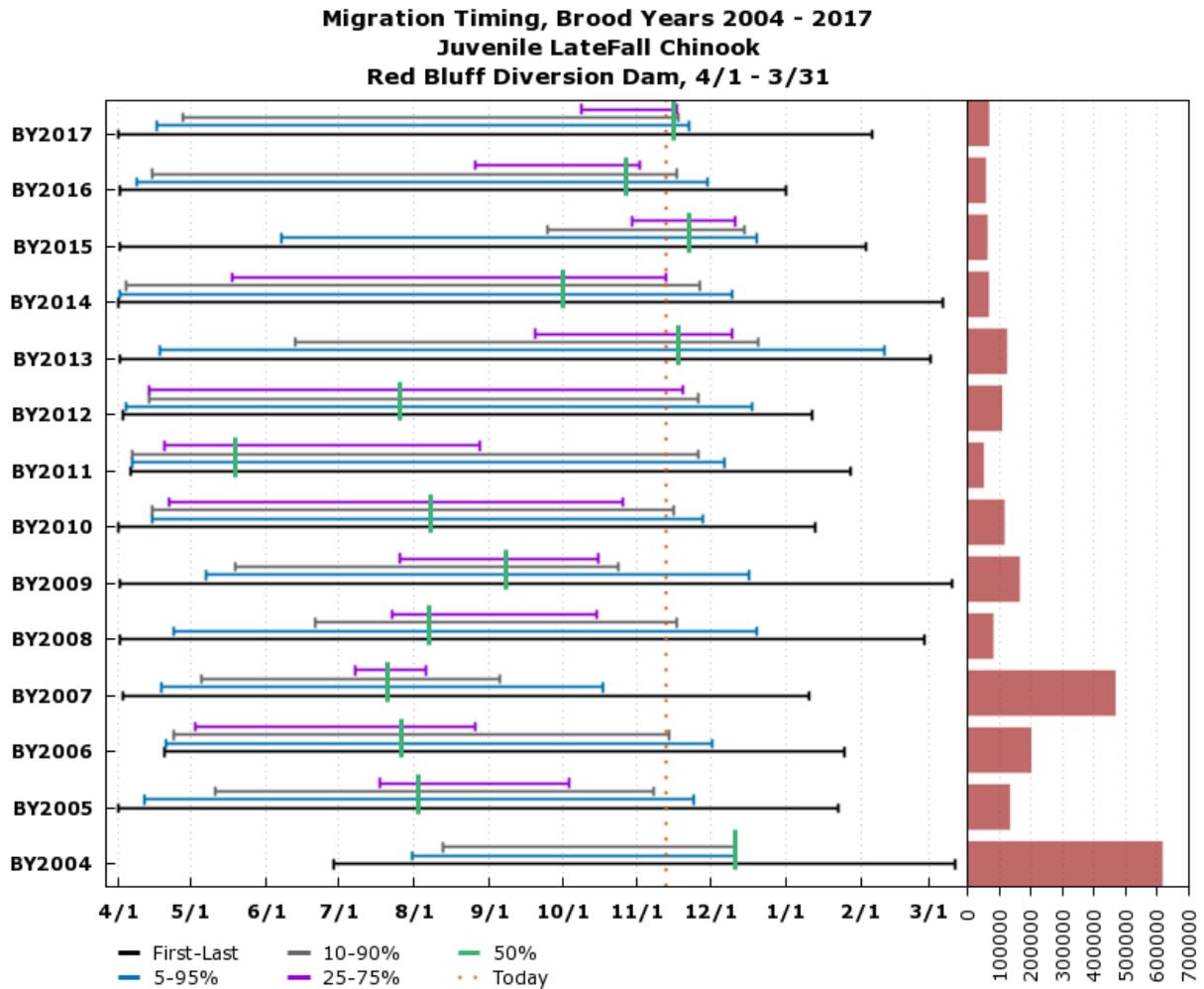


**F.4.9 Fall-Run Chinook Salmon Salvage: Clipped (CWT-Race)**



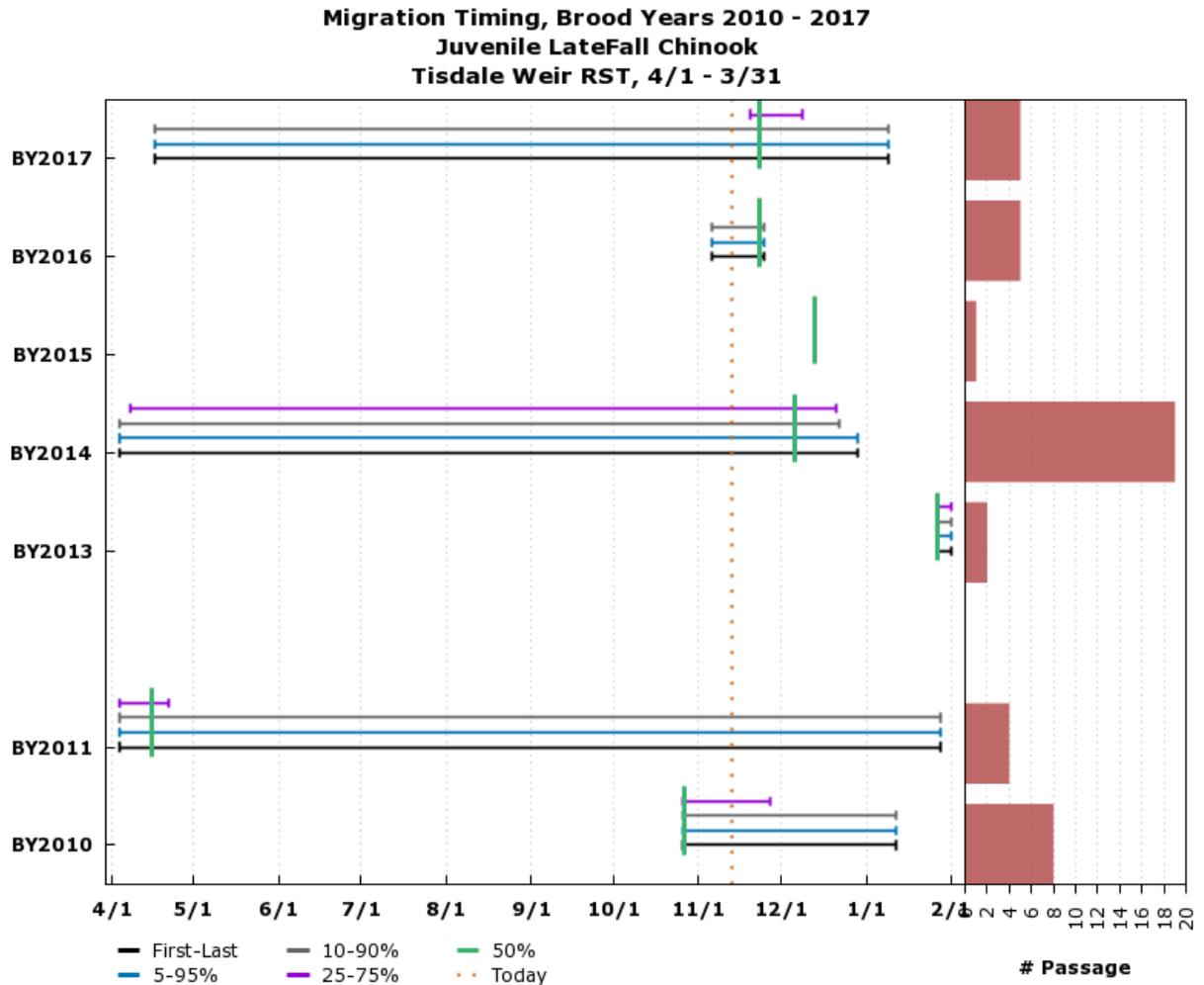
## F.5 Late Fall-Run Chinook Salmon

### F.5.1 Late Fall-Run Chinook Salmon: Red Bluff Diversion Dam



Based on Daily Estimated Passage. Preliminary data from USFWS Red Bluff; subject to revision. # Passage  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/) 14 Nov 2018 09:39:55 PST

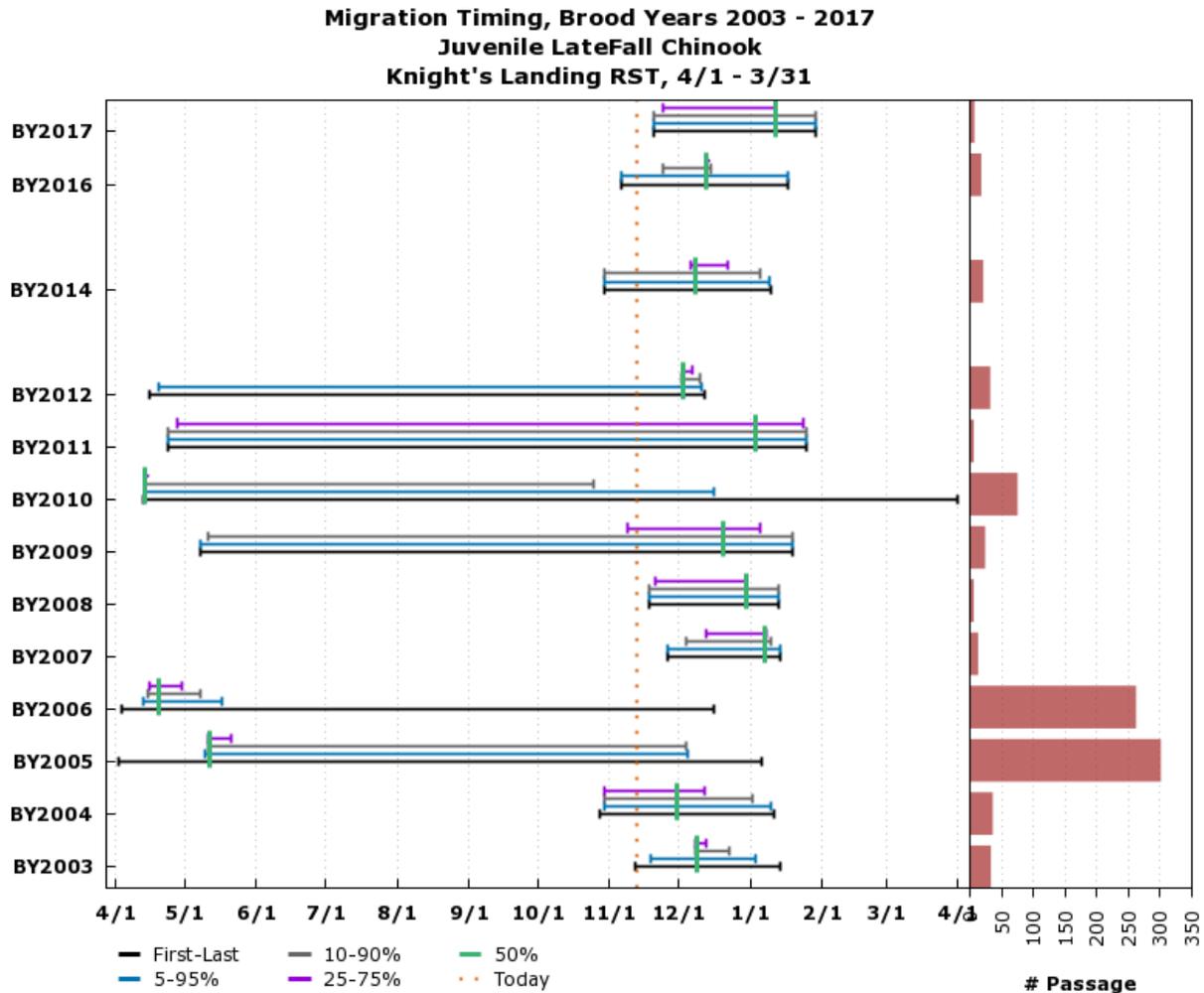
**F.5.2 Late Fall-Run Chinook Salmon: Tisdale Weir Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:40:26 PST

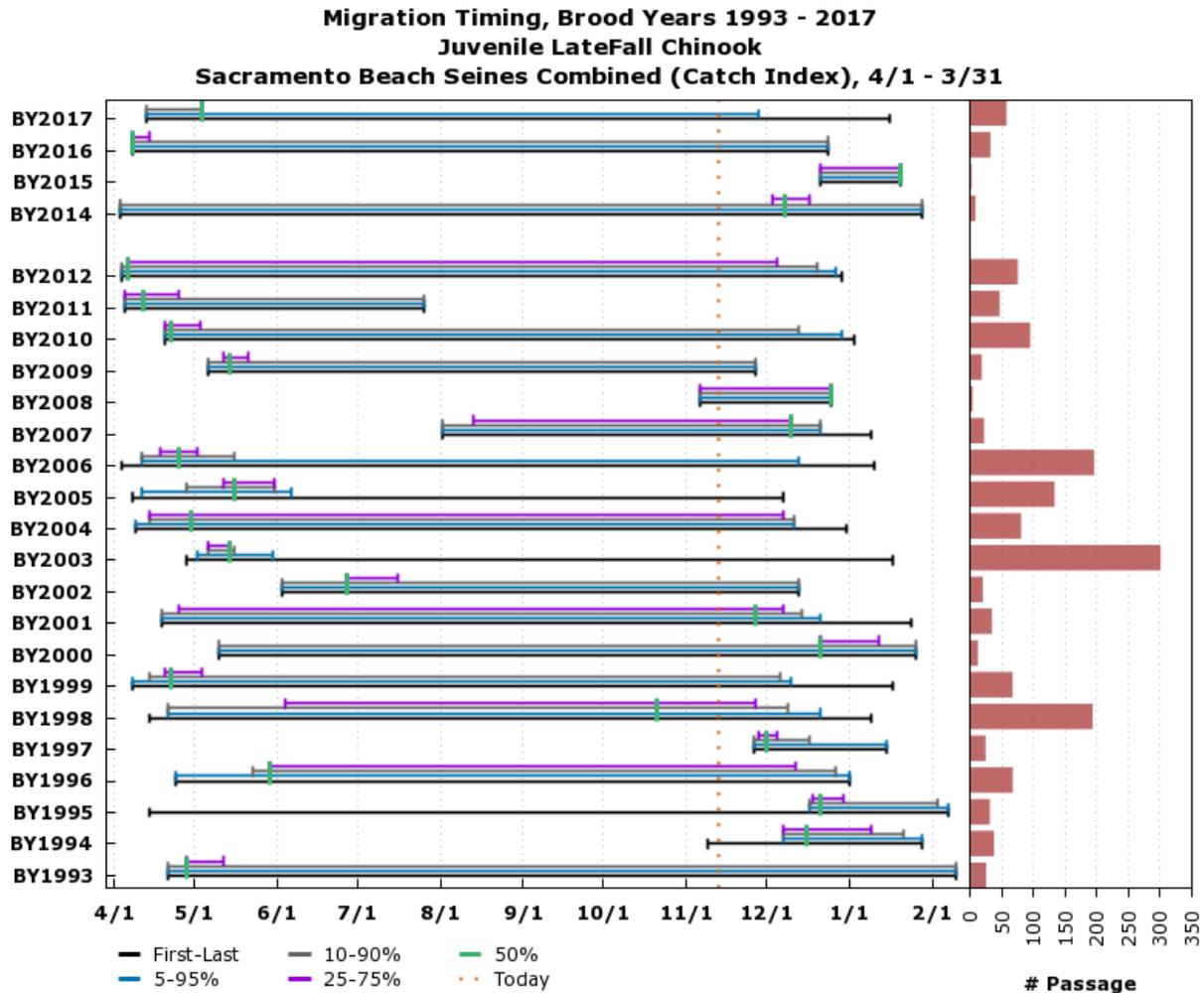
**F.5.3 Late Fall-Run Chinook Salmon: Knights Landing Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:40:58 PST

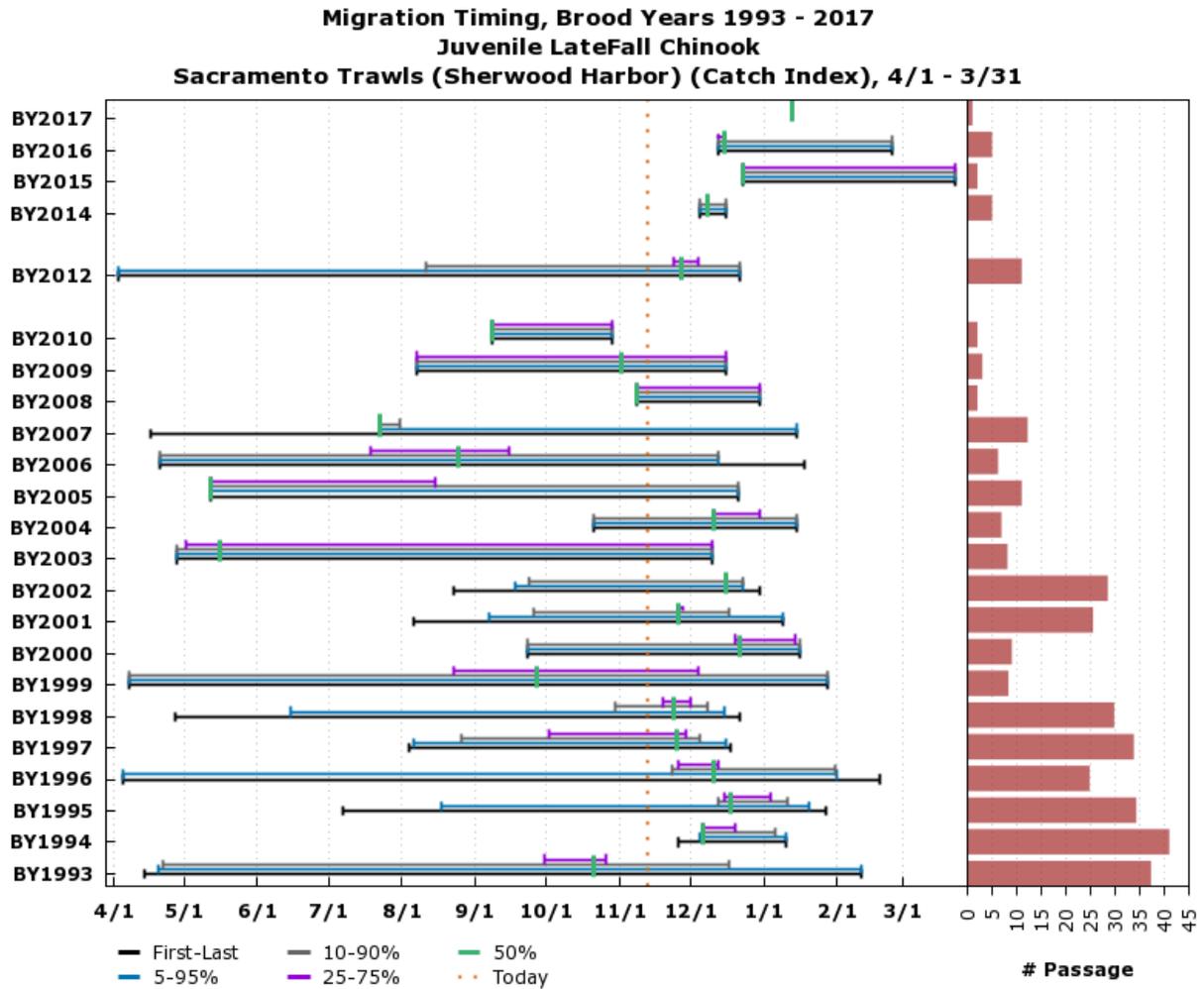
**F.5.4 Late Fall-Run Chinook Salmon: Sacramento Beach Seines Combined**



Based on 8 hauls/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:41:37 PST

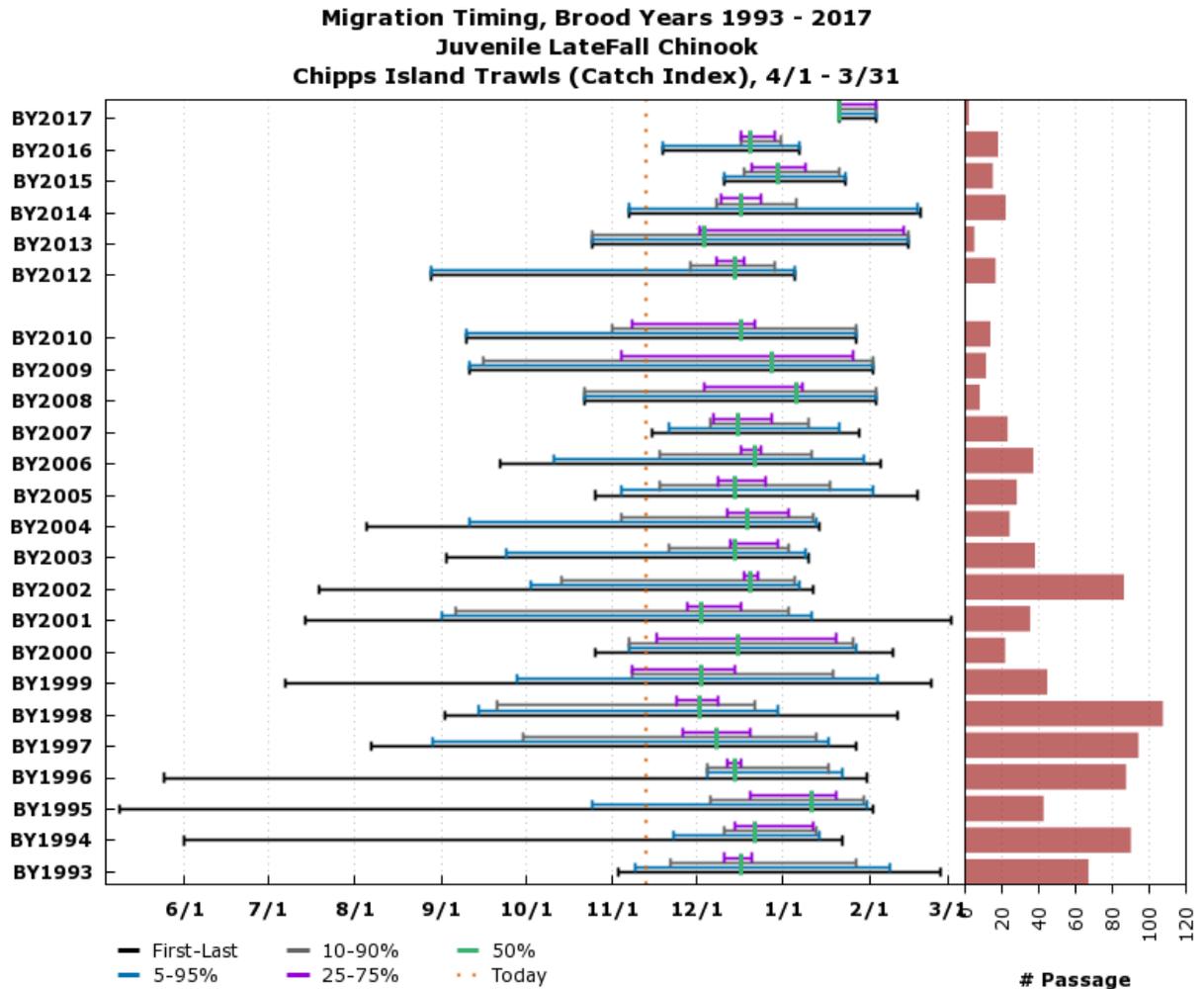
**F.5.5 Late Fall-Run Chinook Salmon: Sacramento Trawls (Sherwood Harbor)**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:42:04 PST

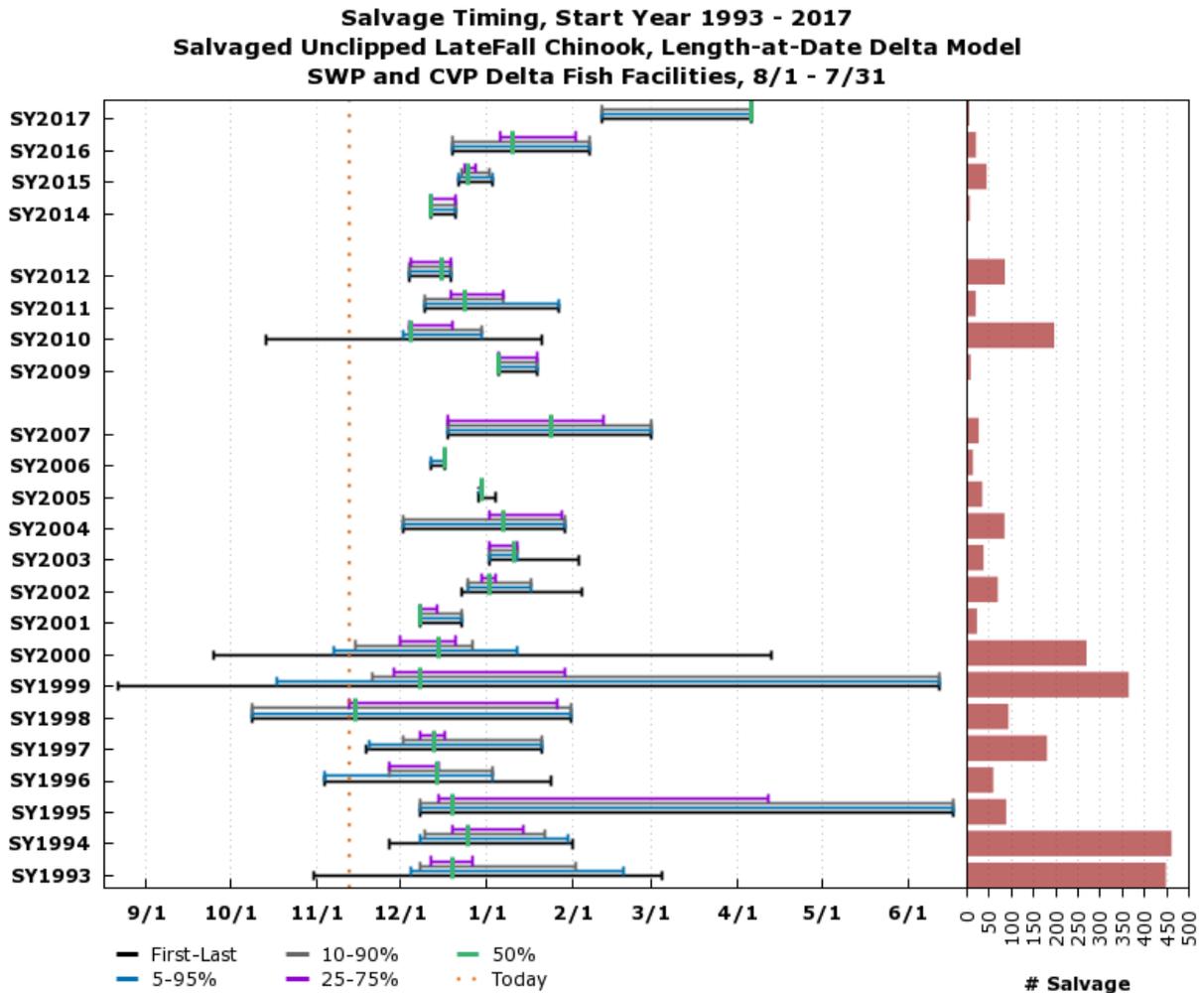
**F.5.6 Late Fall-Run Chinook Salmon: Chipps Island Trawls**



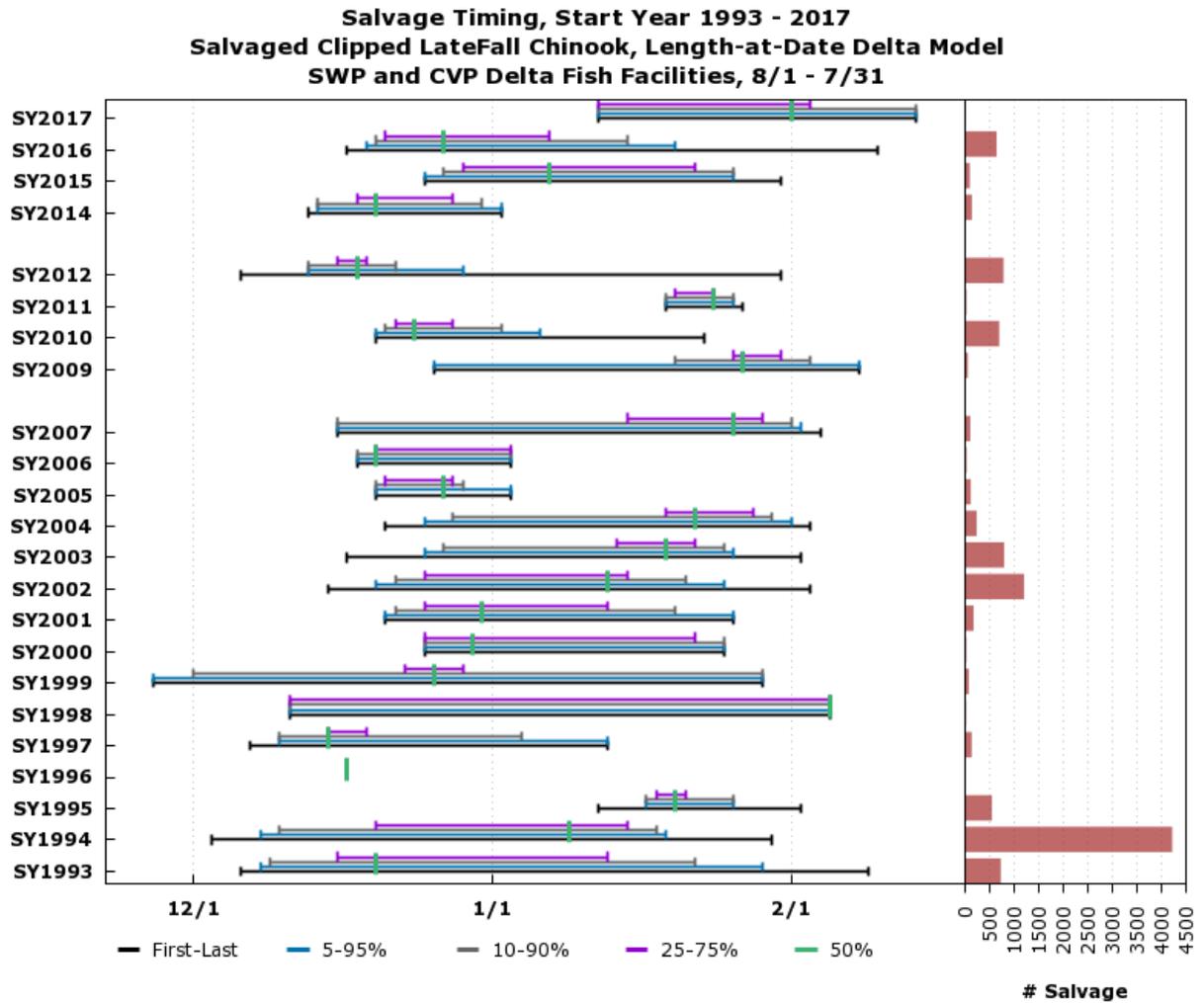
Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:42:58 PST

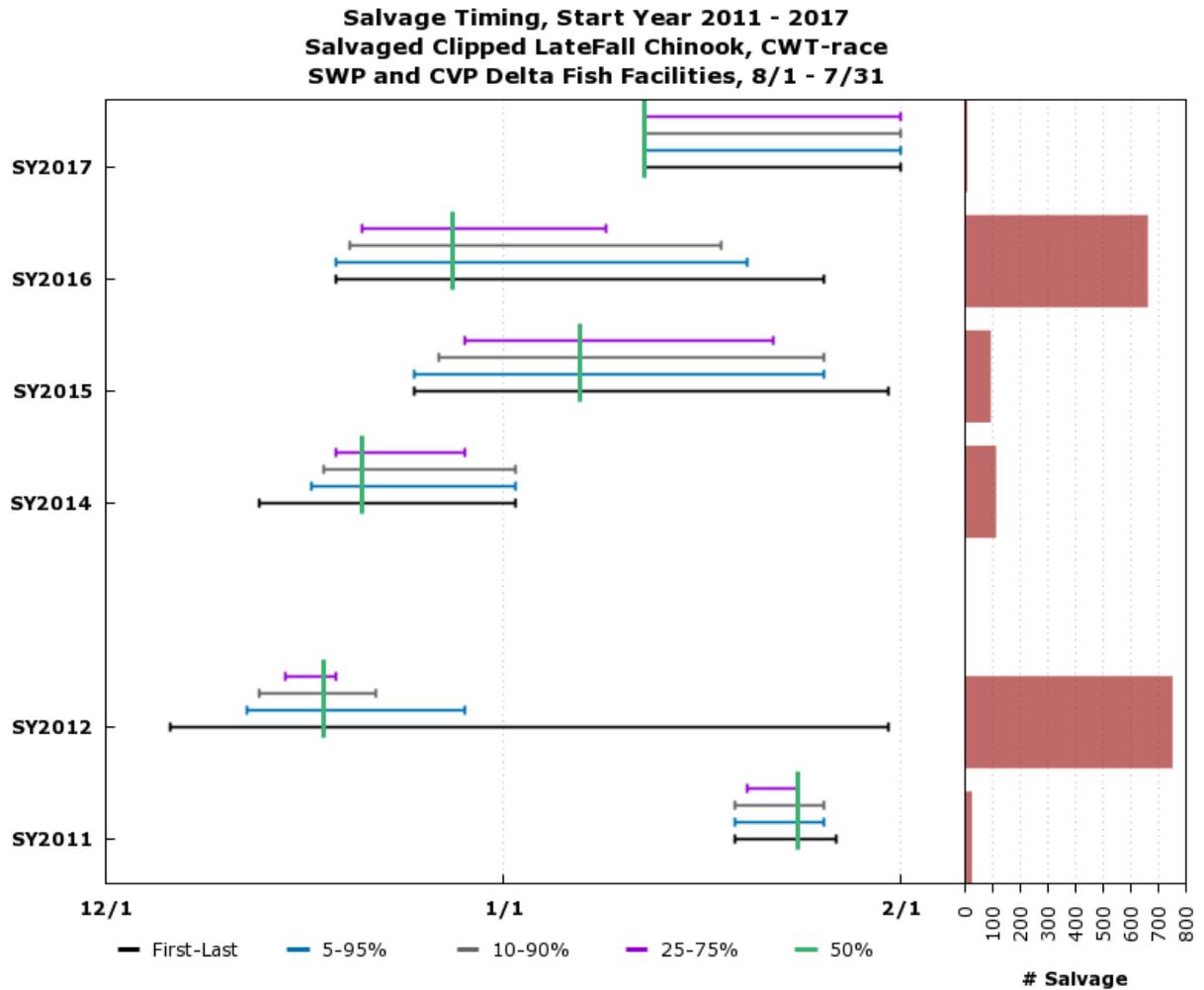
**F.5.7 Late Fall-Run Chinook Salmon Salvage: Unclipped (Length-at-Date)**



**F.5.8 Late Fall-Run Chinook Salmon Salvage: Clipped (Length-at-Date)**

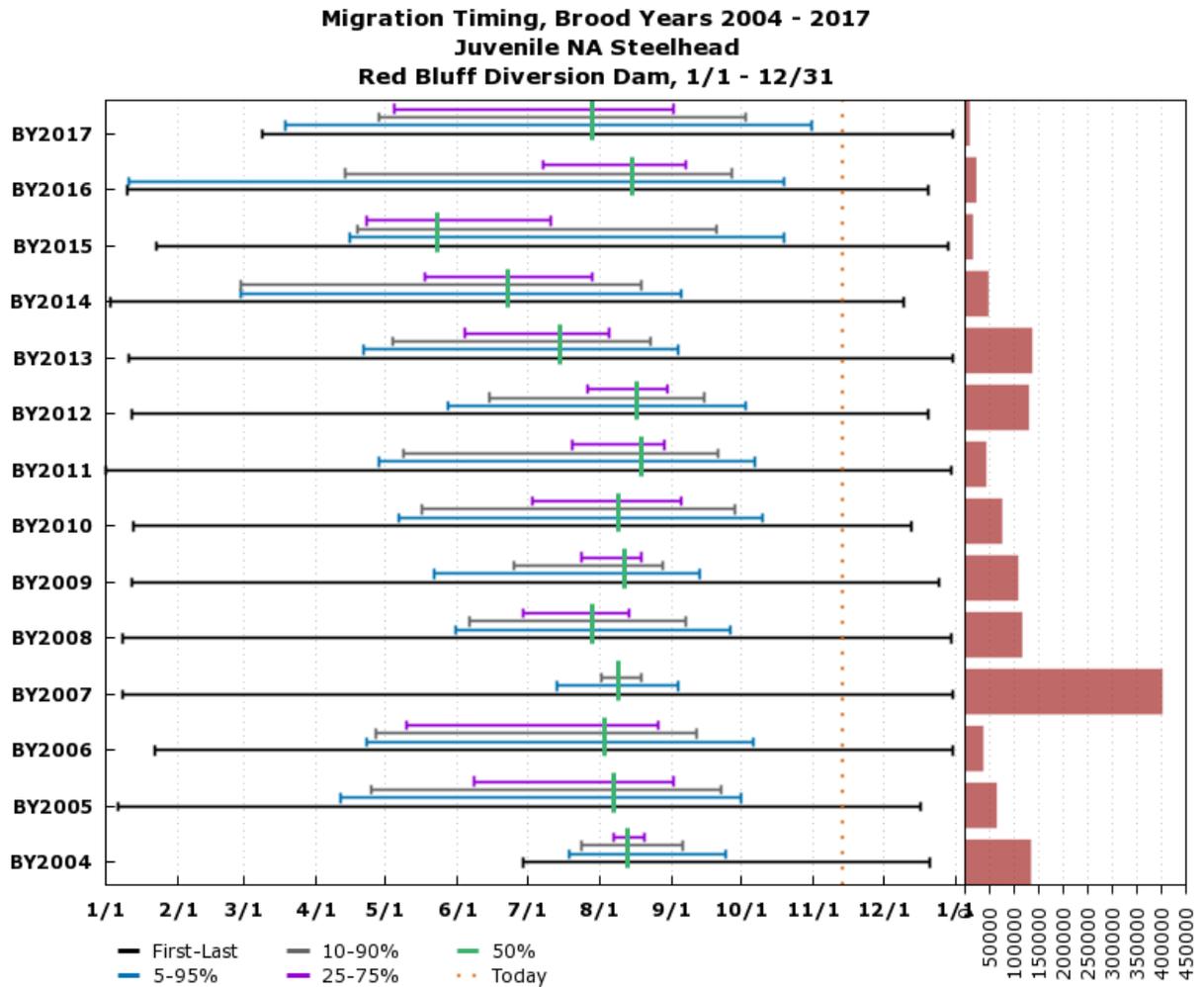


**F.5.9 Late Fall-Run Chinook Salmon Salvage: Clipped (CWT-Race)**



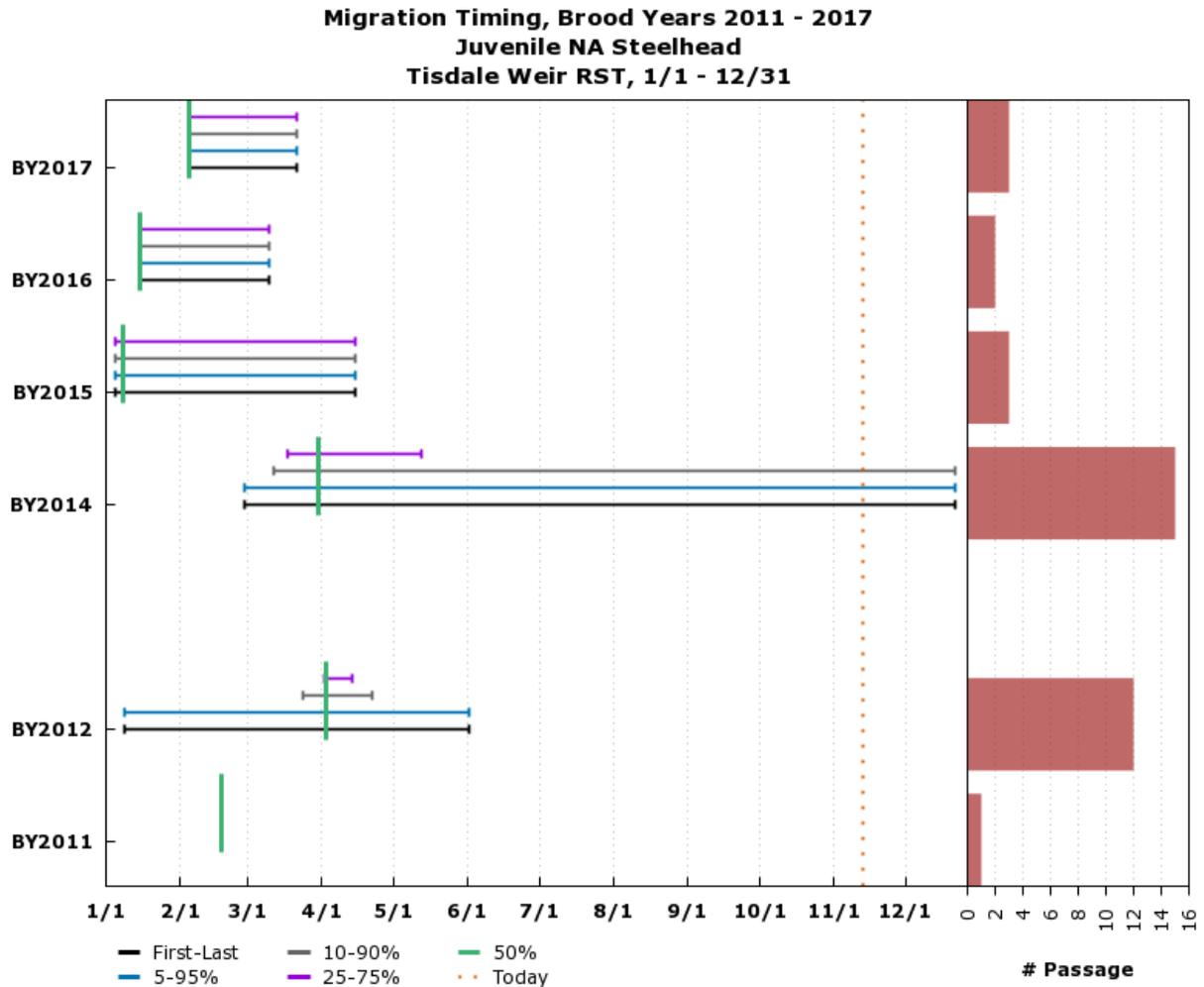
## F.6 Steelhead

### F.6.1 Steelhead: Red Bluff Diversion Dam



Based on Daily Estimated Passage. Preliminary data from USFWS Red Bluff; subject to revision. **# Passage**  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/) 14 Nov 2018 09:45:42 PST

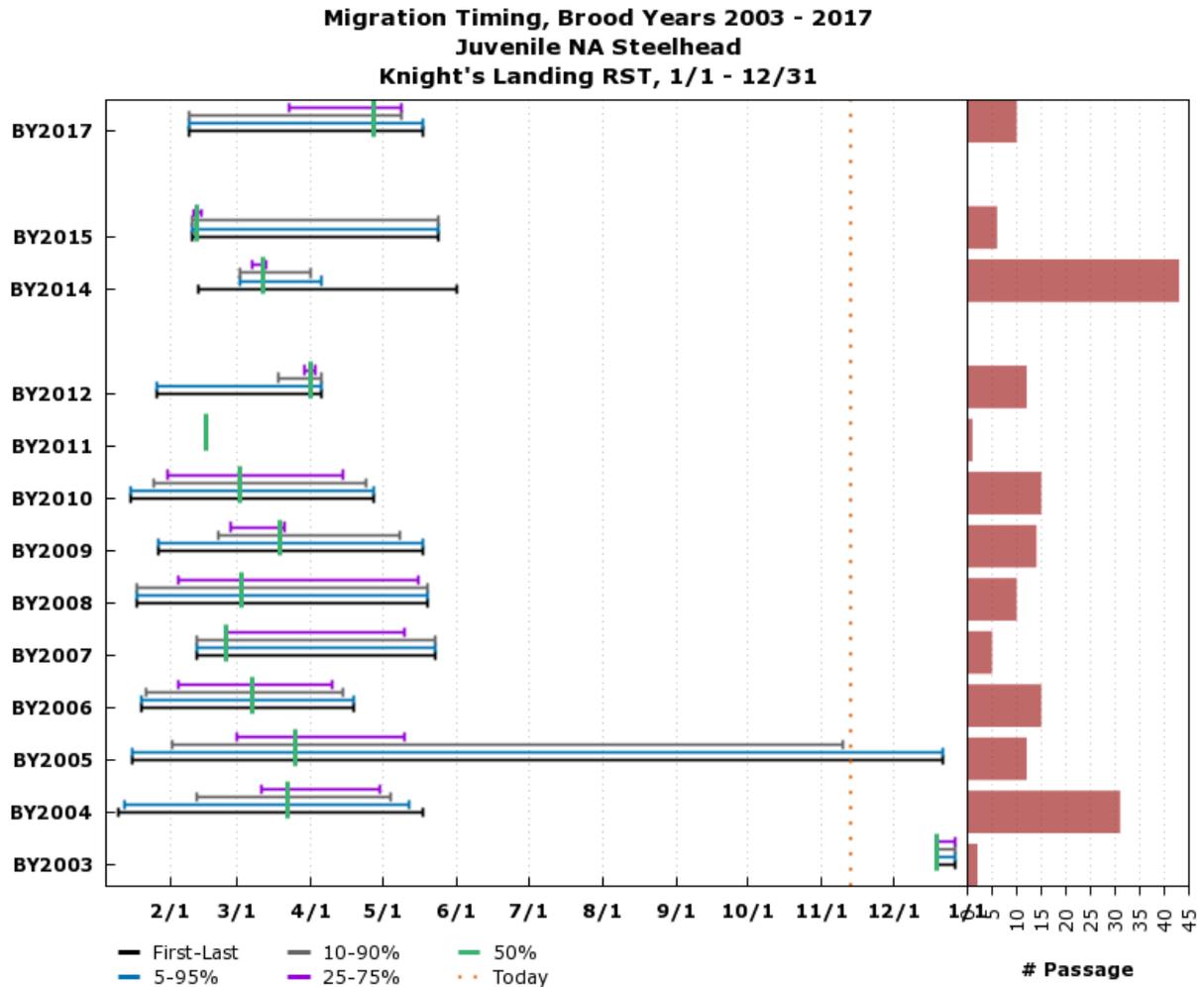
**F.6.2 Steelhead: Tisdale Weir Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:46:20 PST

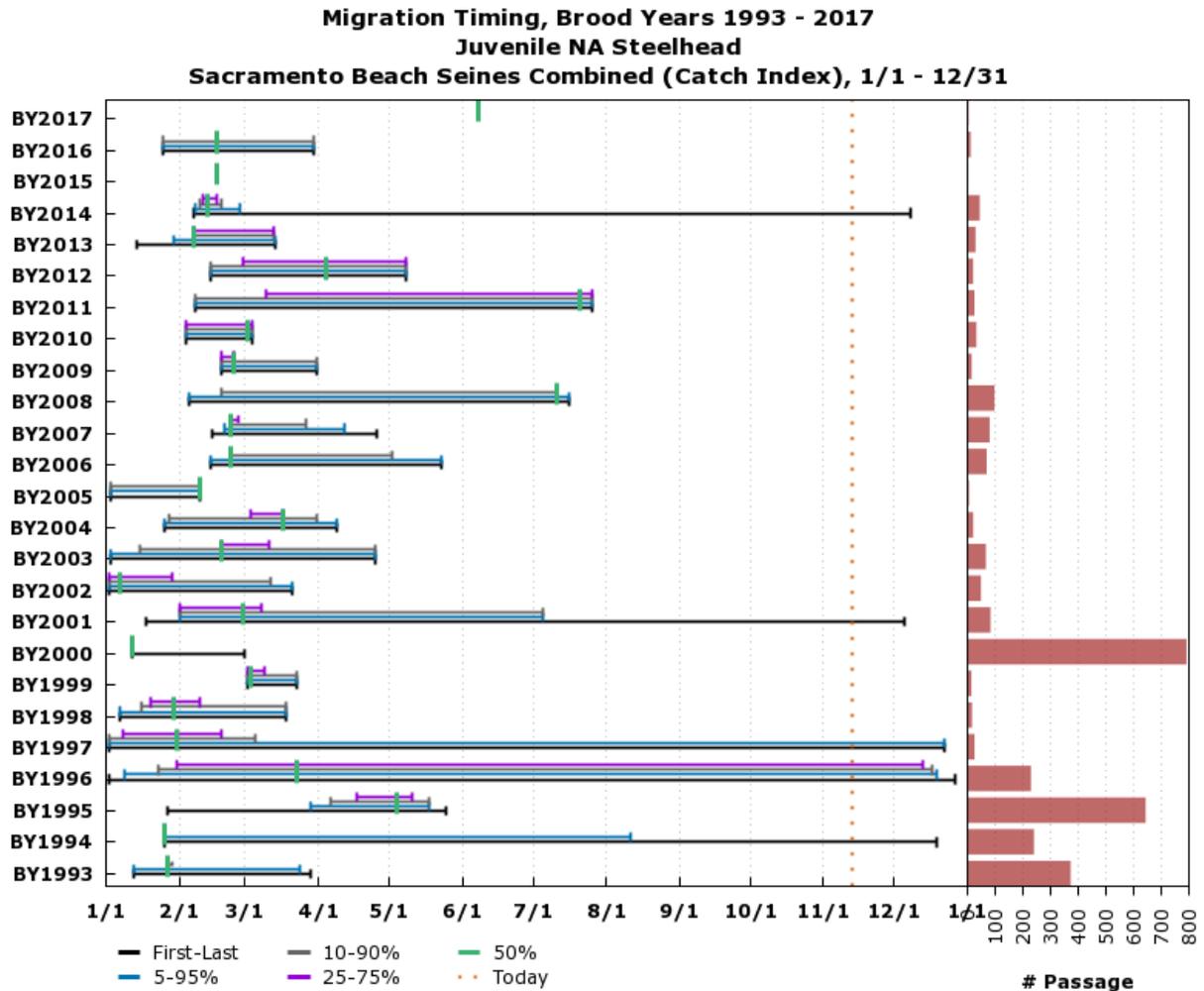
**F.6.3 Steelhead: Knights Landing Rotary Screw Traps**



Based on Daily Sampling. Preliminary data from CDFW via StreamNet; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:46:48 PST

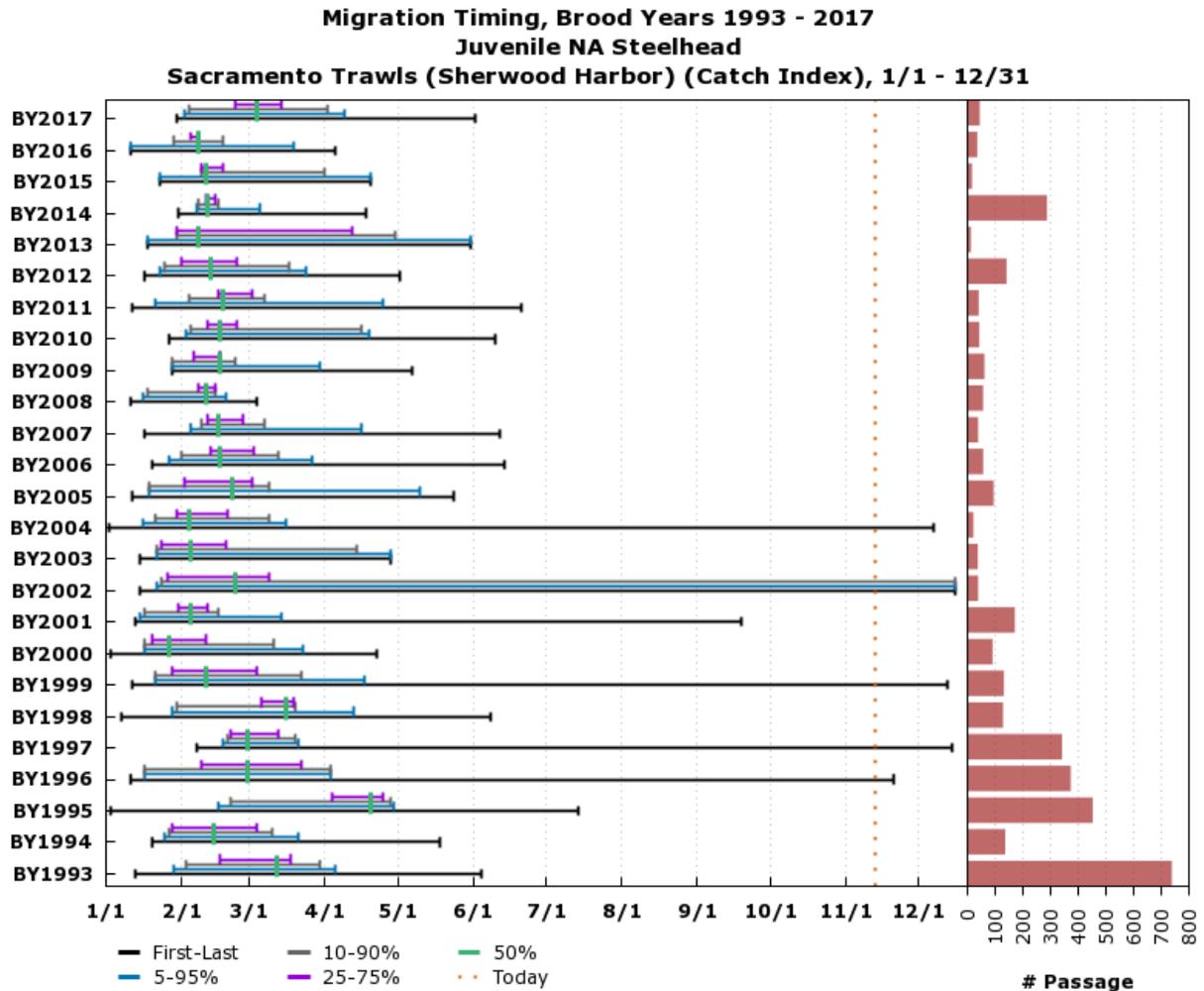
**F.6.4 Steelhead: Sacramento Beach Seines Combined**



Based on 8 hauls/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:47:18 PST

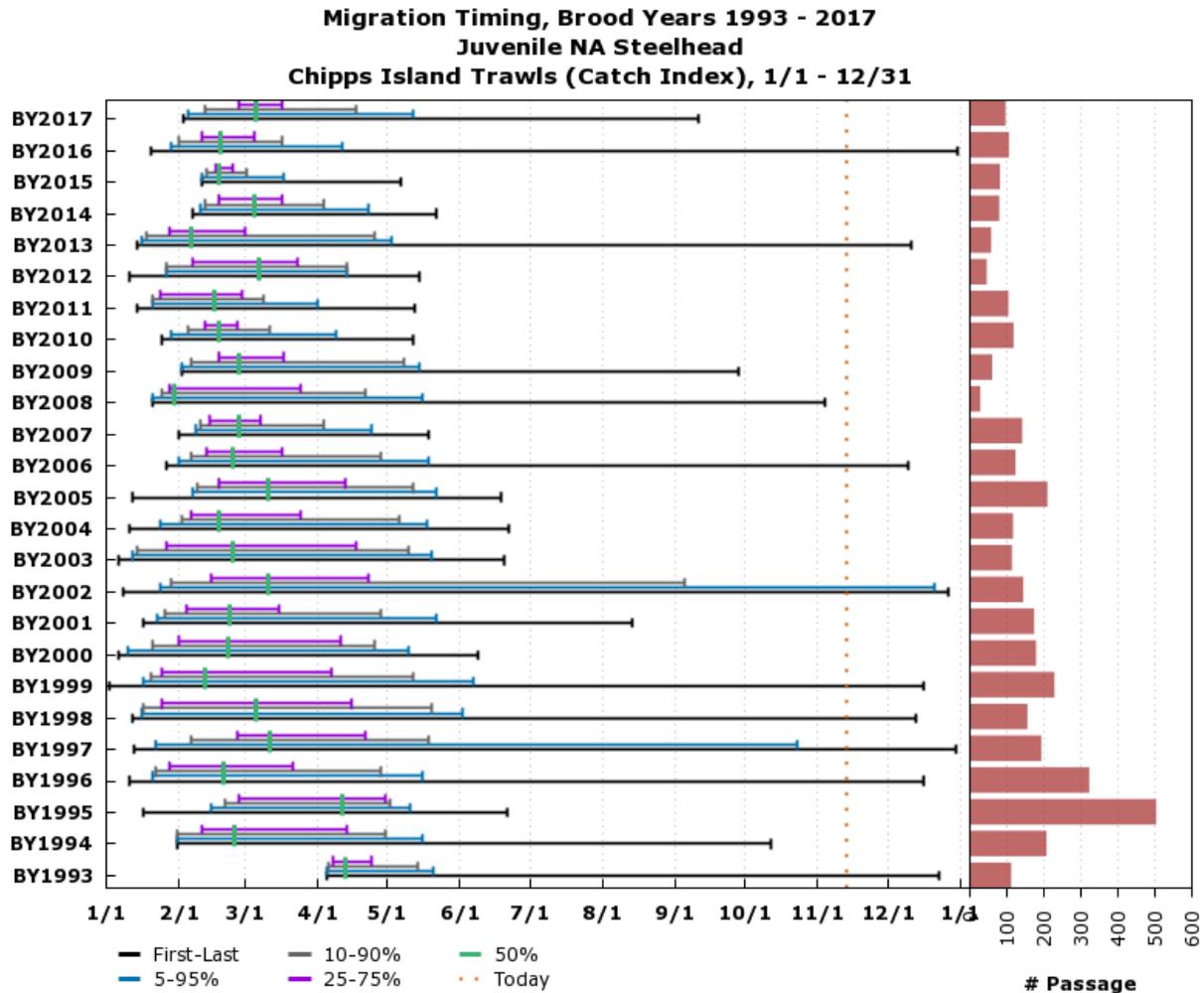
**F.6.5 Steelhead: Sacramento Trawls (Sherwood Harbor)**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:48:02 PST

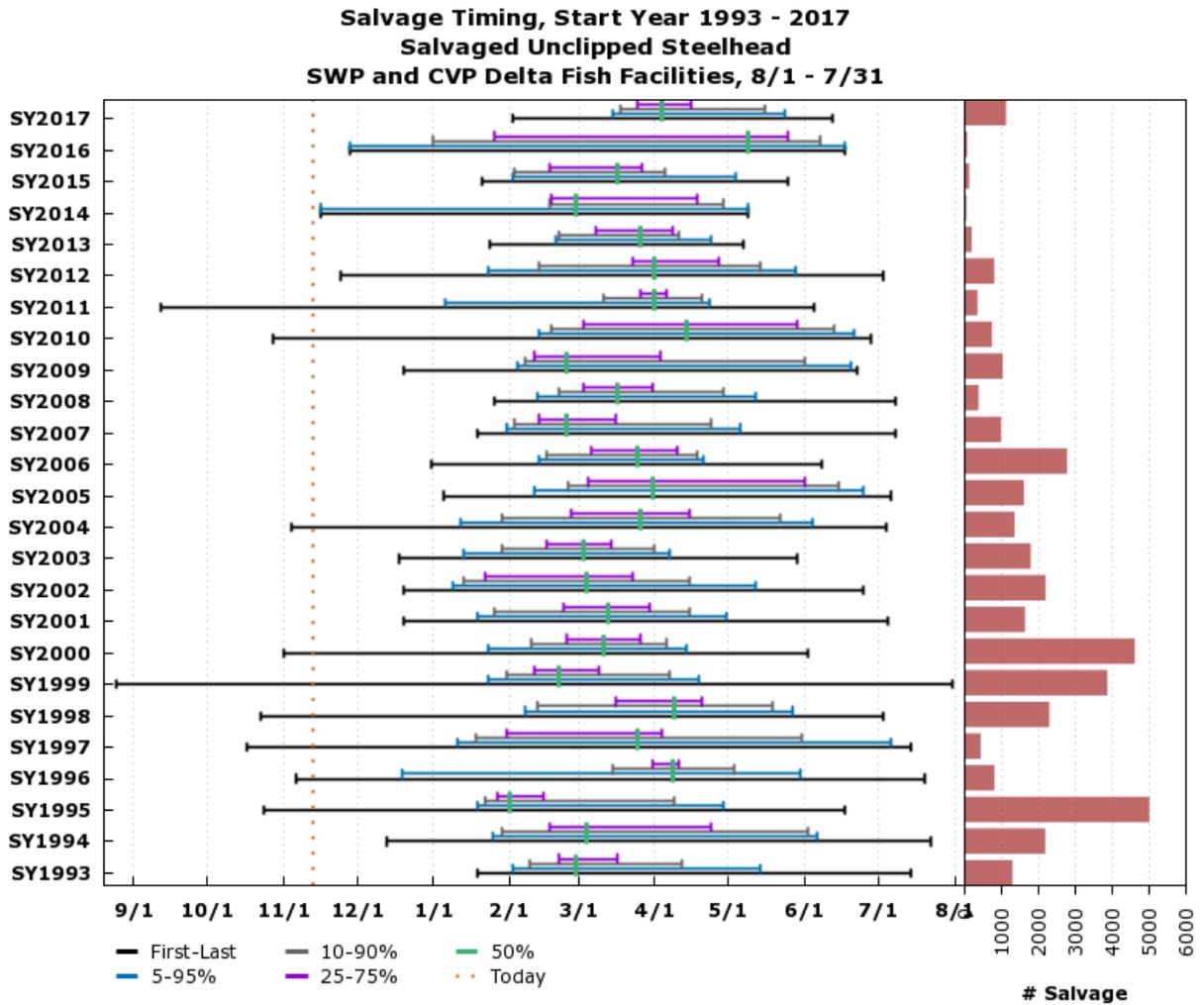
**F.6.6 Steelhead: Chipps Island Trawls**



Based on 10 tows/day. Preliminary data from USFWS Lodi; subject to revision.  
[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2018 09:48:33 PST

**F.6.7 Steelhead Salvage: Unclipped**



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14 Nov 2018 09:49:40 PST

**F.6.8 Steelhead Salvage: Clipped**

