## **2023 OUT-MIGRATION REPORT, FAUNTLEROY CREEK**

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#### SUMMARY

Monitors documented 41 coho smolts that survived their year in Fauntleroy Creek to migrate to nearshore habitat in Fauntleroy Cove in central Puget Sound. Monitoring documented salmonids making use of the entire creek system, including a pond that resulted from partial blockage of the creek culvert under 45th Ave. SW. Smolt size was typical and all appeared healthy. Monitors also documented 238 live fry and 10 dead.

| Year | Monitoring<br>Period | Live<br>Smolts<br>Upper | Live<br>Smolts<br>Lower | Live<br>Smolts<br>Other <sup>4</sup> | Dead<br>Smolts | Smolts<br>to Salt | Smolt<br>Size<br>(mm) | Live<br>Fry<br>Upper | Live<br>Fry<br>Lower | Dead<br>Fry |
|------|----------------------|-------------------------|-------------------------|--------------------------------------|----------------|-------------------|-----------------------|----------------------|----------------------|-------------|
| 2023 | 3/15 - 5/25          | 11                      | 17                      | 13                                   | 0              | 41                | Typical               | 2                    | 38                   | 10          |
| 2022 | 3/15 - 5/26          | 2                       | 9                       |                                      | 0              | 11                | Typical               | 4                    | 07                   | 0           |
| 2021 | 3/17 - 5/22          | 15                      | 34                      |                                      | 1              | 49                | Typical               | 71                   | 17                   | 0           |
| 2020 | 2/29 - 5/26          | 22                      | 55                      |                                      | 1              | 77                | Typical               | 87                   | 85                   | 0           |
| 2019 | 3/15 - 5/26          | 4                       | 18                      |                                      | 0              | 22                | Typical               | 23                   | 5                    | 0           |
| 2018 | 3/10 - 5/31          | 26                      | 19                      |                                      | 0              | 45                | Typical               | 98                   | 4                    | 0           |
| 2017 | 3/15 - 5/28          | 18                      | 14                      |                                      | 1              | 32                | Typical               | 237                  |                      | 0           |
| 2016 | 3/10 - 5/27          | 14                      | 5                       |                                      | 1              | 19                | Typical               | 60                   | 0                    | 20          |
| 2015 | 3/27 - 5/31          | 2                       | 33                      |                                      | 0              | 35                | Typical               | 1                    | 00                   | 20          |
| 2014 | 3/15 - 5/31          | 8                       | 11                      |                                      | 0              | 19                | Typical               | 84                   | 0                    | 1           |
| 2013 | 3/15 - 5/31          | 65                      | 76                      |                                      | 12             | 141               | Typical               |                      | 534                  | 0           |
| 2012 | 3/17 - 6/7           | 145                     | 85                      |                                      | 2              | 230 <sup>3</sup>  | 90 -105               |                      | 924                  | 56          |
| 2011 | 3/25 - 5/30          | 147                     | 36                      |                                      | 0              | 183 <sup>3</sup>  |                       |                      | a few                | 0           |
| 2010 | 4/1 - 5/22           |                         | 24                      |                                      | 0              | 24                | 110 - 140             |                      | 81                   | 2           |
| 2009 | 4/1 - 5/31           |                         | 18                      |                                      | 1              | 18                | 97 -110               |                      | 1                    | 0           |
| 2008 | 4/2 - 5/31           |                         | 17                      |                                      | 0              | 17                | 100 -135              |                      | 85                   | 0           |
| 2007 | 4/7 - 5/19           |                         | 24                      |                                      | 0              | 24                | 115 -128              |                      | 20                   | 0           |
| 2006 | 4/9 - 5/18           |                         | 22                      |                                      | 1              | 22                | 105 -155              |                      | 121                  | 0           |
| 2005 | 3/16 - 5/27          |                         | 10                      |                                      | 0              | 10                | 100 -135              |                      | 34                   | 3           |
| 2004 | 3/3 - 6/10           |                         | 11                      |                                      | 0              | 11                | 97 -123               |                      | 569                  | 3           |
| 2003 | 4/2 - 6/16           |                         | 37                      |                                      | 0              | 37                |                       |                      | 637                  | 84          |

<sup>1</sup>Does not include eggs left by spawners <sup>2</sup>Participation reduced by pandemic <sup>3</sup>Corrected 2018

<sup>4</sup>Includes smolts sighted in tidepool on beach and caught in blockage pond at 45th

#### METHODOLOGY

Because of deterioration, we built two new traps this year. Both had a frame fitted with netting and were anchored below a weir so all water flowed through, softly trapping everything headed downstream. Netting over each trap protected trapped fish from birds and raccoons.

One trap was located on the mainstem as the creek flows out of Fauntleroy Park and the other was due upstream of the fish ladder, about a half block from the creek mouth. Monitoring began the day traps were installation and continued until 5 days after trapping the last smolt (mid May).

Because we had 254 spawners in the lower creek in fall 2022, the fry caught in our traps during March and April could have been home hatch. Some of those caught after April 27 could have been a mix of home match and released fry.

Volunteers checked both traps twice daily. As in past years, we had state permission to transport smolts from the upper trap to below the lower trap to ensure their safe out-migration. We released all smolts and fry to continue their downstream journey. To avoid trauma, we did not handle the smolts to get exact measurements. Monitors documented each day's activity on a central white board, which Phil Sweetland transcribed at the end (attached tables).

#### COMMENTS

Monitors sighted a smolt in a tidepool on the beach on March 15 and decided to count it. The first entrapment was March 25 (about two weeks earlier than last year) and the last was May 20 - about the same as last year. The heaviest activity was in April (earlier than last year).

Having several monitors again this year spread the load, improved our knowledge base, and increased our capacity to continue this important study.

# 2023 SMOLT COUNT DETAIL

| Date   | Smolts |       |              |           |       |       |         |       |      | Fry |  |
|--------|--------|-------|--------------|-----------|-------|-------|---------|-------|------|-----|--|
|        | Live   |       |              | Dead Tota |       |       | To Salt | Alive | Dead |     |  |
|        | Upper  | Lower | 45th Culvert | Other     | Upper | Lower |         |       |      |     |  |
|        | No.    | No.   | No           | No        | 0     | 0     |         |       |      |     |  |
| 12-Mar |        |       |              | 1         |       |       | 1       | 1     |      |     |  |
| 13-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 14-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 15-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 16-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 17-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 18-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 19-Mar |        |       | 1            |           |       |       | 2       | 2     |      |     |  |
| 20-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 21-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 22-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 23-Mar |        |       |              |           |       |       |         |       | 5    | 2   |  |
| 24-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 25-Mar |        | 1     |              |           |       |       | 3       | 3     |      | 2   |  |
| 26-Mar | 2      | 1     |              |           |       |       | 6       | 6     | 2    |     |  |
| 27-Mar | 2      |       |              |           |       |       | 8       | 8     | 1    |     |  |
| 28-Mar |        |       |              |           |       |       |         |       | 2    |     |  |
| 29-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 30-Mar | 1      |       |              |           |       |       | 9       | 9     | 1    |     |  |
| 31-Mar |        |       |              |           |       |       |         |       |      |     |  |
| 1-Apr  |        | 1     |              |           |       |       | 10      | 10    |      |     |  |
| 2-Apr  |        |       |              |           |       |       |         |       | 1    |     |  |
| 3-Apr  |        | 1     |              |           |       |       | 11      | 11    | 3    |     |  |
| 4-Apr  |        |       | 5            |           |       |       | 16      | 16    | 2    |     |  |
| 5-Apr  |        |       |              |           |       |       |         |       |      |     |  |
| 6-Apr  | 1      |       |              |           |       |       | 17      | 17    | 2    |     |  |
| 7-Apr  |        |       |              |           |       |       |         |       |      |     |  |
| 8-Apr  | 2      |       |              |           |       |       | 19      | 19    | 1    |     |  |
| 9-Apr  |        |       |              |           |       |       |         |       |      |     |  |
| 10-Apr |        |       |              |           |       |       |         |       |      |     |  |
| 11-Apr |        |       |              |           |       |       |         |       |      |     |  |
| 12-Apr |        |       | 6            |           |       |       | 25      | 25    |      |     |  |
| 13-Apr |        |       |              |           |       |       |         |       | 1    |     |  |
| 14-Apr |        |       |              |           |       |       |         |       | 7    |     |  |
| 15-Apr |        |       |              |           | l I   | 1     |         |       |      |     |  |
| 16-Apr |        | 1     |              |           |       |       | 26      | 26    | 2    | 1   |  |
| 17-Apr |        |       |              |           |       |       |         |       |      |     |  |

| Date   |       | Fry   |              |       |       |       |         |       |      |    |
|--------|-------|-------|--------------|-------|-------|-------|---------|-------|------|----|
|        |       |       | Live         | De    | ad    | Total | To Salt | Alive | Dead |    |
|        | Upper | Lower | 45th Culvert | Other | Upper | Lower |         |       |      |    |
|        | No.   | No.   | No           | No    | 0     | 0     |         |       |      |    |
| 18-Apr |       |       |              |       |       |       |         |       |      |    |
| 19-Apr |       | 1     |              |       |       |       | 27      | 27    | 1    |    |
| 20-Apr |       |       |              |       |       |       |         |       | 5    |    |
| 21-Apr |       | 1     |              |       |       |       | 28      | 28    |      |    |
| 22-Apr |       |       |              |       |       |       |         |       |      |    |
| 23-Apr |       |       |              |       |       |       |         |       |      |    |
| 24-Apr |       |       |              |       |       |       |         |       |      |    |
| 25-Apr |       | 1     |              |       |       |       | 29      | 29    | 2    |    |
| 26-Apr | 1     | 1     |              |       |       |       | 31      | 31    |      |    |
| 27-Apr | 1     | 1     |              |       |       |       | 33      | 33    | 2    |    |
| 28-Apr |       | 1     |              |       |       |       | 34      | 34    | 2    |    |
| 29-Apr |       |       |              |       |       |       |         |       |      |    |
| 30-Apr |       |       |              |       |       |       |         |       | 3    | 1  |
| 1-May  |       |       |              |       |       |       |         |       | 1    |    |
| 2-May  |       | 3     |              |       |       |       | 37      | 37    | 2    |    |
| 3-May  |       | 1     |              |       |       |       | 38      | 38    | 1    |    |
| 4-May  |       |       |              |       |       |       |         |       | 4    |    |
| 5-May  |       |       |              |       |       |       |         |       | 2    |    |
| 6-May  |       |       |              |       |       |       |         |       | 2    | 2  |
| 7-May  |       | 1     |              |       |       |       | 39      | 38    | 8    |    |
| 8-May  |       | -     |              |       |       |       |         |       | 6    |    |
| 9-May  |       |       |              |       |       |       |         |       | 11   |    |
| 10-May |       |       |              |       |       |       |         |       | 2    |    |
| 11-May |       |       |              |       |       |       |         |       | 6    |    |
| 12-May |       |       |              |       |       |       |         |       | 7    |    |
| 13-May |       |       |              |       |       |       |         |       | 6    |    |
| 14-May |       |       |              |       |       |       |         |       | 5    |    |
| 15-May |       |       |              |       |       |       |         |       | 8    | 2  |
| 16-May | 1     |       |              |       |       |       | 40      | 40    | 6    |    |
| 17-May |       |       |              |       |       |       |         |       |      |    |
| 18-May |       |       |              |       |       |       |         |       | 7    |    |
| 19-May |       |       |              |       |       |       |         |       | 11   |    |
| 20-May |       | 1     |              |       |       |       | 41      | 41    | 17   |    |
| 21-May |       | -     |              |       |       |       |         |       | 27   |    |
| 22-May |       |       |              |       |       |       |         |       | 4    |    |
| 23-May |       |       |              |       |       |       |         |       | 6    | 1  |
| 24-May |       |       |              |       |       |       |         |       | 12   | 1  |
| 25-May |       |       |              | 1     |       |       | -       |       | 32   |    |
| TOTALS | 11    | 17    | 12           | 1     | 0     | 0     | 41      | 41    | 238  | 10 |

|   | 2023 | Smolt Count               |   |
|---|------|---------------------------|---|
|   |      | molt Count including dead |   |
| 12-Mar  | ) 1  | 2                         | 3 |
| 13-Mar<br>14-Mar<br>15-Mar                                      |      |                           |   |
| 16-Mar<br>17-Mar<br>18-Mar                                      |      |                           |   |
| 19-Mar<br>20-Mar<br>21-Mar                                      |      |                           |   |
| 22-Mar<br>23-Mar<br>24-Mar                                      |      |                           |   |
| 25-Mar<br>26-Mar<br>27-Mar                                      |      |                           |   |
| 28-Mar<br>29-Mar<br>30-Mar                                      |      |                           |   |
| 31-Mar  |      |                           |   |
| 2-Apr<br>3-Apr<br>4-Apr<br>5-Apr                                |      |                           |   |
| 6-Apr<br>7-Apr<br>8-Apr   |      |                           |   |
| 9-Apr<br>10-Apr   |      |                           |   |
| 11-Apr<br>12-Apr<br>13-Apr                                      |      |                           |   |
| 14-Apr<br>15-Apr<br>16-Apr                                      |      |                           |   |
| 17-Apr<br>18-Apr<br>19-Apr                                      |      |                           |   |
| 20-Apr<br>21-Apr<br>22-Apr                                      |      |                           |   |
| 23-Apr<br>24-Apr<br>25-Apr<br>26-Apr                            |      |                           |   |
| 27 Apr  |      |                           |   |
| 27-Apr<br>28-Apr<br>29-Apr<br>30-Apr<br>1-May<br>2-May<br>3-May |      |                           |   |
| 4-IVIdV   |      |                           |   |
| 5-May<br>6-May<br>7-May   |      |                           |   |
| 8-May<br>9-May<br>10-May  |      |                           |   |
| 11-May<br>12-May<br>13-May                                      |      |                           |   |
| 14-May<br>15-May<br>16-May                                      |      |                           |   |
| 17-May<br>18-May<br>19-May                                      |      |                           |   |
| 20-May<br>21-May  |      |                           |   |
| 22-May<br>23-May<br>24-May                                      |      |                           |   |
| 25-May  |      |                           |   |