

**From:** [Sandell, Todd A \(DFW\)](#)  
**To:** [Thomas, Sue](#)  
**Cc:** [Dionne, Phillip E \(DFW\)](#); [Clark, Roy \(DFW\)](#)  
**Subject:** [EXTERNAL] RE: recent forage fish data for Dungeness Harbor  
**Date:** Thursday, July 29, 2021 5:24:15 PM  
**Attachments:** [Dungeness Bay Rake surveys 2021.xlsx](#)  
[O\\_spawn\\_detected\\_DungenessBay\\_2012-2020.xlsx](#)

---

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hi Sue- I just saw your request and I'm off tomorrow so sending this ASAP. Looks like our previous correspondence covered through 2018 but just to be sure I attached all the rakes where spawn was detected for 20112-2020 here. We are in the process of generating the 2020 Quadrannual herring report but it won't be done until fall.

In 2021 we found a total of 34.152751 tonnes of spawn in Dungeness Bay; these data have not yet been merged with the "master" database so I included it here in a separate excel sheet, with lat/longs. Adam has taken another position within the Department so we are without a GIS/mapping expert for awhile. However, he did make a map for Dungeness through 2020; that is also attached. The project area appears clear of recent herring spawn but if it has aquatic vegetation it may be inside the buffer for being protected.

Hope this information is useful. I am interested to see how this plays out.

Cheers,  
Todd

\*\*\* Please note that herring season has begun and I will be out in the field the majority of the time through June. As a result I will be slow to respond to emails; if you need a quick response please call or text. \*\*\*

Todd Sandell, Ph.D. (He/Him)  
Senior Forage Fish Ecologist  
Puget Sound Marine Fish Science Unit  
Region 4, Mill Creek Annex  
(work cell) 425-287-2877

Want to know more about herring in the Southern Salish Sea?  
<https://wdfw.wa.gov/publications/02105>

---

**From:** Thomas, Sue <sue\_thomas@fws.gov>

**Sent:** Thursday, July 29, 2021 4:01 PM  
**To:** Sandell, Todd A (DFW) <Todd.Sandell@dfw.wa.gov>  
**Subject:** recent forage fish data for Dungeness Harbor

External Email

Hi Todd,

My apologies for sending this email during the busy field season.

Unfortunately, we are working under a tight timeline to document forage fish distribution within Dungeness Harbor for an aquaculture farm and I'm working on providing the most current data & metadata. You shared the attached info on herring spawning distribution on 4/2019 and I'm wondering if these data have been provided in a recent report. If so, can you forward when you get a moment? Anything that provides more detail on the data points for the record would be appreciated.

Thanks for your help and hope you had time to get out in the field this year,  
Sue

Sue Thomas  
Wildlife Biologist  
Washington Maritime NWRC  
360 457 8451











| Survey Area   | fs_herring_rake_surveys_c_post.Da       | Station Number |
|---------------|---|----------------|
| Dungeness Bay | Mon Mar 15 2021 10:36:46 GMT-0700 (PDT) | 1              |
| Dungeness Bay | Mon Mar 15 2021 10:39:21 GMT-0700 (PDT) | 2              |
| Dungeness Bay | Mon Mar 15 2021 10:41:58 GMT-0700 (PDT) | 3              |
| Dungeness Bay | Mon Mar 15 2021 10:44:27 GMT-0700 (PDT) | 4              |
| Dungeness Bay | Mon Mar 15 2021 10:46:48 GMT-0700 (PDT) | 5              |
| Dungeness Bay | Mon Mar 15 2021 10:49:05 GMT-0700 (PDT) | 6              |
| Dungeness Bay | Mon Mar 15 2021 10:52:31 GMT-0700 (PDT) | 7              |
| Dungeness Bay | Mon Mar 15 2021 10:56:05 GMT-0700 (PDT) | 8              |
| Dungeness Bay | Mon Mar 15 2021 10:59:03 GMT-0700 (PDT) | 9              |
| Dungeness Bay | Mon Mar 15 2021 11:02:53 GMT-0700 (PDT) | 10             |
| Dungeness Bay | Mon Mar 15 2021 11:05:37 GMT-0700 (PDT) | 11             |
| Dungeness Bay | Mon Mar 15 2021 11:07:59 GMT-0700 (PDT) | 12             |
| Dungeness Bay | Mon Mar 15 2021 11:10:12 GMT-0700 (PDT) | 13             |
| Dungeness Bay | Mon Mar 15 2021 11:12:48 GMT-0700 (PDT) | 14             |
| Dungeness Bay | Mon Mar 15 2021 11:15:20 GMT-0700 (PDT) | 15             |
| Dungeness Bay | Mon Mar 15 2021 11:20:34 GMT-0700 (PDT) | 16             |
| Dungeness Bay | Mon Mar 15 2021 11:24:56 GMT-0700 (PDT) | 17             |
| Dungeness Bay | Mon Mar 15 2021 11:29:00 GMT-0700 (PDT) | 18             |
| Dungeness Bay | Mon Mar 15 2021 11:32:15 GMT-0700 (PDT) | 19             |
| Dungeness Bay | Mon Mar 15 2021 11:36:44 GMT-0700 (PDT) | 20             |
| Dungeness Bay | Mon Mar 15 2021 11:40:01 GMT-0700 (PDT) | 21             |
| Dungeness Bay | Mon Mar 15 2021 11:41:42 GMT-0700 (PDT) | 22             |
| Dungeness Bay | Thu Mar 04 2021 10:41:59 GMT-0800 (PST) | 1              |
| Dungeness Bay | Thu Mar 04 2021 10:46:26 GMT-0800 (PST) | 2              |
| Dungeness Bay | Thu Mar 04 2021 10:48:54 GMT-0800 (PST) | 3              |
| Dungeness Bay | Thu Mar 04 2021 10:51:08 GMT-0800 (PST) | 4              |
| Dungeness Bay | Thu Mar 04 2021 10:54:03 GMT-0800 (PST) | 5              |
| Dungeness Bay | Thu Mar 04 2021 10:56:58 GMT-0800 (PST) | 6              |
| Dungeness Bay | Thu Mar 04 2021 11:00:50 GMT-0800 (PST) | 7              |
| Dungeness Bay | Thu Mar 04 2021 11:06:47 GMT-0800 (PST) | 8              |
| Dungeness Bay | Thu Mar 04 2021 11:11:05 GMT-0800 (PST) | 9              |
| Dungeness Bay | Thu Mar 04 2021 11:15:40 GMT-0800 (PST) | 10             |

|               |  |    |
|---------------|--|----|
| Dungeness Bay | Thu Mar 04 2021 11:20:39 GMT-0800 (PST)  | 11 |
| Dungeness Bay | Thu Mar 04 2021 11:23:59 GMT-0800 (PST)  | 12 |
| Dungeness Bay | Thu Mar 04 2021 11:27:10 GMT-0800 (PST)  | 13 |
| Dungeness Bay | Thu Mar 04 2021 11:30:36 GMT-0800 (PST)  | 14 |
| Dungeness Bay | Thu Mar 04 2021 11:35:19 GMT-0800 (PST)  | 15 |
| Dungeness Bay | Thu Mar 04 2021 11:39:14 GMT-0800 (PST)  | 16 |
| Dungeness Bay | Thu Mar 04 2021 11:42:29 GMT-0800 (PST)  | 17 |
| Dungeness Bay | Thu Mar 04 2021 11:48:21 GMT-0800 (PST)  | 18 |
| Dungeness Bay | Thu Mar 04 2021 11:51:22 GMT-0800 (PST)  | 19 |
| Dungeness Bay | Thu Mar 04 2021 11:56:45 GMT-0800 (PST)  | 20 |
| Dungeness Bay | Thu Mar 04 2021 11:59:15 GMT-0800 (PST)  | 21 |
| Dungeness Bay | Thu Mar 04 2021 12:02:35 GMT-0800 (PST)  | 22 |
| Dungeness Bay | Wed Feb 24 2021 10:46:3 / GMT-0800 (PST) | 1  |
| Dungeness Bay | Wed Feb 24 2021 10:50:2 / GMT-0800 (PST) | 2  |
| Dungeness Bay | Wed Feb 24 2021 10:52:25 GMT-0800 (PST)  | 3  |
| Dungeness Bay | Wed Feb 24 2021 10:54:36 GMT-0800 (PST)  | 4  |
| Dungeness Bay | Wed Feb 24 2021 10:57:06 GMT-0800 (PST)  | 5  |
| Dungeness Bay | Wed Feb 24 2021 11:00:11 GMT-0800 (PST)  | 6  |
| Dungeness Bay | Wed Feb 24 2021 11:05:13 GMT-0800 (PST)  | 7  |
| Dungeness Bay | Wed Feb 24 2021 11:08:07 GMT-0800 (PST)  | 8  |
| Dungeness Bay | Wed Feb 24 2021 11:10:52 GMT-0800 (PST)  | 9  |
| Dungeness Bay | Wed Feb 24 2021 11:14:08 GMT-0800 (PST)  | 10 |
| Dungeness Bay | Wed Feb 24 2021 11:21:58 GMT-0800 (PST)  | 11 |
| Dungeness Bay | Wed Feb 24 2021 11:25:48 GMT-0800 (PST)  | 12 |
| Dungeness Bay | Wed Feb 24 2021 11:29:33 GMT-0800 (PST)  | 13 |
| Dungeness Bay | Wed Feb 24 2021 11:32:31 GMT-0800 (PST)  | 14 |
| Dungeness Bay | Wed Feb 24 2021 11:36:3 / GMT-0800 (PST) | 15 |
| Dungeness Bay | Wed Feb 24 2021 11:44:19 GMT-0800 (PST)  | 16 |
| Dungeness Bay | Wed Feb 24 2021 11:49:54 GMT-0800 (PST)  | 17 |
| Dungeness Bay | Wed Feb 24 2021 11:53:27 GMT-0800 (PST)  | 18 |
| Dungeness Bay | Wed Feb 24 2021 11:58:23 GMT-0800 (PST)  | 19 |
| Dungeness Bay | Wed Feb 24 2021 12:02:10 GMT-0800 (PST)  | 20 |
| Dungeness Bay | Wed Feb 24 2021 12:07:14 GMT-0800 (PST)  | 21 |

|               |   |    |
|---------------|---|----|
| Dungeness Bay | Wed Feb 24 2021 12:11:28 GMT-0800 (PST) | 22 |
| Dungeness Bay | Wed Feb 24 2021 12:13:27 GMT-0800 (PST) | 23 |
| Dungeness Bay | Wed Feb 24 2021 12:21:20 GMT-0800 (PST) | 24 |
| Dungeness Bay | Thu Feb 11 2021 10:11:22 GMT-0800 (PST) | 1  |
| Dungeness Bay | Thu Feb 11 2021 10:13:32 GMT-0800 (PST) | 2  |
| Dungeness Bay | Thu Feb 11 2021 10:15:16 GMT-0800 (PST) | 3  |
| Dungeness Bay | Thu Feb 11 2021 10:17:01 GMT-0800 (PST) | 4  |
| Dungeness Bay | Thu Feb 11 2021 10:19:24 GMT-0800 (PST) | 5  |
| Dungeness Bay | Thu Feb 11 2021 10:22:15 GMT-0800 (PST) | 6  |
| Dungeness Bay | Thu Feb 11 2021 10:24:40 GMT-0800 (PST) | 7  |
| Dungeness Bay | Thu Feb 11 2021 10:27:53 GMT-0800 (PST) | 8  |
| Dungeness Bay | Thu Feb 11 2021 10:30:43 GMT-0800 (PST) | 9  |
| Dungeness Bay | Thu Feb 11 2021 10:33:24 GMT-0800 (PST) | 10 |
| Dungeness Bay | Thu Feb 11 2021 10:35:37 GMT-0800 (PST) | 11 |
| Dungeness Bay | Thu Feb 11 2021 10:38:16 GMT-0800 (PST) | 12 |
| Dungeness Bay | Thu Feb 11 2021 10:41:27 GMT-0800 (PST) | 13 |
| Dungeness Bay | Thu Feb 11 2021 10:43:50 GMT-0800 (PST) | 14 |
| Dungeness Bay | Thu Feb 11 2021 10:46:40 GMT-0800 (PST) | 15 |
| Dungeness Bay | Thu Feb 11 2021 10:49:54 GMT-0800 (PST) | 16 |
| Dungeness Bay | Thu Feb 11 2021 10:52:39 GMT-0800 (PST) | 17 |
| Dungeness Bay | Thu Feb 11 2021 10:58:58 GMT-0800 (PST) | 18 |
| Dungeness Bay | Thu Feb 11 2021 11:01:14 GMT-0800 (PST) | 19 |
| Dungeness Bay | Mon Feb 01 2021 10:48:57 GMT-0800 (PST) | 1  |
| Dungeness Bay | Mon Feb 01 2021 10:51:42 GMT-0800 (PST) | 2  |
| Dungeness Bay | Mon Feb 01 2021 10:54:12 GMT-0800 (PST) | 3  |
| Dungeness Bay | Mon Feb 01 2021 10:57:13 GMT-0800 (PST) | 4  |
| Dungeness Bay | Mon Feb 01 2021 10:59:43 GMT-0800 (PST) | 5  |
| Dungeness Bay | Mon Feb 01 2021 11:03:03 GMT-0800 (PST) | 6  |
| Dungeness Bay | Mon Feb 01 2021 11:05:24 GMT-0800 (PST) | 7  |
| Dungeness Bay | Mon Feb 01 2021 11:08:05 GMT-0800 (PST) | 8  |
| Dungeness Bay | Mon Feb 01 2021 11:10:46 GMT-0800 (PST) | 9  |
| Dungeness Bay | Mon Feb 01 2021 11:13:41 GMT-0800 (PST) | 10 |
| Dungeness Bay | Mon Feb 01 2021 11:16:22 GMT-0800 (PST) | 11 |

|               |   |    |
|---------------|---|----|
| Dungeness Bay | Mon Feb 01 2021 11:18:46 GMT-0800 (PST) | 12 |
| Dungeness Bay | Mon Feb 01 2021 11:21:13 GMT-0800 (PST) | 13 |
| Dungeness Bay | Mon Feb 01 2021 11:23:29 GMT-0800 (PST) | 14 |
| Dungeness Bay | Mon Feb 01 2021 11:26:50 GMT-0800 (PST) | 15 |
| Dungeness Bay | Mon Feb 01 2021 11:29:47 GMT-0800 (PST) | 16 |
| Dungeness Bay | Mon Feb 01 2021 11:35:36 GMT-0800 (PST) | 17 |
| Dungeness Bay | Mon Feb 01 2021 11:38:21 GMT-0800 (PST) | 18 |
| Dungeness Bay | Mon Feb 01 2021 11:40:57 GMT-0800 (PST) | 19 |
| Dungeness Bay | Mon Feb 01 2021 11:43:14 GMT-0800 (PST) | 20 |
| Dungeness Bay | Mon Feb 01 2021 11:46:04 GMT-0800 (PST) | 21 |
| Dungeness Bay | Mon Feb 01 2021 11:49:04 GMT-0800 (PST) | 22 |
| Dungeness Bay | Mon Feb 01 2021 11:54:18 GMT-0800 (PST) | 23 |
| Dungeness Bay | Wed Jan 27 2021 14:06:05 GMT-0800 (PST) | 1  |
| Dungeness Bay | Wed Jan 27 2021 14:09:44 GMT-0800 (PST) | 2  |
| Dungeness Bay | Wed Jan 27 2021 14:11:51 GMT-0800 (PST) | 3  |
| Dungeness Bay | Wed Jan 27 2021 14:14:20 GMT-0800 (PST) | 4  |
| Dungeness Bay | Wed Jan 27 2021 14:16:43 GMT-0800 (PST) | 5  |
| Dungeness Bay | Wed Jan 27 2021 14:19:15 GMT-0800 (PST) | 6  |
| Dungeness Bay | Wed Jan 27 2021 14:24:03 GMT-0800 (PST) | 7  |
| Dungeness Bay | Wed Jan 27 2021 14:26:32 GMT-0800 (PST) | 8  |
| Dungeness Bay | Wed Jan 27 2021 14:29:37 GMT-0800 (PST) | 9  |
| Dungeness Bay | Wed Jan 27 2021 14:32:03 GMT-0800 (PST) | 10 |
| Dungeness Bay | Wed Jan 27 2021 14:35:12 GMT-0800 (PST) | 11 |
| Dungeness Bay | Wed Jan 27 2021 14:37:54 GMT-0800 (PST) | 12 |
| Dungeness Bay | Wed Jan 27 2021 14:40:36 GMT-0800 (PST) | 13 |
| Dungeness Bay | Wed Jan 27 2021 14:43:24 GMT-0800 (PST) | 14 |
| Dungeness Bay | Wed Jan 27 2021 14:46:21 GMT-0800 (PST) | 15 |
| Dungeness Bay | Wed Jan 27 2021 14:48:29 GMT-0800 (PST) | 16 |
| Dungeness Bay | Wed Jan 27 2021 14:51:01 GMT-0800 (PST) | 17 |
| Dungeness Bay | Wed Jan 27 2021 14:52:48 GMT-0800 (PST) | 18 |
| Dungeness Bay | Wed Jan 27 2021 14:55:35 GMT-0800 (PST) | 19 |
| Dungeness Bay | Thu Jan 21 2021 10:13:23 GMT-0800 (PST) | 1  |
| Dungeness Bay | Mon Jan 11 2021 10:33:38 GMT-0800 (PST) | 1  |

|               |   |   |
|---------------|---|---|
| Dungeness Bay | Mon Jan 11 2021 10:36:19 GMT-0800 (PST) | 2 |
| Dungeness Bay | Mon Jan 11 2021 10:38:28 GMT-0800 (PST) | 3 |
| Dungeness Bay | Mon Jan 11 2021 10:41:16 GMT-0800 (PST) | 4 |
| Dungeness Bay | Mon Jan 11 2021 10:43:59 GMT-0800 (PST) | 5 |
| Dungeness Bay | Mon Jan 11 2021 10:46:14 GMT-0800 (PST) | 6 |
| Dungeness Bay | Mon Jan 11 2021 10:48:12 GMT-0800 (PST) | 7 |

| Location                                     | Start Depth | End Depth |
|--|-------------|-----------|
| Latitude:48.151520,<br>Longitude:-123.153261 | 5           | 6         |
| Latitude:48.150579,<br>Longitude:-123.157200 | 8           | 7         |
| Latitude:48.150423,<br>Longitude:-123.160605 | 6           | 4         |
| Latitude:48.149998,<br>Longitude:-123.164346 | 7           | 5         |
| Latitude:48.148956,<br>Longitude:-123.169015 | 6           | 5         |
| Latitude:48.149526,<br>Longitude:-123.174447 | 10          | 10        |
| Latitude:48.151472,<br>Longitude:-123.177771 | 10          | 10        |
| Latitude:48.154016,<br>Longitude:-123.175071 | 10          | 10        |
| Latitude:48.156189,<br>Longitude:-123.172237 | 10          | 10        |
| Latitude:48.158288,<br>Longitude:-123.168717 | 9           | 9         |
| Latitude:48.161396,<br>Longitude:-123.165786 | 8           | 8         |
| Latitude:48.163202,<br>Longitude:-123.163335 | 4           | 4         |
| Latitude:48.161359,<br>Longitude:-123.159774 | 3           | 4         |
| Latitude:48.158228,<br>Longitude:-123.164514 | 7           | 6         |
| Latitude:48.155035,<br>Longitude:-123.169116 | 9           | 9         |
| Latitude:48.152112,<br>Longitude:-123.172716 | 9           | 9         |
| Latitude:48.151821,<br>Longitude:-123.169304 | 9           | 9         |
| Latitude:48.153518,<br>Longitude:-123.165440 | 9           | 9         |
| Latitude:48.155092,<br>Longitude:-123.160431 | 10          | 11        |
| Latitude:48.156267,<br>Longitude:-123.153801 | 10          | 7         |
| Latitude:48.152923,<br>Longitude:-123.156025 | 10          | 10        |
| Latitude:48.153370,<br>Longitude:-123.159915 | 9           | 9         |
| Latitude:48.151656,<br>Longitude:-123.153364 | 6           | 7         |
| Latitude:48.150579,<br>Longitude:-123.156605 | 7           | 7         |
| Latitude:48.150531,<br>Longitude:-123.160145 | 8           | 5         |
| Latitude:48.150277,<br>Longitude:-123.164019 | 7           | 8         |
| Latitude:48.149327,<br>Longitude:-123.167652 | 6           | 7         |
| Latitude:48.149046,<br>Longitude:-123.171996 | 10          | 11        |
| Latitude:48.150648,<br>Longitude:-123.175779 | 11          | 10        |
| Latitude:48.153409,<br>Longitude:-123.175372 | 10          | 10        |
| Latitude:48.156543,<br>Longitude:-123.171720 | 10          | 10        |
| Latitude:48.159494,<br>Longitude:-123.168253 | 9           | 9         |



|  |    |    |
|--|----|----|
|  | 11 | 10 |
|  | 13 | 13 |
|  | 14 | 14 |
| Latitude:48.153454,<br>Longitude:-123.154117 | 13 | 12 |
| Latitude:48.155629,<br>Longitude:-123.154289 | 14 | 14 |
| Latitude:48.155586,<br>Longitude:-123.158157 | 15 | 14 |
| Latitude:48.156228,<br>Longitude:-123.161967 | 12 | 11 |
| Latitude:48.157245,<br>Longitude:-123.165953 | 12 | 12 |
| Latitude:48.158753,<br>Longitude:-123.168985 | 12 | 12 |
| Latitude:48.156518,<br>Longitude:-123.172456 | 13 | 13 |
| Latitude:48.153498,<br>Longitude:-123.176991 | 12 | 12 |
| Latitude:48.151026,<br>Longitude:-123.179786 | 12 | 12 |
| Latitude:48.149145,<br>Longitude:-123.176288 | 13 | 12 |
| Latitude:48.148356,<br>Longitude:-123.173209 | 12 | 11 |
| Latitude:48.148691,<br>Longitude:-123.170460 | 10 | 9  |
| Latitude:48.149966,<br>Longitude:-123.165611 | 10 | 9  |
| Latitude:48.150337,<br>Longitude:-123.162897 | 8  | 7  |
| Latitude:48.151828,<br>Longitude:-123.166672 | 14 | 12 |
| Latitude:48.153871,<br>Longitude:-123.169639 | 14 | 13 |
| Latitude:48.151780,<br>Longitude:-123.173177 | 14 | 13 |
| Latitude:48.151101,<br>Longitude:-123.159047 | 13 | 13 |
| Latitude:48.152488,<br>Longitude:-123.160141 | 14 | 13 |
| Latitude:48.157570,<br>Longitude:-123.152254 | 11 | 9  |
| Latitude:48.158599,<br>Longitude:-123.156030 | 13 | 9  |
| Latitude:48.159899,<br>Longitude:-123.159554 | 8  | 9  |
| Latitude:48.161155,<br>Longitude:-123.163092 | 12 | 12 |
| Latitude:48.159740,<br>Longitude:-123.166158 | 12 | 12 |
| Latitude:48.158990,<br>Longitude:-123.161909 | 11 | 13 |
| Latitude:48.157319,<br>Longitude:-123.157757 | 19 | 19 |
| Latitude:48.154625,<br>Longitude:-123.155491 | 14 | 14 |
| Latitude:48.154865,<br>Longitude:-123.158204 | 14 | 14 |
| Latitude:48.155927,<br>Longitude:-123.161623 | 11 | 11 |
| Latitude:48.156579,<br>Longitude:-123.165200 | 12 | 12 |

|  |    |    |
|--|----|----|
| Latitude:48.158015,<br>Longitude:-123.167898 | 12 | 11 |
| Latitude:48.156990,<br>Longitude:-123.171349 | 12 | 12 |
| Latitude:48.155825,<br>Longitude:-123.167354 | 12 | 12 |
| Latitude:48.154674,<br>Longitude:-123.162402 | 12 | 12 |
| Latitude:48.153404,<br>Longitude:-123.157276 | 13 | 13 |
| Latitude:48.150612,<br>Longitude:-123.155984 | 10 | 7  |
| Latitude:48.150261,<br>Longitude:-123.159167 | 7  | 9  |
| Latitude:48.152624,<br>Longitude:-123.158222 | 13 | 14 |
| Latitude:48.152553,<br>Longitude:-123.160530 | 13 | 12 |
| Latitude:48.150383,<br>Longitude:-123.162344 | 9  | 7  |
| Latitude:48.149126,<br>Longitude:-123.167946 | 7  | 8  |
| Latitude:48.151582,<br>Longitude:-123.167939 | 12 | 12 |
| Latitude:48.151311,<br>Longitude:-123.153413 | 10 | 10 |
| Latitude:48.150751,<br>Longitude:-123.157795 | 14 | 13 |
| Latitude:48.150711,<br>Longitude:-123.163102 | 14 | 14 |
| Latitude:48.149191,<br>Longitude:-123.168620 | 12 | 10 |
| Latitude:48.148849,<br>Longitude:-123.173503 | 12 | 12 |
| Latitude:48.151682,<br>Longitude:-123.172715 | 15 | 15 |
| Latitude:48.152878,<br>Longitude:-123.177974 | 14 | 13 |
| Latitude:48.155699,<br>Longitude:-123.174113 | 15 | 14 |
| Latitude:48.158613,<br>Longitude:-123.170583 | 13 | 13 |
| Latitude:48.160909,<br>Longitude:-123.166785 | 12 | 12 |
| Latitude:48.161268,<br>Longitude:-123.162440 | 14 | 14 |
| Latitude:48.158473,<br>Longitude:-123.164051 | 12 | 12 |
| Latitude:48.155286,<br>Longitude:-123.166433 | 14 | 14 |
| Latitude:48.152403,<br>Longitude:-123.167614 | 15 | 15 |
| Latitude:48.153029,<br>Longitude:-123.162458 | 14 | 14 |
| Latitude:48.155918,<br>Longitude:-123.159707 | 13 | 12 |
| Latitude:48.158833,<br>Longitude:-123.157302 | 18 | 22 |
| Latitude:48.157092,<br>Longitude:-123.153891 | 15 | 13 |
| Latitude:48.153790,<br>Longitude:-123.155442 | 15 | 15 |
| Latitude:48.151960,<br>Longitude:-123.153325 | 9  | 10 |
| Latitude:48.152087,<br>Longitude:-123.153192 | 10 | 11 |

|  |    |    |
|--|----|----|
| Latitude:48.150577,<br>Longitude:-123.156394 | 9  | 11 |
| Latitude:48.150472,<br>Longitude:-123.160381 | 12 | 10 |
| Latitude:48.149878,<br>Longitude:-123.165210 | 12 | 10 |
| Latitude:48.148851,<br>Longitude:-123.169693 | 11 | 12 |
| Latitude:48.150274,<br>Longitude:-123.174413 | 16 | 16 |
| Latitude:48.152416,<br>Longitude:-123.177031 | 16 | 15 |

| Overall Spawn Intensity | Eel Grass | Agardhiella | Gracillariopsis |
|-------------------------|-----------|-------------|-----------------|
| NP                      | NP        | NP          | X               |
| NP                      | X         | X           | X               |
| NP                      | X         | NP          | NP              |
| NP                      | X         | X           | NP              |
| NP                      | NP        | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | NP        | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | NP        | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | X           | X               |
| NP                      | X         | X           | X               |
| NP                      | NP        | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | NP        | NP          | X               |
| NP                      | X         | NP          | NP              |
| NP                      | NP        | X           | X               |
| NP                      | X         | X           | X               |
| NP                      | X         | X           | NP              |
| NP                      | X         | NP          | X               |
| NP                      | NP        | NP          | NP              |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | X               |
| NP                      | X         | NP          | NP              |
| NP                      | X         | NP          | X               |

|    |    |    |    |
|----|----|----|----|
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | NP | NP | X  |
| NP | NP | NP | X  |
| VL | VL | NP | VL |
| NP | X  | NP | X  |
| NP | X  | X  | X  |
| NP | NP | X  | X  |
| NP | NP | NP | X  |
| NP | NP | X  | X  |
| NP | NP | X  | X  |
| NP | NP | NP | X  |
| NP | X  | NP | NP |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | NP | NP | X  |
| NP | X  | NP | NP |
| NP | NP | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | X  | X  | NP |
| NP | X  | NP | X  |
| VL | VL | NP | X  |
| VL | X  | VL | VL |
| NP | X  | NP | X  |
| NP | NP | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | NP | X  | X  |

|           |    |    |    |
|-----------|----|----|----|
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | X  | X  | X  |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | NP | NP | NP |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | NP | NP | NP |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | NP | NP | X  |
| <b>NP</b> | NP | NP | NP |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | X  |

|    |    |    |    |
|----|----|----|----|
| NP | X  | NP | NP |
| NP | NP | NP | X  |
| NP | X  | X  | NP |
| NP | X  | NP | X  |
| NP | X  | X  | X  |
| NP | NP | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | NP |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | X  | NP | X  |
| NP | NP | X  | X  |
| NP | X  | NP | X  |
| NP | NP | NP | X  |
| NP | X  | NP | NP |
| NP | X  | NP | NP |
| NP | NP | NP | NP |
| NP | X  | NP | NP |
| NP | X  | NP | NP |
| NP | X  | NP | X  |
| NP | X  | NP | NP |
| NP | X  | NP | X  |
| NP | NP | NP | X  |
| NP | NP | NP | X  |
| NP | X  | NP | NP |
| NP | X  | NP | NP |
| NP | X  | X  | X  |
| NP | NP | NP | X  |
| NP | X  | NP | X  |
| NP | NP | X  | X  |

|           |    |    |    |
|-----------|----|----|----|
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | X  | NP | X  |
| <b>NP</b> | NP | NP | NP |
| <b>NP</b> | X  | NP | NP |
| <b>NP</b> | NP | NP | X  |































| Odonthalia | Plocamium | Polyneura | Prionitis | Rhodoptilum |
|------------|-----------|-----------|-----------|-------------|
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | X         | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |
| NP         | NP        | NP        | NP        | NP          |

|    |    |    |    |    |
|----|----|----|----|----|
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | X  | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |







| Rhodymelia | Rhodymenia | Sargassum | Ulva | Urospora |
|------------|------------|-----------|------|----------|
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | X    | X        |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | X    | X        |
| NP         | NP         | NP        | X    | X        |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | X    | X        |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | X    | X        |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | NP   | NP       |
| NP         | NP         | NP        | X    | NP       |
| NP         | NP         | NP        | NP   | X        |
| NP         | NP         | NP        | NP   | NP       |

|    |    |    |    |    |
|----|----|----|----|----|
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | X  | X  |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | X  |
| NP | NP | NP | X  | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | X  | X  |
| NP | NP | NP | X  | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |

|    |    |    |    |    |
|----|----|----|----|----|
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | X  |
| NP | NP | NP | X  | NP |



|    |    |    |    |    |
|----|----|----|----|----|
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | NP | NP |
| NP | NP | NP | X  | NP |
| NP | NP | NP | NP | NP |



|    |  |    |  |    |
|----|--|----|--|----|
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| X  |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |
| NP |  | No |  | NP |







| Terrestrial Debris | Man Made Debris | Vegetation Present? | Sampled | Sample Jar Number (fro |
|--------------------|-----------------|---------------------|---------|------------------------|
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | No                  | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| X                  | NP              | Yes                 | No      |                        |
| NP                 | NP              | Yes                 | No      |                        |







|    |    |     |    |  |
|----|----|-----|----|--|
| NP | NP | Yes | No |  |
| NP | NP | Yes | No |  |
| NP | NP | Yes | No |  |
| NP | NP | No  | No |  |
| NP | NP | Yes | No |  |
| NP | NP | Yes | No |  |

| Mammals/Birds? | Jellyfish | Latitude  | Longitude   | Comments |
|----------------|-----------|-----------|-------------|----------|
|                |           | 48.15152  | -123.153261 |          |
|                |           | 48.150579 | -123.1572   |          |
|                |           | 48.150423 | -123.160605 |          |
|                |           | 48.149998 | -123.164346 |          |
|                |           | 48.148956 | -123.169015 |          |
|                |           | 48.149526 | -123.174447 |          |
|                |           | 48.151472 | -123.177771 |          |
|                |           | 48.154016 | -123.175071 |          |
|                |           | 48.156189 | -123.172237 |          |
|                |           | 48.158288 | -123.168717 |          |
|                |           | 48.161396 | -123.165786 |          |
|                |           | 48.163202 | -123.163335 |          |
|                |           | 48.161359 | -123.159774 |          |
|                |           | 48.158228 | -123.164514 |          |
|                |           | 48.155035 | -123.169116 |          |
|                |           | 48.152112 | -123.172716 |          |
|                |           | 48.151821 | -123.169304 |          |
|                |           | 48.153518 | -123.16544  |          |
|                |           | 48.155092 | -123.160431 |          |
|                |           | 48.156267 | -123.153801 |          |
|                |           | 48.152923 | -123.156025 |          |
|                |           | 48.15337  | -123.159915 |          |
|                |           | 48.151656 | -123.153364 |          |
|                |           | 48.150579 | -123.156605 |          |
|                |           | 48.150531 | -123.160145 |          |
|                |           | 48.150277 | -123.164019 |          |
|                |           | 48.149327 | -123.167652 |          |
|                |           | 48.149046 | -123.171996 |          |
|                |           | 48.150648 | -123.175779 |          |
|                |           | 48.153409 | -123.175372 |          |
|                |           | 48.156543 | -123.17172  |          |
|                |           | 48.159494 | -123.168253 |          |



|  |  |           |             |
|--|--|-----------|-------------|
|  |  |           |             |
|  |  |           |             |
|  |  |           |             |
|  |  | 48.153454 | -123.154117 |
|  |  | 48.155629 | -123.154289 |
|  |  | 48.155586 | -123.158157 |
|  |  | 48.156228 | -123.161967 |
|  |  | 48.157245 | -123.165953 |
|  |  | 48.158753 | -123.168985 |
|  |  | 48.156518 | -123.172456 |
|  |  | 48.153498 | -123.176991 |
|  |  | 48.151026 | -123.179786 |
|  |  | 48.149145 | -123.176288 |
|  |  | 48.148356 | -123.173209 |
|  |  | 48.148691 | -123.17046  |
|  |  | 48.149966 | -123.165611 |
|  |  | 48.150337 | -123.162897 |
|  |  | 48.151828 | -123.166672 |
|  |  | 48.153871 | -123.169639 |
|  |  | 48.15178  | -123.173177 |
|  |  | 48.151101 | -123.159047 |
|  |  | 48.152488 | -123.160141 |
|  |  | 48.15757  | -123.152254 |
|  |  | 48.158599 | -123.15603  |
|  |  | 48.159899 | -123.159554 |
|  |  | 48.161155 | -123.163092 |
|  |  | 48.15974  | -123.166158 |
|  |  | 48.15899  | -123.161909 |
|  |  | 48.157319 | -123.157757 |
|  |  | 48.154625 | -123.155491 |
|  |  | 48.154865 | -123.158204 |
|  |  | 48.155927 | -123.161623 |
|  |  | 48.156579 | -123.1652   |

|  |  |           |             |  |
|--|--|-----------|-------------|--|
|  |  | 48.158015 | -123.167898 |  |
|  |  | 48.15699  | -123.171349 |  |
|  |  | 48.155825 | -123.167354 |  |
|  |  | 48.154674 | -123.162402 |  |
|  |  | 48.153404 | -123.157276 |  |
|  |  | 48.150612 | -123.155984 |  |
|  |  | 48.150261 | -123.159167 |  |
|  |  | 48.152624 | -123.158222 |  |
|  |  | 48.152553 | -123.16053  |  |
|  |  | 48.150383 | -123.162344 |  |
|  |  | 48.149126 | -123.167946 |  |
|  |  | 48.151582 | -123.167939 |  |
|  |  | 48.151311 | -123.153413 |  |
|  |  | 48.150751 | -123.157795 |  |
|  |  | 48.150711 | -123.163102 |  |
|  |  | 48.149191 | -123.16862  |  |
|  |  | 48.148849 | -123.173503 |  |
|  |  | 48.151682 | -123.172715 |  |
|  |  | 48.152878 | -123.177974 |  |
|  |  | 48.155699 | -123.174113 |  |
|  |  | 48.158613 | -123.170583 |  |
|  |  | 48.160909 | -123.166785 |  |
|  |  | 48.161268 | -123.16244  |  |
|  |  | 48.158473 | -123.164051 |  |
|  |  | 48.155286 | -123.166433 |  |
|  |  | 48.152403 | -123.167614 |  |
|  |  | 48.153029 | -123.162458 |  |
|  |  | 48.155918 | -123.159707 |  |
|  |  | 48.158833 | -123.157302 |  |
|  |  | 48.157092 | -123.153891 |  |
|  |  | 48.15379  | -123.155442 |  |
|  |  | 48.15196  | -123.153325 |  |
|  |  | 48.152087 | -123.153192 |  |

|  |  |           |             |  |
|--|--|-----------|-------------|--|
|  |  | 48.150577 | -123.156394 |  |
|  |  | 48.150472 | -123.160381 |  |
|  |  | 48.149878 | -123.16521  |  |
|  |  | 48.148851 | -123.169693 |  |
|  |  | 48.150274 | -123.174413 |  |
|  |  | 48.152416 | -123.177031 |  |

| Area          | Date       | Latitude | Longitude | Spawn_Intensity | Vegetation_Type |
|---------------|------------|----------|-----------|-----------------|-----------------|
| Dungeness Bay | 03/02/2011 | 48.15136 | -123.1737 | VL              | Eelgrass        |
| Dungeness Bay | 02/10/2011 | 48.15044 | -123.1601 | VL              | Eelgrass        |
| Dungeness Bay | 02/10/2011 | 48.15028 | -123.1633 | VL              | Eelgrass        |
| Dungeness Bay | 02/10/2011 | 48.1528  | -123.16   | VL              | Eelgrass        |
| Dungeness Bay | 02/10/2011 | 48.15039 | -123.1576 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.151   | -123.1552 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.1507  | -123.1579 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.15079 | -123.1609 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.14934 | -123.1683 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.15746 | -123.1705 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.15276 | -123.1657 | VL              | Eelgrass        |
| Dungeness Bay | 02/16/2011 | 48.15033 | -123.1654 | VL              | Eelgrass        |
| Dungeness Bay | 02/04/2010 | 48.15055 | -123.1625 | VL              | Eelgrass        |
| Dungeness Bay | 02/11/2010 | 48.15048 | -123.1622 | VL              | Eelgrass        |
| Dungeness Bay | 02/17/2010 | 48.15049 | -123.1566 | VL              | Eelgrass        |
| Dungeness Bay | 02/17/2010 | 48.15039 | -123.1595 | VL              | Eelgrass        |
| Dungeness Bay | 02/17/2010 | 48.14977 | -123.1652 | VL              | Eelgrass        |
| Dungeness Bay | 02/25/2010 | 48.15049 | -123.1563 | VL              | Eelgrass        |
| Dungeness Bay | 02/25/2010 | 48.15033 | -123.1608 | VL              | Eelgrass        |
| Dungeness Bay | 03/04/2010 | 48.15059 | -123.1568 | VL              | Eelgrass        |
| Dungeness Bay | 03/04/2010 | 48.15041 | -123.1598 | VL              | Eelgrass        |
| Dungeness Bay | 03/04/2010 | 48.15036 | -123.1626 | VL              | Eelgrass        |
| Dungeness Bay | 03/10/2009 | 48.1504  | -123.1593 | VL              | Eelgrass        |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 03/10/2009 | 48.15022 | -123.1627 | VL | Eelgrass |
| Dungeness Bay | 02/19/2009 | 48.15039 | -123.1601 | VL | Eelgrass |
| Dungeness Bay | 03/04/2009 | 48.15045 | -123.1571 | VL | Eelgrass |
| Dungeness Bay | 03/04/2009 | 48.15026 | -123.16   | VL | Eelgrass |
| Dungeness Bay | 03/04/2009 | 48.15011 | -123.1632 | VL | Eelgrass |
| Dungeness Bay | 03/04/2009 | 48.14923 | -123.1664 | VL | Eelgrass |
| Dungeness Bay | 02/21/2008 | 48.15036 | -123.1594 | VL | Eelgrass |
| Dungeness Bay | 02/28/2008 | 48.15023 | -123.1601 | VL | Eelgrass |
| Dungeness Bay | 02/28/2008 | 48.15017 | -123.1625 | VL | Eelgrass |
| Dungeness Bay | 02/28/2008 | 48.15824 | -123.163  | VL | Eelgrass |
| Dungeness Bay | 03/05/2008 | 48.15265 | -123.173  | VL | Eelgrass |
| Dungeness Bay | 03/12/2008 | 48.15303 | -123.1705 | VL | Eelgrass |
| Dungeness Bay | 03/01/2007 | 48.15305 | -123.1684 | VL | Eelgrass |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Eelgrass |
| Dungeness Bay | 02/09/1983 | 48.15244 | -123.1674 | VL | Eelgrass |
| Dungeness Bay | 02/09/1983 | 48.15023 | -123.1663 | VL | Eelgrass |
| Dungeness Bay | 02/09/1983 | 48.15074 | -123.1628 | VL | Eelgrass |
| Dungeness Bay | 02/09/1983 | 48.15554 | -123.152  | VL | Eelgrass |
| Dungeness Bay | 02/16/1983 | 48.15182 | -123.1517 | VL | Eelgrass |
| Dungeness Bay | 02/19/1986 | 48.15258 | -123.1554 | VL | Eelgrass |
| Dungeness Bay | 03/12/1986 | 48.15091 | -123.1557 | VL | Eelgrass |
| Dungeness Bay | 03/12/1986 | 48.15031 | -123.1646 | VL | Eelgrass |
| Dungeness Bay | 03/19/1986 | 48.14989 | -123.1657 | VL | Eelgrass |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 03/05/1986 | 48.153   | -123.1522 | VL | Eelgrass |
| Dungeness Bay | 02/03/1995 | 48.15998 | -123.1632 | L  | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.16031 | -123.1608 | VL | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.15688 | -123.1649 | VL | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.15837 | -123.157  | VL | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.16056 | -123.1543 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.15088 | -123.1646 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.15012 | -123.1669 | VL | Eelgrass |
| Dungeness Bay | 02/24/1995 | 48.15012 | -123.1647 | VL | Eelgrass |
| Dungeness Bay | 02/03/1995 | 48.15084 | -123.1571 | VL | Eelgrass |
| Dungeness Bay | 02/03/1995 | 48.15103 | -123.1591 | VL | Eelgrass |
| Dungeness Bay | 02/03/1995 | 48.15089 | -123.162  | VL | Eelgrass |
| Dungeness Bay | 02/03/1995 | 48.15859 | -123.1688 | L  | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.15103 | -123.1606 | VL | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.15007 | -123.1639 | VL | Eelgrass |
| Dungeness Bay | 02/10/1995 | 48.15873 | -123.1699 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.15974 | -123.1625 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.16146 | -123.1609 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.16317 | -123.1583 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.16199 | -123.1555 | VL | Eelgrass |
| Dungeness Bay | 02/17/1995 | 48.16032 | -123.1575 | VL | Eelgrass |
| Dungeness Bay | 03/03/1995 | 48.15017 | -123.1648 | VL | Eelgrass |
| Dungeness Bay | 03/03/1995 | 48.16098 | -123.1582 | VL | Eelgrass |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 01/24/1996 | 48.16222 | -123.1566 | VL | Eelgrass |
| Dungeness Bay | 01/24/1996 | 48.15938 | -123.1494 | VL | Eelgrass |
| Dungeness Bay | 01/24/1996 | 48.15671 | -123.1515 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15566 | -123.1514 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15895 | -123.1497 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15951 | -123.1582 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.16088 | -123.1612 | VL | Eelgrass |
| Dungeness Bay | 02/09/1996 | 48.15146 | -123.1628 | VL | Eelgrass |
| Dungeness Bay | 03/08/1996 | 48.14835 | -123.1715 | VL | Eelgrass |
| Dungeness Bay | 01/30/1997 | 48.14911 | -123.1693 | VL | Eelgrass |
| Dungeness Bay | 01/30/1997 | 48.15831 | -123.1605 | VL | Eelgrass |
| Dungeness Bay | 02/21/1997 | 48.14988 | -123.1635 | VL | Eelgrass |
| Dungeness Bay | 02/21/1997 | 48.15514 | -123.1518 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15193 | -123.1607 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15199 | -123.1571 | VL | Eelgrass |
| Dungeness Bay | 02/01/1996 | 48.15118 | -123.1545 | VL | Eelgrass |
| Dungeness Bay | 02/09/1996 | 48.15366 | -123.1523 | VL | Eelgrass |
| Dungeness Bay | 02/09/1996 | 48.16236 | -123.1642 | VL | Eelgrass |
| Dungeness Bay | 02/09/1996 | 48.16512 | -123.1598 | VL | Eelgrass |
| Dungeness Bay | 02/09/1996 | 48.1585  | -123.1631 | VL | Eelgrass |
| Dungeness Bay | 03/01/1996 | 48.15146 | -123.1605 | VL | Eelgrass |
| Dungeness Bay | 03/01/1996 | 48.15055 | -123.1651 | VL | Eelgrass |
| Dungeness Bay | 01/28/1999 | 48.15097 | -123.1663 | VL | Eelgrass |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 01/28/1999 | 48.15504 | -123.1516 | VL | Eelgrass |
| Dungeness Bay | 02/06/1998 | 48.15921 | -123.1688 | VL | Eelgrass |
| Dungeness Bay | 03/06/1998 | 48.15669 | -123.1647 | VL | Eelgrass |
| Dungeness Bay | 01/28/1999 | 48.1553  | -123.1688 | VL | Eelgrass |
| Dungeness Bay | 02/12/1999 | 48.15669 | -123.1656 | VL | Eelgrass |
| Dungeness Bay | 02/25/1999 | 48.15727 | -123.1587 | VL | Eelgrass |
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Eelgrass |
| Dungeness Bay | 02/19/1999 | 48.16446 | -123.1552 | L  | Eelgrass |
| Dungeness Bay | 02/19/1999 | 48.15726 | -123.1651 | VL | Eelgrass |
| Dungeness Bay | 03/11/1999 | 48.15337 | -123.152  | VL | Eelgrass |
| Dungeness Bay | 02/03/2000 | 48.15711 | -123.1692 | VL | Eelgrass |
| Dungeness Bay | 02/24/2000 | 48.15085 | -123.1563 | VL | Eelgrass |
| Dungeness Bay | 02/24/2000 | 48.15959 | -123.1674 | VL | Eelgrass |
| Dungeness Bay | 02/24/2000 | 48.15822 | -123.1646 | VL | Eelgrass |
| Dungeness Bay | 02/02/2001 | 48.15827 | -123.1636 | VL | Eelgrass |
| Dungeness Bay | 02/02/2001 | 48.15636 | -123.1651 | VL | Eelgrass |
| Dungeness Bay | 02/08/2001 | 48.15703 | -123.159  | VL | Eelgrass |
| Dungeness Bay | 02/13/2001 | 48.15378 | -123.1676 | VL | Eelgrass |
| Dungeness Bay | 03/01/2001 | 48.15127 | -123.1615 | VL | Eelgrass |
| Dungeness Bay | 03/01/2001 | 48.14983 | -123.167  | VL | Eelgrass |
| Dungeness Bay | 02/07/2002 | 48.15683 | -123.1673 | VL | Eelgrass |
| Dungeness Bay | 02/20/2002 | 48.15371 | -123.1662 | VL | Eelgrass |
| Dungeness Bay | 02/08/2001 | 48.15689 | -123.1627 | VL | Eelgrass |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 03/01/2001 | 48.15684 | -123.1622 | VL | Eelgrass |
| Dungeness Bay | 03/01/2001 | 48.15732 | -123.1601 | VL | Eelgrass |
| Dungeness Bay | 02/14/2002 | 48.15856 | -123.168  | VL | Eelgrass |
| Dungeness Bay | 02/14/2002 | 48.16085 | -123.1658 | VL | Eelgrass |
| Dungeness Bay | 02/14/2002 | 48.15852 | -123.1626 | VL | Eelgrass |
| Dungeness Bay | 02/14/2002 | 48.15776 | -123.1584 | VL | Eelgrass |
| Dungeness Bay | 02/28/2002 | 48.15313 | -123.1669 | VL | Eelgrass |
| Dungeness Bay | 02/12/2004 | 48.15751 | -123.1709 | VL | Eelgrass |
| Dungeness Bay | 02/07/2012 | 48.15018 | -123.1583 | VL | Eelgrass |
| Dungeness Bay | 02/07/2012 | 48.1502  | -123.1636 | VL | Eelgrass |
| Dungeness Bay | 03/19/2012 | 48.15061 | -123.1607 | VL | Eelgrass |
| Dungeness Bay | 03/19/2012 | 48.1504  | -123.1631 | VL | Eelgrass |
| Dungeness Bay | 02/20/2013 | 48.15738 | -123.161  | VL | Eelgrass |
| Dungeness Bay | 03/20/2013 | 48.15612 | -123.1603 | VL | Eelgrass |
| Dungeness Bay | 02/13/2014 | 48.15348 | -123.1718 | VL | Eelgrass |
| Dungeness Bay | 02/26/2014 | 48.15461 | -123.1528 | VL | Eelgrass |
| Dungeness Bay | 03/06/2014 | 48.15071 | -123.1576 | VL | Eelgrass |
| Dungeness Bay | 02/19/2014 | 48.15196 | -123.1656 | VL | Eelgrass |
| Dungeness Bay | 02/26/2014 | 48.15045 | -123.1588 | VL | Eelgrass |
| Dungeness Bay | 03/06/2014 | 48.15572 | -123.1677 | VL | Eelgrass |
| Dungeness Bay | 02/05/2015 | 48.15037 | -123.1609 | VL | Eelgrass |
| Dungeness Bay | 02/16/2016 | 48.15816 | -123.1653 | VL | Eelgrass |
| Dungeness Bay | 02/16/2016 | 48.15931 | -123.1624 | VL | Eelgrass |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/16/2016 | 48.15968 | -123.1593 | VL | Eelgrass        |
| Dungeness Bay | 02/01/2017 | 48.15468 | -123.1722 | VL | Eelgrass        |
| Dungeness Bay | 02/01/2017 | 48.15369 | -123.1704 | VL | Eelgrass        |
| Dungeness Bay | 02/01/2017 | 48.15593 | -123.1608 | VL | Eelgrass        |
| Dungeness Bay | 02/13/2017 | 48.15378 | -123.1743 | VL | Eelgrass        |
| Dungeness Bay | 02/13/2017 | 48.15397 | -123.1696 | VL | Eelgrass        |
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | VL | Eelgrass        |
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | VL | Eelgrass        |
| Dungeness Bay | 02/13/2017 | 48.15558 | -123.161  | VL | Eelgrass        |
| Dungeness Bay | 02/02/2018 | 48.15133 | -123.1696 | VL | Eelgrass        |
| Dungeness Bay | 01/28/2019 | 48.15409 | -123.1639 | VL | Eelgrass        |
| Dungeness Bay | 02/25/2019 | 48.15633 | -123.1556 | VL | Eelgrass        |
| Dungeness Bay | 03/04/2019 | 48.15397 | -123.1634 | VL | Eelgrass        |
| Dungeness Bay | 02/10/2020 | 48.15771 | -123.1707 | VL | Eelgrass        |
| Dungeness Bay | 03/02/2011 | 48.15136 | -123.1737 | VL | Gracillariopsis |
| Dungeness Bay | 02/17/2010 | 48.15024 | -123.1626 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/2010 | 48.15033 | -123.1608 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2011 | 48.15044 | -123.1601 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2011 | 48.15028 | -123.1633 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2011 | 48.1528  | -123.16   | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.151   | -123.1552 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.1507  | -123.1579 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.15079 | -123.1609 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/16/2011 | 48.14934 | -123.1683 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.15746 | -123.1705 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.15276 | -123.1657 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.15211 | -123.1539 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.15513 | -123.171  | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2011 | 48.1548  | -123.1589 | VL | Gracillariopsis |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Gracillariopsis |
| Dungeness Bay | 03/08/2007 | 48.1511  | -123.1712 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/2008 | 48.15303 | -123.1705 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/2008 | 48.15778 | -123.1608 | VL | Gracillariopsis |
| Dungeness Bay | 03/01/2007 | 48.15329 | -123.1722 | VL | Gracillariopsis |
| Dungeness Bay | 03/01/2007 | 48.15305 | -123.1684 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.16531 | -123.1574 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.14901 | -123.1717 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.14794 | -123.1739 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.14944 | -123.1683 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.15152 | -123.1615 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.15045 | -123.1651 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.14973 | -123.1689 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.14837 | -123.1729 | VL | Gracillariopsis |
| Dungeness Bay | 03/09/1983 | 48.15132 | -123.1593 | VL | Gracillariopsis |
| Dungeness Bay | 03/09/1983 | 48.15107 | -123.1626 | VL | Gracillariopsis |
| Dungeness Bay | 03/09/1983 | 48.151   | -123.1656 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 03/09/1983 | 48.14963 | -123.1701 | VL | Gracillariopsis |
| Dungeness Bay | 03/09/1983 | 48.14733 | -123.1758 | VL | Gracillariopsis |
| Dungeness Bay | 03/14/1980 | 48.14764 | -123.1744 | VL | Gracillariopsis |
| Dungeness Bay | 03/14/1980 | 48.14728 | -123.1772 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15244 | -123.1674 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15023 | -123.1663 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15316 | -123.1627 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15281 | -123.1589 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.1526  | -123.1557 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15118 | -123.1538 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15325 | -123.1519 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15554 | -123.152  | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1983 | 48.15739 | -123.154  | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.15182 | -123.1517 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.15075 | -123.1539 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/1983 | 48.14772 | -123.1745 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.15356 | -123.1515 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.15157 | -123.1527 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.15058 | -123.1568 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.15075 | -123.1634 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.14939 | -123.1677 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.14926 | -123.1708 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/1983 | 48.14752 | -123.1744 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/05/1986 | 48.14737 | -123.1782 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1986 | 48.15078 | -123.1629 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1986 | 48.14989 | -123.1662 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1986 | 48.14899 | -123.1699 | VL | Gracillariopsis |
| Dungeness Bay | 02/26/1986 | 48.15401 | -123.1509 | VL | Gracillariopsis |
| Dungeness Bay | 03/05/1986 | 48.15192 | -123.1594 | VL | Gracillariopsis |
| Dungeness Bay | 03/05/1986 | 48.15168 | -123.1617 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.15091 | -123.1557 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.15031 | -123.1646 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.14983 | -123.1669 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.15556 | -123.1515 | VL | Gracillariopsis |
| Dungeness Bay | 02/26/1986 | 48.15235 | -123.1521 | VL | Gracillariopsis |
| Dungeness Bay | 02/05/1986 | 48.15007 | -123.1655 | VL | Gracillariopsis |
| Dungeness Bay | 02/05/1986 | 48.14947 | -123.1674 | VL | Gracillariopsis |
| Dungeness Bay | 02/05/1986 | 48.14881 | -123.1707 | VL | Gracillariopsis |
| Dungeness Bay | 02/05/1986 | 48.14755 | -123.1752 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1986 | 48.14803 | -123.173  | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1986 | 48.14743 | -123.176  | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.15288 | -123.152  | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.15103 | -123.1548 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.15258 | -123.1554 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.15043 | -123.1645 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1986 | 48.14791 | -123.1758 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 03/12/1986 | 48.14833 | -123.1735 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.14725 | -123.1769 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.15255 | -123.1748 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1986 | 48.15491 | -123.1515 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1995 | 48.15084 | -123.1571 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1995 | 48.15089 | -123.162  | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1995 | 48.15007 | -123.1658 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/1995 | 48.15085 | -123.1537 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/1995 | 48.14959 | -123.1663 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/1995 | 48.14835 | -123.171  | VL | Gracillariopsis |
| Dungeness Bay | 02/10/1995 | 48.16236 | -123.164  | VL | Gracillariopsis |
| Dungeness Bay | 02/17/1995 | 48.15802 | -123.1684 | VL | Gracillariopsis |
| Dungeness Bay | 02/17/1995 | 48.15974 | -123.1625 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/1995 | 48.15012 | -123.1647 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/1995 | 48.14935 | -123.1683 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1995 | 48.15859 | -123.1688 | L  | Gracillariopsis |
| Dungeness Bay | 02/17/1995 | 48.15285 | -123.1523 | VL | Gracillariopsis |
| Dungeness Bay | 02/17/1995 | 48.15012 | -123.1669 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/1995 | 48.14835 | -123.1724 | VL | Gracillariopsis |
| Dungeness Bay | 03/03/1995 | 48.15061 | -123.1562 | VL | Gracillariopsis |
| Dungeness Bay | 03/03/1995 | 48.15017 | -123.1648 | VL | Gracillariopsis |
| Dungeness Bay | 03/03/1995 | 48.14911 | -123.169  | VL | Gracillariopsis |
| Dungeness Bay | 03/03/1995 | 48.14782 | -123.1742 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 01/24/1996 | 48.15671 | -123.1515 | VL | Gracillariopsis |
| Dungeness Bay | 02/01/1996 | 48.15352 | -123.1518 | VL | Gracillariopsis |
| Dungeness Bay | 02/23/1996 | 48.15564 | -123.1636 | VL | Gracillariopsis |
| Dungeness Bay | 01/30/1997 | 48.1606  | -123.1632 | VL | Gracillariopsis |
| Dungeness Bay | 01/30/1997 | 48.1625  | -123.1607 | VL | Gracillariopsis |
| Dungeness Bay | 02/07/1997 | 48.14959 | -123.1675 | VL | Gracillariopsis |
| Dungeness Bay | 01/24/1996 | 48.15304 | -123.1518 | VL | Gracillariopsis |
| Dungeness Bay | 02/01/1996 | 48.15193 | -123.1607 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1996 | 48.15366 | -123.1523 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1996 | 48.16512 | -123.1598 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/1996 | 48.1585  | -123.1631 | VL | Gracillariopsis |
| Dungeness Bay | 03/01/1996 | 48.15055 | -123.1651 | VL | Gracillariopsis |
| Dungeness Bay | 03/01/1996 | 48.14835 | -123.1734 | VL | Gracillariopsis |
| Dungeness Bay | 03/01/1996 | 48.14829 | -123.181  | VL | Gracillariopsis |
| Dungeness Bay | 03/08/1996 | 48.14724 | -123.1786 | VL | Gracillariopsis |
| Dungeness Bay | 01/30/1997 | 48.15113 | -123.1547 | VL | Gracillariopsis |
| Dungeness Bay | 01/30/1997 | 48.14911 | -123.1693 | VL | Gracillariopsis |
| Dungeness Bay | 01/30/1997 | 48.14724 | -123.1781 | VL | Gracillariopsis |
| Dungeness Bay | 02/07/1997 | 48.15616 | -123.1692 | VL | Gracillariopsis |
| Dungeness Bay | 02/14/1997 | 48.1494  | -123.1683 | VL | Gracillariopsis |
| Dungeness Bay | 02/14/1997 | 48.15569 | -123.1674 | VL | Gracillariopsis |
| Dungeness Bay | 02/14/1997 | 48.15442 | -123.156  | VL | Gracillariopsis |
| Dungeness Bay | 02/14/1997 | 48.15854 | -123.1689 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/14/1997 | 48.16207 | -123.1647 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/1997 | 48.14988 | -123.1635 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1997 | 48.14988 | -123.1692 | VL | Gracillariopsis |
| Dungeness Bay | 03/12/1997 | 48.14811 | -123.1729 | VL | Gracillariopsis |
| Dungeness Bay | 01/29/1998 | 48.16293 | -123.163  | VL | Gracillariopsis |
| Dungeness Bay | 02/06/1998 | 48.15921 | -123.1688 | VL | Gracillariopsis |
| Dungeness Bay | 02/06/1998 | 48.16679 | -123.1572 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1998 | 48.15237 | -123.1526 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/1998 | 48.15576 | -123.1517 | VL | Gracillariopsis |
| Dungeness Bay | 03/06/1998 | 48.15669 | -123.1647 | VL | Gracillariopsis |
| Dungeness Bay | 01/28/1999 | 48.15097 | -123.1663 | VL | Gracillariopsis |
| Dungeness Bay | 03/17/1999 | 48.15166 | -123.1525 | VL | Gracillariopsis |
| Dungeness Bay | 03/17/1999 | 48.15098 | -123.1632 | VL | Gracillariopsis |
| Dungeness Bay | 03/17/1999 | 48.14926 | -123.1681 | VL | Gracillariopsis |
| Dungeness Bay | 03/17/1999 | 48.14835 | -123.1727 | L  | Gracillariopsis |
| Dungeness Bay | 02/21/1997 | 48.15511 | -123.1734 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/1997 | 48.15754 | -123.1699 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/1997 | 48.15514 | -123.1518 | VL | Gracillariopsis |
| Dungeness Bay | 03/18/1997 | 48.14978 | -123.1702 | VL | Gracillariopsis |
| Dungeness Bay | 01/29/1998 | 48.16675 | -123.1564 | VL | Gracillariopsis |
| Dungeness Bay | 01/29/1998 | 48.16942 | -123.1532 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1998 | 48.15466 | -123.1515 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1998 | 48.15838 | -123.1506 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/20/1998 | 48.14844 | -123.1717 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/1998 | 48.15844 | -123.1696 | VL | Gracillariopsis |
| Dungeness Bay | 03/06/1998 | 48.15903 | -123.1613 | VL | Gracillariopsis |
| Dungeness Bay | 01/28/1999 | 48.1553  | -123.1688 | VL | Gracillariopsis |
| Dungeness Bay | 01/28/1999 | 48.15504 | -123.1516 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1999 | 48.14978 | -123.1663 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1999 | 48.14768 | -123.1738 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1999 | 48.1562  | -123.1733 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.14902 | -123.1701 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.14744 | -123.1771 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.15669 | -123.1656 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.15536 | -123.1613 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.16446 | -123.1552 | L  | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.15922 | -123.1619 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.15726 | -123.1651 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.15627 | -123.1609 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15214 | -123.1526 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15069 | -123.1631 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15035 | -123.167  | VL | Gracillariopsis |
| Dungeness Bay | 03/11/1999 | 48.15755 | -123.1617 | VL | Gracillariopsis |
| Dungeness Bay | 03/11/1999 | 48.15337 | -123.152  | VL | Gracillariopsis |
| Dungeness Bay | 01/27/2000 | 48.15425 | -123.173  | VL | Gracillariopsis |
| Dungeness Bay | 02/17/2000 | 48.1525  | -123.1647 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/03/1999 | 48.15855 | -123.1649 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/1999 | 48.15741 | -123.1608 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.15371 | -123.152  | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.15108 | -123.1605 | VL | Gracillariopsis |
| Dungeness Bay | 02/12/1999 | 48.15088 | -123.1631 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.15376 | -123.1518 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.15185 | -123.1562 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.14974 | -123.1667 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.14873 | -123.1698 | L  | Gracillariopsis |
| Dungeness Bay | 02/19/1999 | 48.14782 | -123.1742 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15473 | -123.1668 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15895 | -123.1498 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/1999 | 48.15533 | -123.1513 | VL | Gracillariopsis |
| Dungeness Bay | 03/11/1999 | 48.15088 | -123.1668 | VL | Gracillariopsis |
| Dungeness Bay | 02/03/2000 | 48.15711 | -123.1692 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.15544 | -123.1725 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.15782 | -123.1698 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.15616 | -123.1669 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.15116 | -123.1727 | VL | Gracillariopsis |
| Dungeness Bay | 02/09/2000 | 48.15164 | -123.1676 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/2000 | 48.15487 | -123.1746 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/2000 | 48.15606 | -123.1712 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/24/2000 | 48.1575  | -123.1695 | VL | Gracillariopsis |
| Dungeness Bay | 02/24/2000 | 48.1545  | -123.1696 | VL | Gracillariopsis |
| Dungeness Bay | 02/07/2002 | 48.15683 | -123.1673 | VL | Gracillariopsis |
| Dungeness Bay | 02/14/2002 | 48.15594 | -123.1668 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/2002 | 48.15628 | -123.1659 | VL | Gracillariopsis |
| Dungeness Bay | 03/09/2000 | 48.15135 | -123.1742 | VL | Gracillariopsis |
| Dungeness Bay | 02/02/2001 | 48.15978 | -123.1671 | VL | Gracillariopsis |
| Dungeness Bay | 02/02/2001 | 48.15502 | -123.1676 | VL | Gracillariopsis |
| Dungeness Bay | 02/07/2002 | 48.15627 | -123.1638 | VL | Gracillariopsis |
| Dungeness Bay | 02/14/2002 | 48.16085 | -123.1658 | VL | Gracillariopsis |
| Dungeness Bay | 02/28/2002 | 48.1549  | -123.1649 | L  | Gracillariopsis |
| Dungeness Bay | 02/10/2003 | 48.15756 | -123.17   | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2003 | 48.15417 | -123.1714 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/2003 | 48.15532 | -123.1721 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/2003 | 48.1577  | -123.1687 | VL | Gracillariopsis |
| Dungeness Bay | 02/21/2003 | 48.15975 | -123.1653 | VL | Gracillariopsis |
| Dungeness Bay | 02/04/2004 | 48.15408 | -123.1741 | VL | Gracillariopsis |
| Dungeness Bay | 03/06/2012 | 48.15418 | -123.1694 | VL | Gracillariopsis |
| Dungeness Bay | 03/06/2012 | 48.15227 | -123.1706 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/2013 | 48.15836 | -123.1581 | VL | Gracillariopsis |
| Dungeness Bay | 03/20/2013 | 48.15612 | -123.1603 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/2013 | 48.15389 | -123.1645 | VL | Gracillariopsis |
| Dungeness Bay | 02/20/2013 | 48.15738 | -123.161  | L  | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 02/20/2013 | 48.15903 | -123.1582 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2014 | 48.15348 | -123.1718 | VL | Gracillariopsis |
| Dungeness Bay | 02/19/2014 | 48.15196 | -123.1656 | L  | Gracillariopsis |
| Dungeness Bay | 02/26/2014 | 48.15153 | -123.153  | VL | Gracillariopsis |
| Dungeness Bay | 02/26/2014 | 48.15295 | -123.153  | VL | Gracillariopsis |
| Dungeness Bay | 03/06/2014 | 48.15572 | -123.1677 | VL | Gracillariopsis |
| Dungeness Bay | 02/16/2016 | 48.15816 | -123.1653 | VL | Gracillariopsis |
| Dungeness Bay | 02/01/2017 | 48.15119 | -123.168  | VL | Gracillariopsis |
| Dungeness Bay | 02/01/2017 | 48.15332 | -123.1665 | L  | Gracillariopsis |
| Dungeness Bay | 02/01/2017 | 48.15593 | -123.1608 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15378 | -123.1743 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15397 | -123.1696 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15405 | -123.164  | VL | Gracillariopsis |
| Dungeness Bay | 02/13/2017 | 48.15558 | -123.161  | VL | Gracillariopsis |
| Dungeness Bay | 02/23/2017 | 48.15431 | -123.1669 | VL | Gracillariopsis |
| Dungeness Bay | 03/06/2017 | 48.15047 | -123.1563 | VL | Gracillariopsis |
| Dungeness Bay | 01/24/2018 | 48.15313 | -123.1645 | VL | Gracillariopsis |
| Dungeness Bay | 02/23/2018 | 48.15394 | -123.1681 | VL | Gracillariopsis |
| Dungeness Bay | 01/24/2018 | 48.15313 | -123.1645 | VL | Gracillariopsis |
| Dungeness Bay | 01/24/2018 | 48.15313 | -123.1645 | VL | Gracillariopsis |
| Dungeness Bay | 03/02/2018 | 48.15045 | -123.1626 | VL | Gracillariopsis |

|               |            |          |           |    |                 |
|---------------|------------|----------|-----------|----|-----------------|
| Dungeness Bay | 03/02/2018 | 48.1538  | -123.1599 | VL | Gracillariopsis |
| Dungeness Bay | 01/28/2019 | 48.15409 | -123.1639 | VL | Gracillariopsis |
| Dungeness Bay | 02/25/2019 | 48.15313 | -123.1652 | VL | Gracillariopsis |
| Dungeness Bay | 03/04/2019 | 48.15282 | -123.1662 | VL | Gracillariopsis |
| Dungeness Bay | 03/04/2019 | 48.15397 | -123.1634 | L  | Gracillariopsis |
| Dungeness Bay | 01/21/2020 | 48.15543 | -123.1709 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2020 | 48.1561  | -123.1732 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2020 | 48.15013 | -123.1797 | VL | Gracillariopsis |
| Dungeness Bay | 02/10/2011 | 48.15044 | -123.1601 | VL | Agardhiella     |
| Dungeness Bay | 02/21/2008 | 48.1543  | -123.1708 | VL | Agardhiella     |
| Dungeness Bay | 03/05/2008 | 48.15479 | -123.1699 | VL | Agardhiella     |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Agardhiella     |
| Dungeness Bay | 02/17/2010 | 48.15024 | -123.1626 | VL | Agardhiella     |
| Dungeness Bay | 02/17/2010 | 48.14977 | -123.1652 | VL | Agardhiella     |
| Dungeness Bay | 03/08/2007 | 48.1511  | -123.1712 | VL | Agardhiella     |
| Dungeness Bay | 02/19/1986 | 48.15729 | -123.1517 | VL | Agardhiella     |
| Dungeness Bay | 02/26/1986 | 48.15235 | -123.1521 | VL | Agardhiella     |
| Dungeness Bay | 02/26/1986 | 48.15092 | -123.1546 | VL | Agardhiella     |
| Dungeness Bay | 02/26/1986 | 48.15073 | -123.1577 | VL | Agardhiella     |
| Dungeness Bay | 02/26/1986 | 48.15114 | -123.1611 | VL | Agardhiella     |
| Dungeness Bay | 03/05/1986 | 48.14946 | -123.1746 | VL | Agardhiella     |
| Dungeness Bay | 03/05/1986 | 48.16157 | -123.1535 | VL | Agardhiella     |
| Dungeness Bay | 03/02/1983 | 48.14939 | -123.1677 | VL | Agardhiella     |

|               |            |          |           |    |               |
|---------------|------------|----------|-----------|----|---------------|
| Dungeness Bay | 03/02/1983 | 48.14926 | -123.1708 | VL | Agardhiella   |
| Dungeness Bay | 02/19/1986 | 48.14983 | -123.1673 | VL | Agardhiella   |
| Dungeness Bay | 02/19/1986 | 48.14994 | -123.1701 | VL | Agardhiella   |
| Dungeness Bay | 02/19/1986 | 48.14881 | -123.1724 | VL | Agardhiella   |
| Dungeness Bay | 02/26/1986 | 48.15007 | -123.1653 | VL | Agardhiella   |
| Dungeness Bay | 02/26/1986 | 48.14947 | -123.1682 | VL | Agardhiella   |
| Dungeness Bay | 02/26/1986 | 48.14869 | -123.1718 | VL | Agardhiella   |
| Dungeness Bay | 02/26/1986 | 48.14743 | -123.1749 | VL | Agardhiella   |
| Dungeness Bay | 03/05/1986 | 48.15675 | -123.1517 | VL | Agardhiella   |
| Dungeness Bay | 03/05/1986 | 48.15132 | -123.1644 | VL | Agardhiella   |
| Dungeness Bay | 02/12/1999 | 48.15108 | -123.1605 | VL | Agardhiella   |
| Dungeness Bay | 01/27/2000 | 48.15425 | -123.173  | VL | Agardhiella   |
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Agardhiella   |
| Dungeness Bay | 03/01/2001 | 48.15684 | -123.1622 | VL | Agardhiella   |
| Dungeness Bay | 02/10/2003 | 48.15417 | -123.1714 | VL | Agardhiella   |
| Dungeness Bay | 01/30/1997 | 48.1606  | -123.1632 | VL | Agardhiella   |
| Dungeness Bay | 02/06/1998 | 48.16679 | -123.1572 | VL | Agardhiella   |
| Dungeness Bay | 02/01/2017 | 48.15332 | -123.1665 | VL | Agardhiella   |
| Dungeness Bay | 02/23/2017 | 48.15431 | -123.1669 | VL | Agardhiella   |
| Dungeness Bay | 02/25/2019 | 48.15633 | -123.1556 | VL | Agardhiella   |
| Dungeness Bay | 02/10/2020 | 48.15102 | -123.1706 | VL | Agardhiella   |
| Dungeness Bay | 02/16/2011 | 48.1507  | -123.1579 | VL | Botryoglossum |
| Dungeness Bay | 02/11/2010 | 48.15262 | -123.1629 | VL | Botryoglossum |

|               |            |          |           |    |               |
|---------------|------------|----------|-----------|----|---------------|
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Botryoglossum |
| Dungeness Bay | 02/07/1997 | 48.15616 | -123.1692 | VL | Botryoglossum |
| Dungeness Bay | 02/12/1999 | 48.14744 | -123.1771 | VL | Botryoglossum |
| Dungeness Bay | 02/12/1999 | 48.15536 | -123.1613 | VL | Botryoglossum |
| Dungeness Bay | 02/25/1999 | 48.15035 | -123.167  | VL | Botryoglossum |
| Dungeness Bay | 02/02/2001 | 48.15827 | -123.1636 | VL | Botryoglossum |
| Dungeness Bay | 02/02/2001 | 48.15636 | -123.1651 | VL | Botryoglossum |
| Dungeness Bay | 02/13/2001 | 48.15697 | -123.1693 | VL | Botryoglossum |
| Dungeness Bay | 02/13/2001 | 48.15378 | -123.1676 | VL | Botryoglossum |
| Dungeness Bay | 02/13/2001 | 48.15584 | -123.1602 | VL | Botryoglossum |
| Dungeness Bay | 02/28/2002 | 48.15313 | -123.1669 | VL | Botryoglossum |
| Dungeness Bay | 03/06/2012 | 48.15195 | -123.1671 | VL | Botryoglossum |
| Dungeness Bay | 02/20/2013 | 48.15389 | -123.1645 | VL | Botryoglossum |
| Dungeness Bay | 02/23/2017 | 48.15431 | -123.1669 | VL | Botryoglossum |
| Dungeness Bay | 02/26/1986 | 48.15092 | -123.1546 | VL | Callophyllis  |
| Dungeness Bay | 02/02/2001 | 48.15636 | -123.1651 | VL | Callophyllis  |
| Dungeness Bay | 02/17/1995 | 48.15802 | -123.1684 | VL | Ceramium      |
| Dungeness Bay | 01/29/1998 | 48.16274 | -123.1583 | VL | Gigartina     |
| Dungeness Bay | 03/11/1999 | 48.15337 | -123.152  | VL | Gigartina     |
| Dungeness Bay | 02/10/2011 | 48.15044 | -123.1601 | VL | Hydroids      |
| Dungeness Bay | 02/10/2011 | 48.15028 | -123.1633 | VL | Hydroids      |
| Dungeness Bay | 02/25/2010 | 48.15033 | -123.1608 | VL | Hydroids      |
| Dungeness Bay | 02/21/2008 | 48.1543  | -123.1708 | VL | Hydroids      |

|               |            |          |           |    |          |
|---------------|------------|----------|-----------|----|----------|
| Dungeness Bay | 02/16/2011 | 48.15079 | -123.1609 | VL | Hydroids |
| Dungeness Bay | 02/16/2011 | 48.15746 | -123.1705 | VL | Hydroids |
| Dungeness Bay | 02/09/1983 | 48.16531 | -123.1574 | VL | Hydroids |
| Dungeness Bay | 02/09/1983 | 48.14944 | -123.1683 | VL | Hydroids |
| Dungeness Bay | 02/16/1983 | 48.14973 | -123.1689 | VL | Hydroids |
| Dungeness Bay | 03/14/1980 | 48.15607 | -123.1732 | VL | Hydroids |
| Dungeness Bay | 03/14/1980 | 48.15772 | -123.1713 | VL | Hydroids |
| Dungeness Bay | 02/19/1986 | 48.15556 | -123.1515 | VL | Hydroids |
| Dungeness Bay | 02/26/1986 | 48.15092 | -123.1546 | VL | Hydroids |
| Dungeness Bay | 02/26/1986 | 48.15073 | -123.1577 | VL | Hydroids |
| Dungeness Bay | 03/12/1986 | 48.15031 | -123.1646 | VL | Hydroids |
| Dungeness Bay | 02/10/1995 | 48.14959 | -123.1663 | VL | Hydroids |
| Dungeness Bay | 02/19/1999 | 48.15922 | -123.1619 | VL | Hydroids |
| Dungeness Bay | 02/21/2003 | 48.15975 | -123.1653 | VL | Hydroids |
| Dungeness Bay | 02/12/1986 | 48.15078 | -123.1629 | VL | Hydroids |
| Dungeness Bay | 02/19/1986 | 48.15103 | -123.1548 | VL | Hydroids |
| Dungeness Bay | 02/19/1986 | 48.14983 | -123.1673 | VL | Hydroids |
| Dungeness Bay | 03/05/1986 | 48.153   | -123.1522 | VL | Hydroids |
| Dungeness Bay | 03/12/1986 | 48.15091 | -123.1557 | VL | Hydroids |
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Hydroids |
| Dungeness Bay | 03/06/2012 | 48.15418 | -123.1694 | VL | Hydroids |
| Dungeness Bay | 03/06/2014 | 48.15572 | -123.1677 | VL | Hydroids |
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | L  | Hydroids |

|               |            |          |           |    |            |
|---------------|------------|----------|-----------|----|------------|
| Dungeness Bay | 02/13/2017 | 48.15243 | -123.1665 | L  | Hydroids   |
| Dungeness Bay | 02/23/2018 | 48.15394 | -123.1681 | VL | Hydroids   |
| Dungeness Bay | 03/12/2008 | 48.15303 | -123.1705 | VL | Laminaria  |
| Dungeness Bay | 02/09/1983 | 48.15244 | -123.1674 | VL | Laminaria  |
| Dungeness Bay | 02/09/1983 | 48.15316 | -123.1627 | VL | Laminaria  |
| Dungeness Bay | 02/09/1983 | 48.15281 | -123.1589 | VL | Laminaria  |
| Dungeness Bay | 02/16/1983 | 48.14973 | -123.1689 | VL | Laminaria  |
| Dungeness Bay | 02/24/2000 | 48.15487 | -123.1746 | VL | Laminaria  |
| Dungeness Bay | 01/27/2000 | 48.15425 | -123.173  | VL | Laminaria  |
| Dungeness Bay | 02/28/2002 | 48.1549  | -123.1649 | VL | Laminaria  |
| Dungeness Bay | 02/23/2017 | 48.15431 | -123.1669 | VL | Laminaria  |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Odonthalia |
| Dungeness Bay | 02/13/2008 | 48.15701 | -123.1667 | VL | Plocamium  |
| Dungeness Bay | 02/28/2002 | 48.1549  | -123.1649 | VL | Plocamium  |
| Dungeness Bay | 02/10/2011 | 48.15044 | -123.1601 | VL | Polyneura  |
| Dungeness Bay | 02/10/2011 | 48.1528  | -123.16   | VL | Polyneura  |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Polyneura  |
| Dungeness Bay | 02/17/1995 | 48.16146 | -123.1609 | VL | Polyneura  |
| Dungeness Bay | 01/27/2000 | 48.1564  | -123.1706 | VL | Polyneura  |
| Dungeness Bay | 02/19/1986 | 48.15258 | -123.1554 | VL | Polyneura  |
| Dungeness Bay | 02/12/1999 | 48.14902 | -123.1701 | VL | Polyneura  |
| Dungeness Bay | 02/12/1999 | 48.14744 | -123.1771 | VL | Polyneura  |
| Dungeness Bay | 02/19/1999 | 48.16446 | -123.1552 | L  | Polyneura  |

|               |            |          |           |    |                    |
|---------------|------------|----------|-----------|----|--------------------|
| Dungeness Bay | 02/19/1999 | 48.15922 | -123.1619 | VL | Polyneura          |
| Dungeness Bay | 01/28/1999 | 48.15097 | -123.1663 | VL | Rhodymenia         |
| Dungeness Bay | 02/16/2011 | 48.15513 | -123.171  | VL | Terrestrial_Debris |
| Dungeness Bay | 02/09/1983 | 48.14794 | -123.1739 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/03/1999 | 48.1562  | -123.1733 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/19/1999 | 48.16446 | -123.1552 | VL | Terrestrial_Debris |
| Dungeness Bay | 03/11/1999 | 48.15755 | -123.1617 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/14/2002 | 48.15852 | -123.1626 | VL | Terrestrial_Debris |
| Dungeness Bay | 03/06/1998 | 48.15903 | -123.1613 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/19/1999 | 48.14782 | -123.1742 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/09/2000 | 48.1534  | -123.1705 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/24/2000 | 48.14967 | -123.1797 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/07/2002 | 48.15627 | -123.1638 | VL | Terrestrial_Debris |
| Dungeness Bay | 02/28/2002 | 48.1549  | -123.1649 | L  | Terrestrial_Debris |
| Dungeness Bay | 01/21/2020 | 48.15543 | -123.1709 | VL | Terrestrial_Debris |
| Dungeness Bay | 03/02/2011 | 48.15136 | -123.1737 | VL | Ulva               |
| Dungeness Bay | 02/16/2011 | 48.151   | -123.1552 | VL | Ulva               |
| Dungeness Bay | 02/16/2011 | 48.15746 | -123.1705 | VL | Ulva               |
| Dungeness Bay | 02/16/2011 | 48.15276 | -123.1657 | VL | Ulva               |
| Dungeness Bay | 02/16/2011 | 48.15211 | -123.1539 | VL | Ulva               |
| Dungeness Bay | 03/08/2007 | 48.15258 | -123.1727 | VL | Ulva               |
| Dungeness Bay | 02/09/1983 | 48.15281 | -123.1589 | VL | Ulva               |
| Dungeness Bay | 02/19/1986 | 48.15258 | -123.1554 | VL | Ulva               |

|               |            |          |           |    |      |
|---------------|------------|----------|-----------|----|------|
| Dungeness Bay | 02/17/1995 | 48.15802 | -123.1684 | VL | Ulva |
| Dungeness Bay | 02/03/1999 | 48.15855 | -123.1649 | VL | Ulva |
| Dungeness Bay | 02/21/1997 | 48.14988 | -123.1635 | VL | Ulva |
| Dungeness Bay | 02/03/1999 | 48.1562  | -123.1733 | VL | Ulva |
| Dungeness Bay | 02/19/1999 | 48.16446 | -123.1552 | L  | Ulva |
| Dungeness Bay | 02/19/1999 | 48.15627 | -123.1609 | VL | Ulva |
| Dungeness Bay | 02/03/2000 | 48.15711 | -123.1692 | VL | Ulva |
| Dungeness Bay | 02/24/2000 | 48.14967 | -123.1797 | VL | Ulva |
| Dungeness Bay | 02/24/2000 | 48.15487 | -123.1746 | VL | Ulva |
| Dungeness Bay | 02/24/2000 | 48.1575  | -123.1695 | VL | Ulva |
| Dungeness Bay | 02/24/2000 | 48.15959 | -123.1674 | VL | Ulva |
| Dungeness Bay | 02/24/2000 | 48.1545  | -123.1696 | VL | Ulva |
| Dungeness Bay | 02/13/2001 | 48.15879 | -123.1663 | VL | Ulva |
| Dungeness Bay | 02/13/2001 | 48.15593 | -123.1664 | VL | Ulva |
| Dungeness Bay | 02/14/2002 | 48.15594 | -123.1668 | VL | Ulva |
| Dungeness Bay | 01/27/2000 | 48.15187 | -123.175  | VL | Ulva |
| Dungeness Bay | 01/27/2000 | 48.15425 | -123.173  | VL | Ulva |
| Dungeness Bay | 02/09/2000 | 48.15544 | -123.1725 | VL | Ulva |
| Dungeness Bay | 02/09/2000 | 48.15782 | -123.1698 | VL | Ulva |
| Dungeness Bay | 02/28/2002 | 48.15313 | -123.1669 | VL | Ulva |
| Dungeness Bay | 02/21/2003 | 48.15532 | -123.1721 | VL | Ulva |
| Dungeness Bay | 02/21/2003 | 48.1577  | -123.1687 | VL | Ulva |
| Dungeness Bay | 02/21/2003 | 48.15975 | -123.1653 | VL | Ulva |

|               |            |          |           |    |                |
|---------------|------------|----------|-----------|----|----------------|
| Dungeness Bay | 02/10/2003 | 48.15417 | -123.1714 | VL | Ulva           |
| Dungeness Bay | 02/01/2017 | 48.15119 | -123.168  | VL | Ulva           |
| Dungeness Bay | 02/01/2017 | 48.15332 | -123.1665 | VL | Ulva           |
| Dungeness Bay | 02/13/2017 | 48.15397 | -123.1696 | VL | Ulva           |
| Dungeness Bay | 02/23/2018 | 48.15394 | -123.1681 | VL | Ulva           |
| Dungeness Bay | 02/23/2018 | 48.14856 | -123.1736 | VL | Ulva           |
| Dungeness Bay | 03/02/2018 | 48.15045 | -123.1626 | VL | Ulva           |
| Dungeness Bay | 02/25/2019 | 48.15633 | -123.1556 | VL | Ulva           |
| Dungeness Bay | 03/04/2019 | 48.15397 | -123.1634 | VL | Ulva           |
| Dungeness Bay | 02/10/2020 | 48.15771 | -123.1707 | VL | Ulva           |
| Dungeness Bay | 02/09/1983 | 48.15316 | -123.1627 | VL | Urospora       |
| Dungeness Bay | 03/05/1986 | 48.15675 | -123.1517 | VL | Urospora       |
| Dungeness Bay | 03/03/1995 | 48.14782 | -123.1742 | VL | Urospora       |
| Dungeness Bay | 02/24/2000 | 48.15606 | -123.1712 | VL | Urospora       |
| Dungeness Bay | 02/10/2020 | 48.15129 | -123.1728 | VL | Urospora       |
| Dungeness Bay | 02/10/2020 | 48.15102 | -123.1706 | VL | Urospora       |
| Dungeness Bay | 02/11/2015 | 48.15653 | -123.1729 | MH | Alaria         |
| Dungeness Bay | 02/11/2015 | 48.15164 | -123.1634 | MH | Alaria         |
| Dungeness Bay | 02/10/2020 | 48.15771 | -123.1707 | VL | Manmade_Debris |

| Tonnes   |
|----------|
| 6.350295 |
| 5.44311  |
| 6.350295 |
| 9.979035 |
| 6.350295 |
| 4.535925 |
| 5.44311  |
| 7.25748  |
| 6.350295 |
| 4.535925 |
| 7.25748  |
| 7.25748  |
| 6.350295 |

|          |
|----------|
| 6.350295 |
| 5.44311  |
| 5.44311  |
| 7.25748  |
| 8.164665 |
| 6.350295 |
| 5.44311  |
| 5.44311  |
| 6.350295 |

|          |
|----------|
| 6.350295 |
| 6.350295 |
| 5.44311  |
| 5.44311  |
| 6.350295 |
| 5.44311  |
| 9.07185  |
| 4.535925 |

|          |
|----------|
| 9.07185  |
| 8.164665 |
| 8.164665 |
| 7.25748  |
| 5.44311  |
| 5.44311  |
| 6.350295 |
| 5.44311  |
| 6.350295 |

|          |
|----------|
| 5.44311  |
| 5.44311  |
| 6.350295 |

|           |
|-----------|
| 33.565845 |
| 9.979035  |
| 5.44311   |
| 8.164665  |
| 9.07185   |

|           |
|-----------|
| 6.350295  |
| 3.62874   |
| 3.62874   |
| 5.44311   |
| 19.050885 |
| 5.44311   |
| 7.25748   |
| 9.07185   |
| 9.07185   |
| 6.350295  |
| 5.44311   |
| 6.350295  |
| 8.164665  |
| 8.164665  |

|          |
|----------|
| 8.164665 |
| 8.164665 |
| 9.979035 |
| 9.979035 |
| 6.350295 |
| 8.164665 |
| 7.25748  |

|          |
|----------|
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 9.979035 |
| 6.350295 |
| 5.44311  |
| 5.44311  |

|          |
|----------|
| 10.88622 |
| 8.164665 |
| 8.164665 |
| 8.164665 |
| 8.164665 |

|          |
|----------|
| 8.164665 |
| 6.350295 |

|          |
|----------|
| 9.07185  |
| 6.350295 |
| 8.164665 |
| 29.02992 |
| 8.164665 |
| 6.350295 |
| 10.88622 |

|          |
|----------|
| 5.44311  |
| 8.164665 |
| 8.164665 |
| 5.44311  |
| 6.350295 |

|           |
|-----------|
| 5.44311   |
| 7.25748   |
| 8.164665  |
| 11.793405 |
| 5.44311   |

|          |
|----------|
| 5.44311  |
| 5.44311  |
| 9.07185  |
| 9.979035 |
| 9.979035 |
| 9.979035 |
| 6.350295 |

|            |
|------------|
| 4.535925   |
| 7.25748    |
| 4.535925   |
| 4.535925   |
| 30.84429   |
| 13.607775  |
| 10.88622   |
| 9.07185    |
| 0          |
| 8.164665   |
| 9.07185    |
| 12.70059   |
| 7.4249944  |
| 11.6583495 |
| 13.7417807 |

|            |
|------------|
| 14.1628998 |
| 10.9047679 |
| 13.8008852 |
| 16.6970024 |
| 12.4267071 |
| 13.4019303 |
| 7.3437258  |
| 7.3437258  |
| 16.2684953 |
| 17.1550618 |
| 16.6643125 |
| 14.713073  |
| 13.5617205 |
| 7.926153   |
| 6.350295   |
| 5.44311    |
| 8.164665   |
| 5.44311    |
| 6.350295   |
| 9.979035   |
| 4.535925   |
| 5.44311    |
| 7.25748    |

|          |
|----------|
| 6.350295 |
| 4.535925 |
| 7.25748  |
| 6.350295 |
| 4.535925 |
| 6.350295 |
| 7.25748  |
| 8.164665 |
| 8.164665 |
| 6.350295 |
| 7.25748  |
| 8.164665 |
| 8.164665 |
| 5.44311  |
| 5.44311  |
| 5.44311  |
| 9.07185  |
| 8.164665 |
| 6.350295 |
| 8.164665 |
| 6.350295 |
| 5.44311  |
| 8.164665 |

|          |
|----------|
| 8.164665 |
|----------|

|          |
|----------|
| 4.535925 |
|----------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|          |
|----------|
| 6.350295 |
|----------|

|         |
|---------|
| 7.25748 |
|---------|

|         |
|---------|
| 7.25748 |
|---------|

|          |
|----------|
| 8.164665 |
|----------|

|          |
|----------|
| 6.350295 |
|----------|

|          |
|----------|
| 6.350295 |
|----------|

|          |
|----------|
| 6.350295 |
|----------|

|          |
|----------|
| 6.350295 |
| 6.350295 |
| 6.350295 |

|          |
|----------|
| 4.535925 |
| 5.44311  |
| 5.44311  |
| 4.535925 |
| 5.44311  |
| 5.44311  |

|          |
|----------|
| 5.44311  |
| 6.350295 |
| 5.44311  |
| 6.350295 |

|         |
|---------|
| 5.44311 |
|---------|

|          |
|----------|
| 6.350295 |
| 5.44311  |
| 8.164665 |

|         |
|---------|
| 3.62874 |
| 5.44311 |
| 5.44311 |
| 5.44311 |
| 5.44311 |
| 5.44311 |
| 5.44311 |

|           |
|-----------|
| 7.25748   |
| 9.07185   |
| 6.350295  |
| 5.44311   |
| 19.050885 |
| 5.44311   |

|          |
|----------|
| 6.350295 |
| 6.350295 |
| 8.164665 |
| 8.164665 |
| 9.07185  |

|          |
|----------|
| 9.979035 |
| 7.25748  |
| 9.07185  |
| 8.164665 |
| 5.44311  |
| 9.979035 |
| 9.07185  |
| 6.350295 |

|          |
|----------|
| 8.164665 |
| 8.164665 |
| 8.164665 |
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 6.350295 |
| 9.979035 |
| 9.07185  |
| 9.07185  |
| 5.44311  |
| 9.979035 |

|          |
|----------|
| 6.350295 |
| 9.979035 |
| 9.07185  |
| 7.25748  |
| 8.164665 |
| 8.164665 |
| 8.164665 |

|          |
|----------|
| 6.350295 |
|----------|

|         |
|---------|
| 5.44311 |
|---------|

|           |
|-----------|
| 40.823325 |
| 8.164665  |

|          |
|----------|
| 9.979035 |
| 7.25748  |
| 6.350295 |
| 7.25748  |
| 9.07185  |
| 9.979035 |

|         |
|---------|
| 7.25748 |
| 9.07185 |
| 7.25748 |

|          |
|----------|
| 8.164665 |
| 9.979035 |
| 5.44311  |
| 5.44311  |
| 9.07185  |
| 8.164665 |
| 29.02992 |

|          |
|----------|
| 8.164665 |
|----------|

|         |
|---------|
| 9.07185 |
| 7.25748 |
| 7.25748 |

|          |
|----------|
| 6.350295 |
| 7.25748  |

|           |
|-----------|
| 6.350295  |
| 8.164665  |
| 6.350295  |
| 5.44311   |
| 5.44311   |
| 6.350295  |
| 9.979035  |
| 5.44311   |
| 33.565845 |
| 8.164665  |

|          |
|----------|
| 6.350295 |
| 9.979035 |
| 9.979035 |
| 10.88622 |
| 8.164665 |
| 7.25748  |
| 9.979035 |
| 8.164665 |
| 8.164665 |
| 9.979035 |
| 6.350295 |
| 4.535925 |

|          |
|----------|
| 5.44311  |
| 6.350295 |
| 8.164665 |
| 9.07185  |

|           |
|-----------|
| 7.25748   |
| 8.164665  |
| 5.44311   |
| 9.979035  |
| 39.008955 |
| 5.44311   |
| 8.164665  |
| 8.164665  |
| 8.164665  |

|           |
|-----------|
| 8.164665  |
| 7.25748   |
| 5.44311   |
| 6.350295  |
| 13.607775 |
| 7.25748   |
| 30.84429  |

|            |
|------------|
| 6.350295   |
| 10.88622   |
| 8.164665   |
| 8.164665   |
| 7.25748    |
| 12.70059   |
| 11.6583495 |
| 11.4367078 |
| 12.6040204 |
| 16.6970024 |
| 12.4267071 |
| 13.4019303 |
| 7.3437258  |
| 7.3437258  |
| 16.7561068 |
| 16.2684953 |
| 9.6487987  |
| 4.8613396  |
| 15.5592421 |
| 13.7417807 |
| 15.5592421 |
| 15.5592421 |
| 11.3923795 |

|            |
|------------|
| 19.1055081 |
|------------|

|            |
|------------|
| 16.6643125 |
|------------|

|            |
|------------|
| 19.2336465 |
|------------|

|           |
|-----------|
| 14.276771 |
|-----------|

|            |
|------------|
| 13.5617205 |
|------------|

|        |
|--------|
| 9.6956 |
|--------|

|         |
|---------|
| 9.45321 |
|---------|

|          |
|----------|
| 6.568769 |
|----------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 9.07185 |
|---------|

|          |
|----------|
| 8.164665 |
|----------|

|         |
|---------|
| 7.25748 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|          |
|----------|
| 8.164665 |
|----------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 5.44311 |
|---------|

|         |
|---------|
| 7.25748 |
|---------|

|          |
|----------|
| 8.164665 |
|----------|

|          |
|----------|
| 6.350295 |
|----------|

|          |
|----------|
| 6.350295 |
| 4.535925 |
| 3.62874  |
| 5.44311  |
| 6.350295 |
| 5.44311  |
| 6.350295 |
| 7.25748  |

|            |
|------------|
| 4.535925   |
| 5.44311    |
| 7.25748    |
| 8.164665   |
| 5.44311    |
| 8.164665   |
| 8.164665   |
| 8.164665   |
| 12.6040204 |
| 9.6487987  |
| 14.713073  |
| 8.0594675  |
| 5.44311    |
| 6.350295   |

|          |
|----------|
| 8.164665 |
| 9.979035 |
| 5.44311  |
| 8.164665 |
| 7.25748  |
| 8.164665 |
| 5.44311  |
| 8.164665 |

|           |
|-----------|
| 6.350295  |
| 5.44311   |
| 7.25748   |
| 9.6487987 |
| 5.44311   |
| 5.44311   |
| 7.25748   |
| 7.25748   |
| 6.350295  |
| 5.44311   |
| 6.350295  |
| 8.164665  |
| 9.07185   |

|          |
|----------|
| 7.25748  |
| 4.535925 |
| 8.164665 |
| 5.44311  |
| 6.350295 |

|         |
|---------|
| 5.44311 |
| 5.44311 |
| 5.44311 |
| 5.44311 |
| 5.44311 |

|          |
|----------|
| 6.350295 |
| 4.535925 |

|           |
|-----------|
| 5.44311   |
| 8.164665  |
| 7.25748   |
| 12.70059  |
| 7.3437258 |

|            |
|------------|
| 7.3437258  |
| 13.7417807 |
| 8.164665   |
| 5.44311    |

|           |
|-----------|
| 5.44311   |
| 6.350295  |
| 6.350295  |
| 7.25748   |
| 39.008955 |
| 9.6487987 |
| 7.25748   |
| 8.164665  |
| 39.008955 |
| 5.44311   |
| 9.979035  |
| 7.25748   |
| 6.350295  |
| 8.164665  |

|          |
|----------|
| 5.44311  |
| 5.44311  |
| 29.02992 |

|          |
|----------|
| 4.535925 |
| 5.44311  |
| 9.979035 |
| 29.02992 |

|           |
|-----------|
| 9.979035  |
| 7.25748   |
| 8.164665  |
| 8.164665  |
| 5.44311   |
| 5.44311   |
| 39.008955 |
| 9.6956    |
| 6.350295  |
| 4.535925  |
| 4.535925  |
| 7.25748   |
| 6.350295  |
| 7.25748   |
| 5.44311   |

|          |
|----------|
| 7.25748  |
| 6.350295 |
| 6.350295 |
| 9.979035 |
| 29.02992 |

|          |
|----------|
| 10.88622 |
| 5.44311  |
| 6.350295 |
| 5.44311  |
| 5.44311  |
| 6.350295 |
| 6.350295 |

|          |
|----------|
| 9.07185  |
| 5.44311  |
| 7.25748  |
| 8.164665 |
| 7.25748  |
| 6.350295 |
| 8.164665 |
| 8.164665 |

|          |
|----------|
| 8.164665 |
|----------|

|            |
|------------|
| 11.4367078 |
|------------|

|            |
|------------|
| 12.6040204 |
|------------|

|            |
|------------|
| 13.4019303 |
|------------|

|            |
|------------|
| 13.7417807 |
|------------|

|            |
|------------|
| 16.3017415 |
|------------|

|            |
|------------|
| 11.3923795 |
|------------|

|           |
|-----------|
| 14.713073 |
|-----------|

|            |
|------------|
| 13.5617205 |
|------------|

|          |
|----------|
| 7.926153 |
|----------|

|         |
|---------|
| 9.07185 |
|---------|

|          |
|----------|
| 4.535925 |
|----------|

|          |
|----------|
| 15.02818 |
|----------|

|           |
|-----------|
| 8.0594675 |
|-----------|

|          |
|----------|
| 7.926153 |
|----------|