

# Hood Canal 1

## Annual Shellfish Growing Area Review



Prepared By: Fiona Dahl

Area: Hood Canal 1

Year Ending: December 31, 2023

Classification: Approved, Prohibited

### Activities in the Growing Area in 2023

The growing area was sampled six times in accordance with the National Shellfish Sanitation Program (NSSP) Systematic Random Sampling criteria. An evaluation of the Squamish Marina and the Coon Bay Marina (in the Driftwood Keys development on the Hansville peninsula) were completed and no change to the current Prohibited areas were recommended. A comprehensive evaluation report is in the central growing area file.

A routine three-year shoreline evaluation was completed and the Department, Kitsap Public Health District (KPHD), and Jefferson County Public Health (JCPH) evaluated one agricultural site, 131 on-site sewage systems, 255 drainages, recreational activities, and wildlife activities. Based on an evaluation of upland conditions in conjunction with local health partners, the Department recommended the following actions which will be completed in the first quarter of 2024:

- Changing the classification of approximately one acre at the mouth of Kinman Creek from Prohibited to Approved based on improved water quality, pollution identification and correction activities, and no known OSS issues in the Kinman Creek area.
- Reopening the parcels associated with drainages 043, 044, and 094 along the southeast shoreline of the growing area, including parcels 282701-4-005-2009, 282701-4-004-2000 and 282701-4-093-2002, 282701-4-066-2005, 282701-4-039-2009, 282701-4-031-2007, 282701-4-079-2000, 282701-4-078-2001, 052601-1-001-2007, 052601-1-037-2005, and 052601-1-026-2008 based on reduced bacteria levels, pollution identification and correction activities, and no known Direct or Indirect impacts.
- Creating temporary closure areas around Site PB042 in Paradise Bay, including parcels 984000109, 984000110, 984000112, 984000113, 984000114, and 984000115, and around Site SH011 in Squamish Harbor, including parcels 930700015, 821334007, 821334011, and 821334005 based on elevated bacteria levels and Indirect Impacts from nonpoint pollution sources.

JCPH and KPHD continued pollution identification and correction (PIC) activities, provide on-site sewage system operation and maintenance (O&M) rebates, and a cost-share and grant program for septic system repair, replacement, and decommissioning/abatement. In addition, JCPH received Centennial Clean Water grant funding for PIC activities and enhanced O&M in the growing area.

### Analytical Results of Water Samples

Table 1 summarizes the results of the last 30 samples collected from the area. This summary shows that all stations pass the NSSP water quality standard.

### Change in Actual Pollution Sources that Impact the Growing Area

Temporary closure areas were recommended around Site PB042 in Paradise Bay, including parcels 984000109, 984000110, 984000112, 984000113, 984000114, and 984000115, and around Site SH011 in Squamish Harbor, including parcels 930700015, 821334007, 821334011, and 821334005 based on elevated bacteria levels and Indirect Impacts from nonpoint pollution sources.

## Classification Status

- Well within the classification standards
- Meets standards, but threatened with downgrade in classification
- Fails to meet current classification standards

## Remarks and Recommendations

Table 1 shows that all stations meet the NSSP water quality standard for an Approved classification. Temporary parcel closures should occur on those parcels described in the Changes in Actual Pollution Sources that Impact the Growing Area section.

**TABLE 1. Summary of Marine Water Data (SRS) for the Hood Canal 1 Growing Area**

Sampling Event Type: Regulatory

Maximum Number of Samples: 30

Tides Included: All

| Station Number | Classification | Date Range              | Range (FC/100mL) | Geomean (FC/100mL) | Est. 90 <sup>th</sup> Percentile (FC/100mL) | Meets Standard |
|----------------|----------------|-------------------------|------------------|--------------------|---|----------------|
| 16             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 17             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 18             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 4.0        | 1.8                | 2.2   | Y              |
| 19             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 1.7        | 1.7                | 1.7   | Y              |
| 20             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 21             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 22             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 46.0       | 1.9                | 4.2   | Y              |
| 23             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 1.7        | 1.7                | 1.7   | Y              |
| 25             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.9   | Y              |
| 26             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.9   | Y              |
| 27             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 4.5        | 1.8                | 2.2   | Y              |
| 28             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 1.7        | 1.7                | 1.7   | Y              |
| 29             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.9   | Y              |
| 30             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 31             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 4.5        | 1.8                | 2.2   | Y              |
| 32             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 33             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 34             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 35             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.9   | Y              |
| 36             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 11.0       | 2.0                | 3.6   | Y              |
| 37             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 23.0       | 2.1                | 4.4   | Y              |
| 38             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 350.0      | 2.1                | 7.5   | Y              |
| 39             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 6.8        | 1.9                | 3   | Y              |
| 40             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 13.0       | 2.0                | 3.5   | Y              |
| 41             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 13.0       | 1.8                | 2.9   | Y              |
| 43             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 44             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 45             | Approved       | 11/15/2018 - 12/19/2023 | 1.7 - 23.0       | 1.9                | 3.4   | Y              |
| 48             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 4.5        | 1.8                | 2.3   | Y              |
| 49             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 1.7        | 1.7                | 1.7   | Y              |
| 50             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |

**TABLE 1. Continued**

| Station Number | Classification | Date Range              | Range (FC/100mL) | Geomean (FC/100mL) | Est. 90 <sup>th</sup> Percentile (FC/100mL) | Meets Standard |
|----------------|----------------|-------------------------|------------------|--------------------|---|----------------|
| 52             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 79.0       | 2.2                | 6.2   | Y              |
| 53             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 17.0       | 1.8                | 3.1   | Y              |
| 54             | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 2.0        | 1.7                | 1.8   | Y              |
| 288            | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 27.0       | 1.9                | 3.6   | Y              |
| 304            | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 13.0       | 1.9                | 3.2   | Y              |
| 306            | Approved       | 2/25/2019 - 12/19/2023  | 1.7 - 79.0       | 2.1                | 5.4   | Y              |
| 24             | Prohibited     | 11/15/2018 - 12/19/2023 | 1.7 - 7.8        | 1.8                | 2.6   | Y              |
| 305            | Prohibited     | 2/25/2019 - 12/19/2023  | 1.7 - 4.5        | 1.8                | 2.3   | Y              |
| 51             | Unclassified   | 2/25/2019 - 12/19/2023  | 1.7 - 7.8        | 1.9                | 2.8   | Y              |

The standard for approved shellfish growing waters is fecal coliform geometric mean not greater than 14 organisms/ 100 mL with an estimated 90th percentile not greater than 43 organisms/ 100 mL. The above table shows bacteriological results in relation to program standards.

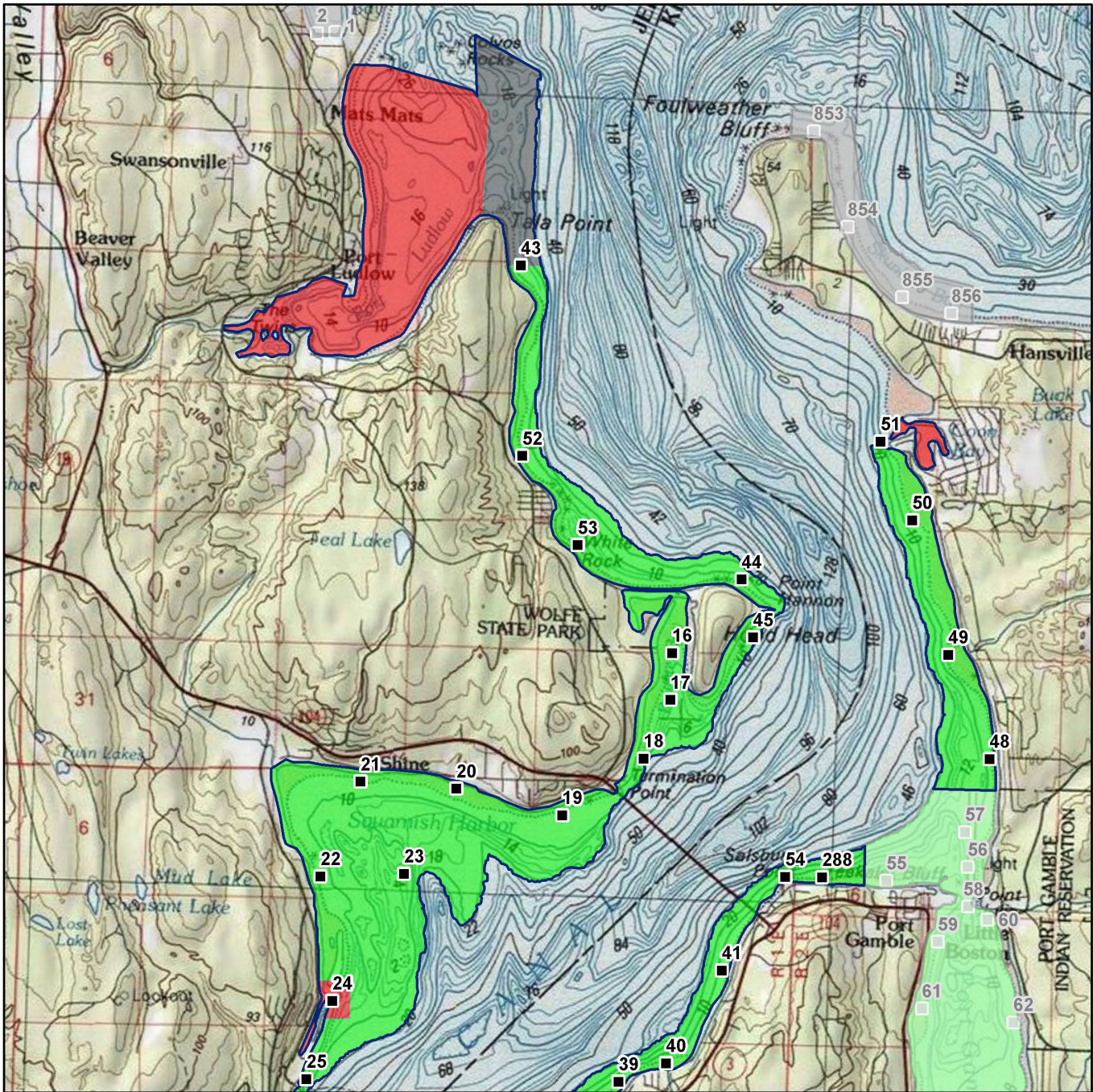
MAP 1. Hood Canal 1 Growing Area (1 of 3)

Hood Canal #1 (1 of 3)



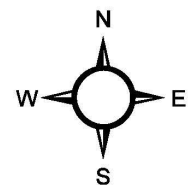
Date Updated: 7/11/2018

0 1.5 3 Miles



- Classification**
- Approved
  - Conditional
  - Prohibited
  - Restricted
  - Unclassified

- Sampling Stations**
- 



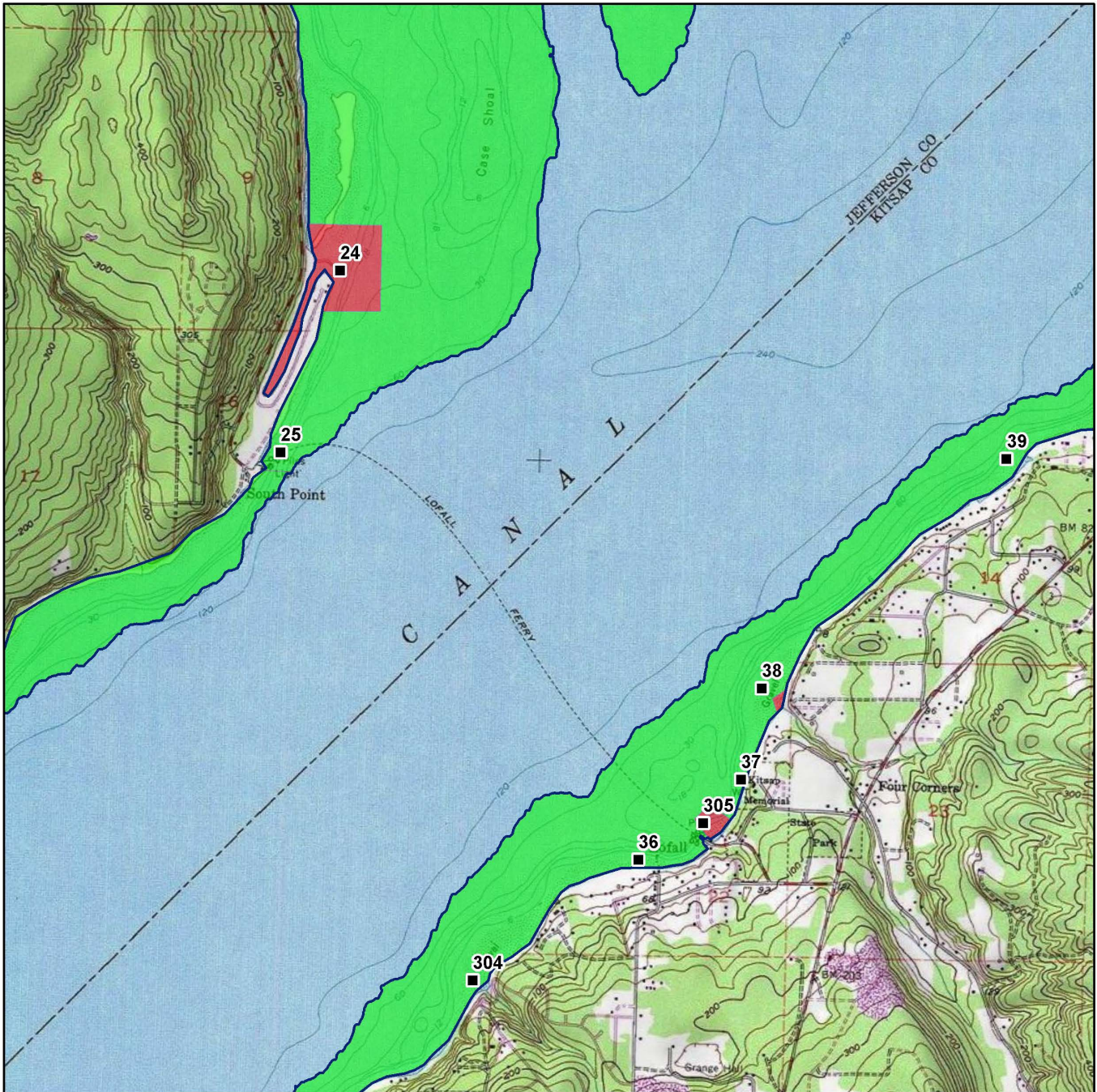
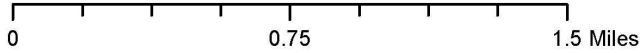
\* Some sampling stations are highlighted with grey box for ease of reading.

MAP 2. Hood Canal 1 Growing Area (2 of 3)

Hood Canal #1 (2 of 3)

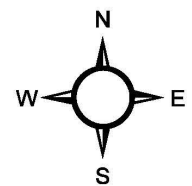


Date Updated: 7/11/2018



Classification Sampling Stations

- Approved
- Conditional
- Prohibited
- Restricted
- Unclassified



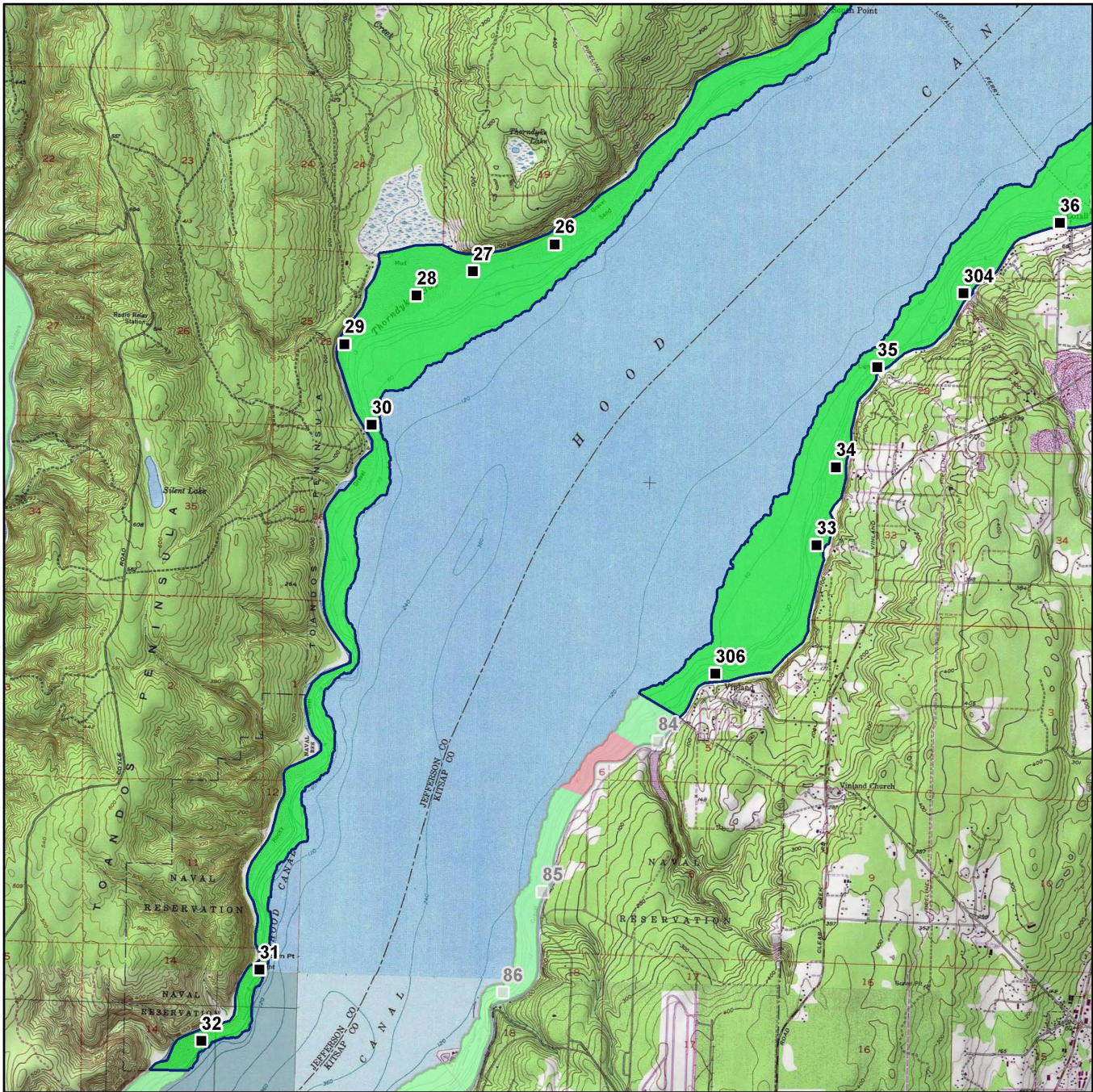
\* Some sampling stations are highlighted with grey box for ease of reading.

MAP 3. Hood Canal 1 Growing Area (3 of 3)

 Hood Canal #1 (3 of 3)

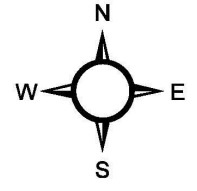


Date Updated: 7/11/2018



- Classification**
- Approved
  - Conditional
  - Prohibited
  - Restricted
  - Unclassified

- Sampling Stations**
- 



\* Some sampling stations are highlighted with grey box for ease of reading.