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July 7, 2006

Christine Goodwin
Friends of Holmes Harbor
Post Office Box 493
Freeland, Washington 98249

Dear Ms. Goodwin:

The Washington State Department of Health, Office of Food Safety and Shellfish is approving additional portions of Holmes Harbor for commercial shellfish harvesting. The northern portion of the current Unclassified area will be classified as Approved, while the southern-most portion of this area will be classified as Prohibited. A portion of the Harbor will remain Unclassified. We anticipate that the reclassification will be finalized by August 11, 2006. This classification is the result of a comprehensive review of shoreline sanitary conditions and marine water quality data.

The areas being classified are identified by boundary lines in Figure #3 of the enclosed Sanitary Survey report.

If you have any questions, please contact Debby Sargeant at (360) 236-3320.

Sincerely,

Nancy Napolilli
Office Director

Enclosure

SANITARY SURVEY

OF

HOLMES HARBOR

May 2006

WASHINGTON STATE DEPARTMENT OF HEALTH

OFFICE OF FOOD SAFETY AND SHELLFISH

Prepared by:

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I. Executive Summary

The Holmes Harbor shellfish area is a large embayment located on the southeast shore of Whidbey Island (see Figure #1, page 10). Shellfish harvested commercially from the area include oysters, hard-shell clams, and mussels. Approximately 1,121 acres of shellfish grounds within Holmes Harbor are classified as Approved for commercial harvest (see Figure #2, page, 11). All commercial shellfish grounds within Holmes Harbor meet the National Shellfish Sanitation Program standards for the Approved classification.

The Department of Health Office of Food Safety and Shellfish Programs (DOH) recently completed a shoreline survey of Holmes Harbor. No direct or indirect impacts to the Approved portions of the area were identified during the survey. The survey did find elevated bacteria levels in samples collected from four surface water drainages located in the Unclassified portions of the area. Two of these drainages impact the public beach at Freeland Park, a popular recreational shellfish harvest area. Based on these results approximately 98 acres in the south end of Holmes harbor, including all of the Freeland Park tidelands, have been closed to shellfish harvest (see Figure 3, page 12). This action constitutes a downgrade in classification. The Freeland Park tidelands had previously been classified as Open to recreational shellfish harvest. The area is now classified as Closed. The area will also be classified as Prohibited for commercial shellfish harvest.

The shoreline survey also identified a shipyard that is located in close proximity to the marine shoreline at the south end of the harbor as a possible source of contamination. Based on the survey information regarding the shipyard, it is recommended that the portion of Holmes Harbor located between the Prohibited area and the Approved area (shown in Figure 3 on page 12) remain Unclassified until an assessment of the shipyard impacts can be completed.

II. Description of Growing Area

A. Location map or chart showing growing area

See Figure 1, page 10 and Figure 2, page 11

B. Description of area

Holmes Harbor is a large embayment located on the southeastern shoreline of Whidbey Island. The harbor is approximately six miles long and two miles wide at its mouth and opens to the north into Saratoga Passage. Holmes Harbor, as defined by DOH, occupies a total area of approximately 5,960 acres. Approximately 1,121 acres within the area are classified as Approved and the remainder of the Harbor is listed as Unclassified for commercial harvest.

The Approved portion of Holmes Harbor consists of two separate areas (see figure 2, page 11). One area is located along approximately three and a half miles of the western shoreline and occupies an area of approximately 1,024 acres. A second area of approximately 97 acres surrounds Baby Island which is located

approximately 1000 feet off of the northeastern shoreline at the mouth of the Harbor.

Pacific oysters, hard-shell clams, and mussels have been harvested commercially from the Holmes Harbor shellfish area. Shellfish are also harvested recreationally from private tidelands and from the Freeland Park public tidelands located at the extreme south end of the harbor.

The majority of the Holmes Harbor shoreline and uplands has rural residential use. The town of Freeland is located at the extreme south end of the harbor. The shoreline and uplands in this portion of the harbor have been developed for commercial and industrial use. All of the homes and businesses in the area use on-site systems for the treatment and disposal of sewage.

C. History of growing area classification

Holmes Harbor has been classified and monitored as a shellfish growing area since 1987. The area has been classified as Approved since the original classification.

1. Date of last survey

The previous sanitary survey was written in 2001.

2. Previous classification(s) map(s)

Holmes Harbor has maintained an "Approved" classification since it was first classified in 1987

III. Pollution Source Survey

A. Summary of Sources and Location

DOH staff completed a shoreline survey of the Holmes Harbor shellfish area in February 2006. A copy of the report is in the Holmes Harbor growing area file.

1. Map or chart showing the location of major sources of actual or potential pollution

Figure 2 on page 9 of the shoreline survey report shows the boundaries of the shoreline survey and the locations of drainage points and agricultural sites.

2. Table of sources of pollution cross-referenced to the map

The description and location of each drainage and agricultural site are in Appendix A, beginning on page 16 of the report.

B. Identification and evaluation of pollution sources

DOH staff completed a shoreline survey of the Holmes Harbor shellfish area in February 2006. The survey evaluated 165 developed parcels and five agricultural sites. The survey also identified 16 drainage/discharge points. No direct or indirect impacts to the Approved shellfish areas were identified. Detailed information can be found in the shoreline survey report, a copy of which is located in the Holmes Harbor growing area file.

2. Stormwater

The shoreline survey identified 16 drainages and discharge points within the Holmes Harbor area. Water samples were collected from 6 of these sites. Four samples were collected from each of the six sites over a three month period. While all six of the sites sampled showed elevated bacteria levels, insufficient data exists from the DOH sampling events to determine the relationship between stormwater discharge and marine water quality. Water sample results are shown in Table 2 on page 6 of the report and rainfall records are shown in Table 4 on page 8.

An independent study conducted by a private consulting firm examined water quality in an open ditch drainage system in the Freeland area. This system discharges to the beach at the south end of the bay. Sampling conducted during this study showed nearly consistent high levels of bacteria. It is likely that stormwater would have a significant influence on the levels of bacteria discharged to marine waters from this drainage system. Water sample results from this study are shown in Table 1 on page 5 or the report.

3. Agricultural waste (farms, feedlots, & slaughterhouse operations)

Five agricultural sites were identified during the survey. Two sites 060 and 070 may have the potential to impact the area during heavy rainfall. Three other sites were determined to have no impact. None of the sites are located in the Approved portions of the area. Site locations are shown in Figure 2 on page 9 of the report.

4. Wildlife areas

Harbor Seals occasionally use the shoreline of Baby Island. Marine water samples collected at the site do not indicate that the seals are a significant source of contamination.

5. Industrial wastes

One industrial site, Nichols Brothers Boat Builders Incorporated, is located in Freeland in close proximity to the marine shoreline. A detailed discussion of the potential impacts of this business is provided in the shoreline survey report. The possibility exists that contaminants from the shipyard have been and continue to be discharged to Holmes Harbor. The

Department of Health Office of Environmental Health Assessments will be conducting a literature review on this site that could lead to a risk assessment study.

IV. Hydrographic and Meteorological Characteristics

A. Tides

1. Type

Holmes Harbor is subject to mixed tides, predominantly semi-diurnal, characterized by a large inequality in the high water heights, low water heights, or both. There are usually two high and two low tides each day but occasionally the tidal pattern will result in only one high or one low tide in a single day

2. Amplitude

Tidal height in Holmes Harbor ranges from an extreme high of approximately +15 feet (15 feet above mean lower low water: MLLW), to an extreme low of approximately –3.5 feet (3.5 feet below MLLW).

B. Rainfall

1. Amount

Average annual rainfall in the Holmes Harbor area using Coupeville rainfall records for the period 6/1/48 to 12/31/05 is 20.65 inches.

2. When