Summary of the 2008-09 Pacific Herring Commercial Fisheries in San Francisco Bay



April 6, 2009 Preliminary Report

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REVIEW OF THE 2008-2009 SAN FRANCISCO BAY PACIFIC HERRING FISHERIES

QUOTAS

The total quota for San Francisco Bay was set at 1,118 short tons (tons) for the 2008-2009 season. The spawning biomass estimate is based on spawning ground surveys conducted from November 2008 through March 2009. The 1,118 ton quota is based on 10 percent of the biomass estimate from spawning ground surveys for the 2007-08 season. The Department provided the Fish and Game Commission quota options for the 2008-09 season ranging from 0-10 percent of 07-08 spawning biomass estimate.

HEOK: The total quota for the herring eggs-on-kelp fishery was 17.6 tons of herring-eggs-on-kelp product, which was converted from 79 tons of whole fish from the total San Francisco Bay quota. All herring-eggs-on-kelp permittees must hold a herring permit (i.e., a regular gill net or a CH gill net), and each permittee's share of the herring quota (from the sac roe fishery) is transferred to the herring-eggs-on-kelp fishery. In 1994, the Fish and Game Commission determined that CH permittees who fish herring-eggs-on-kelp would be allocated a quota equal to the quota formerly received by round haul permittees (i.e., 0.79% of the sac roe quota). For each CH permit this season, this is equivalent to an individual quota of 1.9 tons herring eggs-on-kelp product. Regular gill net permittees that transferred to the herring-eggs-on-kelp fishery received a quota of 1.3 tons of herring-eggs-on-kelp.

SEASON DATES

GILL NET FISHERY: The opening and closing dates of the gill net seasons are adjusted each year to account for annual changes in the calendar. This season, the DH fishery began at 5 p.m. on Monday, December 1, 2008 and closed at noon on Friday, December 19, 2008. The Odd or Even gill net fisheries traditionally open on the second of January or at sunset on the first Sunday in January. This season, the opening was set at 5:00 p.m. on Sunday, January 4, 2009, and the closing was set at noon on Friday, March 20, 2009. Since 1974, the gill net fisheries have been closed each week from noon on Friday until 5:00 p.m. on Sunday. This weekend closure was instituted to reduce conflicts with recreational users of the bay.

HEOK FISHERY: The opening and closing dates for the herring-eggs-on-kelp fishery are not adjusted for holidays or weekends. The herring-eggs-on-kelp season ran from December 1, 2008 to March 31, 2009.

LANDINGS

Approximately 50 percent of the San Francisco Bay gillnet quota was landed by the three combined platoons, during the 2008-09 commercial herring season (Table 1). The December fishery (DH platoon) landed 0.075 tons of their quota in December but did not fish after the Odd and Even platoons. The Odd platoon landed 31.8 percent of their quota, whereas the Even platoon landed 99.7 percent of their quota. The three gill net fisheries landed a combined total of 507 tons of herring.

A total of 3.3 tons of herring-eggs-on-kelp product was landed. This is equivalent to 14.8 tons of whole fish.

TABLE 1. Herring quotas and landings, and roe percentage and fish count (as percents of total weight), for San Francisco Bay, 2008-2009 Season.

| | , | | 1 | | |
|---|-------------------------------------|---------------------------------------|---|------------|------------------|
| FISHERY (# PERMITS MADE LANDINGS / #PERMITS ASSIGNED) | QUOTA (TONS) | LANDINGS (TONS) | OVER QUOTA (+) UNDER QUOTA (-) | ROE (%) | FISH COUNT/kg |
| DH GILL NET (2 OF 50*) | 243 | 0.075 | -243 TONS | 13.3 | 101 |
| ODD GILL NET (38 OF 81*) | 393 | 125 | -268 TONS | 14.4 | 105 |
| EVEN GILL NET (40 OF 79*) | 383 | 381.8 | -1.2 TONS | 13.2 | 103 |
| TOTAL GILL NET | 1,019 | 507 | -512 (50% UNDER QUOTA) | | |
| HERRING-EGGS-ON-KELP (2 OF 10* ACTIVE) | 17.6 (= 79.0 TONS WHOLE FISH) | 3.3 (= 14.8 TONS IN WHOLE FISH) | -14.3 TONS PRODUCT (81% UNDER QUOTA) | NA | NA |
| SF BAY TOTAL | 1,037 | 510 | -527 TONS | NA | NA |

^{*} Permit count based on permits purchased as of December 27, 2008.

TABLE 2. Quotas and landings in tons for the herring **gill net sac roe fisheries** in San Francisco Bay,

1972-73 season through 2008-09 season.

| SEASON | QUOTA (TONS) | Landings (Tons) | SEASON | QUOTA (TONS) | LANDINGS (TONS) |
|----------|--------------|-----------------|------------|--------------|-----------------|
| 1972-73 | 1,500 | 436 | 1991-92* | 7,134 | 7,417 |
| 1973-74 | 500 | 1,938 | 1992-93* | 5,175 | 5,151 |
| 1974-75 | 600 | 514 | 1993-94* | 1,996 | 2,302 |
| 1975-76 | 3,000 | 1,719 | 1994-95* | 4,408 | 4,574 |
| 1976-77 | 4,000 | 4,201 | 1995-96* | 5,524 | 6,165 |
| 1977-78 | 5,000 | 4,987 | 1996-97* | 13,543 | 11,496 |
| 1978-79 | 5,000 | 4,115 | 1997-98* | 9,793 | 1,981 |
| 1979-80 | 6,000 | 6,430 | 1998-99* | 2,739 | 2,817 |
| 1980-81 | 7,250 | 5,811 | 1999-2000* | 5,460 | 3,356 |
| 1981-82 | 10,000 | 10,415 | 2000-01* | 2,499 | 2,991 |
| 1982-83 | 10,399 | 9,699 | 2001-02* | 4,128 | 3,287 |
| 1983-84 | 10,399 | 2,828 | 2002-03* | 3,262 | 2,097 |
| 1984-85 | 6,500 | 7,740 | 2003-04* | 2,020 | 1,540 |
| 1985-86 | 7,530 | 7,278 | 2004-05* | 3,169 | 145 |
| 1986-87* | 7,470 | 8,098 | 2005-06* | 4,328 | 744 |
| 1987-88* | 8,432 | 8,741 | 2006-07* | 4,328 | 292 |
| 1988-89* | 9,238 | 9,736 | 2007-08* | 1,057 | 687 |
| 1989-90* | 9,057 | 8,962 | 2008-09* | 1,019 | 507 |
| 1990-91* | 8,858 | 7,741 | | | |
| | THIRT | 5,468 | 4,566 | | |
| | SIXTEEN YEAR | 4,330 | 2,811 | | |
| | TWELVE YEAR | 3,092 | 1,678 | | |

^{*} Quotas and landings after the 1985-86 season do not include HEOK or fresh fish allocation and landings

TABLE 3. Quotas, landings and number of permits for the **herring-eggs-on-kelp (HEOK)** fishery in San Francisco Bay, 1989-90 season through 2008-09 season.

| SEASON | Quota (tons) | Total Landings (tons) | PERCENT OF QUOTA LANDED | Number of Permits |
|-----------|-----------------|--------------------------|----------------------------|-------------------|
| 1989-90 | 110.0 | 107.1 | 97.4 | 8 |
| 1990-91 | 144.0 | 47.0 | 32.6 | 10 |
| 1991-92 | 114.0 | 84.2 | 73.8 | 10 |
| 1992-93 | 84.5 | 47.4 | 56.1 | 10 |
| 1993-94 | 35.1 | 35.0 | 99.7 | 10 |
| 1994-95 | 85.0 | 13.1 | 15.4 | 10 |
| 1995-96 | 106.5 | 106.8 | 100.3 | 10 |
| 1996-97 | 286.0 | 185.7 | 64.9 | 11 |
| 1997-98 | 209.0 | 36.4 | 17.4 | 11 |
| 1998-99 | 54.4 | 31.7 | 58.3 | 11 |
| 1999-2000 | 99.2 | 31 | 31.3 | 11 |
| 2000-01 | 49.3 | 27.2 | 55.2 | 11 |
| 2001-02 | 73.2 | 45.3 | 62.0 | 10 |
| 2002-03 | 57.6 | 53.3 | 92.5 | 10 |
| 2003-04 | 38.9 | 6.3 | 71.0 | 10 |
| 2004-05 | 55.7 | 0 | 0 | 10 |
| 2005-06 | 34 | 0 | 0 | 4 |
| 2006-07 | 34 | 3.9 | 11 | 4 |
| 2007-08 | 17 | 15.1 | 88.6 | 10 |
| 2008-09 | 17.6 | 3.3 | 18.9 | 10 |
| Average | 85.3 | 44.0 | 52.3 | 9.6 |

REVIEW OF EACH FISHERY

DH (DECEMBER) GILL NET PLATOON:

The DH herring gill net fishery opened on Sunday, December 2, 2008 at 5 p.m. By the closure of the DH platoon at noon on Friday, December 19, 0.075 tons of herring had been landed. Regulations provide an opportunity for the DH platoon to re-open after both January platoons have reached their quota. However, the DH platoon never re-opened because the Odd platoon did not reach their quota. Ninety-six percent of the permits assigned to this platoon did not make landings this season.

TABLE 4. Daily landings for the DH gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|---------|---------|-------|------------|--------------|------------|-----------|
| 12/16/2 | 008 403 | 0.075 | 2 | 0.0375 | 101 | 13.30 |

| OH Landings (tons) Effort: (based on boats declared by per | | | |
|--|--|--|--|
| Quota: 243 | 1 Boat used in the DH Platoon | | |
| Catch: 0.075 | 2 Permits fished in the DH Platoon | | |
| Under Quota: 243 | 50* Permits assigned to the DH Platoon | | |
| | 96 % of the DH permits were not fished this season. | | |

^{*} Permit count based on permits renewed as of November 06, 2008.

ODD AND EVEN GILL NET PLATOONS:

The Odd and Even fishery is divided into two separate platoons grouped by permit numbers that are odd and even. Platoons rotate fishing weeks with the first platoon designated by whether the season year is odd or even, therefore for the 2008-09 season, the Even platoon was designated to fish first.

ODD GILL NET FISHERY

The Odd platoon opened on Sunday January 11, 2008, at 5:00 p.m. This platoon made all of its landings after the Even platoon closed on Wednesday January 21 at 5:00 am and the Odd was reopened at 5:00 pm that day. The average roe count for all Odd platoon landings was 14.36 percent. The Odd platoon did not reach their quota. Twenty-five percent of the permits assigned to this platoon did not make landings this season.

TABLE 5. Daily landings for the Odd gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|---------------------|---------|--------|------------|--------------|------------|-----------|
| 1/22/2009 | 61,719 | 30.86 | 39 | 0.79 | 104 | 14.04 |
| 1/23/2009 | 23,904 | 11.95 | 20 | 0.60 | 107 | 12.82 |
| 2/4/2009 | 65,821 | 32.91 | 33 | 1.00 | 105 | 14.55 |
| 2/5/2009 | 98,625 | 49.31 | 47 | 1.05 | 106 | 15.21 |
| Totals and averages | 250,069 | 125.03 | 139 | 0.90 | 105 | 14.36 |

| Odd Landings (tons) | Effort: (based on boats active) | | |
|---------------------|--|--|--|
| Quota: 393 | 29 Boats used in the Odd Platoon | | |
| Catch: 125 | 61 Permits fished in the Odd Platoon | | |
| Under Quota: 268 | 81* Permits assigned to the Odd Platoon | | |
| | 25 % of the Odd permits were not fished this season. | | |

^{*} Permit count based on permits renewed as of November 06, 2008.

EVEN GILL NET FISHERY

The Even platoon opened on Sunday, January 4, 2009, at 5:00 p.m. and made all of their landings during the second Even fishing week of January when the quota was reached and the platoon was closed. Average roe percentage for the Even platoon landings was 14.36 percent. Twenty-four percent of the permits assigned to this platoon were not used this season.

TABLE 6. Daily landings for the **Even** gill net platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt | Fish Count | Roe Count |
|---------------------|----------|--------|------------|--------------|------------|-----------|
| 1/19/2009 | 23,992.5 | 12.00 | 27 | 0.44 | 103 | 12.93 |
| 1/20/2009 | 543.998 | 272.00 | 50 | 5.44 | 102 | 13.92 |
| 1/21/2009 | 194,980 | 97.49 | 55 | 1.77 | 103 | 12.83 |
| Totals and averages | 763,537 | 381.77 | 133 | 2.87 | 103 | 13.23 |

| Even Landings (tons) | Effort: (based on boats active) | | |
|----------------------|---|--|--|
| Quota: 383 | 30 Boats used in the Even Platoon | | |
| Catch: 382 | 60 Permits fished in the Even Platoon | | |
| Under Quota: 1 | 79* Permits assigned to the Even Platoon | | |
| | 24 % of the Even permits were not fished this season. | | |

^{*} Permit count based on permits renewed as of November 06, 2008.

HERRING EGGS ON KELP (HEOK) FISHERY

The season opened on December 1st, 2008 and closed on March 31st, 2009. Ten permits were renewed this season and 3.327 tons of HEOK product were landed.

TABLE 6. Daily landings for the **HOEK** platoon.

| Date | Pounds | Tons | # Receipts | Tons/Receipt |
|---------------------|--------|------|------------|--------------|
| 1/26/2009 | 3679 | 1.84 | 1 | 1.84 |
| 1/27/2009 | 2,847 | 1.42 | 2 | 0.71 |
| 1/28/2009 | 128 | 0.06 | 1 | 0.06 |
| Totals and averages | 6,654 | 3.33 | 4 | 0.83 |

| HOEK Landings (tons) | Effort: (based on active boats) |
|----------------------|---|
| Quota: 17.6 | 1 Boat was used in the HOEK Platoon |
| Catch: 3.33 | 2 Permits landed fished in the HOEK Platoon |
| Under Quota: 14.27 | |

SPECIAL EDUCATION PERMITS

No Special Education Permit was issued to the City of Oakland Maritime Training Program for the 2008-09 season.

APENDICES

APPENDIX 1. Average roe count (as percent of total weight) in the San Francisco Bay gill net fisheries, 1983-84 season (24 year average) through 2008-09 season.

| SEASON | DECEMBER | 1ST JANUARY | 2ND JANUARY |
|-----------|-------------|-------------|-------------|
| | GILL NET | GILL NET | GILL NET |
| | PLATOON | PLATOON | PLATOON |
| 1983-84 | 13.5 | 13.1 ODD | 13.4 EVEN |
| 1984-85 | 10.1 | 10.8 EVEN | 13.4 ODD |
| 1985-86 | 11.2 | 11.9 ODD | 13.4 EVEN |
| 1986-87 | 10.9 | 11.4 EVEN | 12.7 ODD |
| 1987-88 | 11.9 | 13.5 ODD | 15.0 EVEN |
| 1988-89 | 9.7 | 11.6 EVEN | 13.1 ODD |
| 1989-90 | 11.6 | 13.0 ODD | 14.3 EVEN |
| 1990-91 | 11.7 | 13.4 ODD | 15.8 ODD |
| 1991-92 | 11.7 | 11.7 EVEN | 15.5 ODD |
| 1992-93 | 9.7 | 14.0 EVEN | 14.8 ODD |
| 1993-94 | 10.2 | 11.5 ODD | 13.3 EVEN |
| 1994-95 | 11.1 | 13.8 EVEN | 12.0 ODD |
| 1995-96 | 12.0 | 14.4 ODD | 14.6 EVEN |
| 1996-97 | 10.3 | 14.1 EVEN | 13.9 ODD |
| 1997-98 | 14.1 | 14.9 ODD | NO LANDINGS |
| 1998-99 | 13.4 | 14.8 EVEN | 17.2 ODD |
| 1999-2000 | 12.1 | 13.3 ODD | 15.6 EVEN |
| 2000-01 | 12.2 | 14.5 EVEN | 13.6 ODD |
| 2001-02 | 15.0 | 14.6 ODD | 17.5 EVEN |
| 2002-03 | 11.2 | 15.0 EVEN | 15.8 ODD |
| 2003-04 | 14.3 | 11.9 ODD | 14.5 EVEN |
| 2004-05 | NO LANDINGS | 15.8 EVEN | 16.8 ODD |
| 2005-06 | NO LANDINGS | 14.2 ODD | 13.9 EVEN |
| 2006-07 | 10.8 | 15.7 EVEN | 16.1 ODD |
| 2007-08 | NO LANDINGS | 13.1 ODD | 16.3 EVEN |
| 2008-09 | 13.3 | 13.2 EVEN | 14.4 ODD |
| Average | 11.83 | 13.43 | 14.67 |

APPENDIX 2. 2008-09 SF Bay Herring Commercial Catch Data. (Length measurements in body length).

| Date | Mean Length (mm BL) | Shortest (mm BL) | Longest (mm BL) | n |
|-----------|------------------------|------------------|-----------------|----|
| 20-Jan-09 | 182 | 167 | 198 | 63 |
| 21-Jan-09 | 185 | 164 | 203 | 40 |
| 05-Feb-09 | 183 | 169 | 202 | 61 |
| Date | Mean Weight (g) | Lightest (g) | Heaviest (g) | n |
| 20-Jan-09 | 90.0 | 70.9 | 114.9 | 63 |
| 21-Jan-09 | 88.6 | 52.6 | 112.4 | 40 |
| 05-Feb-09 | 89.7 | 70.4 | 112.3 | 59 |

APPENDIX 3. SF Bay Historic Commercial Gill Net Sample Data (Length measurements in body length).

| (Length measur | (Length measurements in body length). | | | | | |
|-----------------------------|---------------------------------------|----------------------|--|--|--|--|
| Season | Mean Length (mm BL) | Length Range (mm BL) | | | | |
| 1976-1977 | 212 | 192-236 | | | | |
| 1977-1978 | 211 | 178-236 | | | | |
| 1978-1979 | 203 | 164-234 | | | | |
| 1979-1980 | 208 | 184-230 | | | | |
| 1980-1981 | 205 | 170-236 | | | | |
| 1981-1982 | 201 | 160-228 | | | | |
| 1982-1983 | 203 | 170-230 | | | | |
| 1983-1984 | 205 | 182-232 | | | | |
| 1984-1985 | 196 | 158-238 | | | | |
| 1985-1986 | 196 | 166-226 | | | | |
| 1986-1987 | 194 | 168-222 | | | | |
| 1987-1988 | 195 | 160-230 | | | | |
| 1988-1989 | 195 | 164-226 | | | | |
| 1989-1990 | 196 | 172-226 | | | | |
| 1990-1991 | 192 | 162-226 | | | | |
| 1991-1992 | 189 | 168-220 | | | | |
| 1992-1993 | 192 | 162-220 | | | | |
| 1993-1994 | 188 | 152-212 | | | | |
| 1994-1995 | 196 | 172-235 | | | | |
| 1995-1996 | 193 | 158-231 | | | | |
| 1996-1997 | 194 | 166-226 | | | | |
| 1997-1998 | 200 | 176-224 | | | | |
| 1998-1999 | 190 | 156-220 | | | | |
| 1999-2000 | 187 | 155-210 | | | | |
| 2000-2001 | 185 | 155-209 | | | | |
| 2001-2002 | 183 | 160-207 | | | | |
| 2002-2003 | 188 | 156-211 | | | | |
| 2003-2004 | 187 | 147-203 | | | | |
| 2004-2005 | 191 | 146-209 | | | | |
| 2005-2006 | 188 | 169-207 | | | | |
| 2006-2007 | 186 | 166-209 | | | | |
| 2007-2008 | 186 | 169-211 | | | | |
| 2008-2009 | 183 | 164-203 | | | | |
| Overall Mean Body Length | 194 | | | | | |