Evaluation of the <u>2004</u> <u>Resolution on the Conservation</u> <u>of Tuna in the eastern Pacific</u> <u>Ocean (Resolution C-04-09)</u> 2004 Resolution on the Conservation of Tuna in the eastern Pacific Ocean (Resolution C-04-09)

- a 6-week closure during the third OR fourth quarter of the year for purse-seine fisheries
- Longline catches are not to exceed 2001 levels.

Change in purse seine effort from 2003 (BET fisheries)

| . Year | Quarter | Fishery 2 | Fishery 3 | Fishery 4 | Fishery 5 | Total |
|--------|---------|-----------|-----------|-----------|-----------|-------|
| 2004 | 1 | 1.39 | 1.13 | 0.96 | 0.85 | 1.13 |
| | 2 | 1.28 | 0.52 | 0.40 | 0.95 | 0.82 |
| | 3 | 0.96 | 0.45 | 0.30 | 0.75 | 0.54 |
| | 4 | 0.77 | 0.89 | 0.50 | 0.97 | 0.82 |
| Total | | 1.12 | 0.70 | 0.53 | 0.86 | 0.78 |
| 2005 | 1 | 1.03 | 1.99 | 1.09 | 1.43 | 1.22 |
| | 2 | 1.01 | 2.44 | 1.70 | 1.43 | 1.54 |
| | 3 | 0.76 | 0.60 | 0.91 | 0.76 | 0.73 |
| | 4 | 0.97 | 0.86 | 1.51 | 1.24 | 1.04 |
| Total | | 0.96 | 0.98 | 1.25 | 1.10 | 1.07 |
| 2006 | 1 | 1.13 | 2.22 | 1.48 | 1.02 | 1.40 |
| | 2 | 1.40 | 2.58 | 1.32 | 1.50 | 1.59 |
| | 3 | 1.43 | 1.04 | 0.40 | 0.99 | 0.91 |
| | 4 | 0.96 | 1.18 | 1.38 | 1.18 | 1.17 |
| Total | | 1.21 | 1.32 | 1.08 | 1.17 | 1.21 |

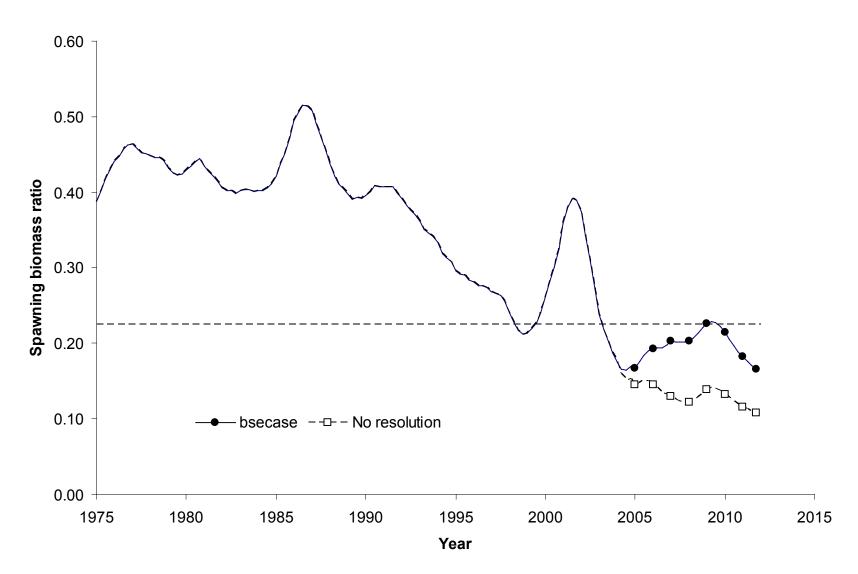
Change in longline catch

| | China | Japan | Korea | Chinese Taipei | Total catch | Relative to 2001 |
|-------------|-------|-------|-------|-------------------|----------------|---------------------|
| 2001 | 2639 | 38048 | 12576 | 9285 | 68726 | 1.00 |
| 2002 | 7614 | 34193 | 10358 | 17253 | 74405 | 1.08 |
| 2003 | 10066 | 24796 | 10272 | 12016 | 59666 | 0.87 |
| 2004 | 2645 | 21132 | 10729 | 7384 | 43354 | 0.63 |
| 2005 | 2104 | 21137 | 11580 | 6901 | 43893 | 0.64 |
| 2006 | 709 | 13618 | 8694 | 6878 | 30019 | 0.44 |
| Catch limit | 2639 | 34076 | 12576 | 7953 | | |

Methods

- Projected the population forward 8 years, starting in 2004, assuming that the conservation measures were not implemented
- 6-week closure occurred in the third quarter for bigeye tuna; increased catch by 86% (2004-2006)
- 2007-2011: increased exploitation rate by 13%
- Longline: ratio of catch in 2003 to catch in 2004 was used to increased the effort for restricted countries. southern longline fishery catch (2004-2006) and exploitation rate (2007-2011) was increased by 39% for all quarters

Bigeye results



Bigeye results: restricted/unrestricted

| | End-of-year spawning biomass | Purse-seine catch | Longline catch |
|------|---------------------------------|----------------------|----------------|
| 2004 | 0.86 | 1.13 | 1.39 |
| 2005 | 0.76 | 1.13 | 1.39 |
| 2006 | 0.64 | 1.13 | 1.39 |
| 2007 | 0.60 | 0.90 | 0.89 |
| 2008 | 0.61 | 0.93 | 0.89 |
| 2009 | 0.62 | 0.97 | 0.89 |
| 2010 | 0.63 | 0.99 | 0.90 |
| 2011 | 0.62 | 0.99 | 0.92 |