

Hidden Falls CR Assessment

5-year modeling using
2006-2010 Hidden Falls
Harvest Data

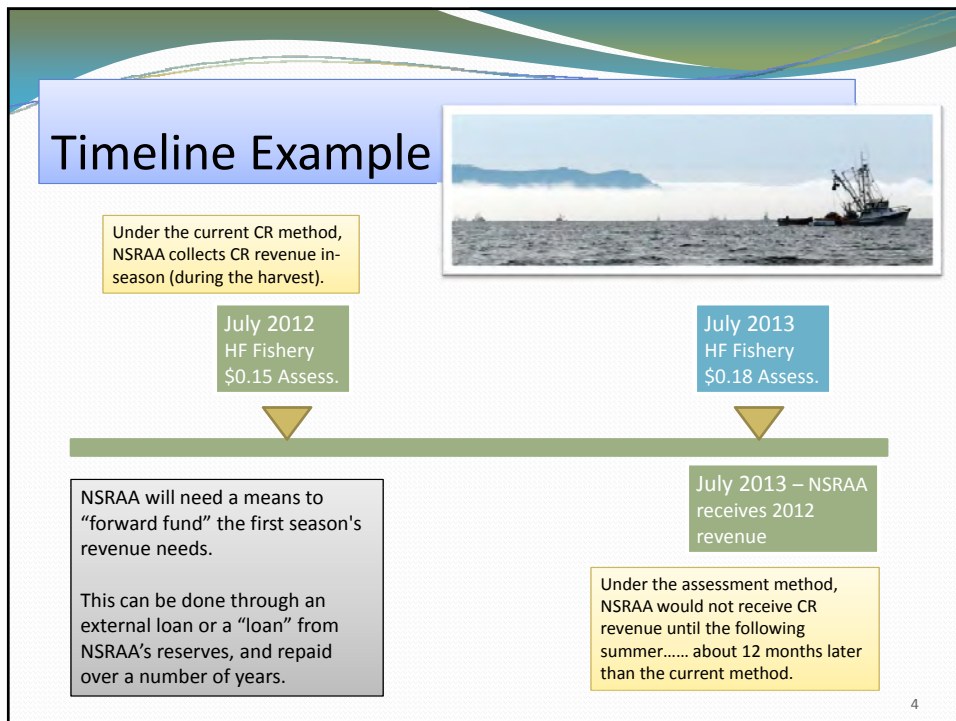
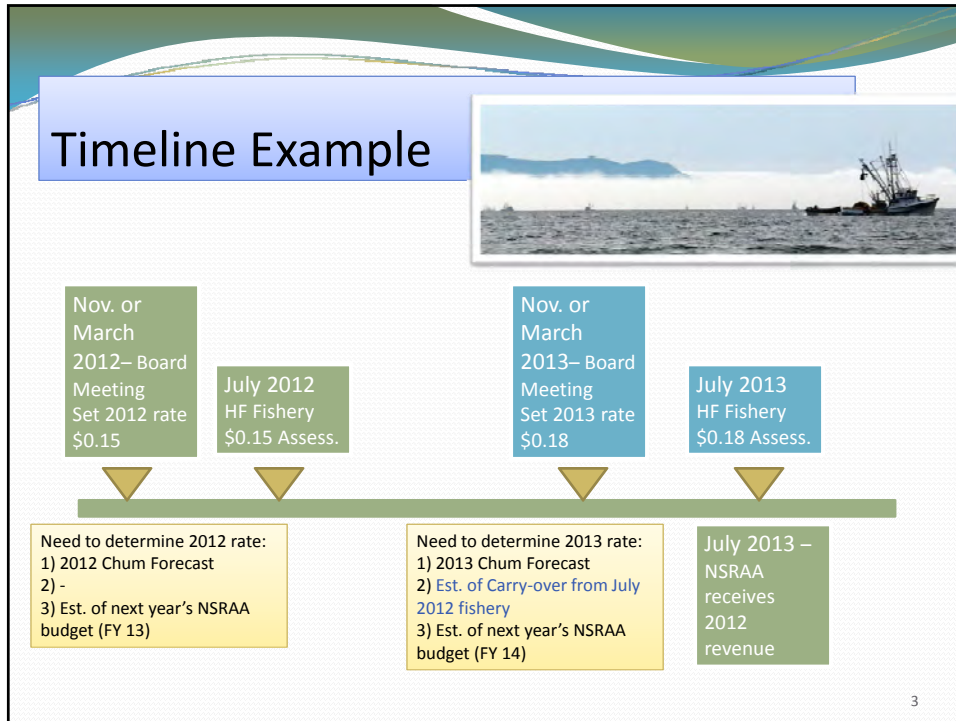


1

Assessment/ Revenue Timeline

- **Determine Assessment Rate for season #1**
(Nov. or March? – depending on Dept. of Revenue needs)
- **Conduct Fishery** – processors collect revenue
(late June – early August)
- **Post-season estimate of revenues collected**
(Sept-Nov? – needed to set the next year's assessment rate)
- **Determine Assessment Rate for season #2**
(Nov. or March?)
- **NSRAA receives revenues from season #1**
(following June or July?)

2



Determining Assessment Rate: Definitions

Harvest pounds forecast = (HF Chum forecast – broodstock needs) x avg. wt.

Example: (1,500,000 forecast - 150,000 broodstock needed)
= 1,350,000 harvestable fish
x 8.0 lb. avg. weight
= **10,800,000 harvest pounds forecast**

5

Determining Assessment Rate: Definitions

CR required = cost recovery revenue required from Hidden Falls chum

Carry-over = under-or over-collection of revenue in a given year – applied towards following year's CR

Adjusted CR required = CR required +/- any carry-over from previous season

Example : \$1,700,000 **CR required** - \$150,000 **carry-over** =
\$1,550,000 **adjusted CR required**

6

Determine Assessment Rate: Calculation

Example:

If :

- 10,800,000 harvest pounds forecast
- \$1,550,000 adjusted CR required

- Calculation:

- 1) $\$1,550,000 / 10,800,000 = \underline{\$0.1435}$ per pound ;
- 2) round up to \$0.15 ;
- 3) add a **safety factor of \$0.02** to bring rate to \$0.17

7

Will it Work? 5-year modeling

5-year hypothetical modeling – based on actual data from 2006-2010 Hidden Falls harvest



8

5-year modeling results – Process

- We created a model using 2006-2010 data to compare the current method with the assessment method:
- For each year, an **assessment rate was calculated “pre-season”** based on the chum forecast and CR requirements
- **Revenue estimates were calculated** using the season’s assessment rate and actual return & harvest data
- **Results were compared** for the current CR method vs. the assessment method.

9

5-year modeling results – Process

- Using the results, we review how the assessment method would change:
 - Overall Seine Value
 - 3 % SET Revenue from the Hidden Falls harvest
 - NSRAA Revenue needs / Cash flow

10

5-year modeling results – Rates

Rates – set based on forecast & adjusted revenue required:

Year	Base	Rate with \$.02 safety
2006	\$0.10	\$0.12
2007	\$0.06	\$0.08
2008	\$0.20	\$0.22
2009	\$0.04	\$0.06
2010	\$0.13	\$0.15
Average	\$0.11	\$0.13

11

5-year modeling results – Rates

Rates – set based on forecast & adjusted revenue required:

Year	Rate with \$.02 safety	Seine Price	Effective Percent
2006	\$0.12	\$0.329	36%
2007	\$0.08	\$0.354	23%
2008	\$0.22	\$0.679	32%
2009	\$0.06	\$0.513	12%
2010	\$0.15	\$0.668	22%
Average	\$0.13	\$0.509	25%

★ Given the current price trends, the percent would be lower than shown by the modeling. For example, $\$0.13 / \$0.75 = 17\%$

12

5-year modeling results

- Adj. revenue required & actual revenue collected, resulting in carry-over amounts:

Year	CR Required (Adj.)	Revenue Collected	Carry-over
2006	\$ 1,040,048	\$ 2,054,120	\$ 1,014,071.88
2007	\$ 1,023,143	\$ 612,280	\$ (410,863.11)
2008	\$ 2,891,599	\$ 3,796,897	\$ 905,298.60
2009	\$ 528,765	\$ 830,881	\$ 302,116.03
2010	\$ 1,507,924	\$ 978,053	\$ (529,870.82)
Average	\$ 1,398,296	\$ 1,654,446	\$ 256,151

★ The idea of a **"Stop Option"** has come up in discussions: the harvest would be tracked in-season (we do this anyway), and at the time we estimate we've reached 105-110% of the CR goal (the extra to account for errors in estimation) – the assessment ends for the season.

This would eliminate the possibility of large overages in collections.

13

5-year modeling results – Results

- There was a fair amount of deviation from revenue needs from year to year - due mainly to forecasting accuracy - but the carry-over adjustment balances things out each year.
- Cash flow of revenues to NSRAA would change, but there would be no net change to NSRAA's CR revenue.

14

5-year modeling results – Results

- **Assessment rate** averaged about **\$0.13** per pound (with a range of \$0.06-\$0.22). This includes a \$.02 safety.
- This averages out to about **25%** on a percentage basis (with a range of 12%-36%).
- Averaged out, the **seine value** for the 5-year period was within a few percent using the two methods (current vs. assessment).
- Assuming 3% SET (Salmon Enhancement Tax) is calculated on the Gross Seine Value, **3% revenues will exceed those of the current method.**

15

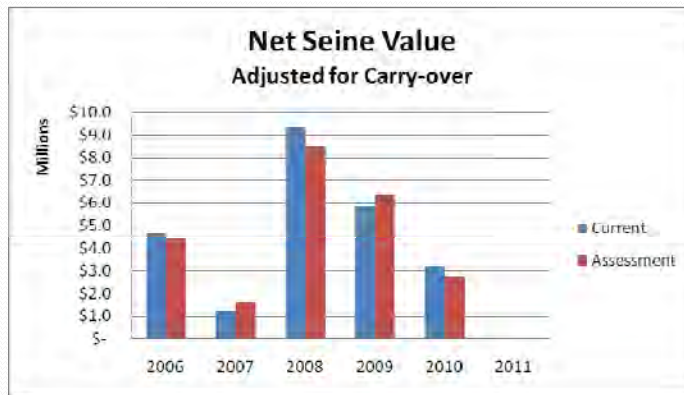
5-year modeling results – Effect on Seine Value

Table 1. Comparison of Current and Assessment CR Methods

Gear		Seine			
Net Seine w Carry-over.		Scenario:		Percent	Value
Year	Current	Assessment		Difference	Difference
2006	\$ 4,639,604	\$ 4,422,712		-4.7%	\$ (216,892)
2007	\$ 1,221,252	\$ 1,604,916		31.4%	\$ 383,664
2008	\$ 9,324,215	\$ 8,475,449		-9.1%	\$ (848,766)
2009	\$ 5,875,947	\$ 6,362,144		8.3%	\$ 486,198
2010	\$ 3,172,818	\$ 2,717,005		-14.4%	\$ (455,814)
2011	\$ -	\$ -			
Grand Total	\$ 24,233,837	\$ 23,582,226		-2.7%	\$ (651,611)

16

5-year modeling results – Effect on Seine Value



17

5-year modeling results: Revenue Flow

Table 3. Revenue Flow with Assessment Method

Gear: Seine

Scenario: Assessment

Year	CR required.	Carry-over.	ADJ CR required=Go	Rev. Collected	CR Surplus/Deficit.
2006	\$ 1,040,048		\$ 1,040,048	\$ 2,054,120	\$ 1,014,072
2007	\$ 2,037,215	\$ 1,014,072	\$ 1,023,143	\$ 612,280	\$ (410,863)
2008	\$ 2,480,736	\$ (410,863)	\$ 2,891,599	\$ 3,796,897	\$ 905,299
2009	\$ 1,434,063	\$ 905,299	\$ 528,765	\$ 830,881	\$ 302,116
2010	\$ 1,810,040	\$ 302,116	\$ 1,507,924	\$ 978,053	\$ (529,871)
2011	\$ 954,000	\$ (529,871)	\$ 1,483,871		
Grand Total	\$ 9,756,102	\$ 1,280,753	\$ 8,475,349	\$ 8,272,231	\$ 1,280,753

	CR Required	CR Rev Collected
2006-10	\$ 8,802,102	\$ 8,272,231
carry-over		\$ (529,871)
balance		\$ 8,802,102

NSRAA CR Revenue needs balance each year with the carry-over figured in

18

5-year modeling results – 3% SET on Gross Seine Value

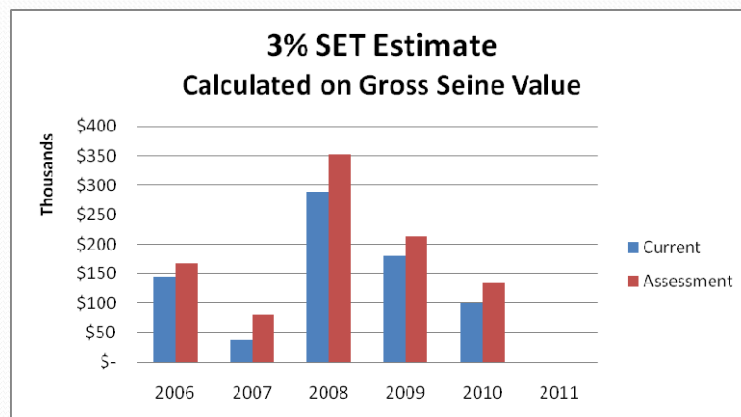
Table 2. Comparison of 3% SET with Current and Assessment CR Methods

Gear Seine

3% SET Calculations	Scenario:		Percent	Value
Row Labels	Current	Assessment	Difference	Difference
2006	\$ 143,493	\$ 168,951	18%	\$ 25,458
2007	\$ 37,771	\$ 81,280	115%	\$ 43,510
2008	\$ 288,378	\$ 351,558	22%	\$ 63,180
2009	\$ 181,730	\$ 213,121	17%	\$ 31,391
2010	\$ 99,891	\$ 133,015	33%	\$ 33,124
2011				
Grand Total	\$ 751,263	\$ 947,926	26%	\$ 196,663

19

5-year modeling results – 3% SET on Gross Seine Value



20

5-year modeling results: Possible 3% SET Adjustment

- Any adjustment for this higher 3% revenue can be handled in-house by NSRAA as part of our budget process.



21