



Fisheries and Oceans
Canada

Pêches et Océans
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Preliminary Salmon Outlook for 2015

Forum on Conservation and Harvest Planning

Quesnel, BC

December 17, 2014

Canada



What is the Outlook?

- preliminary forecast of “status”
- stock groups are arranged into “Outlook Units”
- categorical, not quantitative
- status and targets are based on a variety of approaches including expert opinion
- preliminary outlook is provided in November 2014
- final outlook is planned for April 2015



Outlook Units

- total of 91 Outlook Units (four fewer units this year)
- Outlook Units represent aggregates of CUs
 - see appendix one in Outlook document
- further aggregated into management units
 - e.g. Fraser sockeye: 26 CUs; 14 OUs; 4 management units
- due to the preliminary nature, comparisons with previous outlooks are weak



Outlook Categories

Colour	Outlook Category	Abundance	Trend
Red	1 – Stock of Concern	<25% of target	Declining rapidly
Yellow	2 – Low	25% to 75% of target	Declining
Green	3 – Near Target	75% to 125% of target	Stable or increasing
Gray	4 – Abundant	>125% of target	N/A

- objective & consistent context for fisheries planning
- from biological perspective, gives indication of fishing opportunities and stocks around which fisheries may be shaped
- is a prelude to CSAS quantitative forecasts and formal advice
- no steelhead populations included



COLOURS

- The **red**, **yellow** and **green** colours have **NO** relationship with WSP status!
- The Outlook is something totally different from WSP status.



2015 Outlook Summary

- a total of 91 Outlook Units were considered
 - outlooks categorized for 84 units
 - six units were data deficient (ND)
 - one pink unit was not applicable (NA)
- 38 Outlook Units are likely to be at or above target abundance
- 28 are expected to be of some conservation concern
- the remaining 18 have mixed outlook levels
- overall, the outlook for 2015 has improved relative to the previous outlook



2015 Outlook Summary – cont'd

- 14 Outlook Units improved in category
 - **sockeye**: Areas 7 to 10
 - **chinook**: Fraser Spring 42, Fraser Spring 52 and Fraser Summer 52
 - **coho**: Area 3, Area 12, Haida Gwaii East, Skeena and Skeena High Interior
 - **pink**: Areas 11 to 13 and Areas 3 to 6
 - **chum**: Areas 11 to 13, Georgia Strait and Areas 7 to 10
- 8 Outlook Units declined in category
 - **sockeye**: Early Stuart, Early Summer North Thompson, Fall Portage and Fall South Thompson
 - **chinook**: WCVI Hatchery
 - **coho**: WCVI
 - **pink**: Georgia Strait West
 - **chum**: WCVI



Outlook Map Legend

Colour Legend

- Stock of Concern
- Low
- Near Target
- Abundant
- No Data

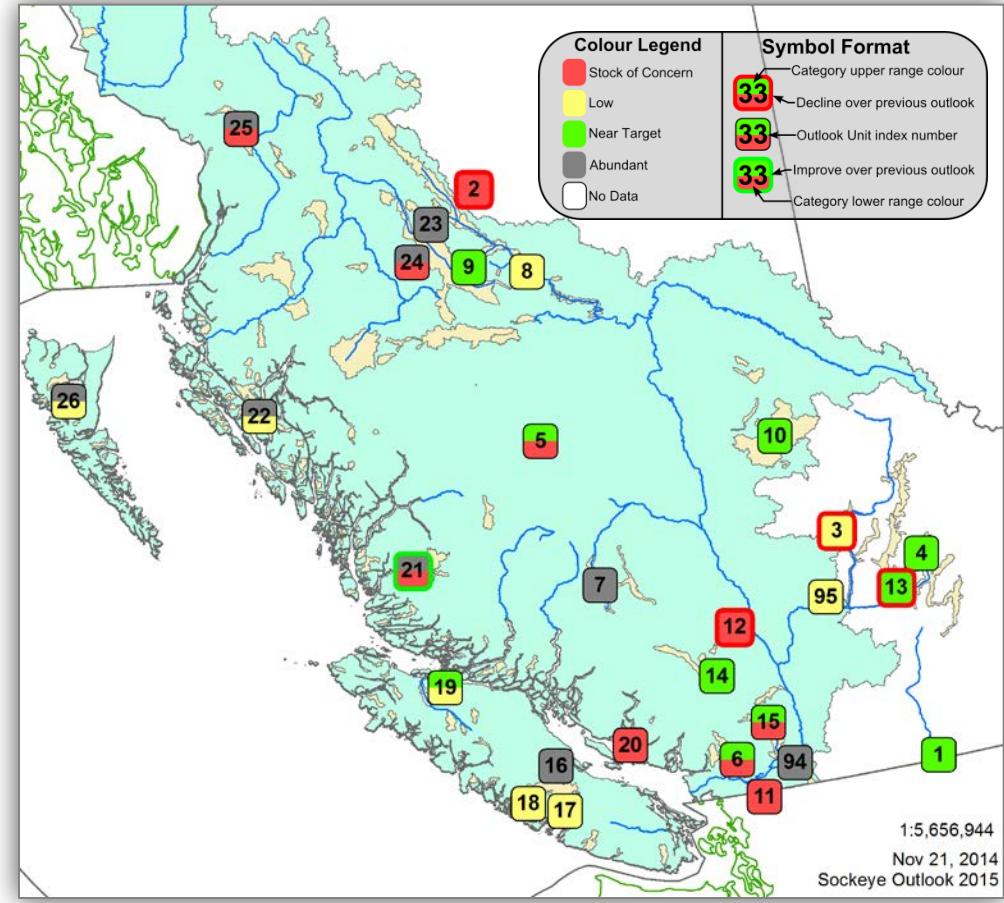
Symbol Format

- Category upper range colour
- Decline over previous outlook
- Outlook Unit index number
- Improve over previous outlook
- Category lower range colour

Sockeye 2015 Outlook

Category	Count
1, 1/2, 1/3, 1/4	10
2, 2/3, 2/4	9
3 & 3/4	8
4	4

- 31 Outlook Units; 215 CUs
- Fraser: sub-dominant cycle; target or above for half of units
- Somass: abundant returns
- Skeena: above / average survival
- Nass: above average returns







Fraser Sockeye

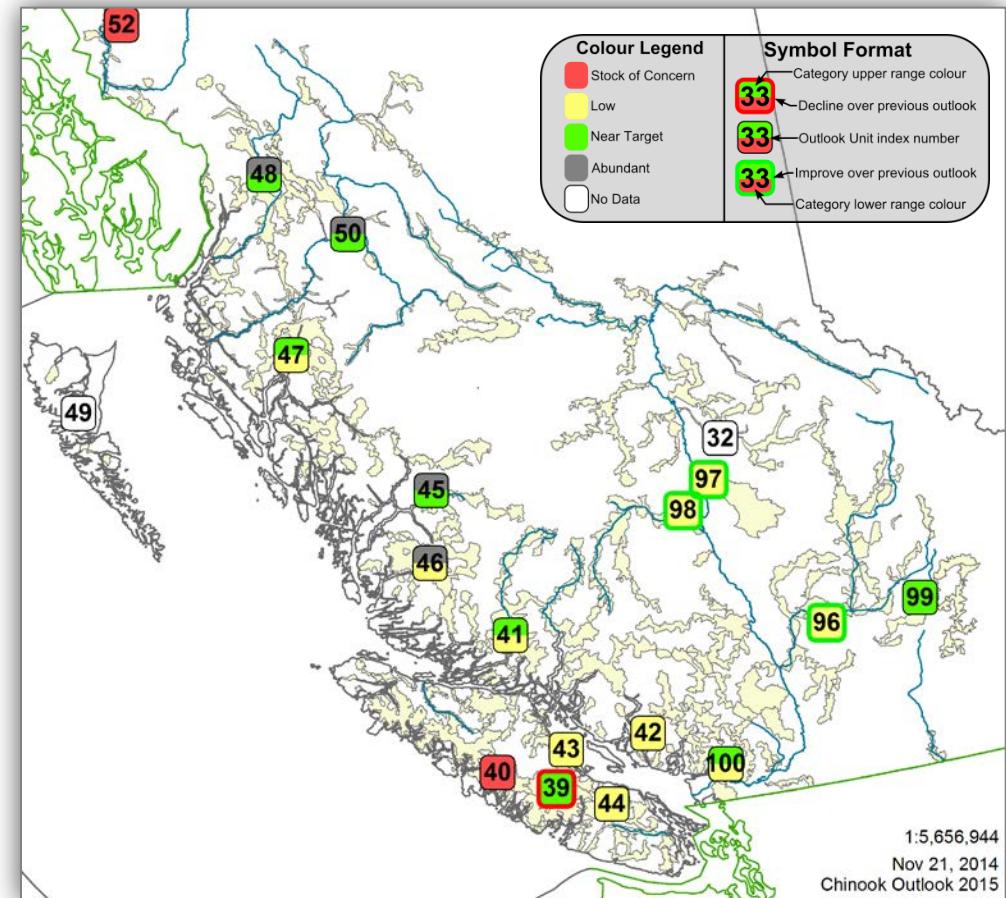
- Early Stuart, Nadina, Bowron, Taseko, Chilliwack, Nahatlatch, Portage and Widgeon are outlook category 1 (stock of concern)
- North Thompson, Raft and Late Stuart – outlook category 2 (low)
- Scotch/Seymour, Pitt, Stellako, Quesnel, Late Shuswap, Weaver – outlook category 3 (near target)
- Chilko, Harrison – outlook category 4 (abundant)

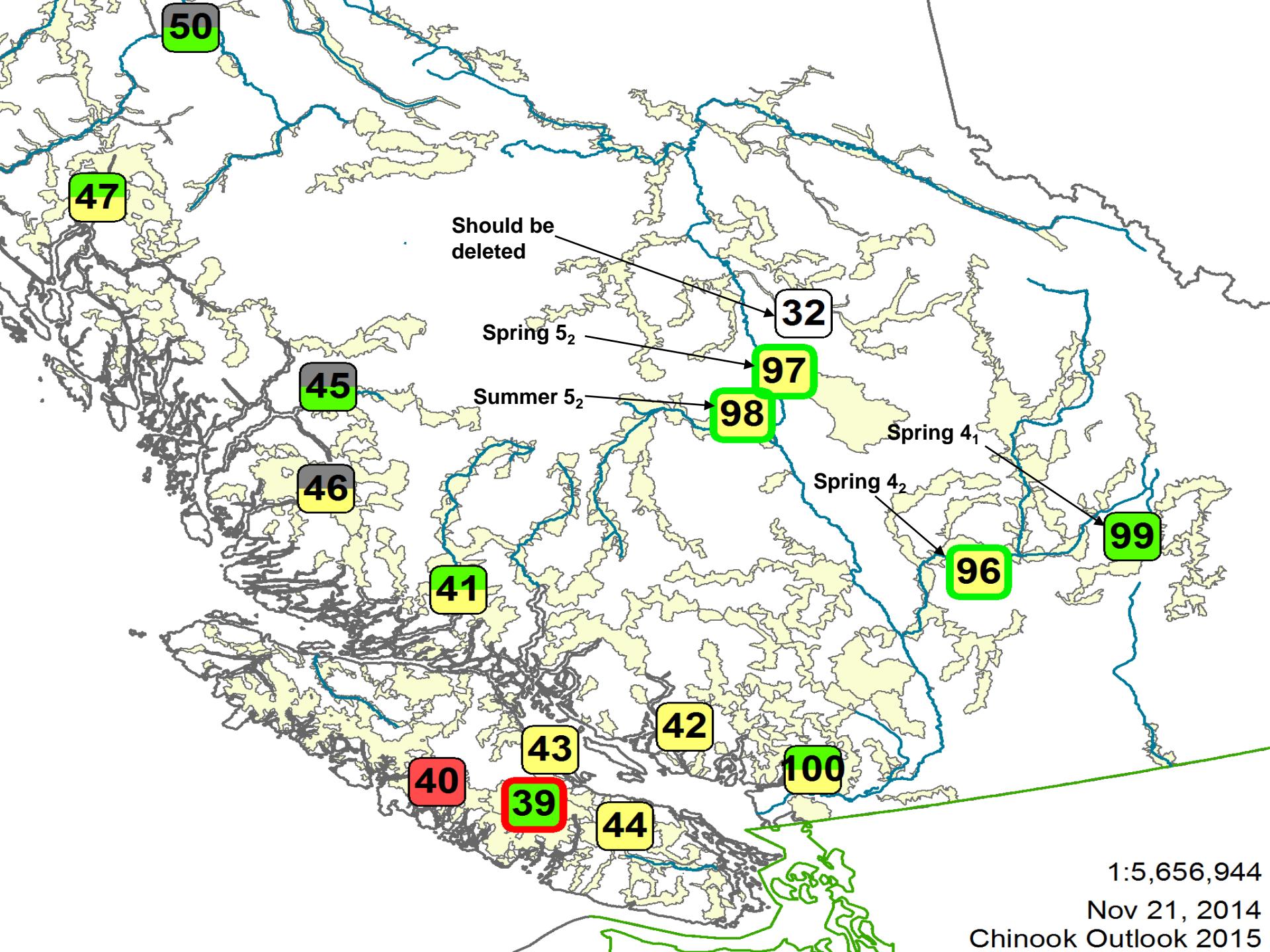


Chinook 2015 Outlook

Category	Count
1, 1/2, 1/3, 1/4	2
2, 2/3, 2/4	13
3 & 3/4	5
4	None
No Data	1

- 21 Outlook Units; 74 CUs
- Fraser: low returns but improved
- WCVI Hatchery: decline
- Areas 7 & 8: average
- Stikine: below trigger







Fraser Chinook

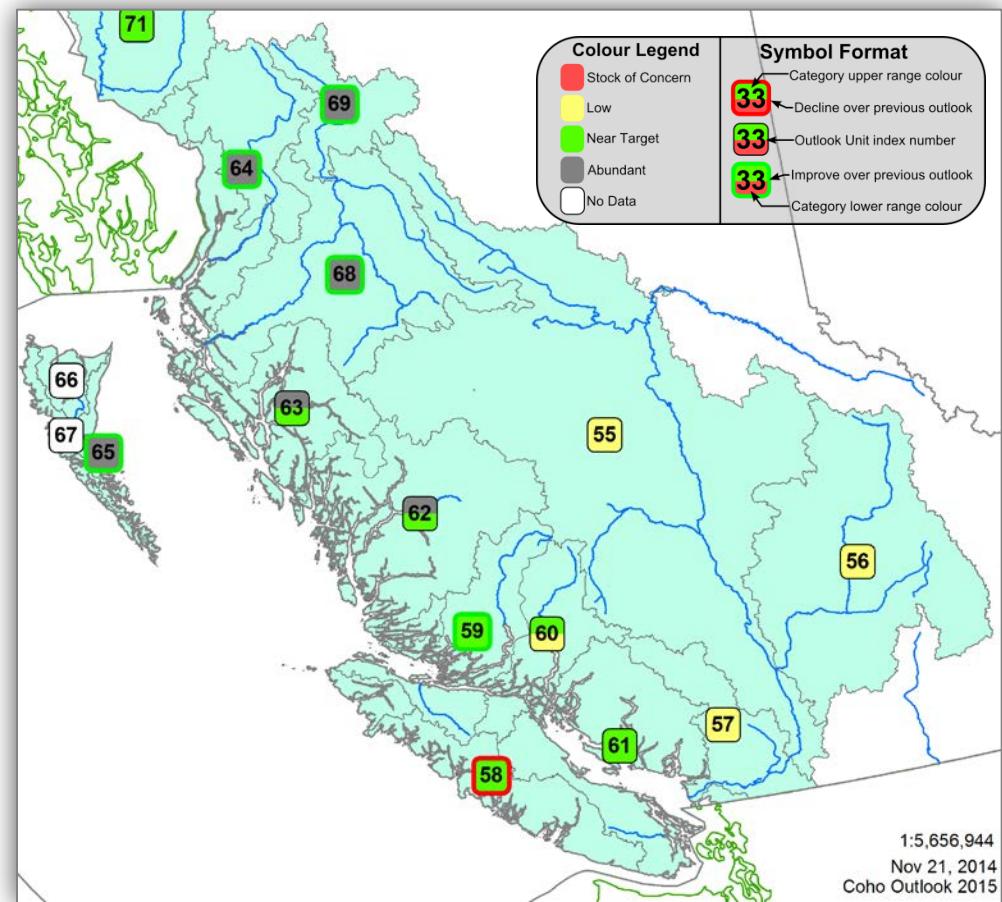
- Outlook unit 32 is an oops, it should have been deleted.
- Spring 4₂, Spring 5₂, Summer 5₂ – outlook category 2 (low)
- Summer 4₁ – outlook category 3 (near target)

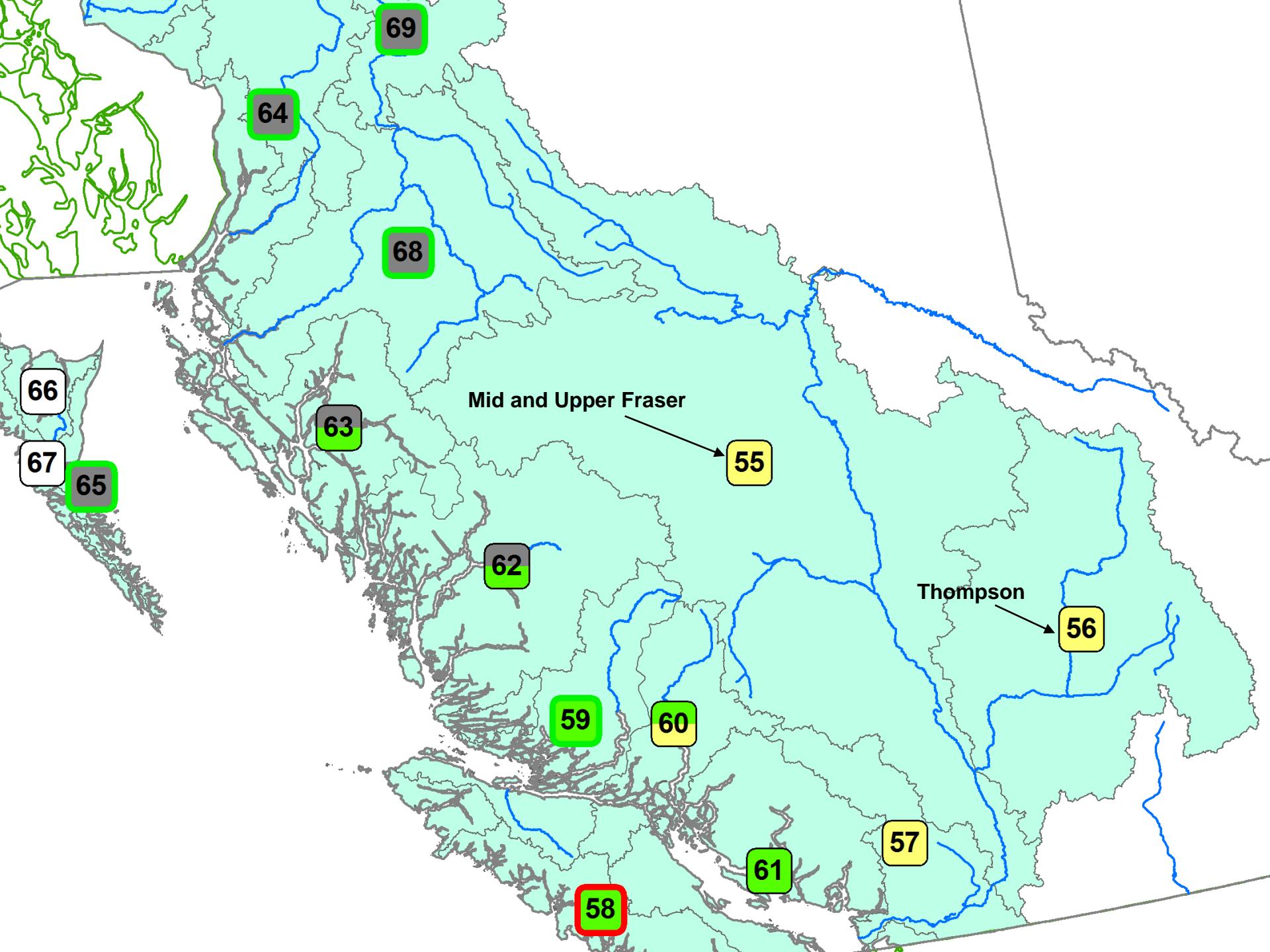


Coho 2015 Outlook

Category	Count
1, 1/2, 1/3, 1/4	none
2, 2/3, 2/4	4
3 & 3/4	8
4	4
No Data	3

- 19 Outlook Units; 43 CUs
- Fraser: improved returns
- WCVI: decline
- GSt: some improvement
- North Coast: target / abundant
- Alsek: above average returns







Interior Fraser Coho

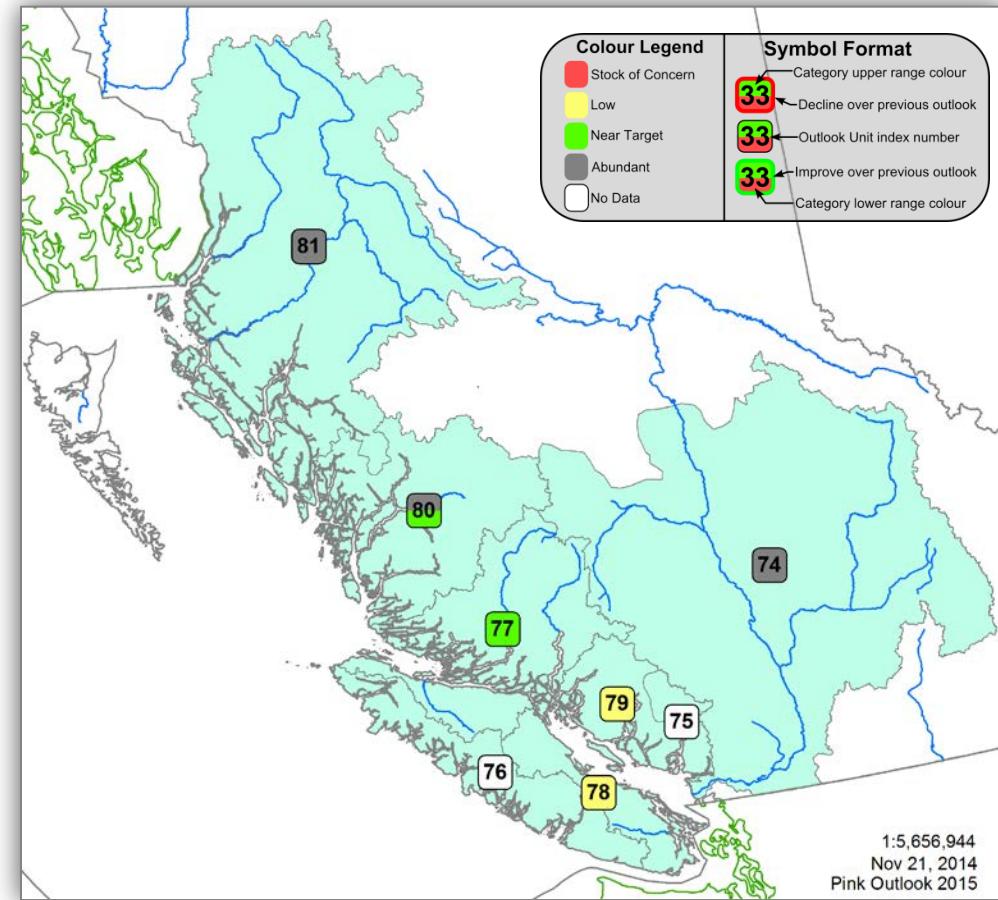
- Middle and Upper Fraser and Thompson coho are outlook category 2 (low).
- A formal forecast will be presented in Spring 2015.

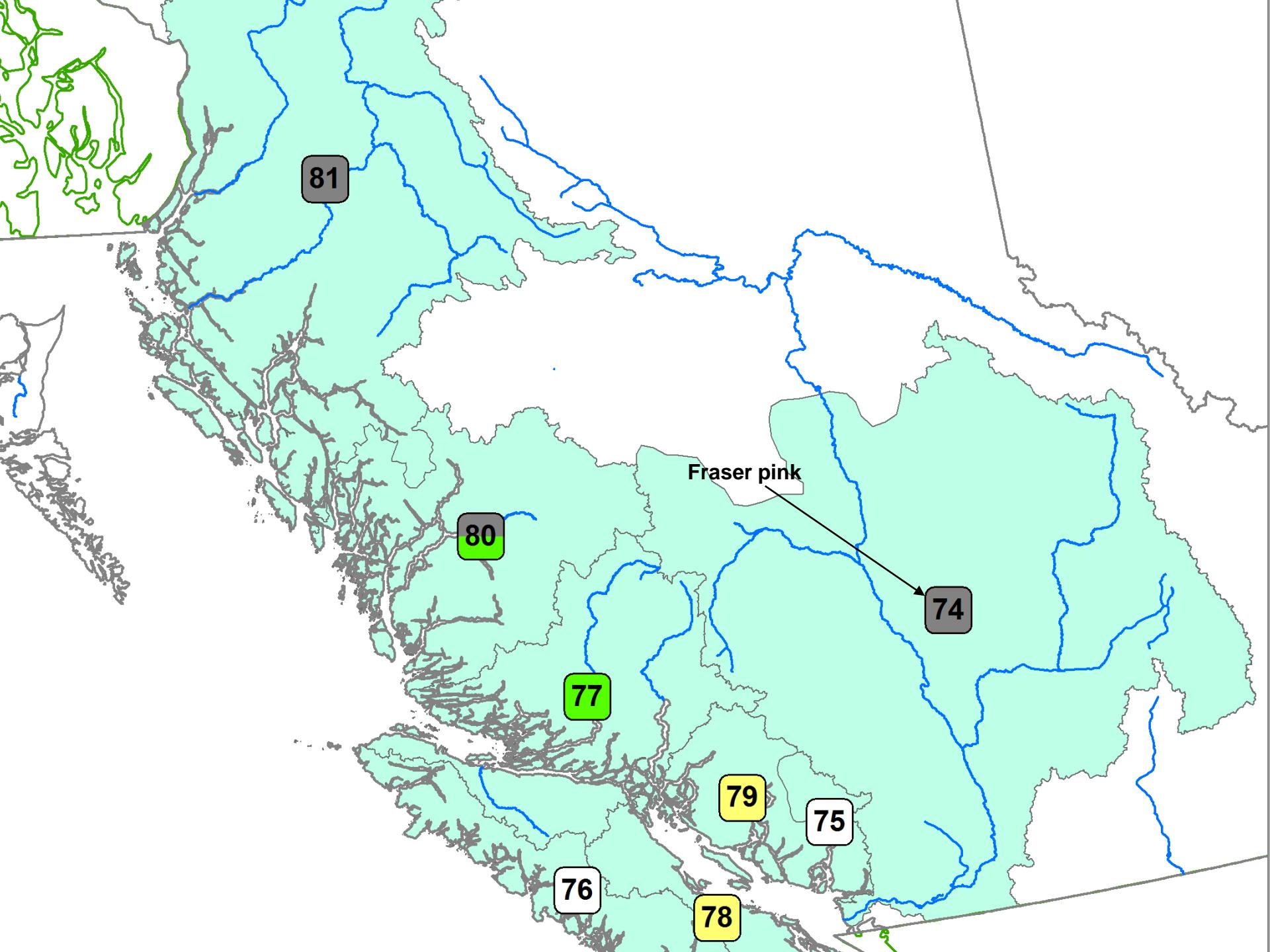


Pink 2015 Outlook

Category	Count
1, 1/2, 1/3, 1/4	none
2, 2/3, 2/4	2
3 & 3/4	2
4	2
No Data	2
Not Applicable	1

- 9 Outlook Units; 31 CUs
- Fraser: dominant cycle year
- Areas 11-13: improved / average
- Georgia Strait: below average
- Areas 3-6: strong returns







Fraser Pink Considerations

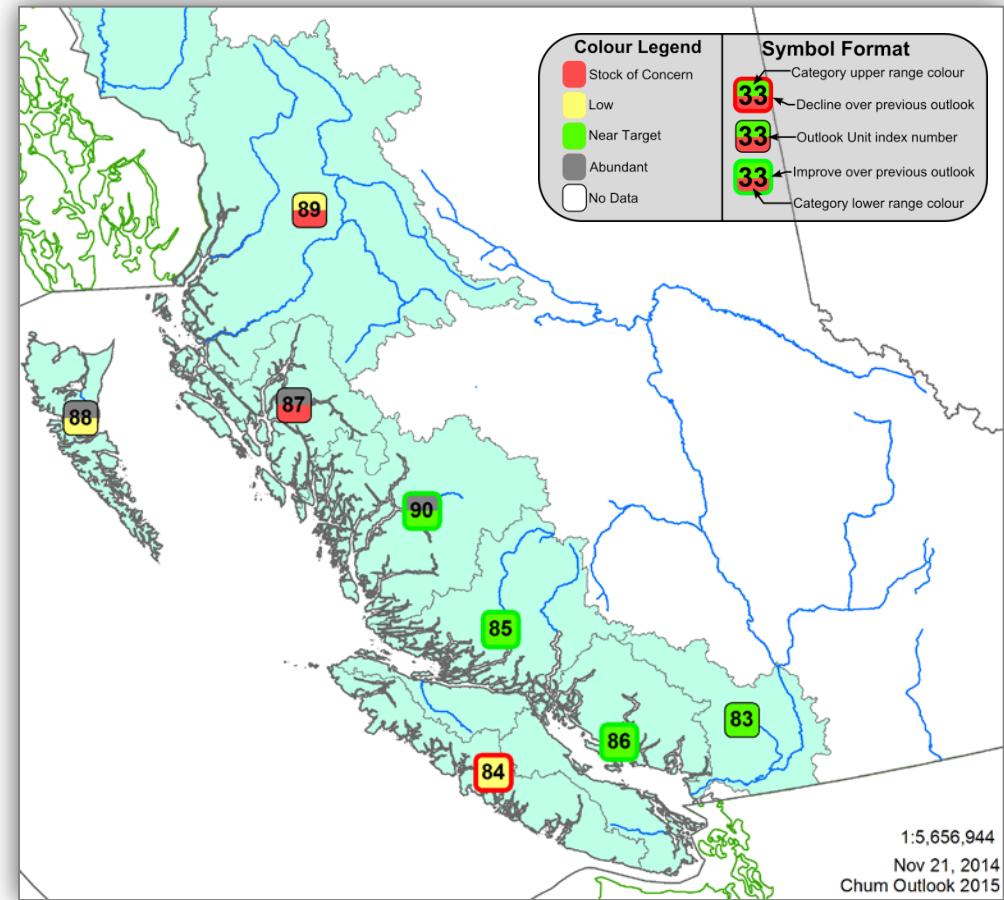
- Fraser pink are near target. There is a probability of fisheries in marine waters and the lower Fraser river.
- A demonstration fishery in the Thompson and Upper Fraser is also possible.
- Late run sockeye and coho impacts will need to be considered in these fisheries.



Chum 2015 Outlook

Category	Count
1, 1/2, 1/3, 1/4	2
2, 2/3, 2/4	4
3 & 3/4	5
4	none

- 11 Outlook Units; 37 CUs
- Fraser: near target
- Georgia Strait: near target
- WCVI: below target
- Skeena / Nass: very poor
- Yukon: above average





Chum considerations

- Fraser chum are near target. There is a probability of a fishery in marine waters and the lower Fraser river.
- Late run sockeye and coho impacts will need to be considered in these fisheries.



Considerations for 2015 Outlook

- Outlook is still very preliminary
- official forecasts are currently not available
 - sockeye in February
 - chinook & coho in March
- some assessments programs still on-going (coho & chum); 2014 escapement estimates & age information are not yet available
- marine survival conditions at ocean entry year
 - 2011 ocean indicators: sea surface cooler than 2010
 - 2012 ocean indicators: sea surface cooler than 2010 and 2011
 - 2013 ocean indicators: sea surface variable but warmer than 2012 on average
- many BC salmon populations remain depressed due to low numbers of brood-year spawners, partially attributed to poor survival and production during the mid 2000s.



2015 Salmon Fishery Considerations

- The Salmon Outlook provides an indication that there are likely to be a number of constraints to fisheries.
- Careful and detailed fisheries planning will be required for the 2015 fishing season in FSC, commercial and recreational fisheries.
- It is prudent to start working with your communities to discuss harvest planning options soon.



Questions?

