



Preliminary Salmon Outlook for 2015

Forum on Conservation and Harvest Planning

Quesnel, BC

December 17, 2014



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

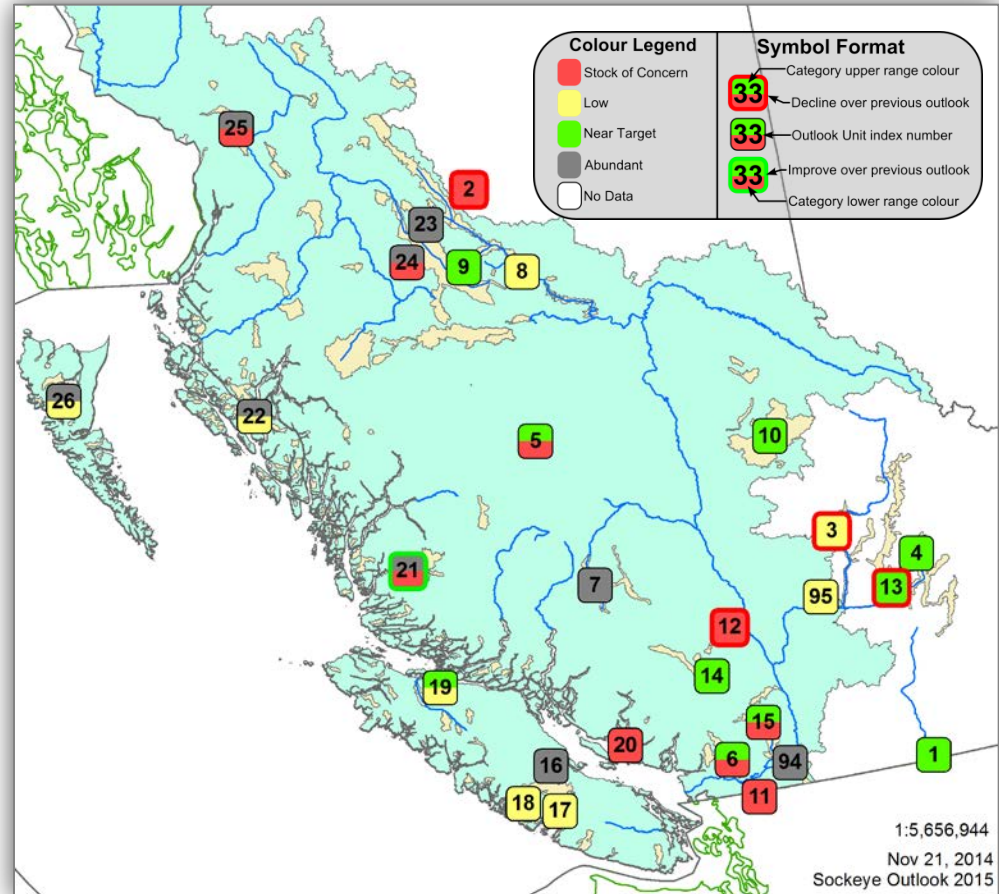
Category lower range colour



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

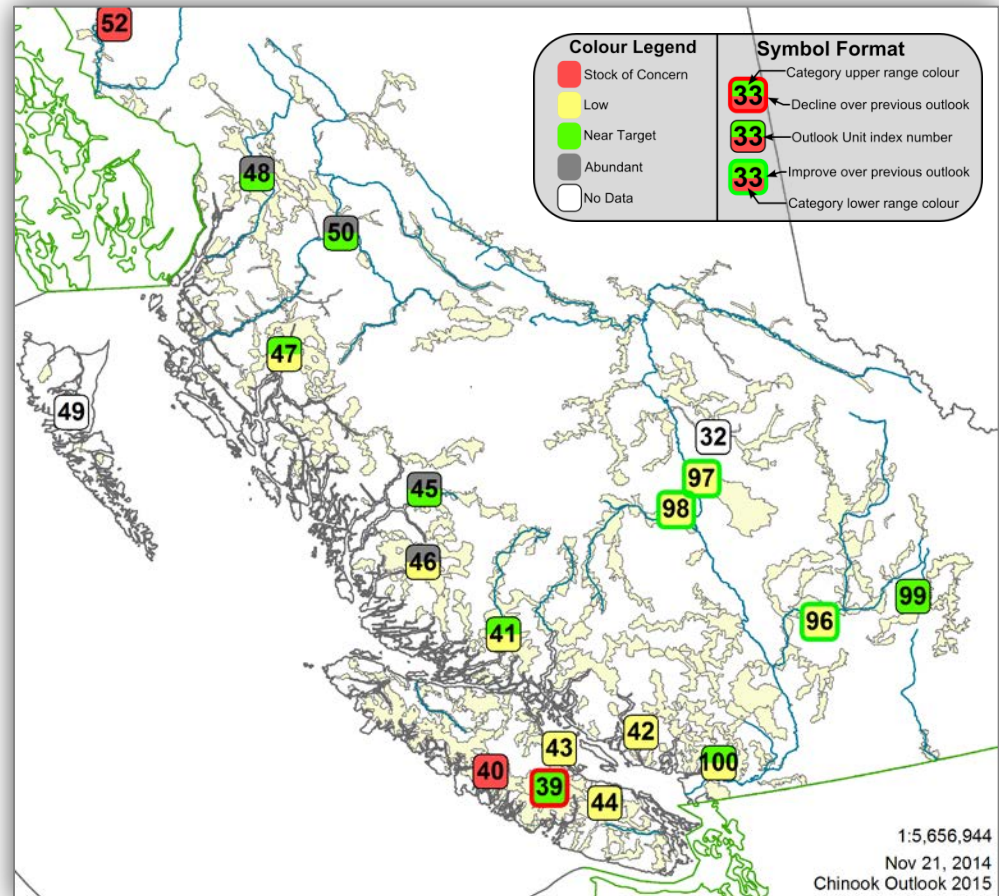
- Early Stuart, Nadina, Bowron, Taseko, Chilliwack, Nahatlatch, Portage and Widgeon are outlook category 1 (stock of concern)
- North Thompson, Raft and Late Stuart – outlook category 2 (low)
- Scotch/Seymour, Pitt, Stellako, Quesnel, Late Shuswap, Weaver – outlook category 3 (near target)
- Chilko,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

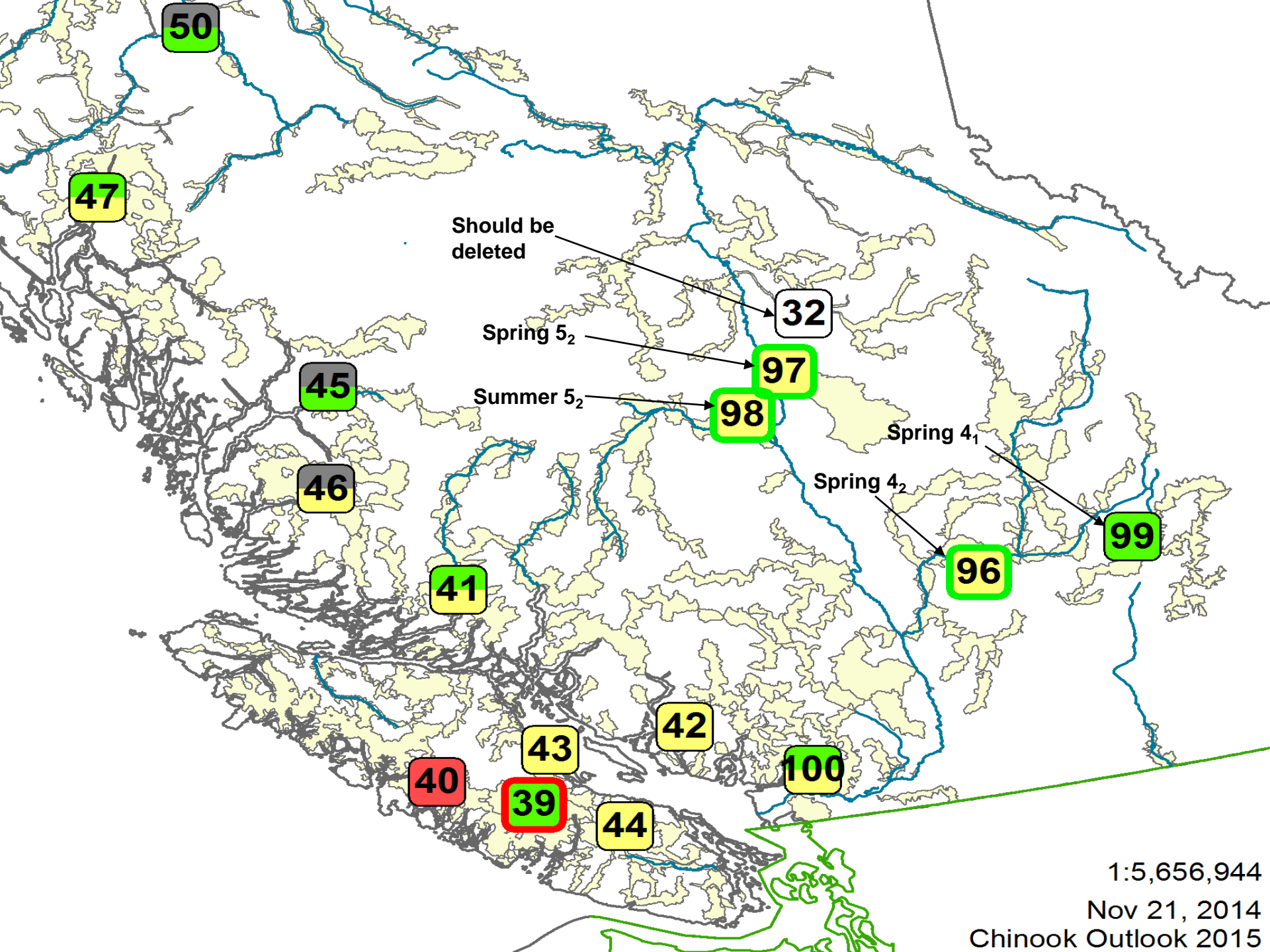


Chinook 2015 Outlook

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





Should be
deleted

Spring 5₂

Summer 5₂

Spring 4₁

Spring 4₂

1:5,656,944

Nov 21, 2014

Chinook Outlook 2015



Fraser Chinook

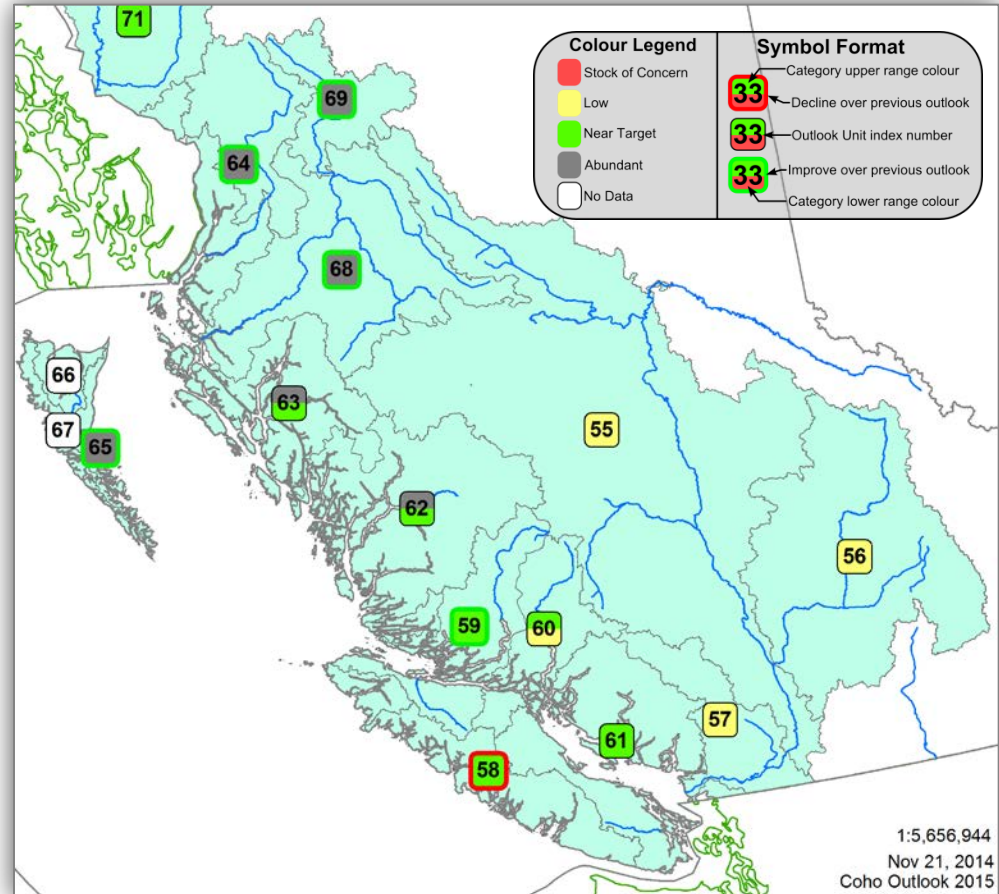
- Outlook unit 32 is an oops, it should have been deleted.
- Spring 4_2 , Spring 5_2 , Summer 5_2 – outlook category 2 (low)
- Summer 4_1 – outlook category 3 (near target)

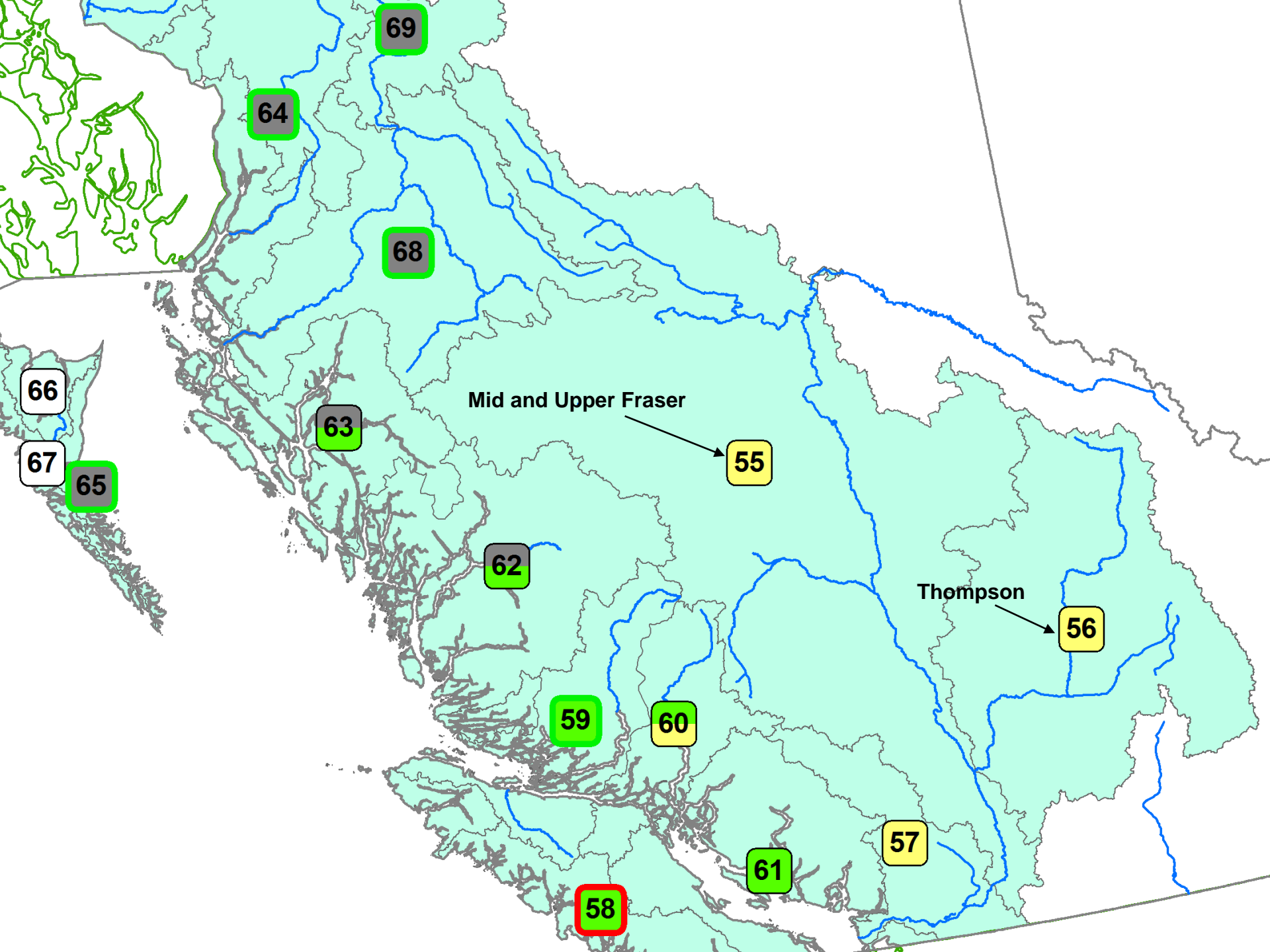


Coho 2015 Outlook

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

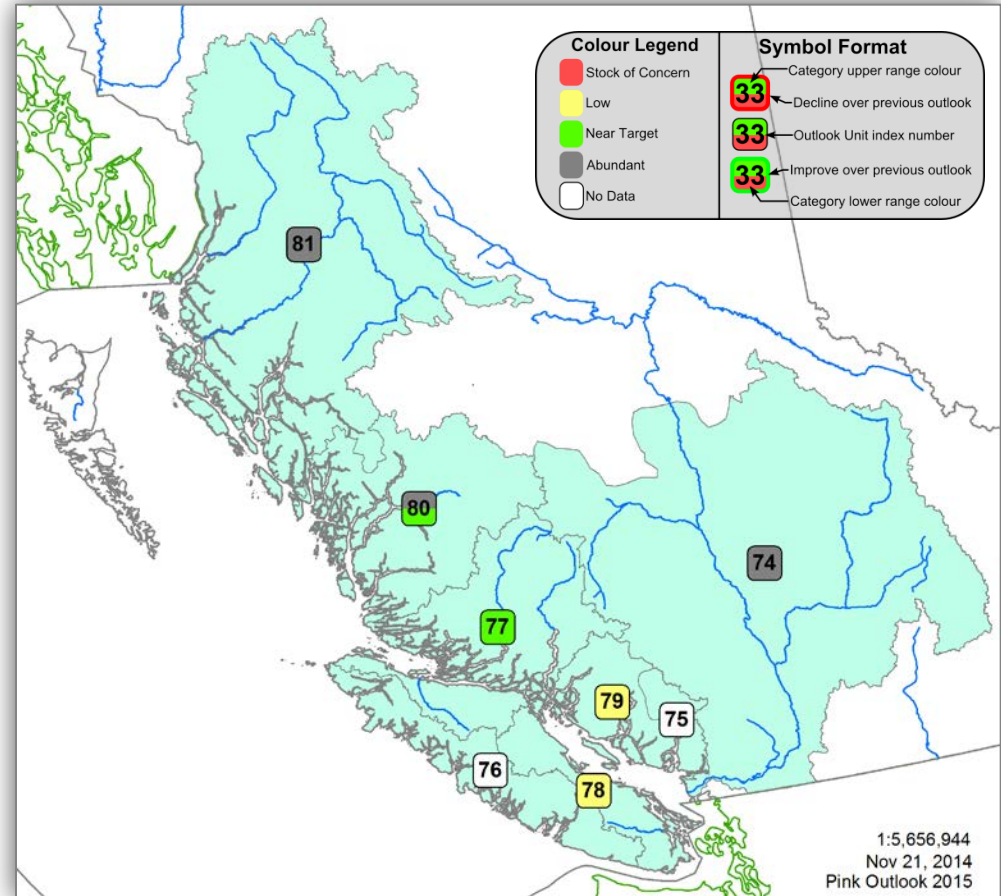
- Middle and Upper Fraser and Thompson coho are outlook category 2 (low).
- A formal forecast will be presented in Spring 2015.

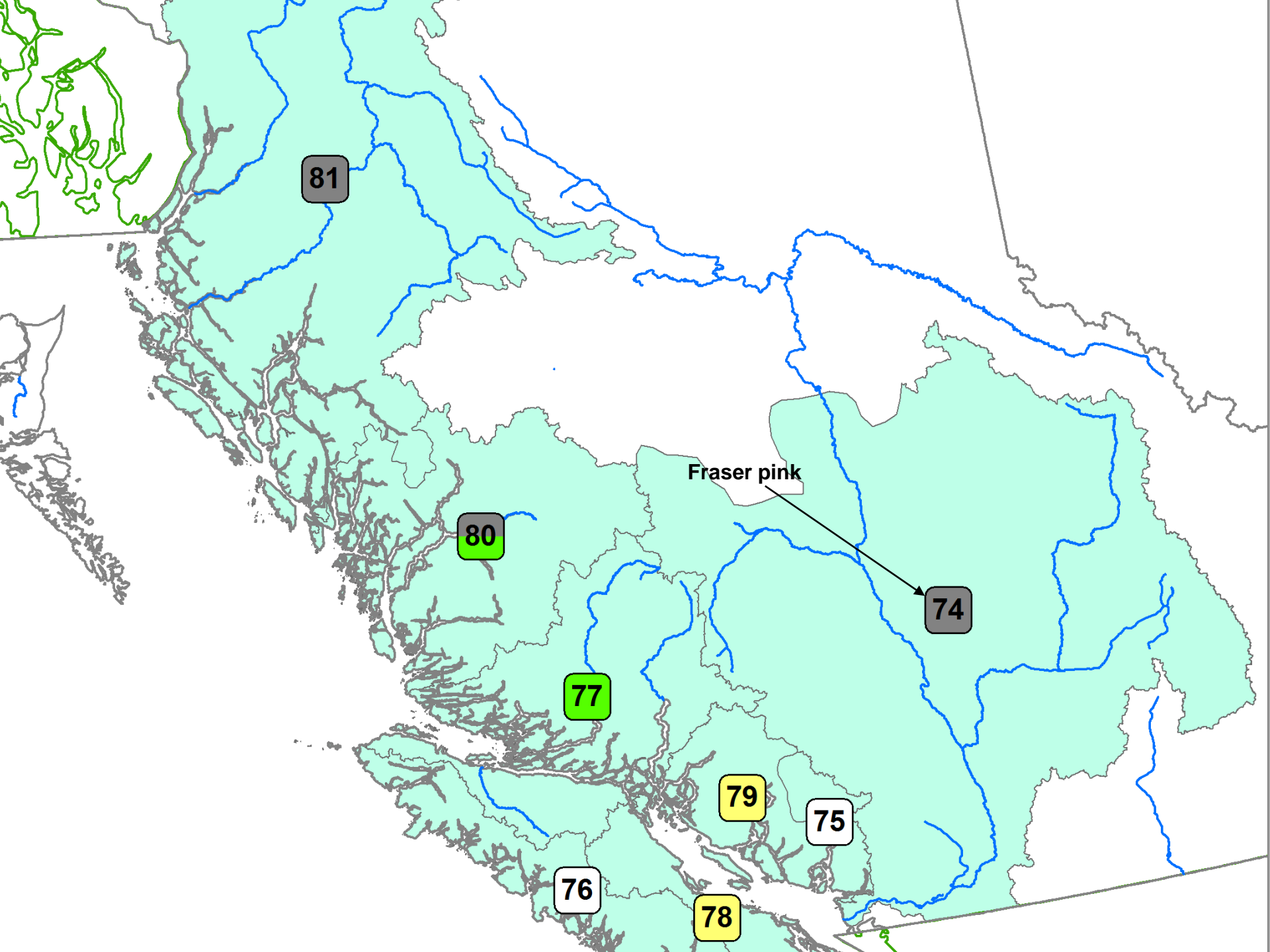


Pink 2015 Outlook

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





81

80

77

79

76

78

75

74

Fraser pink



Fraser Pink Considerations

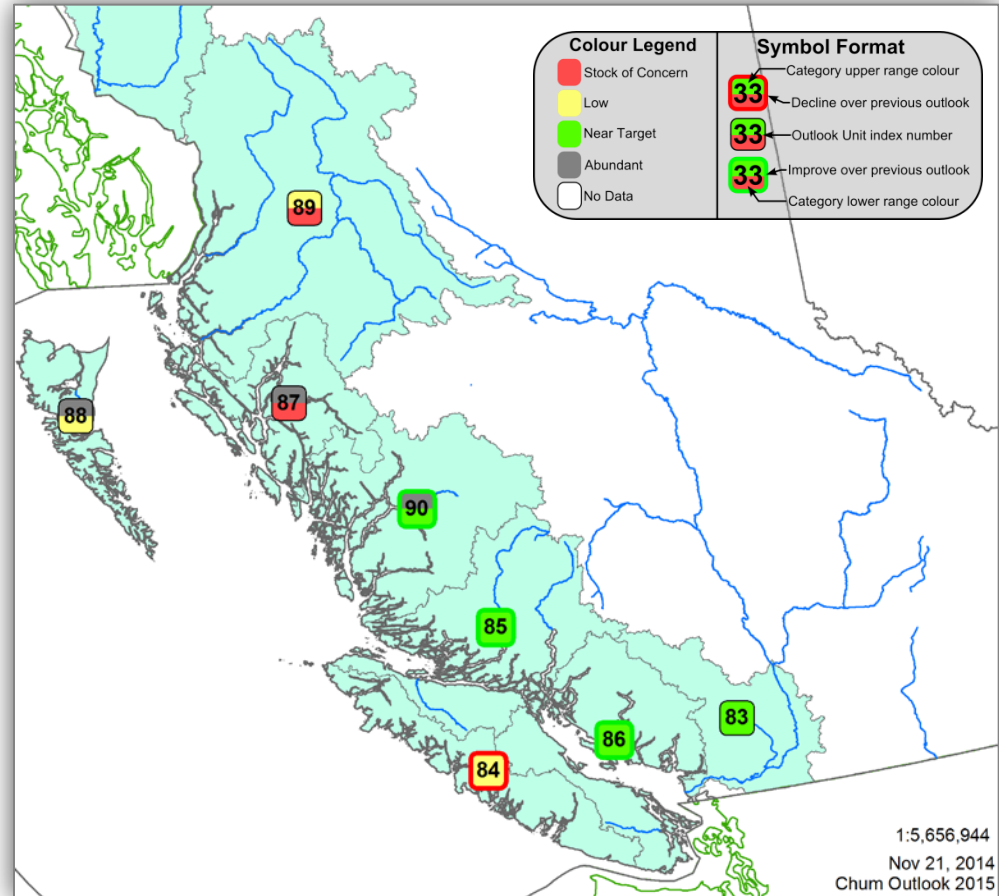
- Fraser pink are near target. There is a probability of fisheries in marine waters and the lower Fraser river.
- A demonstration fishery in the Thompson and Upper Fraser is also possible.
- Late run sockeye and coho impacts will need to be considered in these fisheries.



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?

