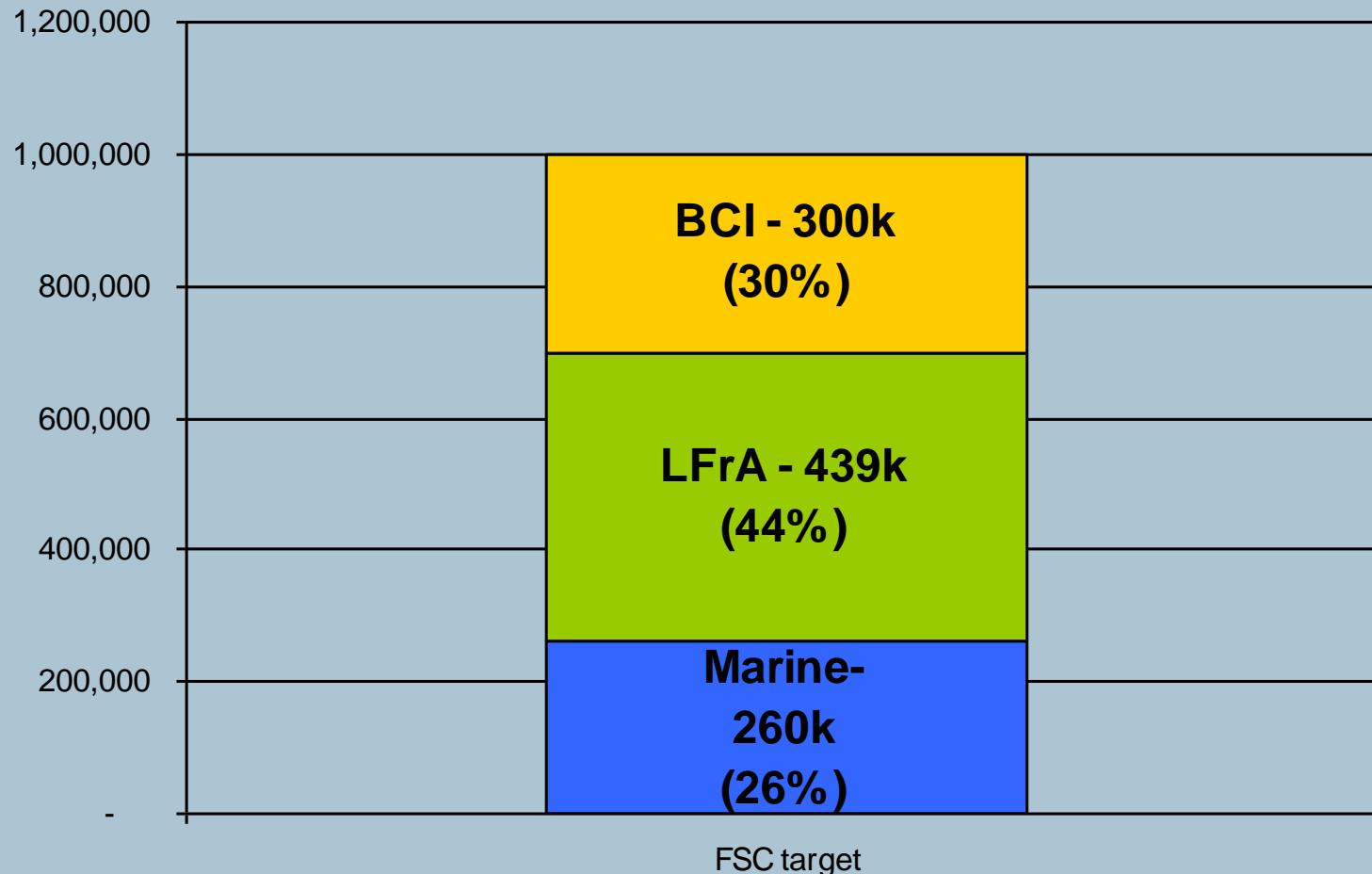


FSC Sharing Options

Overview of Past Methods

presented to: First Nations Forum
by: L. Jantz
Apr 5 2016

Best Case Scenario



Note that these #'s have changed, based on recent treaty agreements and updates to licensed amounts in the various areas.

But, what happens when there is $< 1M$ accessible TAC?

- In some instances, a constraining stock may result in some groups achieving a lower percentage of what their allocation may be at a reduced TAC
- How to share FSC TAC between First Nations?
 - Early Stuart sharing arrangement (1996)
 - suite of options used for since 2008.

Guidelines

1. All planned harvest will remain within conservation constraints.
2. The entire TAC of the run timing group that is the constraint will be planned to be harvested to enable harvest of surpluses where available.

Past Methods for Sharing FSC

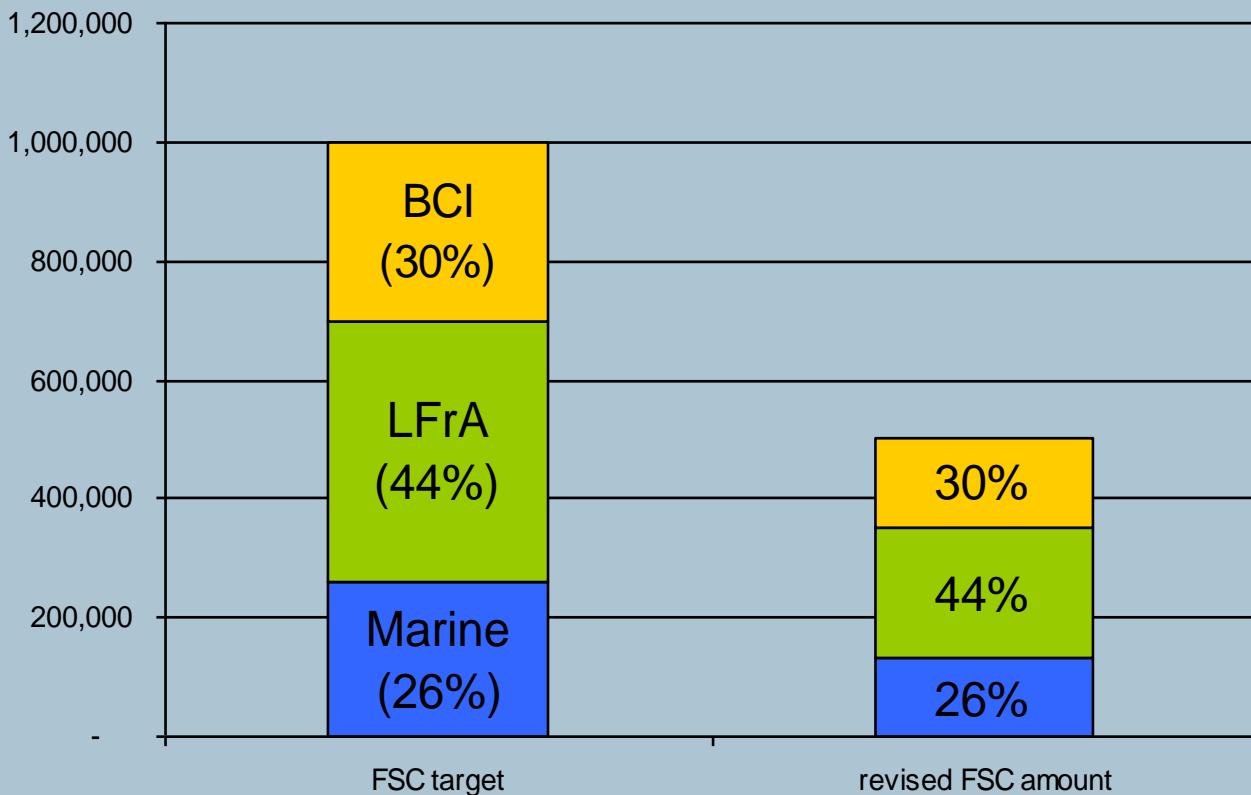
- Early Stuart Sharing arrangement
 - FN in 1996
 - for Early Stuart only
- Methods that assisted with decision making since 2008 (in no particular order):
 - proportional sharing of constraints
 - group that is furthest behind target is allocated more constraint
 - keep to strict proportional sharing of catch
 - multi-step approach to combine above with assessment of fish distribution in BCI

Note: no *single* one of these was used in either year, rather, results from all methods were examined to make decisions

Early Stuart

- Sharing agreement from 1996
 - general approach: first priority to FN groups with limited to no access to other SK stocks
 - first 5,000 EStu TAC to Carrier-Sekani
 - rest of EStu TAC shared between remaining in-river FNs
 - two different suites of sharing arrangements based on EStu TAC greater or less than 24.5k
 - applied on a more geographically discrete scale than methods to follow

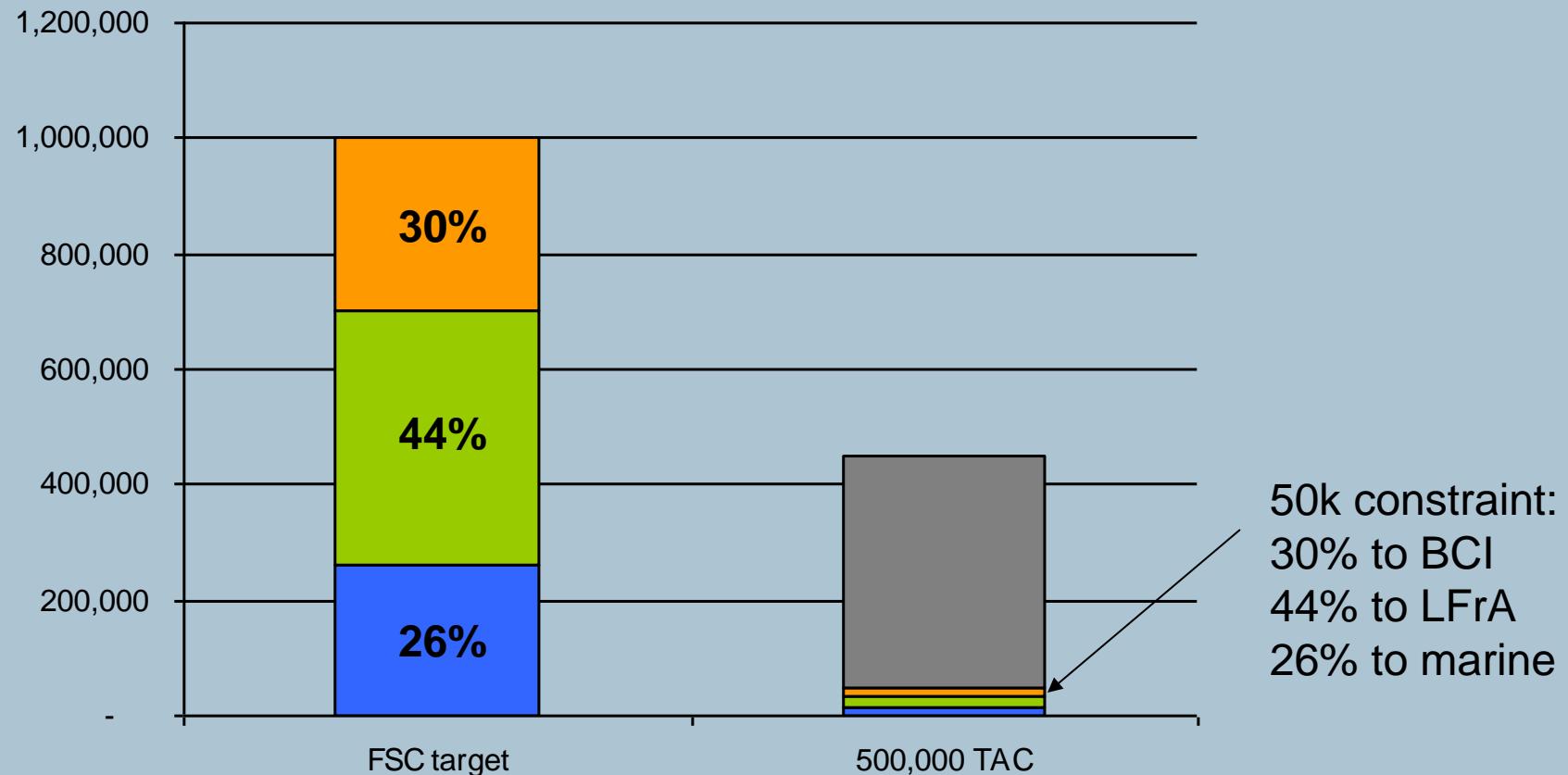
Ideally...



- If the TAC is reduced by $\frac{1}{2}$, all FSC targets reduced by $\frac{1}{2}$
- BUT, this does not take into account the stock of constraint/concept of accessible TAC
- So...need to share the stock of constraint

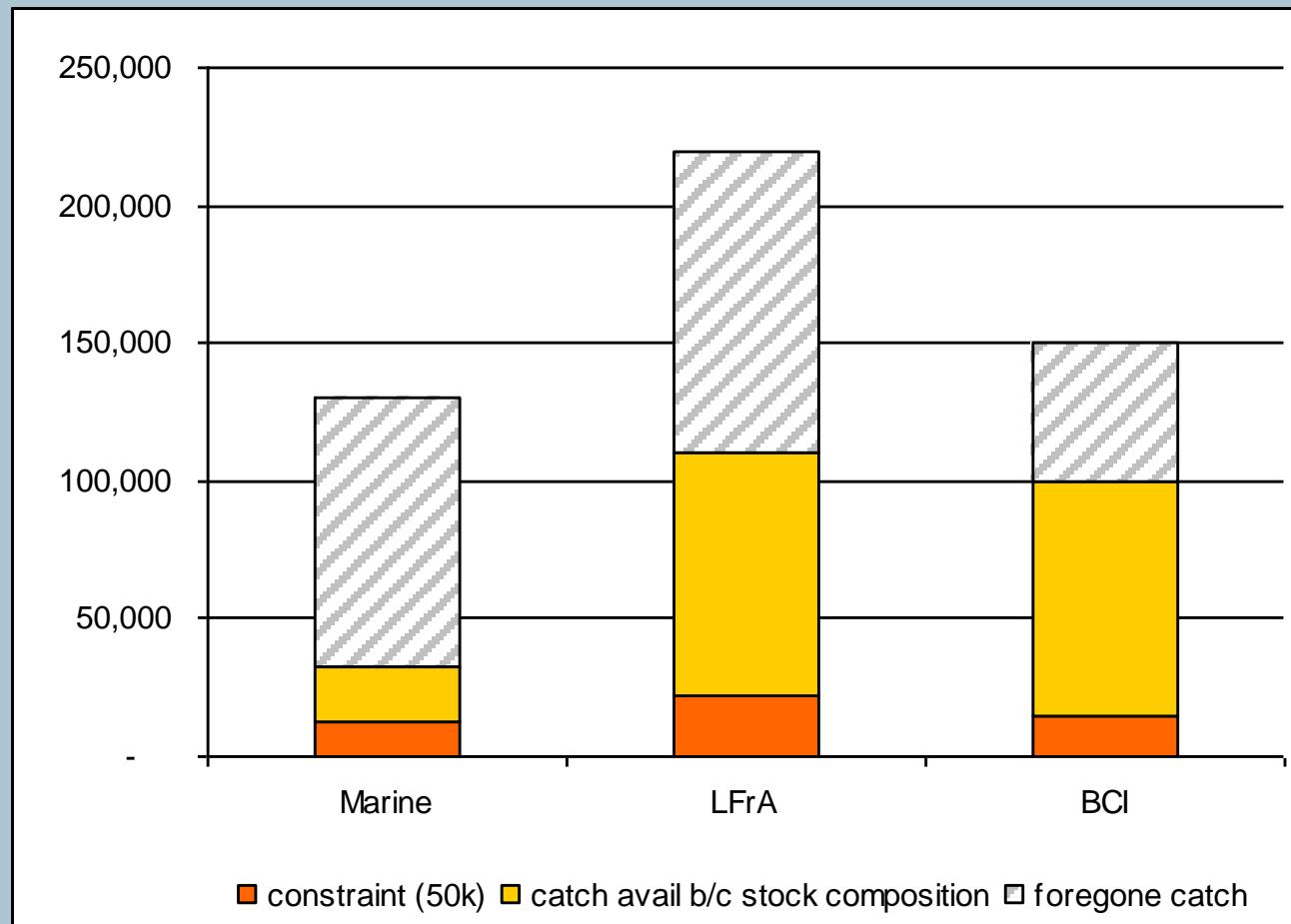
Scenario A: Proportional Sharing of Constraint

500k TAC, constraint: 50k



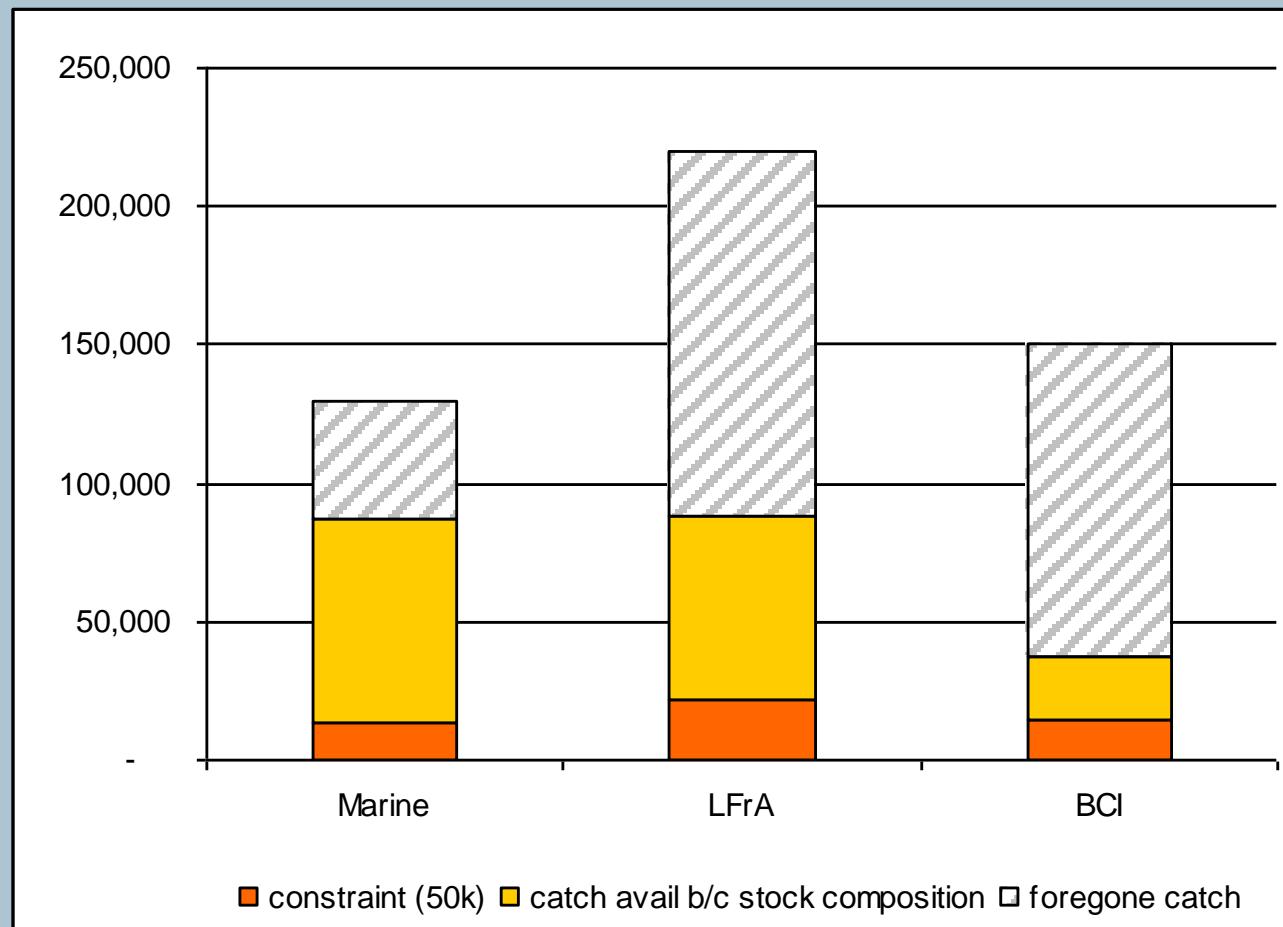
Scenario A: Proportional Sharing of Constraint

(example of available total catch due to stock composition)



constraint % of stock comp in each Area: 40% mrne; 20% LFrA; 15% BCI
(e.g. Late Run is constraint)

Scenario A: Proportional Sharing of Constraint (alternate example of avail. tl. catch due to stock composition)

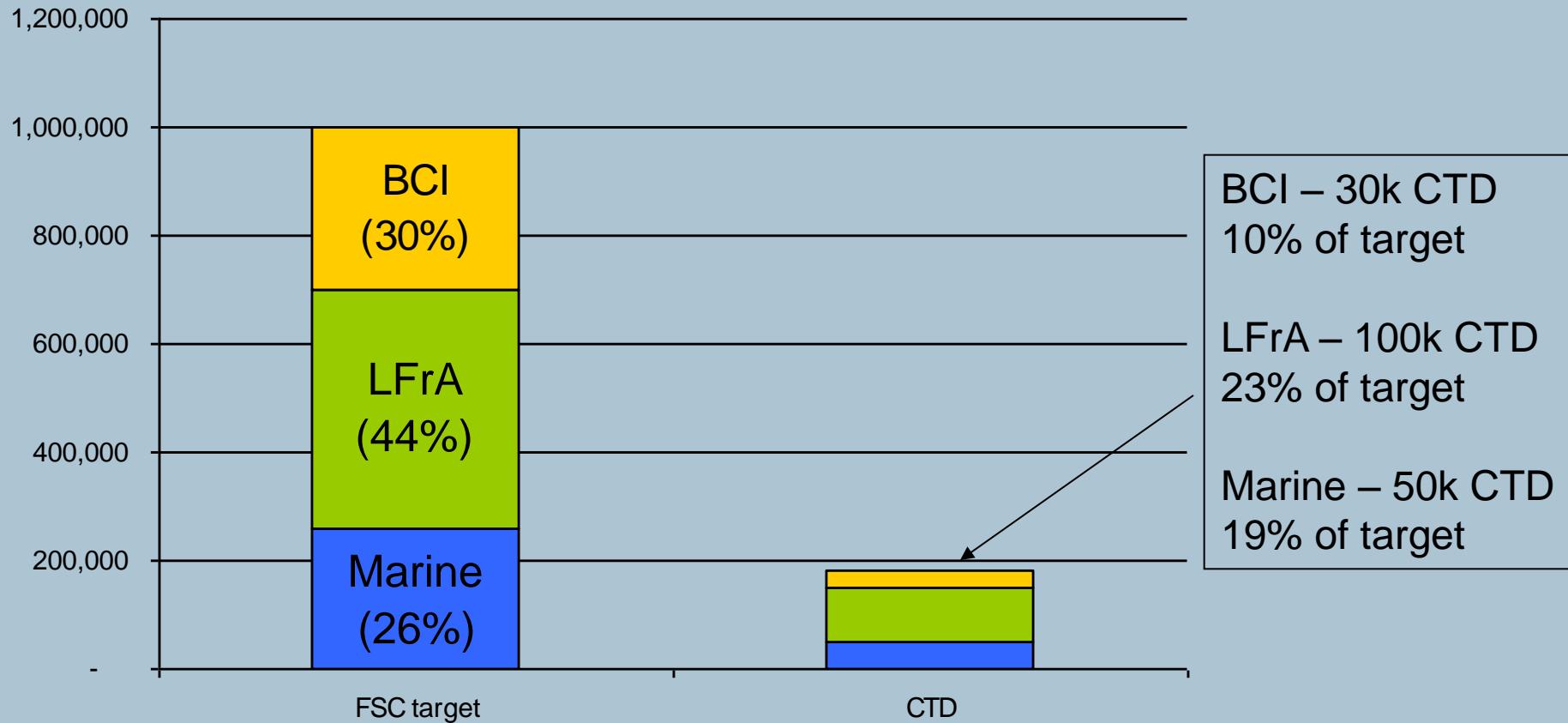


constraint % of stock comp in each Area: 15% mrne; 25% LFrA; 40% BCI
(e.g. Early Summers is constraint)

Caveats & other Extenuating Circumstances

- examples shown are highly simplified
 - only one constraint shown (there's often both Early Summer and Lates at the same time)
 - only show one moment in time – in practice, these calcs are updated multiple times a week
 - catch to date, stock composition by location and time, & TAC are all constantly changing and must be taken into account

Scenario B: Group furthest behind gets more of the constraint



Scenario B: Group furthest behind gets more of the constraint

- Priority for allocating constraint would go to groups furthest behind (in example shown, BCI then Marine FNs)
 - actual amount used for fisheries would depend on the stock composition in the area

Scenario C: Keep to Proportional Shares

500k TAC, constraint: 50k

- the “commercial shares scenario” – first priority is for the shares between Areas to be maintained
- in an extreme example:
 - each Area’s CTD shares are proportionally balanced (30:44:26)
 - there is no constraint left
 - there is TAC available for Summer run
 - terminal fisheries for Summer run would not proceed

Scenario D: Multi-step Proportional Sharing

500k TAC, constraint: 50k

1. calculate shares of constraint according to
“Scenario A: Proportional Sharing of
Constraint”
2. assess whether entire constraint amount as
calc'd in step 1 is needed in each Area
 - e.g. would BCI FNs require entire Late Run share in
order to catch FSC amount?
3. If entire constraint is not needed in an Area,
the constraint is then re-distributed between
the two remaining Areas.
 - option a – proportionally between two Areas
 - option b – based on which Area is furthest behind

Next Steps

- feedback from FN Forum