



**NOAA
FISHERIES**

National Standard 1 Technical Guidance on Carry-over and Phase-in

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Subgroup 2 (Carry-over and Phase-in)

National Standard 1 Technical Guidance for Designing, Evaluating, and Implementing Carry-over and Phase-in Provisions within ABC Control Rules

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Background

- National Standard 1 (NS1) requires that U.S. fisheries management:
 - Prevent overfishing
 - Achieve optimum yield
- NS1 guidelines provide guidance on *how* to achieve these requirements
- NMFS last revised the NS1 guidelines in 2016
 - Phase-in
 - Carry-over

NS1 Technical Guidance Workgroup

Purpose: Develop technical guidance on National Standard 1 (NS1) guideline topics to support decision-making.

- Address key concepts within 2009 and 2016 revisions.
- Will result in multiple work products.

NS1 Technical Guidance Workgroup

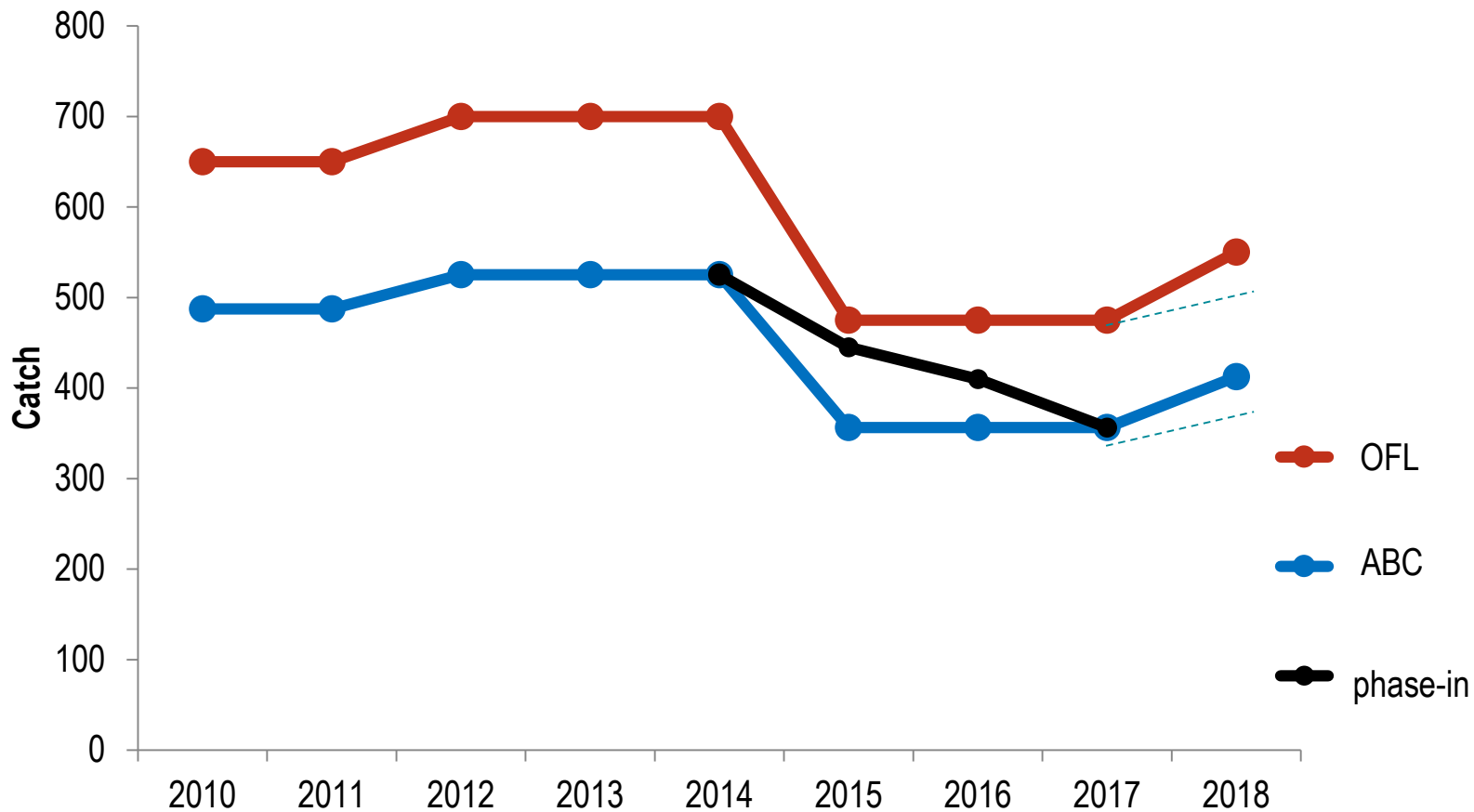
- Divided into 3 subgroups.
 - Subgroup 1: Reference points
 - Subgroup 2: Carry-over and Phase-in
 - Subgroup 3: Data limited stocks

NS1 Technical Guidance Workgroup

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Phasing-in changes to catch levels

Must prevent overfishing each year



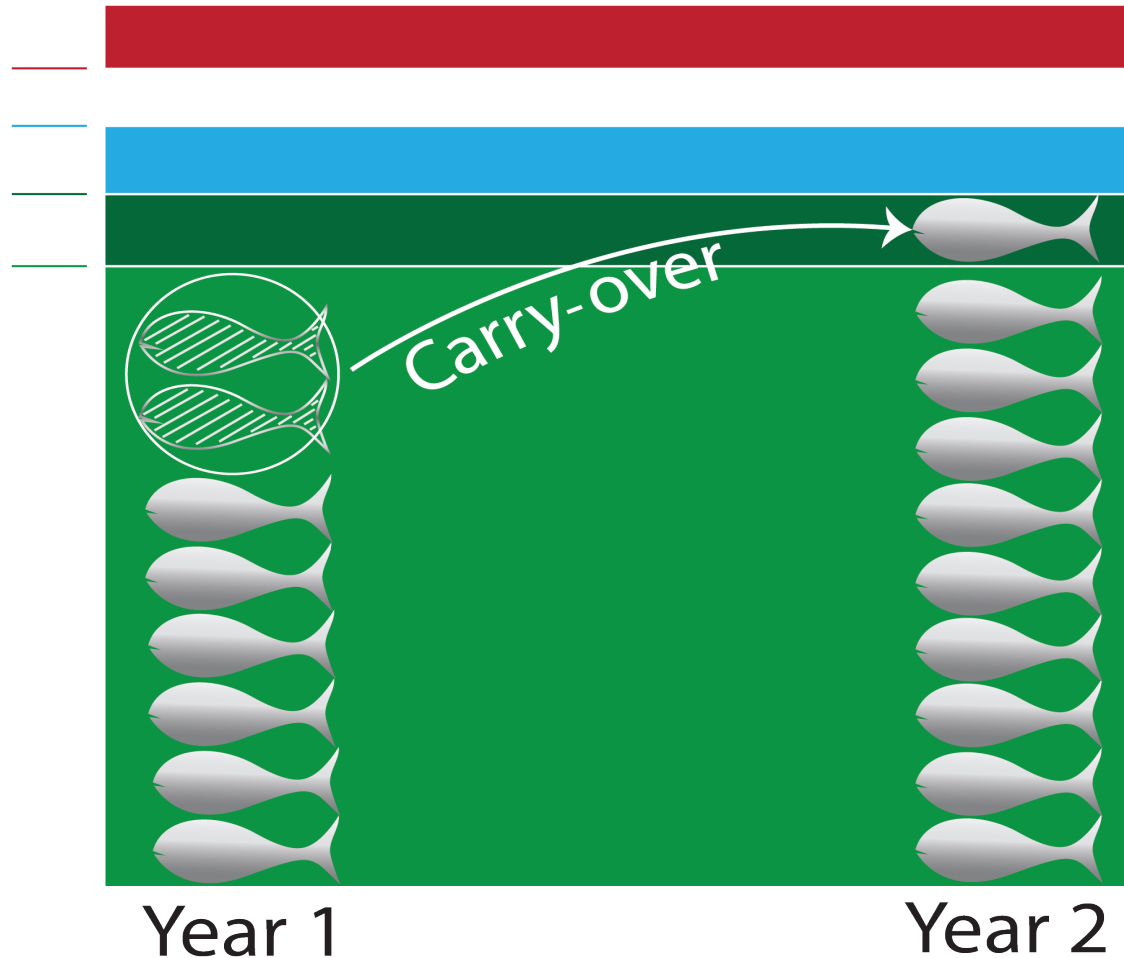
Carry-Over Approach #1: Utilizing ACL buffer

Overfishing
Limit

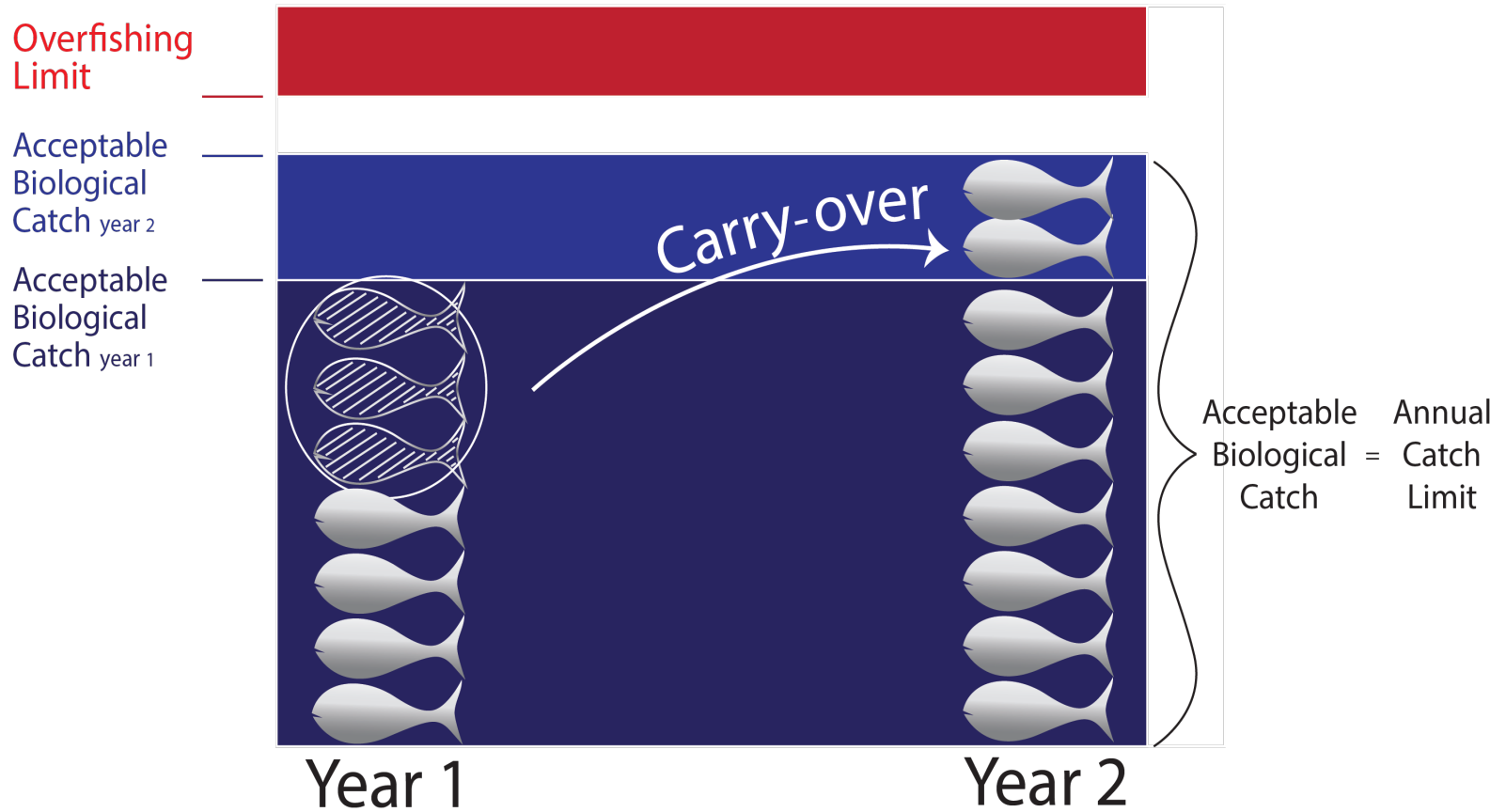
Acceptable
Biological
Catch

Annual
Catch
Limit year 2

Annual
Catch
Limit year 1



Carry-Over Approach #2: ABC Control Rule



Consider the stock's **condition** & the **reason** for the underage prior to carrying-over

Tech Memo on Carry-over and Phase-in

- NS1 Technical Guidance for Designing, Evaluating, and Implementing Carryover and Phase-in Provisions within ABC Control Rules.
 - Examples of carry-over and phase-in provisions.
 - Approaches to implement and evaluate carry-over and phase-in.
 - Characteristics of fish stocks/fisheries/management that impact risks and benefits of carry-over and phase-in.

Potential Benefits of carry-over

- Safety
- Economic stability
- Management stability
- Multispecies catch share fisheries

Carry-over Use in U.S. and Abroad

- Used in New Zealand, Canada, Iceland, Australia IFQ systems as part of catch balancing system (10%-30% carry-overs – often both carry back and forward)
- US FMPs with Carry-over
 - North Pacific Halibut & Sablefish IFQ (10%)
 - Pacific Groundfish IFQ (10%)
 - New England Multispecies Sectors (10%)
 - Atlantic Sea Scallops LE (10% DAS)
 - Atlantic Sea Scallops IFQ (15%)
 - Atlantic HMS Shark – not overfished (50%)
 - Gulf Snapper and Reefish IFQ (10%)

Approaches to implement and evaluate carry-over

Develop carry-over provision within ABC control rule

- NS1 Guidelines advise:
 - Describe when the carry-over provisions can/cannot be used
 - Conduct comprehensive analysis
 - Consider reason for the ACL underage
 - Evaluate if appropriate for overfished/rebuilding stocks

Approaches to implement and evaluate carry-over

Develop carry-over provision within ABC control rule - continued

- Additional factors to consider:
 - Which stocks are eligible for carry-over?
 - How will underages be determined?
 - Account for multiple fishery sectors
 - Limit the amount of carryover
 - Process for making changes to ABC and ACL
 - Evaluate with a management strategy evaluation to test for robustness
 - Consult with SSC and applicable NMFS Science Center

Approaches to implement and evaluate carry-over

Case-by-case basis

- Rerun the projections that were used in the last stock assessment with revised catch estimates.
- Scenario planning within a stock assessment.

Potential Benefits of Phase-in

- Greater stability/less variability in ACLs over time
- Lower management uncertainty (easier for managers to control catch when ACLs shifts are smaller)

Phase-in Use in U.S. and Abroad

- Many fisheries in South Africa, New Zealand, Iceland, Europe have control rules that limit frequency or amount of change in TAC – usually tested with MSE
- US fisheries with phase-in – one-off cases
 - Mid Atlantic summer flounder (2016-18) later abandoned
 - Western Pacific bottomfish (2015-18)
 - Gulf of Alaska Pollock –stair-step 3 year ABCs

Approaches to implement and evaluate phase-in

Develop phase-in provisions within ABC control rule

- NS1 Guidelines advise:
 - Describe when the phase-in provisions can/cannot be used
 - Conduct comprehensive analysis
 - Phase-in time may not exceed 3 years
 - Prevent overfishing each year
 - Evaluate if appropriate for overfished/rebuilding stocks

Approaches to implement and evaluate phase-in

Develop phase-in provisions within ABC control rule - continued

- Additional factors to consider:
 - Which stocks are eligible?
 - Phasing in increases and decreases to ABC
 - Maintaining a minimum buffer between ABC and OFL
 - Generation time of stock, assessment precision, and length of time between assessments
 - Evaluate with a management strategy evaluation to test for robustness

Approaches to implement and evaluate phase-in

Case-by-case basis

- SSC may recommend ABC that differs from the result of the ABC control rule.
- Run projections based on the most recent assessment with the proposed ABCs.

Characteristics of fish stocks and fisheries that impact risks of carry-over and phase-in

- Life history characteristics
- Stock structure and spatial dynamics
- Jointly targeted and bycatch species
- Assessment availability and frequency
- ACL overages and catch uncertainty

Next Steps

- Plan to make draft available to SSCs for review in late summer or fall 2019.
- Deadline for feedback from the Councils January 15, 2020.
- Finalize Tech Memo by May 2020

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Thank you!

