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# Phased in Approaches to Changing Catch Limits

## National Standard 1 – Technical Guidance

Pacific Fishery Management Council Meeting

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Dr. Jim Hastie

Population Ecology Program Manager  
Fishery Resource Analysis and Monitoring Division

# 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

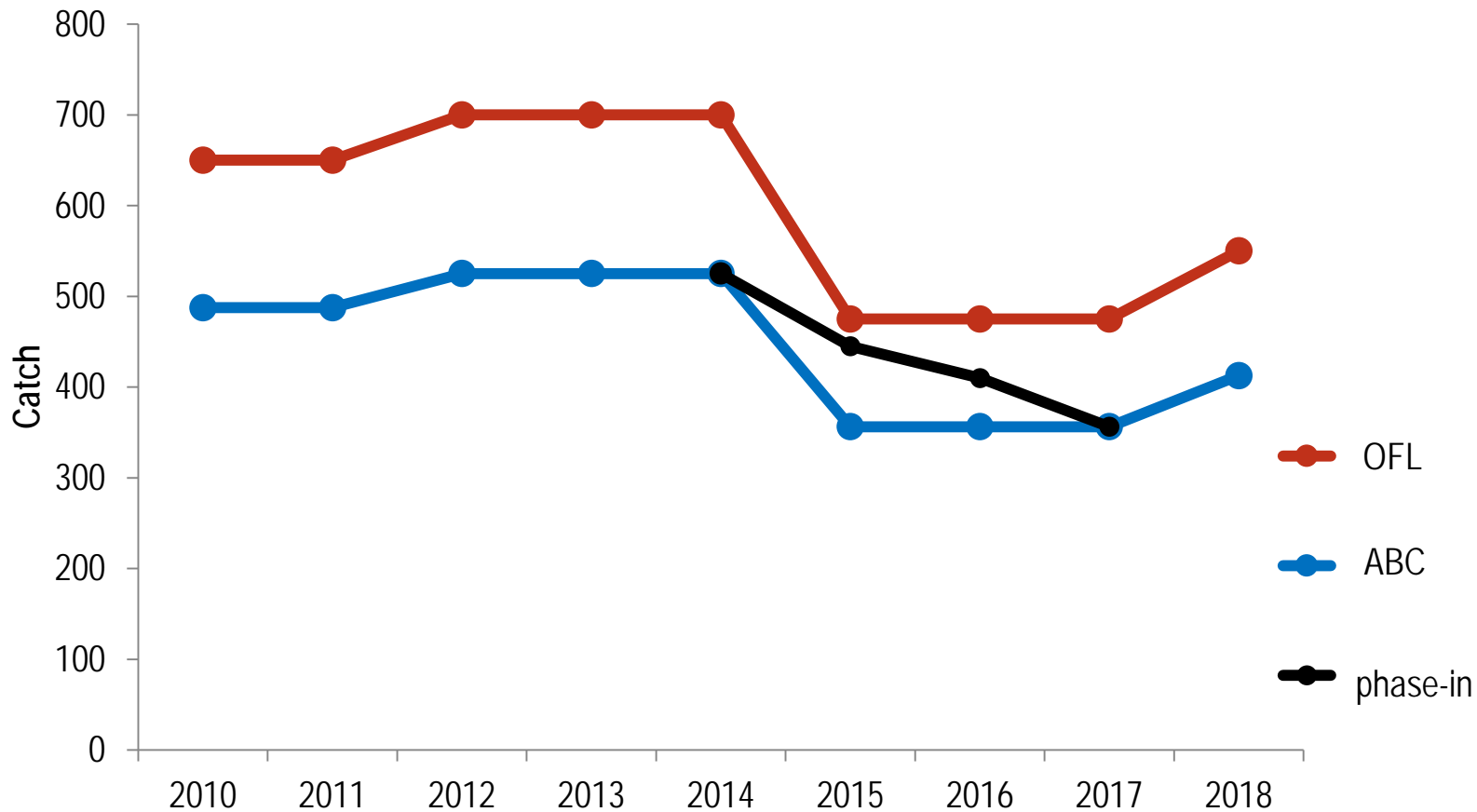
- Divided into 3 subgroups.
  - Subgroup 1: Reference points
  - Subgroup 2: Carry-over and Phase-in
  - Subgroup 3: Data limited stocks

# NS1 Technical Guidance Workgroup

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

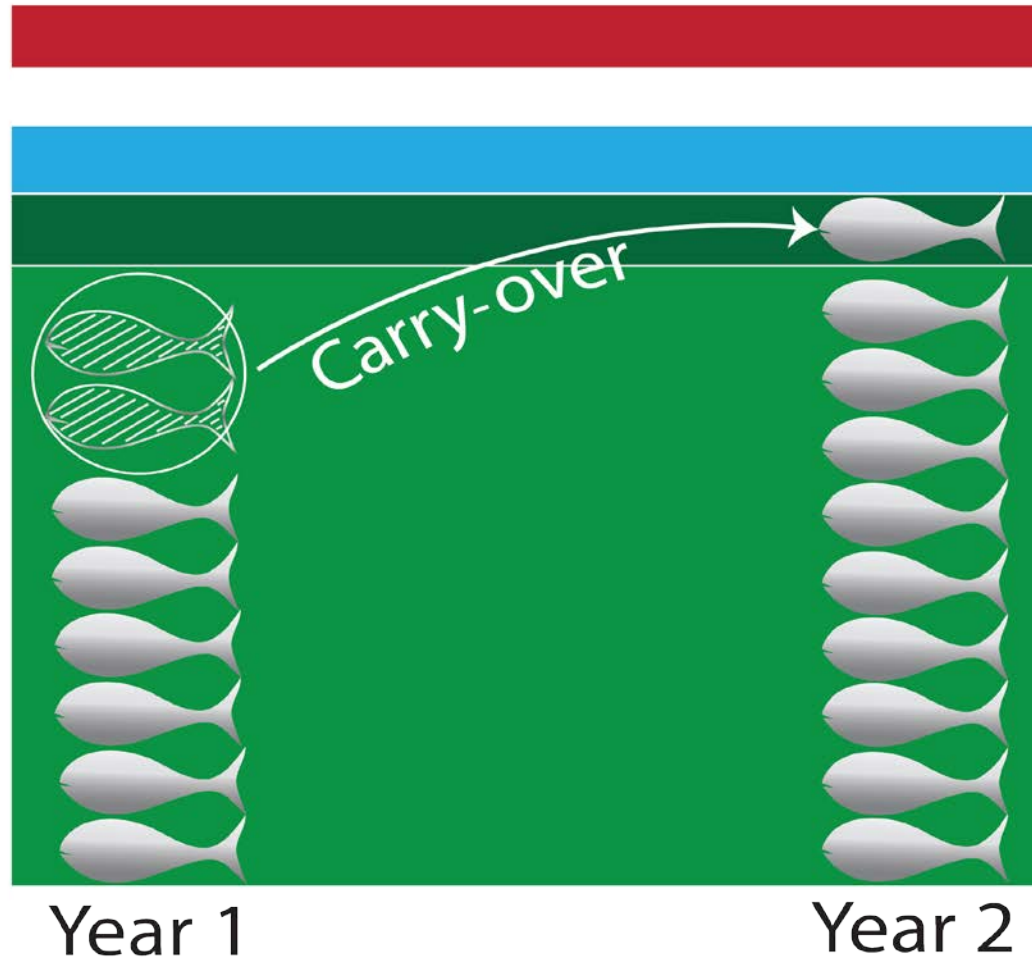
# Phasing-in changes to catch levels

Must prevent overfishing each year

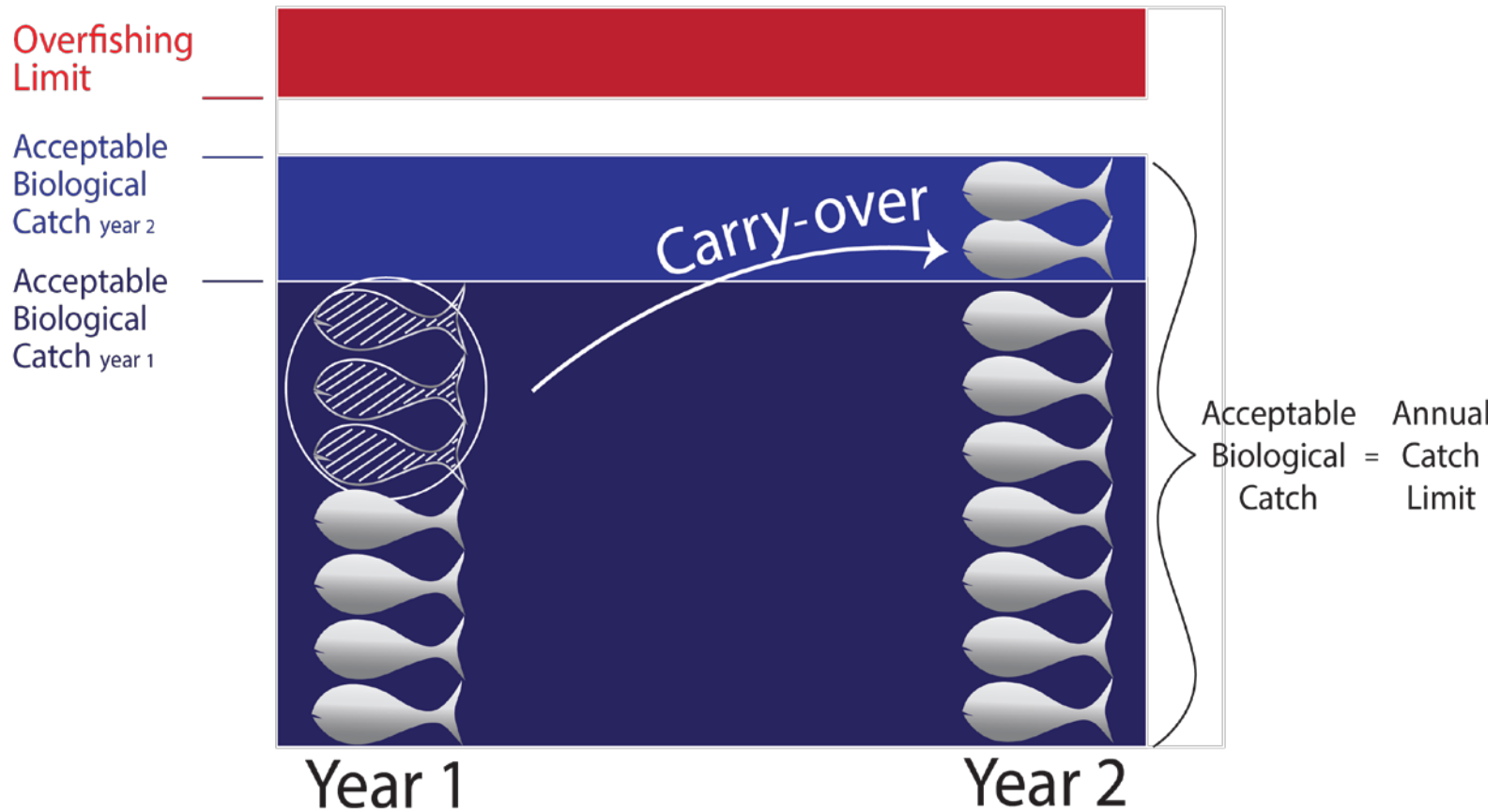


# Carry-Over Approach #1: Utilizing ACL buffer

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.

# Tech Memo on Carry-over and Phase-in

- Council staff liaisons
  - Dr. Ryan Rindone (GMFMC)
  - Josh DeMello (WPFMC)
- Status:
  - Draft under internal review.

# Potential Benefits of carry-over

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

# 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)

# 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

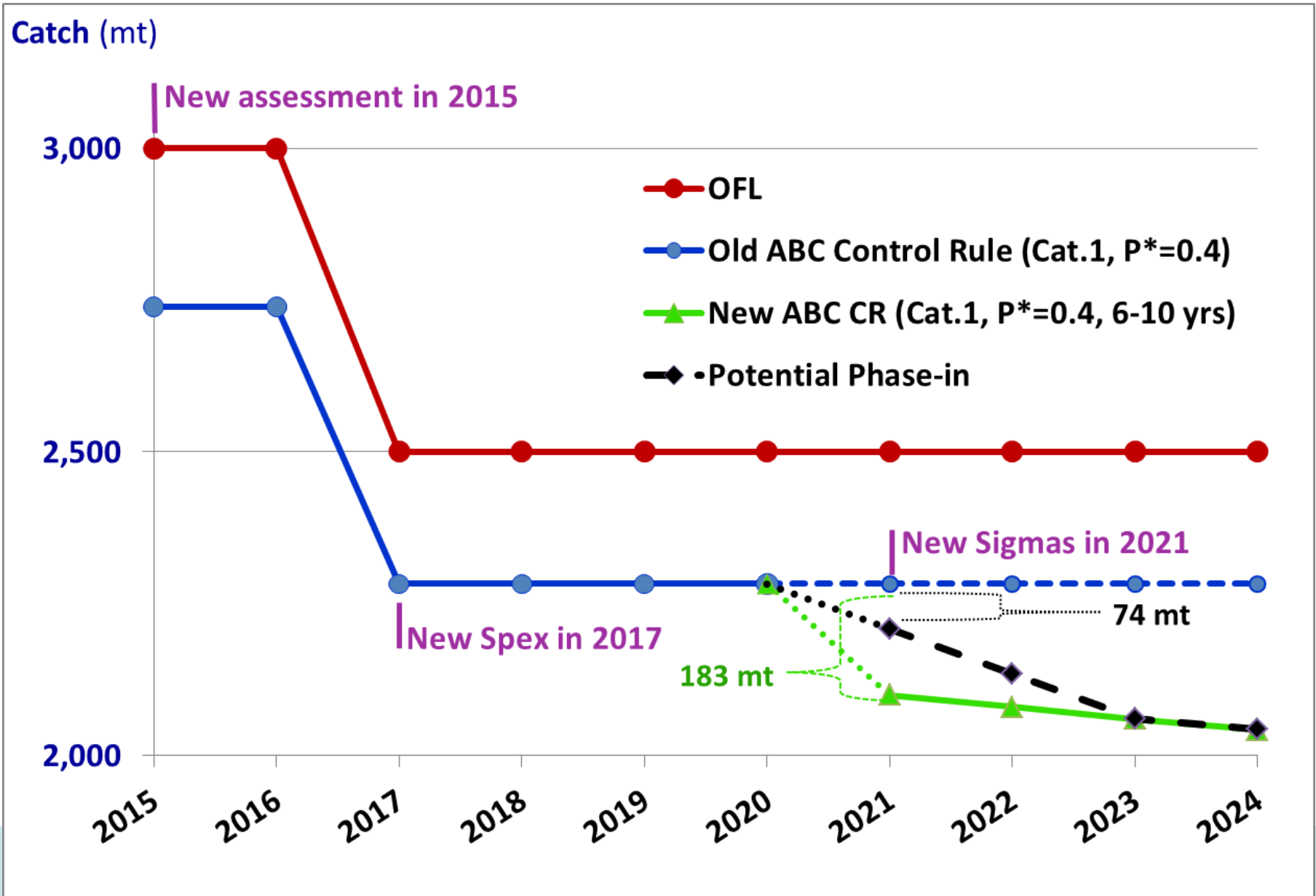


# Approaches to implement and evaluate phase-in

## 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

# Example of phase-in from old to new sigma values



# 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, status, 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 summer 2019.
- Plan to present to CCC in November.

# Points of Contact

- Dan Holland, [Dan.Holland@noaa.gov](mailto:Dan.Holland@noaa.gov)
- Deb Lambert, [Deb.Lambert@noaa.gov](mailto:Deb.Lambert@noaa.gov)
- Kathryn Frens, [Kathryn.Frens@noaa.gov](mailto:Kathryn.Frens@noaa.gov)

# Thank you!

