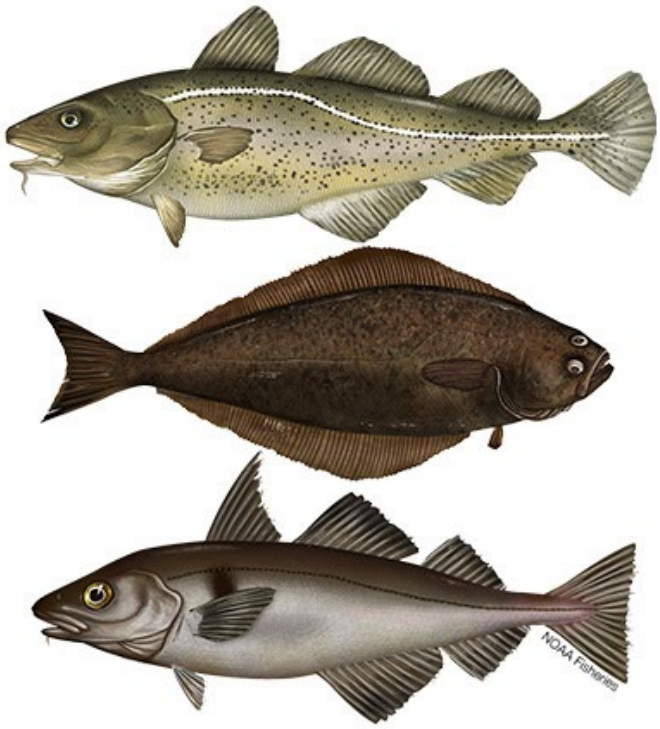
Northeast Multispecies Fishery Management Plan

<u>DRAFT</u> Framework Adjustment 68

Including a Regulatory Flexibility Analysis and Analysis of Alternatives



Framework Discussion Document
Committee Version 1
October 2026

Prepared by the

New England Fishery Management Council

In consultation with the

National Marine Fisheries Service and

Mid-Atlantic Fishery Management Council

New England
Fishery Management Council

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

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FRAMEWORK ADJUSTMENT 68

TO THE NORTHEAST MULTISPECIES FISHERY MANAGEMENT PLAN

Proposed Action: Propose revised acceptable biological catch control rules and additional acceptable biological catch stability tools.

Responsible Agencies:

New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, MA 01950

National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
Washington, D.C. 20235

For Further Information:

Dr. Cate O'Keefe, Executive Director
New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, Massachusetts 01950
Phone: (978) 465-0492
Fax: (978) 465-3116

Abstract:

The New England Fishery Management Council, in consultation with NOAA's National Marine Fisheries Service, has prepared Framework Adjustment 68 to the Northeast Multispecies Fishery Management Plan, which includes alternatives to achieve the goals and objectives of the action. The proposed action focuses on revising the acceptable biological catch control rules and adding acceptable biological catch stability tools to the plan. The document describes the affected environment and valued ecosystem components and analyzes the impacts of the alternatives on both. It addresses the requirements of the National Environmental Policy Act, the Magnuson Stevens Fishery Conservation and Management Act, the Regulatory Flexibility Act, and other applicable laws.

1.0 EXECUTIVE SUMMARY

To be completed later as Council develops this action.

2.0 TABLE OF CONTENTS

To be completed later as Council develops this action.

3.0 BACKGROUND AND PURPOSE

3.1 BACKGROUND

The Northeast Multispecies (Groundfish) Fishery Management Plan (FMP) specifies the management measures for thirteen groundfish species, both target (cod, haddock, yellowtail flounder, pollock, American plaice, witch flounder, white hake, winter flounder, redfish and Atlantic halibut) and non-target (windowpane flounder, ocean pout, and Atlantic wolffish) species off the New England and Mid-Atlantic coasts. Some of these species (cod, haddock, yellowtail flounder, winter flounder, and windowpane flounder) are further sub-divided into individual stocks that are attributed to different geographic areas. Two stocks, Georges Bank (GB) cod and GB haddock, also have distinct management units because of the U.S.-Canadian Transboundary Resource Sharing Agreement. The FMP therefore consists of 22 stocks and 2 management units. Commercial and recreational fisheries catch these species.

The New England Fishery Management Council (NEFMC or Council) makes proposals, through various management actions, to NOAA's National Marine Fisheries Service (NMFS) for the management of the fishery. As such, the FMP has been updated through a series of amendments and framework adjustments. Amendment 16, which became effective in 2010, adopted a broad suite of management measures to achieve the fishing mortality targets necessary to rebuild overfished stocks and meet other requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Amendment 16 greatly expanded the sector management program and adopted a process for setting annual catch limits (ACLs) that requires catch levels to be set in biennial specifications packages. Amendment 17, effective in 2011, allowed NOAA-sponsored state-operated permit banks to function within the structure of A16. Amendment 18, effective in 2017, addressed fleet diversity and accumulation limits. Numerous framework adjustments have updated the measures in Amendment 16. Amendment 23, effective December 2022/January 2023, addressed improvements to monitoring in the commercial groundfish fishery. Amendment 25, effective June 30, 2026, revised the FMP to incorporate four stocks of Atlantic cod, based on the 2023 Atlantic Cod Research Track Stock Assessment.

Amendment 16 adopted a system of acceptable biological catches (ABCs), ACLs, and accountability measures (AMs). An ABC is a level of a stock's annual catch that is based on an ABC control rule that accounts for the scientific uncertainty in the estimate of the overfishing limit (OFL), any other scientific uncertainty, and the Council's risk policy. Amendment 16 specified ABC control rules (CR) that are used by the Council's Scientific and Statistical Committee (SSC) to set ABCs. ACLs are set by reducing ABCs to account for management uncertainty. AMs are management controls to prevent ACLs from being exceeded and to correct or mitigate overages of the ACL if they occur. In June 2026, the Council revised its Risk Policy.

3.2 PURPOSE AND NEED

The purpose of FW68 is to revise the existing groundfish ABC CRs to better address the goals and objectives of the FMP and incorporate the Council's revised Risk Policy. There are two objectives of FW68.

1. Develop CRs which consider:
    - Stock status, including unknown and rebuilt;
    - Stock assessment model types and sources or levels of uncertainty; and
    - Productivity regime.
2. Add ABC stability tools to the FMP, consistent with the Magnuson-Stevens Act and updated National Standard 1 guidance.
    - Phase-in ABC Control Rules

- Carry-over ABC Control Rules; and
- Guidance for the use of constant ABCs.

FW68 incorporates the results of a management strategy evaluation (MSE) and simulation testing that were used to develop and evaluate alternative ABC CRs. That work included consideration of the proposed ABC stability tools and supports the proposed ABC CRs. The need for this action is to incorporate ABC CRs that produce catch advice that prevents overfishing, rebuilds stocks, improves attainment of optimum yield, and minimizes large changes in catch advice, as appropriate and consistent with the status of stocks and the requirements of the MSA; and to include flexibility in setting ACLs as allowed by the Magnuson-Stevens Act, and particularly in accordance with 2020 National Marine Fisheries Service guidance on carry-over and phase-in provisions (Holland et al. 2020).

This framework includes alternatives (Table 1) that would:

- Revise the ABC CRs for all large-mesh stocks in the FMP;
- Include a phased-in ABC approach;
- Include ABC carry-over provisions; and
- Include guidance for the use of constants ABCs.

Table 1 – Purpose and need for Framework 68.

Purpose	Need
Revised ABC CRs	Produce catch advice that prevents overfishing, rebuilds stocks, improves attainment of optimum yield, and minimizes large changes in catch advice.
Phased-in ABC provisions	Minimize large changes in catch advice.
ABC carry-over provisions	Prevent overfishing, rebuild stocks, improve attainment of optimum yield.
Guidance on the use of constant ABCs	Prevent overfishing, rebuild stocks, improve attainment of optimum yield.

4.0 DRAFT ALTERNATIVES UNDER CONSIDERATION

Questions/Comments for the Committee:

- This section presents draft alternatives for this action along with a rationale for each alternative.
- Text boxes like this one provide questions or comments for the Committee, and analyses and discussion from the PDT.
- Please decide which of these alternatives to continue developing for inclusion in the action. You may select more than one alternative in any combination.

4.1 ACTION 1 – ABC CONTROL RULES

4.1.1 Alternative 1 - No Action

Under Alternative 1/No Action, there would be no change to the ABC CRs in the FMP and phased-in ABCs, ABC carryover, and guidance for the use of constant ABCs would not be added to the FMP.

***Rationale**:* The No Action alternative would keep the current set of ABC CRs and the SSC would continue to set ABCs using those control rules. The SSC would not be able to phase-in ABC decreases to minimize disruption to the fishery or increase ABCs to carry over a portion of a previous year's uncaught ACL. The SSC would continue to have the option to use constant ABCs at its discretion. The sector carryover provision would continue (reduces the buffer between ACL and ABC to account for carryover).

4.1.2 Alternative 2 – Revised ABC Control Rules

Questions/Considerations for the Committee:

- This section is still in development and will come before the Committee in 2027.
- There is ongoing simulation testing of potential ABC CRs for groundfish through contract work under Inflation Reduction Act (IRA) initiative #1.
    - This work is a Management Strategy Evaluation (MSE) of possible new ABC CRs for groundfish that incorporate the Council's new Risk Policy.
    - This work may also inform future ABC CRs for other FMPs.
- **This work will come to the Committee after the December 2026 Council meeting**.

Alternative 2 would adopt new ABC CRs for all stocks in the FMP. The new ABC CRs will consider:

- Stock status, including unknown and rebuilt;
- Stock assessment model types and sources or levels of uncertainty; and
- Stock productivity regime.

Rationale: Revised ABC CRs would better address the goals and objectives of the FMP. The new ABC CRs would consider increasing uncertainty and variability in stock assessments, changing environmental conditions, and the National Standard Guidelines to produce catch advice that prevents overfishing, rebuilds stocks, improves attainment of optimum yield, and minimize larges changes in catch advice as appropriate. The new ABC CRs would incorporate the Council's revised Risk Policy.

4.1.3 **Alternative 3 – Phased-in ABCs**

Alternative 3 would add a provision to the FMP to allow for phasing in ABCs. This would allow reductions in ABCs to be phased in over time rather than making the full cut in 1 year. ABC reductions could be phased in over 2 or 3 years. The phased-in ABC cannot exceed the OFL in any year because overfishing must be prevented each year. New projections would be made to account for catch levels during phase-in that are higher than initially projected. The new projections would adjust the new OFL trajectory down, which leads to a slightly lower ABC in the years following the phase-in (Figure 1). The phased-in ABC provisions would specify when, or if, it is appropriate to phase in ABC cuts for stocks that are overfished and/or rebuilding.

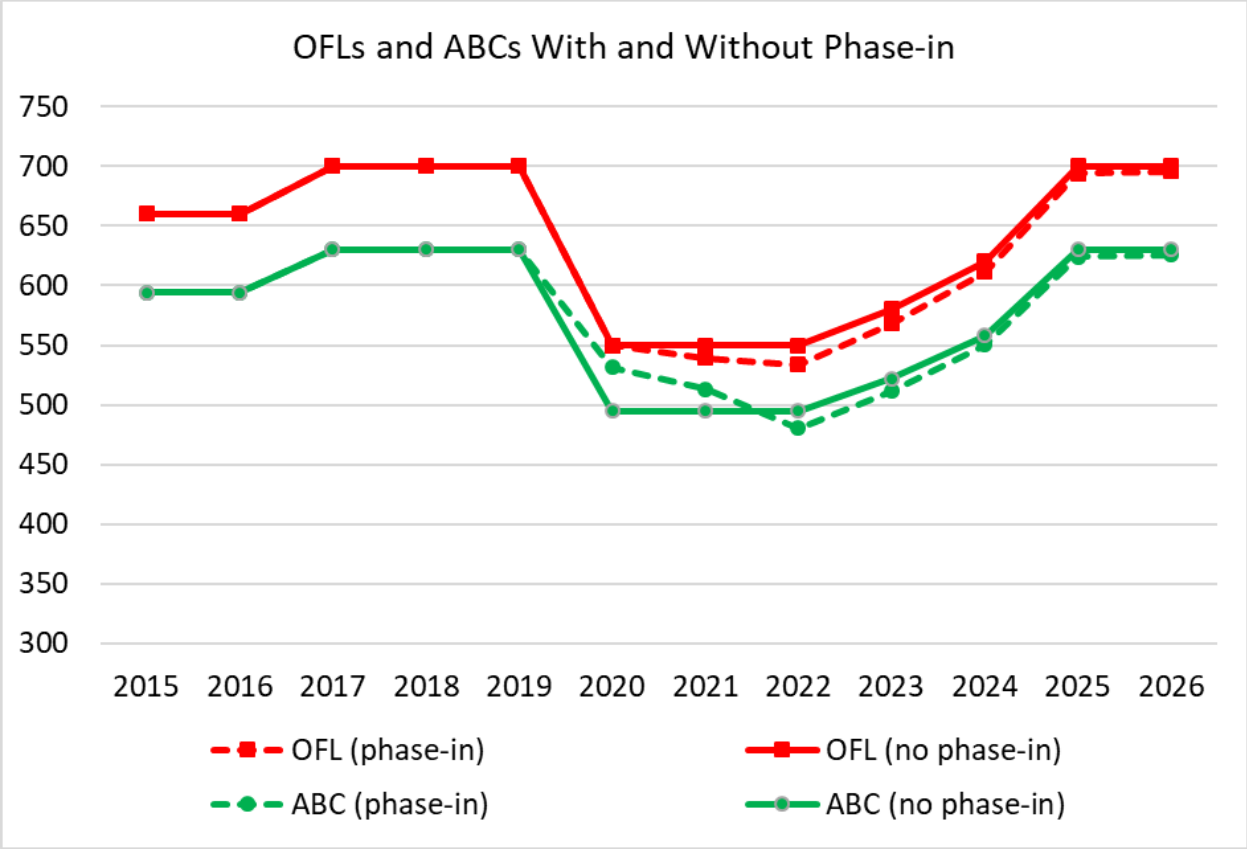


Figure 1: Hypothetical example of how changes in ABC could be phased in. In this example, a new assessment requires a reduction in the OFL and ABC in 2020. The Council has chosen to phase in the reduction in the ABC, but it must still be less than the new OFL. New projections are done to account for higher expected catch levels during phase-in, which adjust the new OFL trajectory down, which leads to a slightly lower ABC in the years following the phase-in. Taken from Holland, et. al., 2020.

Questions/Considerations for the Committee:

The PDT is concerned that the example shown above would not be realistic for the groundfish fishery. The PDT has developed some draft alternative examples based on Gulf of Maine cod and white hake. The goal is to provide relevant examples to illustrate the potential issues for the Committee's discussion and for further analysis by the PDT.

Gulf of Maine Cod

Gulf of Maine (GOM) cod is an example of a stock in a rebuilding plan. It is not uncommon to see a decline in B for a stock in a rebuilding plan if either fishing mortality (F) was higher than expected, recruitment (R) was lower than expected, or our understanding of the stocks status changed. In this example, a new assessment requires a reduction in the OFL and ABC in year 2 of the projections (the first year of the new specifications).

When using either average ABC or median ABC values to determine the phased-in ABCs, we would first need to confirm that the first specification year would not allow overfishing (i.e., $F>F_{MSY}$). This may be less likely to occur using the median ABC than the average ABC. In this phased-in ABC example, $95\%F_{MSY}$, $75\%F_{MSY}$ and $65\%F_{MSY}$ are used to specify the phased-in ABCs, but a different F could be defined if desired.

Table 2 Example of ABC reduction (relative to the bridge year) with projection indicating rebuilding using GOM cod (F_{MSY} = 0.18) as an example.

	$75\%F_{MSY}$		Phased Based on $\%F_{MSY}$			Phased Based on 3 yr avg			Phased Based on 3 yr median		
Year	F	catch	$\%F_{MSY}$	F	catch	$\%F_{MSY}$	F	catch	$\%F_{MSY}$	F	catch
Bridge yr 1	0.459	3,767	-	0.459	3,767	-	0.459	3,767	-	0.459	3,767
spec yr 2	0.135	1,249	95%	0.171	1,559	97%	0.175	1,594	91%	0.164	1,503
spec yr 3	0.135	1,503	75%	0.135	1,465	82%	0.148	1,594	77%	0.138	1,503
spec yr 4	0.135	2,030	65%	0.117	1,740	60%	0.108	1,594	56%	0.100	1,503
outyear 5	0.135	2,854	65%	0.117	2,487	41%	0.073	1,594	38%	0.068	1,503
outyear 6	0.135	3,752	65%	0.117	3,311	29%	0.053	1,594	27%	0.049	1,503

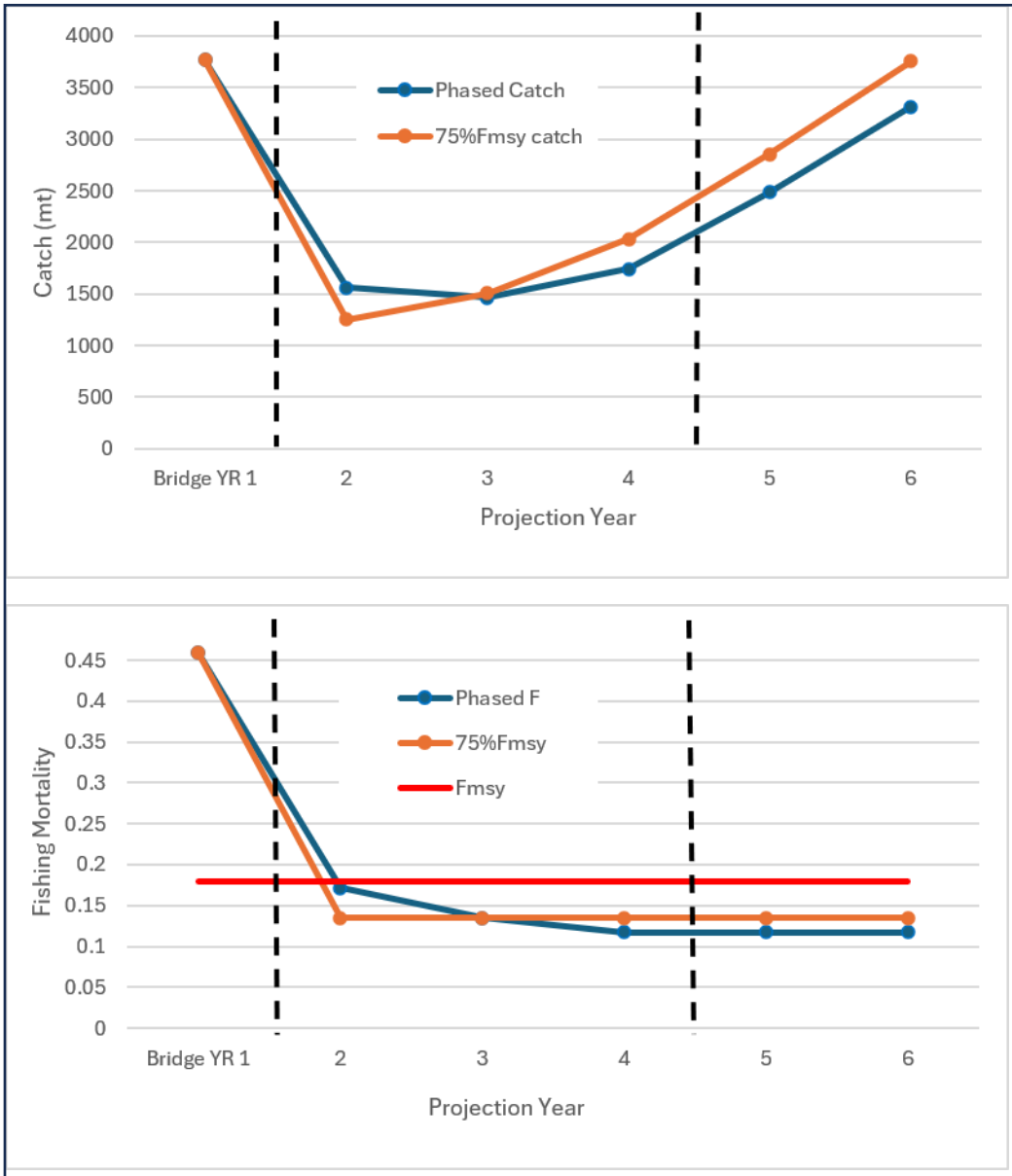
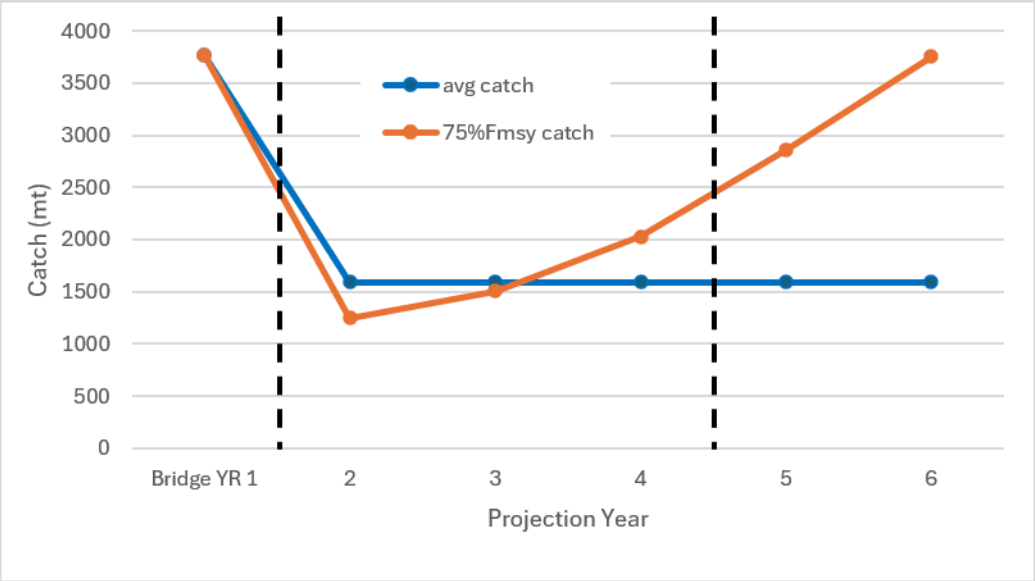


Figure 2: Hypothetical example of how changes in ABC for GOM cod could be phased in using $\%F_{MSY}$. The top figure shows catch in mt and the bottom figure shows F. New projections are made to account for higher expected catch levels during phase-in period, which adjust the new catch trajectory down and leads to a slightly lower ABC in the years following the phase-in.



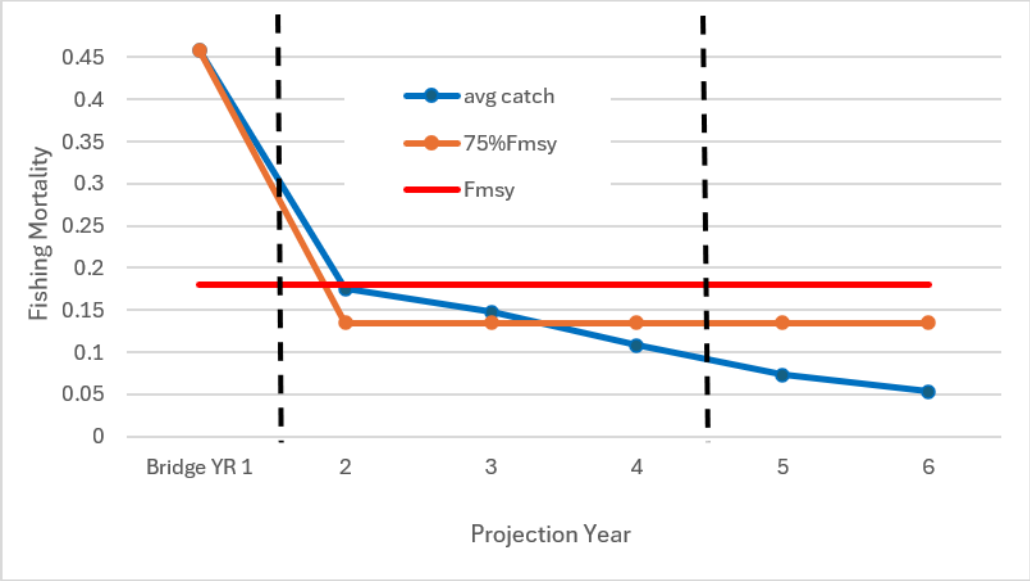


Figure 3: Hypothetical example of how changes in ABC for GOM cod could be phased in using the 3-year average catch. In this example, a new assessment requires a reduction in the OFL and ABC in year 2 of the projections (the first year of the new specifications). The top figure shows catch in mt and the lower figure shows F. New projections are done to account for higher expected catch levels during phase-in, which adjust the new catch trajectory down, which leads to a slightly lower ABC in the years following the phase-in. A plot using median catch would look similar.

White Hake

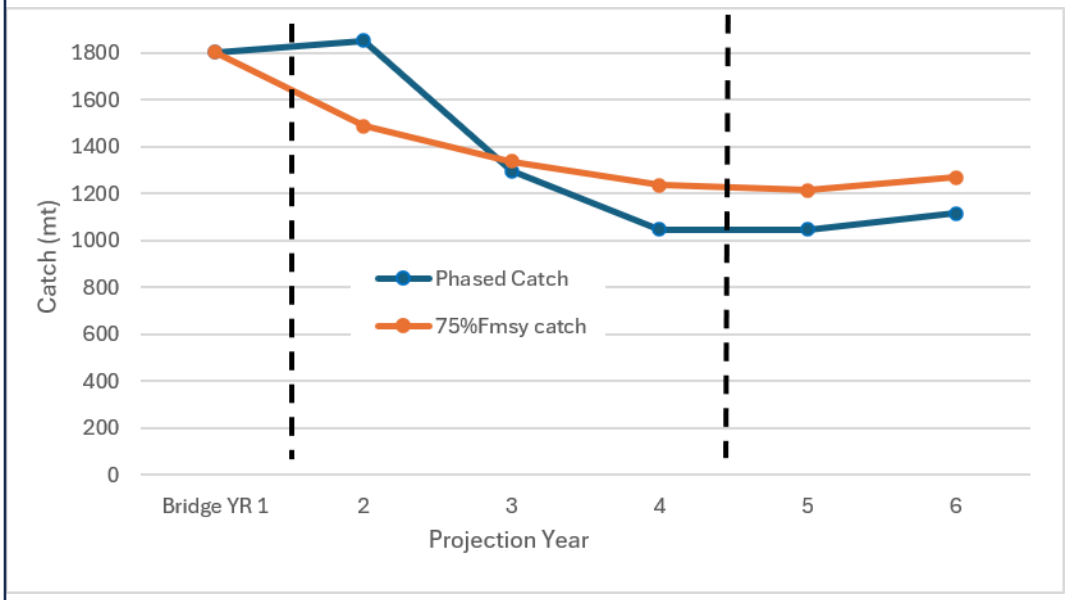
Reduction in the projections for a healthy stock can occur if recruitment at the end of the model time series is low (year classes in the pipeline) and/or the stock is above SSB_{MSY} and the fishery is fishing the stock down to the SSB_{MSY} reference point. In this example, a new assessment requires a reduction in the OFL and ABC in year 2 of the projections (the first year of the new specifications).

When using either average ABC or median ABC values to determine the phased-in ABCs, we would first need to confirm that the first specification year would not allow overfishing (i.e., $F>F_{MSY}$). This may be less likely to occur using the median ABC than the average ABC. In this phased-in ABC example, $95\%F_{MSY}$, $75\%F_{MSY}$ and $65\%F_{MSY}$ are used to specify the phased-in ABCs, but a different F could be defined if desired.

Phasing in a reduction did not work well when the projections showed a continuing decline. This results in more variable catch advice or a larger reduction in the first year of specifications.

Table 3 Example of ABC reduction (relative to the bridge year) within the projection (White Hake, F_{MSY} = 0.176).

	$75\%F_{MSY}$		Phased Based on $\%F_{MSY}$			Phased Based on 3 yr avg		
Year	F	catch	$\%F_{MSY}$	F	catch	$\%F_{MSY}$	F	catch
Bridge yr 1	0.145	1,802	-	0.145	1,802	-	0.145	1,802
spec yr 2	0.132	1,488	95%	0.1672	1,853	68%	0.119	1,354
spec yr 3	0.132	1,337	75%	0.132	1,295	75%	0.132	1,354
spec yr 4	0.132	1,236	65%	0.1144	1,046	82%	0.144	1,354
outyear 5	0.132	1,213	65%	0.1144	1,046	85%	0.149	1,354
outyear 6	0.132	1,270	65%	0.1144	1,115	82%	0.144	1,354



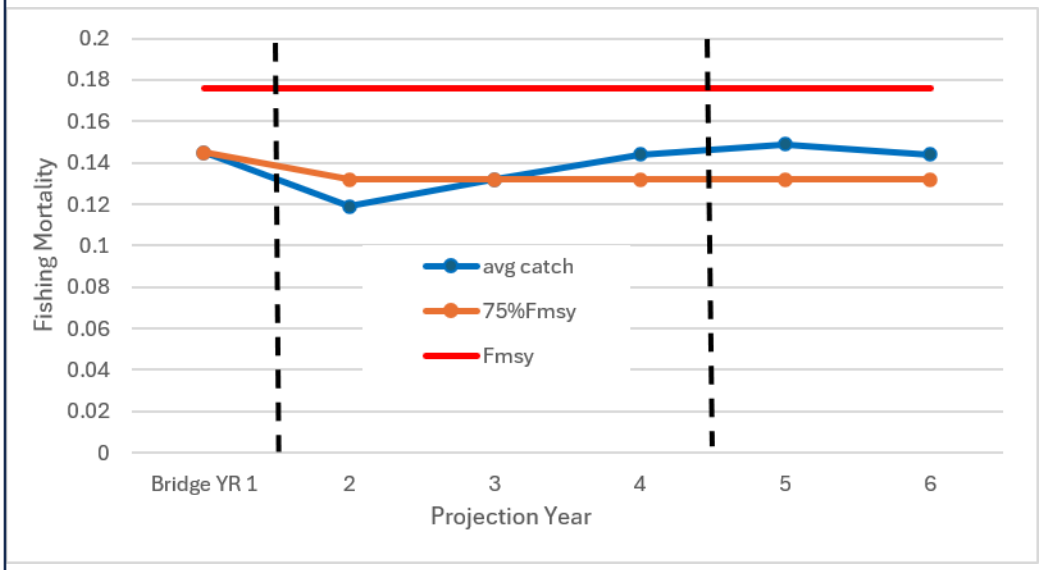
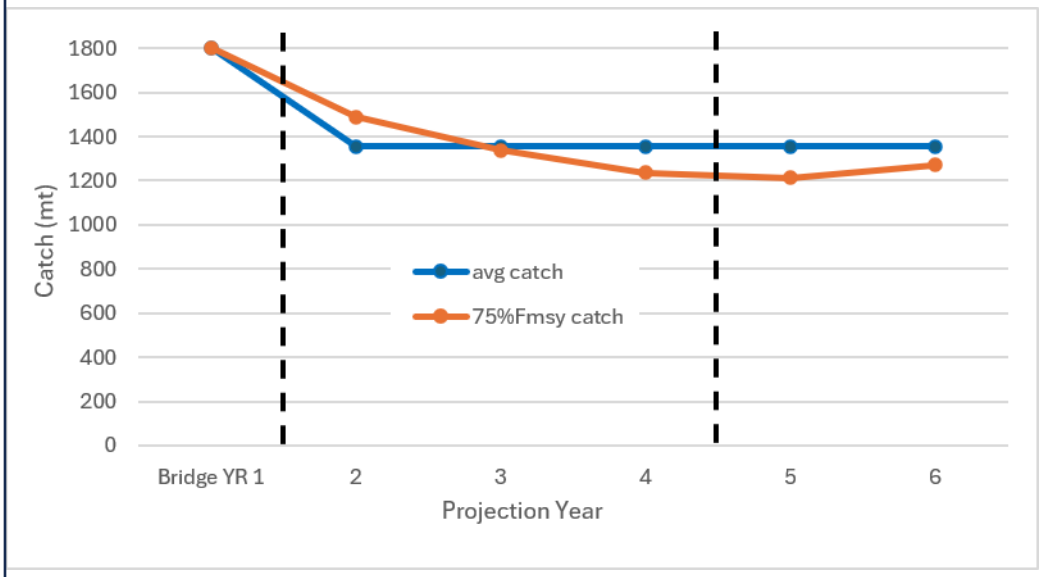


Figure 4: Hypothetical example of how changes in ABC for white could be phased in using $\%F_{MSY}$. In this example, a new assessment requires a reduction in the OFL and ABC in year 2 of the projections (the first year of the new specifications). The top figure shows catch in mt and the lower figure shows F. New projections are made, which results in more variable catch advice or a larger reduction in the first year of specifications.



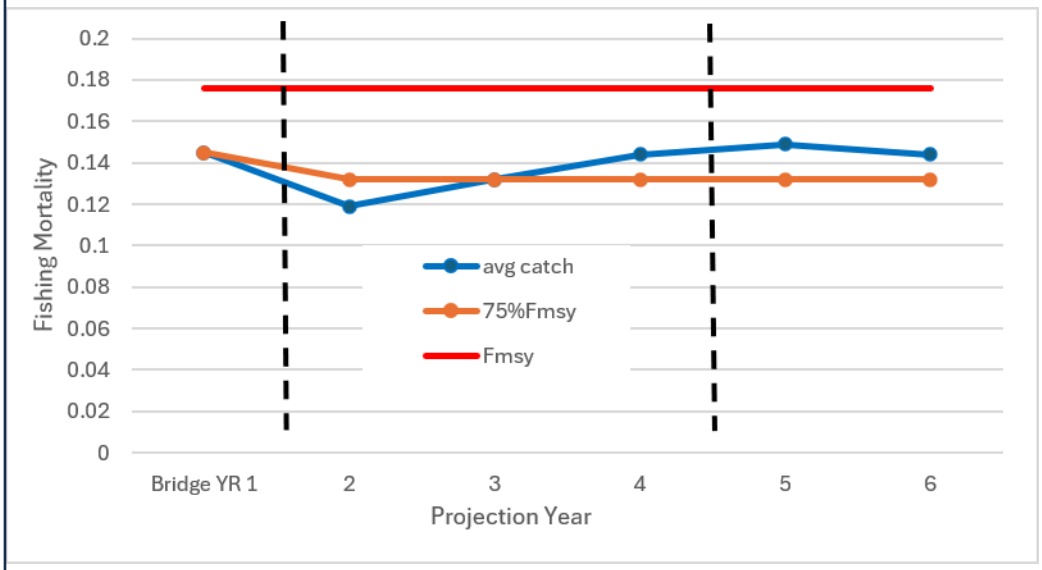


Figure 5: Hypothetical example of how changes in ABC for white hake could be phased in using the 3-year average catch. In this example, a new assessment requires a reduction in the OFL and ABC in year 2 of the projections (the first year of the new specifications). The top figure shows catch in mt and the bottom figure shows F. New projections are made, which results in more variable catch advice or a larger reduction in the first year of specifications. A plot using median catch would look similar.

This alternative addresses flexibility allowed under the revised NS1 guidelines. Phase-in of the ABC is an option the Council can consider to address the social and economic impacts from management changes. Adopting this flexibility does not require the Council to phase in all ABC changes, nor does adopting one approach prevent the Council from choosing a more restrictive schedule for an ABC phase-in. When considering whether to phase in an ABC change, the Council would compare the risk to the stock against the expected social and economic benefits of the alternative ABC. The Council may consult with its SSC and advisory panels (AP) to help develop a rationale and implementation plan for using a phase-in.

Benefits of Allowing Phase-in

- Stability: Phasing in changes to a new ACL helps create more stable fisheries. Implementing large changes in ACLs due to new scientific information about the status of a stock may have greater negative effects on the fishing industry than spreading the change out over time. Spreading out the change provides some stability by allowing the fishing industry time to plan for the best ways to adapt to the reductions.
- Reductions in management uncertainty: Management uncertainty (which is a function of the ability of managers to control catch) decreases when quotas vary less from year to year (Patrick et al. 2013). Further, phasing in ACL changes can improve regulatory effectiveness. Implementing large catch changes over a few years gives managers an opportunity to evaluate and, if needed, adjust management actions as they learn how the fishery responds to the regulatory change.

Risks of Allowing Phase-in

Allowing phase-in has the potential to increase biological risk by allowing overfishing to occur inadvertently, which could lead to depletion or slow rebuilding of stocks. Risks of overfishing may be higher for some species or fisheries based on life-history characteristics, assessment frequency, data quality, and characteristics of the management system.

- Life history characteristics: Phase-in could be riskier for short-lived stocks with high rates of natural mortality.
- Stock structure and spatial dynamics of fish and fisheries: For species that school or contract their distribution as biomass declines (allowing catch per unit effort [CPUE] to remain high as the stock is depleted), phase-in provisions could increase the risk of overfishing.
- Assessment variability and frequency: If stock assessments are infrequent or subject to high uncertainty, phasing in decreases in catch may increase the risk of overfishing. Recruitment assumptions may be a major source of uncertainty if projected years' biomass is heavily dependent on assumed recruitment not seen in current data.
- Phasing in decreases without phasing in increases: Phasing in decreases without phasing in increases could increase the risk of inadvertent overfishing and depletion over the long term.
- Phasing in continuing declines: Phasing in a reduction does not work well when projections show a continuing decline. This results in more variable catch advice or a larger reduction in the first year of specifications.

Rationale: Large changes in catch limits due to new scientific information about the status of a stock may have negative effects on the fishing industry and fishing communities. Phasing in changes to catch limits reduces the immediate magnitude of the change and should help the fishing industry adapt to, and plan for, the future by creating more stable fisheries over the short term, while still preventing overfishing.

Questions/Considerations for the Committee:

- This section is still in development.
- In 2016, NMFS published a final rule implementing revised National Standard (NS) Guidelines for NS 1, 3, and 7. There is also an FAQ for the revisions and a set of responses to questions asked by the Council Coordinating Committee (CCC).

    - The revised guidelines allow Councils to develop an ABC CR that would phase in changes to the ABC over a period of time not to exceed 3 years, as long as overfishing is prevented.
- In 2020, NMFS published NS 1 Technical Guidance for Designing, Evaluating, and Implementing Carry-over and Phase-in Provisions.
- What should be the criteria for deciding when to phase in decreases in an ABC?
    - For example, the SAFMC considered phase-in for ABCs when the new ABC is less than 60%, 70%, or 80% of the existing ABC.
- Should phase-in be capped at 2 years or 3 years?
- Should phase-in be permitted for stocks that are overfished and/or rebuilding?
    - The overriding goal for such stocks is to rebuild stocks in as short a time as possible.
- There is no MSA requirement to specify in an FMP when a Council would phase in an ABC increase, but is the Council interested in adding guidance to the FMP for phasing in ABC increases?
    - When future years' biomass is heavily dependent on assumed recruitment that has not yet been seen in data, should ABC increases be phased-in to minimize the risk of over-reliance on recruitment that might not occur?
    - 50 CFR 600.310(e)(3)(iii)(A) and (B) discuss setting optimum yield (OY) by reducing maximum sustainable yield (MSY) to identify the greatest benefit to the Nation and account for economic, ecologic, and social factors.

4.1.4 **Alternative 4 – ABC Carryover**

Alternative 4 would add a provision to the FMP to allow for carrying over a portion of an uncaught ACL in a fishing year by increasing the ABC for the following fishing year. The SSC could increase the ABC based on the increased stock abundance that results from an ACL underage. The ABC CR would be revised to specify when ABC carry-over could and could not be used and how the carry-over CR prevents overfishing. The SSC would specify the new ABC and carryover would be adjusted for biological factors such as natural mortality and growth.

This alternative addresses flexibility allowed under the revised NS1 guidelines. Sector Annual Catch Entitlement (ACE) carry-over, up to 10 percent of each ACE, is permitted under existing rules, using the buffer between the ACL and ABC. This can result in less than the full 10 percent being carried over if adding the carried-over ACE to the ACL would exceed the ABC. However, ACE carryover is not permitted for Georges Bank (GB) yellowtail flounder or unallocated stocks; and there is no permitted carryover of underharvest of recreational sub-ACLs or common pool sub-ACLs. Per the NS1 guidance, an ABC control rule may include provisions to increase the ABC in the next year to address an ACL underage.

Rationale: A carry-over ABC control rule establishes a policy that allows Councils to carry over some portion of an ACL underage into the next year by adjusting the ABC upwards following an ACL underharvest to account for the increased stock abundance that results from an ACL underage. Carry-over is designed to relieve the pressure to catch the entire ACL each year and reduce the incentive to fish in unsafe situations. Carry-over also reduces the likelihood that an ACL is exceeded by minimizing incentives to catch every pound in a given fishing year to avoid underharvest.

Questions/Considerations for the Committee:

- This section is still in development.

- In 2016, NMFS published a final rule implementing revised National Standard (NS) Guidelines for NS 1, 3, and 7. There is also an FAQ for the revisions and a set of responses to questions asked by the Council Coordinating Committee (CCC).
    - The revised guidelines allow Councils to develop an ABC CR that would carry over some of the unused portion of the ACL from a year to increase the ABC for the next year, based on increased stock abundance resulting from the fishery harvesting less than the full ACL.
- In 2020, NMFS published NS 1 Technical Guidance for Designing, Evaluating, and Implementing Carry-over and Phase-in Provisions.
- What are the criteria for determining when a portion of the unharvested ACL may be carried over?
    - Examples:
        - Stock status is known, and the stock is neither overfished nor subject to overfishing.
        - OFL is known.
        - Biomass (B) exceeds the midpoint (i.e., 75%B_{MSY}) between B_{MSY} and the overfished threshold (50%B_{MSY}).
        - 3-year average of catch less than 3-year average of ACLs.
        - ABC decreases are not being phased in.
- Will the FMP need framework procedures for implementing carryover or can NMFS implement carryover when the criteria are met?
    - What would be the timing of carryover?
    - Sector carryover occurs months into the following fishing year.
- How much of the ACL may be carried over from one year to the next year's ABC?
    - The existing NE groundfish sector program allows sectors to carry over 10% of unused ACE.
    - Should ABC carryover be consistent?
    - The revised ABC still cannot exceed OFL.
- Should ABC be allowed to equal OFL or should some scientific uncertainty buffer be maintained?
    - It seems logical to maintain at least the buffer required by Council's Risk Policy.
    - Perhaps retain at least 50% of the original OFL-ABC buffer?
- Is carryover based on total ACL adding to the ABC, or individual sub-ACLs adding to individual sub-ABCs (i.e., only commercial and recreational groundfish)?
    - Recreational monitoring data is not as precise or accurate as sector monitoring.
    - ABC carryover should reflect the actual reduction in total removals, rather than underages within individual fishery components, to prevent sub-ACL underages from generating carryover when the total catch is near or above the overall ACL.
        - If at the sub-ACL level, how could carryover limits be appliced to prevent the ABC from exceeding the OFL? (e.g., Sector ACE carryover cuts are applied equally.)
        - A common proportional reduction could be applied to all sub-ACL carryover. (This is similar to existing ACE carryover adjustments.)
- How is natural mortality (M) and stock growth considered in determining carryover?
    - Carryover should reflect the estimated increase in biomass (B) resulting from the underage, so natural mortality (M) and growth should be accounted for. This is particularly important for stocks with high M or short lifespans where much of the underage may not persist into the next year.
    - If we need to account for M and growth, then updated projections will be necessary.

4.1.5 **Alternative 5 – Guidance for Using Constant ABCs**

Alternative 5 would provide specific guidance for the SSC to use in determining when to use constant ABCs. The guidance would become part of the ABC CRs. The guidance would include considerations for stocks in a rebuilding plan, approaching an overfished condition, or recently rebuilt, and levels of uncertainty in the projection; and would specify which years of the projected ABCs could be considered for being held constant.

Typically, constant ABC means holding year 1 of the projected ABCs constant when the ABCs in year 2 and 3 would otherwise increase. If recent recruitment is low, projections that are overly optimistic could overestimate SSB if drawn from a longer recruitment series.

Many groundfish assessments have declining trends in recruitment which tend to produce overly optimistic projections that occur when increases in recruitment within the projections were not realized in subsequent assessments. Keeping the first year constant is a proxy for accounting for uncertainty associated with the assumed increase in recruitment within the projection (i.e., "paper fish" assumption) in the short term. Increases in catch in years 2 and 3 of the projection tend to be due to the assumed increases in recruitment in the projections. Most groundfish projections make the same assumption as the projections for biological reference points (BRP) for the recruitment assumption. An alternative to this approach of application in the ABC control rules would be for the stock assessments to develop different projections for the short term which can have different assumptions relative to BRP projections in order to better characterize the likely recruitment in the short term.

Draft list for when to consider constant ABCs:
- When a stock is in a rebuilding plan and particularly when near the end of its rebuilding plan.
- When a stock is approaching an overfished condition.
- When a high level of uncertainty in the projections is anticipated.
- When a stock is recently considered rebuilt to help to maintain that status in the specifications period.

Rationale: The SSC has used constant ABCs on multiple occasions and has made ad hoc decisions on which year of the projections to hold constant and how long to hold that ABC constant. Reflecting on its work following the 2022 management track assessments, the plan development team (PDT) developed a draft list of criteria to consider when deciding to develop constant ABCs. If recent recruitment is low, projections that are overly optimistic could overestimate SSB if drawn from a longer recruitment series. Many groundfish assessments have declining trends in recruitment which tend to produce overly optimistic projections that occur when increases in recruitment within the projections were not realized in subsequent assessments.

Questions/Considerations for the Committee:

- This section is still in development.
- On November 30, 2022, the PDT sent a memorandum to the Committee titled Follow-up Draft Alternatives for Framework Adjustment 65 which included a section on ABC CRs.
- The current ABC CRs generally use constant F to set OFLs and ABCs.
- Constant catch (e.g., constant ABC) facilitates stable catches, but setting an appropriate level is difficult. Constant catch leads to high F at low B.
- When is it appropriate to use a constant ABC?
    - When a stock is in a rebuilding plan and particularly when near the end of its rebuilding plan.
    - When a stock is approaching an overfished condition.
    - When a high level of uncertainty in the projections is anticipated.

    - When a stock is recently considered rebuilt to help to maintain that status in the specifications period.
- Which ABC should be held constant?
    - Depending on risk tolerance, might use year 1 (least risky) or a later year or a mean of 2-3 years.
    - With 6-year projections to set specs for 5 years, the focus should be on holding an early year ABC constant due to increased risk of paper fish from recruitment assumptions.
        - The first year (i.e., earliest year of projection when projection is most reliable) may be the most defensible option because it is based on the near-term projection which relies less on projected recruitment.
    - The lowest ABC in a set of projections?
    - An average of the ABCs in the set of projections (so long as it never exceeds the OFL in any year)?
- What about when the ABC is increasing or decreasing or both in a series of projections?
    - Holding year 1 constant may be appropriate when ABC increases after year 1 and those increases are driven by uncertain recruitment or other optimistic projection assumptions.
    - Holding year 1 constant may not be appropriate when ABCs are projected to decrease after year 1 because doing so could maintain catch above levels supported by projected conditions.
    - Holding year 1 constant may still make sense if the ABC increases then decreases, as long as the ABC remains less than the OFL in every year.
    - Holding year 1 constant is not recommended if the ABC decreases then increases.