



SECOND BIGEYE TUNA MANAGEMENT WORKSHOP (BMW02)

1 – 2 October 2026

Honolulu, Hawaii (Hybrid)

SUPPORTING INFORMATION: HARVEST CONTROL RULE PARAMETERS AND PLOTS

WCPFC-BMW02-2026-IP01

28 September 2026

SPC-OFP¹

¹ Oceanic Fisheries Programme, The Pacific Community

1 Introduction

This document contains the parameters and plots of the harvest control rules (HCRs) used in the bigeye management procedure evaluations (SPC-OFP, 2026b).

The parameters for each HCR used in evaluations are given in Table 1. Corresponding plots presented in Figure 1 to Figure 24.

Two HCR formulations are described, the difference being the height of the bottom step (SPC-OFP, 2026a,c).

The HCRs are grouped under the associated MP, with three pairs of HCRs for each MP. Note that the HCR output for the FAD-associated purse seine fisheries is EEZ FAD open period, not closed period. A ratio of 3 months EEZ and 5 months high seas FAD closure, rounded to the nearest quarter month (week), and converted to open period, is used in the evaluations.

References

- SPC-OFP (2026a). Bigeye tuna management procedure and harvest control rule design. Technical Report BMW02-2026-WP03, Honolulu, Hawaii, 1 - 2 October 2026.
- SPC-OFP (2026b). Bigeye tuna management procedure evaluations for BMW02. Technical Report BMW02-2026-WP05, Honolulu, Hawaii, 1 - 2 October 2026.
- SPC-OFP (2026c). Shape of the harvest control rules. Technical Report BMW02-2026-WP06, Honolulu, Hawaii, 1 - 2 October 2026.

2 Harvest control rule parameters

Table 1: Harvest control rule parameters for each of the three HCR pairs, for each MP. The HCRs in each HCR pair have the same input parameters (estimated SB/SB₂₀₁₂₋₂₀₁₅). The output parameters are 000s tonnes of bigeye catch for the longline fisheries and EEZ FAD open period in months.

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum
MP 5 (ITRP HCR form 1)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.76	1.21	1.79
			Longline catch (000s t)	21.00	52.50	52.50	57.75
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.79
			Longline catch (000s t)	22.00	55.00	55.00	60.50
		EEZ FAD open period (months)	4.20	10.50	10.50	11.55	
LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.81		
	Longline catch (000s t)	23.00	57.50	57.50	63.25		
	EEZ FAD open period (months)	3.60	9.00	9.00	9.90		
MP 6 (60% > ITRP HCR form 1)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.30	1.88
			Longline catch (000s t)	18.00	45.00	45.00	49.50
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.30	1.88
			Longline catch (000s t)	19.00	47.50	47.50	52.25
		EEZ FAD open period (months)	4.20	10.50	10.50	11.55	
LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.84	1.29	1.86		
	Longline catch (000s t)	21.00	52.50	52.50	57.75		
	EEZ FAD open period (months)	3.60	9.00	9.00	9.90		
MP 7 (70% > ITRP HCR form 1)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.91	1.35	1.92
			Longline catch (000s t)	16.00	40.00	40.00	44.00
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.91	1.35	1.93
			Longline catch (000s t)	17.00	42.50	42.50	46.75
		EEZ FAD open period (months)	4.20	10.50	10.50	11.55	
LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.93	1.37	1.94		
	Longline catch (000s t)	18.00	45.00	45.00	49.50		
	EEZ FAD open period (months)	3.60	9.00	9.00	9.90		
MP 8 (uTRP HCR form 1)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.88	1.32	1.90
			Longline catch (000s t)	17.00	42.50	42.50	46.75
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	18.00	45.00	45.00	49.50

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum
		LL favoured	EEZ FAD open period (months)	4.20	10.50	10.50	11.55
			Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.90	1.34	1.92
			Longline catch (000s t)	19.00	47.50	47.50	52.25
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
MP 9 (ITRP HCR form 1)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.79
			Longline catch (000s t)	25.00	62.50	62.50	68.75
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.80
			Longline catch (000s t)	26.00	65.00	65.00	71.50
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.81
			Longline catch (000s t)	27.00	67.50	67.50	74.25
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
MP 10 (60% > ITRP HCR form 1)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.30	1.88
			Longline catch (000s t)	22.00	55.00	55.00	60.50
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.30	1.88
			Longline catch (000s t)	23.00	57.50	57.50	63.25
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.84	1.29	1.86
			Longline catch (000s t)	25.00	62.50	62.50	68.75
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
MP 11 (70% > ITRP HCR form 1)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.91	1.35	1.92
			Longline catch (000s t)	20.00	50.00	50.00	55.00
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.92	1.36	1.93
			Longline catch (000s t)	21.00	52.50	52.50	57.75
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.93	1.37	1.94
			Longline catch (000s t)	22.00	55.00	55.00	60.50
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
MP 12 (uTRP HCR form 1)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.88	1.33	1.90
			Longline catch (000s t)	21.00	52.50	52.50	57.75
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	22.00	55.00	55.00	60.50
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum	
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 23.00 3.60	0.90 57.50 9.00	1.34 57.50 9.00	1.92 63.25 9.90	
MP 13 (ITRP HCR form 1)	TLL incl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 17.00 4.80	0.77 42.50 12.00	1.22 42.50 12.00	1.80 46.75 12.00	
			Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 18.00 4.20	0.78 45.00 10.50	1.23 45.00 10.50	1.80 49.50 11.55
				LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 19.00 3.60	0.79 47.50 9.00	1.24 47.50 9.00
		FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 14.00 4.80	0.86 35.00 12.00	1.31 35.00 12.00	1.88 38.50 12.00	
			Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 16.00 4.20	0.83 40.00 10.50	1.28 40.00 10.50	1.86 44.00 11.55
				LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 17.00 3.60	0.85 42.50 9.00	1.29 42.50 9.00
MP 15 (70% > ITRP HCR form 1)	TLL incl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 12.00 4.80	0.91 30.00 12.00	1.36 30.00 12.00	1.93 33.00 12.00	
			Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 13.00 4.20	0.92 32.50 10.50	1.36 32.50 10.50	1.93 35.75 11.55
				LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 14.00 3.60	0.93 35.00 9.00	1.37 35.00 9.00
		FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 13.00 4.80	0.89 32.50 12.00	1.33 32.50 12.00	1.90 35.75 12.00	
			Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t) EEZ FAD open period (months)	0.68 14.00 4.20	0.89 35.00 10.50	1.34 35.00 10.50	1.91 38.50 11.55
				LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅ Longline catch (000s t)	0.68 16.00	0.87 40.00	1.32 40.00

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
MP 17 (ITRP HCR form 1)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.80
			Longline catch (000s t)	16.00	40.00	40.00	44.00
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.80
			Longline catch (000s t)	17.00	42.50	42.50	46.75
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
MP 18 (60% > ITRP HCR form 1)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.30	1.88
			Longline catch (000s t)	13.00	32.50	32.50	35.75
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.86	1.31	1.88
			Longline catch (000s t)	14.00	35.00	35.00	38.50
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
MP 19 (70% > ITRP HCR form 1)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.91	1.36	1.93
			Longline catch (000s t)	11.00	27.50	27.50	30.25
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.91	1.36	1.93
			Longline catch (000s t)	12.00	30.00	30.00	33.00
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
MP 20 (uTRP HCR form 1)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.93	1.37	1.94
			Longline catch (000s t)	13.00	32.50	32.50	35.75
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.90
			Longline catch (000s t)	12.00	30.00	30.00	33.00
			EEZ FAD open period (months)	4.80	12.00	12.00	12.00
MP 20 (uTRP HCR form 1)	TLL excl. HW	Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	13.00	32.50	32.50	35.75
			EEZ FAD open period (months)	4.20	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.90	1.34	1.92
			Longline catch (000s t)	14.00	35.00	35.00	38.50
			EEZ FAD open period (months)	3.60	9.00	9.00	9.90

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum
MP 21 (ITRP HCR form 2)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.76	1.21	1.79
			Longline catch (000s t)	32.87	52.50	52.50	57.75
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.79
			Longline catch (000s t)	32.87	55.00	55.00	60.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.81
			Longline catch (000s t)	32.87	57.50	57.50	63.25
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 24 (uTRP HCR form 2)	WCPO excl. SIDS	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.88	1.32	1.90
			Longline catch (000s t)	32.87	42.50	42.50	46.75
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	32.87	45.00	45.00	49.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.90	1.34	1.92
			Longline catch (000s t)	32.87	47.50	47.50	52.25
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 25 (ITRP HCR form 2)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.79
			Longline catch (000s t)	40.52	62.50	62.50	68.75
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.80
			Longline catch (000s t)	40.52	65.00	65.00	71.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.81
			Longline catch (000s t)	40.52	67.50	67.50	74.25
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 28 (uTRP HCR form 2)	WCPO	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.88	1.33	1.90
			Longline catch (000s t)	40.52	52.50	52.50	57.75
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	40.52	55.00	55.00	60.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.90	1.34	1.92
			Longline catch (000s t)	40.52	57.50	57.50	63.25
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
		FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.80
			Longline catch (000s t)	30.57	42.50	42.50	46.75

MP	Scenario	HCR pair		Limit	Step start	Step end	Maximum
MP 29 (ITRP HCR form 2)	TLL incl. HW		EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.80
			Longline catch (000s t)	30.57	45.00	45.00	49.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.79	1.24	1.82
			Longline catch (000s t)	30.57	47.50	47.50	52.25
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 32 (uTRP HCR form 2)	TLL incl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.90
			Longline catch (000s t)	30.57	32.50	32.50	35.75
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.34	1.91
			Longline catch (000s t)	30.57	35.00	35.00	38.50
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.87	1.32	1.89
			Longline catch (000s t)	30.57	40.00	40.00	44.00
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 33 (ITRP HCR form 2)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.77	1.22	1.80
			Longline catch (000s t)	28.86	40.00	40.00	44.00
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.78	1.23	1.80
			Longline catch (000s t)	28.86	42.50	42.50	46.75
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.79	1.24	1.82
			Longline catch (000s t)	28.86	45.00	45.00	49.50
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90
MP 36 (uTRP HCR form 2)	TLL excl. HW	FAD favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.90
			Longline catch (000s t)	28.86	30.00	30.00	33.00
			EEZ FAD open period (months)	8.00	12.00	12.00	12.00
		Intermediate	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.89	1.33	1.91
			Longline catch (000s t)	28.86	32.50	32.50	35.75
			EEZ FAD open period (months)	8.00	10.50	10.50	11.55
		LL favoured	Estimated SB/SB ₂₀₁₂₋₂₀₁₅	0.68	0.90	1.34	1.92
			Longline catch (000s t)	28.86	35.00	35.00	38.50
			EEZ FAD open period (months)	8.00	9.00	9.00	9.90

3 Harvest control rule plots

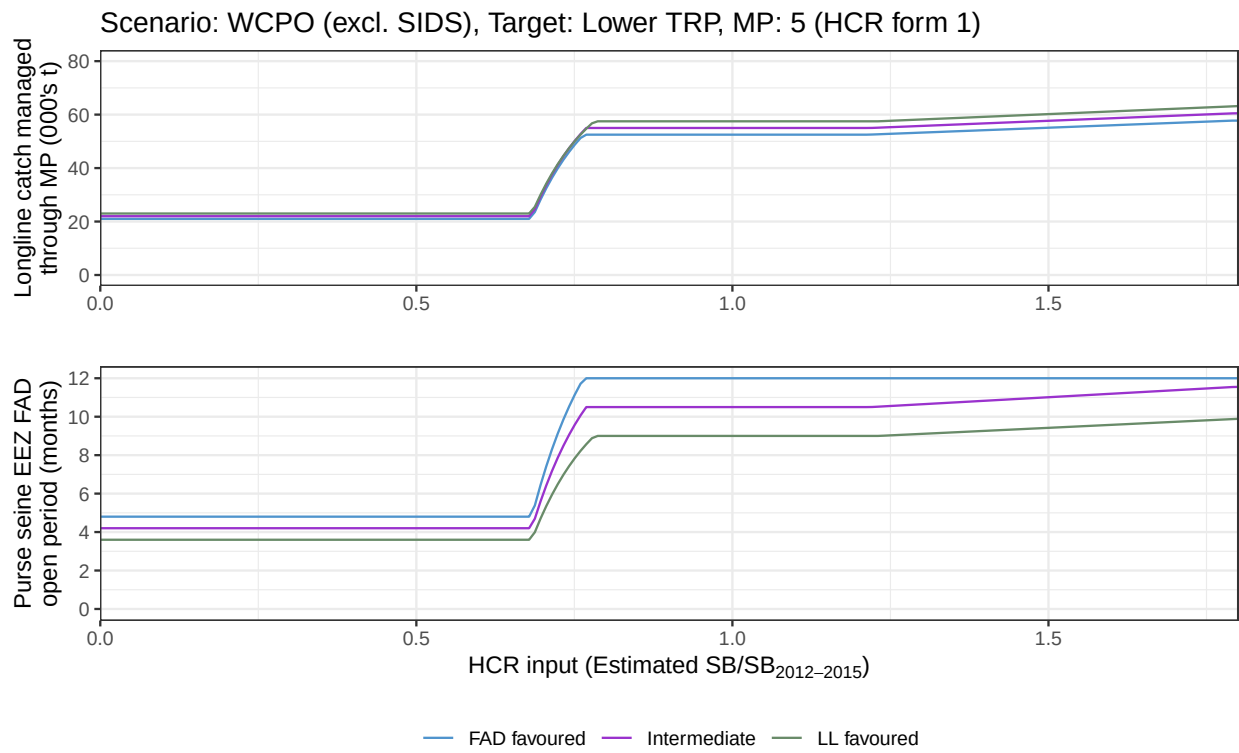


Figure 1

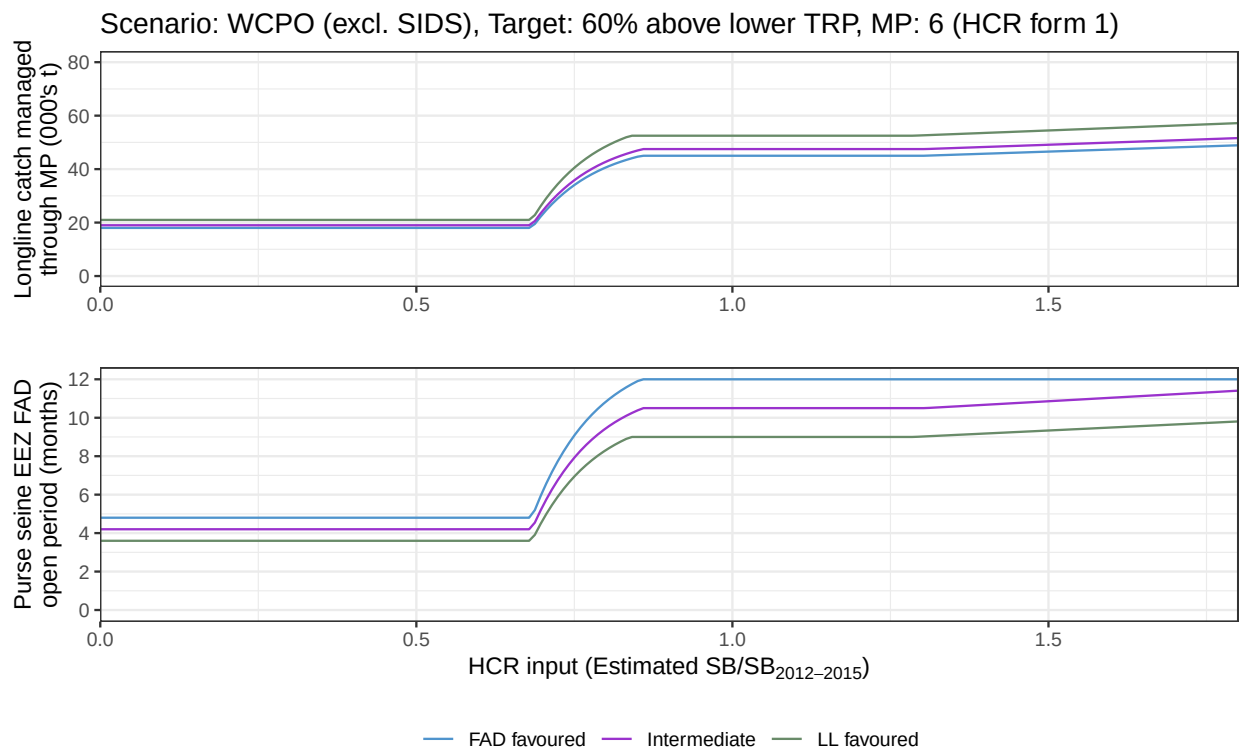


Figure 2

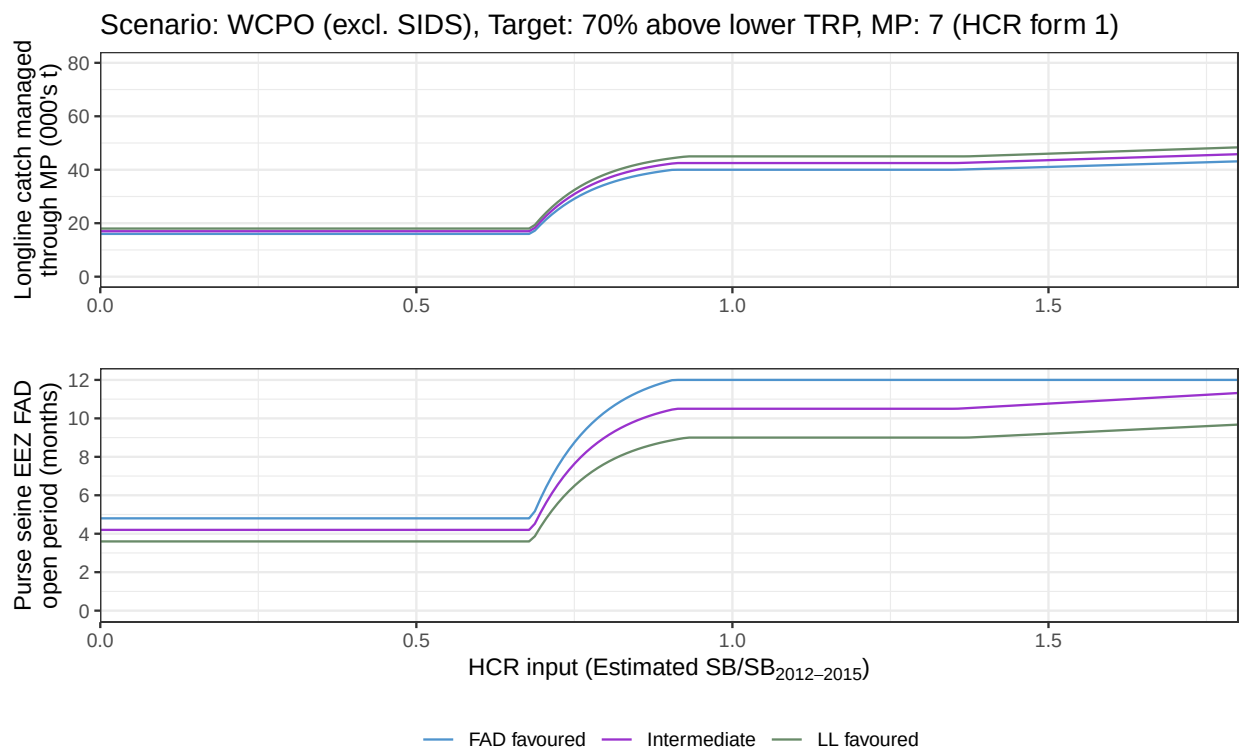


Figure 3

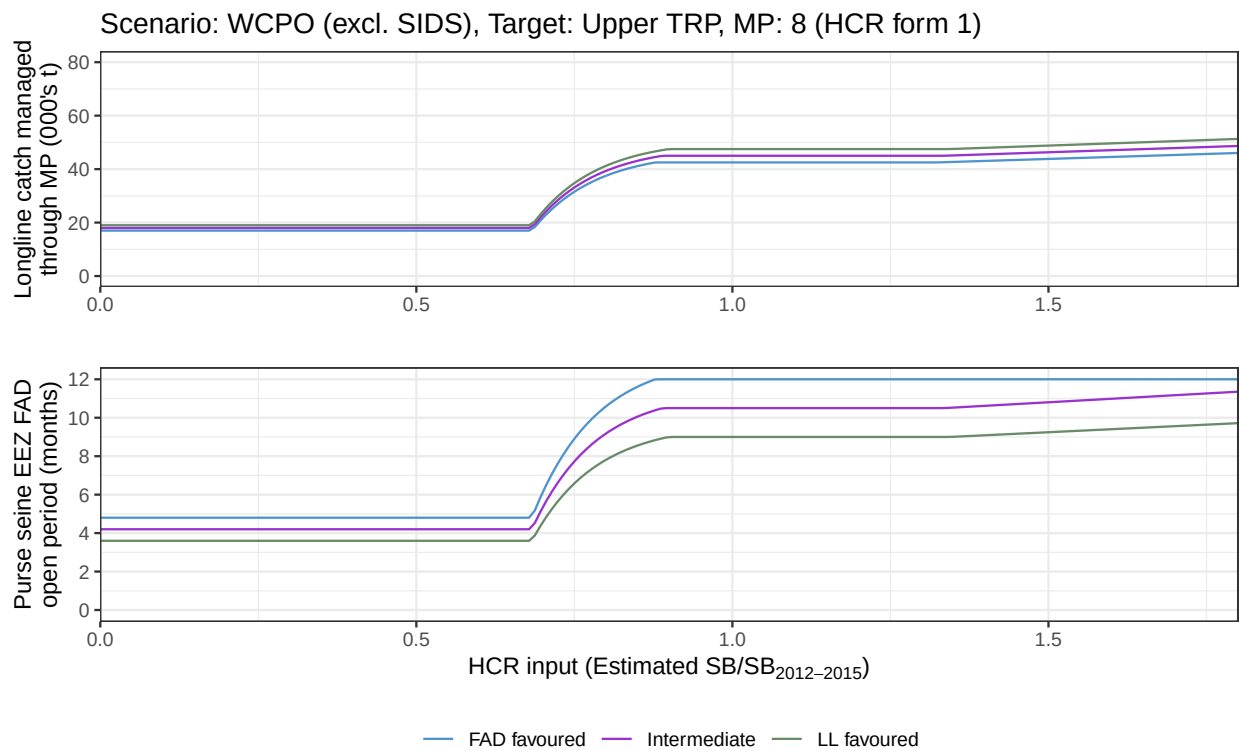


Figure 4

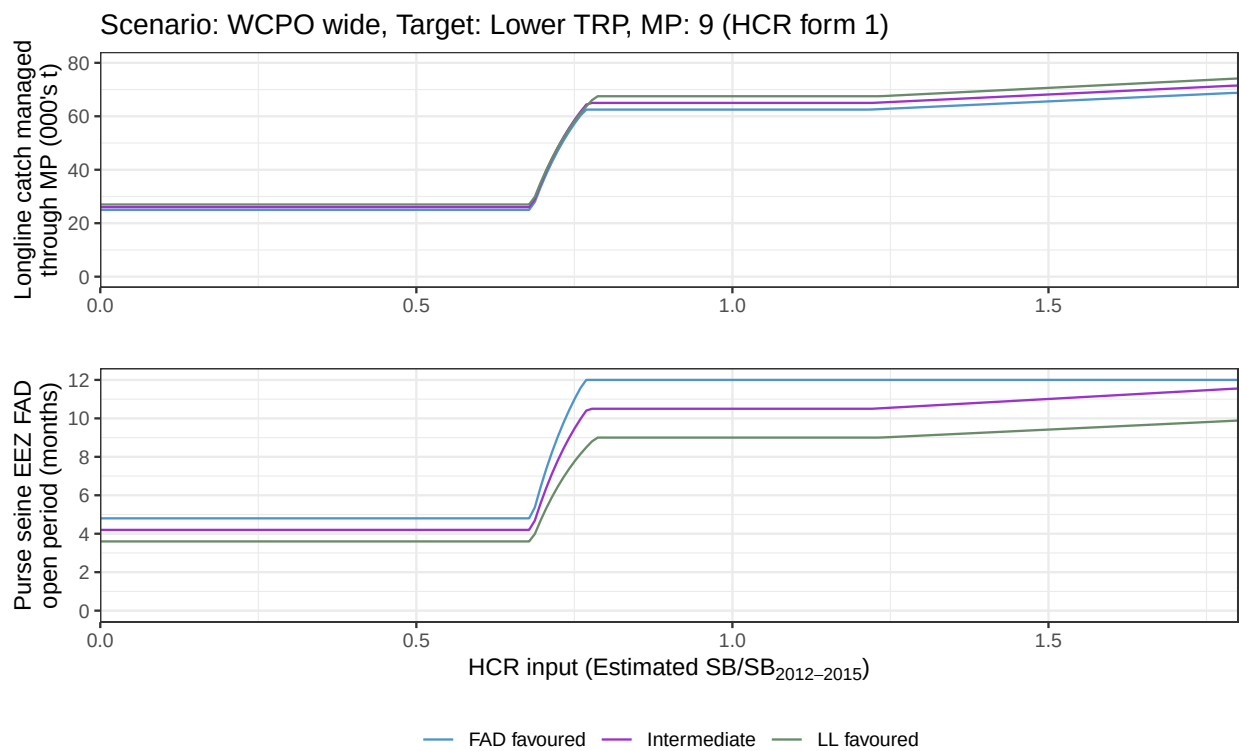


Figure 5

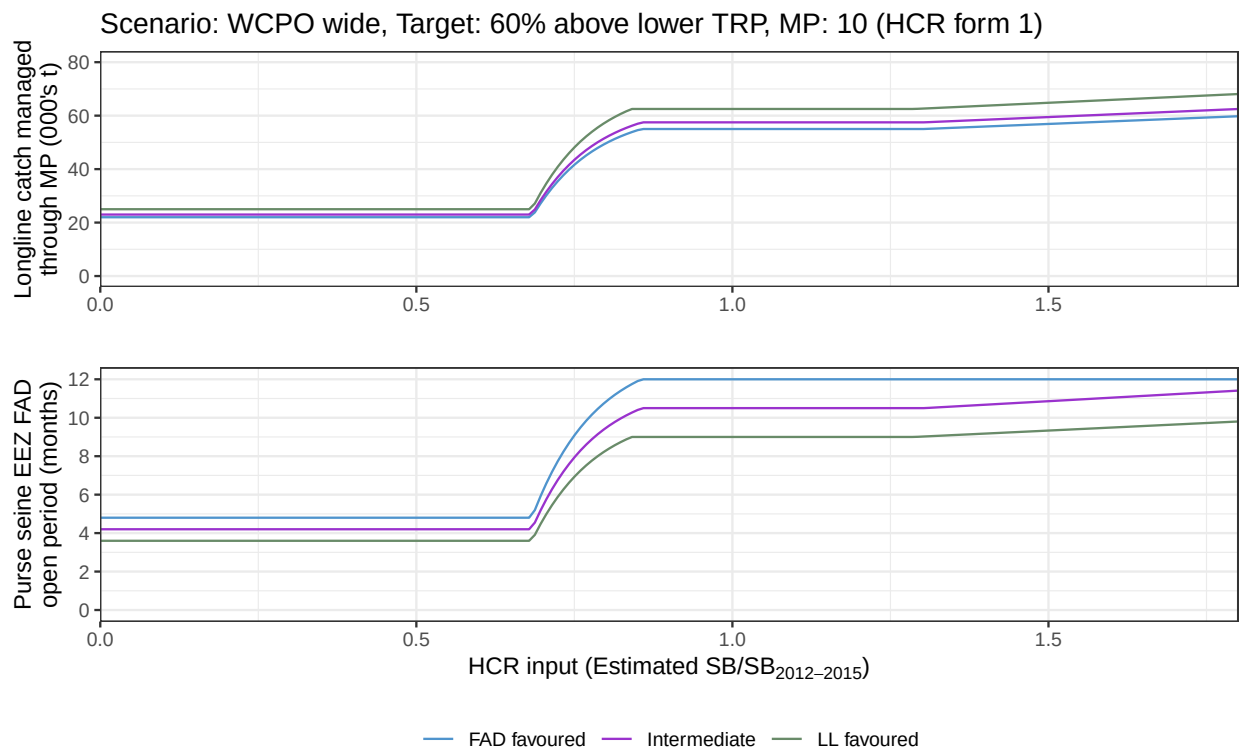


Figure 6

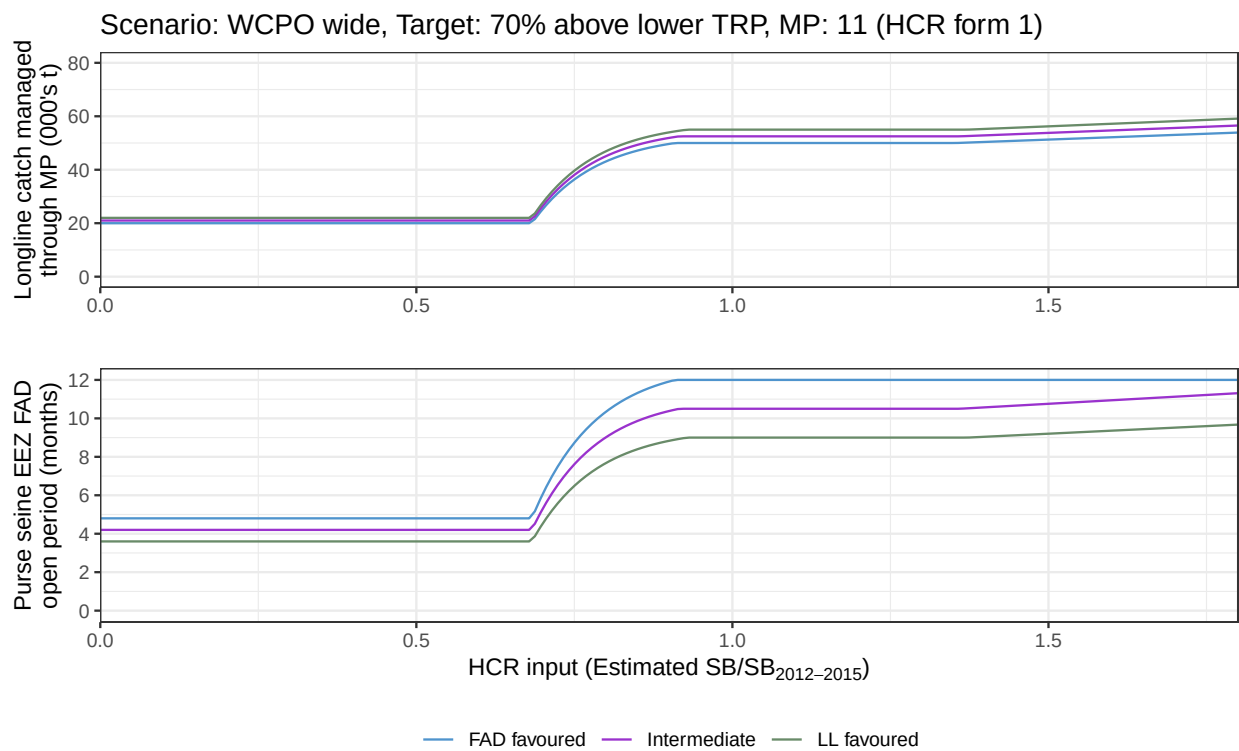


Figure 7

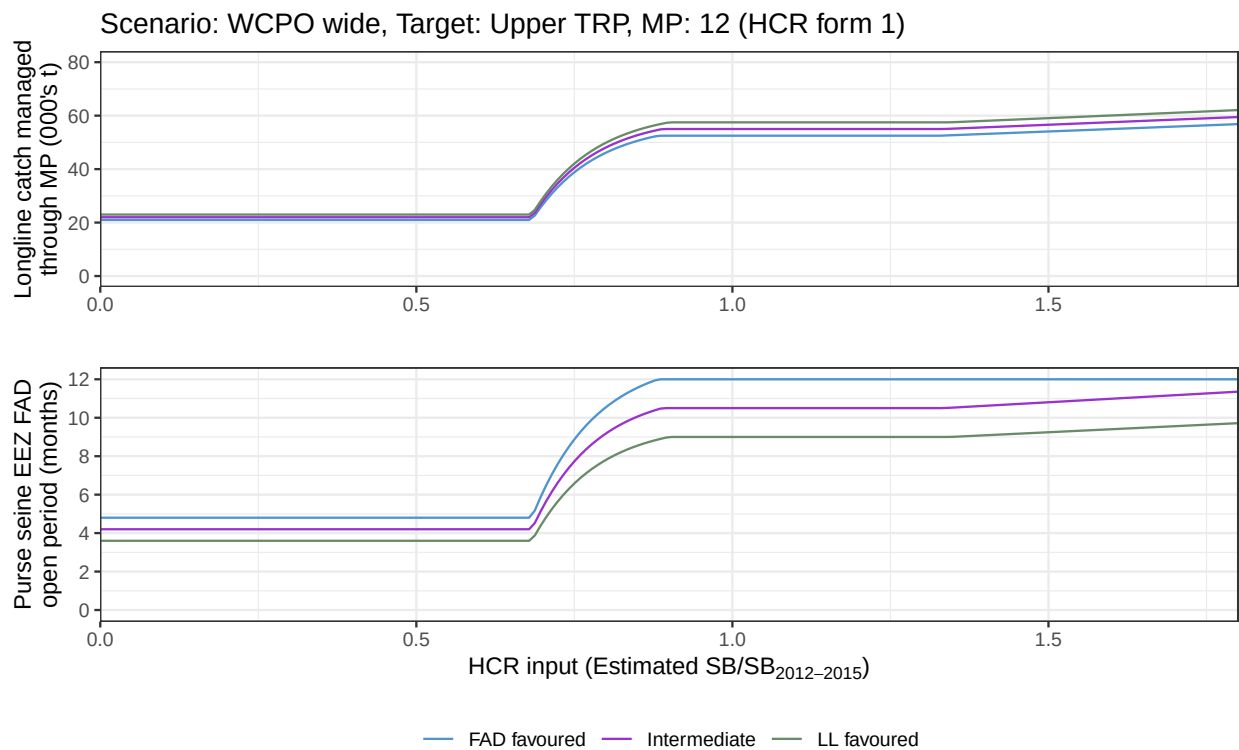


Figure 8

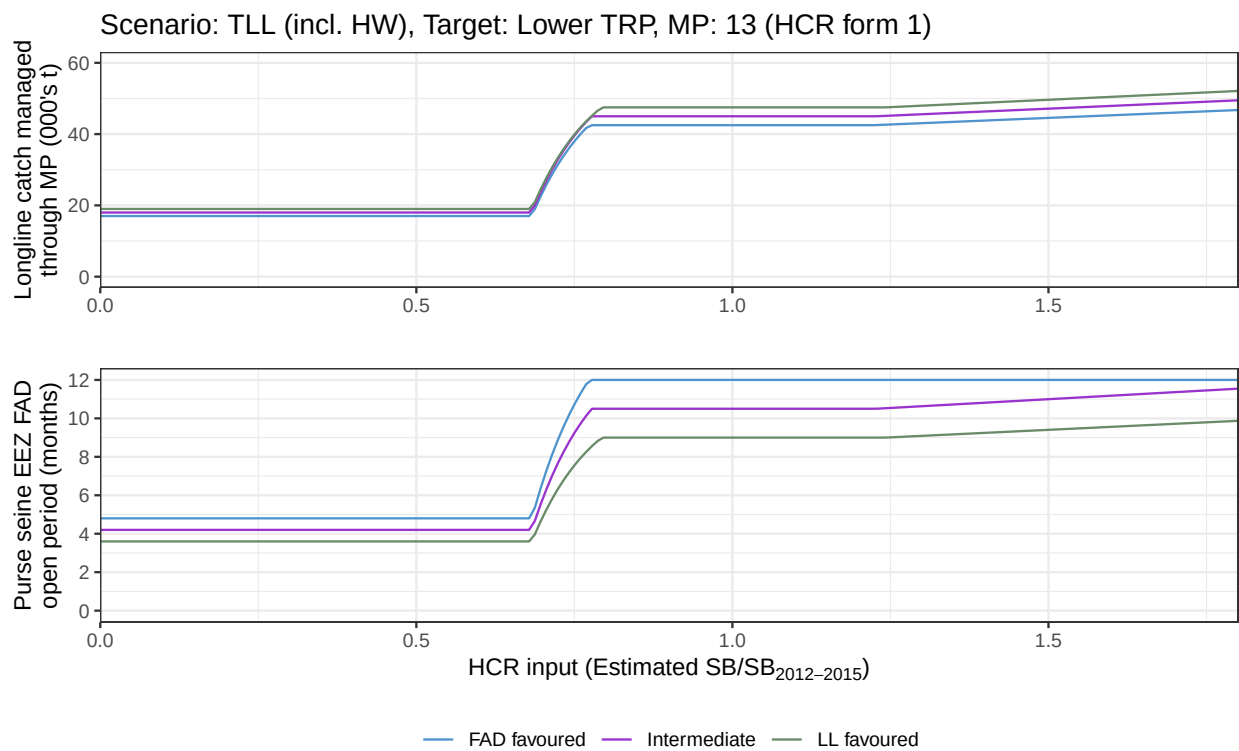


Figure 9

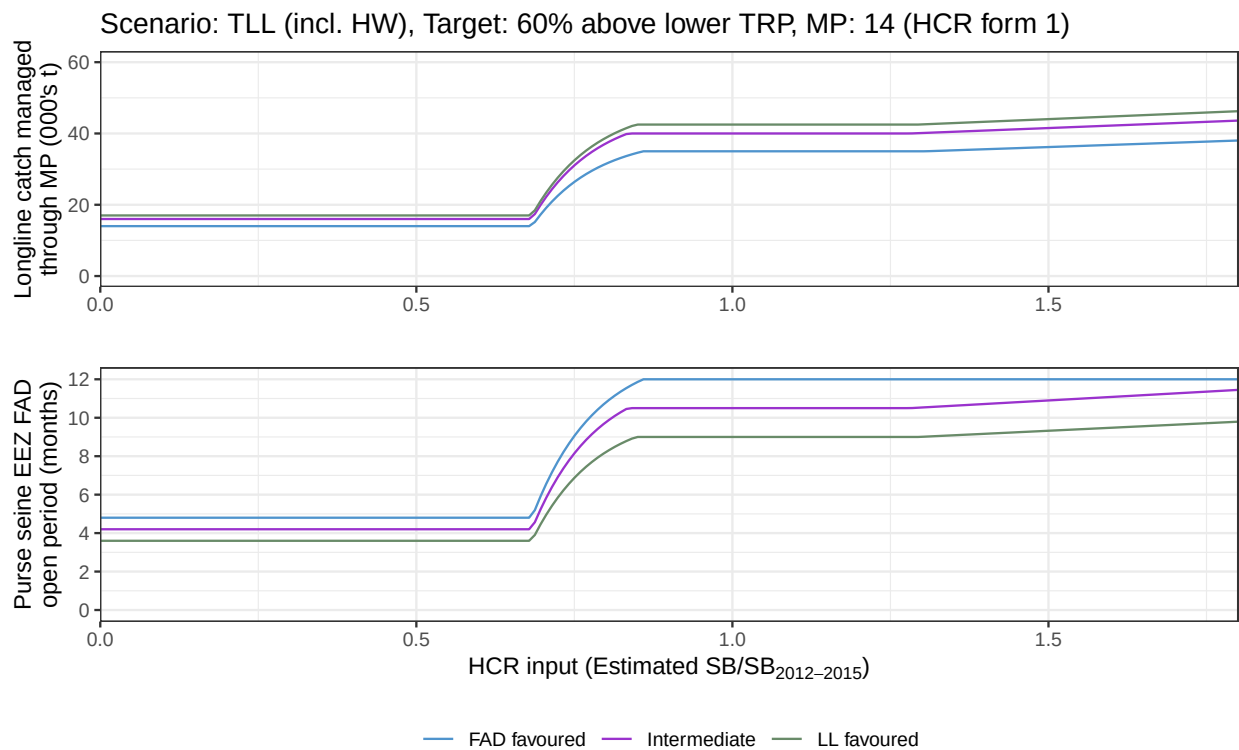


Figure 10

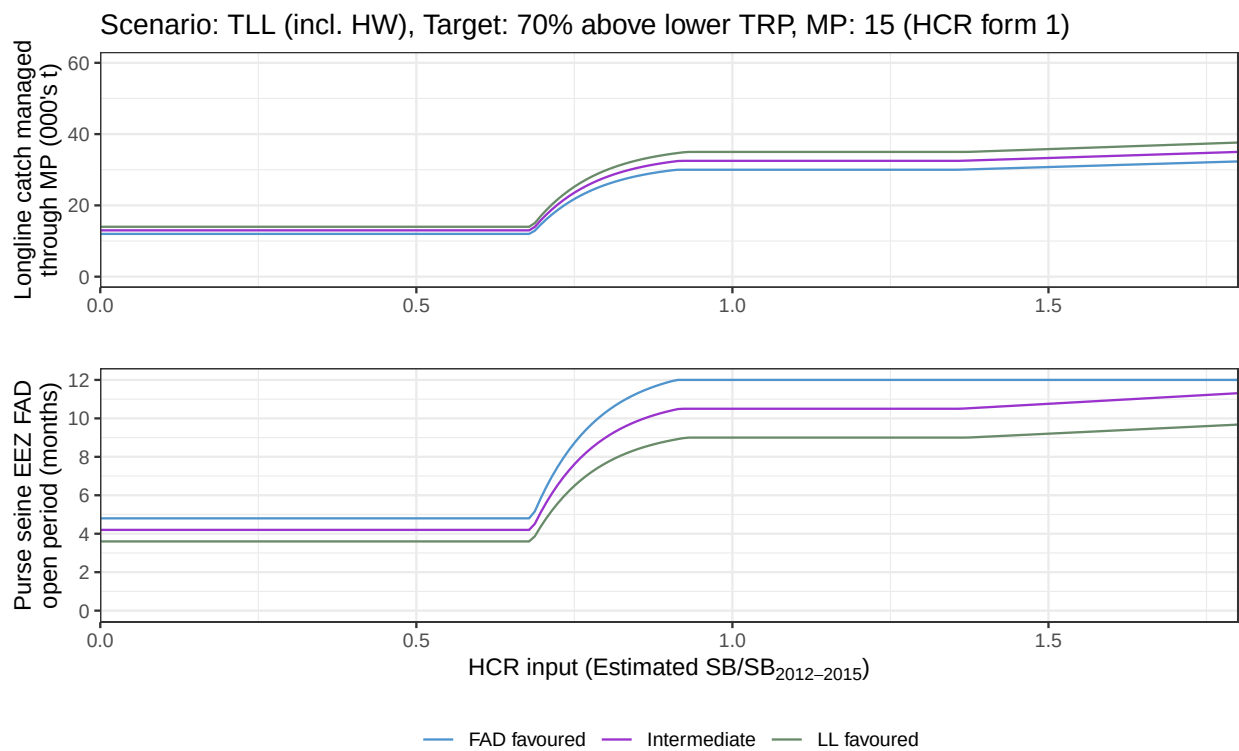


Figure 11

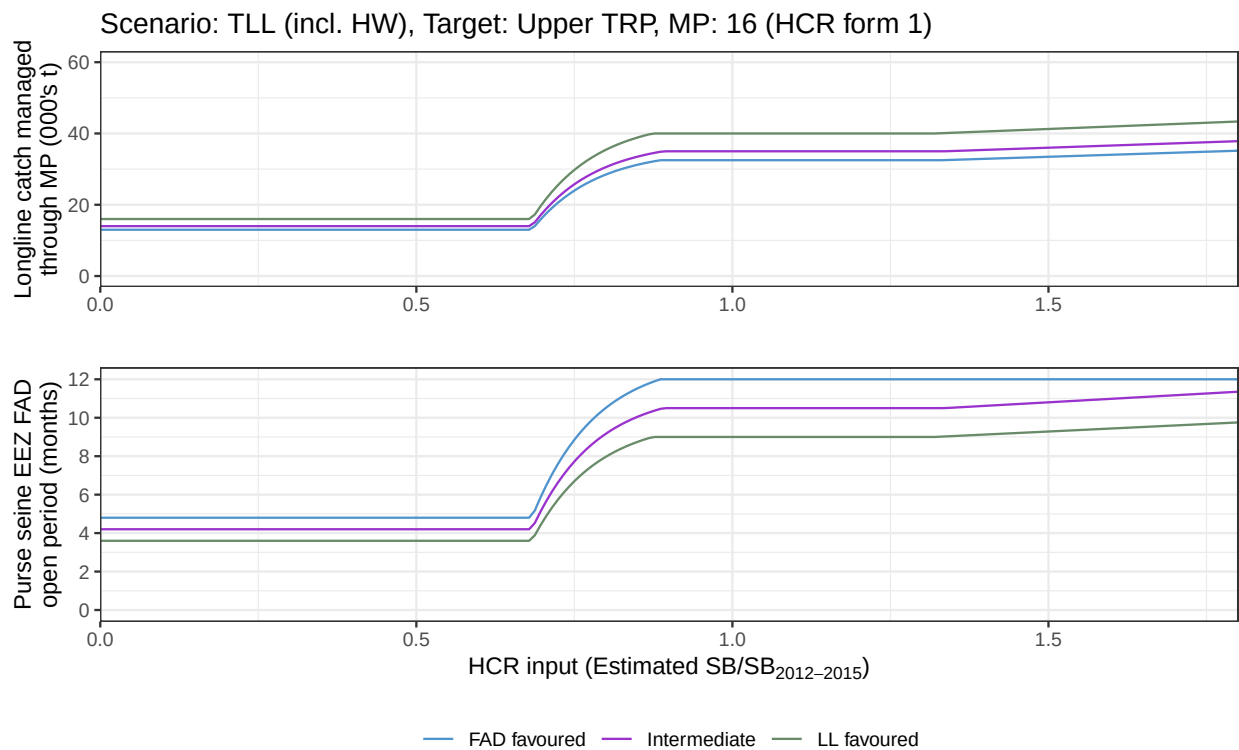


Figure 12

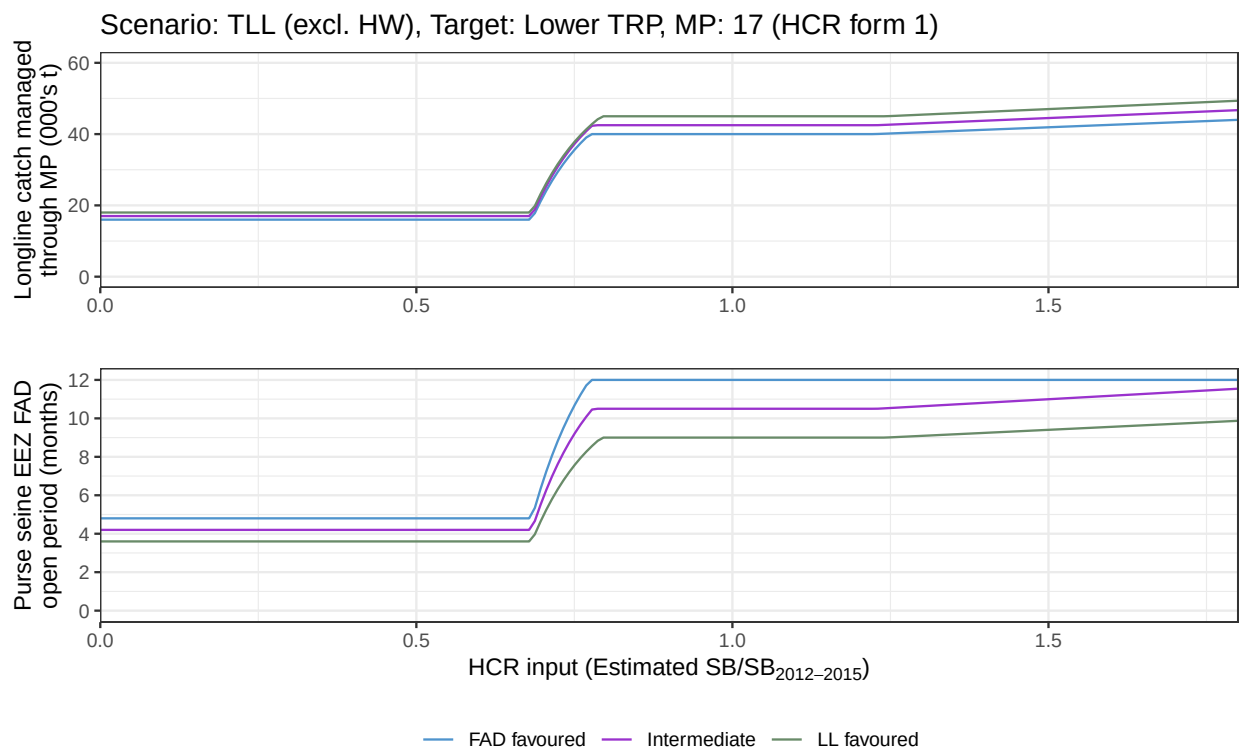


Figure 13

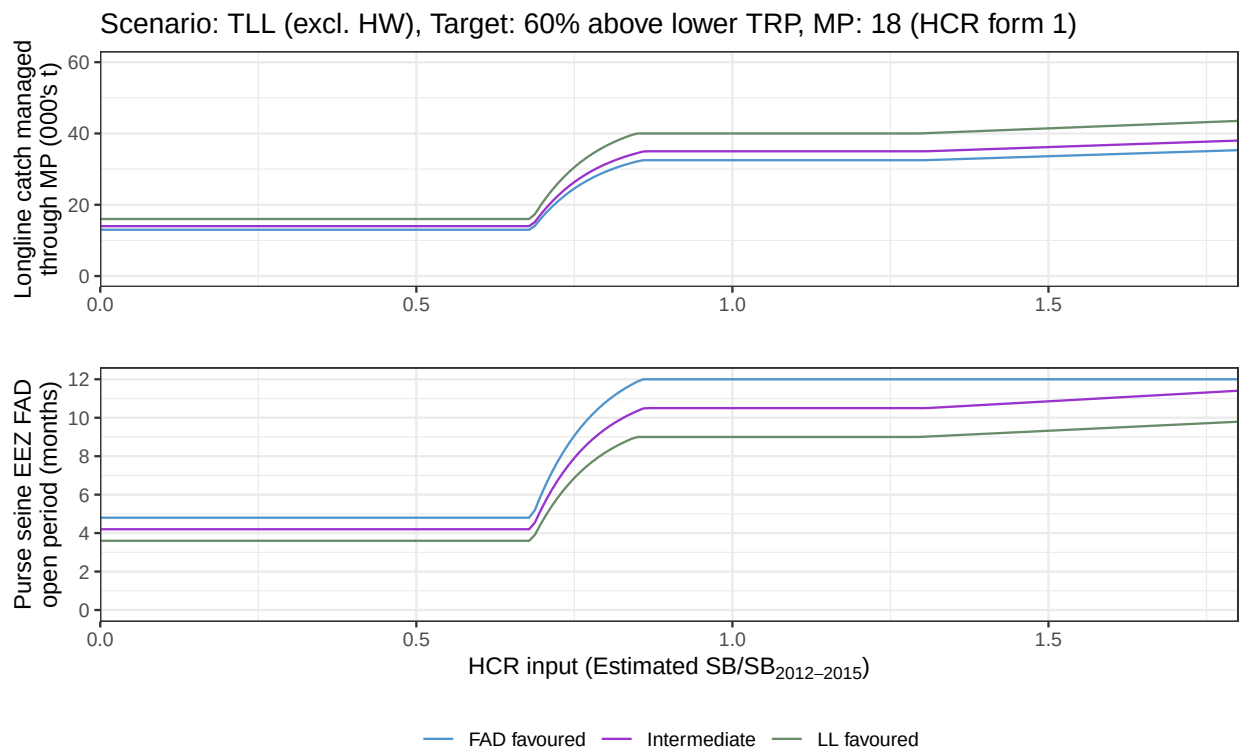


Figure 14

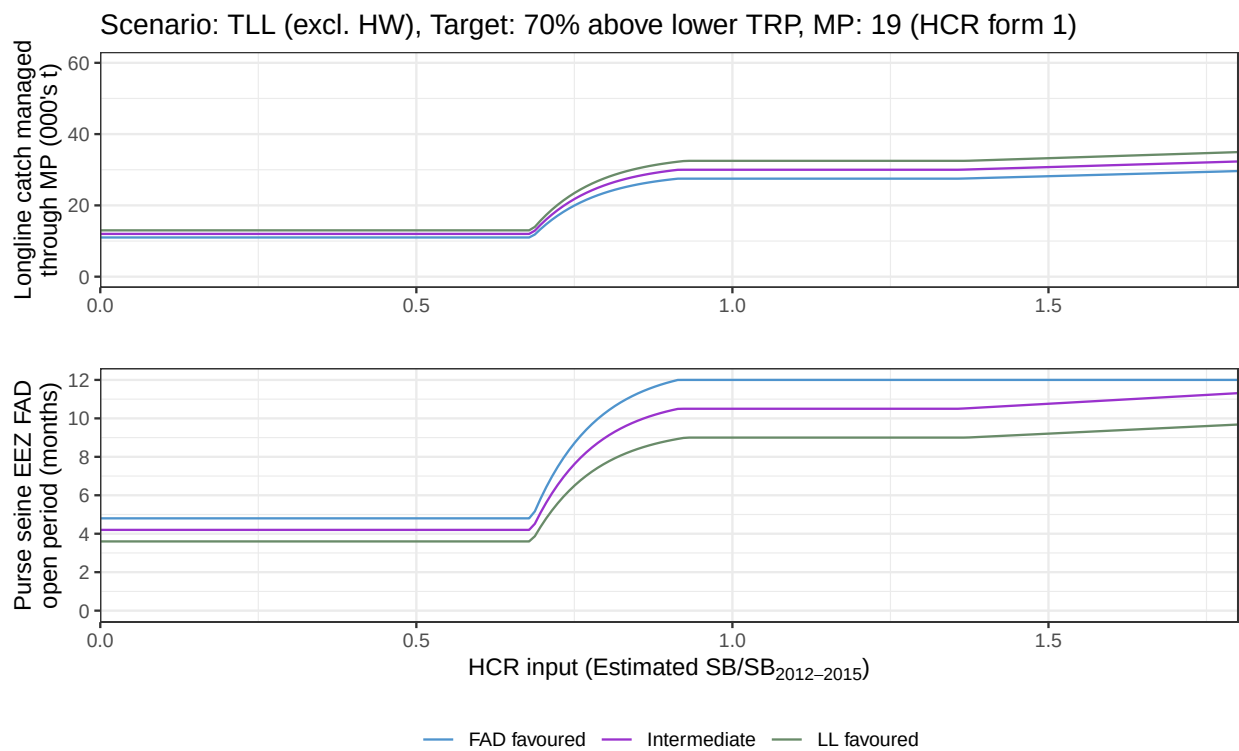


Figure 15

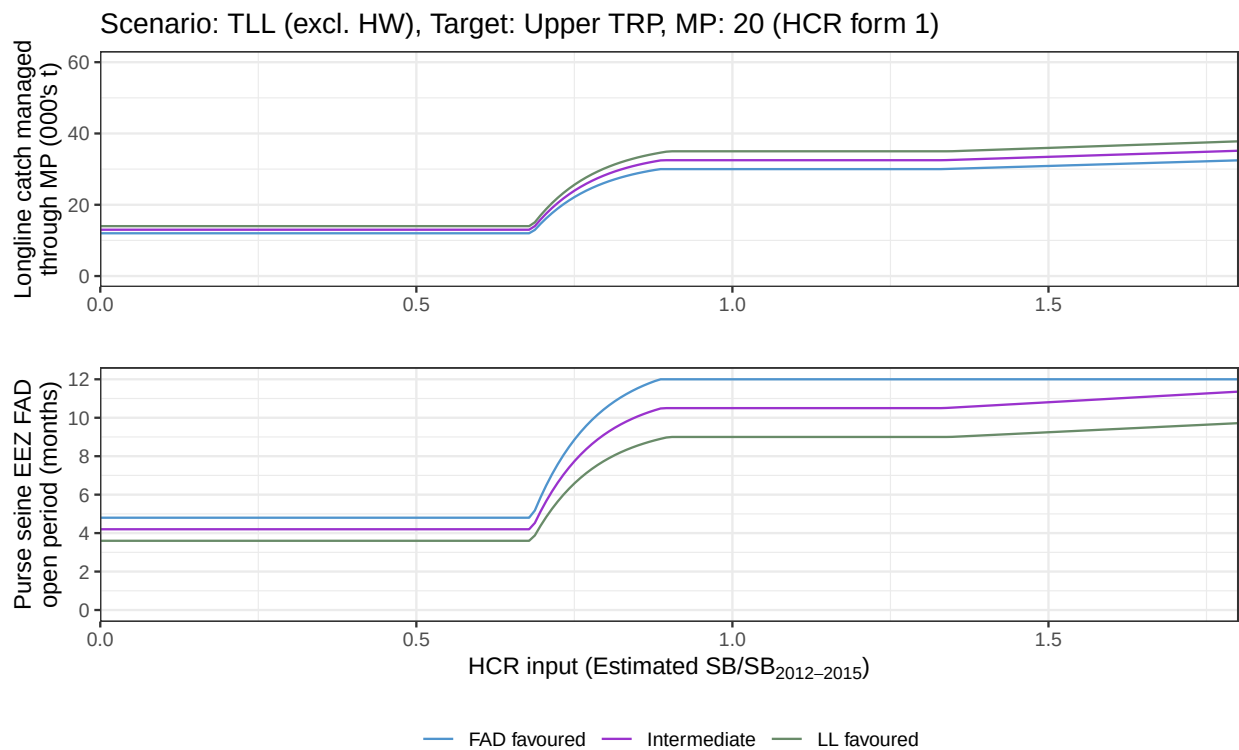


Figure 16

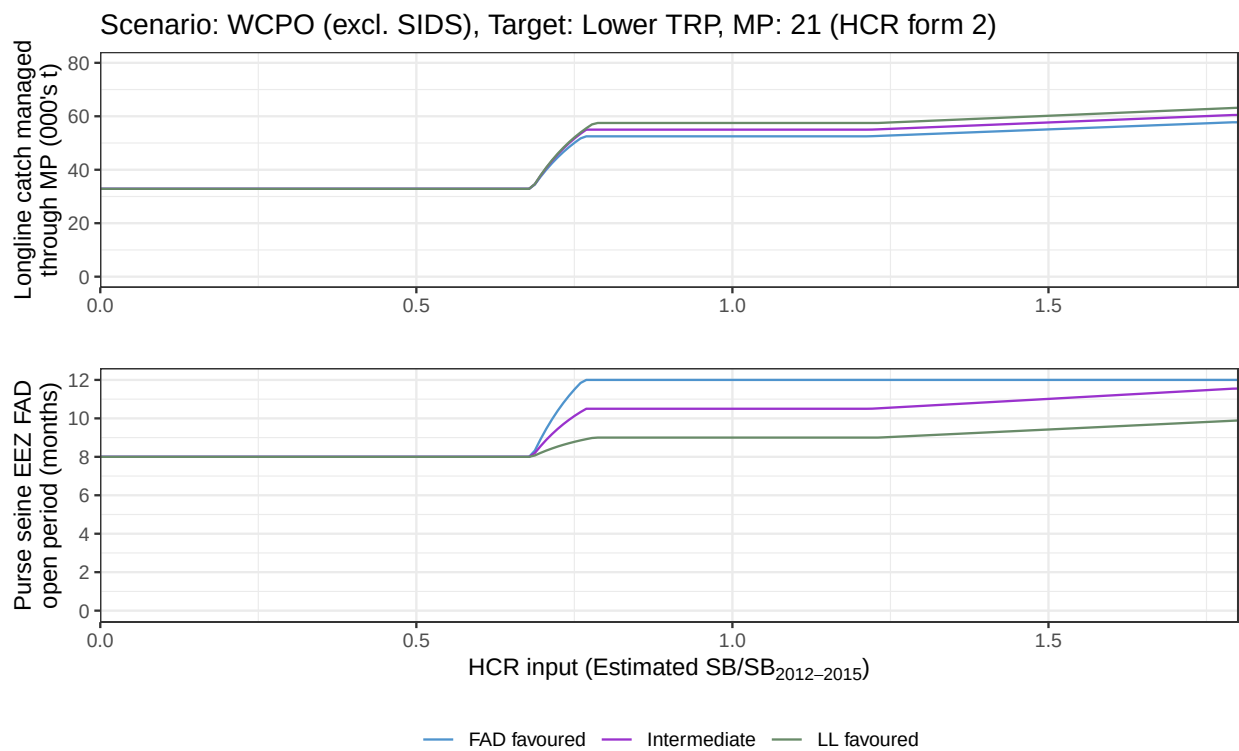


Figure 17

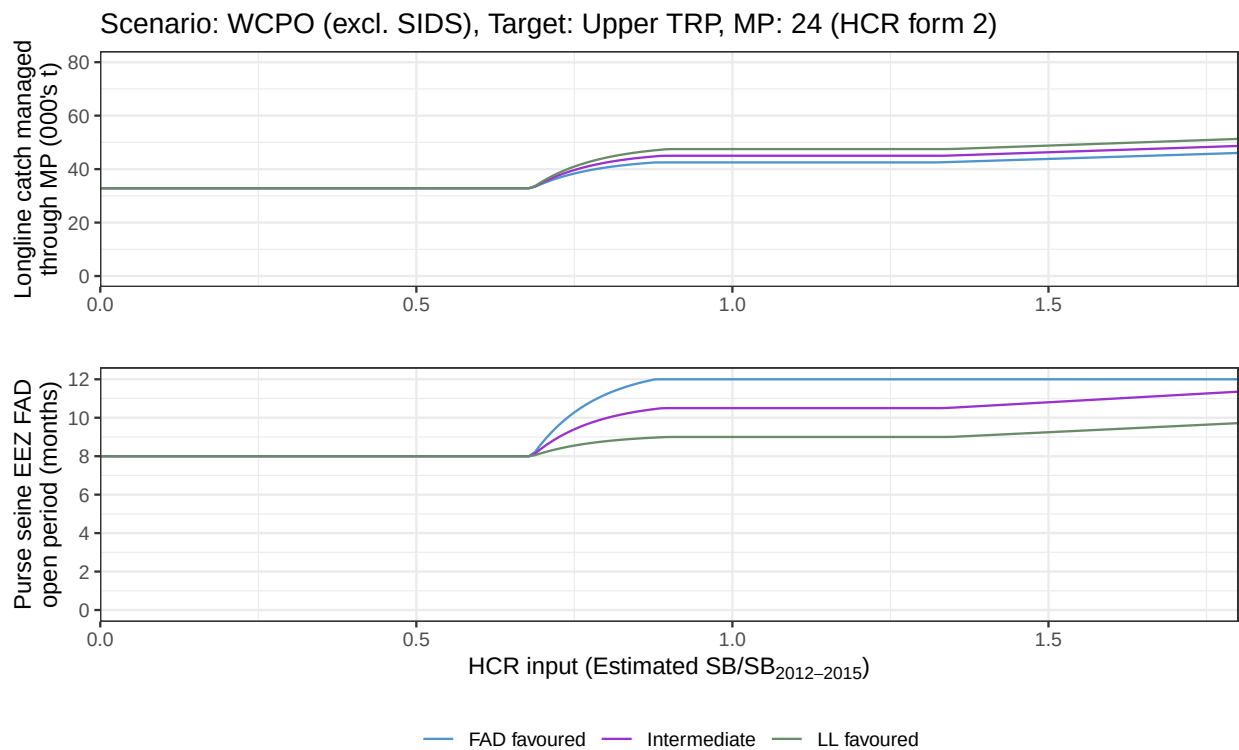


Figure 18

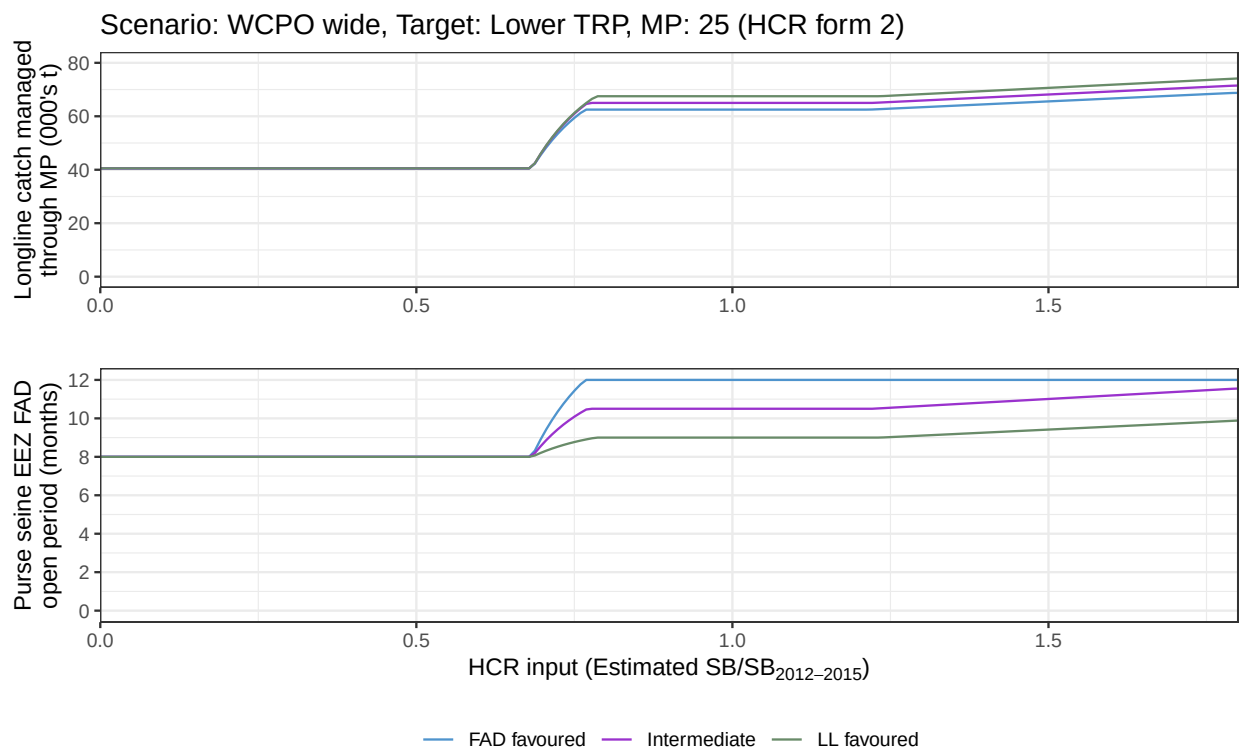


Figure 19

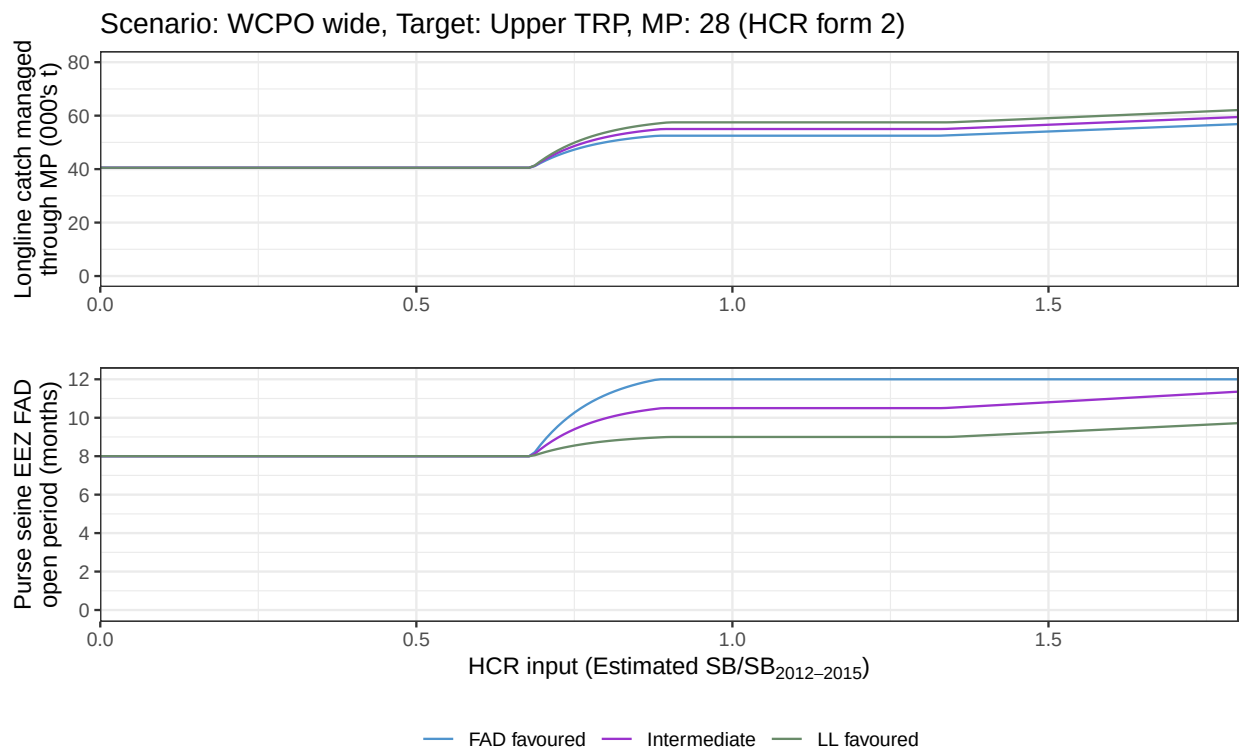


Figure 20

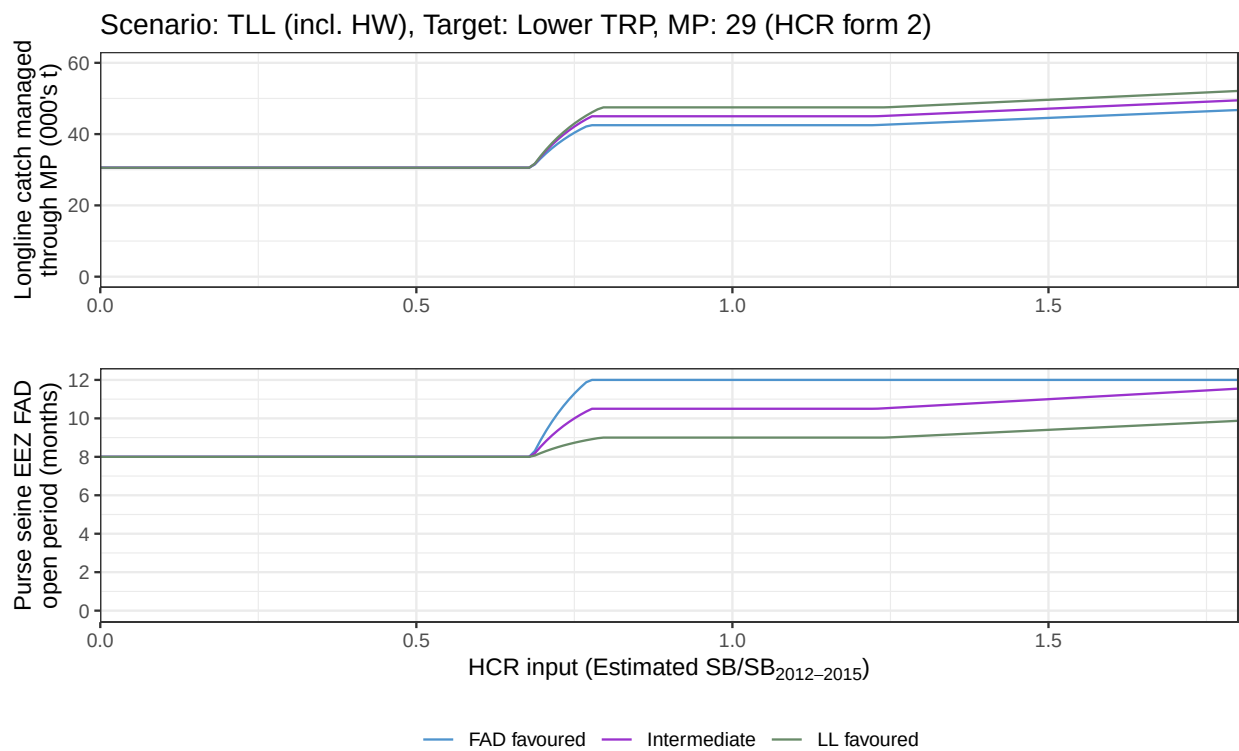


Figure 21

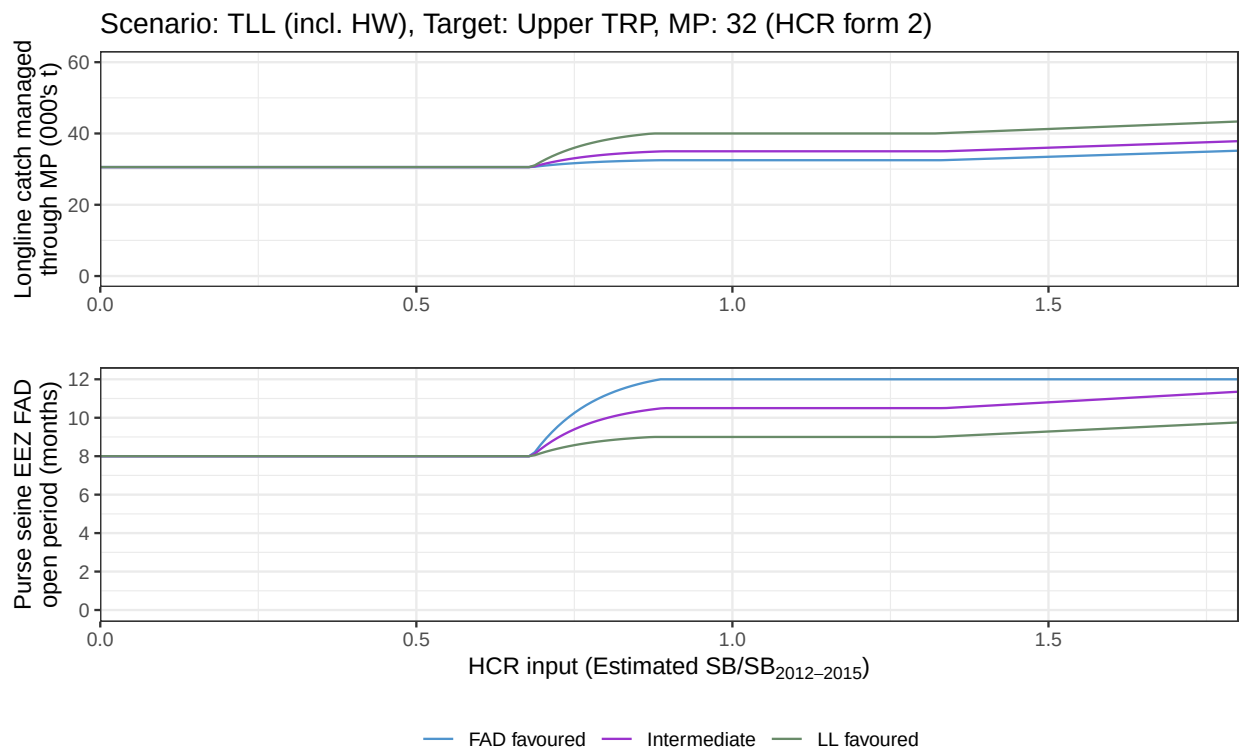


Figure 22

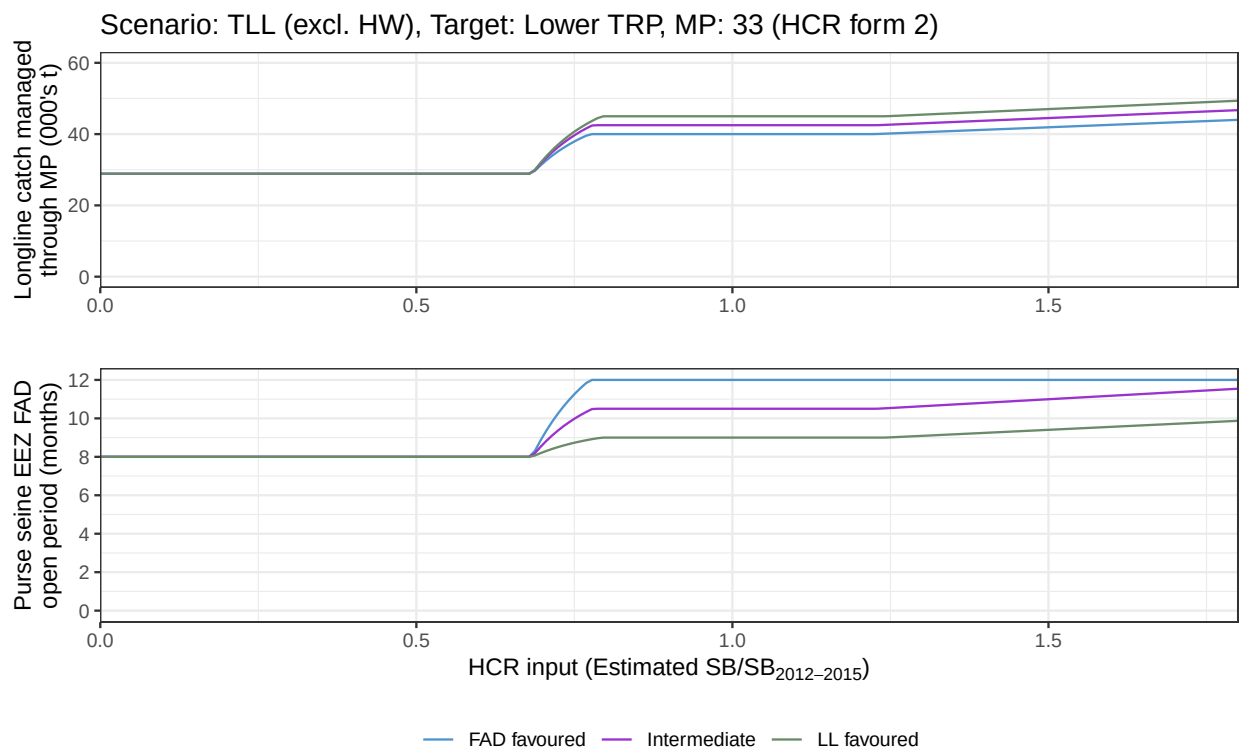


Figure 23

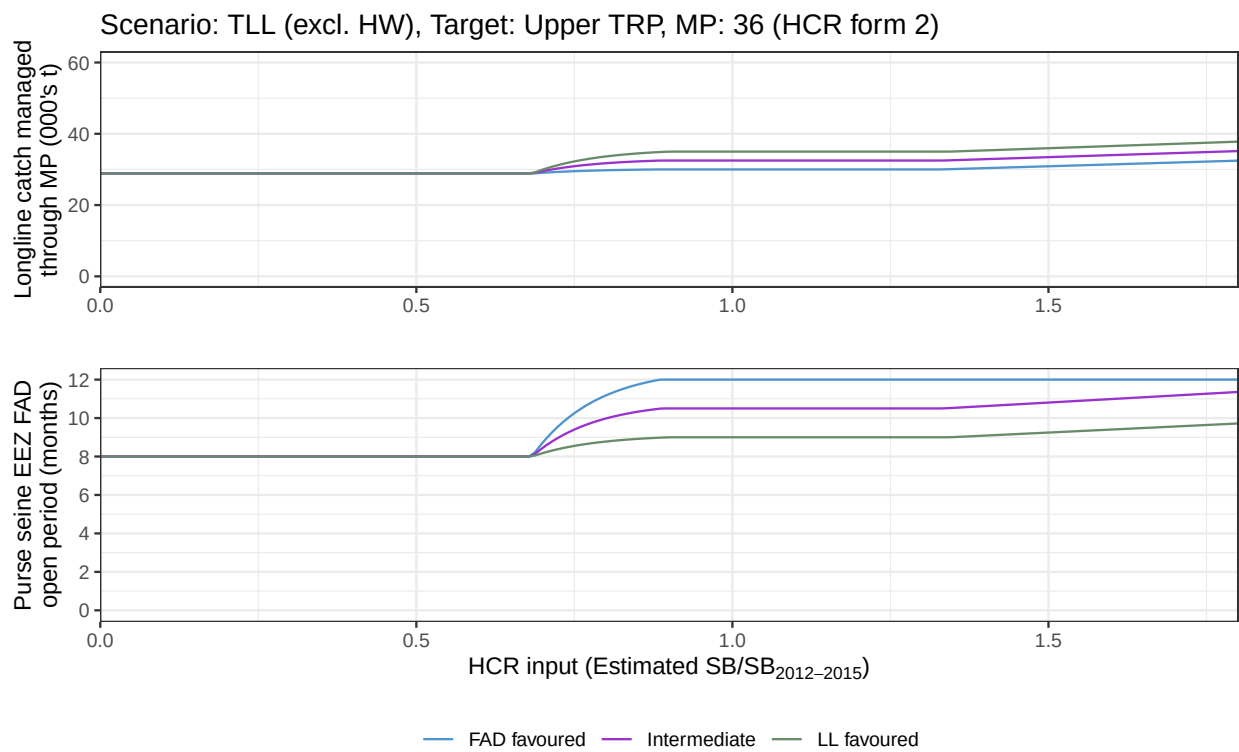


Figure 24