

# Halibut DMRs

For in-season management of non-target groundfish fisheries  
In 2019



# Methods

- Based on observer assessments of halibut viability
- Expanded to the haul, trip, and fishery
- Calculated within each sampling stratum then combined across strata
- Data from EM and halibut deck-sorting EFP were excluded
- Rockfish Program trips better identified

# EM

- DMR estimation methods on observer-based viability assessments
- EM reviewers record information on halibut condition
- FMA considering eliminating EM assessments of halibut condition

# Tables

TOTAL								
AREA	GEAR	SECTOR	RPP	2013	2014	2015	2016	2017
BSAI	POT	CP and CV	N	62	59	51	59	69
	HAL	CP	N	33	31	31	32	29
	HAL	CV	N	30	18	17	14	14
	NPT	CP	N	26	28	25	24	22
	NPT	CV	N	53	48	52	56	58
GOA	POT	CP and CV	N	130	103	117	119	129
	HAL	CP	N	11	14	13	13	12
	HAL	CV	N	344	339	336	327	293
	NPT	CP	N	14	11	10	13	10
	NPT	CV	N	60	59	57	59	52
	NPT	CV	Y	29	28	27	27	24
EM								
AREA	GEAR	SECTOR	RPP	2013	2014	2015	2016	2017
	HAL	CV	N			16	33	61
	POT	CV	N					25

# Tables

2018						
Operational Group				Mean Annual N_violabilities	Estimate DMR?	DMR
Area	Gear	Sector	RPP			
BSAI	POT	None	N	548	Y	9%
	HAL	CP	N	9,547	Y	8%
		CV	N	832	Y	17%
	NPT	CP	N	2,025	Y	84%
		CV	N	2,456	Y	60%
GOA	POT	None	N	602	Y	7%
	HAL	CP	N	1,631	Y	10%
		CV	N	3,286	Y	17%
	NPT	CP	N	132	N	84%
		CV	N	755	Y	67%
		CV	Y	176	Y	62%

2019						
Operational Group				Mean Annual N_violabilities	Estimate DMR?	DMR
Area	Gear	Sector	RPP			
BSAI	POT	None	N	380	Y	19%
	HAL	CP	N	6,886	Y	8%
		CV	N	360	Y/N ?	4%
	NPT	CP	N	2,844	Y	78%
		CV	N	2,736	Y	59%
GOA	POT	None	N	450	Y	4%
	HAL	CP	N	1,672	Y	11%
		CV	N	2,367	Y	21%
	NPT	CP	N	1,300	Y	79%
		CV	N	1,106	Y	67%
		CV	Y	389	Y	49%

10%

0%

-13%

-6%

-1%

-3%

1%

4%

-5%

0%

-13%

# Tables

Viabilities														
AREA	GEAR	SECTOR	RPP	2009	2010	2011	2012	2013	2014	2015	2016	2017	2014-2016	2016-2017
BSAI	POT	CP and CV	N	231	616	1259	1502	491	498	723	424	335	548	380
	HAL	CP	N	11394	9790	12666	14303	17284	11149	10268	7224	6548	9547	6886
	HAL	CV	N						1052	612		360	832	360
	NPT	CP	N	8967	7375	2363	1410	2868	1928	463	3685	2003	2025	2844
	NPT	CV	N	765	2151	2972	2228	2090	2780	1977	2611	2860	2456	2736
GOA	POT	CP and CV	N	78	179	1067	1070	363	179	895	732	168	602	450
	HAL	CP	N	1367	1921	2326	367	740	1546	1785	1562	1781	1631	1672
	HAL	CV	N	90	180	18	147	2025	4385	2687	2786	1948	3286	2367
	NPT	CP	N	1170	569	903	591	424	164	1	232	2367	132	1300
	NPT	CV	N	1628	2256	1558	2726	533	487	346	1433	778	755	1106
	NPT	CV	Y	155	113	106	156	124	58	94	375	402	176	389

# Tables

## Noteworthy results:

Operational Group	2018 DMR*	2019 DMR	Comments
BSAI POTs	9%	19%	
BSAI HAL CV	17%	4%	No viabilities in 2016
BSAI CP NPT	84%	78%	
GOA NPT CP	84%	79%	10x increase in N_viabilities
GOA NPT CV RPP	62%	49%	

\*specified value

# Recommendations

- Maintain current methods
- 2-year reference period (2016-2017)
- Average of most recent 2 years (2015,2017) for BSAI HAL CVs



# Question for Plan Teams

- Support combined groupings?
- Support updated reference period?
- Recommend newly estimated DMRs for 2019?

# Future Directions

- IPHC study on HAL release methods
- Increased use of EM
- Deck sorting
- Improved basis studies for DMRs