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Discard Estimation Methodology Review: Summary of Working Paper 6 Assumed Discard Rate Analysis

S.E. Wigley
Northeast Fisheries Science Center

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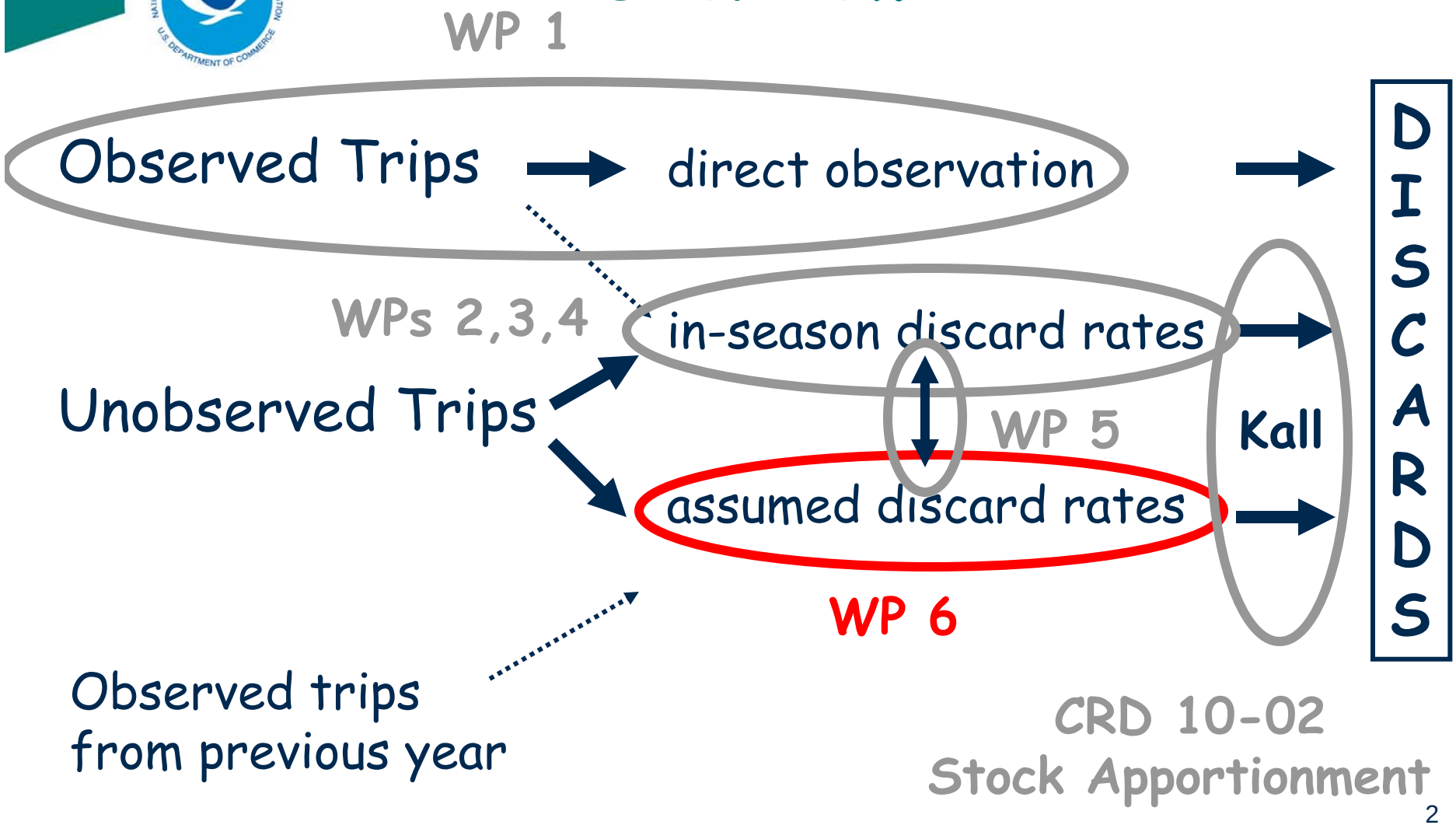
Overview



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WP 6: Assumed Discard Rates

Data: Amendment 16 prescribes the data sets

1) 'previous year': July 2008 through June 2009
used 12 most recent months

2) stratification:
- common pool and sectors
- by stock and gear (implied large mesh)

If insufficient data, then use 'fleet-wide' gear and stock (problematic for some cells).

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Data Set Aggregation

C1: sector-gear-stock specific discard rates using
the common pool primary data set;
C3: stock-specific discard rates using
the common pool primary data set;

S1: sector-gear-stock specific discard rates using
the sector primary data set;
S2: gear-stock specific discard rates using
the sector primary data set; and
S3: stock-specific discard rates using
the sector primary data set.

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Table 19 in Amendment 16

Table 19 – Discard estimates will be applied to the species/gear combinations

Gear	Species
Trawl	All
Gillnet	Cod, haddock, pollock, white hake, yellowtail flounder, winter flounder, witch flounder, American plaice, redfish, Atlantic wolffish
Longline	Cod, haddock, pollock, white hake, redfish, Atlantic wolffish

WP 6 Table 3 Number of observed trips for 5 data set aggregation levels

Data Set Aggregation Level	SECTOR ID	Gear	Mesh	AM. PLAICE	COD		HADDOCK		POLLOCK	REDFISH	WHITE HAKE	WINTER FLD.			WITCH FLD.	WOLFFISH	YELLOWTAIL FLD.			OCE POU
				ALL	GB	GOM	GB	GOM	ALL	ALL	ALL	GB	GOM	SNEMA	ALL	ALL	GB	GOM	SNEMA	ALL
Common Pool (C1)	2	LL	all	18	18	1	18	1	18	18	18		1	18	18	18		18		18
		OT	lg	175	133	43	133	43	175	175	175	17	43	118	175	175	17	45	116	175
		GN	lg	33	12	21	12	21	33	33	33		21	12	33	33		21	12	33
			xlg	68	65	4	65	4	68	68	68		4	65	68	68		8	63	68
Stock (C3)				287	222	66	222	66	287	287	287	17	66	207	287	287	17	85	189	287
Sector (S1)	3	LL	all	50	50		50		50	50	50	22		39	50	50	22	39		50
		OT	lg																	
		GN	lg	20	20		20		20	20	20			20	20	20		20		20
			xlg	29	29		29		29	29	29			29	29	29		28	9	29
	5	LL	all	1	1	1	1	1	1	1	1		1	1	1	1		1		1
		OT	lg	153	119	81	119	81	153	153	153	64	81	92	153	153	64	110	24	153
		GN	lg	11		11		11	11	11	11		11		11	11		11		11
			xlg	2	1	2	1	2	2	2	2		2	1	2	2		2	1	2
	6	LL	all	1		1		1	1	1	1		1		1	1		1		1
		OT	lg	6		6		6	6	6	6		6		6	6		6		6
		GN	lg	8		8		8	8	8	8		8		8	8		8		8
			xlg	1		1		1	1	1	1		1		1	1		1		1
	7	OT	lg	79	79	1	79	1	79	79	79	74	1	20	79	79	74	15	8	79
		GN	lg																	
			xlg	8	8		8		8	8	8	1		7	8	8	1	6	1	8
	9	OT	lg	66	66	1	66	1	66	66	66	60	1	21	66	66	60	20	6	66
	10	LL	all	1	1		1		1	1	1			1	1	1		1		1
		OT	lg	6		6		6	6	6	6		6		6	6		6		6
		GN	lg	46	1	46	1	46	46	46	46	1	46		46	46	1	46		46
			xlg	18	1	18	1	18	18	18	18		18	1	18	18		18	1	18
	11	OT	lg	4		4		4	4	4	4		4		4	4		4		4
	12	OT	lg	164	38	146	38	146	164	164	164	28	146	27	164	164	28	158	1	164
		GN	lg																	
	13	LL	all	15		15		15	15	15	15		15		15	15		15		15
		OT	lg																	
		GN	lg	99		99		99	99	99	99		99		99	99		99		99
			xlg	18	1	17	1	17	18	18	18		17	1	18	18		17	1	18
	15	LL	all	4	1	2	1	2	4	4	4	1	2		4	4	1	2		4
		OT	lg	41	7	35	7	35	41	41	41	1	35	7	41	41	1	39	1	41
		GN	lg	25	1	24	1	24	25	25	25		24	1	25	25		25		25
			xlg	9	1	7	1	7	9	9	9		7	1	9	9		8	1	9
	16	OT	lg	59	55	2	55	2	59	59	59	47	2	22	59	59	47	19	10	59
		GN	lg																	
	17	OT	lg	88	87	3	87	3	88	88	88	68	3	47	88	88	68	43	17	88
	18	OT	lg	59	59		59		59	59	59	14		47	59	59	14	1	47	59
		GN	lg																	
			xlg	1	1		1		1	1	1			1	1	1			1	1
	19	LL	all																	
		OT	lg	16	11	6	11	6	16	16	16	9	6	1	16	16	9	6	1	16
		GN	lg																	
			xlg																	
	20	OT	lg	18	15	15	15	15	18	18	18	12	15	14	18	18	12	18		18
		GN	lg																	
			xlg																	
	21	LL	all	1		1		1	1	1	1		1		1	1		1		1
		OT	lg																	
Gear-Stock (S2)		LL	all	72	54	19	54	19	72	72	72	23	19	43	72	72	23	53		72
		OT	lg	759	534	308	534	308	759	759	759	376	308	298	759	759	376	446	117	759
		GN	lg	209	22	188	22	188	209	209	209	1	188	21	209	209	1	209		209
			xlg	86	44	42	44	42	86	86	86	1	42	42	86	86	1	70	14	86
Stock (S3)				1093	649	529	649	529	1093	1093	1093	398	529	391	1093	1093	398	745	131	1093

WP 6 Table 4b. Number of cells with discard rates, by sector and data set aggregation level

Sector Id	Sector Name	Sector-Gear-Mesh-Stock-specific (C1, S1)	Gear-Mesh-Stock specific (S2)	Stock-specific (C3, S3)	Total
2	Common - Groundfish	50		10	60
3	GB Cod Fixed Gear	26	29	5	60
5	Sustainable Harvest	20	35	5	60
6	Port Clyde Community		55	5	60
7	NFS VII	15	40	5	60
9	NFS VIII	15	40	5	60
10	NFS XI	20	35	5	60
11	NFS XII		55	5	60
12	NFS II	18	37	5	60
13	NFS III	26	29	5	60
15	NFS X	23	32	5	60
16	NFS XIII	15	40	5	60
17	NFS IX	17	38	5	60
18	NFS V	16	39	5	60
19	Tri-State Sector	9	46	5	60
20	NFS VI	18	37	5	60
21	NCCS		55	5	60
	Total	288	642	90	1020
		28%	63%	9%	

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Summary

- Methods are described – rates are preliminary.
- Assumed discard rates are used until in-season rates are available.
- Majority of cells are derived at gear-stock level.
- Rates are available for all cells, but some may not be needed.
- There are cases where rates are not available:
  stocks: EGB cod and haddock
  gears: Ruhle and Haddock Separator Trawl

Protocols should be established for these situations.

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Questions or comments ?