

#### 2023 PACIFIC NORTHWEST CROP QUALITY REPORT

WEEK 4: August 17, 2023

We received and processed a total of 221 samples by the end of the fourth week reporting period for the 2023 Pacific Northwest wheat harvest.

#### SAMPLE DISTRIBUTION -

68 wheat samples were received in the fourth week – 54 soft white (SWH), 4 white club (WHCB), 7 hard red winter (HRW), and 3 hard red spring (HRS). 16 samples (24%) were from District 8, 13 (19%) were from District 4, 10 (15%) each were from District 5 and District 11, 9 (13%) were from District 1\2, 8 (12%) were from District 3, and less than 10% were from Districts 6\7. (Please refer to page 2 - USDA Economic Statistics Districts Map.)

#### USDA ECONOMIC STATISTICS DISTRICTS (TABLE 1) DATA –

**SWH** – Average **test weight** was 60.3 lb/bu (79.4 kg/hl), lower than the 5-year average of 61.1 lb/bu (80.3 kg/hl). Average **dockage** was 0.4%. Average **wheat moisture** content was 8.8%, lower than the 5-year average of 9.1%. Average **wheat protein** content (12% mb) was 11.1%, continuing to trend down but still higher than the 5-year average of 10.0%. Average **falling number** value (14% mb) was 331 seconds, higher than the 5-year average of 326 seconds. Average **thousand kernel weight** (14% mb) was 31.8 g, an increase of 1.1 g compared to the last week but still lower than the 5-year average of 34.4 g. Average **kernel size** was 2.60 mm, smaller than the 5-year average of 2.72 mm.

WHCB – Average **test weight** was 60.8 lb/bu (80.0 kg/hl), similar to the 5-year average of 60.7 lb/bu (79.9 kg/hl). Average **wheat protein** content (12% mb) was 10.0%, the same as the 5-year average. Average **falling number** value (14% mb) was 322 seconds, lower than the 5-year average of 331 seconds. Average **thousand kernel weight** (14% mb) was 29.6 g, lower than the 5-year average of 30.7 g. Average **kernel size** was 2.47 mm, smaller than the 5-year average of 2.55 mm.

HRW – Average test weight was 61.9 lb/bu, similar to the 5-year average of 61.8 lb/bu. Average wheat protein content (12% mb) was 11.7%, similar to the 5-year average of 11.6%. Thousand kernel weight (14% mb) and kernel size were lower than the 5-year averages.

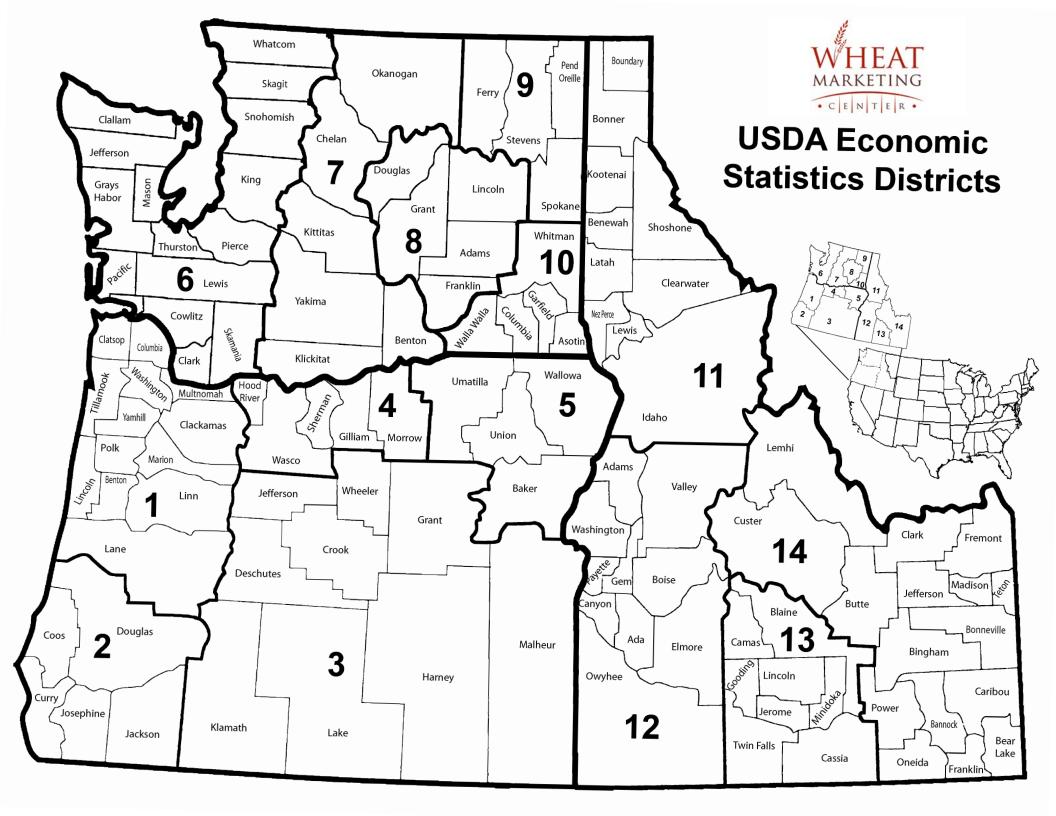
HRS – Average **test weight** was 62.3 lb/bu, slightly higher than the 5-year average of 62.0 lb/bu. Average **wheat protein** content (12% mb) was 14.5%, similar to the 5-year average of 14.6%. **Thousand kernel weight** (14% mb) and **kernel size** were slightly higher than the 5-year averages.

#### PACIFIC NORTHWEST WHEAT PRODUCTION ZONES (TABLE 2) DATA -

Thirty seven percent of this week's samples were from Zone C, 24% were from Zone NC, 15% were from Zone NE, 13% were from Zone SW, and 12% were from Zone SE. (Please refer to page 4 – Pacific Northwest Wheat Production Zones Map.)

**SWH** – Average **wheat protein content (12% mb)** was highest for Zone C at 12.1% followed by Zone NE at 10.8%, Zone NC at 10.4%, Zone SE at 9.8% and the lowest was for Zone SW at 8.6%.

WHCB – Average wheat protein content (12% mb) for Zone NC and Zone C were at 9.8% and 10.7% respectively.



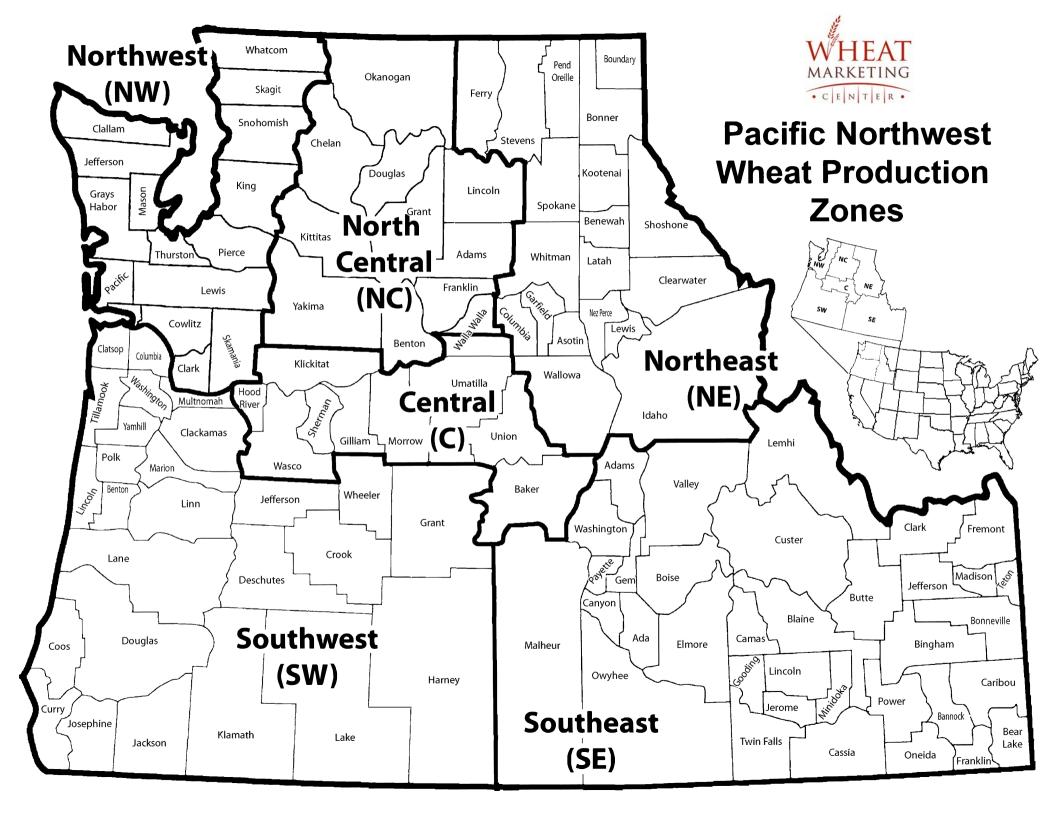


### BY USDA ECONOMIC STATISTICS DISTRICTS

Table 1

2023 CROP WEEK 4: August 17, 2023														4510 1								
		Grading Data										Quality Data										
Class	District	Number of Samples	Test Weight (lb/bu)	Test Weight (kg/hl)	Dockage (%)	Heat Damage (%)	Total Damage (%)	Foreign Material (%)	Shrunk & Broken (%)	Total Defects (%)	Moisture (%)	( Average	Protein %, 12% mb	) High	Falling Number (s, 14%mb)	Thousand Kernel Weight (g, 14% mb)	Kernel Hardness (-20 to 120)	Kernel Size (mm)	Ash (%, 14% mb)	Wet Gluten (%, 14% mb)		
SWH	1\2	10	61.3	80.7	0.3	0.0	0.0	0.0	0.9	0.9	10.4	8.6	8.0	10.0	333	38.2	24.4	2.79	1.36	16.4		
SWH	3	10	61.6	81.0	0.5	0.0	0.5	0.0	0.4	0.9	8.7	10.1	9.1	10.9	283	41.3	26.1	2.90	1.62	21.5		
SWH	4	45	59.3	78.1	0.4	0.0	0.0	0.1	0.9	1.0	8.7	12.2	10.6	15.5	342	27.7	22.5	2.48	1.39	30.8		
SWH	5	33	59.8	78.7	0.2	0.0	0.0	0.0	0.9	1.0	8.6	11.8	10.2	14.7	336	29.3	21.9	2.53	1.45	29.5		
SWH	6\7	6	59.2	77.8	1.0	0.0	0.0	0.1	0.4	0.5	9.5	10.9	9.6	12.7	328	34.7	23.9	2.73	1.58	27.0		
SWH	8	25	60.4	79.5	0.4	0.0	0.0	0.0	0.9	0.9	8.3	10.4	8.4	12.7	322	31.3	24.4	2.56	1.21	24.1		
SWH	10	5	60.4	79.5	0.3	0.0	0.0	0.0	0.7	0.7	8.5	11.2	9.5	12.8	341	31.9	15.3	2.61	1.38	23.3		
SWH	11	28	61.6	81.1	0.3	0.0	0.0	0.0	0.8	0.7	8.9	10.7	8.8	14.0	340	32.4	23.9	2.62	1.40	23.2		
SWH	12	6	61.5	80.8	0.5	0.0	0.1	0.0	0.3	0.4	9.2	9.7	8.7	10.7	290	43.5	20.6	2.91	1.55	21.6		
SWH	14	4	60.9	80.1	0.0	0.0	0.0	2.5	0.8	3.4	10.6	9.3	8.0	10.7	338	34.6	24.4	2.68	1.65	15.3		
	Crop Year Average																					
SWH	2023	172	60.3	79.4	0.4	0.0	0.0	0.1	0.8	0.9	8.8	11.1			331	31.8	23.0	2.60	1.41	25.9		
SWH	2022	404	61.0	80.2	0.5	0.0	0.0	0.1	0.5	0.6	8.9	9.5			340	34.8	28.0	2.74	1.47	20.1		
SWH	5-year	416	61.1	80.3	0.5	0.0	0.0	0.0	0.6	0.7	9.1	10.0			326	34.4	28.7	2.72	1.40	22.8		
	average									l					l			l	l	l l		
WHCB	5	4	61.3	80.7	0.3	0.0	0.0	0.0	1.3	1.3	8.5	10.7	10.2	11.0	309	28.3	22.5	2.39	1.25			
WHCB	8	12	60.6	79.8	0.6	0.0	0.0	0.0	1.3	1.3	8.1	9.8	8.4	11.4	327	30.1	21.9	2.50	1.21			
	Crop Year																					
WHCB	Average 2023	16	60.8	80.0	0.5	0.0	0.0	0.0	1.3	1.3	8.2	10.0			322	29.6	22.0	2.47	1.22	1		
WHCB	2022	53	60.6	79.8	0.8	0.0	0.0	0.0	1.1	1.1	7.8	10.1			356	30.2	31.1	2.55	1.36			
WHCB	5-year	91	60.7	79.9	0.6	0.0	0.0	0.1	1.1	1.2	8.3	10.0			331	30.7	30.0	2.55	1.31			
WHOD	average	01	00.7	70.0	0.0	0.0	0.0	0.1		1.2	0.0	10.0			001	00.1	00.0	2.00	1.01			
HRW	4	6	62.0	81.5	0.3	0.0	0.0	0.0	1.0	1.0	8.4	13.0	12.3	14.8	347	31.0	62.5	2.65	1.45	30.8		
HRW	5	4	61.6	80.9	0.4	0.0	0.0	0.0	1.3	1.3	9.3	12.3	11.7	13.6	345	31.2	71.9	2.67	1.41	26.6		
HRW	8	3	61.7	81.1	0.4	0.0	0.0	0.0	0.4	0.4	8.3	11.9	11.5	12.7	374	38.0	61.7	2.85	1.28	24.7		
HRW	11	8	62.1	81.7	0.2	0.0	0.0	0.0	0.4	0.4	8.1	11.4	10.6	12.1	344	35.3	66.3	2.85	1.24	23.8		
HRW	14	3	61.8	81.3	0.3	0.0	0.0	0.0	1.2	1.3	9.9	8.7	8.2	9.1	349	32.6	55.0	2.52	1.57	17.9		
	Crop Year Average																					
HRW	2023	24	61.9	81.4	0.3	0.0	0.0	0.0	0.8	8.0	8.6	11.7			349	33.5	64.3	2.73	1.37	25.4		
HRW	2022	78	61.5	80.9	0.4	0.0	0.0	0.0	8.0	8.0	8.8	11.1			382	33.7	66.2	2.80	1.53	24.1		
HRW	5-year average	87	61.8	81.2	0.3	0.0	0.0	0.0	0.6	0.7	8.9	11.6			367	34.5	66.5	2.82	1.42	26.3		
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HRS	4	3	60.4	79.5	1.1	0.0	0.0	0.1	1.0	1.1	9.3	15.0	14.7	15.2	389	31.1	70.6	2.77	1.63	35.5		
HRS	5	3	63.8	83.8	0.1	0.0	0.0	0.0	0.5	0.5	8.8	13.8	13.4	14.1	319	34.7	61.2	2.84	1.52	33.9		
HRS	11 Crop Year	3	62.7	82.4	0.5	0.0	0.0	0.0	0.5	0.6	7.7	14.7	14.1	15.4	407	28.2	78.5	2.60	1.36	36.9		
	Crop Year Average			1	1	1	1	,			1				Т			ı	Т			
HRS	2023	9	62.3	81.9	0.6	0.0	0.0	0.0	0.7	0.7	8.6	14.5			371	31.3	70.1	2.74	1.50	35.5		
HRS	2022	56	61.6	81.0	0.4	0.0	0.0	0.0	0.6	0.7	8.7	14.4			387	30.5	72.2	2.71	1.65	35.1		
HRS	5-year average	64	62.0	81.6	0.4	0.0	0.1	0.0	0.8	0.9	9.1	14.6			379	30.8	71.6	2.72	1.61	36.4		

<sup>\*</sup> Wet gluten has been discontinued for club wheat





#### BY PRODUCTION ZONES

Table 2

2023 CROP WEEK 4: August 17, 2023																				
Grading Data Quality Data																				
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Class	District	Number of Samples	Test Weight (lb/bu)	Test Weight (kg/hl)	Dockage (%)	Heat Damage (%)	Total Damage (%)	Foreign Material (%)	Shrunk & Broken (%)	Total Defects (%)	Moisture (%)	Average	%, 12% ml	) High	Falling Number (s, 14%mb)	Thousand Kernel Weight (g, 14% mb)	Kernel Hardness (-20 to 120)	Kernel Size (mm)	Ash (%, 14% mb)	Wet Gluten (%, 14% mb)
SWH	NC	29	60.3	79.4	0.5	0.0	0.0	0.0	0.8	0.9	8.5	10.4	8.4	12.7	325	32.2	24.4	2.60	1.27	24.0
SWH	NE	33	61.5	80.8	0.3	0.0	0.0	0.0	0.7	0.7	8.8	10.8	8.8	14.0	340	32.3	22.6	2.61	1.39	23.2
SWH	С	80	59.5	78.3	0.3	0.0	0.0	0.0	0.9	1.0	8.7	12.1	10.2	15.5	339	28.4	22.2	2.50	1.42	30.4
SWH	SW	10	61.3	80.7	0.3	0.0	0.0	0.0	0.9	0.9	10.4	8.6	8.0	10.0	333	38.2	24.4	2.79	1.36	16.4
SWH	SE	20	61.4	80.8	0.4	0.0	0.3	0.5	0.4	1.2	9.2	9.8	8.0	10.9	294	40.6	24.1	2.86	1.60	20.3
	Crop Year Average																			
SWH	2023	172	60.3	79.4	0.4	0.0	0.0	0.1	0.8	0.9	8.8	11.1			331	31.8	23.0	2.60	1.41	25.9
SWH	2022	404	61.0	80.2	0.5	0.0	0.0	0.1	0.5	0.6	8.9	9.5			340	34.8	28.0	2.74	1.47	20.1
SWH	5-year average	416	61.1	80.3	0.5	0.0	0.0	0.0	0.6	0.7	9.1	10.0			326	34.4	28.7	2.72	1.40	22.8
WHCB	NC	12	60.6	79.8	0.6	0.0	0.0	0.0	1.3	1.3	8.1	9.8	8.4	11.4	327	30.1	21.9	2.50	1.21	
WHCB	С	4	61.3	80.7	0.3	0.0	0.0	0.0	1.3	1.3	8.5	10.7	10.2	11.0	309	28.3	22.5	2.39	1.25	
	Crop Year Average																			
WHCB	2023	16	60.8	80.0	0.5	0.0	0.0	0.0	1.3	1.3	8.2	10.0			322	29.6	22.0	2.47	1.22	
WHCB	2022	53	60.6	79.8	8.0	0.0	0.0	0.0	1.1	1.1	7.8	10.1			356	30.2	31.1	2.55	1.36	
WHCB	5-year average	91	60.7	79.9	0.6	0.0	0.0	0.1	1.1	1.2	8.3	10.0			331	30.7	30.0	2.55	1.31	
HRW	NC	3	61.7	81.1	0.4	0.0	0.0	0.0	0.4	0.4	8.3	11.9	11.5	12.7	374	38.0	61.7	2.85	1.28	24.7
HRW	NE	8	62.1	81.7	0.2	0.0	0.0	0.0	0.4	0.4	8.1	11.4	10.6	12.1	344	35.3	66.3	2.85	1.24	23.8
HRW	С	10	61.8	81.3	0.3	0.0	0.0	0.0	1.1	1.1	8.8	12.7	11.7	14.8	346	31.1	66.3	2.66	1.44	29.1
HRW	SE	3	61.8	81.3	0.3	0.0	0.0	0.0	1.2	1.3	9.9	8.7	8.2	9.1	349	32.6	55.0	2.52	1.57	17.9
	Crop Year Average																			
HRW	2023	24	61.9	81.4	0.3	0.0	0.0	0.0	0.8	0.8	8.6	11.7			349	33.5	64.3	2.73	1.37	25.4
HRW	2022	78	61.5	80.9	0.4	0.0	0.0	0.0	0.8	0.8	8.8	11.1			382	33.7	66.2	2.80	1.53	24.1
HRW	5-year average	87	61.8	81.2	0.3	0.0	0.0	0.0	0.6	0.7	8.9	11.6			367	34.5	66.5	2.82	1.42	26.3
LIDO	NE I		00.7	00.4	0.5	0.0	0.0	0.0	0.5	0.0		44.7	144	45.4	407	20.0	70.5	0.00	4.00	20.0
HRS	NE C	3 6	62.7 62.1	82.4 81.7	0.5	0.0	0.0	0.0	0.5	0.6	7.7 9.1	14.7 14.4	14.1	15.4 15.2	407 350	28.2 32.9	78.5 65.9	2.60 2.81	1.36 1.58	36.9 34.7
TINO	Crop Year Average	U	02.1	01.7	0.0	0.0	0.0	0.0	0.0	0.0	3.1	14.4	13.4	10.2	330	32.3	00.9	2.01	1.50	J4.1
HRS	2023	9	62.3	81.9	0.6	0.0	0.0	0.0	0.7	0.7	8.6	14.5	1		371	31.3	70.1	2.74	1.50	35.5
HRS	2022	56	61.6	81.0	0.4	0.0	0.0	0.0	0.6	0.7	8.7	14.4			387	30.5	72.2	2.71	1.65	35.1
HRS	5-year average	64	62.0	81.6	0.4	0.0	0.1	0.0	0.8	0.9	9.1	14.6			379	30.8	71.6	2.72	1.61	36.4

<sup>\*</sup> Wet gluten has been discontinued for club wheat

## **Distributions**

Prepared by: Wheat Marketing Center, Portland, Oregon

#### SOFT WHITE WHEAT

# 172 SAMPLES Test Weight 41% 34% 20 10 51.0-53.9 54.0-55.9 Test Weight (lb/bu) Protein 13.0-13.4 14.0-14.4 14.5-14.9 11.0-11.4 >14.9 Protein Content (percent, 12% mb) Falling Number 42% Frequency (percent) 20 10 400+ Falling Number (s, 14% mb) Moisture 50 58% 30 20 10 10's 11's 12's 13's Moisture (%) Dockage 30 20 < 0.3 0.3 - 0.5 0.6 - 0.8 Dockage (%)

#### WHITE CLUB WHEAT



