

2022 Fall Whooping Crane Monitoring

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January 2023 TAC meeting



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM



Why are we
monitoring?

- **Extension Big Question #5:** What factors influence WC stopover length within the AHR?
- **Extension Big Question #6:** Why is Spring WC use of the AHR greater than Fall use?



Systematic Monitoring

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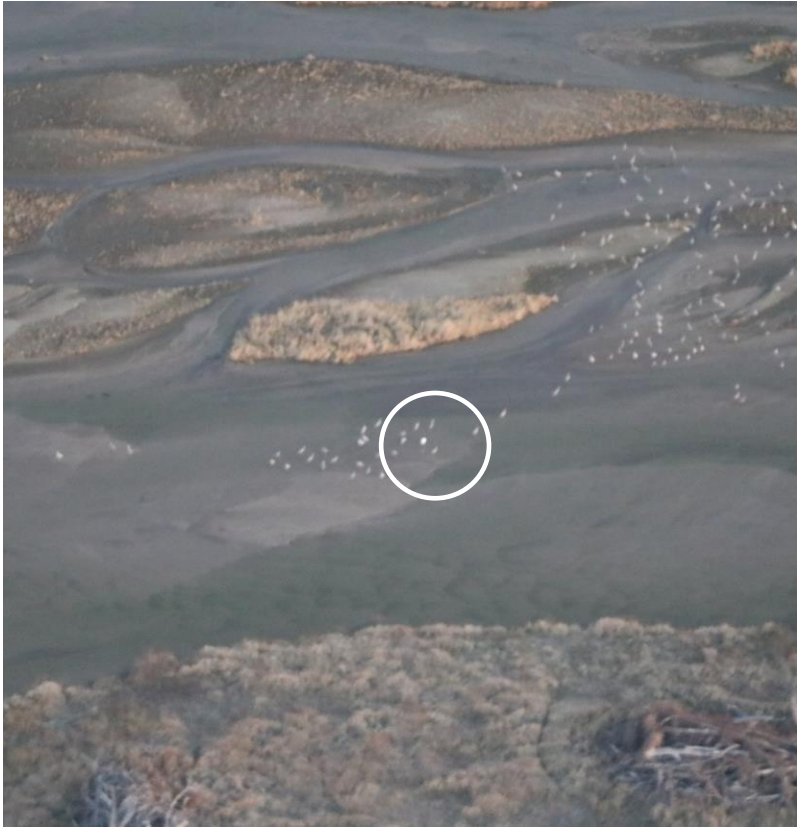


TELEMETRY

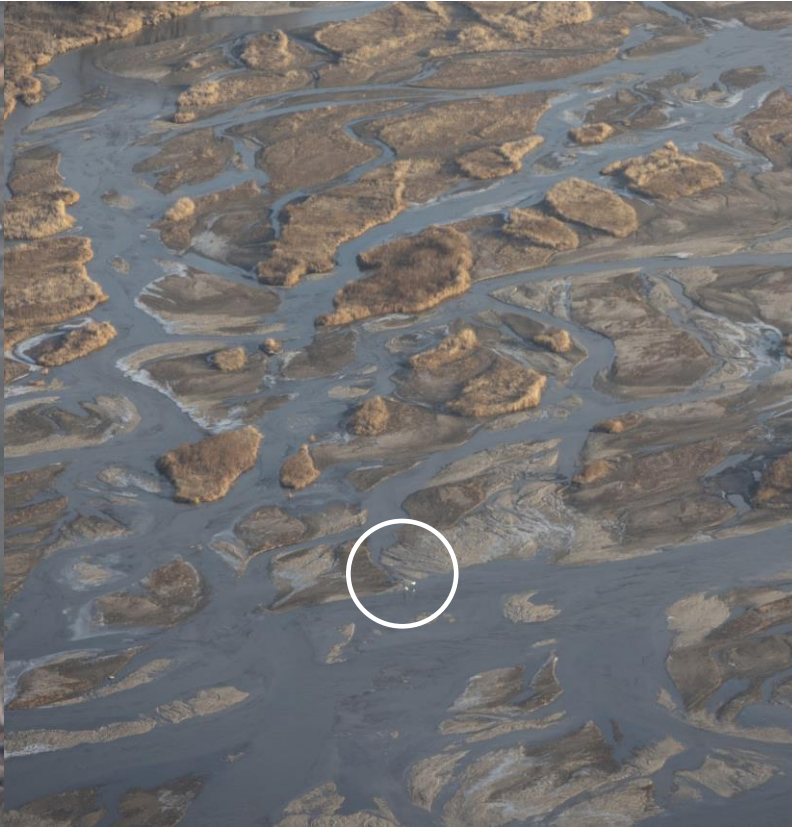
Monitoring Methods



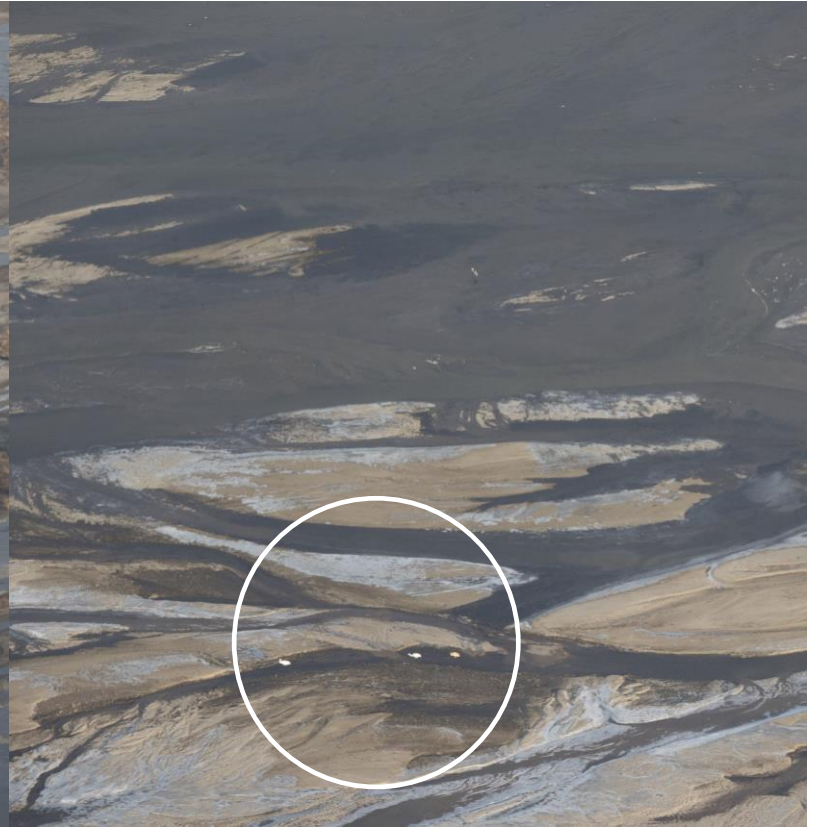
Fall 2022



1:0 @ Rowe



2:0 @ Binfield



2:1 @ Crane Trust

Use Site Metrics collected:

Unobstructed Channel Width

- Fall 2022 Average: 614 ft
- Manage for: ≥ 650 ft

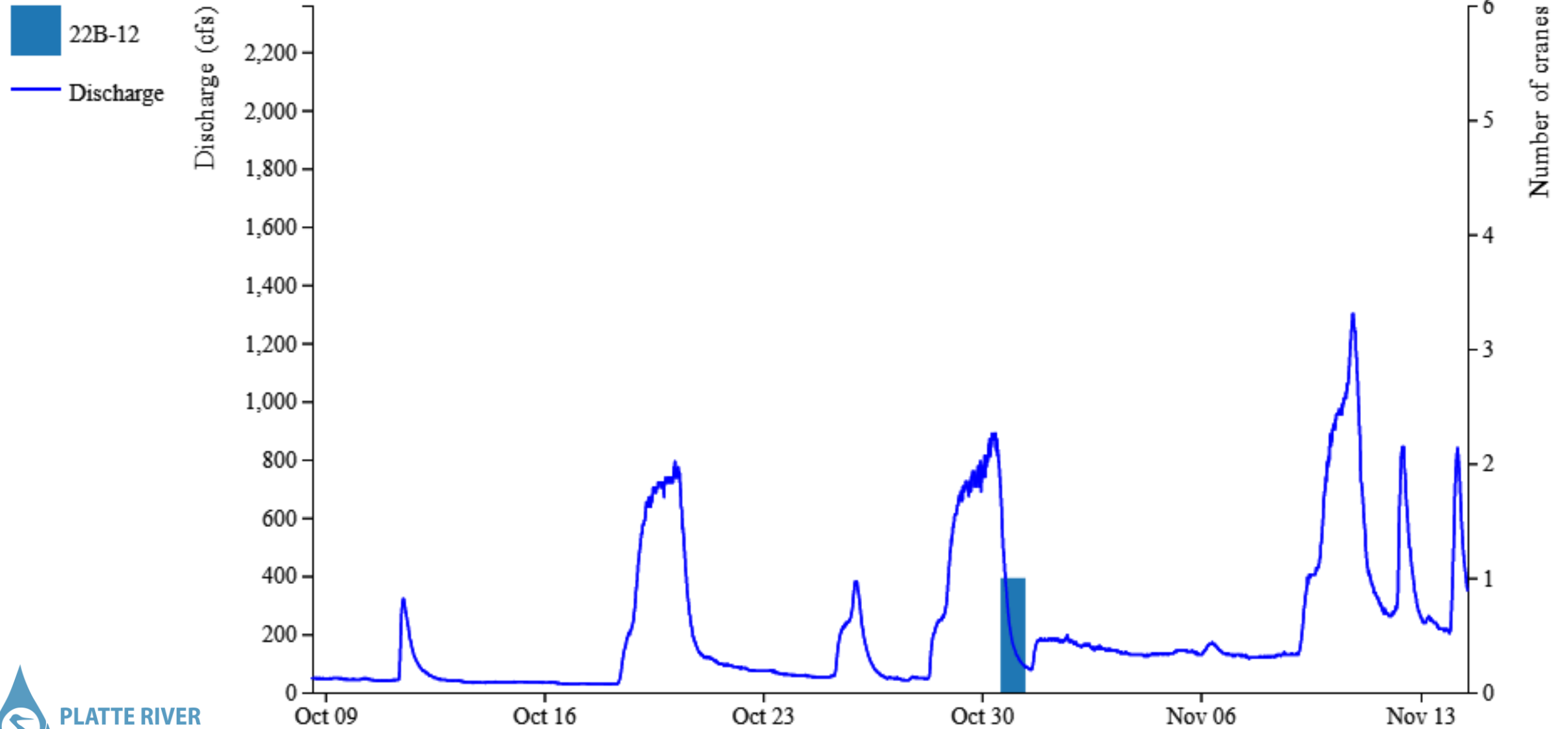
Nearest Forest

- Fall 2022 NF Average: 570ft
 - NFx2: 1,140ft
- Manage for: $\geq 1,100$ ft



2022/FA

Kearney



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

2022/FA

Grand Island

- 22B-55
- 22B-54
- Discharge

Discharge (cfs)

2,200
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0

Oct 09

Oct 16

Oct 23

Oct 30

Nov 06

Nov 13

ICE

Number of cranes

6
5
4
3
2
1
0



PLATTE RIVER
RECOVERY IMPLEMENTATION PROGRAM

Comparison of the River

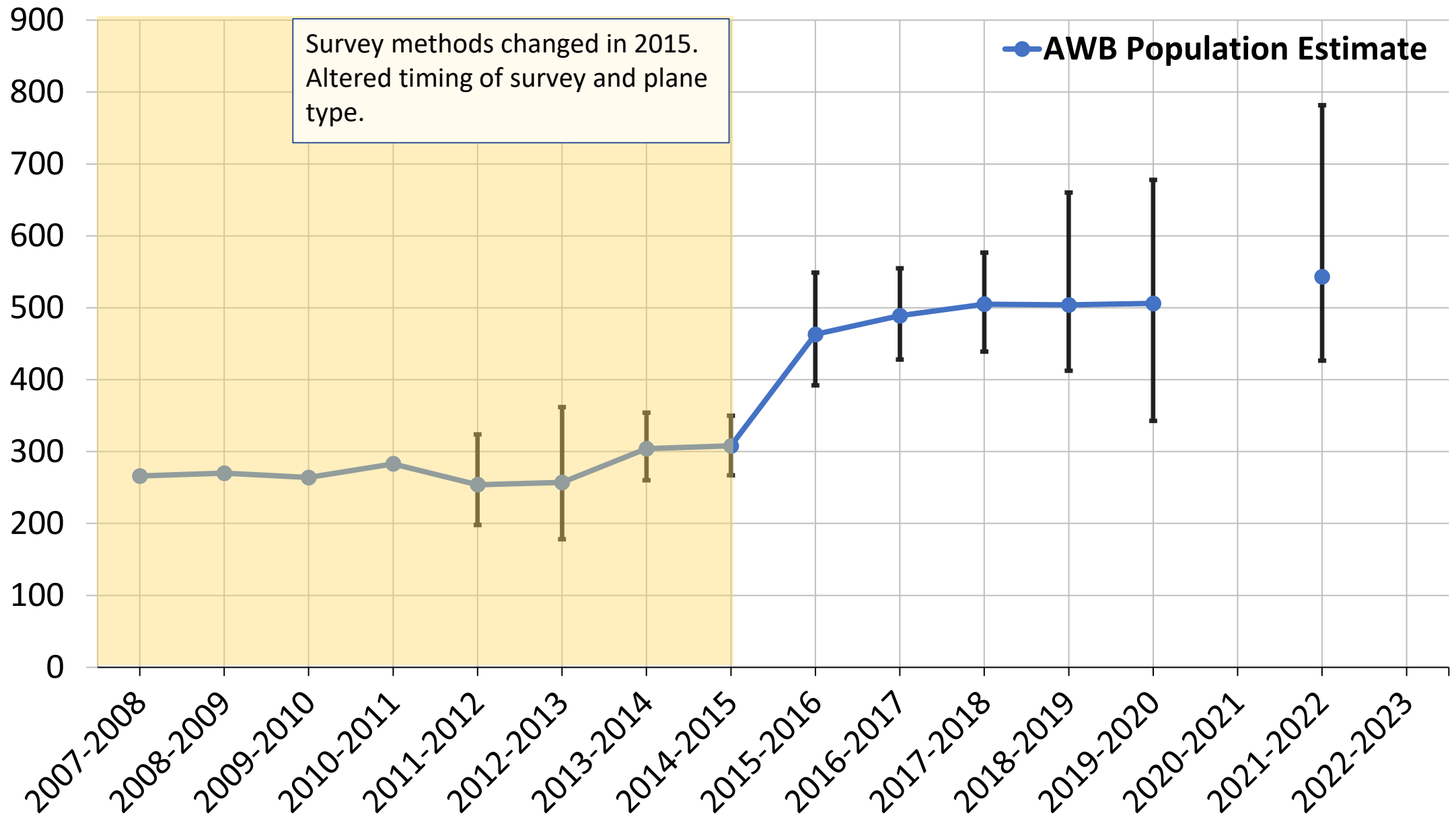
Fall 2022
No flow data

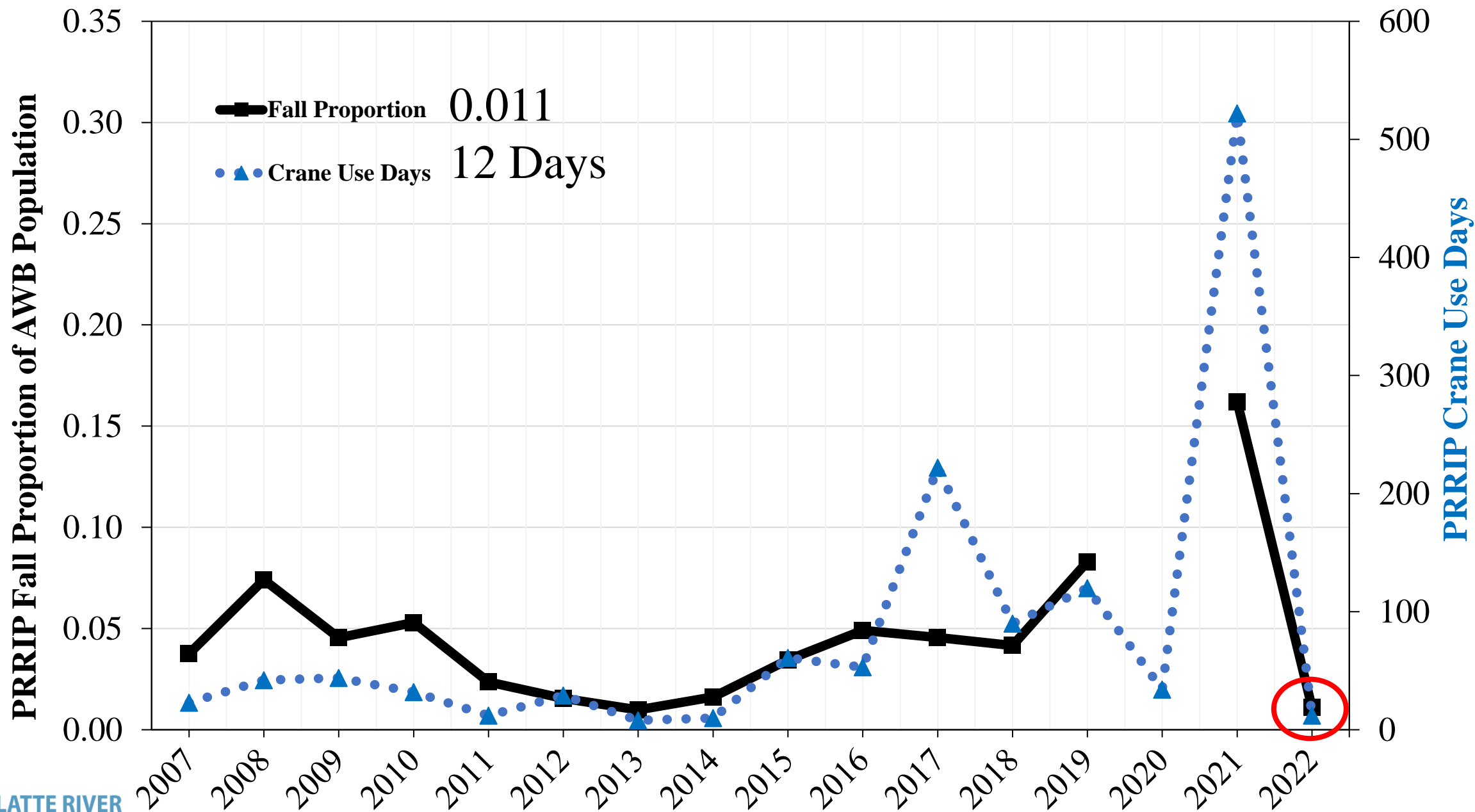


Fall 2021
450 cfs

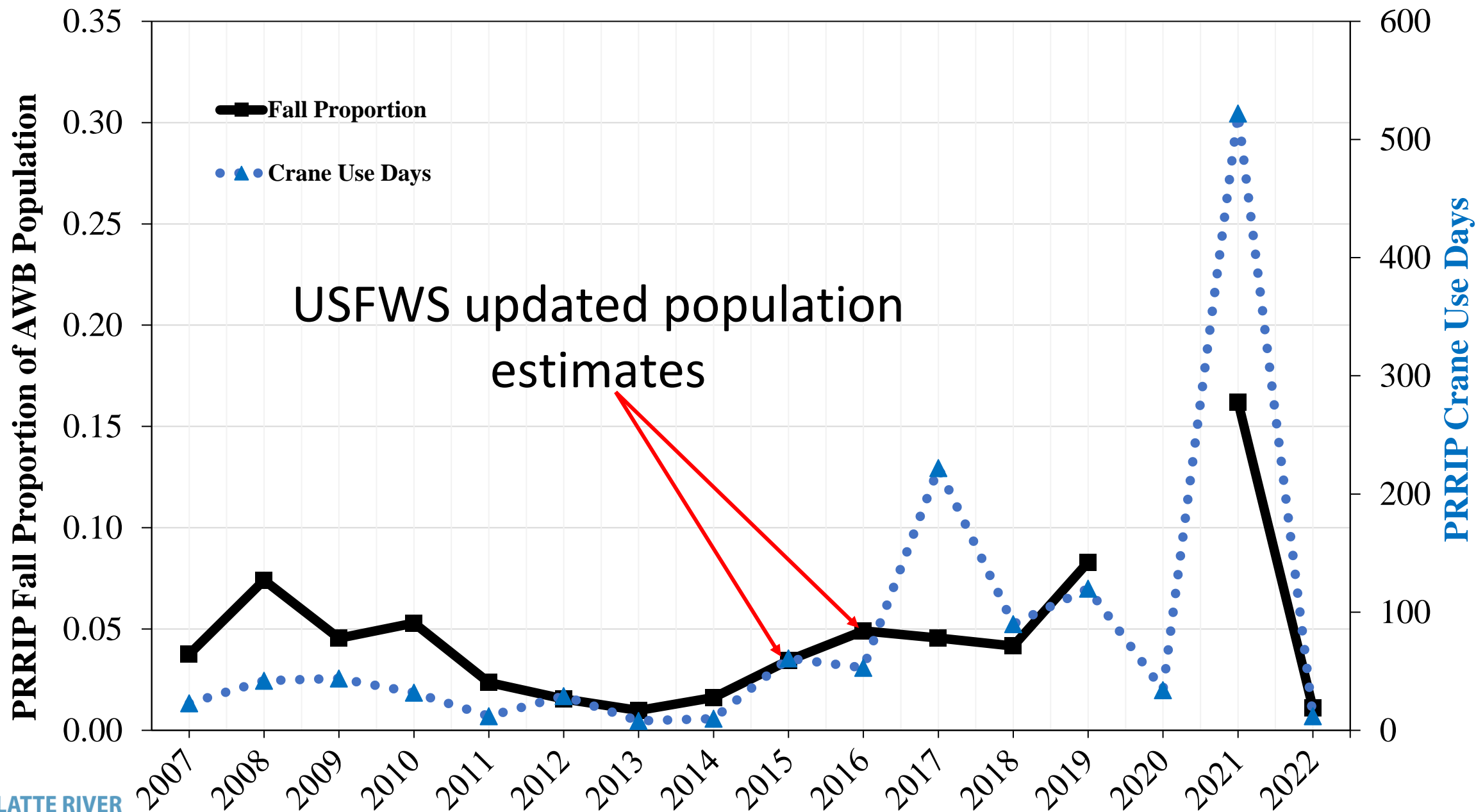


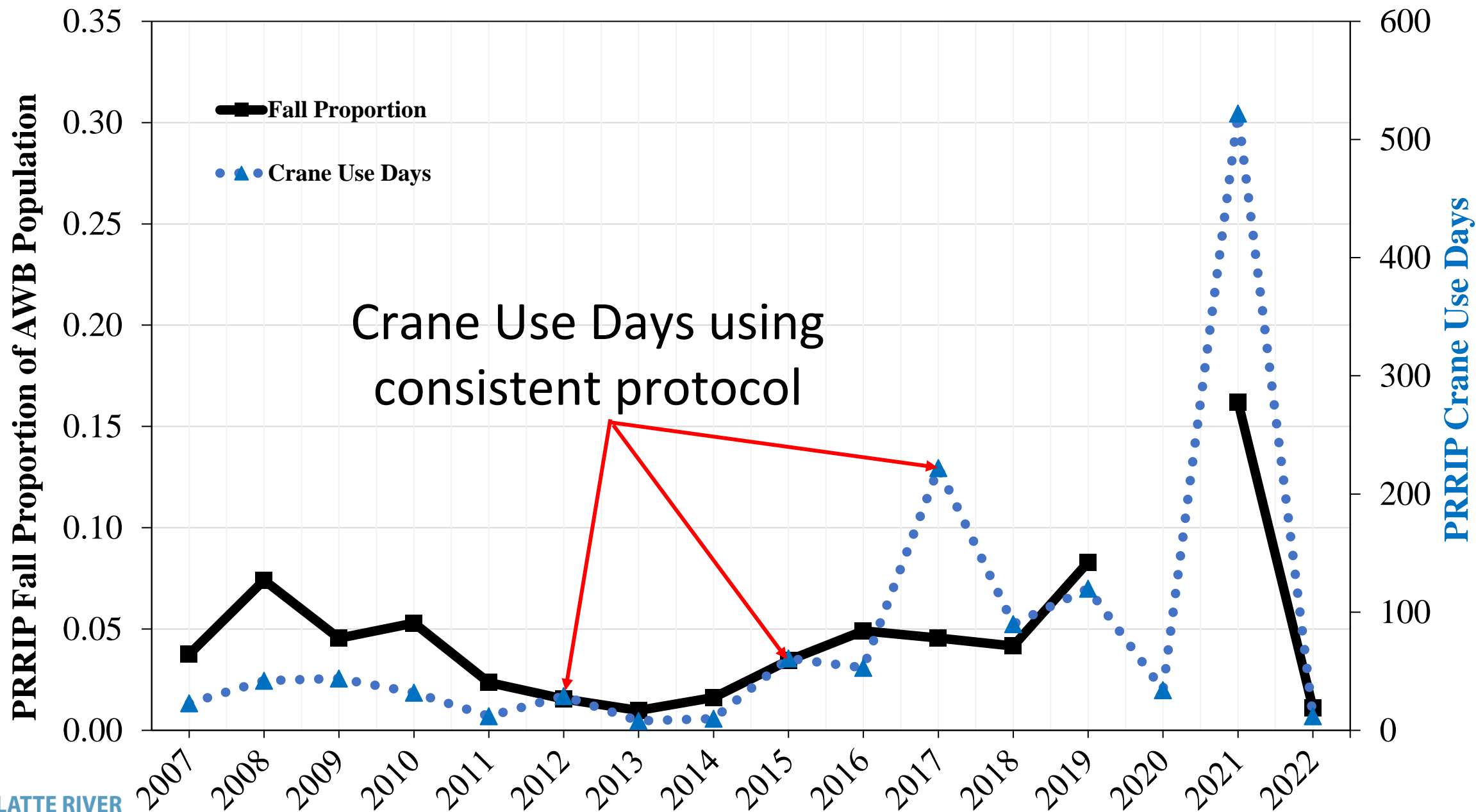
USFWS AWB Population Estimate

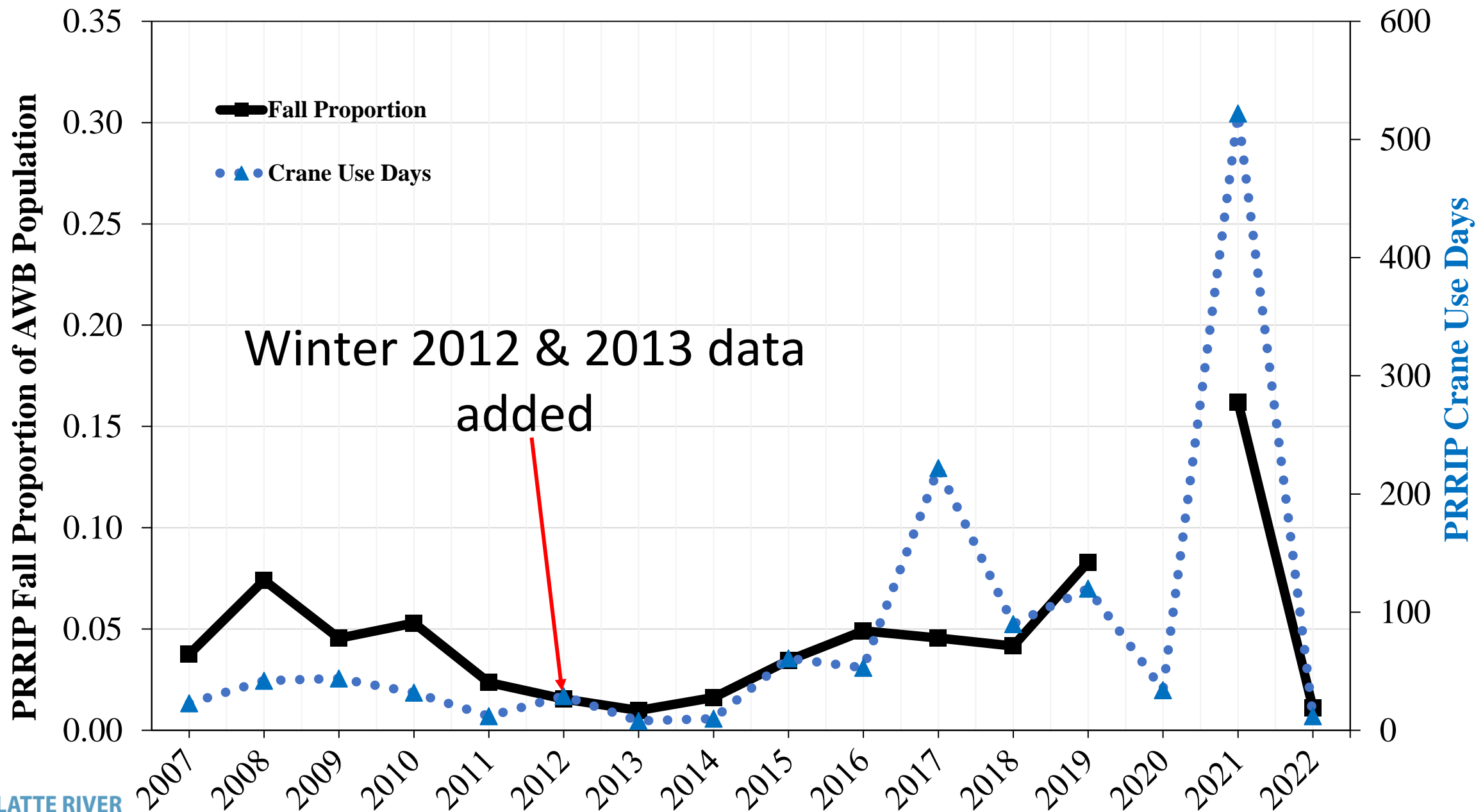




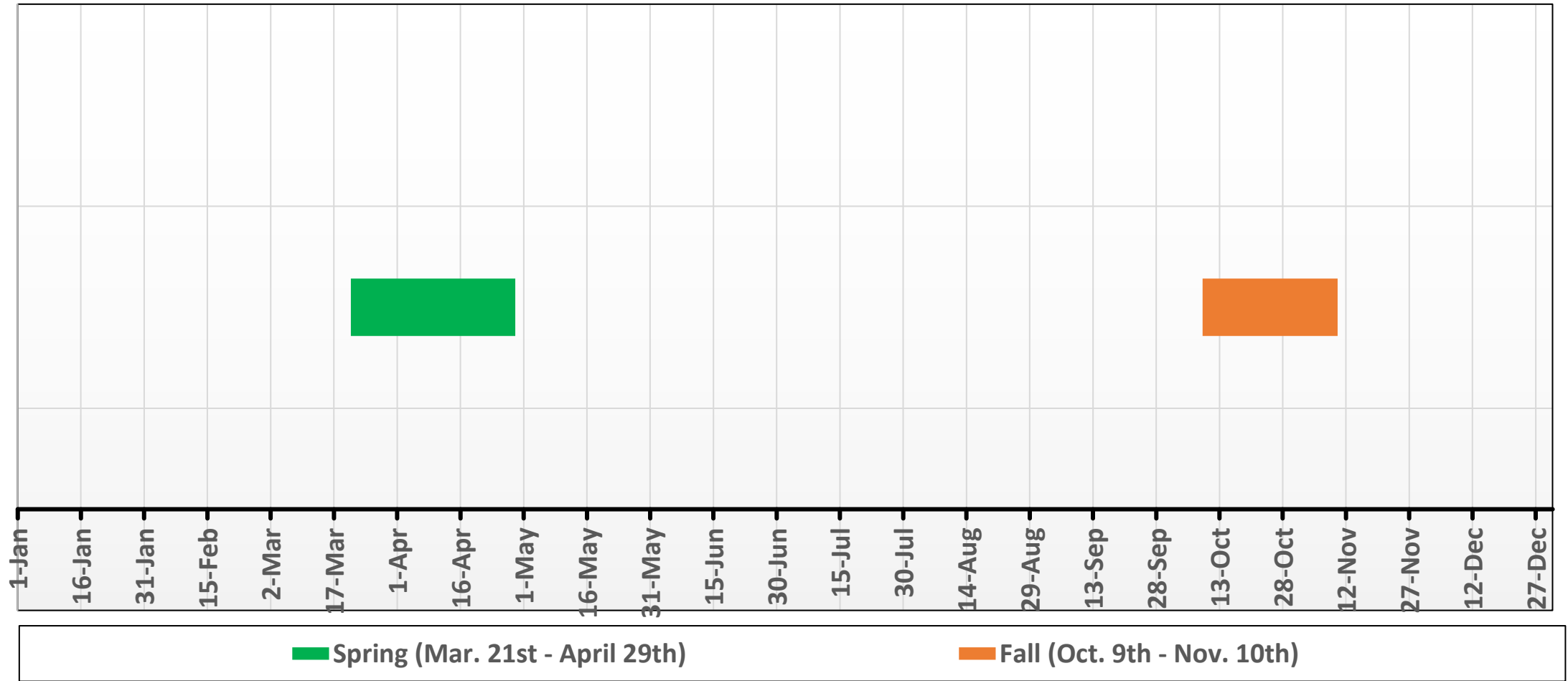
Fall Proportion 0.011
Crane Use Days 12 Days



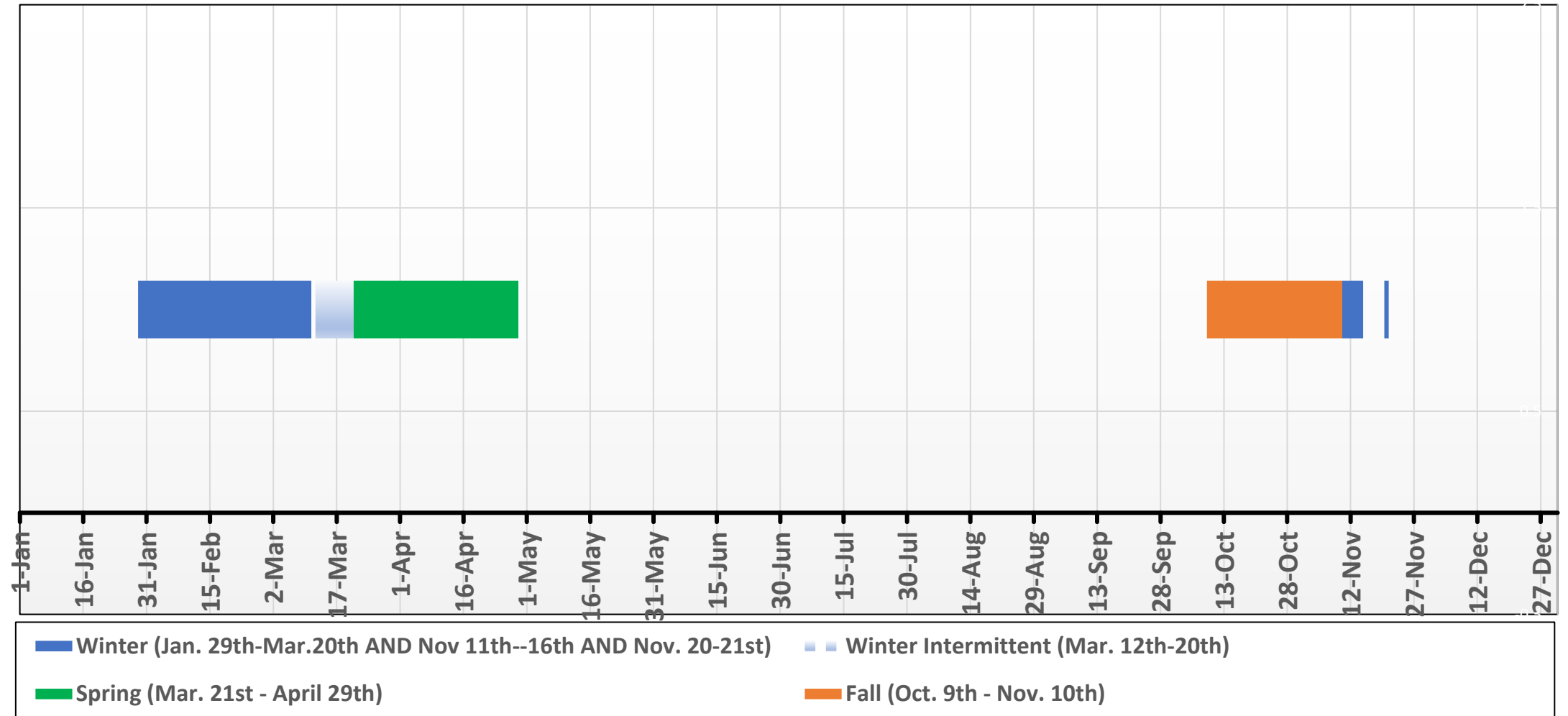




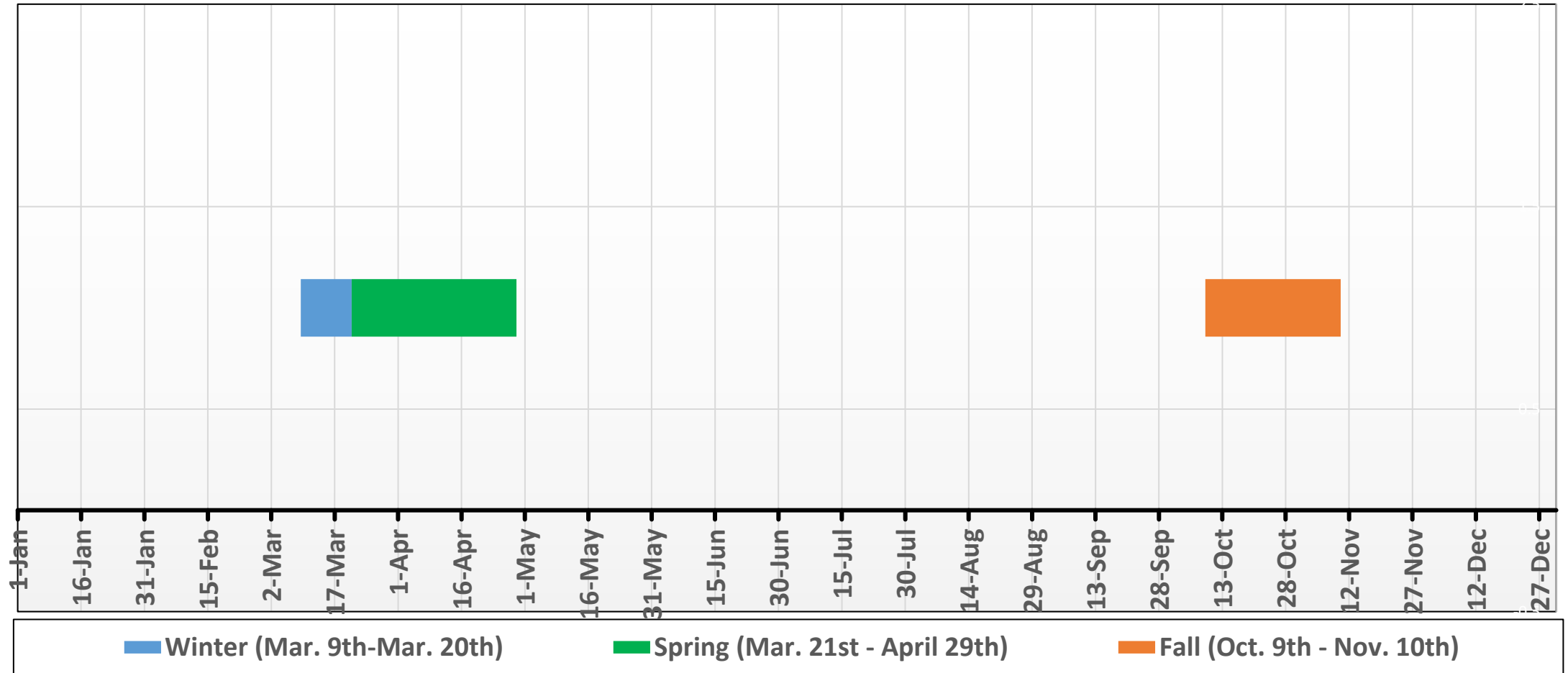
2007- 2011 Monitoring Dates



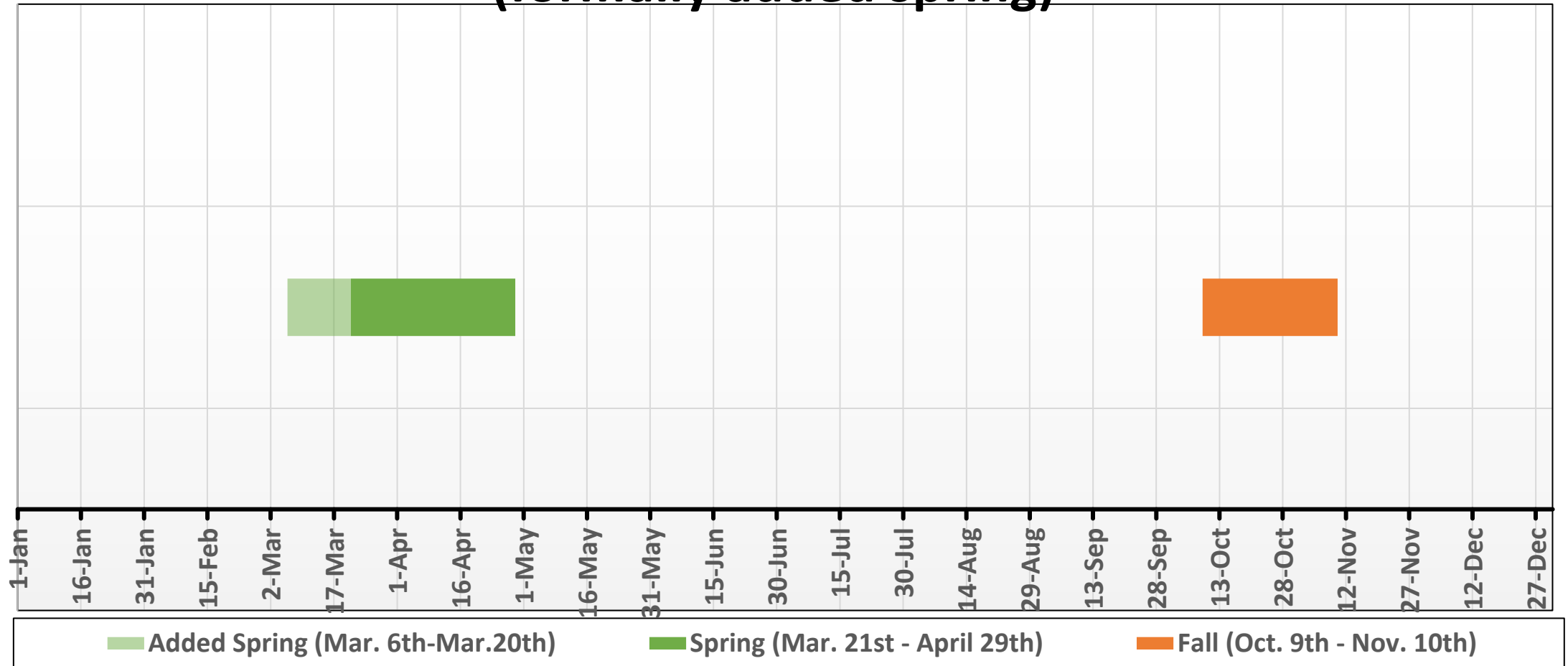
2012 Monitoring Dates



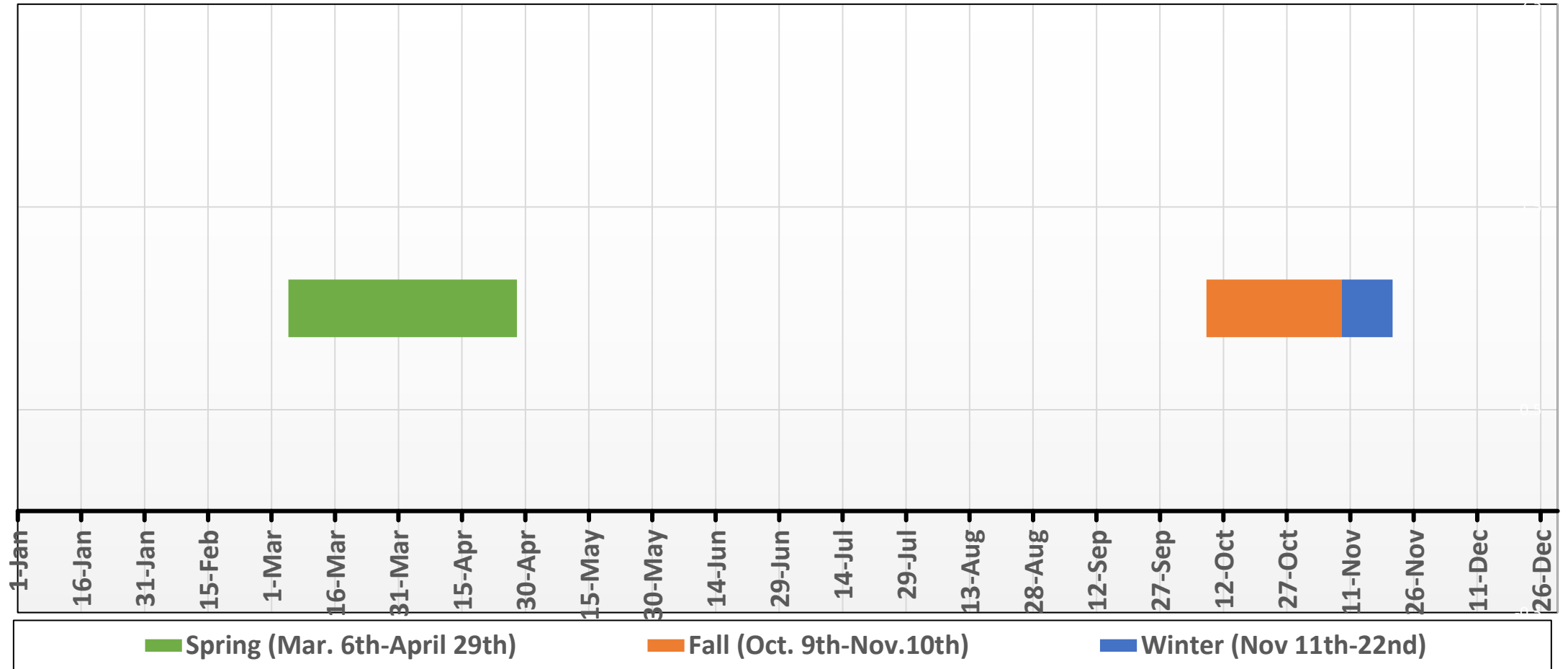
2013 Monitoring Dates



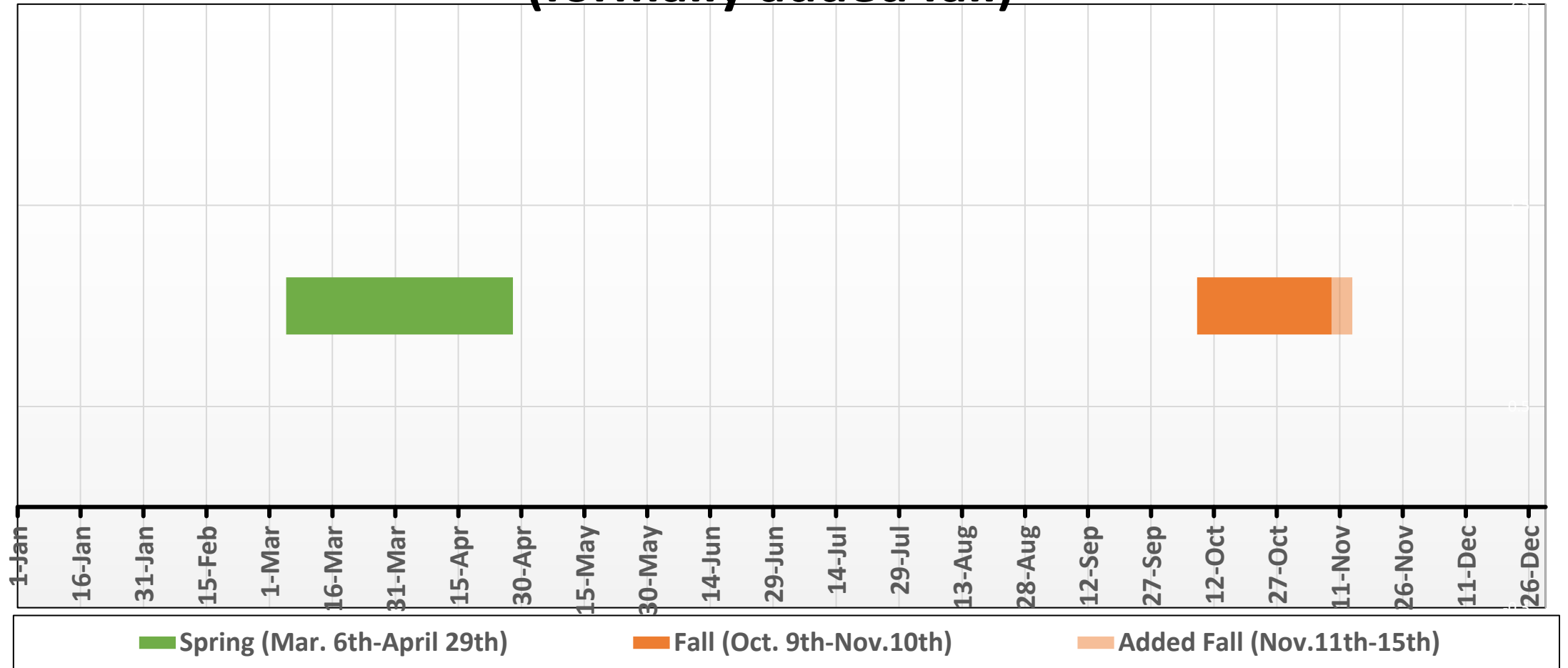
2014 Monitoring Dates (formally added spring)

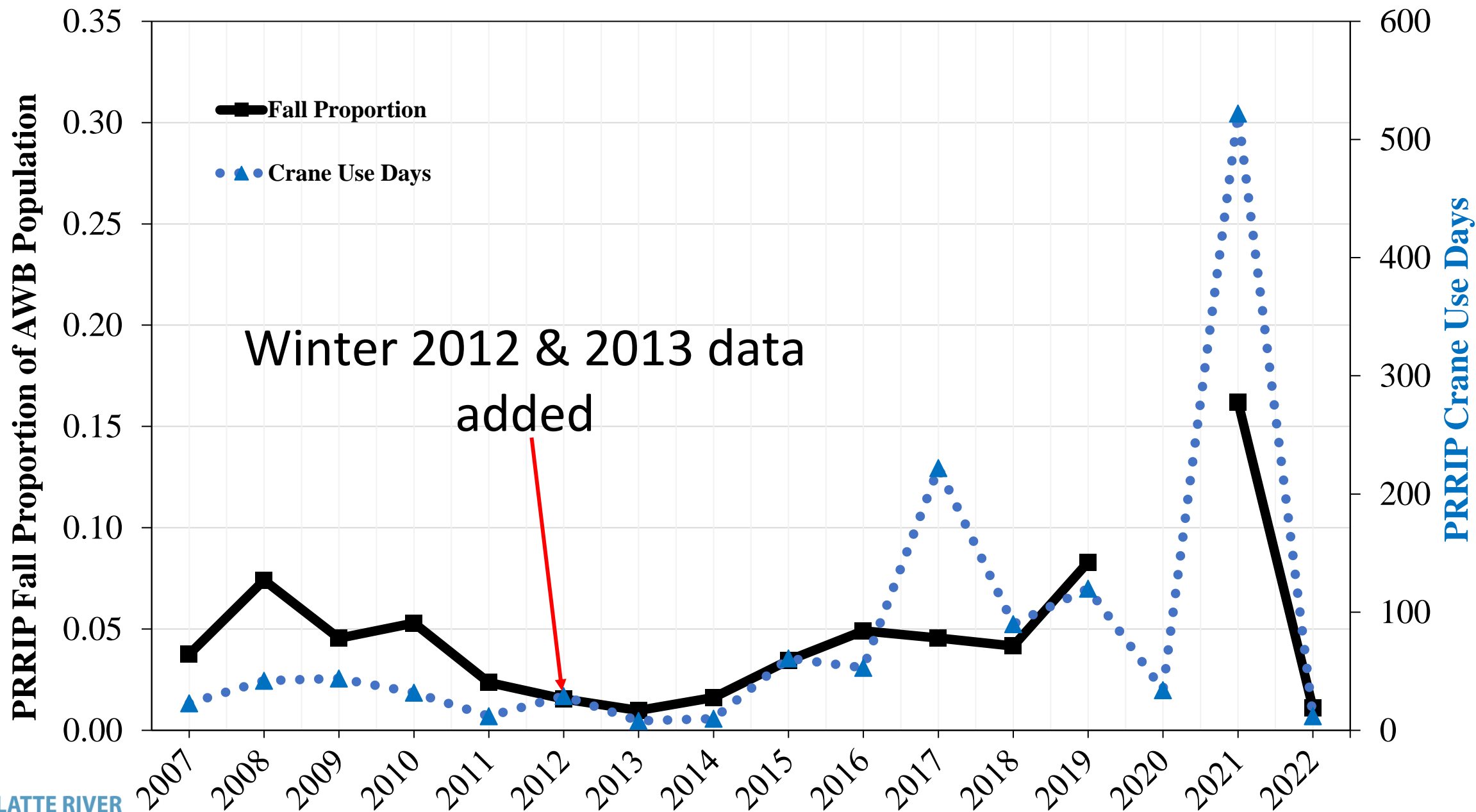


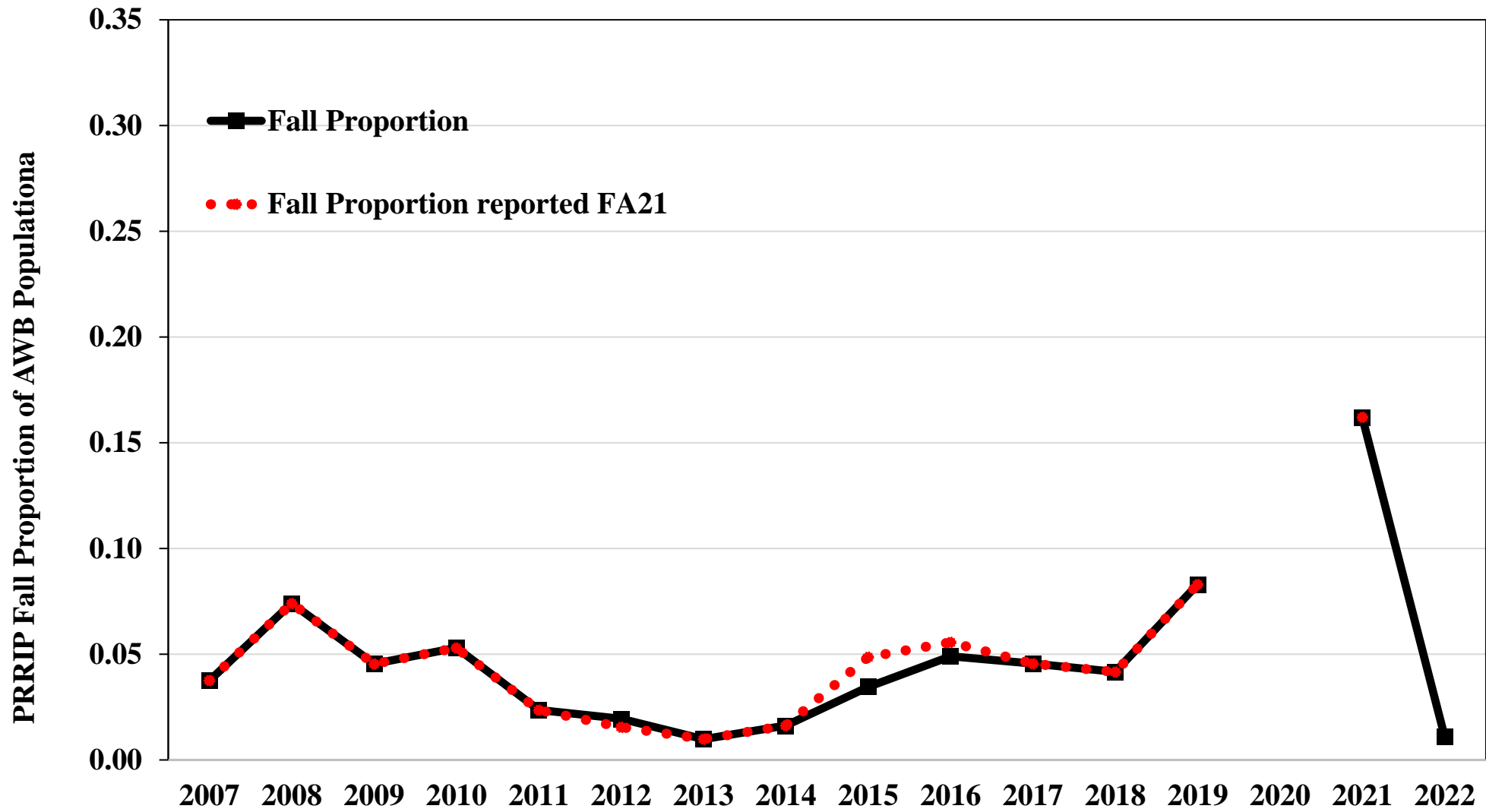
2015-2017 Monitoring Dates

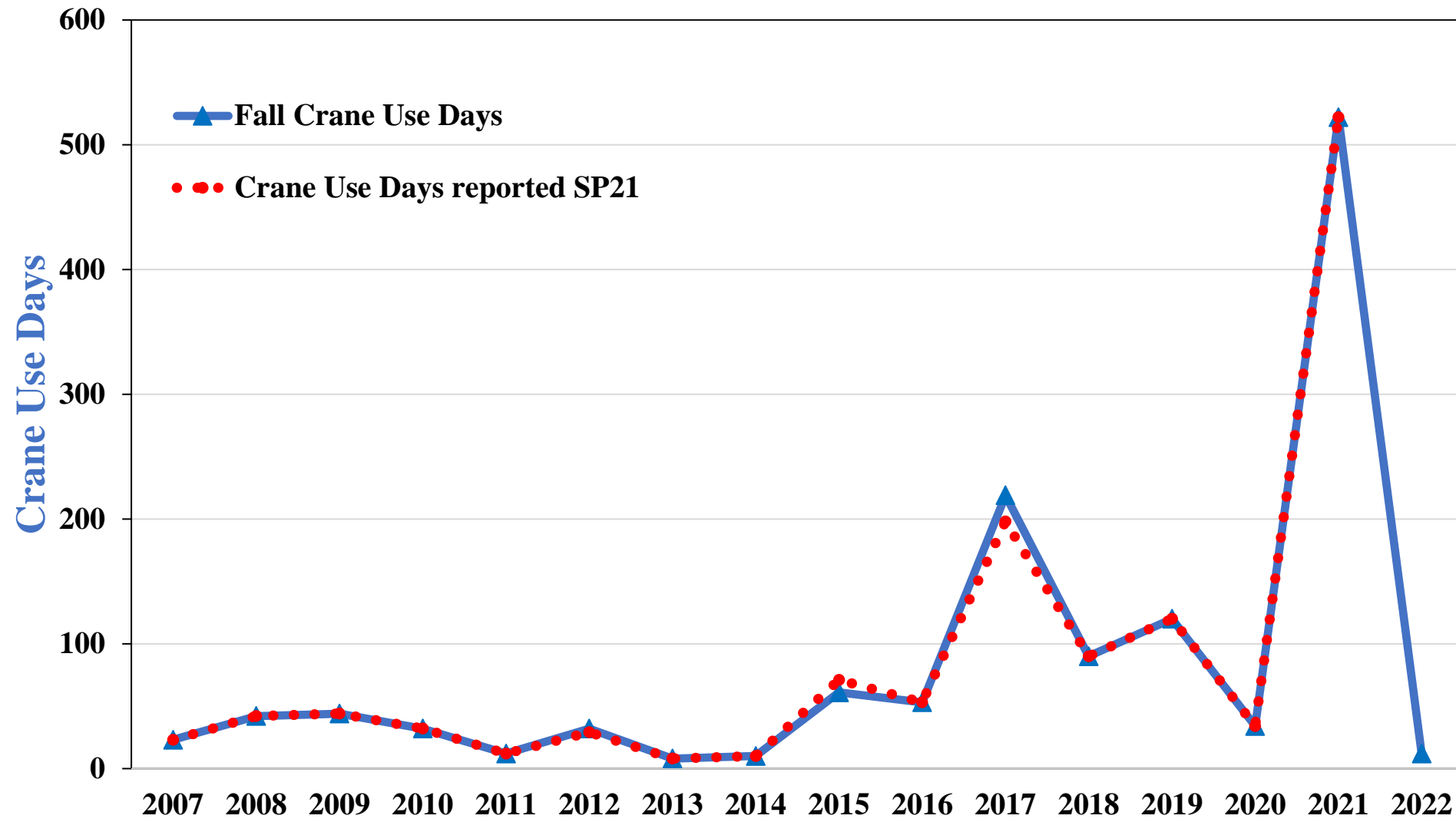


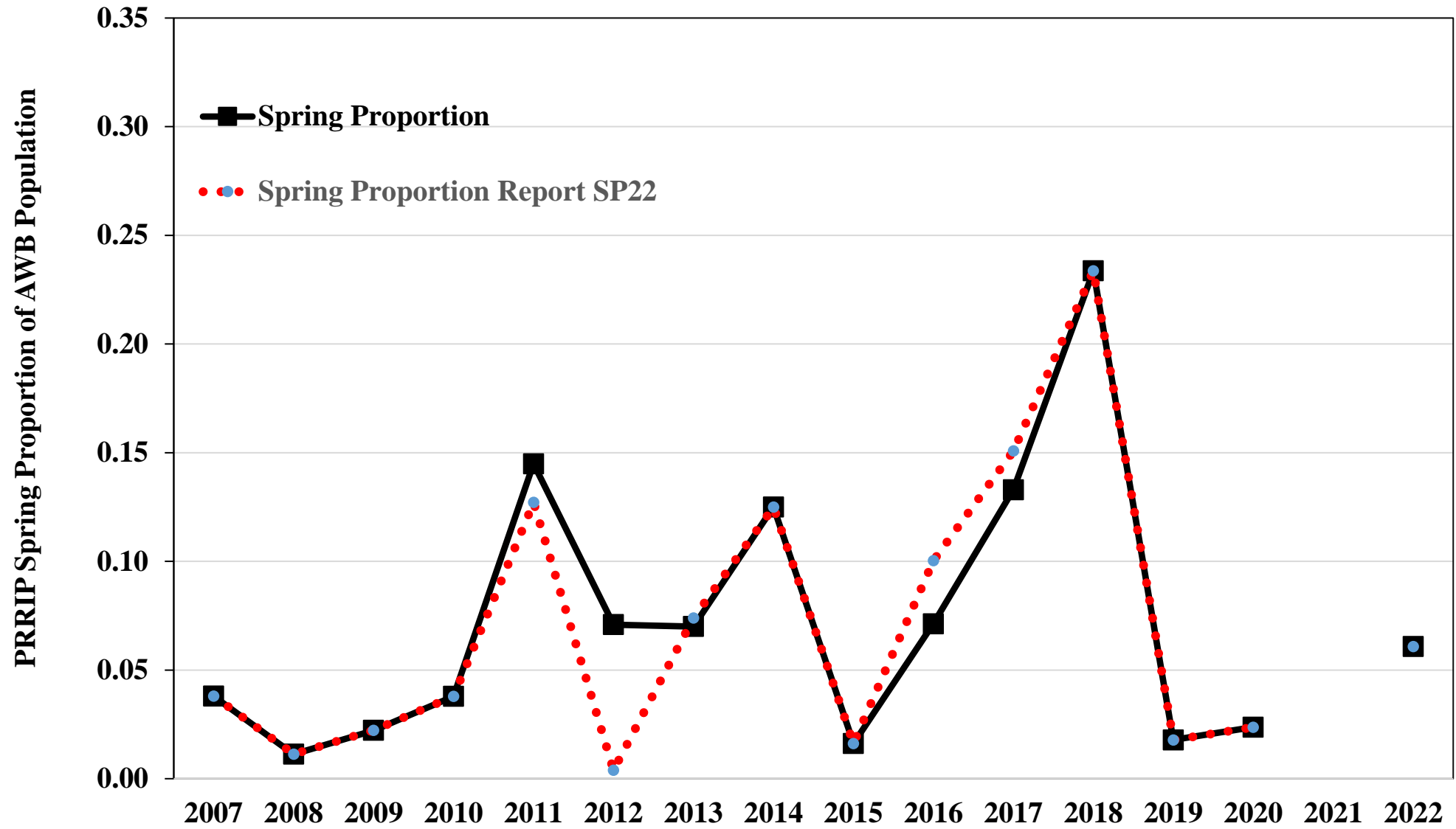
2018-Present Monitoring Dates (formally added fall)

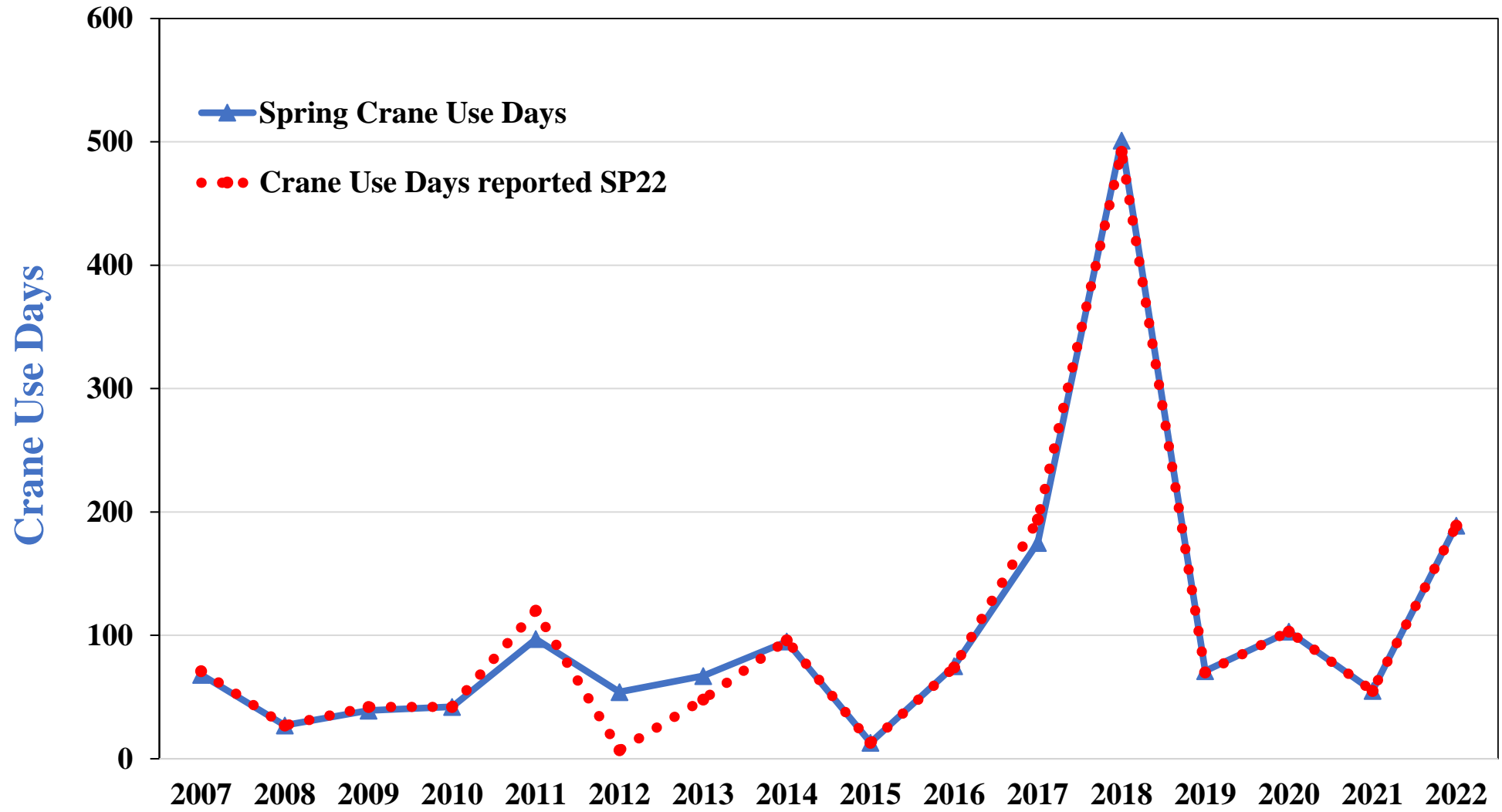




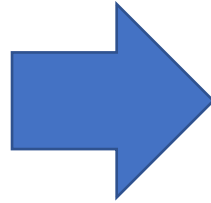








Evolution of Report - Data Collected



Evolution of Report -Systematic/Oppportunistic




Systematic			Flight Transects	WC Group Sightings ^a	Completed	Incomplete	Cancelled	Total Scheduled	Hours	Miles
	Scheduled Flights	On Channel	0SE, 0SW ^b	3	67	0	9	76	33:03:00	7,229
		Off Channel	PWRTE, PWRTW ^c	0	67	0	9	76	29:36:00	
			WSRT, CSRT, ESRT ^d	0	50	1	6	57	8:58:00	
	Additional Flights ^e	On-Channel	0SE, 0SW ^b	0	5	0	1	6	2:32:00	525
		Off-Channel	PWRTE, PWRTW ^c	0	5	0	1	6	2:02:00	
			WSRT, CSRT, ESRT ^d	0	3	0	1	4	0:21:00	
	Opportunistic	Flight ^f		1						
		Ground ^g		1					3:06:00	85
		TOTALS			5	197	1	27	225	79:38:00

Evolution of Report - Effort

			Flight Transects	WC Group Sightings ^a	Completed	Incomplete	Cancelled	Total Scheduled	Hours	Miles
Systematic	Scheduled Flights	On Channel	0SE, 0SW ^b	3	67	0	9	76	33:03:00	7,229
		Off Channel	PWRTE, PWRTW ^c	0	67	0	9	76	29:36:00	
			WSRT, CSRT, ESRT ^d	0	50	1	6	57	8:58:00	
	Additional Flights ^e	On-Channel	0SE, 0SW ^b	0	5	0	1	6	2:32:00	525
		Off-Channel	PWRTE, PWRTW ^c	0	5	0	1	6	2:02:00	
			WSRT, CSRT, ESRT ^d	0	3	0	1	4	0:21:00	
Opportunistic	Flight ^f			1						
	Ground ^g			1					3:06:00	85
	TOTALS			5	197	1	27	225	79:38:00	7,839



Evolution of Report – PRRIP/USFWS datasets

PRRIP						USFWS				
Unique Group Icon	Group ID	Dates Present	Use Days = (Days Present x Cranes) + 1 day per crane on first day observed			Group ID	Dates Present	Use Days = (Days Present x Cranes) + 1 day per crane on first day observed		
			# of WC Ad:Juv	Days Present	Use Days			# of WC Ad:Juv	Days Present	Use Days
	2022FA01	10/31	1:0	1	2	22B-12	10/31	1:0	1	2
	2022FA02	11/15	2:0	1	4	22B-55	11/15	2:0	1	4
	2022FA03	11/15	2:1	1	6	22B-54	11/15	2:1	1	6
Totals			5:1		12	Totals		5:1		12



Questions/Comments?

Adjusting Monitoring Dates???

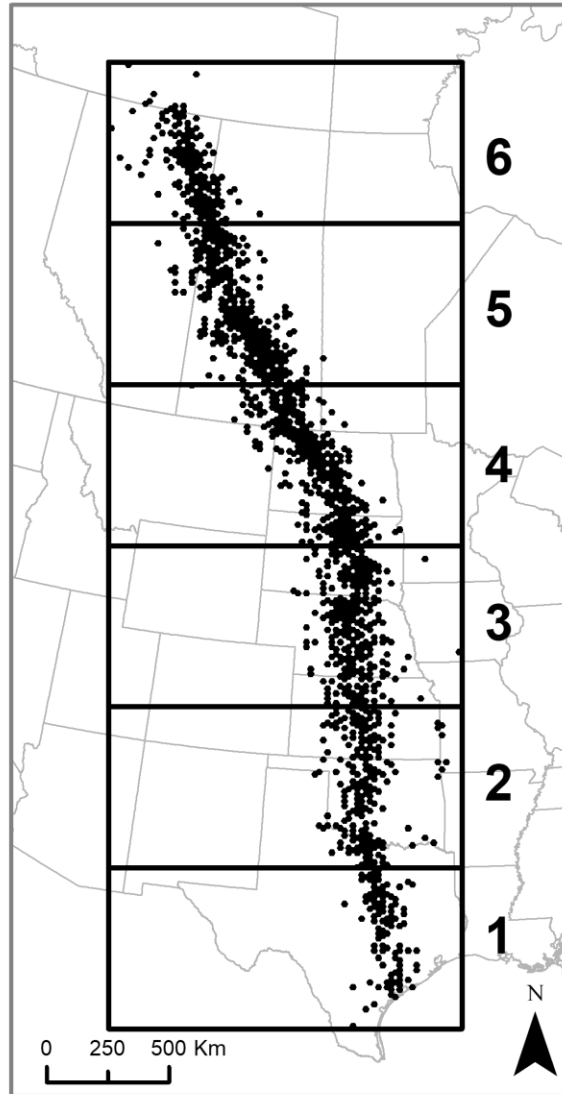
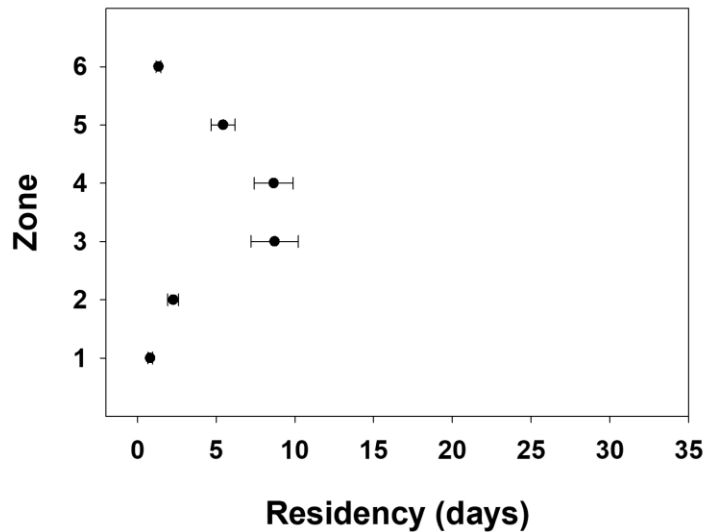
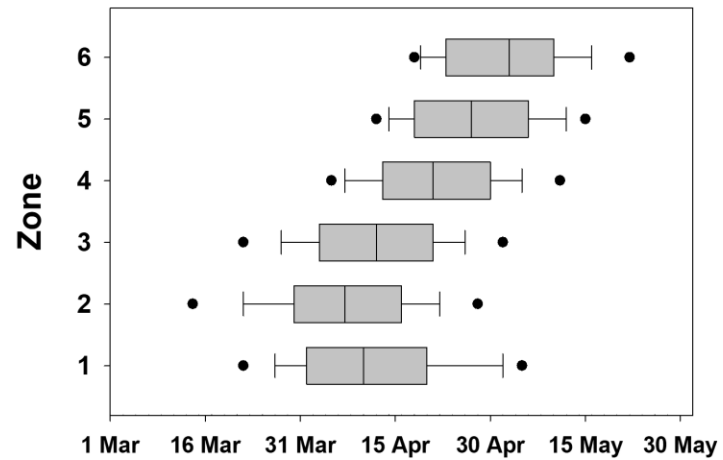
		First Observation	Last Observation
Spring	Outside	Within Monitoring Window Mar 6th – April 29th	
	2022	14-Mar	19-Apr
	2021	4-Mar	31-Mar
	2020	7-Mar	1-Apr
	2019	17-Mar	14-Apr
	2018	28-Feb	22-Apr
	2017	10-Mar	7-Apr
	2016	18-Mar	9-Apr
	2015	28-Mar	13-Apr
	2014	14-Mar	15-Apr
	2013	9-Mar	13-Apr
Average		12-Mar	11-Apr

		First Observation	Last Observation		
Fall	Outside	Within Monitoring Window Oct. 9th – Nov. 15th		Outside	
	2022	31-Oct	15-Nov		
	2021	23-Oct		17-Nov	
	2020	20-Oct	10-Nov		
	2019	13-Oct	10-Nov		
	2018	18-Oct	6-Nov		
	2017	2-Nov		21-Nov	
	2016	4-Nov	14-Nov		
	2015	3-Nov		19-Nov	
	2014	15-Oct	10-Nov		
	2013	3-Nov	10-Nov		
Average		25-Oct	13-Nov		

2010-2016 data

A. T. Pearce, K. L. Metzger, D. A. Brandt, et al.

Spring migration



Autumn migration

