

Section 120 LOA Activities at Bonneville Dam

Steven Jeffries

Washington Department of Fish
and Wildlife

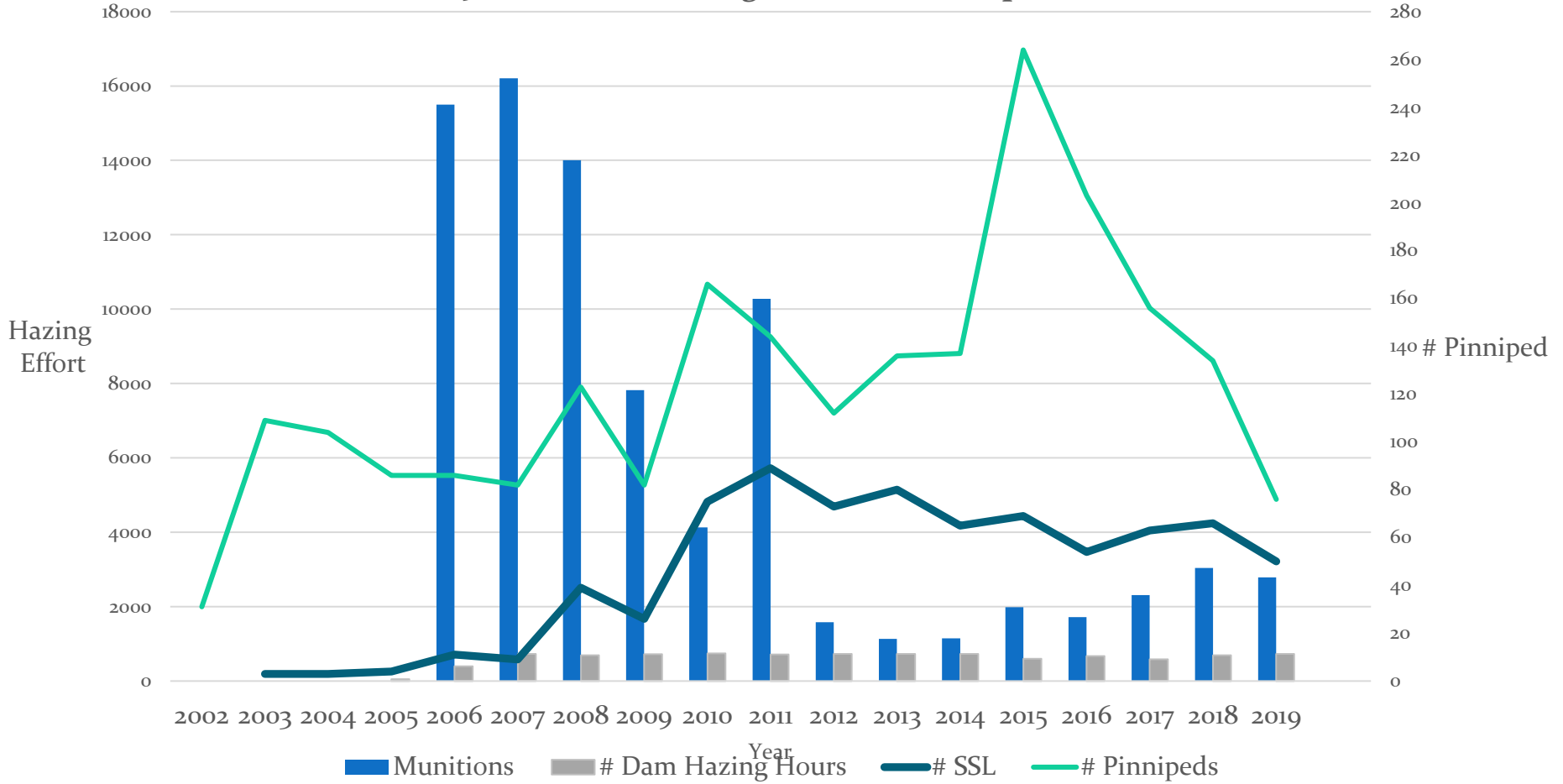


*Washington
Department of*
**FISH and
WILDLIFE**





2002 - 2019 Bonneville Hazing Effort and Pinniped Abundance







NO SMOKING
WHEN FLEASING

119

121

HONDA 90

Yamaha

HONDA

NOV 15 11















Table 5. Summary of California sea lion removals under States' Bonneville Dam MMPA §120 removal authorization. Removals are categorized by location, season, and outcome. Accidental mortalities are further categorized by whether animals were on the list for removal or had qualified to be on the list.

Year	Bonneville Dam				Euthanized	Willamette Falls	Astoria		Total
	Placed in captivity	Accidental mortality		Euthanized (spring)		Euthanized (spring)	Euthanized (fall)		
		On list	Qualified					Not yet qualified	
2008	6	2	1	2				11	
2009	4				10		1	15	
2010					12		2	14	
2011							1	1	
2012	1				11		1	13	
2013	2				2			4	
2014					15			15	
2015	2			2	30			34	
2016					59			59	
2017					24			24	
2018					28	1		29	
2019					19	(3*)		19	
Total	15	2	1	4	210	1	1	4	238*

*These three sea lions were cross-listed and reported under ODFW's Willamette Falls MMPA §120 removal authorization and therefore not included in totals here.

**Includes seven accidental mortalities; intentional removals = 231 sea lions.

Table 2. Summary of sea lion captures at Bonneville Dam, 2019.

Trap date	Total caught	Steller sea lions		California sea lions		
		Total	Released (branded*)	Total	Released (branded**)	Euthanized
2019-04-30	5	1	1	4	3	1
2019-05-01	7	1	1	6	1	5
2019-05-02	11	6	6	5	1	4
2019-05-07	3	0	0	3	2 (2)	1
2019-05-08	8	2	2	6	5 (1)	1
2019-05-09	2	0	0	2	2	0
2019-05-14	7	4	4	3	0	3
2019-05-15	5	1	1	4	0	4
2019-05-16	4	3	3	1	1	0
2019-05-20	0	0	0	0	0	0
2019-05-21	2	1	1 (1)	1	1	0
2019-05-22	0	0	0	0	0	0
Total	54	19	19 (1)	35	16 (3)	19
Average	4.5	1.6	1.6	2.9	1.3	1.6

Table 3. Summary of prey remains recovered from gastrointestinal tracts of 19 California sea lions removed at Bonneville Dam, 2019.

Date	CSL	Salmonid			Pacific lamprey	Lamprey Spp.	Shad
		Adult*	Juvenile	PIT tag			
2019-04-30	X953	5					
2019-05-01	2-00	1	148	6			1
	2-07	4					
	2-15	1			1		
	2-25	3			1		
	2-28	1					
2019-05-02	1-34	3	72	6	1		
	1-70	2					
	1-92	2	29	5			
	2-30	5			1		
2019-05-07	2-62	1	1				
2019-05-08	1-99	1					
2019-05-14	1-84	5	1			1	1
	2-26	3					
	09-2	3	1				
2019-05-15	2-31	5			2		
	2-32	2					2
	2-55	1	14	2			1
	2-66	1					
Total		49	266	19	6	1	5

*All identified as Chinook salmon except two that were unidentified to species.

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WILDLIFE**

Questions?

Willamette Falls Sea Lion Management Program

Sheanna Steingass

Marine Mammal Program Leader

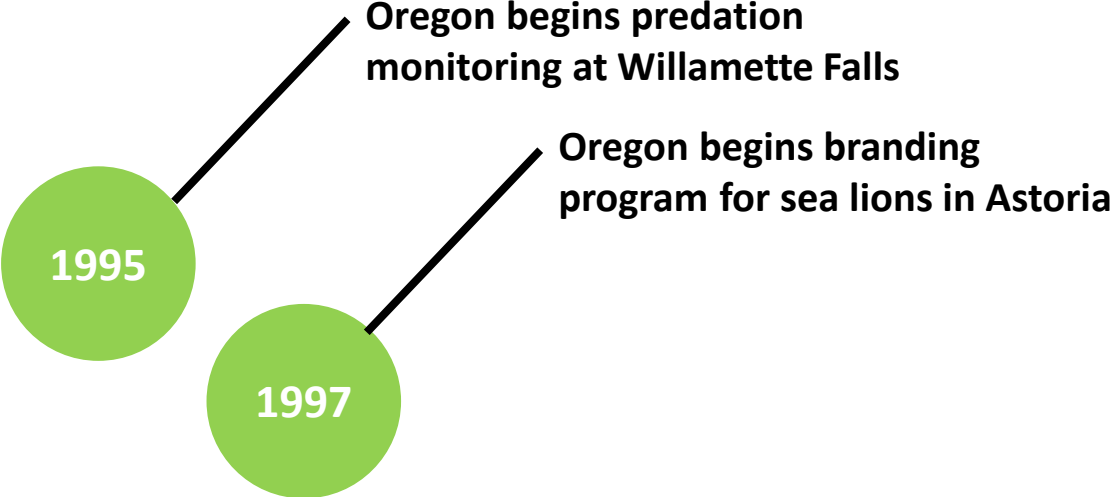
Oregon Department of Fish and Wildlife

Willamette Falls, Oregon.

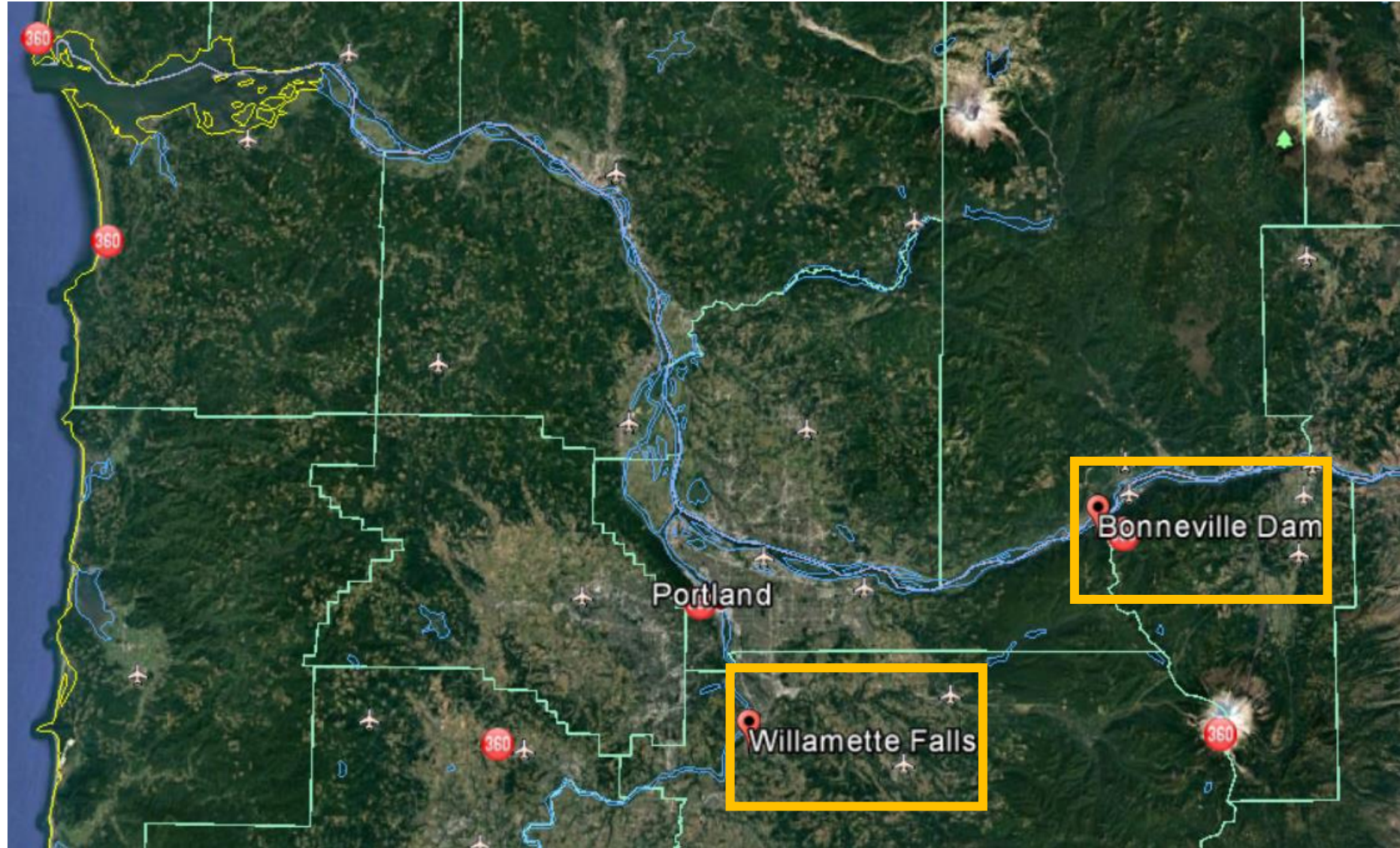




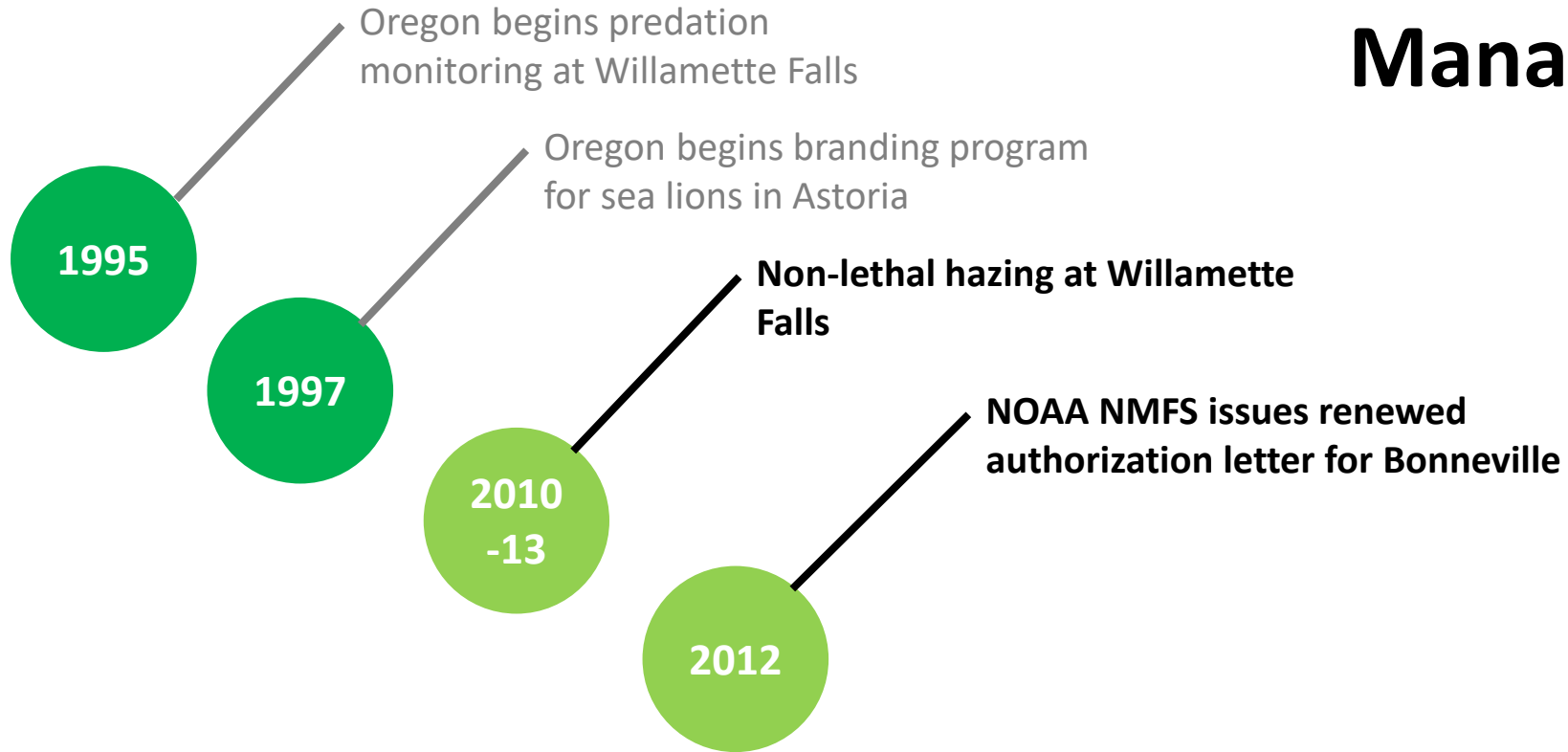
Management Timeline



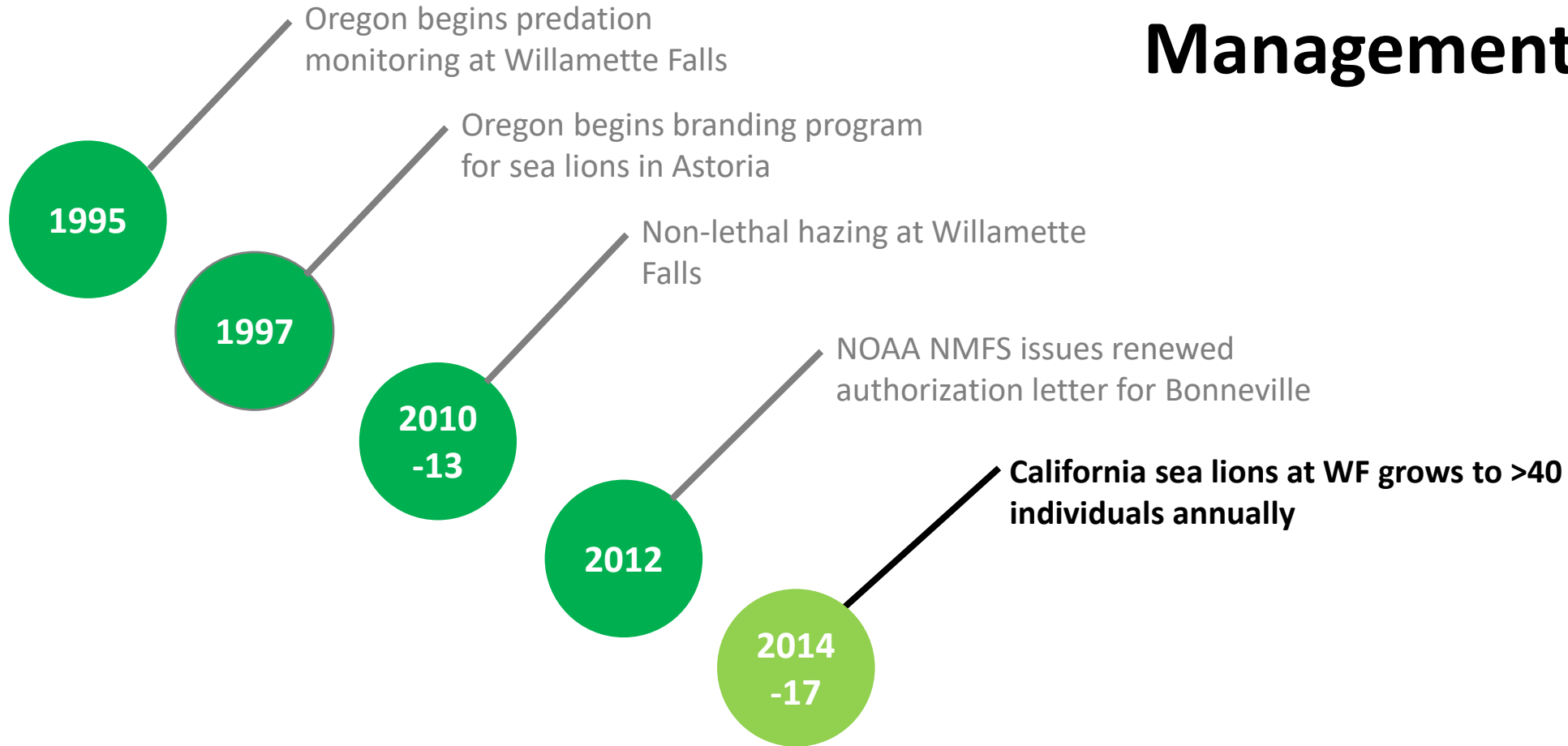
WILLAMETTE FALLS



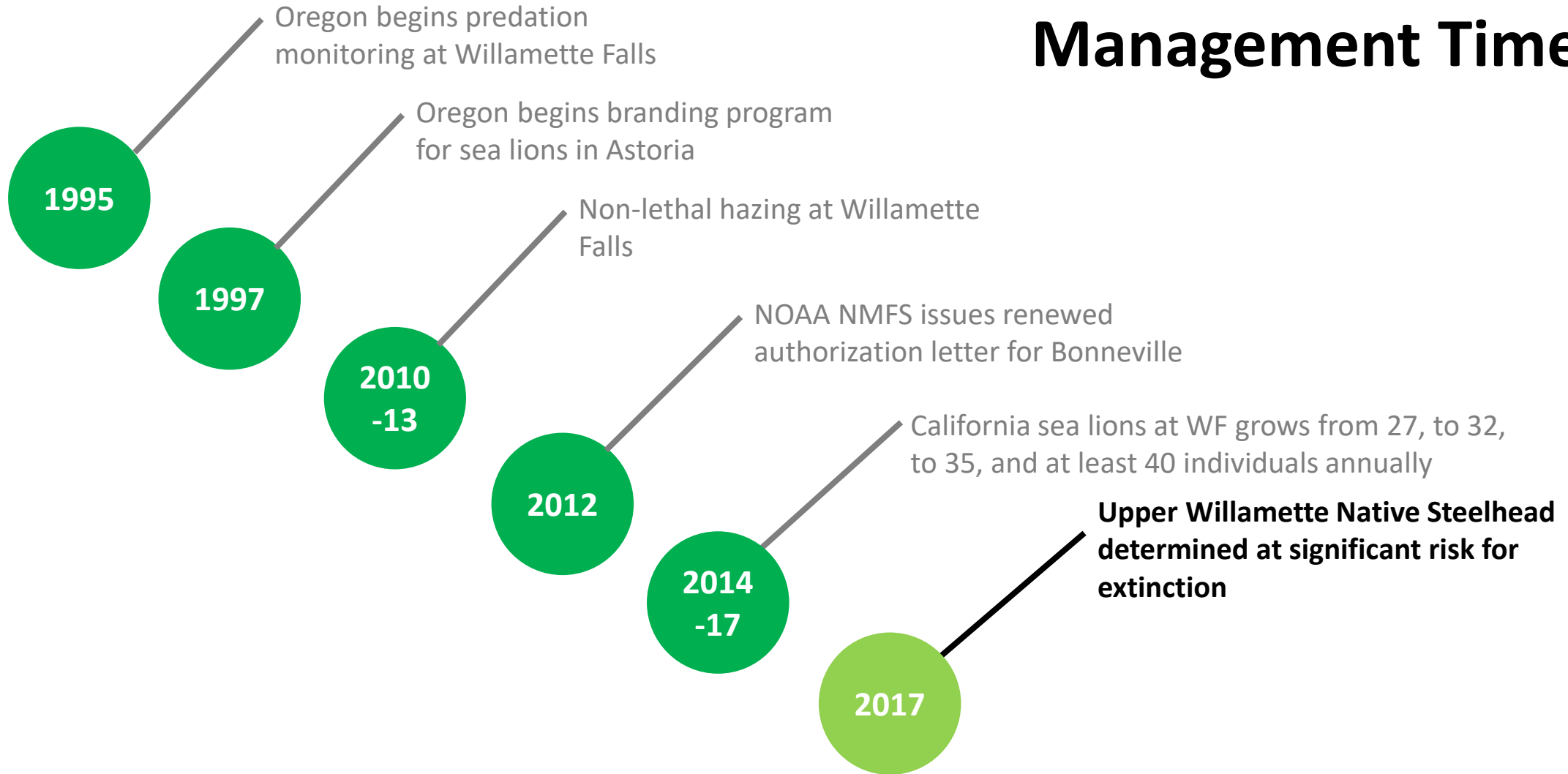
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Management Timeline



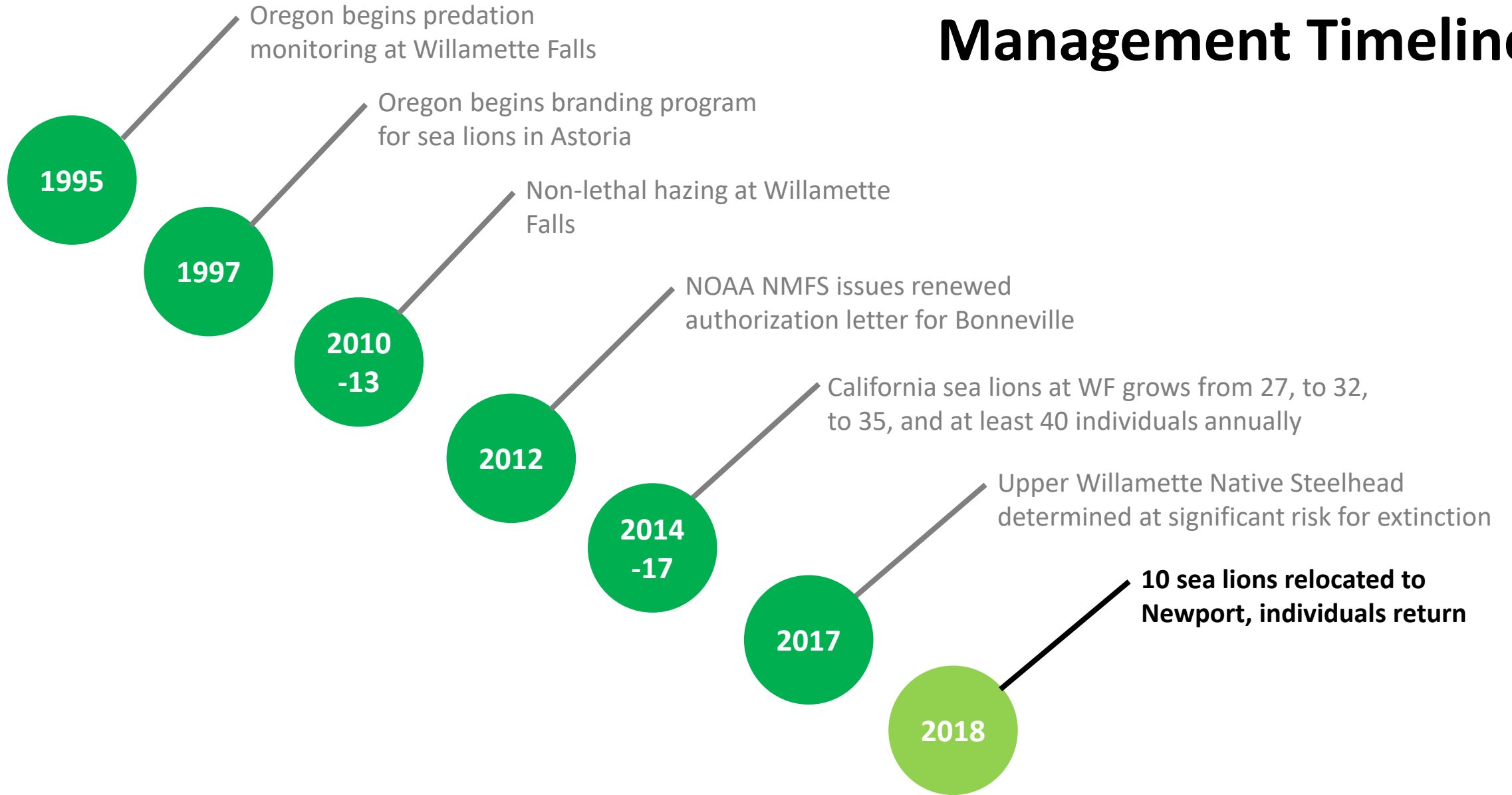
WILLAMETTE MANAGEMENT

As a continuation of non-lethal measures, 10 animals were relocated to Newport, OR in 2018.

All marked animals returned.



Management Timeline



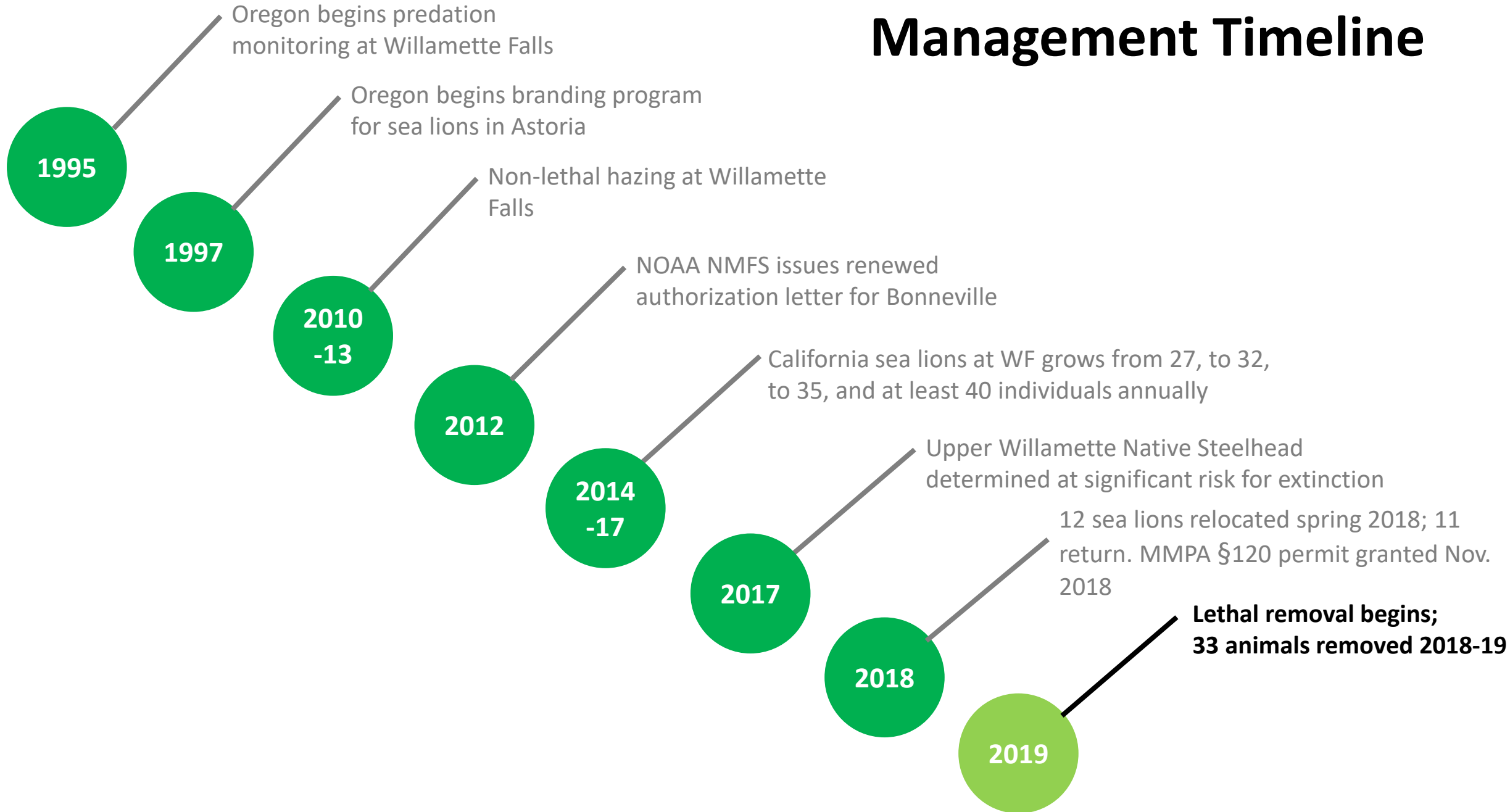
WILLAMETTE MANAGEMENT

Permanent removal efforts at **Willamette Falls** started in December 2018.

33 adult male California sea lions humanely euthanized December - May 2019.



Management Timeline



TRAPPING SET UP AT WILLAMETTE FALLS



**ADJACENT
TRAPS**

TRAPPING SET UP AT WILLAMETTE FALLS

**MOBILE
BARGE**



TRAPPING SET UP AT WILLAMETTE FALLS

**SQUEEZE
CAGE**



TRAPPING SET UP AT WILLAMETTE FALLS



**TRANSFER
CAGES**

MANAGEMENT PROTOCOLS

1. Animals are **individually identified**
2. If a removal animal, or unmarked animal is on the trap, the **trap door closure is triggered** by staff within line of sight using a remote mechanism.
3. **Tarps** are immediately lowered on all sides of the trap to reduce stress on the animals.



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MANAGEMENT PROTOCOLS

3. Once the trap(s) are closed,
 - 1) Staff may move animals between traps in order to **release non-qualified animals** on the spot
 - 2) Animals that do not have markings are moved to the squeeze cage, **marked, and released**
 - 3) Animals qualified for removal are **shuttled to a transfer cage on the barge.**



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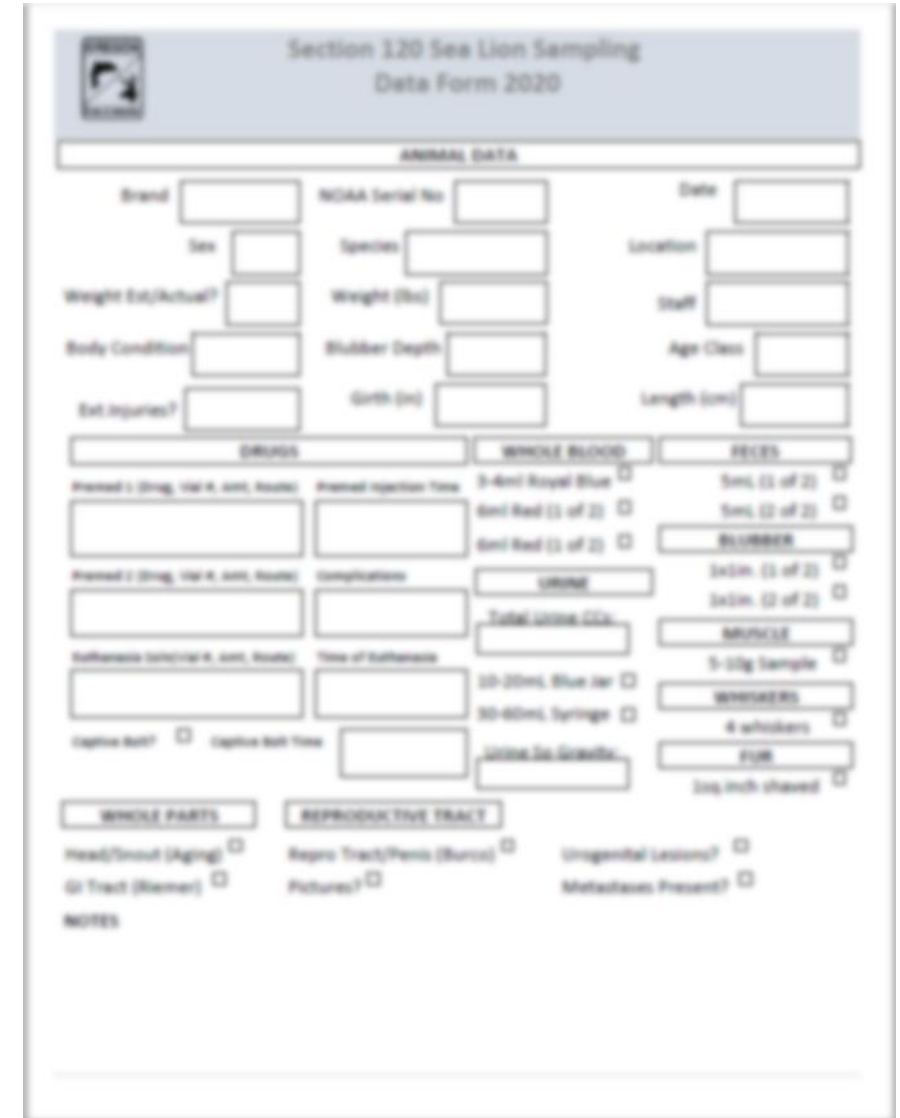
MANAGEMENT PROTOCOLS

4. The identity of authorized animals are **confirmed with NMFS (R. Anderson)**. The barge is moved downstream to the dock where transfer cages are loaded onto a truck.



MANAGEMENT PROTOCOLS

5. Veterinary staff **humanely euthanize** animals via AVMA guidelines
6. A **full necropsy** is conducted. Data from each animal is collected on: health metrics, disease prevalence, immunology and toxicology.
7. A **report is written within 72 hours** for NMFS (R. Anderson) and the Task Force



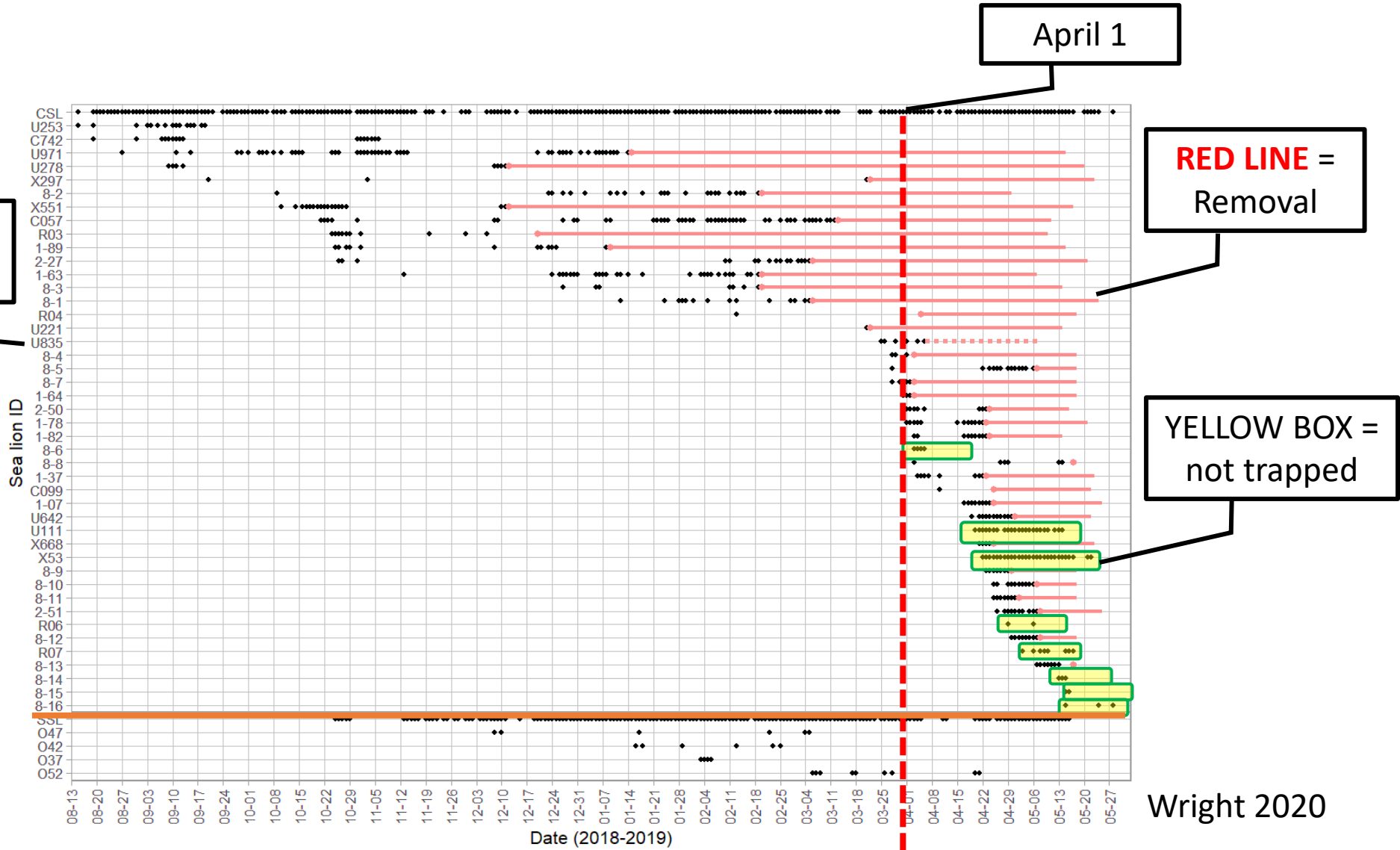
The image shows a data collection form titled "Section 120 Sea Lion Sampling Data Form 2020". The form is organized into several sections for data entry:

- ANIMAL DATA:** Includes fields for Brand, NOAA Serial No., Date, Sex, Species, Location, Weight Est/Actual?, Weight (lbs), Staff, Body Condition, Blubber Depth, Age Class, Est Injuries?, Girth (in), and Length (cm).
- URINE:** Fields for Panel 1 (Drug, Uric Acid, Creatinine) and Panel 2 (Drug, Uric Acid, Creatinine).
- WHOLE BLOOD:** Fields for Panel 1 (Drug, Uric Acid, Creatinine) and Panel 2 (Drug, Uric Acid, Creatinine).
- FECES:** Fields for Panel 1 (Drug, Uric Acid, Creatinine) and Panel 2 (Drug, Uric Acid, Creatinine).
- SPERM:** Fields for Panel 1 (Drug, Uric Acid, Creatinine) and Panel 2 (Drug, Uric Acid, Creatinine).
- MUSCLE:** Fields for Panel 1 (Drug, Uric Acid, Creatinine) and Panel 2 (Drug, Uric Acid, Creatinine).
- WHOLE PARTS:** Fields for Head/Trunk (aging), GI Tract (Barnes), Reproductive Tract (Barnes), Pictures?, Urogenital Lesions?, and Metastases Present?.

The form also includes checkboxes for "log inch shaved" and "log inch shaved".

2018-19 MANAGEMENT RECAP

44 identified
CSLs 2018-19



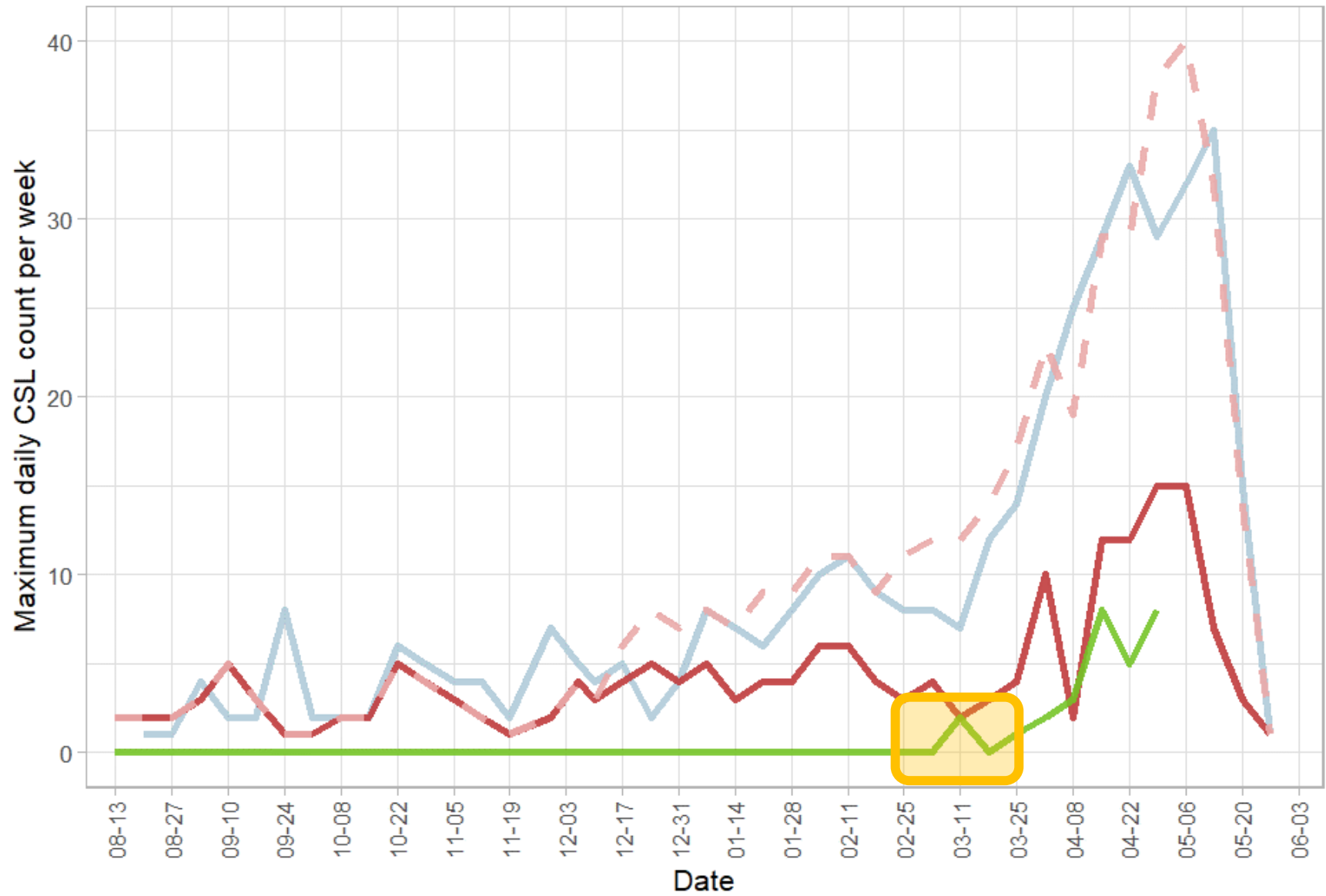
April 1

RED LINE =
Removal

YELLOW BOX =
not trapped

Wright 2020

Study period: 2017-2018 2018-2019 2018-2019 (w/o removals) 2019-2020



**NO RETURNING
CSLS UNTIL MID-
MARCH 2020**