

# HUMAN SYSTEMS IN WEED MANAGEMENT

A REVIEW OF CURRENT PRACTICES, BEST  
PRACTICES AND WHY THERE IS A DIFFERENCE

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Plants and people use the world differently.





We design projects for the benefit of natural systems, but often on our own terms.

Sometimes our terms  
compromise the overall project.

At what point do we make the  
call to continue with our terms?

**DO WE EVER DO MORE HARM  
THAN GOOD?**

INSURING FUNDING  
RATHER THAN FUNDING HOPE











# Control Impacts



# MAINTAINING CONTINUOUS FUNDING

		CA COASTAL CONSERVANCY GRANT 3 YEARS			CCC GRANT		CA COASTAL CONSERVANCY GRANT		GENERAL FUND (Staff & Volunteers)		CA COASTAL CONSERVANCY GRANT			
		YEAR 1		YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	Total Effort
	Acreage	Initial Removal	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Site														
Site 1	0.25	404	104	111			110	21			8	2	2	762
Site 2	0.5	355					94	24			9	4	2	488
Site 3	0.5	494		156			62	96		9	16	48	56	937

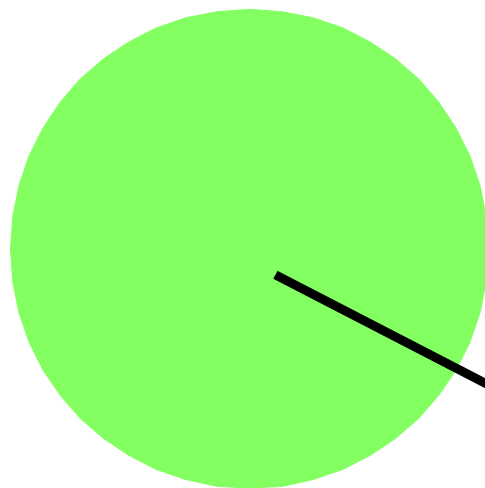
		3 YEAR GRANT					3 YEAR GRANT				
		YEAR 1		YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	
	Acreage	Initial Removal	2000	2001	2002	2003	2004	2005	2006	2007	
Site											
Site 4	0.25	512	17	264	265	0	346	97	68	0	





MANAGING BEYOND  
JURISDICTIONS  
PLANTS ARE TYPICALLY TERRIBLE  
WITH DIRECTION

WATER DISTRICT RIGHT-OF-WAY



RESTORATION SITE







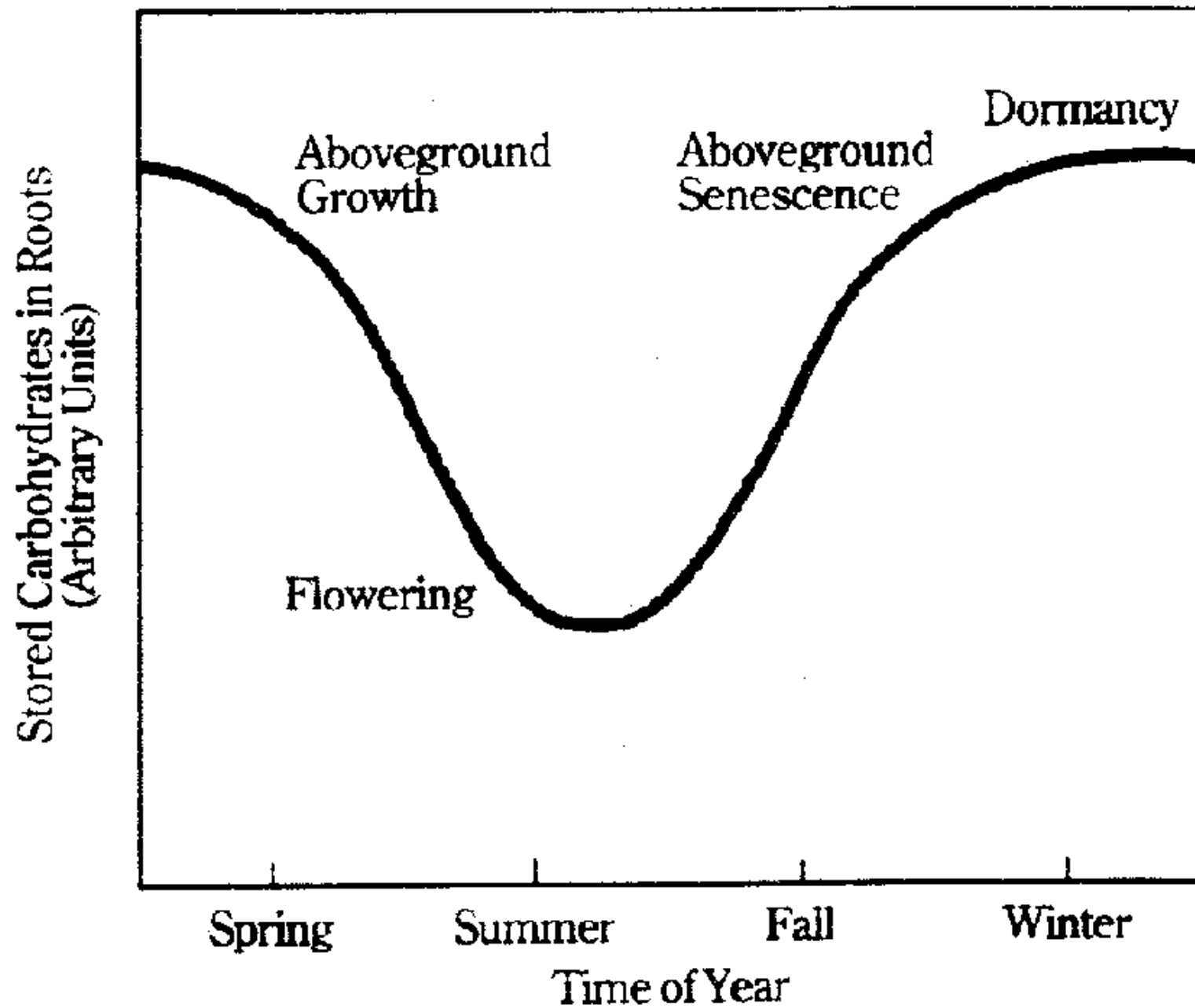
# ALL IN MAINTENANCE

- Pre & Post Emergent Herbicides
- Hand weeding
- Hand watering
- \$400K over 4 years for 1/8 acre of restored area;  
\$200K in design/monitoring fees.

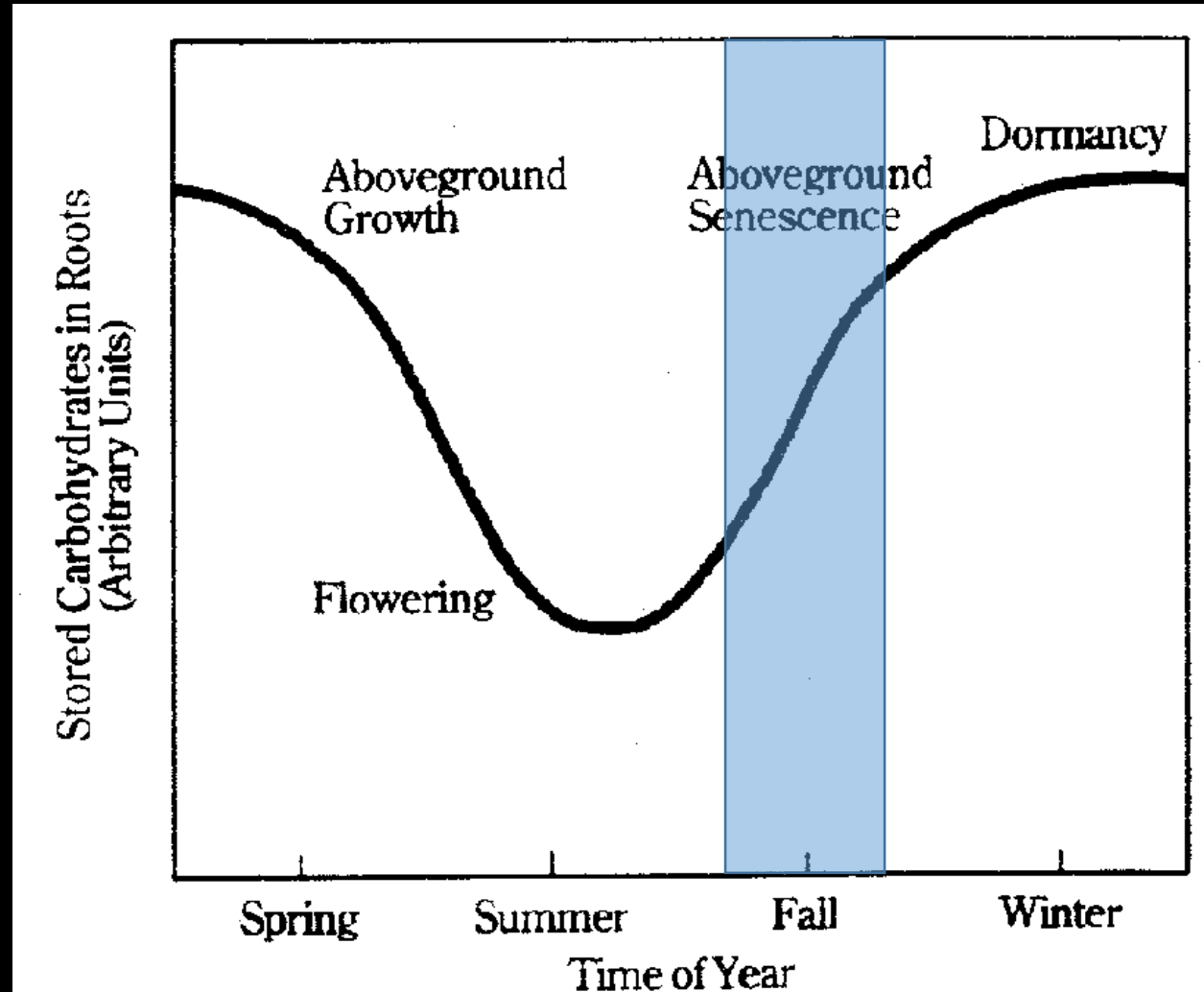
ONE DAY OF SUCCESS DURING  
THE FINAL MONITORING EVENT  
2 YEARS LATER. COVERED IN MUSTARD  
AND RADISH AGAIN

IS THIS REALLY  
MITIGATION!?!?

# NATURE'S SCHEDULE VERSUS OUR OUTLOOK CALENDAR

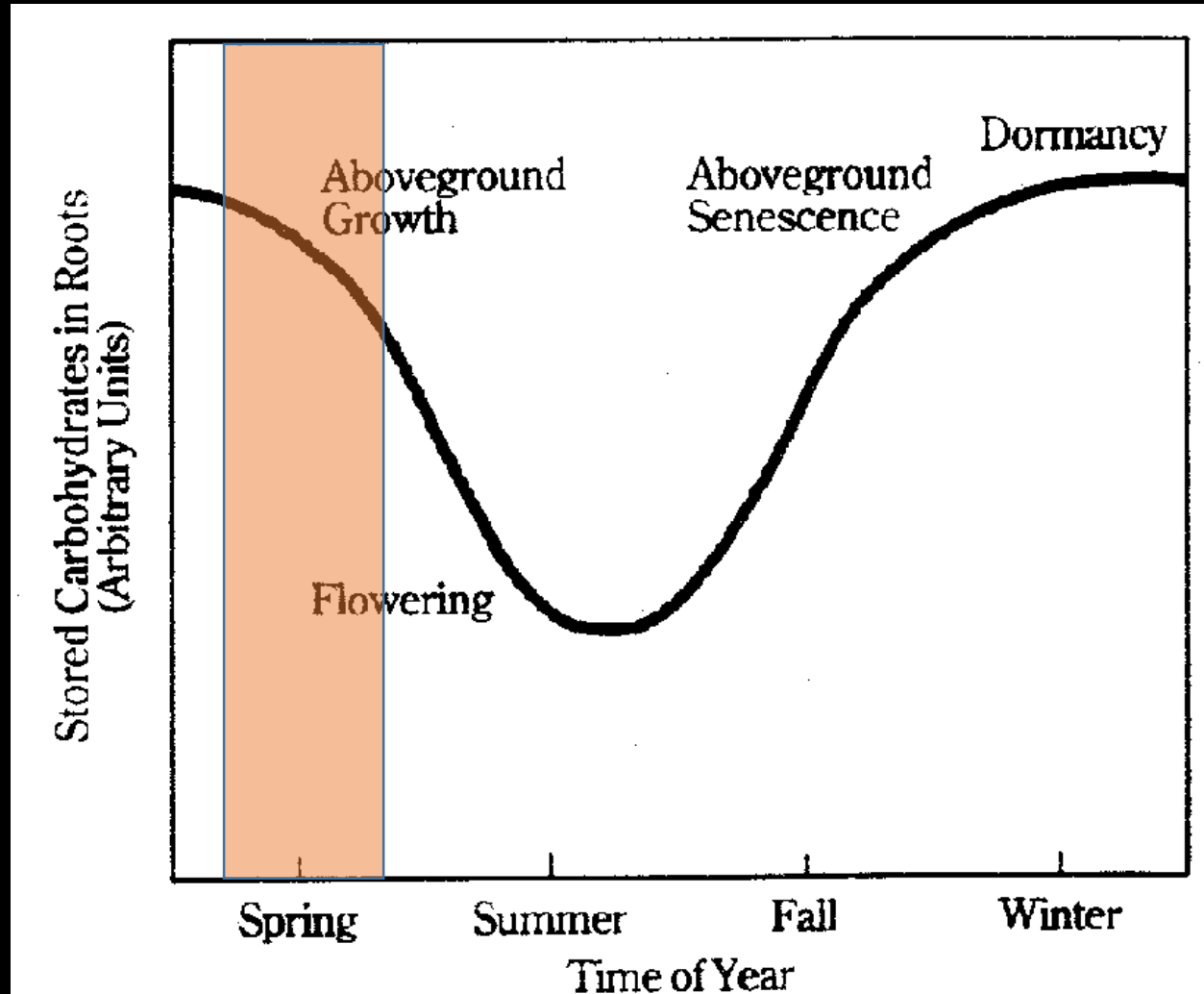


# OPTIMUM TIMING





# WHAT IF END OF FISCAL YEAR DETERMINES TIMING?



# FISCAL YEARS

**JUNE – JULY** block out dates for State/City/County budget cycles

**OCTOBER – NOVEMBER** block out dates for Federal budget cycles

**DECEMBER – JANUARY** block out dates for holidays

LET'S JUST TRY AGAIN NEXT  
YEAR

STUCK TO A PLAN











# WHAT IF RESTORATION IS NO LONGER NEEDED?



WHY DOES IT MATTER





WE ARE EVOLVING



TAMALPAIS LANDS COLLABORATIVE



**TALL TIMBERS**

Research Station & Land Conservancy