

Progress Report
Spartina Control in Willapa Bay – Review of control by watershed and year
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Introduction. Control of Spartina in Willapa Bay for the past 15 years was a losing battle. Recent success with the use of the herbicide Habitat has resulted in excellent success and eradication appears to be very feasible. A review of the general progress of the control program is useful to gauge the remaining cost and timeline.

Methods. Aerial photos and site visits were assessed at all major sites to develop an approximate level of progress. These were converted into estimates of how much of the sites were treated and how successful those treatments were. They are large-scale approximations only, with at best a level of precision of $\pm 10\%$. They also do not count seedlings and other small plants.

Results and Discussion. Many of the sites in South Bay treated by the Willapa National Wildlife Refuge and others are approaching complete control (Palix, Nemah, Jensen Spit, Kaffee Lewis, Baldwin, Omeara Point, and Naselle). Minor clean-up in 2006 should virtually eliminate Spartina from those sites. The Porter Point site, because of the immense scale, difficulty of access and low tidal positions will require at least two more years before it is virtually Spartina-free. The Long Beach Peninsula has been only partially treated to date and will require at least three to four years to clean up. The east side of the bay from the Palix River to the mouth of the Willapa River has been treated for many years and is fairly clean, but still has some missed spots. It will require at least two years before it is fairly clean. The north part of the bay from the Willapa River west to Tokeland has several large sites needing a lot of re-treatment and many untreated areas still needing to be sprayed. This area will take at least three years before it is mostly Spartina-free. Overall, the recent program to control Spartina in Willapa Bay has been remarkably successful. Continued federal funding for the next two years and by the state for the next three to four years is needed to assure that 99% of the Spartina in Willapa Bay has been treated. Additional funding by the state for monitoring/spot treatment for at least five years after this will be necessary to remove any remaining outliers and achieve eradication.

Table 1. Treatment sites in Willapa Bay and the relative success of control at those sites

Watershed (~ acres of Spartina)	Agency treating	Percentage of infested area treated/controlled*		
		2003/2004	2004/2005	2005/2006
Lower Palix Meadow (600+)	WSDA 2004 WNWR 2005		85/75	95/95
Upper Palix (75)	WNWR			90/90
Bone	DNR/TNC?	20/40	20/40	85/90
Niawiakum	TNC		20/50	80/80
Nemah meadows (~2000)	WSDA 2004 WNWR 2005		90/60	95/95
Naselle River Meadow (200)	DNR 2003 to 2005	20/50	70/70	99/98
Kaffee Lewis Meadow (640)	WNWR 2003 to 2005		90/80	95/95
Kaffee Lewis upper slough	WNWR 2003 to 2005			90/95
Baldwin slough (85)	WNWR 2003 to 2005			95/95
Omeara Point (160)	DNR/WWNR 2003/2004 WNWR 2005	50/60	70/80	98/98
Ellsworth Slough (~10)	TNC		50/50	98/95
Porter Point (~2000)	WNWR 2003 to 2005	20/50	50/70	80/80
Tarlatt Slough (~250)	WNWR 2004/2005		90/50	95/95
Jensen Spit (~20)	WNWR 2005			95/95
Wilson Point (~80)	WSDA/WDFW 2003 to 2005			98/95
Rose Ranch/Willapa River Meadow South side (300)	WSDA/WDFW 2003 to 2005	50/50	50/50	90/80
North Willapa Meadow (1500)	WSDA/WDFW 2003 to 2005	20/40	50/60	80/80
Smith Creek/ North River Meadows/Clam Beach(200+)	WSDA/WDFW 2003 to 2005	20/40	50/60	75/75
Long Beach Peninsula S. of Nahcotta (100?)	WSDA 2003 to 2005	20/50	50/60	50/85
Long Beach Peninsula N. of Nahcotta (500-1000?)	WSDA/DNR 2003 to 2005	5/5	5/5	5/10
Tokeland meadows (400)	none	0	0	0

*Results are approximations based on aerial flyovers and/or site visits. Years represent year of treatment followed by year of evaluation. For example 2003/2004 is for Spartina treated in 2003 and evaluated in 2004. Numbers represent ~ % of affected area treated / ~% of those treated acres that were controlled. For example 50/70 = ~50% of the area treated with an ~70% level of control.

