King County Noxious Weed Control Board

2010 Annual Report

Noxious Weed Control Program
206-296-0290 www.kingcounty.gov/weeds

King County

Garlic mustard is a high priority Class A Noxious Weed in King County.

Economic impacts by noxious and invasive weeds in the United States totals approximately $34 billion a year in agricultural losses and removal efforts, according to a report by Cornell University.

Major Results Toward Achieving Program Goals

Once noxious weeds become established, they are difficult and costly to eradicate. A key part of the King County Noxious Weed Control Program strategy is to prevent or rapidly eradicate new priority noxious weed infestations. Clear priorities are identified to ensure that the most threatening weeds are targeted and controlled efficiently (see back page).

The most important resource in achieving this is the active participation of landowners and citizens. Noxious weeds know no boundaries, so involvement of all landowners, public and private, is essential for effective results. The program strives to engage the community and achieve a comprehensive approach. Landowner noxious weed control requirements are also mandated by the State Noxious Weed Control Law.

In 2010, program staff extensively surveyed the county for high priority noxious weeds, identifying new infestations and working with landowners to achieve successful control. Weed infestations are regularly monitored to determine progress towards achieving control and eradication goals. Citizen reports were also received and verified. Overall in 2010, program staff worked with 3,995 landowners and public agencies to achieve weed control.

Class A weeds receive the highest priority because they are limited in distribution, making eradication possible. Out of the 39 Class A noxious weed species on the Washington State Noxious Weed List, 17 have been found in some part of the county. Significant progress was made toward the

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Mission

Provide benefits to the environment, recreation, public health and economic resources of King County by preventing and minimizing harmful impacts of noxious weeds.

Program Goals

Educate the community about prevention and management of noxious weed infestations and increase participation in noxious weed control activities.

Eradicate existing infestations of Class A noxious weeds.

Control regulated Class B and Class C noxious weed infestations to below levels of significant impact.

Implement early detection and rapid response for infestations of new noxious weeds with limited distributions.

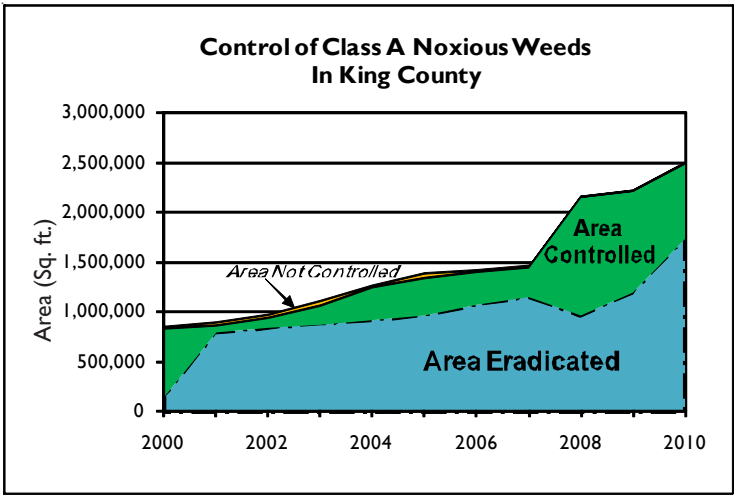
Support the management of widespread noxious weeds and facilitation of more effective, coordinated landscape-scale control efforts.

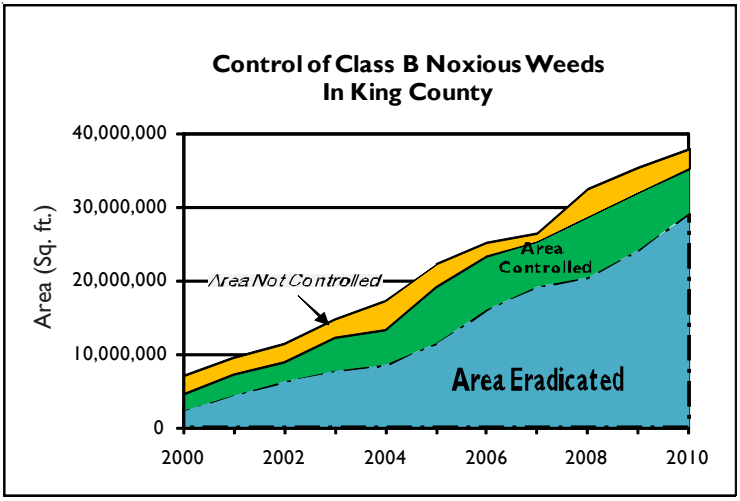
King County Facts:

2,134 square miles
1.9 million people
775,000 households
652,000 acres of parks, trails and forested lands

Major Results (continued)

eradication of these species in the county. The program and property owners have now eradicated 68 percent of the original infestation area identified on parcels in the county. This is an increase from 53 percent in 2009 (see Class A chart). Prevention of seeding is a crucial step to achieving eradication. Control (containment and prevention of seeding or spread) was achieved on 99 percent of all Class A weed infestations found in 2010.



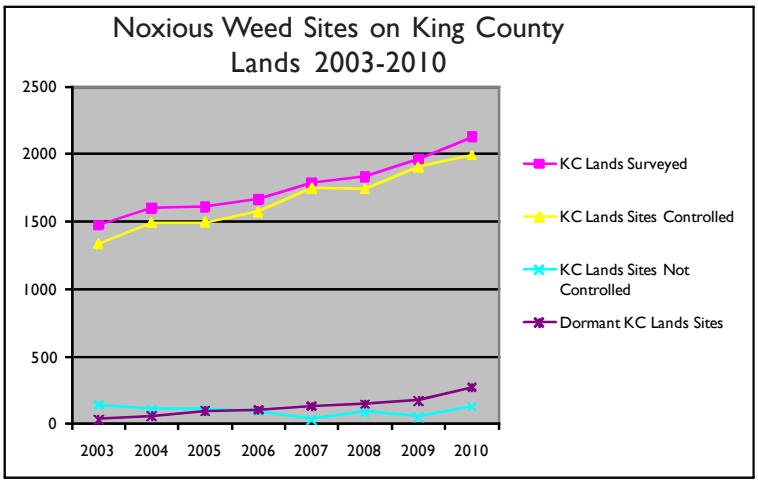


Working with landowners, the program also achieved significant containment and control of regulated Class B noxious weeds. Staff surveyed 8,219 parcels and roads with Class B noxious weeds, 455 of which were new discoveries. Overall, control was accomplished on 88 percent of the Class B weed infestations and 69 percent of the area of infestations. From 2000 to 2010, the trend has been an increase in the area controlled and the area eradicated (see Class B chart).

County Lands

King County government is one of the largest landholders in King County, tasked with managing 33,070 acres of land and maintaining about 1,700 miles of roadway. Noxious weeds were found on lands managed by several county departments and their staff responded quickly with control measures.

Currently, there are 2,504 active, known regulated noxious weed sites on county-managed lands. Staff was able to survey 2,128 sites and control was achieved on 1,995 (94 percent) of those sites. The number of sites surveyed and controlled increased significantly from 2009. This is due mostly to increased survey abilities afforded by utilizing new equipment in the field. The level of control achieved by county agencies was slightly higher (94 percent) than non-county sites (89 percent) continuing the trend of the last several years.



There were nine citizen complaints about regulated noxious weed infestations on county property in 2010. All sites were inspected and noxious weeds were confirmed at seven of the sites. Responsible land managers controlled these infestations prior to seed dispersal. The majority of complaints were for sites managed by the county Roads Department and one complaint involved Parks property.

Top Class A Weeds in King County for 2010

Giant Hogweed
482 sites

73% sites eradicated
99% controlled

Garlic Mustard
242 sites

5% sites eradicated
99% controlled

Milk Thistle
62 sites

23% sites eradicated
100% controlled

Goatsrue
36 sites

10% sites eradicated
100% controlled

Top Class B Weeds in King County for 2010

Tansy Ragwort
4982 sites

23% sites eradicated
89% controlled

Purple Loosestrife
1245 sites

14% sites eradicated
76% controlled

Spotted Knapweed
761 sites

29% sites eradicated
97% controlled

Garden Loosestrife
619 sites

1% sites eradicated
73% controlled

Orange Hawkweed
445 sites

10% sites eradicated
95% controlled

Dalmatian Toadflax
351 sites

25% sites eradicated
86% controlled

Sulfur Cinquefoil
333 sites

19% sites eradicated
91% controlled

Yellow Hawkweed
302 sites

7% sites eradicated
97% controlled

Policeman's Helmet
274 sites

31% sites eradicated
95% controlled

Meadow Knapweed
147 sites

21% sites eradicated
91% controlled

2010 Major Program Activities

Number of infestations surveyed: **9,663**
Number of property owners contacted: **3,995**
Number of infestations controlled: **8,669**
Number of new infestations found: **605**
Percent of regulated noxious weed sites controlled: **90%**
--controlled by property owners: **77%**
--controlled by program: **23%**
Acres of weeds controlled: **137**
Hours spent in the field by staff: **7,752**

Additional information, graphs and maps available online at **www.kingcounty.gov/weeds**

Education and Volunteer Efforts

The program made significant progress toward developing a knowledgeable and engaged community that actively works toward reducing noxious weed impacts in the county.

Technical Assistance

Program staff worked directly with 3,995 landowners and agency staff, answered over 669 public inquiries, and responded to 167 reports of noxious weed infestations. Information was provided to a broad audience through the program's popular website, brochures and booklets, and the newsletter "KC Weed News," which highlights issues relevant to weed control in King County.

The program provided 50 workshops and presentations and had information booths at 31 public events and fairs throughout the county, including 12 Farmer's Markets. The program also expanded its knotweed outreach program and provided six workshops on knotweed control for property owners and agency staff in the Snoqualmie, Skykomish, Cedar, Issaquah Creek, and Green River watersheds in conjunction with the program's knotweed control projects in those areas.

2010 Education Activities

Information booths, tables	31
Workshops and Events	50
Responses to Public Inquiries, Weed Reports	836
Newsletter Subscribers	1,400
Contacts at Events and Workshops	9,528
Brochures Distributed	14,413
Website Visitors Sessions	275,882

Upper Snoqualmie Trails Weed Watcher Program

To increase the detection of invasive weeds in the county's wilderness areas, the program continued its partnership with the U.S. Forest Service to train volunteer weed surveyors as part of the Upper Snoqualmie Invasive Weed Project. In 2010, 20 Weed Watchers volunteered 355 hours, surveyed 29 trails and other areas, and covered 107 miles of trails and backcountry roads.

Customer Service Survey

We strive for excellence in our customer service. In order to better evaluate how we are doing, we surveyed 4,033 property owners, public agencies, and members of the public who either contacted our program for assistance or whom were contacted by us about a noxious weed on their property. Of the 652 surveys returned, 355 (57%) of the respondents noted that they live in a city or town, 218 (35%) reside in unincorporated King County and 55 (9%) live outside the county.

The majority of those responding gave a positive rating overall. When asked to rate their overall interaction with us, 78% responded outstanding or good (464 out of 597). These results provide a customer service benchmark that the program will aim to exceed in future years.

Percent Responding	Satisfied with Service Quality	Staff Knowledgeable and Competent	Received Complete, Clear Information	Program Provides a Valuable Service
Yes, definitely or Somewhat yes	81%	85%	86%	82%
Neither agree nor disagree	8%	9%	5%	7%
Somewhat no or No, definitely not	10%	6%	9%	11%

Aquatic Weed Control

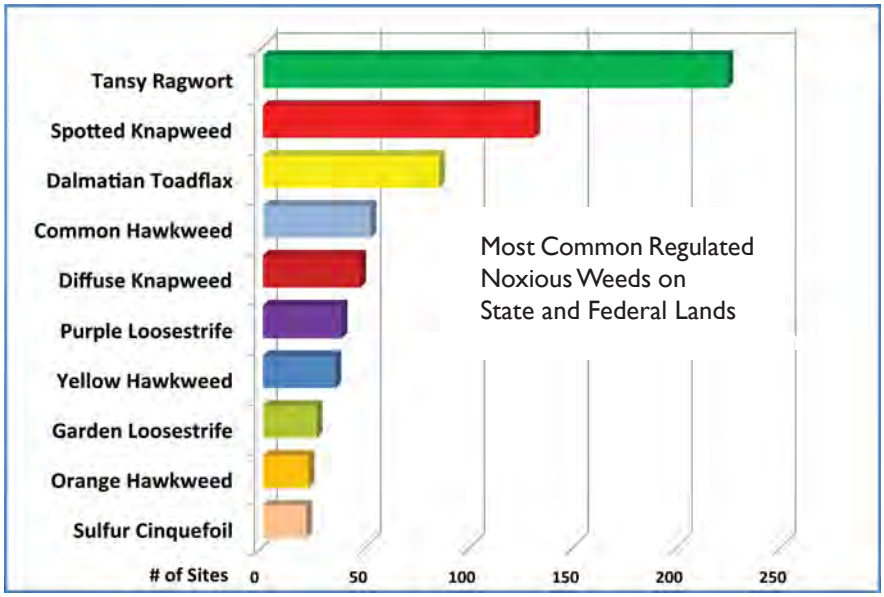
Overall, 67 percent of designated aquatic noxious weed sites were controlled in 2010. Significant new areas of garden loosestrife, purple loosestrife and Brazilian elodea were found and recorded, particularly in the Sammamish River. These infestations require considerable planning and resources to control; consequently, most of this new area was not controlled in 2010.

One hundred percent of existing Class A and high priority Class B weeds were controlled. Staff located and controlled one new patch of the Class A noxious weed reed sweetgrass and controlled all known infestations of parrotfeather, floating primrose-willow, water primrose, and yellow floating-heart.

Intensive surveying is an important program activity. This facilitates early detection of new infestations and a more rapid, effective control response. In 2010, program staff surveyed 18 small lakes, 42 river miles, several streams and wetlands, and Lake Sammamish. Additionally, 38 volunteer Lake Weed Watchers surveyed 20 small lakes and found no new infestations.

State and Federal Lands

The state of Washington and the federal government have over 3,700 parcels within King County, comprising 38 percent of the land within the county. Over 260 known regulated noxious weed sites were surveyed in 2010 on 136 parcels and 185 infestations were found on 106 of these parcels. The program assisted Ski Lifts, Inc. in a comprehensive plan for control of hawkweed infestations on U.S. Forest Service leased lands at Snoqualmie Summit. At the conclusion of the 2010 weed season, 155 invasive hawkweed infestations were controlled to protect sensitive alpine areas.



Program staff conducted surveys of 18 state highways managed by the Washington State Department of Transportation (WSDOT) covering 368 linear miles. In 2010, WSDOT crews were effective in most areas, delivering timely and effective weed control.

Highlights for highway rights-of-way control in 2010 include: continuing success controlling the Class A noxious weed European hawkweed on SR 522, SR 2, and I-90; control of all rush skeletonweed sites on I-90 and one new site on SR 18; and excellent progress in controlling Dalmatian toadflax on I-90, I-5 and SR 599.

Additional information, graphs and maps available online at **www.kingcounty.gov/weeds**

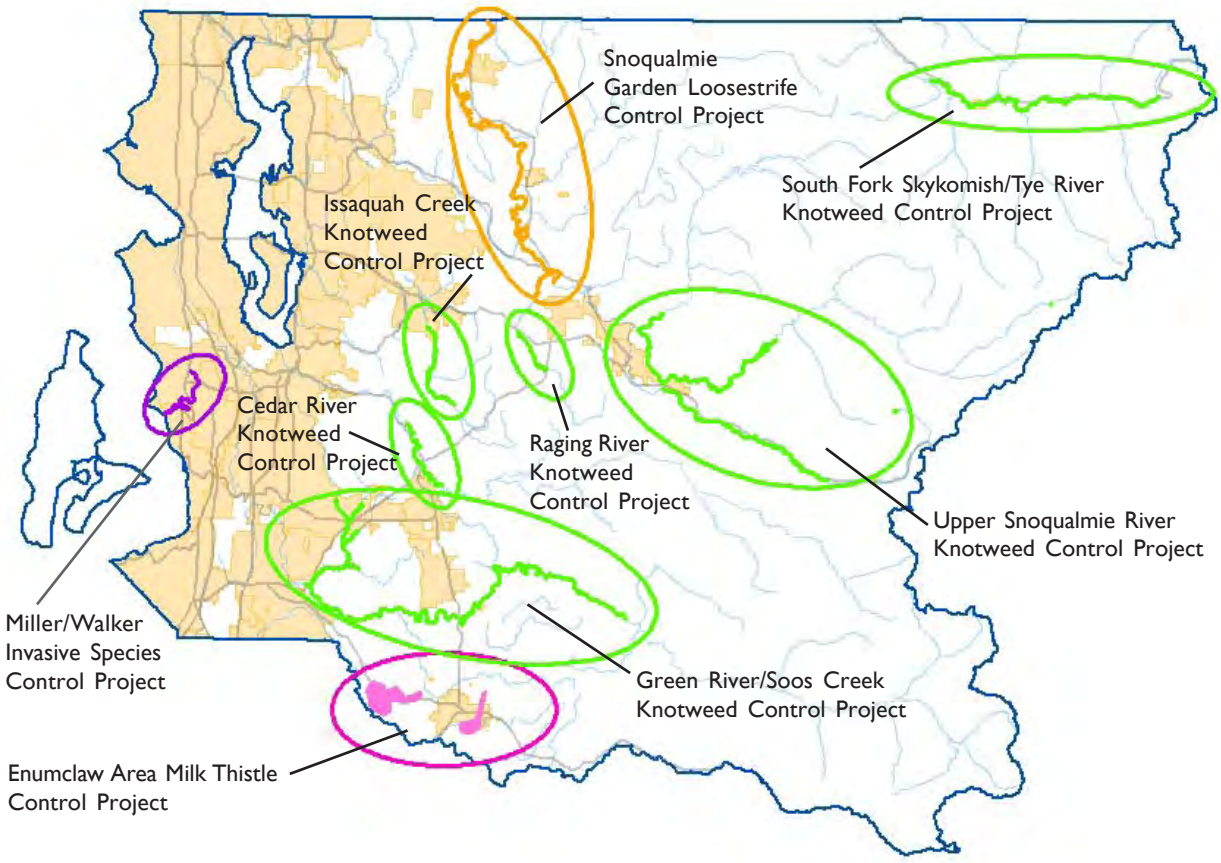
Grant Projects

The King County Noxious Weed Control Program secured grant funding to implement several large-scale, coordinated weed control projects in 2010. These projects target high priority weed infestations where significant public resources are threatened. (See map below.)

Staff use a combination of methods such as herbicide stem injection and foliar spraying on knotweed control projects.

- With funding from the Washington State Department of Ecology, the program completed the fourth year of a project to gain control of garden loosestrife along the Snoqualmie River and adjacent wetlands, working with over 100 landowners on 30 miles of river and seven off-channel areas.
- Funding from the National Fish and Wildlife Foundation allowed the program to continue its project in Miller and Walker Creeks in southwest King County, progressively reducing infestations of giant hogweed, policeman's helmet, purple loosestrife and invasive knotweeds in these urban creeks.
- The program's milk thistle eradication project on 55 properties in southeast King County was supported by the Washington Department of Agriculture through donation of herbicide to the program for use in infested pastures.
- Funding from the US Fish and Wildlife Service, King Conservation District, EPA, National Fish and Wildlife Foundation, and the Washington State Department of Ecology, totaling $174,365 in 2010, enabled the program to significantly expand its cooperative knotweed control projects. These projects reach out to all property owners, public and private. Properties directly adjacent to active flood zones receive first priority for grant funds, but the program also encourages control beyond the immediate riparian corridor through workshops, equipment loan, and technical support.

Externally Funded Weed Control Projects in King County



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Letter from the Board

In King County, we are fortunate to have abundant natural areas and agricultural lands on the doorstep of our major urban centers. This is important to our quality of life in the region. These assets are the result of dedicated work and visionary leadership from the community. We have learned however that noxious weeds can seriously degrade these hard-earned gains.

There is no quick fix for most noxious weed problems. Only well planned and coordinated management, sustained over time produces results. The Noxious Weed Control Program is committed to this long-term strategic approach and this report demonstrates that this is paying dividends. Thank you for your interest and participation in this important work.

Scott Moore, King County Noxious Weed Control Board

The King County Noxious Weed Control Board is comprised of five volunteer citizens representing five districts within the county. Each member is appointed by the King County Executive and confirmed by the King County Council. One staff person from WSU Extension serves as a non-voting member. Thank you to the following for serving on the 2010 King County Noxious Weed Control Board:

Jennifer Andreas, WSU
Clint Bostwick
John Browne
Duane Johnson
Scott Moore, Chair
Grace Stiller

The Board oversees activities completed by King County Noxious Weed Control Program. This year the program employed 18 full and part-time staff.


Urban and Rural Forest Surveys

2010 Program Staff

Program Manager
Steven J. Burke **206-205-6927**

Education Specialist
Sasha Shaw **206-263-6468**

Administrative Specialist
Suzanne Rowe **206-296-0442**

Noxious Weed Specialists
206-296-0290

Roy Brunskill: County Lands
Dennis Chambreau: State Lands
Frances Lucero: Knotweed Grants
Katie Messick: Aquatic Weeds

Seasonal Staff:
Matt Below
Denise Liguori
Lexine Long
Trish MacLaren
Eddy McFarlin
Katrina Montoya
Ben Peterson
Karen Peterson
Kate Reedy
Ann Stevens
Maria Winkler

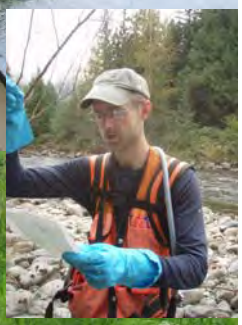
Special Thanks to: Frances Lucero, Lexine Long and Sasha Shaw for data analysis; Suzanne Rowe for layout and design.


Best Management Practices for Weed Control

Public Education Events


Lake and River Surveys

Data Collection

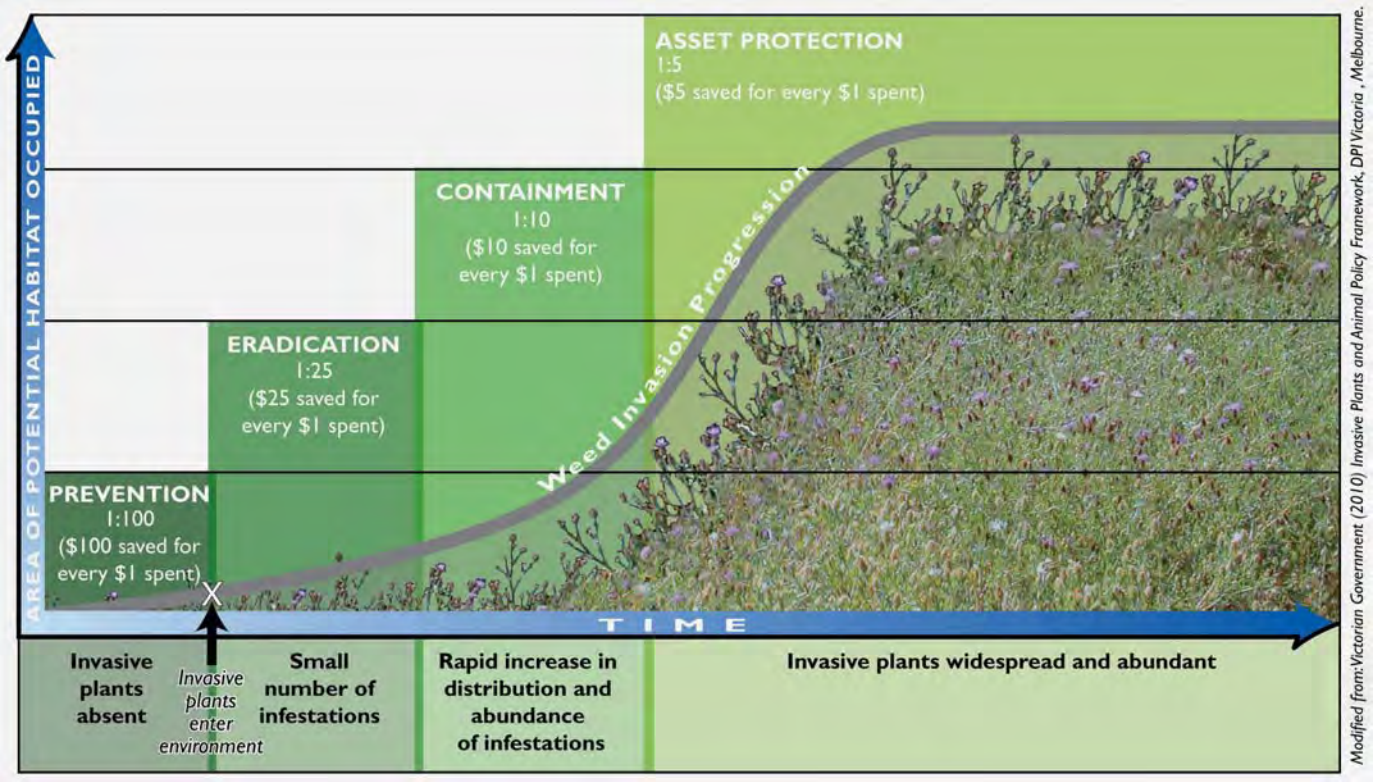


Sampling, Mapping and Control

King County

Department of
Natural Resources and Parks
Water and Land Resources Division
Noxious Weed Control Program
201 S. Jackson Street, Suite 600
Seattle, WA 98104-3856

Prioritized Actions Based on Cost Effectiveness



Alternate formats of this report are available. Call 206-296-0290 or TTY Relay: 711