



KING COUNTY NOXIOUS WEED CONTROL PROGRAM

206-296-0290 • www.kingcounty.gov/weeds

2011 annual report

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. However, we have learned 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 King County Noxious Weed Control Program is committed to this long-term strategic approach and this report demonstrates that this commitment is paying dividends. Thank you for your interest and participation in this important work.

Scott Moore, chair
King County Noxious Weed Control Board

OUR 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

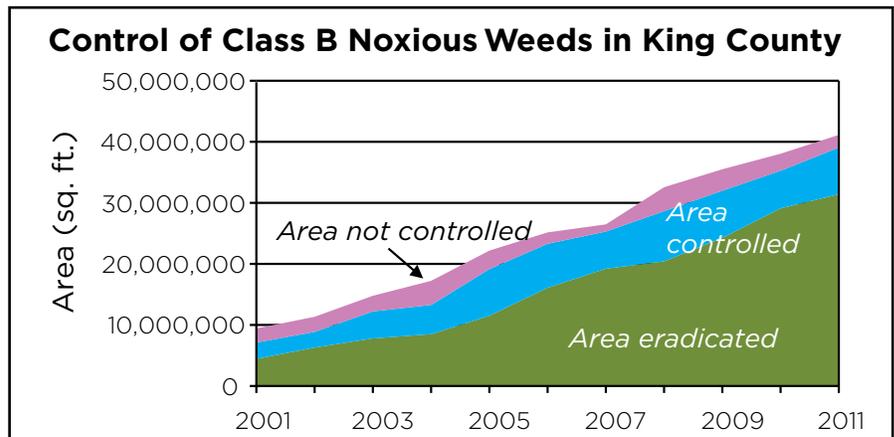
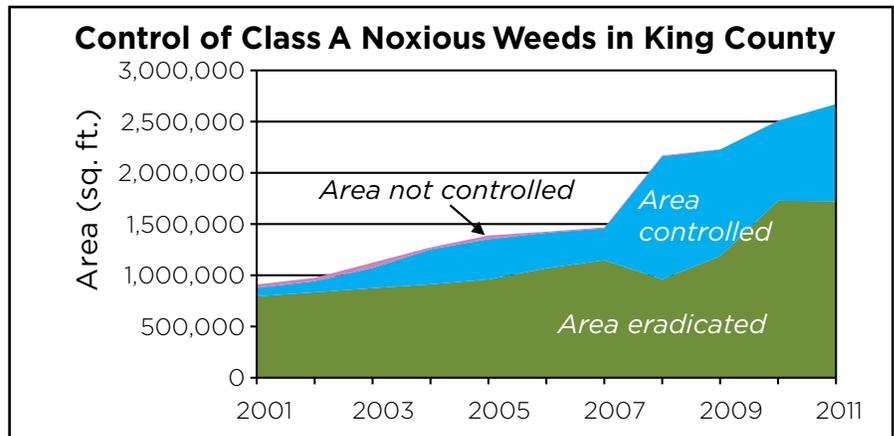
- Educate the community about prevention and management of noxious weed infestations and increase participation in noxious weed control activities.
- Eradicate existing infestations of Class A noxious weeds.
- Control regulated Class B and Class C noxious weed infestations to below levels of significant impact.
- Implement early detection and rapid response for infestations of new noxious weeds with limited distribution.
- Support the management of widespread noxious weeds and facilitation of more effective, coordinated landscape-scale control efforts.

Major Results Towards 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.

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 mandated by the State Noxious Weed Control Law, but the program has found that voluntary, self-motivated participation is the key to long-term results

In 2011, 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 2011, program staff worked



with 4,090 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. The goal for these weeds is eradication of existing infestations and the prevention of new invasions. The program and property owners have now eradicated 64.5 percent of the original infestation area identified on parcels in the county. This is another step towards our long-term goal of eradication of Class A noxious weeds (see Class A chart). Prevention of seeding is crucial to achieving

eradication of noxious weeds. The program achieved control (containment and prevention of seed or spread) on almost 100 percent of all Class A weed infestations found in 2011.

Working with landowners, the program also achieved significant overall containment and control of regulated Class B noxious weeds. Staff surveyed 8,123 parcels and roads with Class B noxious weeds, 934 of which were new discoveries. In 2011, control was accomplished on 93 percent of the Class B weed infestations and 79 percent of the total area infested was controlled. From 2001 to 2011, the trend has been an increase in the area controlled and the area eradicated (see Class B chart).

Top Class A Weeds in King County for 2011

Giant Hogweed

471 sites



74% sites eradicated
100% controlled

Garlic Mustard

271 sites



4% sites eradicated
100% controlled

Milk Thistle

64 sites



24% sites eradicated
100% controlled

Goatsrue

33 sites



15% sites eradicated
100% controlled

Top Class B Weeds in King County for 2011

Tansy Ragwort

4959 sites



27% sites eradicated
92% controlled

Purple Loosestrife

1165 sites



15% sites eradicated
90% controlled

Spotted Knapweed

743 sites



32% sites eradicated
97% controlled

Orange Hawkweed

494 sites



10% sites eradicated
97% controlled

Dalmatian Toadflax

352 sites



27% sites eradicated
93% controlled

Sulfur Cinquefoil

317 sites



23% sites eradicated
95% controlled

Yellow Hawkweed

304 sites



10% sites eradicated
97% controlled

Policeman's Helmet

264 sites



34% sites eradicated
94% controlled

Garden Loosestrife

204 sites



2% sites eradicated
84% controlled

Meadow Knapweed

144 sites



25% sites eradicated
98% controlled

Definitions (RCW 17.10, WAC 16-750)

Control - in a given year, prevent all seed production and prevent the dispersal of all propagative parts capable of forming new plants

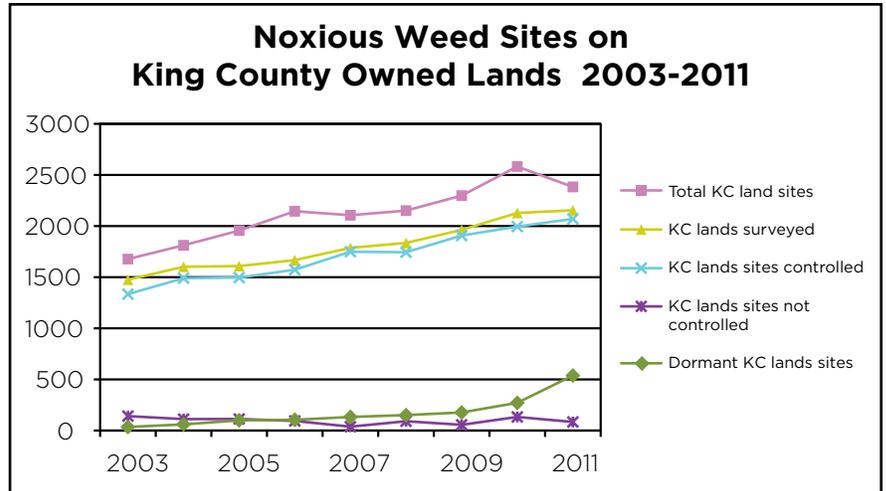
Eradicate - completely eliminate a noxious weed within an area of infestation (if no weeds have been seen in the area for at least three years, the infestation is considered eradicated)

Class A Weeds - Class A weeds are the highest priority in the state due to their significant potential impact and limited distribution. Property owners are required to eradicate all Class A noxious weeds from their property.

Regulated Class B Weeds - Class B weeds have a split distribution in the state and are regulated where they are limited in distribution or where they are a local priority. Property owners are required to control Class B weeds that have been designated by the State Weed Board or selected by the County Weed Board as priority weeds in their county.

County Lands

King County government is one of the largest landholders in King County, tasked with managing 33,380 acres of land and about 1,600 miles of road rights-of-way. During 2011, noxious weeds were found on areas managed by eight county agencies. These agencies responded quickly to control the noxious weeds after being notified by the noxious weed program staff.



There are 2,383 active regulated noxious weed sites on county-maintained lands. Program staff were able to survey 2,195 sites, and control was achieved on 2,089 (95 percent) of those sites. This accomplishment continued the trend of successful weed control activities by county agencies. Among other notable activities, King County Parks significantly improved their weed control efforts and response time. The level of control by all county agencies remained high (95 percent) when compared to non-county agencies and private landowners (93 percent).

There were seven complaints lodged by concerned citizens about noxious weeds growing on county managed lands. All complaints were checked and noxious weeds were confirmed and controlled on all seven sites prior to seed dispersal.

Aquatic Weed Control

Overall, 95 percent of Class A and regulated Class B aquatic noxious weed sites surveyed were controlled in 2011. The vast majority of these sites are infested with purple or garden loosestrife. A few large wetlands with loosestrife were not able to be controlled, so the percent area controlled is lower than the number of sites: 75 percent for garden loosestrife and 54 percent for purple loosestrife. Garden loosestrife has proven very difficult to control, so program staff initiated several control trials in 2011, treating plots with five different approved herbicides and installing weed barrier over one large site.

One hundred percent of the rest of the regulated aquatic weeds were controlled. Program staff located and controlled one new patch of the Class B noxious weed parrotfeather and controlled all previously recorded infestations of parrotfeather, reed sweetgrass, 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 2011, program staff surveyed 18 small lakes, 37 river miles, several streams and wetlands, and the northeast quadrant of Lake



Yellow floating-heart

Washington. Additionally, 22 volunteer Lake Weed Watchers surveyed 15 small lakes and found no new infestations of regulated aquatic noxious weeds.

State and Federal Lands

The state of Washington and the federal government have more than 3,700 parcels within King County, comprising 38 percent of the land within the county. Over 270 regulated noxious weed sites were surveyed in 2011 on 157 parcels, and 263 infestations were found on 118 of these parcels. The program assisted the Port of Seattle in controlling one of the largest infestations of common reed

(also called phragmites) on the Duwamish River. This invasive weed significantly damages habitat in wetlands and riparian areas.

In 2011, program staff conducted surveys of 18 state highways managed by the Washington State Department of Transportation (WSDOT) covering 368 linear miles. WSDOT crews were effective in most areas,

delivering timely and effective weed control.

Highlights for highway rights-of-way control in 2011 include: continued success controlling the Class A noxious weed European hawkweed on SR 522, SR 2, and I-90; control of rush skeletonweed sites on I-90 and SR 18; and excellent progress in controlling Dalmatian toadflax on I-90, I-5 and SR 599.

Grant Projects

The King County Noxious Weed Control Program secured grant funding to implement several landscape-scale, coordinated weed control projects in 2011. These projects target high priority weed infestations where significant public resources are threatened, and the chance for ecological improvement is high (see map).

- With funding from the Washington State Department of Ecology, the program completed the fifth 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 for another season in southwest King County, progressively reducing infestations of giant hogweed, policeman's helmet, purple loosestrife and invasive knotweeds in these urban creeks. These funds also paid for initial replanting work as the project moves into its final phase.
- The program's milk thistle eradication project on 57 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, Environmental Protection Agency, National Fish and Wildlife Foundation, and the Washington State Department of Ecology, totaling \$335,750 in 2011, 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. In 2011, over 25 acres of knotweed were treated through these funds.



Education and Volunteer Efforts



The program continued to make progress toward building a knowledgeable and engaged community that actively works to reduce noxious weed impacts in the county.

Technical Assistance

Program staff worked directly with 4,090 landowners and agency staff, answered over 584 public inquiries, and responded to 225 reports of noxious weed infestations. Information was provided to an even broader audience through the program's popular website, brochures, booklets, and the email newsletter "KC Weed News," which highlights issues relevant to weed control in King County.

The program provided 70 workshops and presentations and had information booths at 29 public events and fairs throughout the county, including nine Farmer's Markets and several large events such as the Enumclaw Street Fair, Vashon Strawberry Festival and Issaquah Salmon Days. The program once again held its popular professional noxious weed workshop series. The three classes were attended by a total of 288 staff from municipal, county, state, and federal agencies and non-profit and private businesses. In addition, the program continued its knotweed outreach program and provided six workshops on knotweed control for property owners and agency staff as well as hosting a regional knotweed forum for agencies and partners working on knotweed control through the central Puget Sound area.

2011 EDUCATION ACTIVITIES

- 29** information booths, outreach events
- 70** workshops and presentations
- 809** responses to public inquiries and weed reports
- 1,540** newsletter subscribers
- 8,547** contacts at events
- 16,353** brochures and bulletins distributed
- 348,368** website visits

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. This survey and control work, which was done without any funding other than the staff time to train and coordinate the volunteers, resulted in weed surveys and control on 35 forest trails and wilderness areas that would not have been done otherwise. In 2011, 20 Weed Watchers volunteered 364 hours and covered 87 miles of trails and backcountry roads.

2011 MAJOR PROGRAM ACTIVITIES

- 9,562** infestations surveyed
- 4,090** property owners contacted
- 8,945** infestations controlled
- 1,053** new infestations found
- 167** Acres of weeds controlled by property owners
- 181** Acres of weeds controlled by program
- 8,462** Hours spent in the field by staff

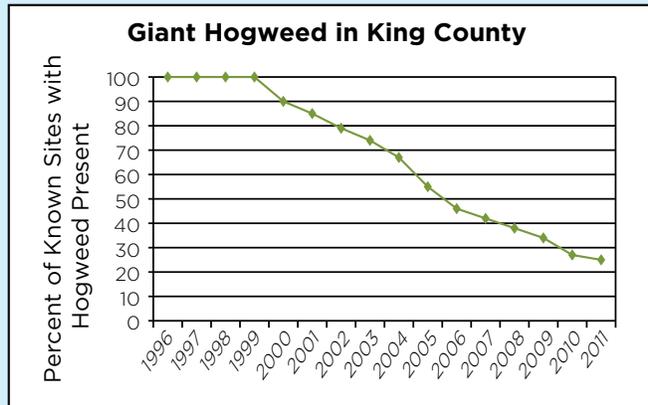


ABOUT KING COUNTY

- 2,131** square miles
- 1.9** million people
- 851,000** acres of parks and forested lands
- 175** miles of trails

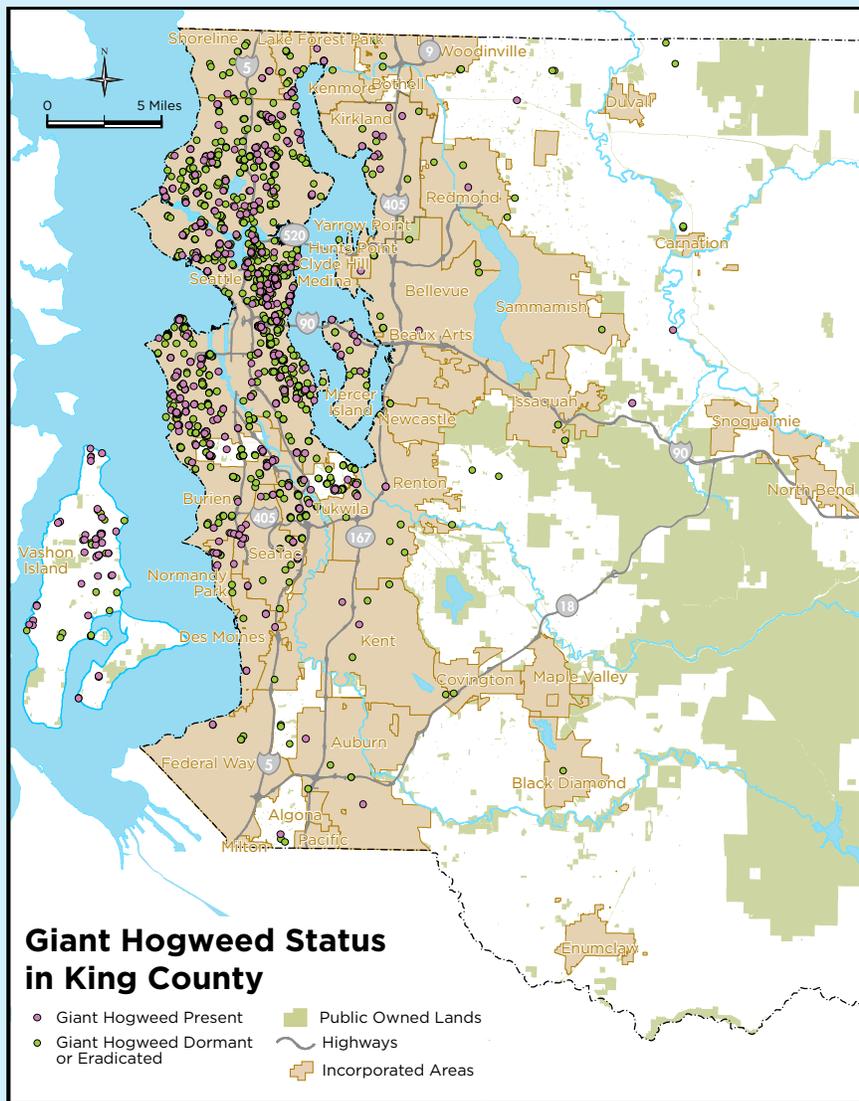
Spotlight on Giant Hogweed, Class A Noxious Weed

The noxious weed control program has made significant progress toward eradicating giant hogweed, one of the most abundant and well known Class A weeds found in the county. Since 1996, the program has located a total of 1,810 infestations of giant hogweed, including an average of approximately 50 to 100 new sites each year.



In 2011, due to the program's work with private landowners and public agencies, giant hogweed was present on only 227 properties (13 percent of the total found). Hogweed may return on some of these sites since it takes many years of control before all the roots are dead and no new seedlings emerge. However, when three years or more have gone by with none seen, it is unlikely that the hogweed will return, and the site is considered dormant.

Since 2000, the program has achieved increasing success in the number of dormant sites, with 73 percent of all the hogweed sites ever found in King County now marked dormant. At the current rate of progress, the program should be able to reduce giant hogweed down to just a minimal presence in the county within the next few years.



The King County Noxious Weed Control Board 2011

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. The King County Noxious Weed Control Board in 2011 were:

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

The Board oversees activities completed by the King County Noxious Weed Control Program. This year the program employed 19 full and part-time staff.

2011 PROGRAM STAFF

Program Manager: Steven J. Burke

County Lands: Roy Brunskill

State Lands: Trish MacLaren

Aquatic Weeds: Katie Messick

Knotweed: Frances Lucero

Education: Sasha Shaw

Administration:

Suzanne Rowe/Denise Liguori

Seasonal Weed Specialists:

Matt Below

Mattia Boscolo

Lexine Long

Ed McFarlin

Lisa Nelson

Ben Peterson

Karen Peterson

Ann Stevens

Maria Winkler

Field Technicians:

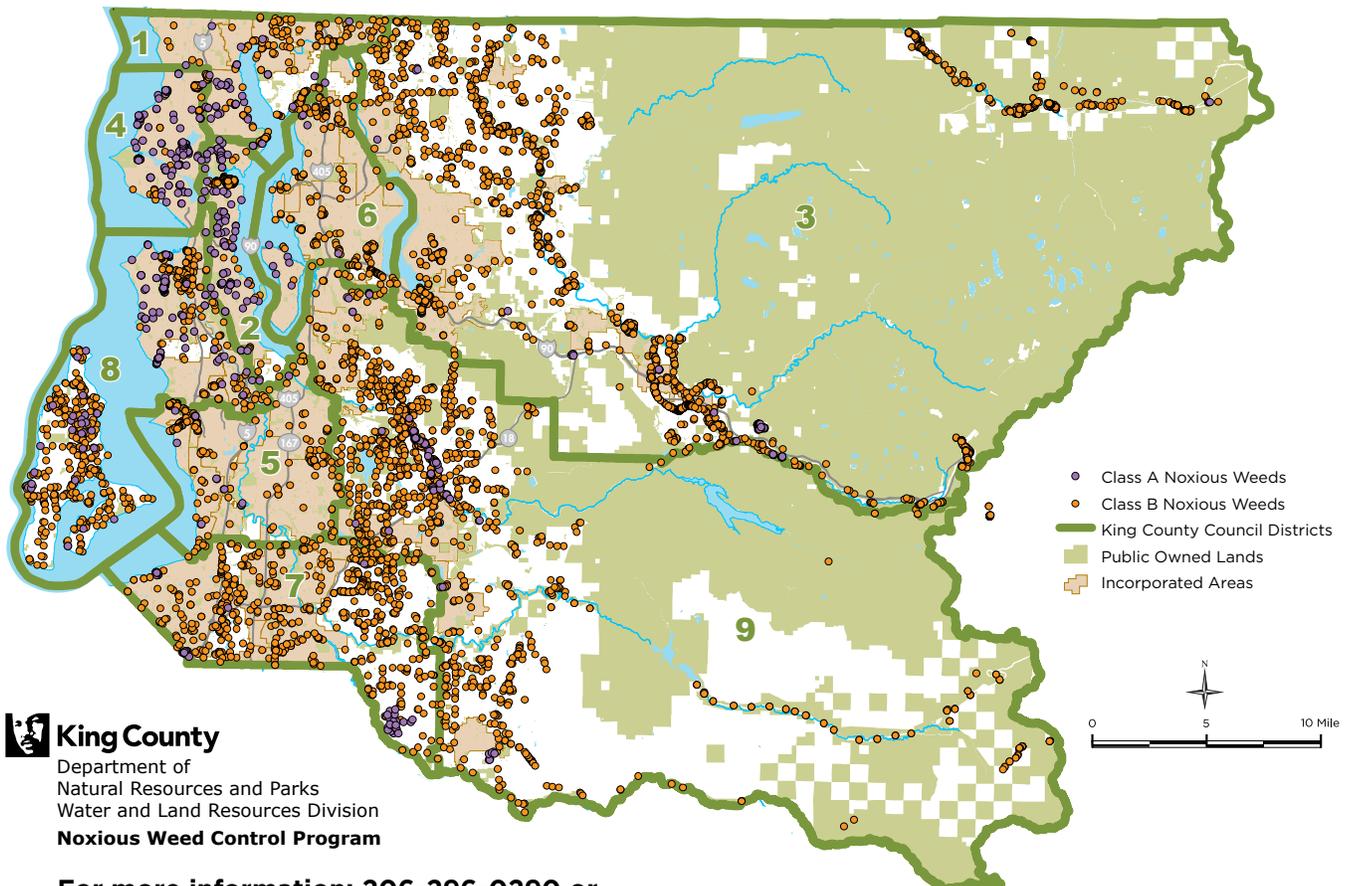
Bonnie Eyestone

Cody Hagen

Denise Liguori

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King County Class A and B Noxious Weed Locations, 2011



King County

Department of
Natural Resources and Parks
Water and Land Resources Division

Noxious Weed Control Program

**For more information: 206-296-0290 or
www.kingcounty.gov/weeds**