Washington State Program for the Control of Invasive Knotweeds

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Washington State Program for the Control of Invasive Knotweeds

- Invasive knotweeds targeted for control
- Program Framework
- Project Selection
- Program History
- Treatment methodology
- Program Results and Achievements
Invasive Knotweeds

- **Japanese** (*Polygonum cuspidatum* Sieb. & Zucc.)
- **Giant** (*P. sachalinense* Schmidt)
- **Bohemian** (*P. x bohemicum* Chrtek & Chrtkova)
- **Himalayan** (*P. polystachyum* Wall)
Framework

- WSDA supports local projects with funding, herbicide, outreach materials, training

- Resources are provided through interagency agreements or contracts with local organizations

- Projects implemented by County Noxious Weed Control Boards, Tribal governments, Washington State Parks, and one non-governmental organization
Project Selection Process

- WSDA solicits proposals in March/April

- WSDA facilitates annual stakeholder meeting to obtain input regarding proposal evaluation criteria

- Based on stakeholder input, WSDA has supported projects that
  
  - Were well underway
  
  - Could cost-effectively control knotweed populations
  
  - Demonstrated a commitment to monitoring
Multiple partners in one project area

Address areas with low-level knotweed infestations, protect functional riparian habitats or endangered plant species, or target areas in the early stages of invasion

Treatment strategies follow an integrated pest management approach

Work is performed on both private and public land
• Pilot project initiated in 2004

  – $500,000 appropriated for control work in Southwest Washington Counties

  – Agreements were entered into with County Noxious Weed Control Boards, The Nature Conservancy, and the Washington State Parks and Recreation Commission

  – Treatment methods were evaluated by Dr. Tim Miller of the Washington State University
• 2005 Program expands statewide
  – Continued funding level of $500,000
  – Projects initiated in 2004 receive continued support
  – Projects on the Olympic Peninsula, Puget Sound, and Yakima County are added to program
Program History

- 2006 Program adds partners in Eastern Washington and Olympic Peninsula
  - Continued funding of $500,000
  - Program Cooperators brought over $500,000 of additional resources to local projects
  - Projects initiated in 2004 or added in 2005 receive continued support
  - Whitman County, Asotin County, Skagit County, and the Jamestown S’Klallam Tribe added as project partners
2004 Partners
- 2004 Partners
- Whatcom County
- Snohomish County
- Island County
- Clallam County
- King County
- Yakima County

2005 Partners
- 2004 Partners
- Whatcom County
- Snohomish County
- Island County
- Clallam County
- King County
- Yakima County

2006 Partners
- 2004 and 2005 Partners
- Whitman County
- Asotin County
- Pend Oreille County
- Skagit County
- Cowlitz County
- Jefferson County
- Jamestown S'Klallam Tribe

JAMESTOWN S'KLAŁLAM TRIBE
Dickey River Olympic National Park
Strait of Juan de Fuca
Clark County
Snoqualmie River
Yakima County
Treatment Methods

- Foliar application of herbicide
- Injection of an undiluted glyphosate formulation
- Combination inject + foliar
- Combination manual + foliar
Foliar Application of Herbicide

- Usually made with a backpack sprayer
- 2% - 8% concentration of glyphosate formulation (and registered for use at aquatic sites)
- 0.5% - 1% concentration of imazapyr formulation (and registered for use at aquatic sites)
- Addition of a spray adjuvant
Injection of Herbicide

• Usually deliver 3 – 5 mL undiluted herbicide per stem

• Glyphosate formulation and registered for application with injection equipment
Combination Inject + Foliar

• Usually deliver 3 – 5 mL undiluted herbicide per stem

• Glyphosate formulation and registered for application with injection equipment

• Foliar application of herbicide to plants too small to inject
• Visit sites in May or June to bend or cut knotweed stems

• Revisit sites after sufficient time to allow for regrowth

• Foliar application of herbicide
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<th>Year</th>
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<td>311</td>
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<tr>
<td>2005</td>
<td>607</td>
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<td>1,564</td>
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Program Achievements
2004-2006

• All known riparian populations of knotweed treated in 24 river systems

• Riparian knotweed populations of the Little White Salmon River basin (Skamania County) exhibited no regrowth in 2006

• All known upland and riparian populations treated in Whitman County, Yakima County