

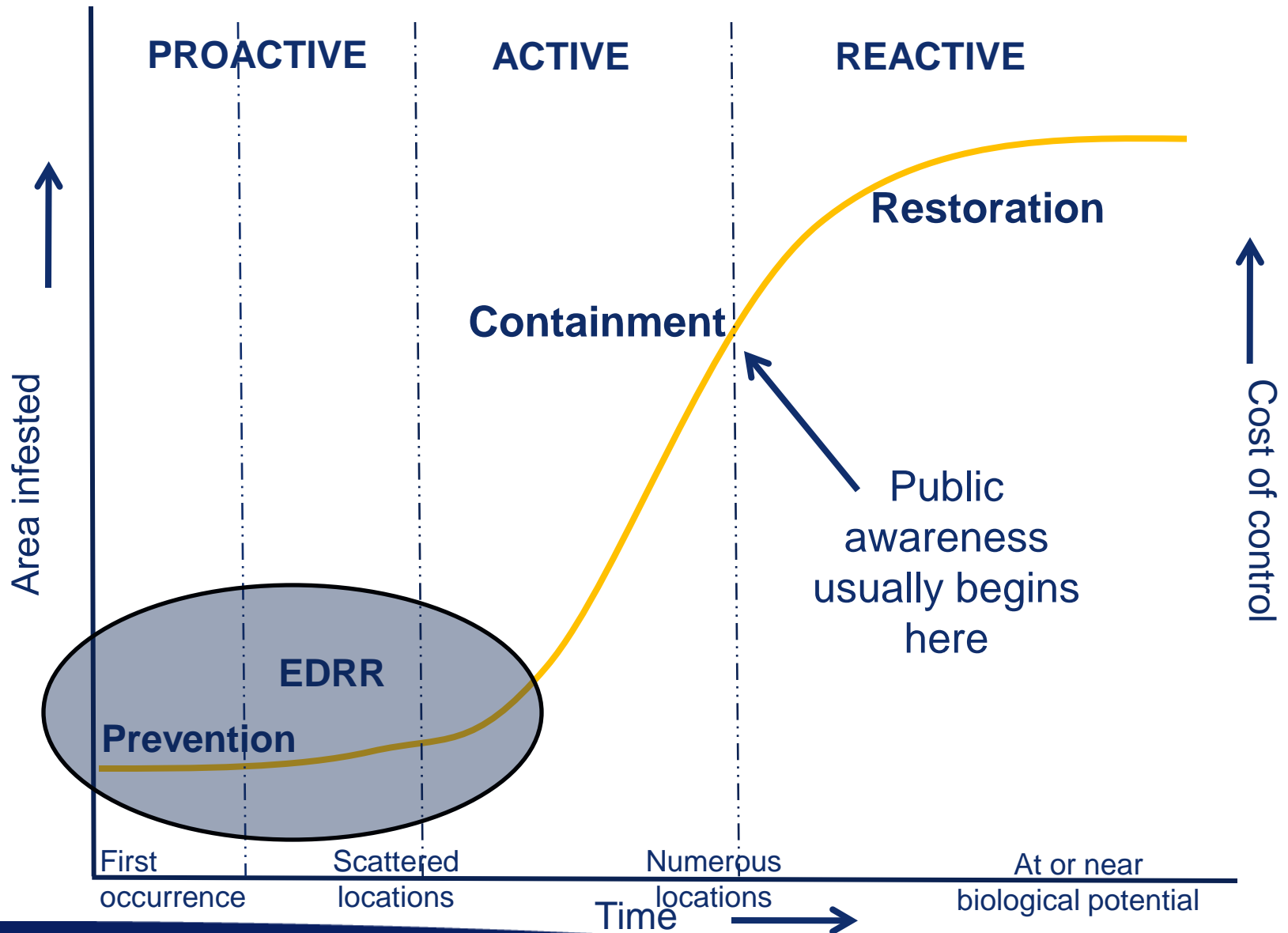
EDRR—Introduction and Overview

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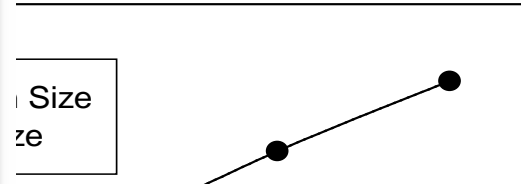
Early Detection and Rapid Response (EDRR)

- **Early recognition of invasive plant**
- **Rapid, intensive, aggressive control to prevent spread**
 - Hand-pulling
 - Herbicides
- **Key component of prevention program**
- **Necessary for long-term management**
 - Mobile, global society
 - Invasive plants *will* continue to spread, especially in right habitat

Invasion Progression vs. Management Strategy



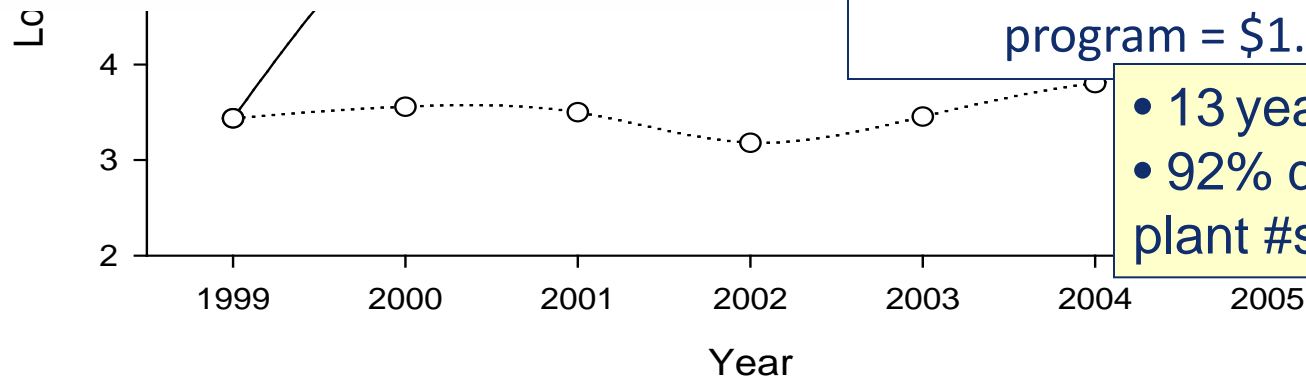
EDRR in Montana—Dyer's Woad



Program cost from 1985-2005 =
\$225,000

Estimated cost of herbicide
application in 2005 without
program = \$1.9 million

- 13 years
- 92% decrease in
plant #s since 2005



EDRR Principles

- 1. Prevention/early intervention are most cost-effective means of invasive plant management**
- 2. EDRR provides opportunities to eradicate or minimize specific invasive plants from state or region of state**
- 3. Risk analysis on level of threat posed by new species based on likelihood of spread and potential impacts**
- 4. Eradication of well-established populations is not a reasonable expectation; however, EDRR processes can be applied to ensure spread to other at-risk areas is minimized**
- 5. Risks of introduction and spread must be communicated to increase vigilance and cooperation across region**



Critical Components of EDRR Program

- 1. Network of “weed watchers”**
 - YOU!
- 2. Training of “weed watchers”**
 - This workshop
- 3. Reporting system**
 - INVADERS Database or EDDMapS
- 4. Alerting system**
 - INVADERS Database or EDDMapS

EDRR Network

- **Communication and decision-making framework**
- **Complement, not replace, existing invasive plant management programs**



State Noxious Weed List

EDRR Species

- **Priority 1A and 1B species**

1. Yellow starthistle
2. Dyer's woad
3. Flowering rush
4. Knotweed complex
5. Purple loosestrife
6. Rush skeletonweed
7. Eurasian watermilfoil
8. Scotch broom
9. Curlyleaf pondweed
10. Hydrilla (Priority 3)

New Invader—A Matter of Geographic Perspective

- **Yellow starthistle in Montana**
- **Spotted knapweed in eastern Montana**
- **Leafy spurge in Beaverhead County**



Once A New Invader Is Found

- 1. Contact local weed district, Extension agent or specialist**
- 2. Collect site information**
- 3. Collect sample and submit for verification**
- 4. Submit information to INVADERS**
- 5. Follow-up management**
 - Eliminate plant(s)
 - Assess possible modes of introduction (site history)
 - Assess potential dispersal from site
 - Survey for additional plants

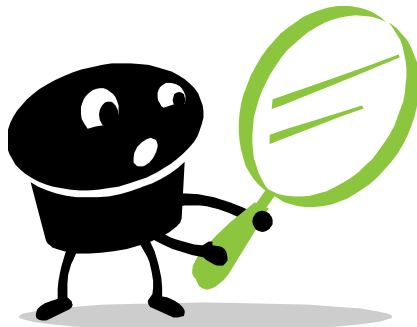
Join the EDRR Network in Montana!

- Network of invasive plant managers & botanists across the state who are actively engaged in *information sharing* and committed to *reducing establishment* of new invaders



Weed Identification

- **New invaders aren't commonly encountered**
- **Easy to confuse with something else**
- **Proper identification is critical**
- **Information accuracy**



Reporting and Sharing Information

■ INVADERS Database

- <http://invader.dbs.umt.edu/>
- Updatable database and web interface to support proactive weed management
- Historic data of weed presence in 5 northwestern states
- Data entry and weed email alert service

The logo for the INVADERS Database System features the word "INVADERS" in a large, bold, serif font with a metallic, 3D effect. Below it, the words "Database System" are written in a smaller, elegant, cursive script. The text is set against a background of green foliage and purple flowers, with a soft, glowing effect around the letters.

INVADERS
Database System