

Knotweed Treatment in the Cedar River Municipal Watershed



Why is Knotweed So Bad?

- Completely takes over—monoculture
- Disrupts food chain—no nutrients
- Degrades fish habitat—destabilizes streambanks
- Provides no food, nesting habitat



Control Methods Tried

- Digging – spreads infestation
- Burying – came up from under nine feet of fill
- Cutting – Tried 6 years
 - doesn't work
- Covering – may work on very small patches



After 8 Years of Covering



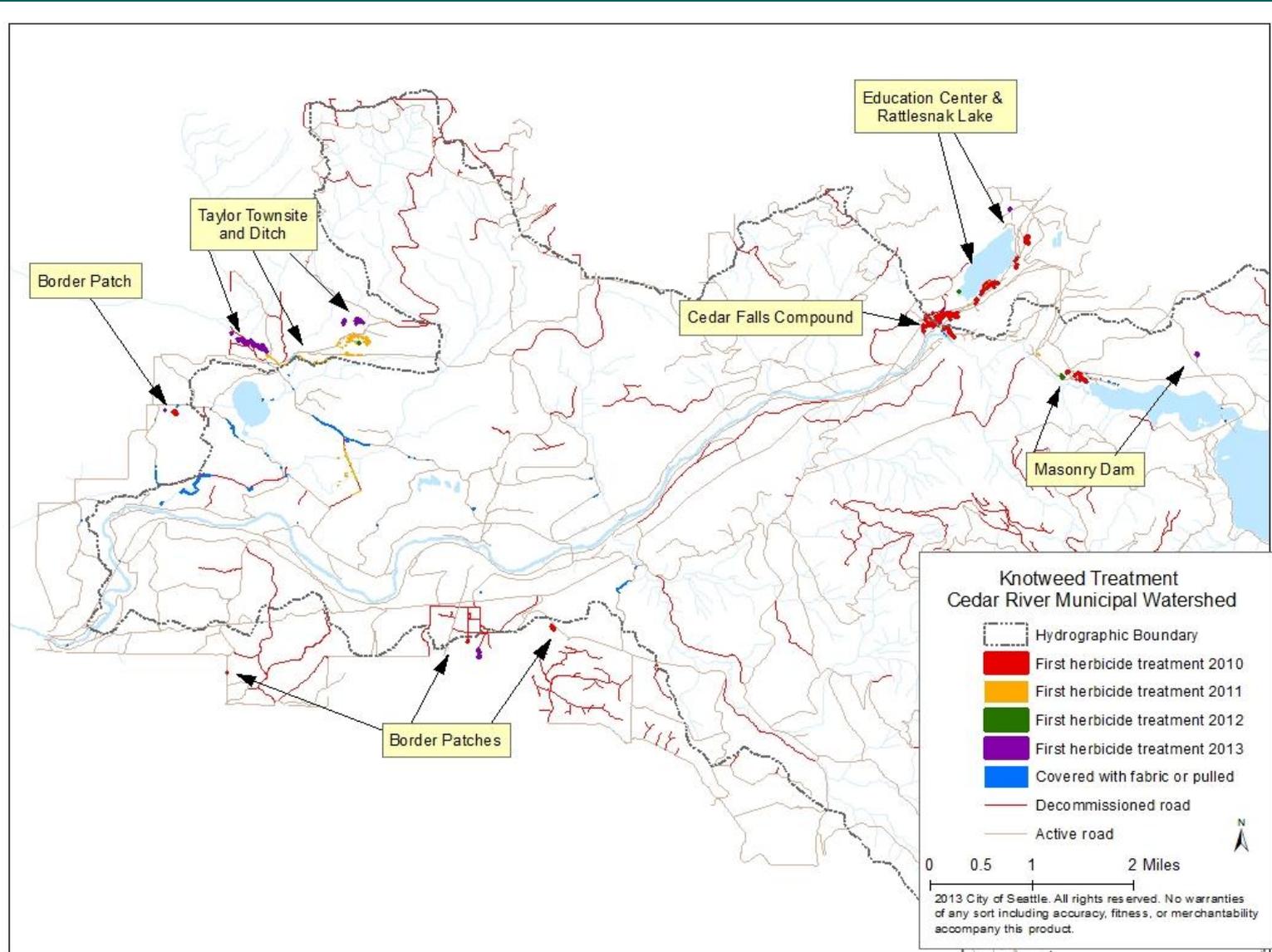
Imazapyr

- EPA rating: low or non-toxic to people and animals
- No measureable adverse affects on fish, mammals, birds, macro-invertebrates
- No bio-accumulation
- Less toxic than Roundup
- Dr Felsot – WSU Environmental Toxicologist – “Nil effect on water quality”

Knotweed Ordinance History

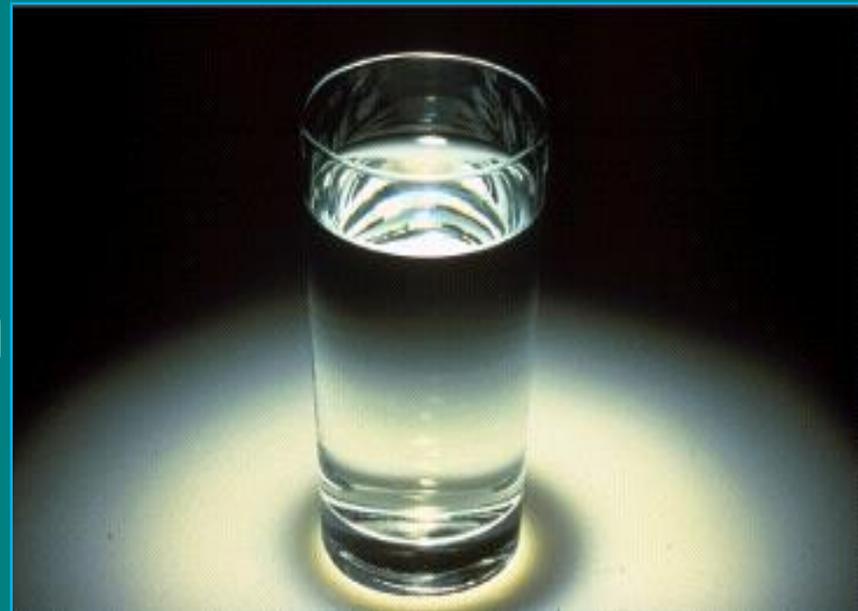
- First ordinance: 2010-2012
- Second: 2013-2015
- Current proposed: 2016-2018
- Limits:
 - Imazapyr to treat knotweed
 - Water quality testing
 - Annual reports to City Council

Location of Knotweed in CRMW



Drinking Water Safety

- Water sampling, testing after each application, 2010 – 2014
- No imazapyr detected in municipal water supply
- Detection limit
0.02 parts per billion



Herbicide Treatment 2010-2014

Number Acres	Number Treatments
7.72	5
7.86	4
0.28	3
2.15	2

Rate of Imazapyr Applied 2010 - 2014

Year	Average oz/ac
2010	43
2011	43
2012	15
2013	9
2014	7

How Many Treatments Needed?

- Latest western WA data: 8+ consecutive years >98% mortality
- Data from watershed: 4 years insufficient



Before Treatment, 2010



1 year after first treatment, 2011



1 year after 2nd treatment, 2012



1 year after 3rd treatment, 2013



1 year after 4th treatment, 2014



Other Invasives - Blackberry



Other Invasives – Locust, Mullein



Site Restoration, Ed Center

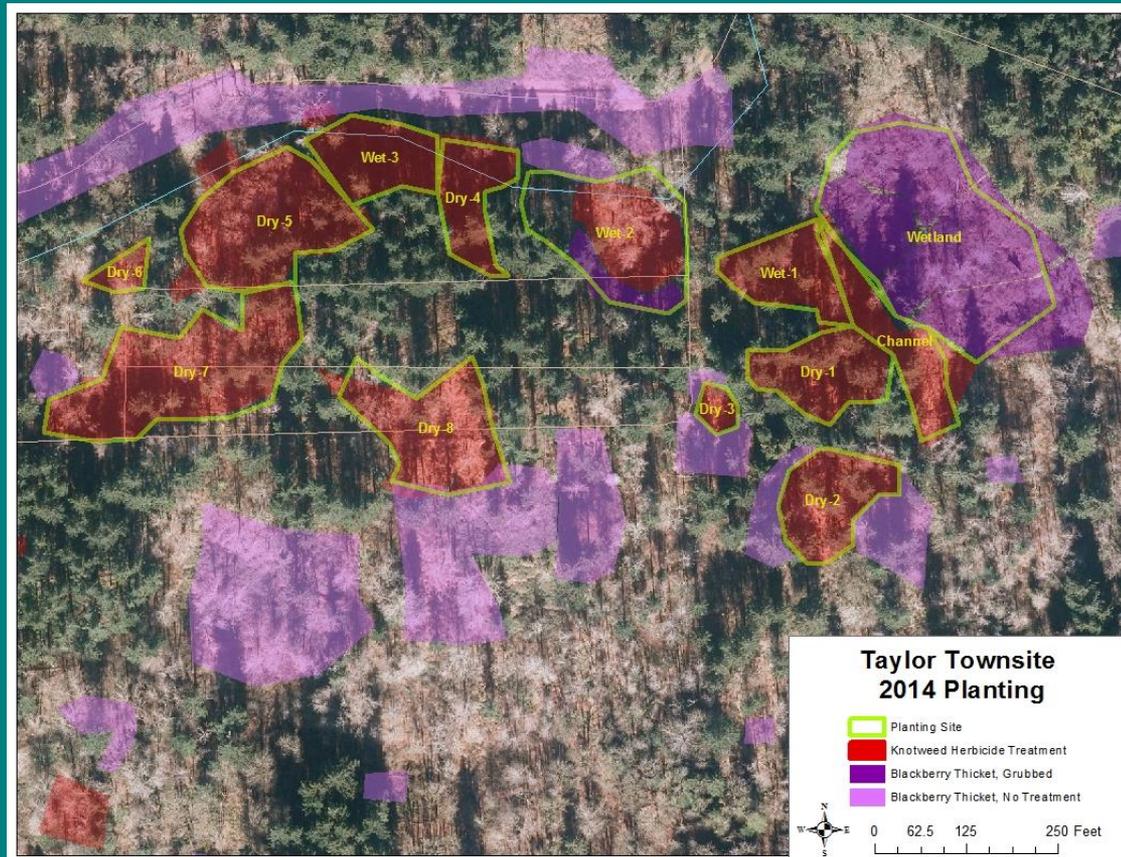
- King Conservation District Grant, 2013-2017
- Clear blackberry, locust, ivy, scots broom, mullein, foxglove
- 2014-15 - Plant 1875 native trees, shrubs
- Spread hundreds of yards of mulch





Site Restoration Taylor Townsite

- Clear blackberry, mullein, foxglove
- Plant 6935 native trees, shrubs









Questions?

