

Knotweed Treatment in the Cedar River Municipal Watershed

Report on treatment 2010-12

Ordinance to continue treatment 2013-15



Why is Knotweed So Bad?

- Completely takes over, creates monoculture
- Disrupts food chain
- Provides no food, nesting habitat
- Degrades fish habitat
- Destabilizes streambanks



Control Methods Tried

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

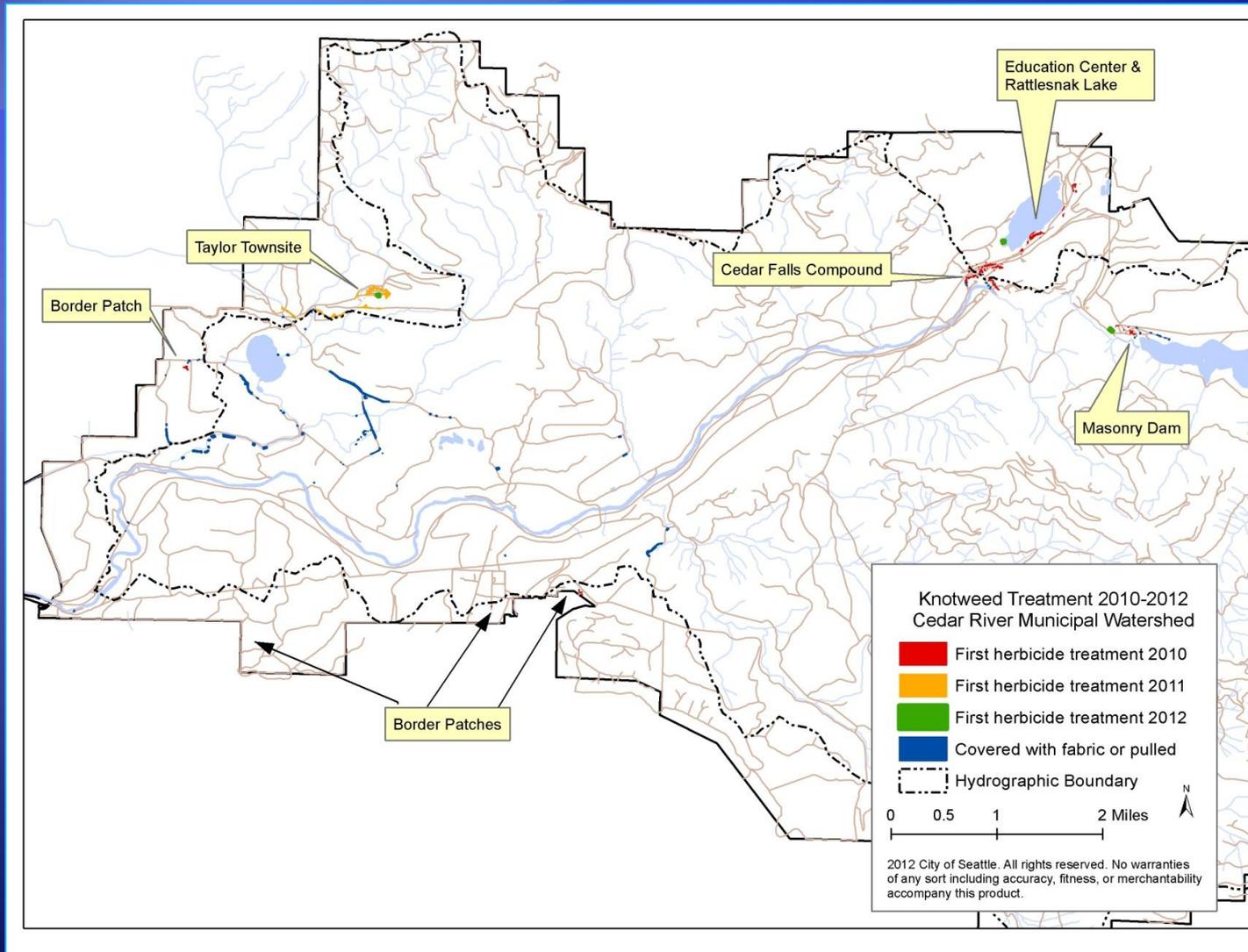


Imazapyr

- EPA rating: low or non-toxic to people and animals
- No measureable adverse affects on mammals, birds, macro-invertebrates, fish
- No bio-accumulation
- Less toxic than Roundup

*US Forest Service Summary of Herbicide Effects to Wildlife, 2005
EPA, Re-registration Eligibility Decision for Imazapyr . EPA 738-R-06-007*

Location of Knotweed



Herbicide Treatment as of 2012

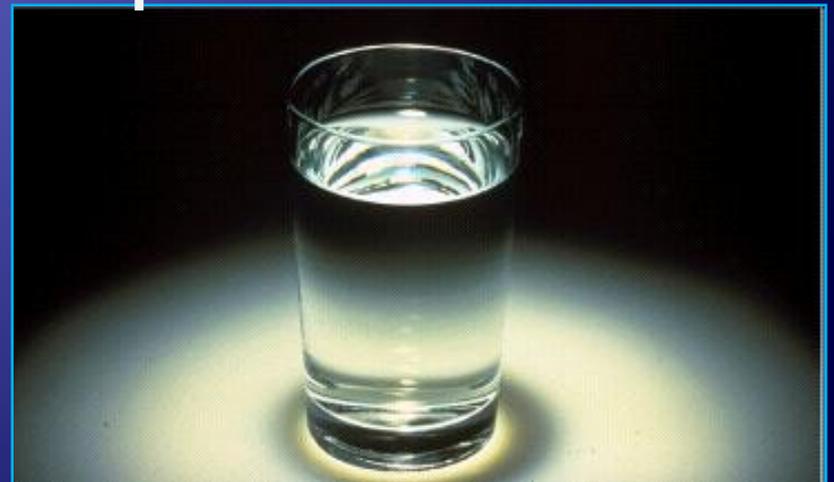
Number Acres	Number Imazapyr Treatments
7.72	3
7.86	2
0.28	1

Amount of Imazapyr Used, 2010 - 2012

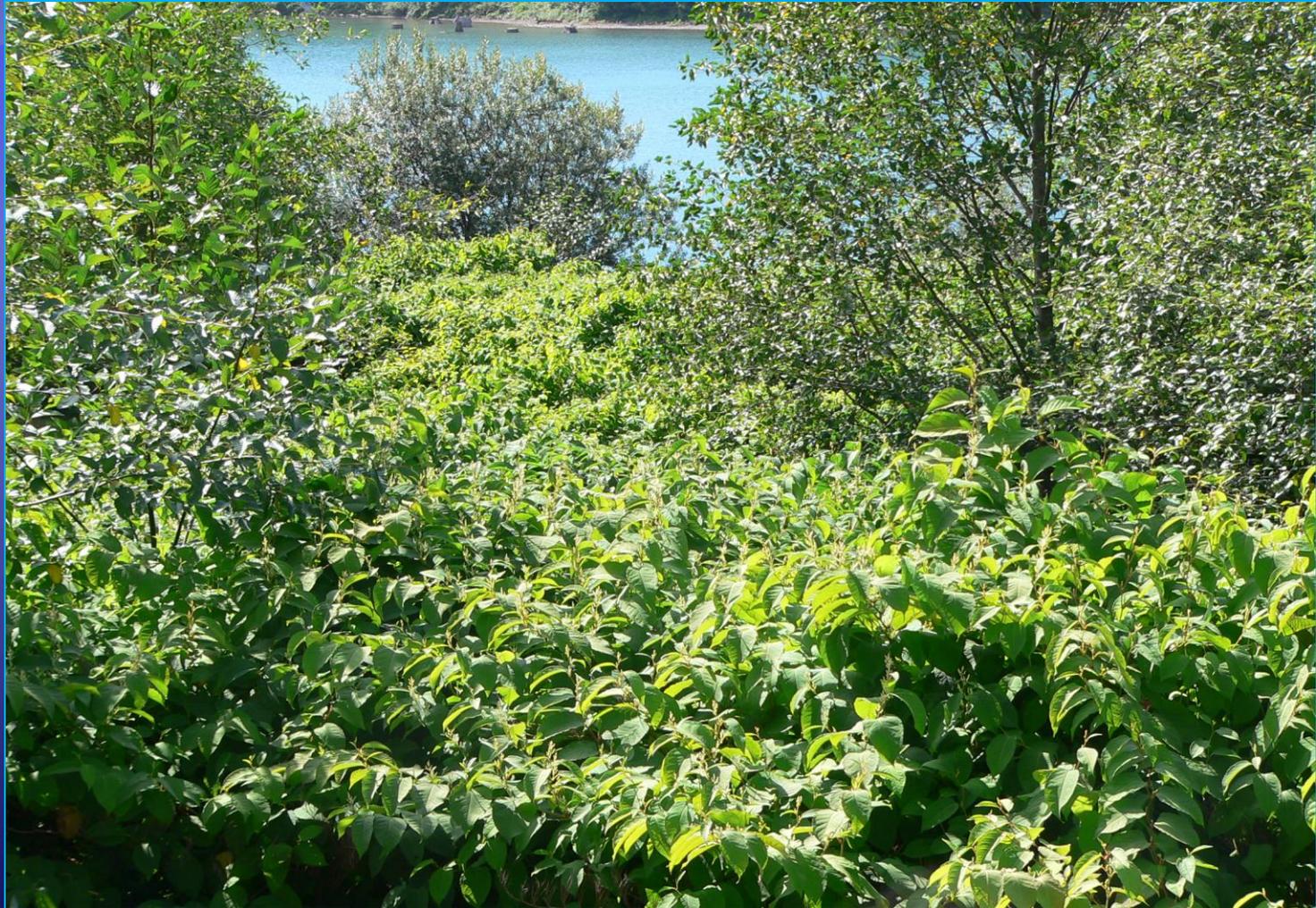
Treatment Number	Average Ounces /Acre
First	43 - 64
Second	18 - 24
Third	10

Drinking Water Safety

- Water sampling, testing after each application, 2010 – 2012
- No imazapyr detected in water supply
- Detection limit 2 parts per billion
- Minute detection in small stream outside water supply



Before Treatment



One Year after First Treatment



One Year after Second Treatment



Eight Months after Third Treatment

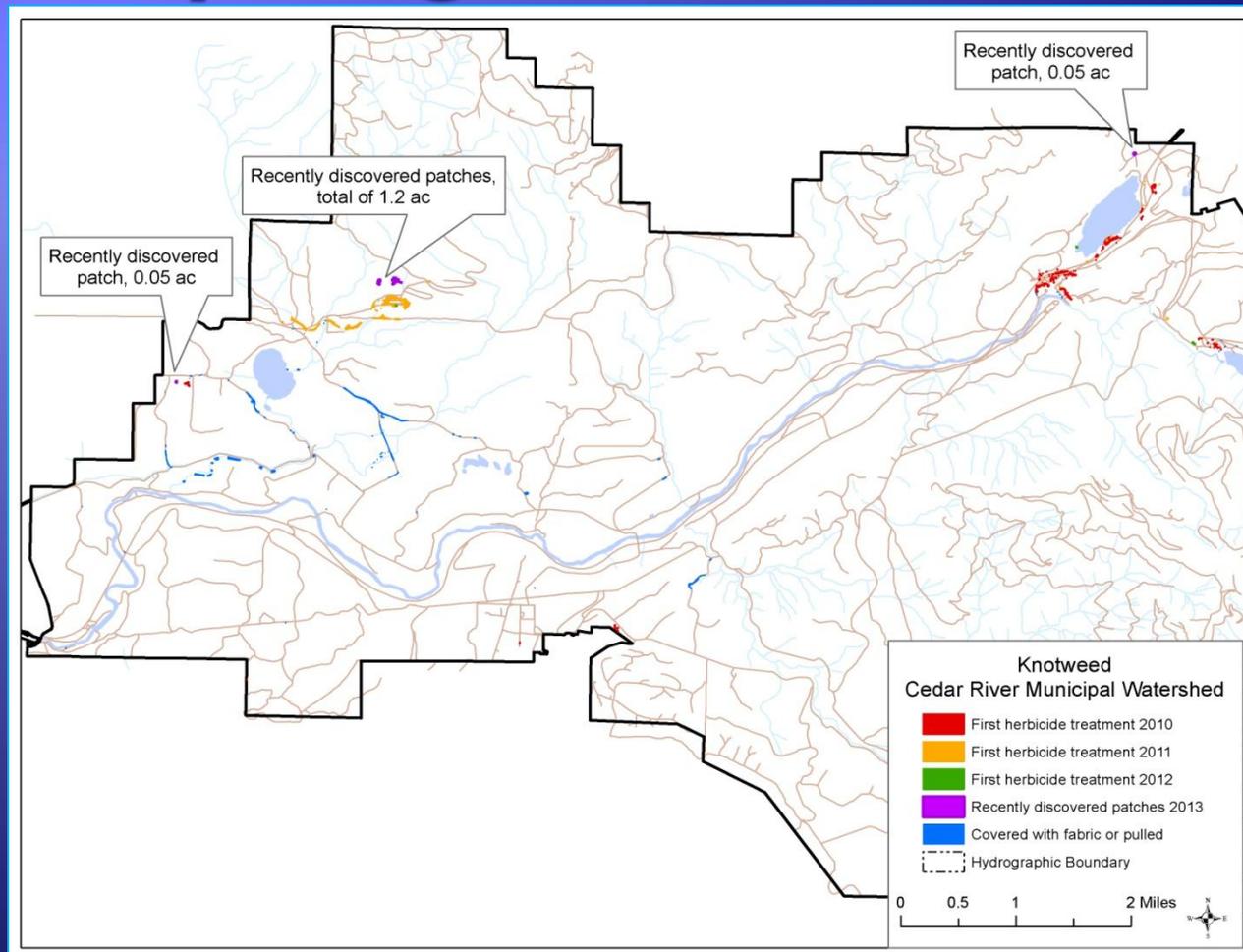


How Many Treatments Needed?

- Latest western WA data: 5 consecutive years >98% mortality
- Data from watershed: 3 years insufficient



Finding Previously Undiscovered Patches, 2013



Questions?

