

# Using Herbicide to Treat Knotweed in the Cedar River Municipal Watershed





# History of Existing Ordinance





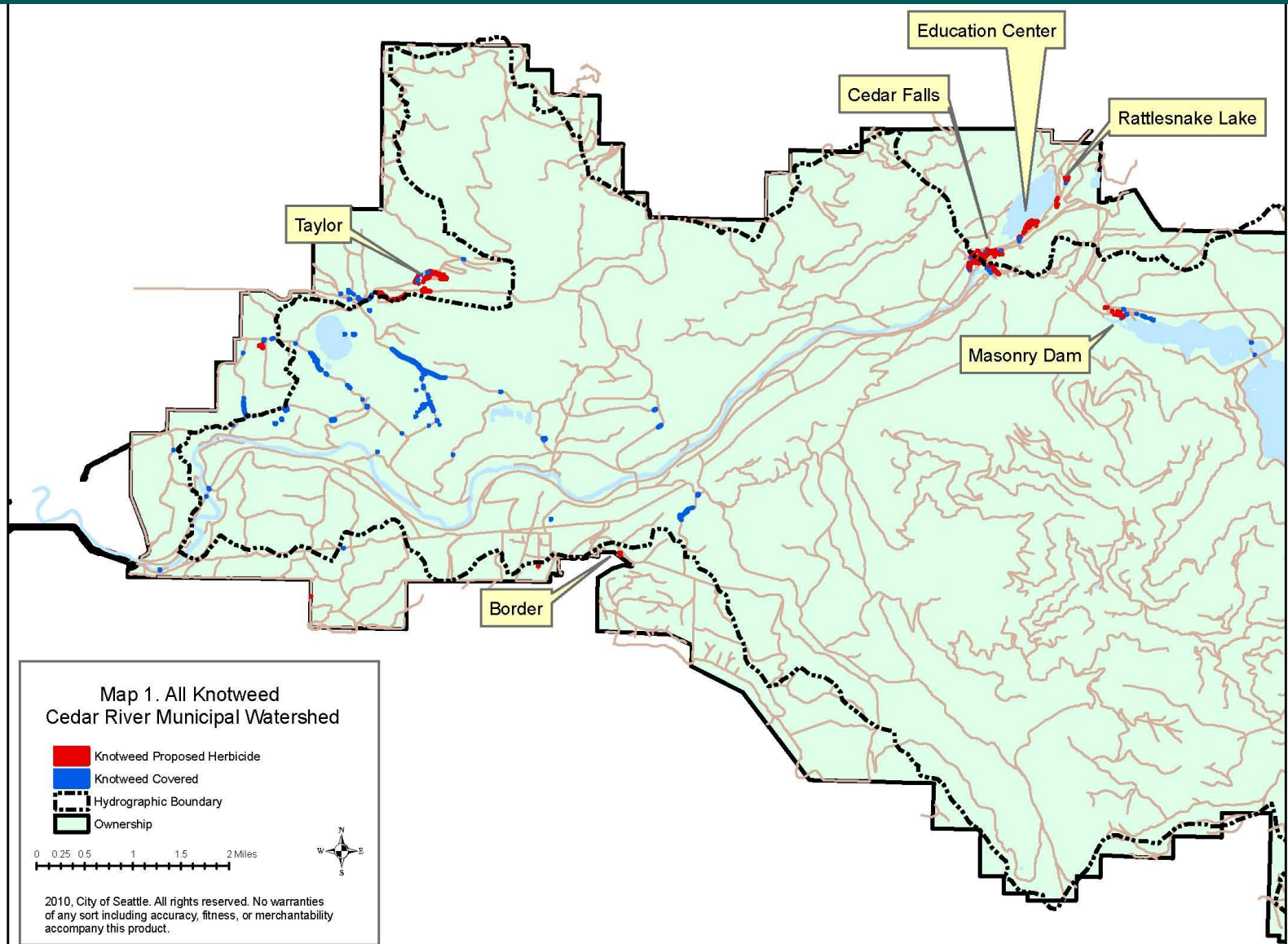
# Why is Knotweed So Bad?

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





# Knotweed Infestation in Watershed





# Control Methods

Digging  
Burying  
Cutting  
Goats

Biological  
Covering  
Herbicides





# Imazapyr Risk Analysis

- Risk posed by knotweed
  - Habitat
  - Ecological functions
  - Water quality
- Risk posed by herbicide
  - Fish and wildlife
  - Water quality



# Protecting Fish and Wildlife

- EPA rating: low or non-toxic to animals
- No adverse effects on mammals, birds, macro-invertebrates, fish
- No bio-accumulation



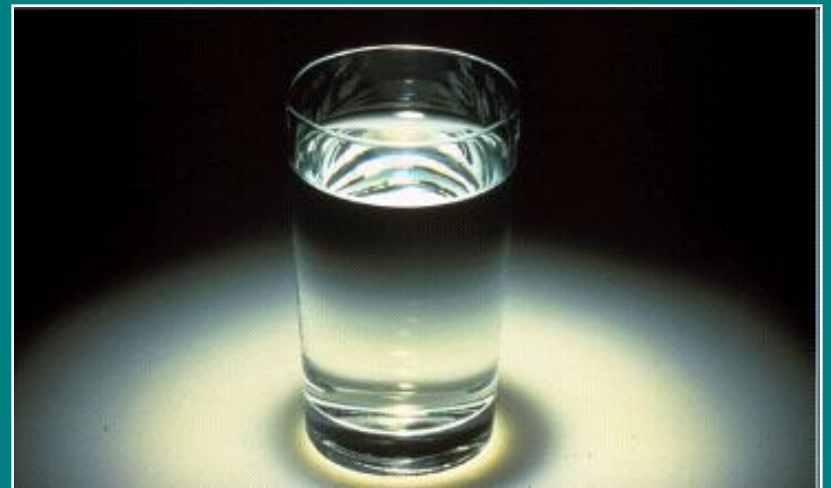
*EPA, Re-registration Eligibility Decision for Imazapyr 2006. EPA 738-R-06-007*

*US Forest Service Summary of Herbicide Effects to Wildlife, 2005*

# Drinking Water Safety

- Will not be applied near Cedar River
- Imazapyr half-life in water 2 -5 days
- Many study results: Imazapyr not detected when applied in or near water
- Water sampling, testing after each application

*Durkin, P. and M. Follenasbee. 2004. Imazapyr – Human Health and Ecological Risk Assessment Final Report to USDA, Forest Service.*





# Expert Review

Washington Department of Health:

- “Approvable”

Dr. Allan Felsot, Environmental Toxicologist,  
WSU

- “Nil effect”

No adverse effects

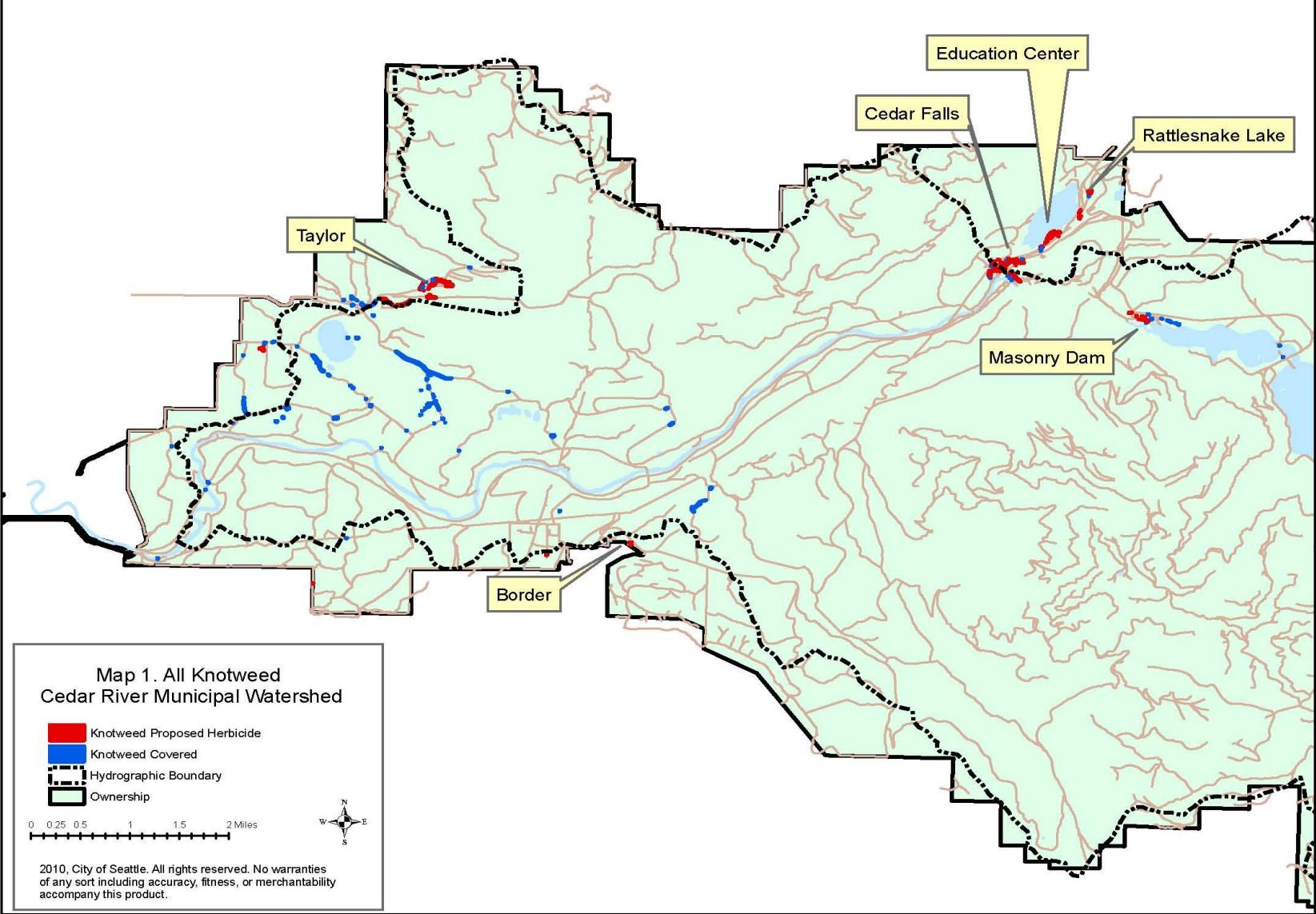


# Approvals Obtained

- Seattle City Council passed ordinance amendment August 2<sup>nd</sup> 2010
- Limited to:
  - imazapyr to treat knotweed
  - Three years
  - 10 acres + 50% (15 acres)
  - No area treated more than twice
  - Annual report to Council Committee
- Approved by WDOH on August 16



# Status





# Questions?

