

Wisconsin Aquatic Plant Management  
Program: Permitting, Herbicide  
Application & Evaluation

4/9/2013 Green Bay

# Permitting:

- All permits and Records to Madison
- Online option for private ponds only
- Other permits distributed from CI
- CI Staff: Becca Jordan and Kelsey Brown
- Questions: CI or Scott Provost



# Online Private Pond

- “Private” pond approval as defined in NR107.11(3)(a)

A private pond is a [1] body of water located entirely on the land of the applicant, with [2] no surface water discharge or a discharge that can be controlled to prevent chemical loss, and [3] without access by the public.

# Non-private Pond Permits

- Will be logged, assigned permit number and process fee at CI
- Routed to regional APM coordinator for review.
- APM Coordinator determines when complete, permit clock starts.

# 2012 By the Numbers:

- Total permit applications processed: 1078
- Total private pond permits: 588
- Total public permits: 490
- Total permits denied: 4
- Issuance compliance (process time): 98.3%
- Submitted via Sharepoint: 4

# What to expect in 2013

- Supervisions
- More review on spot treatments vs. whole lake
- Define what is a spot treatment
- Liquid vs. granular
- New herbicides

# Field Supervision



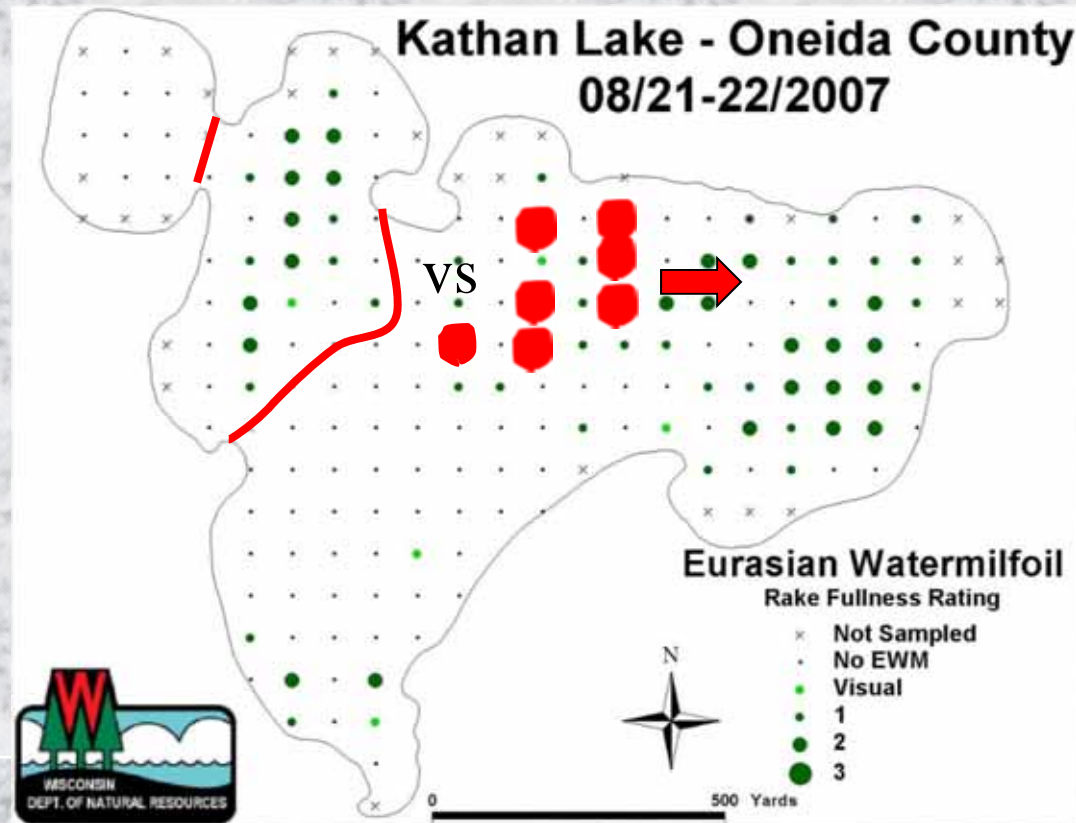
## Typical items:

- Verify treatment areas
  - (CHD, SAD, target, etc.)
- Verify label use
- Application rates
- Posting/Notification
- Equipment
- Other permit conditions
- Weather (e.g. **WIND!**)



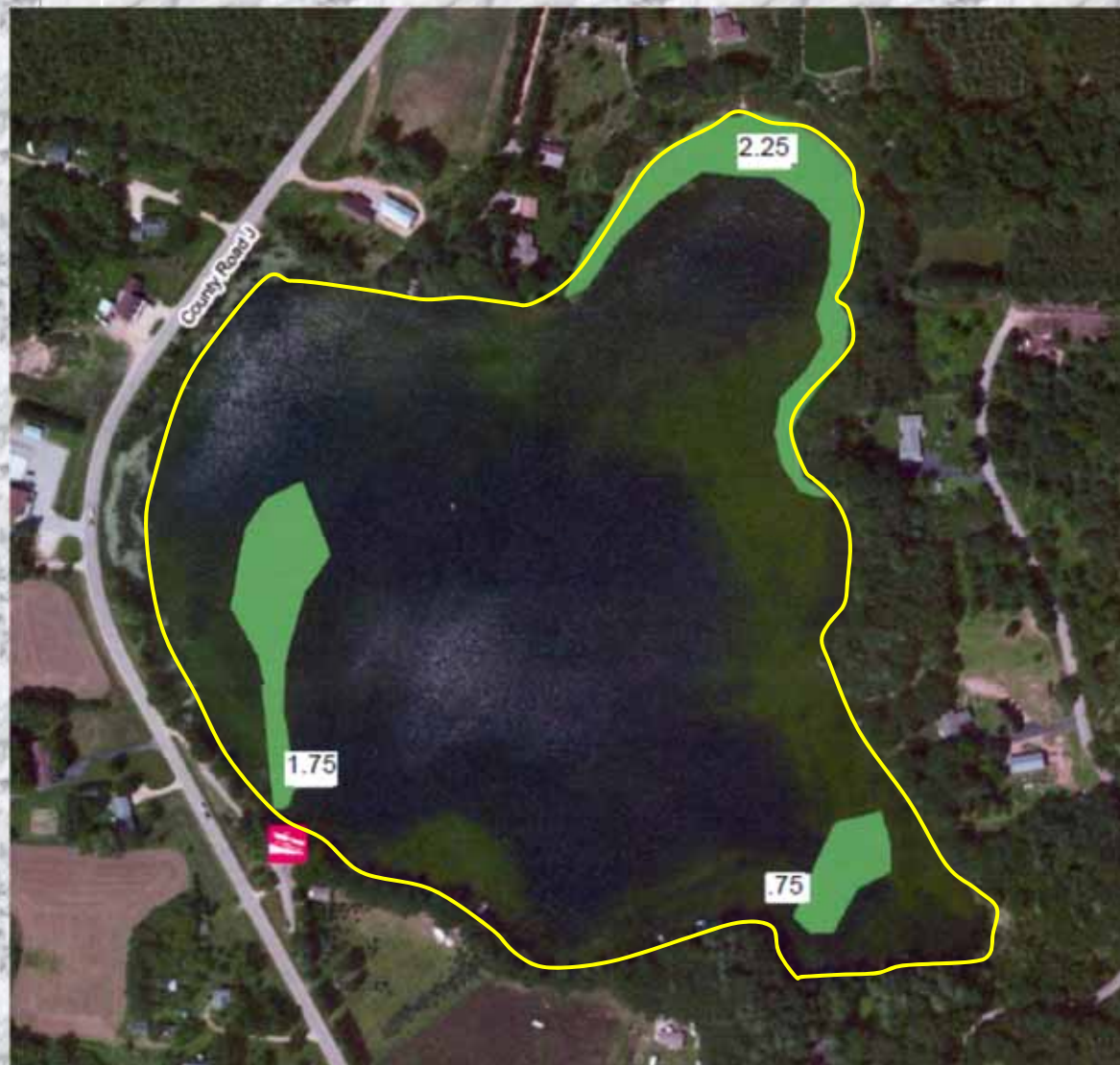
# WIND

- Solubility of products increase dissipation
- Wind speed/direction





# Spot treatment vs. Whole Lake



- 4.75a treatment
- 3.75ppm 2,4-D
- 46a lake
- 300ppb WLC
- Not a spot treatment!

# So what is a spot treatment?

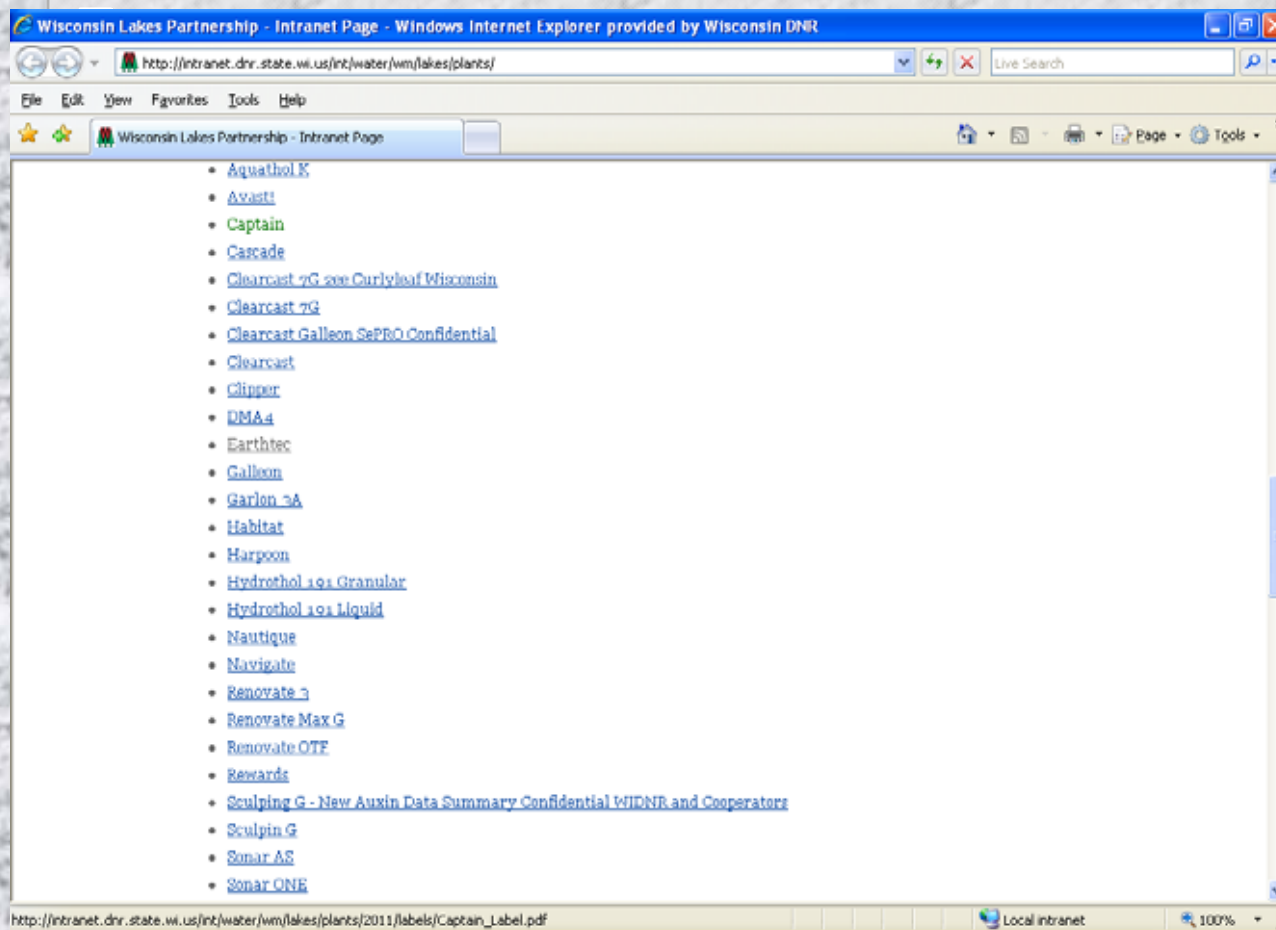
- When the concentration of herbicide is sufficient to have impacts throughout a waterbody
- ~5-10% of epilimnetic volume (?)
- Reduced efficacy < 5 acres?
- Could be herbicide dependent
- Morphology, weather, microbiology (?)

Working to refine this definition.....

# Liquid vs. Granular

- Product dependent
  - Endothol – No difference (see handout)
  - 2,4-D – Little difference
- Hydraulic Residence time
- License requirements (do-it-yourself)
- Relative application size

# New Products and Why



- Advancements in technology
- Minimize non-target effects
- WDNR collaborating with industry
- Number of projects in evaluation
- Assess efficacy using a scientific method
- Best methods to serve citizens and lakes

# Evaluation...and implementing results!

- Proper quantitative evaluation (pre and post)
- Help answer questions and discover new
  - Spot vs. whole lake
  - Safety of efficacy
  - Dose and contact times
  - Economics of efficacy
- Performance of grant funded projects
- Is money being spent the best way?

# Quantified Evaluations

- Standardized procedures to help share data and remove subjectivity, while advancing new technologies
- Pre/Post surveys
- ANSWER QUESTIONS

## Recommended Baseline Monitoring of Aquatic Plants in Wisconsin: Sampling Design, Field and Laboratory Procedures, Data Entry and Analysis, and Applications



Jennifer Hauxwell, Susan Knight, Kelly Wagner, Alison Mikulyuk,  
Michelle Nault, Meghan Porzky and Shaunna Chase

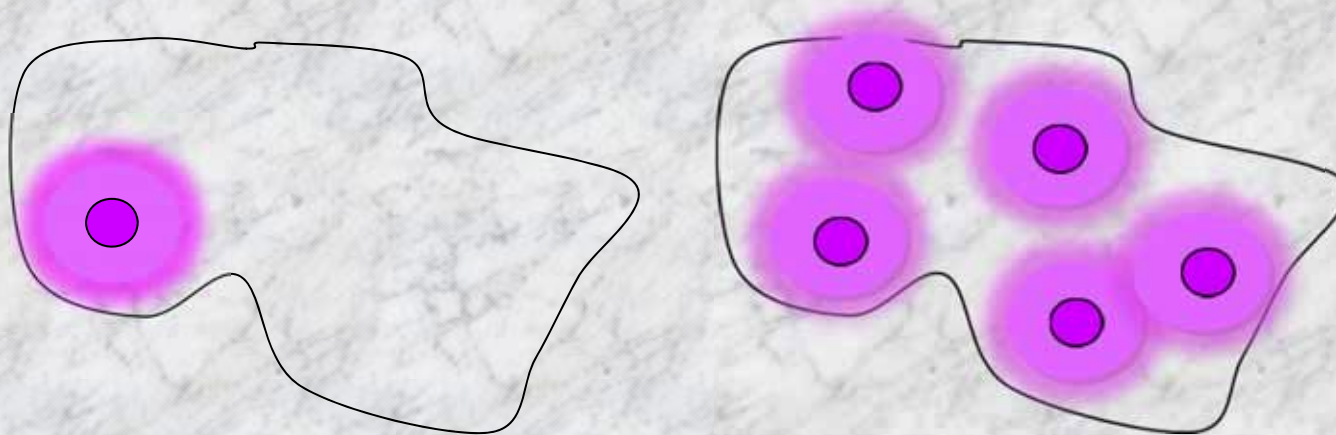
March 2010

Document citation:  
Hauxwell, J., S. Knight, K. Wagner, A. Mikulyuk, M. Nault, M. Porzky and S. Chase. 2010.  
Recommended baseline monitoring of aquatic plants in Wisconsin: sampling design, field  
and laboratory procedures, data entry and analysis, and applications. Wisconsin  
Department of Natural Resources Bureau of Science Services, PUB-65-1068 2010.  
Madison, Wisconsin, USA.



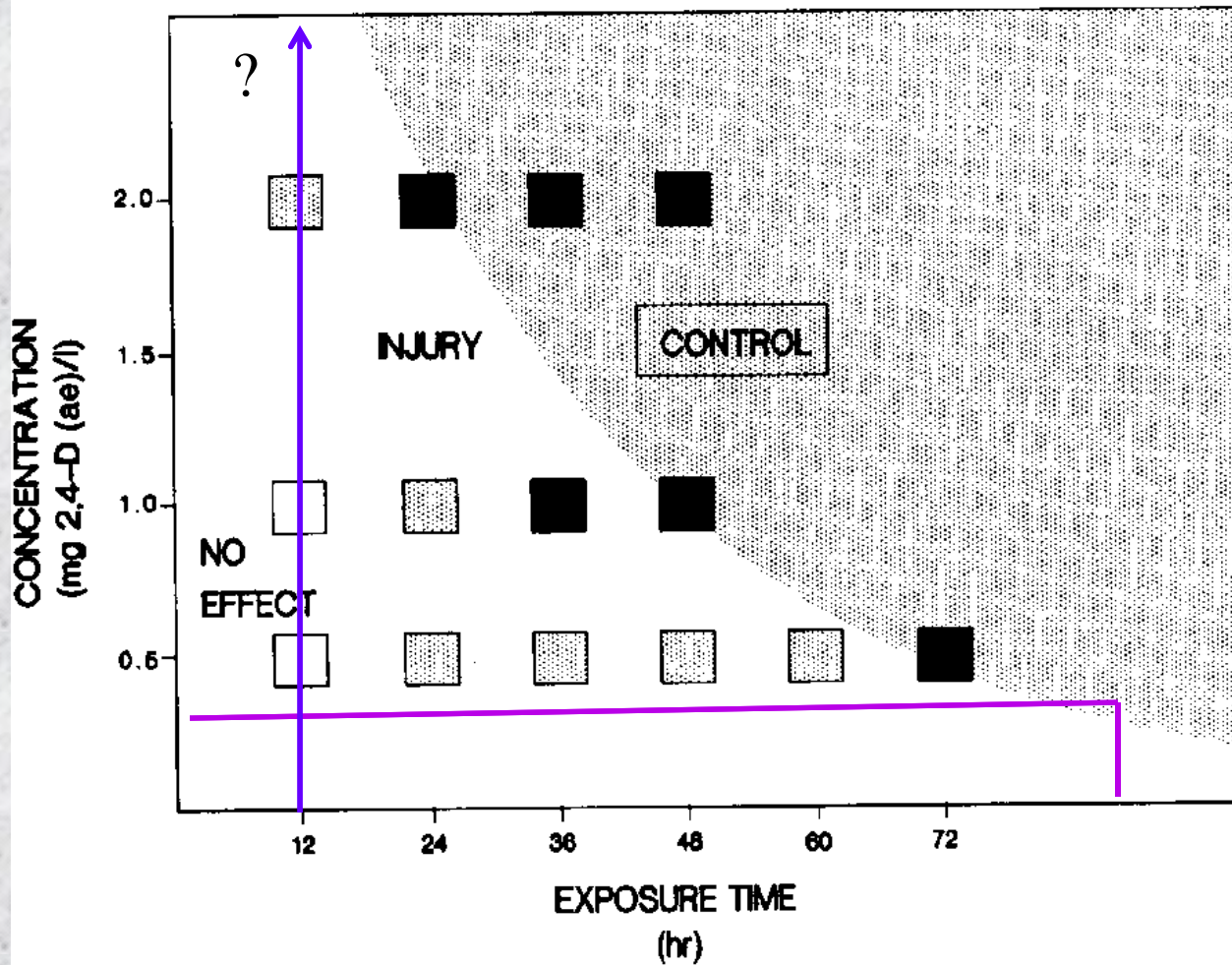
# Evaluations showed....

- Spot vs whole lake treatments
  - Product sampling showed dissipation



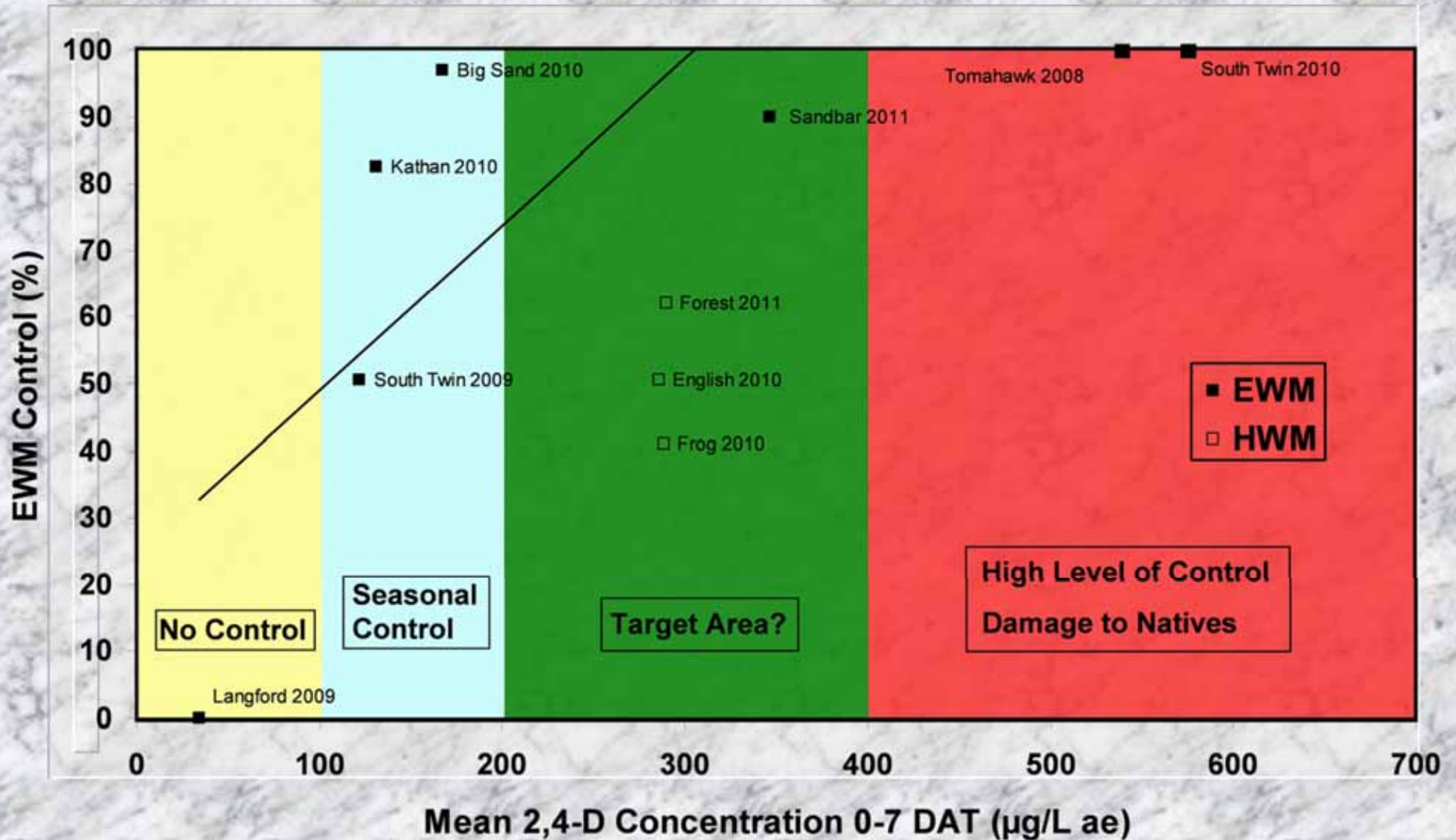
When this  becomes  this

# Dose and Contact Time





# Dose and Contact Time cont.



# Economics of Efficacy

- Granular usually more expensive
- Whole lake should be liquid formulations
- Extends your dollars and grant dollars
- Proper evaluation determines what works
  - Same treatment year after year?
  - Measured success?

# Grant Performance Measures

Can we answer, “Is the treatment working”?

Drafting formal guidance for 2014 AIS control grants

21-day Public Input Process

Who better else to do this!



**And YOU!**

<http://dnr.wi.gov/news/input/Guidance.html>