
Implementing Integrated Pest
Management In Wisconsin

# Historical Perspective

- <1989 Aquatic Nuisance Control
- 1989 Aquatic Plant Management
- 2001 Aquatic Plant Management
  - First regulated apporach to IPM

# Present Day IPM Implementation

- Active research in a collaborative approach
- Implementation of new techniques/methods
- Holistic management is becoming the norm
- AIS focused/protect native species
- Comprehensive Plans
- Revision of code(s) to reflect new technologies and philosophy

# Definition of IPM (UC)

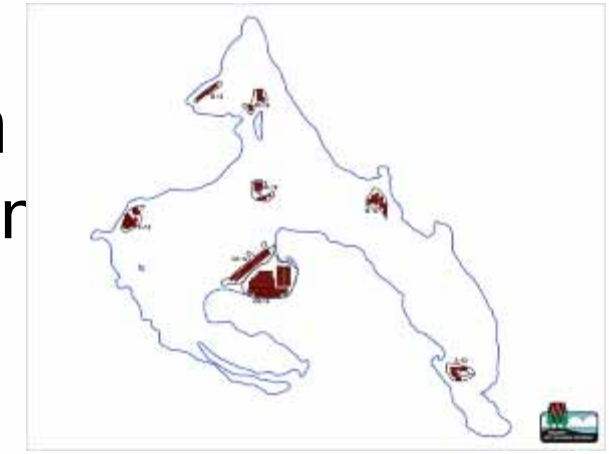
Integrated pest management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

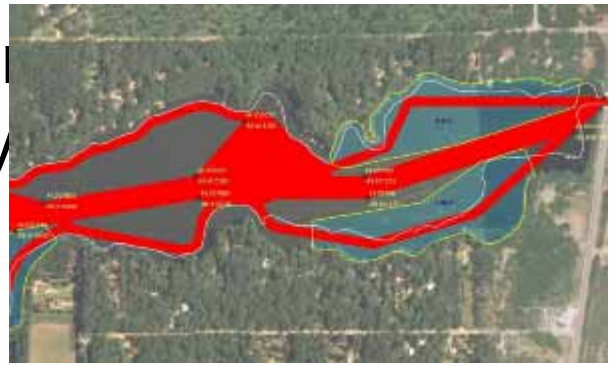
# 3 main concepts of IPM

- Decision Making Process
- Use all available pest management techniques
- Prevent damage from pests while reducing the risk to human health and the environment

# Decision Making Process

- Use Scientific Research
  - Science based evaluation
  - Minimize anecdotes
- Social Impacts
  - Safety impacts
  - Economics
- Detailed Plans
  - Explain management option
  - How, when and where they implemented

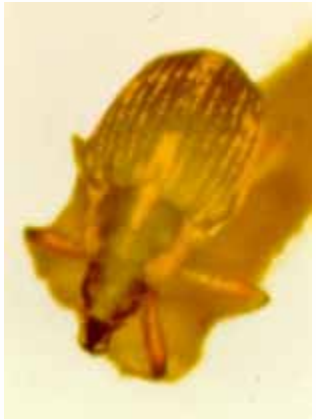




# Use all available techniques

- Nutrient Management
- Mechanical
- Manual
- Chemical
- Biological
- Observation
- Prevention
- Water Levels

Integrated Approach



# Control While Minimizing Risks

- Use best management practices
- Use the right tools
- Robust evaluation
- Inform and educate – Share Information!
- Policy

# Aquatic Invasive Plant Control
# AIS Grants

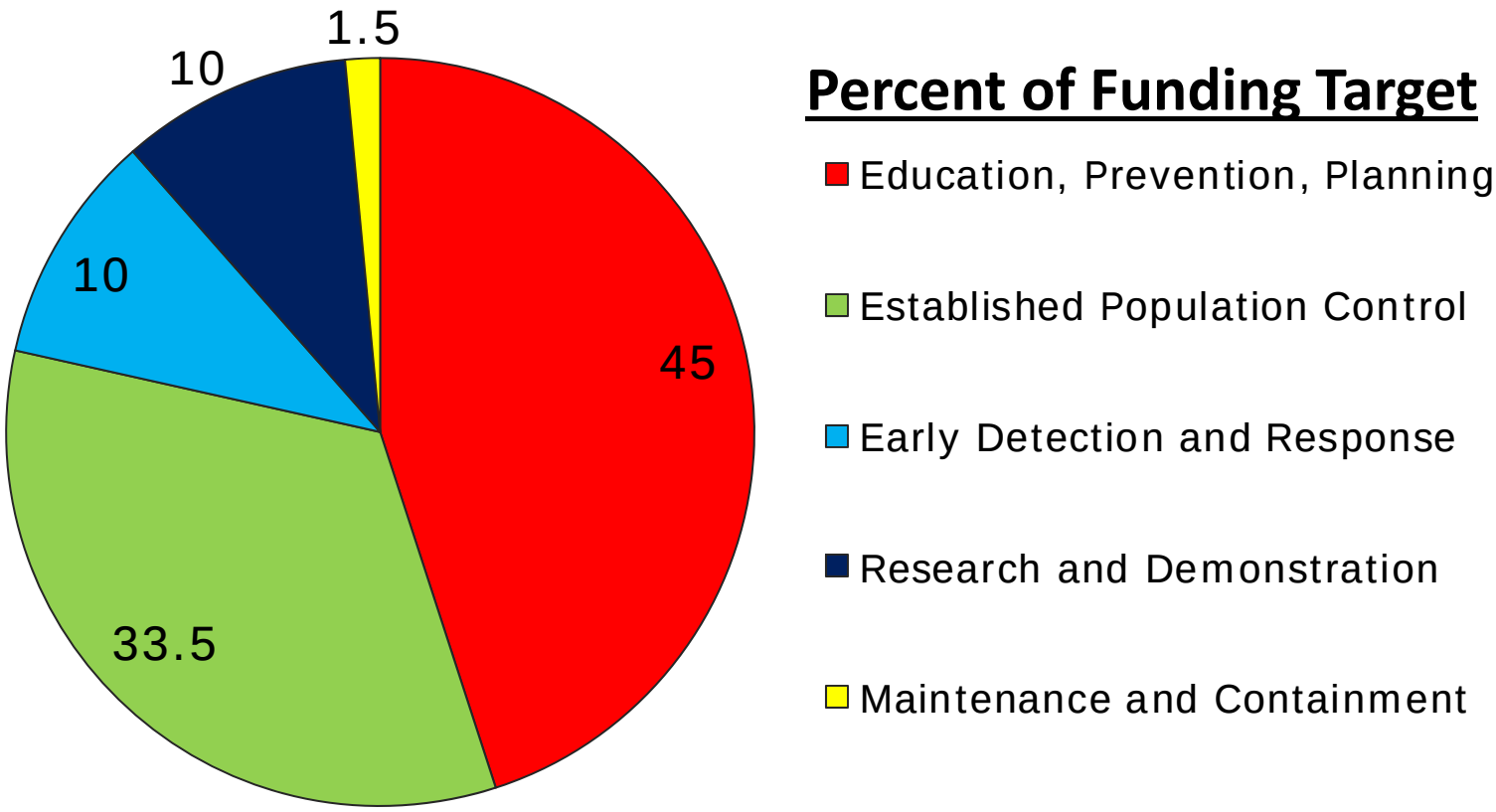
**Scott Van Egeren**
**Lake and Reservoir Ecologist**
**Wisconsin Department of Natural Resources**

# Types of AIS Control Grants

- Early Detection, Rapid Response
- Established Population Control
- Maintenance and Containment
- Education, Prevention and Planning
- Research and Demonstration

# AIS Grant Funding Target

**Total funding = $4 million/biennium**



# Early Detection and Response

- Highest priority for funding
- $20K grant maximum
- Detection and control of relatively new and low coverage occurrences of AIS
  - <5% frequency and present less than five years
- Early detection monitoring for a new AIS in a region.
- A high likelihood of significant reduction and subsequently lower management costs.
- Activities likely include monitoring, hand removal, DASH or herbicide treatments.

# Education, Prevention and Planning

- Grant caps range depending on activities.
  - $4K - Streamlined watercraft inspection (CBCW)
  - $10K – local education or plan updates
  - $50K – AIS plan development/prevention
  - $200K – regional AIS prevention network
- **Create AIS management plans**
- Monitoring of AIS **(including management evaluation).**

# Established Population Control

- $200K grant maximum
- Goal: Manage substantial AIS populations.
- Funds management recommendations from an approved AIS management plan.
- Maximize AIS control and minimize damage to native aquatic plants.
- Activities likely include whole-lake or large-scale herbicide treatments or drawdown.

# Established Population Control

- Good projects will include:
  - Clean Boats, Clean Waters for containment
  - Target levels of control needed to restore lake uses
  - Quantitative pre-post point-intercept surveys
  - Herbicide concentration monitoring for evaluation
  - Treatment evaluation report…
    - Were target levels of control met?
    - What were the impacts to native species?
  - A strategy for maintaining suppressed population after control target is reached.
  - Multiple year benefits and incorporate IPM

# Maintenance and Containment

- Ongoing control of a suppressed population following substantial control.
  - Target level of control from plan has been met.
  - Prevent population from…
    - re-establishing throughout the lake.
    - spreading to other lakes (containment).
    - impairing lake uses (swimming, fishing, boating)
- Activities may include spot treatments, DASH, hand pulling and associated monitoring.
  - Monitoring effectiveness gets more difficult as treatment size decreases, but may be warranted as an evaluation with alternative herbicides.
- Cover the cost of APM permit fees; treatment or monitoring can be used as match.

# Grants Code Revision

2016

- NRB Meeting – April 13
- Summer – **Solicit input**
- Fall – Draft rule
- Winter – Fiscal Estimate and Economic Analysis

2017

- Summer – **Public hearings**
- Fall – Secretary and NRB approval
- Winter – Legislature approval

2018

- Spring – Rule published and becomes effective

2019

- Surface water grant program uses updated rule

# Related Lakes Convention Talks

*Hand-pulling and DASH for AIS Removal*

Thursday 11-12 pm

*DNR Surface Water Grants: What's on the Horizon?*

Thursday 2:35-3:15 pm

*Integrated Pest Management: Milfoil Weevils and Manual EWM Removal*

Friday 8:50-9:50 am

# Grant program questions

- Should we fund unlimited number of early detection, rapid response projects?
- Should we limit the number of established population control projects per lake?
- Do we have enough funding for maintenance following population suppression?