Great Lakes *Phragmites* Collaborative:
A Partnership to Link People, Information and Action

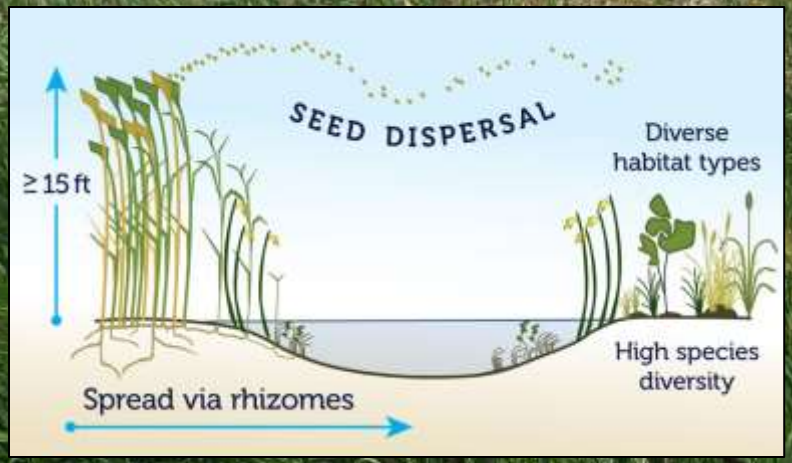
Heather Braun
Great Lakes Commission
Kurt Kowalski
USGS – Great Lakes Science Center

Phragmites australis

- Tall, perennial grass
- Found in wetlands, shorelines, ditches
- Different genotypes grow worldwide

A Landscape-Scale Problem

- Direct impact on people and habitats
- Priority for resource managers
- Need comprehensive approach



Current Management Strategies

Chemical

Flooding

Mechanical

Fire

Challenges

1. Resource intensive
2. Not species specific
3. Treat symptom rather than cause
4. Lack of regional coordination

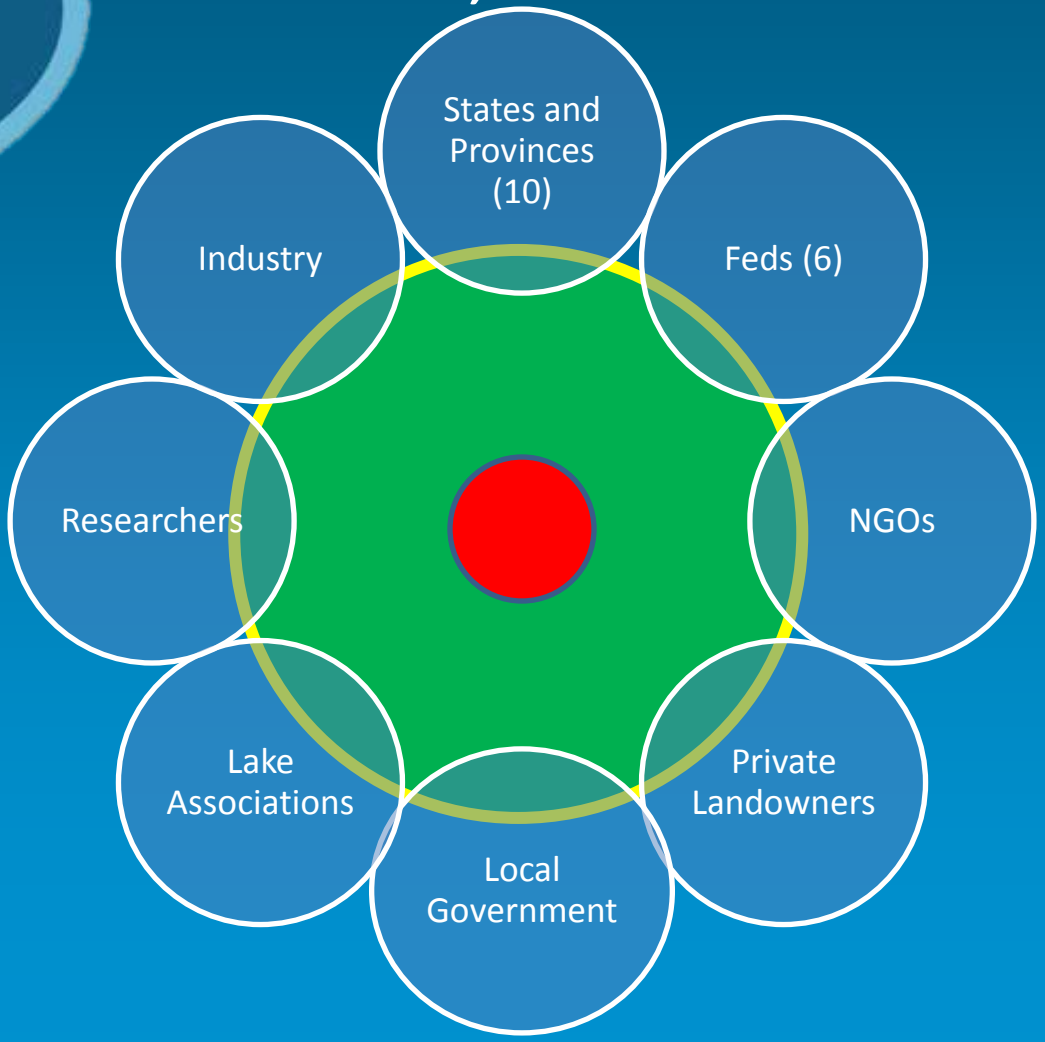
Great Lakes PHRAGMITES COLLABORATIVE

greatlakesphragmites.net

A partnership to link people, information, and action

Great Lakes PHRAGMITES COLLABORATIVE
greatlakesphragmites.net

A partnership to link people, information, and action



Great Lakes PHRAGMITES COLLABORATIVE
greatlakesphragmites.net

A partnership to link people, information, and action

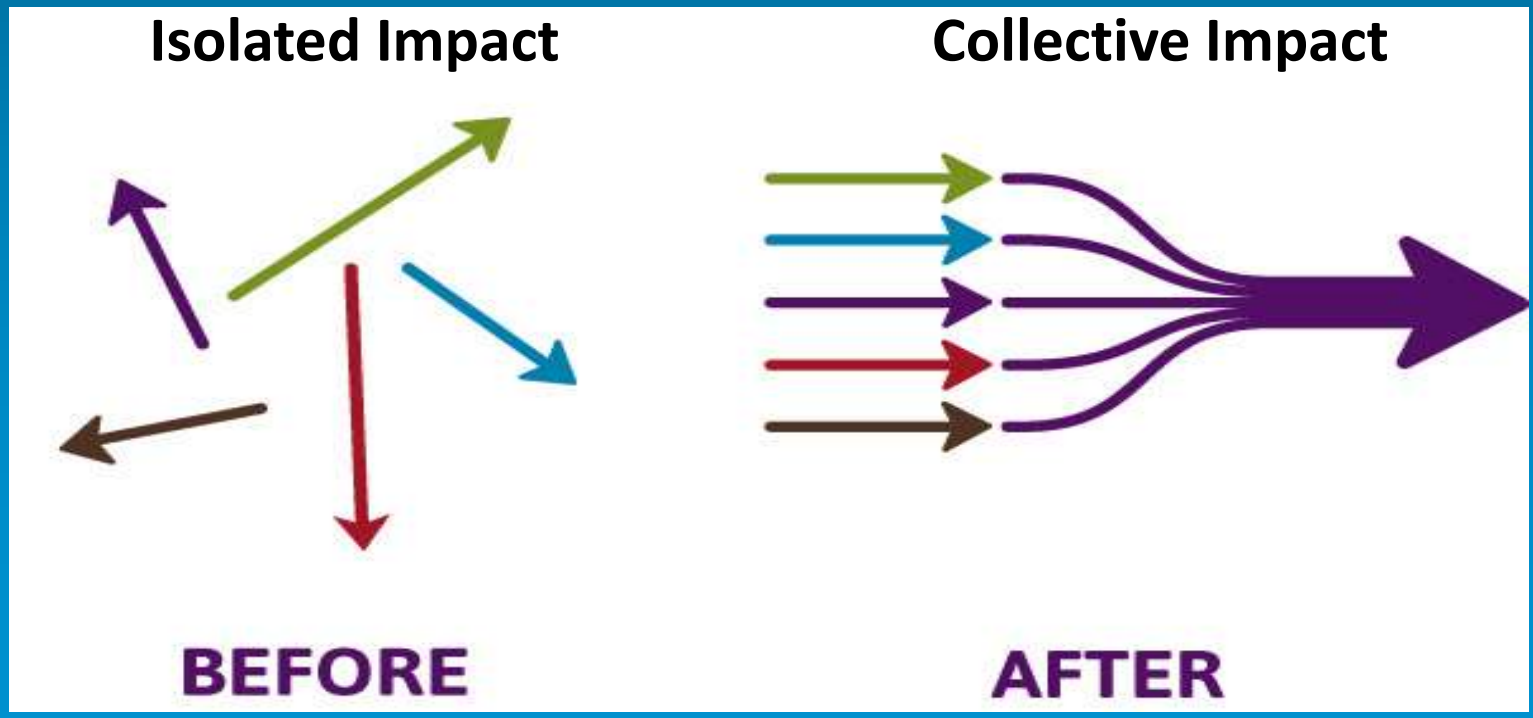
1. Engage stakeholders
2. Streamline information transfer
3. Link science and management
4. Facilitate adaptive management
5. Encourage a systems approach

Collective Impact:

"the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem" (*Kania and Kramer, 2011*)

Collective Impact:

"the commitment of a group of important actors from different sectors to a common agenda for solving a specific social problem" (*Kania and Kramer, 2011*)



Collective Impact Preconditions and Elements

- Influential Champion
- Urgency
- Sustained Funding

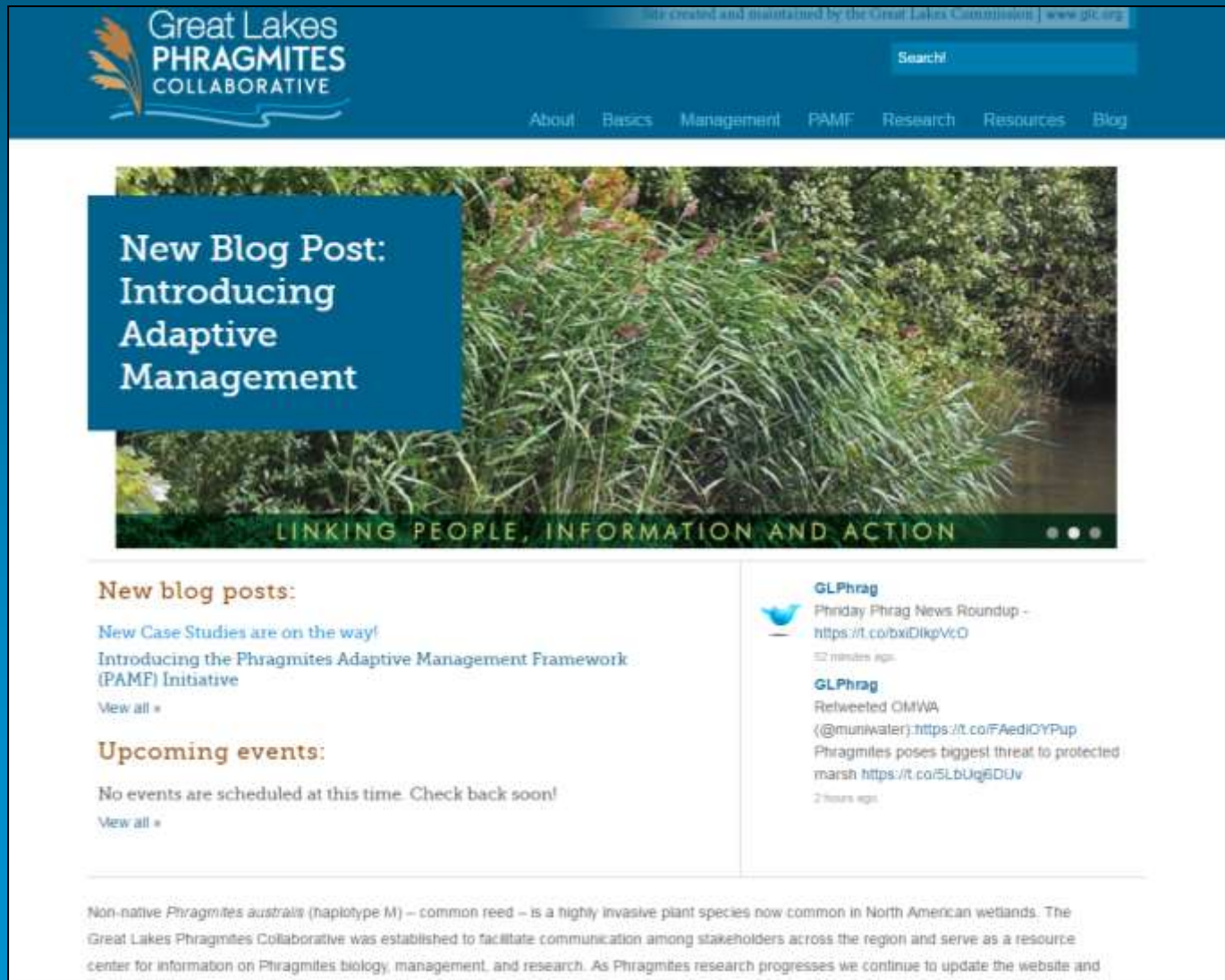
1. Backbone Organization
2. Continuous Communication
3. Common Agenda
4. Shared Measurements
5. Mutually Reinforcing Activities

(*Kania and Kramer, 2011*)

1. Backbone Organization

2. Continuous Communication

- Website
- Social media
- Listserv
- Webinars
- Committees

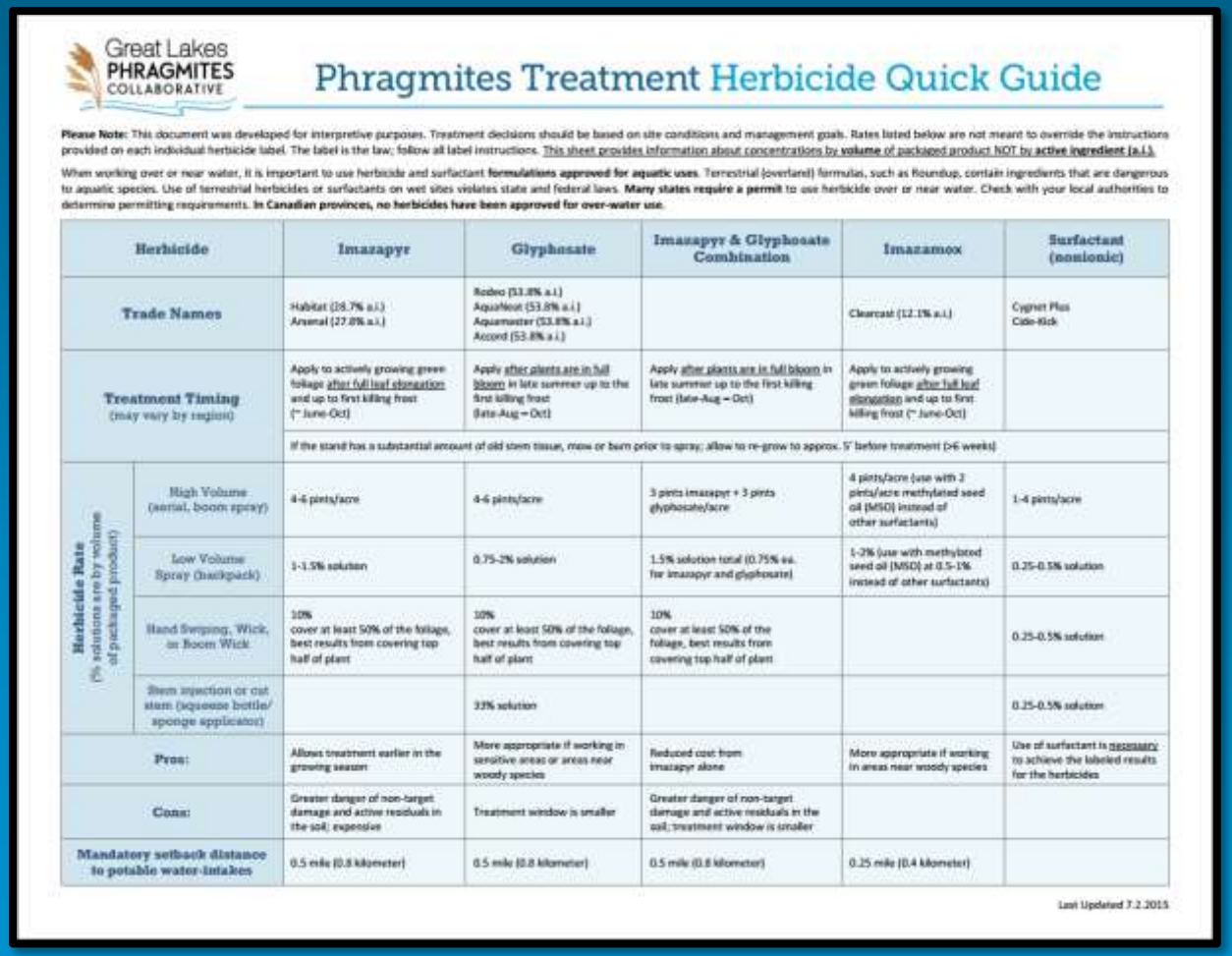


3. Common Agenda

Vision: Great Lakes wetland ecosystems and their services are not degraded by non-native *Phragmites.*"

4. Mutually Reinforcing Activities

- Best Practices



Great Lakes PHRAGMITES COLLABORATIVE

Phragmites Treatment Herbicide Quick Guide

Please Note: This document was developed for interpretive purposes. Treatment decisions should be based on site conditions and management goals. Rates listed below are not meant to override the instructions provided on each individual herbicide label. The label is the law; follow all label instructions. This sheet provides information about concentrations by **volume** of packaged product NOT by **active ingredient (a.i.)**.

When working over or near water, it is important to use herbicide and surfactant **formulations approved for aquatic uses**. Terrestrial (overland) formulas, such as Roundup, contain ingredients that are dangerous to aquatic species. Use of terrestrial herbicides or surfactants on wet sites violates state and federal laws. **Many states require a permit** to use herbicide over or near water. Check with your local authorities to determine permitting requirements. **In Canadian provinces, no herbicides have been approved for over-water use.**

Herbicide		Imazapyr	Glyphosate	Imazapyr & Glyphosate Combination	Imazamox	Surfactant (nonionic)
Trade Names		Habitat (28.7% a.i.) Arsenal (27.8% a.i.)	Rodeo (53.8% a.i.) Aquaneat (53.8% a.i.) Aquamaster (53.8% a.i.) Accord (53.8% a.i.)		Clearcast (12.1% a.i.)	Cygnet Plus Cide-Kick
Treatment Timing (may vary by region)		Apply to actively growing green foliage after full leaf elongation and up to first killing frost (~ June-Oct)	Apply after plants are in full bloom in late summer up to the first killing frost (late-Aug – Oct)	Apply after plants are in full bloom in late summer up to the first killing frost (late-Aug – Oct)	Apply to actively growing green foliage after full leaf elongation and up to first killing frost (~ June-Oct)	
		If the stand has a substantial amount of old stem tissue, mow or burn prior to spray; allow to re-grow to approx. 5' before treatment (>6 weeks)				
Herbicide Rate (% solutions are by volume of packaged product)	High Volume (aerial, boom spray)	4-6 pints/acre	4-6 pints/acre	3 pints imazapyr + 3 pints glyphosate/acre	4 pints/acre (use with 2 pints/acre methylated seed oil (MSO) instead of other surfactants)	1-4 pints/acre
	Low Volume Spray (backpack)	1-1.5% solution	0.75-2% solution	1.5% solution total (0.75% ea. for imazapyr and glyphosate)	1-2% (use with methylated seed oil (MSO) at 0.5-1% instead of other surfactants)	0.25-0.5% solution
	Hand Swiping, Wick, or Boom Wick	10% cover at least 50% of the foliage, best results from covering top half of plant	10% cover at least 50% of the foliage, best results from covering top half of plant	10% cover at least 50% of the foliage, best results from covering top half of plant		0.25-0.5% solution
	Stem injection or cut stem (squeeze bottle/ sponge applicator)		33% solution			0.25-0.5% solution
Pros:		Allows treatment earlier in the growing season	More appropriate if working in sensitive areas or areas near woody species	Reduced cost from imazapyr alone	More appropriate if working in areas near woody species	Use of surfactant is necessary to achieve the labeled results for the herbicides
Cons:		Greater danger of non-target damage and active residuals in the soil; expensive	Treatment window is smaller	Greater danger of non-target damage and active residuals in the soil; treatment window is smaller		
Mandatory setback distance to potable water intakes		0.5 mile (0.8 kilometer)	0.5 mile (0.8 kilometer)	0.5 mile (0.8 kilometer)	0.25 mile (0.4 kilometer)	

Last Updated 7.2.2015

5. Shared Measurements

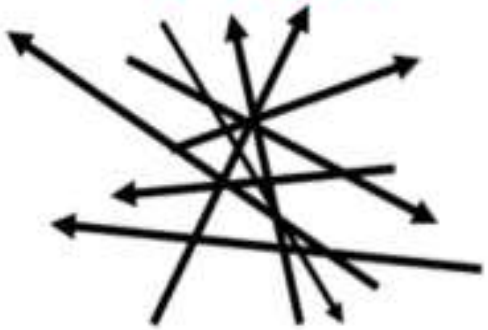
- PAMF

Status of Collective Impact

ELEMENT	STATUS			
Backbone Organization				
Continuous Communication				
Common Agenda				
Mutually Reinforcing Activities				
Shared Measurements				

Why a Phragmites Collaborative?

From



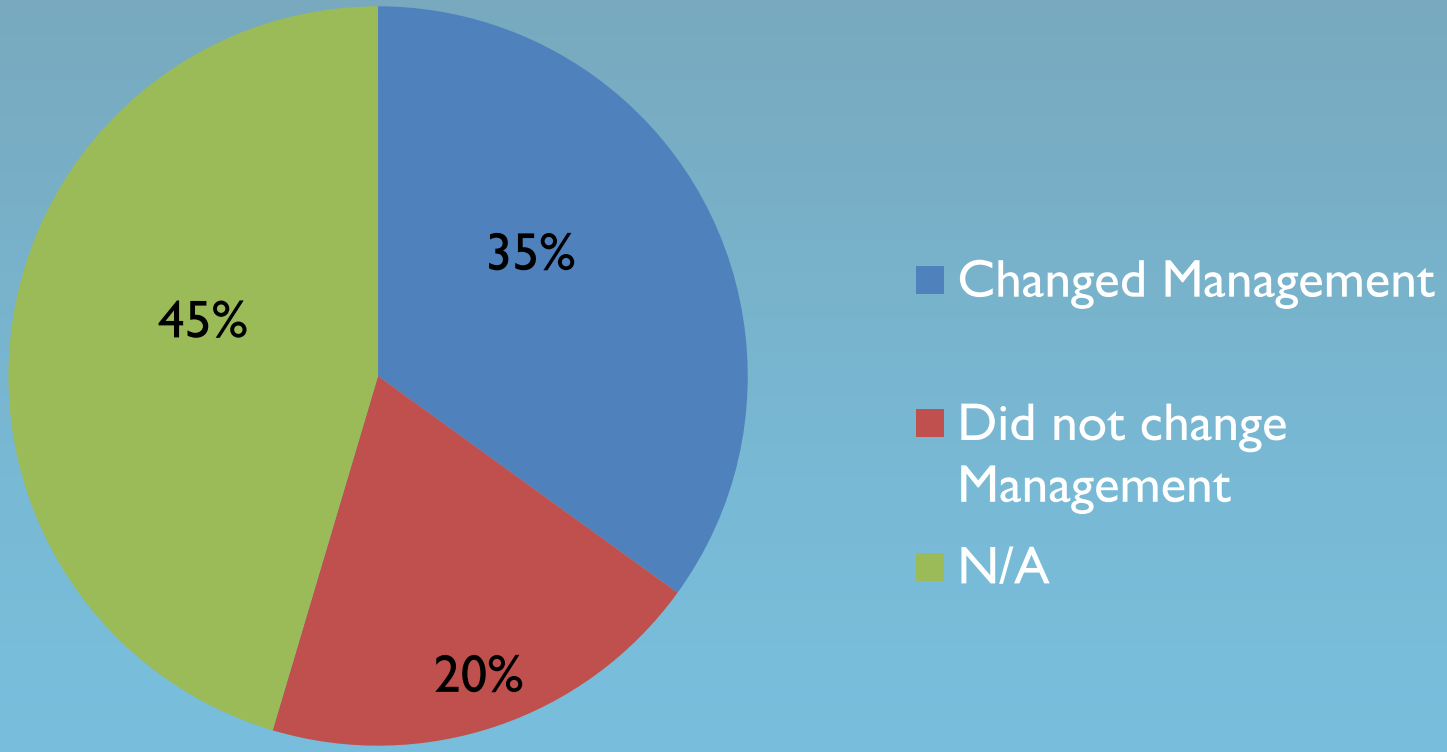
To

Acknowledgements

- Kurt Kowalski, USGS Great Lakes Science Center
- Katherine Hollins, Great Lakes Commission
- U.S. EPA, Great Lakes Restoration Initiative


Thank you!
Heather Braun
hbraun@glc.org
Great Lakes Commission des Grands Lacs
USGS
Great Lakes RESTORATION

GLPC Impact on Management



35% of participants have changed their management based on information received from the GLPC. When those who did not find the question applicable are removed from the data, 64% indicated that their management had changed.