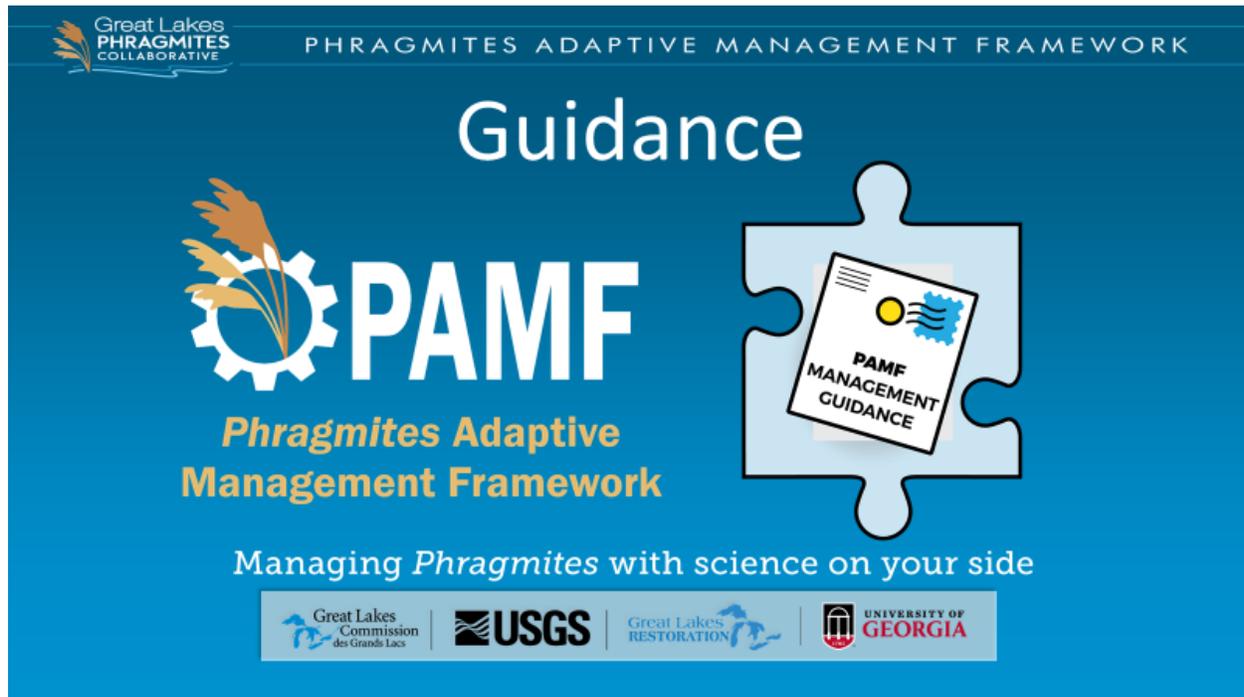


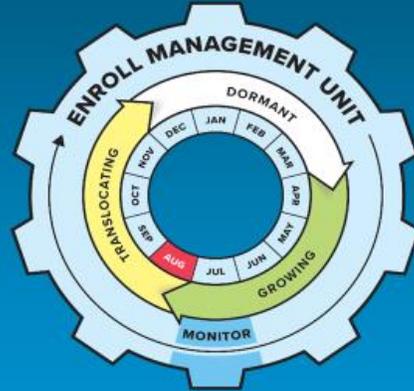
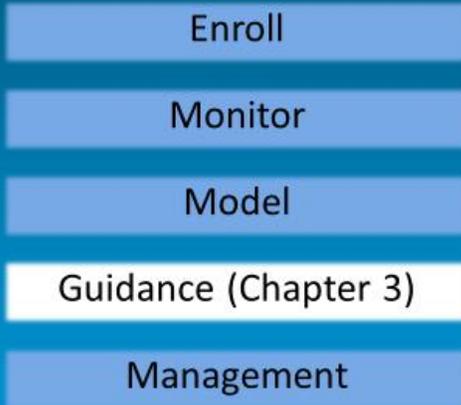
Guidance: Video Transcription

June 2020



[The fourth step in the PAMF participant cycle is receiving management guidance.]

PAMF Participation Cycle



[Each August PAMF participants receive management guidance that is customized to each of the management units they have enrolled in the program. Management guidance is a direct output of the PAMF model and is covered in Chapter three of the [PAMF Participant Guide](#).]

Management Guidance

Phases

Translocating



Dormant



Growing



[Before we explore the guidance, it's helpful to learn a little bit more about why guidance is structured the way it is, more specifically why are we basing our guidance around the seasonal growth patterns of *Phragmites*. *Phragmites* has three biological phases: translocating, dormant and growing. PAMF uses these three phases for planning management actions because different actions work better during each phase.]

Management Guidance



Translocating

When...

- Late summer to mid-fall

What to look for...

- Mature flowers
- Yellowing leaves
- Fluffy inflorescence

[The translocating phase occurs from late-summer to mid-fall. The exact timing of this phase changes from year to year and also depend on where you are in the Great Lakes basin, which is true for all the other phases as well. During this phase the plant reduces its growth and begins moving or replicating the photosynthetic sugars to the rhizomes below ground. This is the ideal time to apply herbicide because they're more likely to be transported below ground to the rhizomes. You can tell a *Phragmites* patch is beginning to translocate when the seed heads mature, and the translocation is fully underway when the leaves begin to yellow, and the inflorescences look fluffy.]

Management Guidance



Dormant

When...

- Late fall to mid-spring

What to look for...

- All aboveground tissue is brown

[The dormant phase is the period from late-fall to mid-spring when the above-ground stands died off. As you can see in this picture, and the below ground rhizomes are mostly inactive. *Phragmites* regrows from rhizomes each year although the dead stems from past years can remain standing for another couple of seasons. The dormant phase is a good time to clear the old biomass which can improve the efficiency of next year's management actions. You will know your management unit is in the dormant phase when all of the above ground tissue is brown.]

Management Guidance



Growing

When...

- Late spring to mid-summer

What to look for...

- New shoots and green tissue

[The growing phase is the period from late-spring through mid-summer when the plants are green and actively growing, as shown in the picture on the right. This is a great time to implement management actions like flooding because the emerging shoots are more easily drowned and thus prevented from further growth. You'll know the growing phase is starting when you see new shoots emerging and will continue to grow until the flowers develop and mature.]

Management Guidance

Guidance Combinations

- 16 combinations
- Management combinations: one action per phase



	Translocating	Dormant	Growing
1	Glyphosate	Pre-Flood Clearing	Flood
2	Glyphosate	Remove Biomass	Rest
3	Glyphosate	Flood	Flood
4	Glyphosate	Mechanical (and Leave Biomass)	Rest
5	Glyphosate	Rest	Glyphosate
6	Glyphosate	Rest	Rest
7	Glyphosate +	Remove Biomass	Rest
8	Glyphosate +	Flood	Flood
9	Glyphosate +	Mechanical (and Leave Biomass)	Rest
10	Glyphosate +	Pre-Flood Clearing	Flood
11	Glyphosate +	Rest	Rest
12	Imazapyr	Rest	Rest
13	Rest	Pre-Flood Clearing	Flood
14	Cut Underwater	Rest	Cut Underwater
15	Spading	Rest	Spading
16	Rest	Rest	Rest

[PAMF tracks 16 management combinations. Each management combination recommends one management action per biological phase. Annual management guidance specific to each management unit will be provided as one of these potential management combinations. Each management unit will receive the combination that the model has determined is most likely to achieve the greatest reduction in *Phragmites* at the lowest cost for that particular site.]

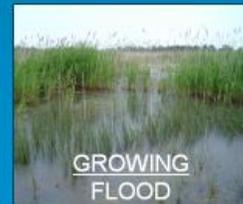
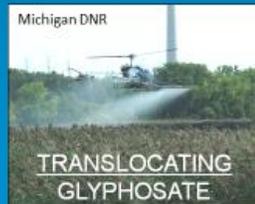
Management Guidance

Overview

- Data-driven
- Site-specific
- Combination of three management actions
- Delivered by mid-August



Example guidance



[You will receive management guidance annually by mid-August on your Web Hub account. As a participant you're encouraged to follow this data-driven management guidance or at least use another of the 16 PAMF combinations because those are what our predictive model is designed to learn from, so by using one of our management combinations you will maximize your contribution to the collective learning process. However, you are free to implement any management actions that you choose, we just ask that you report those actions on the PAMF Web Hub. Once you receive your management guidance it's up to you to implement the management action based on your expertise and best practices. PAMF's roll is not to provide guidance on how to do each management action but rather to facilitate collective learning. However, if you need more instructions on how to implement each management action, there is a management actions details and descriptions document on the PAMF Web Hub, which describes some techniques and considerations for each management action included in PAMF.]

Management Guidance

Management Unit	Translocating	Dormant	Growing
Optimal	Imazapyr	Rest	Rest
Near Optimal	Glyphosate	Rest	Rest
Near Optimal	Cut Underwater	Rest	Cut Underwater



[Here's an example of the kind of management guidance you can expect to receive.

Your guidance will come as one optimal combination and several near optimal combinations. The number of near optimal combinations generally ranges between zero and four, depending on the what the model predicts is going to be most effective and efficient for your management unit and based on the restrictions you have set for which type of management actions you have the ability to implement. A history of your guidance from previous cycles, as well as your current management guidance will be available on the PAMF Web Hub.]

Management Guidance

In Summary

- Guidance is sent out each August
- One action per biological phase
- One optimal and several near optimal combinations
- You decide how best to implement
- PAMF staff is available to answer questions!



pamf@glc.org



[Guidance is one of the main benefits to PAMF participants. As a participant you receive data-driven guidance based on the models most current understanding of *Phragmites* management. The guidance received in August will come as one optimal combination with several near optimal combinations and that is going to look like one management action for each of the three biological phases of *Phragmites*. Deciding the best implementation technique is up to each participant. Resources are available to provide additional guidance on the PAMF Web Hub and the PAMF staff is always available to answer any guidance related questions. You can email us at pamf@glc.org.]

