Quick Guide: How to Submit Management Reports

May 2020

This quick guide provides instructions for how to submit a management report on the Web Hub. The goal for the management reports is to tell the PAMF team, and our quantitative model, about how you controlled your management unit’s (MU) Phragmites during each management phase. Ultimately, this information will both improve the management guidance you receive as well as inform the site-specific guidance developed for various levels of infestation across the Great Lakes basin. For more information about how PAMF defines each management action, refer to the document Management Actions: Details and Descriptions in the Web Hub’s “Resources” tab. Instructions are divided into steps in the field and steps on the Web Hub, although they can be done in conjunction using a mobile device that can access the Web Hub while in the field.

In the Field – Collecting Data:

1. **We do not provide instructions on how to implement specific management actions as that is left to the land manager’s expertise and established best practices.**
2. **Completing a management report while in the field is optional. To do so, print a blank management report and fill it out.** You will need both pages of section 1 and the page from section 2 that corresponds with the management action you implemented.
   a. To find a blank form, log in to the Web Hub, click on the “Resources” tab, and find the Management Report document. For question-by-question instructions, see the Management Report Instructions below.
   b. Take pictures!

On the Web Hub – Submitting Data:

1. **Go to the PAMF Web Hub** (http://www.pamfportal.net) and log in.
2. **At the Home page, click “View a Management Unit,” click on your MU’s name, and click “Report Management Action.”**
3. **Respond about whether you are willing and able to provide cost-related information.** This is not required, and PAMF will not share your costs with others. However, costs are an important metric in determining a management action’s efficiency, and this information will help PAMF provide the best management guidance.
4. **Select your MU.** This should already be selected, but you can change it if desired.
5. **Select the date on which you completed the management action.**
6. **Select the phase the Phragmites plants were in when you completed the management action.**
7. **Note whether you followed your MU’s management guidance if you had any (i.e., the optimal management combination).** We understand that not all participants will follow the management guidance, and that is okay. We ask that you select the reason you did not follow the guidance, so we can improve our processes.
8. **Select the management action you implemented in your MU.**
9. **If you selected “Yes” that you are willing and able to provide cost-related values…**
   a. Note whether you are reporting costs for managing just your MU or a larger area (provide total acreage). We recognize many managers track costs for treating
properties much larger than, and containing, their MU. That’s great! We can work with those numbers by down scaling to your MU. Be sure your responses all correspond to the same land area (i.e., just your MU or the total area).

b. Answer questions related to costs: contractor fees, equipment rental, labor hours, equipment hours.

c. If you selected “No” for providing cost-related values, you will not be prompted with these questions.

10. **Answer questions related to your specific management action.**

a. For herbicide applications (Glyphosate, Imazapyr, Glyphosate +), provide information about the product and surfactant used, as well as their concentrations; for guidance on how to calculate these, refer to the *Herbicide Concentration Calculation Quick Guide*. Report the herbicide mix’s volume, the number of applications during the given management phase, and the proportion of the total area that you herbicided. Note all the equipment used, as well as the treatment technique (broadcast vs. spot treatment). If you are providing cost information, please tell us how much fuel you used in managing the reported area. Lastly, tell us about the hydrologic condition and any other relevant details.

b. For management actions involving mechanical control (Cut Underwater, Spading, Pre-Flood Clearing, Remove Biomass, Mechanical (and Leave Biomass)), you will be asked some combination of questions regarding the technique used, percent coverage of the treatment, equipment used, the number of applications, and whether you removed the leftover *Phragmites* biomass. If you are providing cost information, please tell us how much fuel you used in managing the reported area. Lastly, tell us about the hydrologic condition and any other relevant details.

c. For a Flood, during which all live *Phragmites* tissues were covered by standing water for at least a month, please tell us whether it was a controlled or natural flood. For controlled floods, report whether you used gates or pumps. If you are providing cost information, please tell us how much fuel you used in managing the reported area or the wattage and run time of your pump. Lastly, tell us about the hydrologic condition and any other relevant details.

d. For a Rest, please report the hydrologic condition and any other relevant details.

e. If you carried out a management action that is not listed, select Other. You will be prompted to explain what kind of management action you performed and how many times you did it. Lastly, tell us about the hydrologic condition and any other relevant details.

11. **To finish, click “Submit.”**

12. **To view your management report, click “View Management Unit,” click on your MU’s name, click “View,” click “View Management Reports,” and scroll down. Find the reporting date for the management report of interest, and click “View.”**

13. **To edit your management report, scroll to the bottom and click “Edit.” Repeat for each management phase (translocating, dormant, growing)!**

If you have further questions, please contact the PAMF coordinator ([pamf@glc.org](mailto:pamf@glc.org)) or refer to the *PAMF Participant Guide* and Web Hub where you can find more information.
Management Report

You should complete at least one report per management phase for each management unit (MU). Each report will consist of Section 1 (general information) in its entirety and one page/management action from Section 2 (management action information). You will enter this information in the Web Hub either at the end of each management phase (translocating, dormant, and growing) or at the end of the PAMF cycle by the **August 1st deadline**.

**Section 1: General Information**

Notice: You will be asked to report costs for managing this MU during one phase. PAMF will use this information to recommend the most cost-effective annual management combination for your MU. PAMF will not share the specific costs you or your contractor incurred while managing this or any MU you have enrolled. If you are willing and able to provide cost-related information, please answer all questions in the fourth box in Section 1 as well as the cost-related questions on the Section 2 page that corresponds with the management action you implemented (i.e., all questions preceded by an asterisk). If you are not providing cost information, skip questions preceded by an asterisk.

Management Unit: ____________________________  Date of Management Action: ____________________________

Completion: ________________

<table>
<thead>
<tr>
<th>Phase (choose one):</th>
<th>Translocating</th>
<th>Dormant</th>
<th>Growing</th>
</tr>
</thead>
</table>

Did you treat your MU under the recommendation you received?  
○ Yes  ○ No

○ No Guidance Received

If NO, please select the main reason why the management guidance was not followed and describe the circumstances. **Please check only one box.**

I intended to follow the management guidance, but…

□ Site or environmental conditions prevented access to the MU.  
  *Examples: Impassable roads, obstructed canals, etc.*

□ Site or environmental conditions prevented application of the management action.  
  *Examples: Too dry, too windy, standing water, occurrence of species of concern, etc.*

□ Site or environmental conditions would have reduced efficacy of the management action.  
  *Examples: Insufficient litter to carry fire evenly, unable to flood for intended duration, etc.*

□ A critical resource was not available.  
  *Examples: Lack of funds or personnel, broken equipment, unable to find contractor, etc.*

□ A logistical constraint related to timing could not be resolved.  
  *Examples: Too late to change plans, renegotiate contracts, make critical purchases, etc.*

□ A logistical constraint related to clearances could not be resolved.  
  *Examples: Unable to obtain permits, access, exemptions from institutional policy, etc.*

I never intended to follow the management guidance because…

This document contains detailed instructions on how to fill out your management reports. Remember to complete Section 1 and ONLY the applicable management action from Section 2. If further questions arise, please contact the PAMF Coordinator at pamf@glc.org or refer to the PAMF Participant Guide and Web Hub.

You may have completed multiple management actions in one phase. Please provide the date for the relevant phase when you completed all the activities associated with a specific management action.  

Note: If you use more than one management action (e.g., Glyphosate and Remove Biomass) in one phase, you will need to submit separate management reports for each action. However, if you use more than one implementation technique (e.g., boom sprayer and hand wick) for the same action (e.g., Glyphosate), you can submit one management report for that phase, but be sure to put the final date on which you finished implementing that action.

Make sure you are reporting for this particular management phase throughout this report. You should have one management report per phase.  

Translocating - Period when soluble materials primarily flow downward from leaves to the roots in preparation for dormancy; late summer through late fall. Look for mature or fluffy flowers and yellowing leaves.  
Dormant - Period when aboveground tissues are mostly inactive; late fall through mid-spring. Look for brown or fluffy flowers and yellowing leaves.  
Growing - Period when aboveground tissues are growing and new shoots are emerging from the ground;

We are interested in knowing why you didn’t follow the recommendation as this will help us improve our processes. Please let us know your situation.
I did not have sufficient experience or comfort with applying the recommended management action.

I did not agree that the recommendation provided was best for my circumstances.

Other

There was another reason that is not listed above.

Describe the reason not listed above:

__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________

Which management action did you use? (Choose one)

- Glyphosate
- Imazapyr
- Glyphosate +
- Rest
- Cut Underwater
- Other
- Spading
- Pre-Flood Clearing
- Remove Biomass
- Flood
- Mechanical and Leave Biomass

Reminder: Take a Picture!

* I am willing and able to provide cost-related values. ○ Yes ○ No

* Will you be reporting the costs of managing only your MU or will you be reporting the costs for the total land area managed?

○ I'll be reporting for the exact area of this MU.
○ I'll be reporting for the total area I managed.

What is the total area you managed, if different from MU (acres): __________

Whether you choose to report for the MU or for all land that you treated, please ensure that your responses consistently apply to that land area throughout this report. Please respond in U.S. dollars.

* Did you hire a contractor to do this management for you? ○ Yes ○ No

* If yes, how much did the contractor services cost? Please exclude travel costs. __________

If you did NOT hire a contractor...

* Please tell us the total number of hours for each labor category during management of the MU or total area. Please exclude travel time.

<table>
<thead>
<tr>
<th>Category</th>
<th># hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td></td>
</tr>
<tr>
<td>Volunteers</td>
<td></td>
</tr>
<tr>
<td>Part time/seasonal</td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Example: A participant had two students working for 5 hours each and a full-time staff member working for 8 hours in managing an MU. In this report, the total hours for “Students” will be 10 and for “Full time” will be 8. Remember to be consistent whether you are reporting for just your MU or the total land area you managed.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Did you rent equipment? ○ Yes ○ No</td>
<td></td>
</tr>
<tr>
<td>* If yes, how much did the rental service cost for all the equipment</td>
<td></td>
</tr>
<tr>
<td>used to manage <em>Phragmites</em> in this MU?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>__________</td>
</tr>
<tr>
<td>* How many hours did you use the rented or personally owned equipment?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>__________</td>
</tr>
</tbody>
</table>

Remember to be consistent whether you are reporting for just your MU or the total land area you managed.
Section 2: Management Action Information

Fill out ONLY the page from Section 2 that corresponds with the management action you applied. Whether reporting for just your MU or the total area you managed, be consistent with your responses. If providing cost-related information, be sure to answer all questions preceded by an asterisk. Please report fuel use in US gallons (1 US gal = 1.2 imp gal).

**Glyphosate**

<table>
<thead>
<tr>
<th>Trade name of product used:</th>
<th>_______________</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Active ingredient (from label):</td>
<td>_______________</td>
</tr>
<tr>
<td>% Concentration of product (by volume):</td>
<td>_______________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trade name of surfactant used:</th>
<th>_______________</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Concentration of surfactant (by volume):</td>
<td>_______________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volume of the mix applied to the Phragmites (gal):</th>
<th>_______________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Number of applications to all Phragmites in this MU during management phase:</th>
<th>_______________</th>
</tr>
</thead>
</table>

What percent coverage did you achieve when applying herbicide to the live Phragmites in your MU?
- ○ 0-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

What equipment and machinery did you use for applying herbicide? (Choose all the options that most closely resemble your equipment.)
- ○ Hand tools (e.g., injection tool, dauber, wand, hand wicking)
- ○ Backpack sprayer
- ○ Boom sprayer
- ○ Wheeled vehicle (e.g., tractor, ATV)
- ○ Tracked vehicle (e.g., Marsh Master, Truxor)
- ○ Aerial vehicle (e.g., helicopter, drone)
- ○ Watercraft (e.g., motor boat, air boat)
- ○ Equipment or machinery not listed above

Model of equipment used (optional):

* Did you do a broadcast or spot treatment? (Choose all that apply.)
  - ○ Broadcast
  - ○ Spot Treatment

* How much fuel did you use in all machinery and equipment used for this management action? Answer for all fuel types, and provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).

<table>
<thead>
<tr>
<th>Gas: _____ to _____ (gal)</th>
<th>Jet Fuel: _____ to _____ (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel: _____ to _____ (gal)</td>
<td>Avgas: _____ to _____ (gal)</td>
</tr>
</tbody>
</table>

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?
- ○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live Phragmites stems)
- ○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)

Complete ONLY the report that matches the management action you applied to your MU during the management phase for which you are reporting.

This management action involves the application of any chemical product approved for aquatic use that contains the active ingredient glyphosate. The technique is left to the participant’s discretion.

Remember to be consistent, whether you are reporting for just your MU or the total land area you managed.

We ask you to report the percent concentration by volume of the product. If you are unsure how to calculate percent concentration by volume, you can visit the “Resources” tab in the Web Hub and read Herbicide Concentration Quick Guide.

How many times did you implement this same management action to your MU (e.g. broadcast glyphosate spray followed by hand wicking with glyphosate in the same management phase would be two applications of the same action)? Remember, if you did two different management actions to the same MU in the same phase, then you should be filling in two different management reports for this phase.

Broadcast: blanket herbicide application, usually from above the plants (e.g. aerial, backpack, or boom spray). Spot treatment: applications that target individual Phragmites stems (e.g. hand wicking, injection tool, dauber, wand).

If you know the exact volume, enter that amount in both spaces (e.g. you used 5-gal, type “5 to 5” gal). Report fuel use in US gallons. Liters to gallons conversion: 1 L = 0.264 US gal US to Imperial gallons conversion: 1 US gal = 1.2 imp gal

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation.
- Dry (never any observed standing water over any of the MU)

**Additional Notes/Details:**

_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
_______________________________________________________________________________________________________________________
<table>
<thead>
<tr>
<th><strong>Imazapyr</strong></th>
<th><strong>Phragmites Adaptive Management Framework</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name of product used: ____________________</td>
<td><strong>Managing Phragmites with science on your side</strong></td>
</tr>
<tr>
<td>% Active ingredient (from label): _______</td>
<td></td>
</tr>
<tr>
<td>% Concentration of product (by volume): _______</td>
<td></td>
</tr>
<tr>
<td>Surfactant Used: ____________________</td>
<td></td>
</tr>
<tr>
<td>% Concentration of Surfactant (by volume): _______</td>
<td></td>
</tr>
<tr>
<td>Volume of the mix applied to the <em>Phragmites</em> (gal): ________</td>
<td></td>
</tr>
<tr>
<td>Number of applications to all <em>Phragmites</em> in this MU during management phase: ________</td>
<td></td>
</tr>
<tr>
<td>What percent coverage did you achieve when applying herbicide to the live <em>Phragmites</em> in your MU?</td>
<td></td>
</tr>
<tr>
<td>○ 0-25%</td>
<td>○ 26-50%</td>
</tr>
<tr>
<td>What equipment and machinery did you use for applying herbicide? (Choose all the options that most closely resemble your equipment.)</td>
<td></td>
</tr>
<tr>
<td>○ Hand tools (e.g., injection tool, dauber, wand, hand wicking)</td>
<td></td>
</tr>
<tr>
<td>○ Backpack sprayer</td>
<td></td>
</tr>
<tr>
<td>○ Boom sprayer</td>
<td></td>
</tr>
<tr>
<td>○ Wheeled vehicle (e.g., tractor, ATV)</td>
<td></td>
</tr>
<tr>
<td>○ Tracked vehicle (e.g., Marsh Master, Truxor)</td>
<td></td>
</tr>
<tr>
<td>○ Aerial vehicle (e.g., helicopter, drone)</td>
<td></td>
</tr>
<tr>
<td>○ Watercraft (e.g., motor boat, air boat)</td>
<td></td>
</tr>
<tr>
<td>○ Equipment or machinery not listed above</td>
<td></td>
</tr>
<tr>
<td>Model of equipment used (optional): ____________________</td>
<td></td>
</tr>
<tr>
<td>Did you do a broadcast or spot treatment? (Choose all that apply.)</td>
<td></td>
</tr>
<tr>
<td>○ Broadcast</td>
<td>○ Spot Treatment</td>
</tr>
<tr>
<td>* How much fuel did you use in all machinery and equipment used for this management action? Provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).</td>
<td></td>
</tr>
<tr>
<td>Gas: _____ to _____ (gal)</td>
<td>Jet Fuel: _____ to _____ (gal)</td>
</tr>
<tr>
<td>Diesel: _____ to _____ (gal)</td>
<td>Avgas: _____ to _____ (gal)</td>
</tr>
<tr>
<td>To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?</td>
<td></td>
</tr>
<tr>
<td>○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live <em>Phragmites</em> stems)</td>
<td></td>
</tr>
<tr>
<td>○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)</td>
<td></td>
</tr>
<tr>
<td>○ Dry (never any observed standing water over any of the MU)</td>
<td></td>
</tr>
<tr>
<td>Additional Notes/Details: ____________________</td>
<td></td>
</tr>
</tbody>
</table>
### Glyphosate +

| Trade name of glyphosate product used: ___________________ |
| % Active ingredient (from label): __________ |
| % Concentration of glyphosate product (by volume): ________ |

| Trade name of product added to glyphosate: ___________________ |
| % Concentration of product (by volume): ________ |

| Trade name of surfactant used: ______________________ |
| % Concentration of surfactant (by volume): _______ |

| Volume of the mix applied to the Phragmites (gal): ________ |
| Number of applications to all Phragmites in this MU during management phase: ________ |

What percent coverage did you achieve when applying herbicide to the live Phragmites in your MU?  
- 0-25%  
- 26-50%  
- 51-75%  
- 76-100%

What equipment and machinery did you use for applying herbicide? (Choose all the options that most closely resemble your equipment.)  
- Hand tools (e.g., injection tool, dauber, wand, hand wicking)  
- Backpack sprayer  
- Boom sprayer  
- Wheeled vehicle (e.g., tractor, ATV)  
- Tracked vehicle (e.g., Marsh Master, Truxor)  
- Aerial vehicle (e.g., helicopter, drone)  
- Watercraft (e.g., motor boat, air boat)  
- Equipment or machinery not listed above

Model of equipment used (optional): _____________________________

Did you do a broadcast or spot treatment? (Choose all that apply.)  
- Broadcast  
- Spot Treatment

* How much fuel did you use in all machinery and equipment used for this management action? Provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).  
  - Gas: _____ to _____ (gal)  
  - Jet Fuel: _____ to _____ (gal)  
  - Diesel: _____ to _____ (gal)  
  - Avgas: _____ to _____ (gal)

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?  
- Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live Phragmites stems)  
- Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)  
- Dry (never any observed standing water over any of the MU)
**Remove Biomass**

What technique did you use? (choose one)
- Burn
- Mechanical
- Mechanical then Burn

If mechanical (or mechanical then burn), what technique? (choose one)
- Mow/Cut and Rake
- Digging/Excavation
- Technique not listed

If burn (or mechanical then burn), what percent coverage did you achieve when burning the *Phragmites* in your MU?
- 0-25%
- 26-50%
- 51-75%
- 76-100%

What equipment did you use for the process? (Choose all the options that most closely resemble your equipment.)
- Torches (e.g., drip torch, propane torch)
- Hand tools (e.g., scythe, stierrup hoe, weed whip, hedge shears)
- Hand-held gas-powered tools (e.g., weed whacker, string trimmer, brush cutter)
- Push/Pull gas-powered mower (e.g., brush hog, rotary cutter)
- Vehicle attachment (e.g., mulcher, tiller, field roller)
- Wheeled vehicle (e.g., tractor, ATV)
- Tracked vehicle (e.g., Marsh Master, Truxor)
- Watercraft (e.g., motor boat, air boat)
- Equipment or machinery not listed above

Model of equipment used (optional):

* How much fuel did you use in all machinery and equipment used for this management action? Provide a range if exact amount is not known and answer for all fuel types used in this MU.
  - Gas: _____ to _____ (gal)
  - Diesel: _____ to _____ (gal)

Number of times this management action was applied to all *Phragmites* in the MU during this phase: _______________________

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?
- Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)
- Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- Dry (never any observed standing water over any of the MU)

Additional Notes/Details:

___________________________________________________________

___________________________________________________________

___________________________________________________________

___________________________________________________________
**Phragmites Adaptive Management Framework**  
Managing *Phragmites* with science on your side

### Mechanical (and Leave Biomass)

#### What technique did you use? (choose one)
- ○ Mow  ○ Crush/Roll  ○ Till  ○ Mulch  ○ Technique not listed

#### What equipment did you use for the process? (Choose all the options that most closely resemble your equipment.)
- ○ Torches (e.g., drip torch, propane torch)
- ○ Hand tools (e.g., scythe, stirrup hoe, weed whip, hedge shears)
- ○ Hand-held gas-powered tools (e.g., weed whacker, string trimmer, brush cutter)
- ○ Push/Pull gas-powered mower (e.g., brush hog, rotary cutter)
- ○ Vehicle attachment (e.g., mulcher, tiller, field roller)
- ○ Wheeled vehicle (e.g., tractor, ATV)
- ○ Tracked vehicle (e.g., Marsh Master, Truxor)
- ○ Watercraft (e.g., motor boat, air boat)
- ○ Equipment or machinery not listed above

Model of equipment used (optional):

__________________________________________________________________________

* How much fuel did you use in all machinery and equipment used for this management action? Provide a range if exact amount is not known and answer for all the fuel types used in this MU.

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>_______ to _______ (gal)</td>
</tr>
<tr>
<td>Diesel</td>
<td>_______ to _______ (gal)</td>
</tr>
</tbody>
</table>

Number of times this management action was applied to all *Phragmites* in the MU during this phase: ____________________________

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?
- ○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)
- ○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- ○ Dry (never any observed standing water over any of the MU)

Additional Notes/Details:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

This management action involves cutting or crushing all aboveground *Phragmites* within an MU and then leaving the *Phragmites* material inside the MU.

If you know the exact volume, enter that amount in both spaces (e.g. you used 5-gal, type “5 to 5” gal). Report fuel use in US gallons. Liters to gallons conversion: 1 L = 0.264 US gal US to imperial gallons conversion: 1 US gal = 1.2 imp gal

How many times did you implement this same management action to your MU (e.g. cutting more than once)? Remember, if you did two different management actions to the same MU in the same phase, then you should be filling in two different management reports for this phase.

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation.
### Spading

<table>
<thead>
<tr>
<th>How many times did you spade the entire unit? ____________</th>
</tr>
</thead>
</table>

To the best of your knowledge, what was the hydrologic condition of your MU during this management phase?

- Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)
- Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- Dry (never any observed standing water over any of the MU)

**Additional Notes/Details:**

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

This management action refers to cutting *Phragmites* stems below ground and removing the cut *Phragmites* from the MU.

If you spaded half of the unit in one day and the other half in another day, that still counts as one-time spading. If you spaded the entire unit on one day and then spaded the entire unit again on another day, that counts as two times spading.

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation.
**Pre-Flood Clearing**

What clearing method did you use? (choose one)
- ○ Burn
- ○ Mechanical
- ○ Mechanical then burn

If mechanical (or mechanical then burn), what technique did you use? (choose one)
- ○ Mow/Cut
- ○ Crush/Roll
- ○ Till
- ○ Mulch
- ○ Technique not listed

If burn (or mechanical then burn), what percent coverage did you achieve when burning the *Phragmites* in your MU?
- ○ 0-25%
- ○ 26-50%
- ○ 51-75%
- ○ 76-100%

What equipment did you use for the process? (Choose all the options that most closely resemble your equipment.)
- ○ Torches (e.g., drip torch, propane torch)
- ○ Hand tools (e.g., scythe, stirrup hoe, weed whip, hedge shears)
- ○ Hand-held gas-powered tools (e.g., weed whacker, string trimmer, brush cutter)
- ○ Push/Pull gas-powered mower (e.g., brush hog, rotary cutter)
- ○ Vehicle attachment (e.g., mulcher, tiller, field roller)
- ○ Wheeled vehicle (e.g., tractor, ATV)
- ○ Tracked vehicle (e.g., Marsh Master, Truxor)
- ○ Equipment or machinery not listed above

Model of equipment used (optional): _____________________________________________

* How much fuel did you use in all machinery and equipment used for this management action? Provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).

  - Gas: _____ to _____ (gal)
  - Diesel: _____ to _____ (gal)

Did you remove the biomass from the MU after mechanically leveling the plant?  ○ Yes  ○ No
  - If yes, please describe how you removed the *Phragmites* from the MU:

    __________________________________________________________
    __________________________________________________________
    __________________________________________________________

Number of times this management action was applied to all *Phragmites* in the MU during this phase: ______________________

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?
- ○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)
- ○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- ○ Dry (never any observed standing water over any of the MU)

Additional notes/details about the MU, or the management action itself, that may impact management effectiveness:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
<table>
<thead>
<tr>
<th>Flood</th>
</tr>
</thead>
</table>
| **Type of flood (choose one):**  
  ○ Controlled (pumps, dikes, etc.)  
  ○ Natural (coastal wetlands, riparian areas, etc.)  

* If controlled, what did you do? (choose one)  
  ○ Gates (passive)  
  ○ Fuel-Powered Pump  
  ○ Electric Pump  

* If fuel-powered, how much fuel did you use in the pump? *Provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).*  
  Gas: _____ to _____ (gal)  
  Diesel: _____ to _____ (gal)  

* If electric, what is the wattage of your pump (kW)? *If the value is not shown in specifications, multiply the voltage by the lower amperage rating and divide by 1000 to obtain kW. Provide a range if wattage is not exactly known:*  
  Electric: _____ to _____ (kW)  
  * How long was the pump operating? _______ (hours)  

---

To the best of your knowledge, how long was water sustained over the top of all live *Phragmites* within the MU? Please give an approximation in months:  
________________

---

To the best of your knowledge, what was the hydrologic condition of your management unit during this management phase?  
  ○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)  
  ○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)  
  ○ Dry (never any observed standing water over any of the MU)  

---

Additional Notes/Details:  
_________________________________________________________________  
____  
_________________________________________________________________  
____  
_________________________________________________________________  
____  
_________________________________________________________________  
____  

---

This management action refers to allowing water to cover all live *Phragmites* within the whole MU for at least one month.

---

If you know the exact volume, enter that amount in both spaces (e.g. you used 5-gal, type "5 to 5" gal). Report fuel use in US gallons. Liters to gallons conversion: 1 L = 0.264 US gal US to Imperial gallons conversion: 1 US gal = 1.2 imp gal.

---

Remember that a Flood refers to water covering all live *Phragmites* for at least one month. If the stems grow up out of the water, or the water recedes and exposes live stems, the flood has terminated. We encourage you to keep a watchful eye on any MU(s) where you flooded and suspect new growth may emerge from the water.

---

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation. We realize that a Flood management action implies wet conditions, but some floods are short lived, and conditions can change later in the phase.
<table>
<thead>
<tr>
<th>Cut Underwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>What equipment did you use for cutting? (Choose all the options that most closely resemble your equipment.)</td>
</tr>
<tr>
<td>○ Hand tools (e.g., scythe, stirrup hoe, weed whip, hedge shears, cane cutter, spade)</td>
</tr>
<tr>
<td>○ Hand-held gas-powered tools (e.g., weed whacker, brush cutter)</td>
</tr>
<tr>
<td>○ Vehicle attachment (e.g., trimmer)</td>
</tr>
<tr>
<td>○ Tracked vehicle (e.g., Truxor)</td>
</tr>
<tr>
<td>○ Watercraft (e.g., motor boat, air boat)</td>
</tr>
<tr>
<td>○ Equipment or machinery not listed above</td>
</tr>
</tbody>
</table>

Model of equipment used (optional):
______________________________________

* How much fuel did you use in all machinery, pumps, and equipment used for this management action? Provide a range if exact amount is not known and give an answer for all fuel types (0 to 0 is acceptable).

<table>
<thead>
<tr>
<th>Fuel Type</th>
<th>Range (gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas</td>
<td>____ to ____</td>
</tr>
<tr>
<td>Diesel</td>
<td>____ to ____</td>
</tr>
</tbody>
</table>

Did you remove the biomass from the MU after cutting? ○ Yes  ○ No

If yes, please describe how you removed the cut *Phragmites* from the MU:
______________________________________

______________________________________

______________________________________

Number of times this management action was applied to all *Phragmites* in the MU during this phase: ______________________

To the best of your knowledge, what was the hydrologic condition of your MU during this management phase?

○ Wet (standing water present over the majority of the MU for most of the management phase, but below the height of the live *Phragmites* stems)

○ Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)

○ Dry (never any observed standing water over any of the MU)

Additional Notes/Details:
______________________________________

______________________________________

______________________________________

______________________________________

This management action refers to cutting *Phragmites* stems beneath the water level and as close to the substrate as possible.

In addition to cutting the *Phragmites*, if you removed the cut biomass, include information about the equipment you used for removing it.

If you know the exact volume, enter that amount in both spaces (e.g. you used 5-gal, type “5 to 5” gal). Report fuel use in US gallons. Liters to gallons conversion: 1 L = 0.264 US gal US to Imperial gallons conversion: 1 US gal = 1.2 imp gal

How many times did you implement this same management action to your MU (e.g. cutting more than once)? Remember, if you did two different management actions to the same MU in the same phase, then you should be filling in two different management reports for this phase.

We would like you to consider the hydrologic condition of the MU during the whole management phase. Please provide your best approximation. We realize that a Cut Underwater management action implies wet conditions, but high water can be short lived, and conditions can change later in the phase.
**Rest**

To the best of your knowledge, what was the **hydrologic condition** of your MU during this management phase?

- Wet (standing water present over the majority of the MU, for most of the management phase, but below the height of the live *Phragmites* stems)
- Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- Dry (never any observed standing water over any of the MU)

**Additional Notes/Details:**

______________________________________________________________________________

____________________________________

______________________________________________________________________________

____________________________________

**In a "rest" management action, no *Phragmites* management is done within the MU for the entire phase.**

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation.
### Other

If other, please explain:

____________________________________

____________________________________

Number of times this management action was applied to all *Phragmites* in the MU during this phase: ____________________

To the best of your knowledge, what was the **hydrologic condition** of your MU during this management phase?

- Wet (standing water present over the majority of the MU, for most of the management phase, but below the height of the live *Phragmites* stems)
- Moist (occasional standing water over the majority of the MU, but for less than 50% of the management phase)
- Dry (never any observed standing water over any of the MU)

Additional Notes/Details:

____________________________________

____________________________________

____________________________________

____________________________________

This is any management action that does not fall within one of the other options. Be sure to explain your approach as this can help us improve our processes.

How many times did you implement this exact management action to your MU (e.g. tarping more than once)? Remember, if you did two different management actions to the same MU in the same phase, then you should be filling in two different management reports for this phase.

We would like you to consider the hydrologic condition of the MU during the WHOLE management phase. Please provide your best approximation.

If possible, let us know about any costs (e.g., contractor, equipment rental, labor hours, fuel costs) associated with this management action.