Montague Wood Bank Operations Plan Montague Tree Advisory Committee Drafted by Sean Mahoney February 10<sup>th</sup>, 2018 Amended September 11, 2018

## 1. Overview:

A wood bank is a grassroots effort to provide a community with tangible benefits from trees beyond their useful life by producing firewood for energy assistance. Operating in a similar capacity as a food bank, a wood bank is a relatively new take on the old idea of the town common with natural resources being made available to residents in need of energy. The following is an operations plan for the Montague Wood Bank. This document serves as a guide for program operations and provides transparency for those interested in the project. This plan will evolve with the wood bank and may be amended as needed, subject to approval of the Selectboard.

# 2. Purpose:

The Montague Community Wood Bank will improve the lives of town residents by:

- Increasing residential access to heating assistance
- Bringing neighbors together to support our town trees and forest
- Reducing town wood waste via recycling trees into firewood
- Building community through volunteer action
- Providing a forum for education on wood heat safety

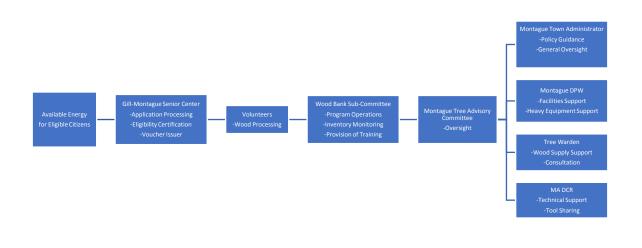
# 3. Governance:

The Montague Wood Bank is administered on behalf of the Town of Montague by the Montague Tree Advisory Committee. Operational maters regarding the wood bank are delegated to a three-member sub-committee of the Montague Tree Advisory Committee which is itself approved by the Selectboard. The Tree Advisory Committee Chair, with approval by a majority of the full committee, shall appoint active members of the Tree Advisory Committee to the Wood Bank Sub-Committee. Sub-committee duties shall include organizing wood processing, fuel distribution, volunteer events, fundraising, education/outreach, safety protocols, and project finances. The Wood Bank Sub-Committee must have a safety training coordinator. The Wood Bank Sub-Committee shall regularly report to the Montague Tree Advisory Committee and provide recommendations for full committee approval in matters involving changes in operations.

# 4. Organizational Structure:

The success of the Montague Wood Bank relies on the teamwork of the Tree Advisory Committee, The Tree Warden, volunteer groups, municipal departments, and private sector businesses. Below is a brief chart outlining the relationships which make the wood bank possible.

# Montague Wood Bank Organizational Chart



### 5. Partners and project roles

### Wood Bank Sub-Committee

The Wood Bank Sub-Committee is a three-member team of the Montague Tree Advisory Committee appointed to administer the Montague Wood Bank. The team will be responsible for general operations of the wood bank including:

- Planning volunteer days
- Record keeping of:
  - Log donations
  - Firewood distributed
  - o Volunteer hours
  - o Equipment and supplies
- o Coordinating the distribution of firewood with the Gill-Montague Senior Center
- Coordinating periodic maintenance with the Montague DPW
- Maintaining the wood bank operations budget

### Montague Tree Advisory Committee

The Montague Tree Advisory Committee is responsible for administering the Montague Wood Bank on behalf of the Inhabitants of Montague. Committee duties include:

- Communication to the Community
- o Appointing the Wood Bank Sub-Committee
- o Approving budget items recommended by the Wood Bank Sub-Committee
- o Advising the Sub-Committee on the long-term planning for the Wood Bank
- Reporting the progress of the Montague Wood Bank in the Annual Town Report

#### **Montague DPW**

The Montague DPW is an essential partner in facilitating the success of the wood bank. Given the professional expertise and heavy equipment resources of the DPW their periodic support is an asset in facilitating efficient wood processing, maintaining volunteer safety, and public access to processed firewood. DPW project tasks:

- Usage of transfer station/ facilities for wood processing
- $\circ$   $\,$  Delivery of unprocessed wood from town tree removals to the processing yard
- Exchanging processed firewood bins from the processing yard to the distribution site at the start of the heating season (Autumn)
- $\circ$   $\,$  Snow plowing of the distribution site located at the Recycling Center  $\,$
- $\circ$   $\,$  Snow plowing (if needed) of the processing yard prior to volunteer events
- Reducing log pile height and smoothing the processing yard (as needed)

## **Gill-Montague Senior Center**

The Gill-Montague senior center is an essential partner for ensuring that firewood produced by the wood bank is received by members of the community who are in need of assistance. Senior Center project tasks include:

- o Communicating a transparent eligibility criteria
- Screening applicants for eligibility
- Issuing certificates for wood allotments
- o Coordinating alternative delivery of wood to residents with limited mobility

## 6. General Operations

The following is an overview of the operations of the Montague Wood Bank.

Location: The wood bank will be located on town land at the town recycling center site. Wood processing will take place east of the Franklin County Sheriff's Office Dog Shelter on Sandy Lane. Eventual site improvements will include a gate to restrict vehicular access. Wood distribution bins will be located within the recycling center grounds and accessed during regular recycling center hours.

Montague Wood Bank Site:



Wood Procurement:

Donations by authorized donors:

Unprocessed wood, meeting donation requirements, can be delivered to the processing yard at any time with notification to the Wood Bank Sub-Committee by authorized donors including the Town of Montague, Turners Falls Fire District, Eversource (and their contractors), the Commonwealth of Massachusetts, and others as approved by the Wood Bank Sub-Committee.

Donation requirements:

Wood donations shall be of "clean wood" as defined by 310 CMR 19.006.

Log donation specifications:

Defined as wood devoid of advanced decay
Species: Hardwood (willow, poplar, and softwood with prior approval)

Log piles:

- Logs off the ground on 2-3 skids
- Pile height shall not exceed 4.5' from grade

Round wood donation specifications: Length: 16" Diameter: 4"-36" Soundness: 100% • Defined as wood devoid of advanced decay Species: Hardwood (willow, poplar, and softwood with prior approval)

Cordwood donation specifications: Length: 16" Diameter: 6" (85% of split pieces) Soundness: 100%

- Defined as wood devoid of advanced decay
- Species: Hardwood (willow, poplar, and softwood with prior approval)

Scale: The wood bank will provide up to 1,800 ft<sup>3</sup> (Approximately 14 cords) of stacked firewood dried to 20% m.c. (wet-basis) per heating season, as feed stock materials allow. Firewood will be distributed in 60 ft<sup>3</sup> increments, known colloquially as "bins" with the project capable of serving up to 30 households per heating season.

Fuel Quality: The wood bank will strive to provide high quality and consistent fuel to program recipients. For fire safety and air quality reasons the wood bank will only distribute firewood dried at or below 20% m.c. (wet-basis). Firewood ready for distribution will be stored in a manner which protects wood from precipitation.

# Fuel Quality (continued):

Firewood specifications: Length: 16" Diameter: 6" (85% of split pieces) Moisture Content: ≤ 20% m.c. (wet basis) Species: Hardwood (willow, poplar, and softwood not more than 25% of volume per bin) Specifications follow: ISO 17225 Part 5 https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/NRCAN\_BB\_no7\_e \_\_\_\_indd.pdf

Processing: The wood bank is heavily reliant on volunteers to process raw materials into quality firewood for fuel assistance. Equipping volunteers with the knowledge to develop and maintain the wood bank is essential to the overall success of the program. The following outlines operations that will be addressed during fuel processing.

## Volunteer events:

Fuel processing will take place during volunteer events scheduled by the Wood Bank Sub-Committee. Each event shall have a designated event coordinator in charge of overseeing the operation.

A sample schedule includes the following components (with suggested times):

- Set-up (layout of processing area) (15 min)
- o Welcome/Check-In (5 min)
- Tailgate Safety Talk (10 min)
- First work period (90 min)
- Snack Break (10 min)
- Second work period (90 min)
- Clean-up (15 min)
- Thank you/Reflection (5 min)

### Volunteer waiver of liability:

All volunteers of the wood bank shall have a signed volunteer waiver on file with the Montague Wood Bank before starting wood processing. Copies of the volunteer waiver will be available for walk-in on volunteer days.

## Volunteer Safety training:

The wood bank will develop a culture of safety to facilitate the long-term success of the program on behalf of the citizens of Montague. To maintain a safe working space at the Montague Wood Bank volunteers will be required to participate in trainings based on the level of activity they chose to undertake at the wood bank. General Volunteer (Required): Safe lifting (in-person) Personal Protective Equipment (in-person) Wood Bank specific tools, aids, and weight estimation (in-person) Wood Bank Program Orientation (in-person)

Hand Splitter (Optional):

Wood bank specific training (in-person)

- Tool identification/maintenance
- Establishing working areas
- Ground splitting w/ wedges
- Splitting on blocks.

Power Splitter (Optional):

Reading the manufacturers safety manual (Online)

• The equipment specific manual must be read for each tool

- Wood bank specific training (in-person)
  - Establishing working areas
  - Preventative maintenance/fueling
  - Starting and stopping equipment

Chainsaw Operator (Optional):

Certificate of completion of a chainsaw safety class totaling at least 8 hours of instruction by a chainsaw manufacturer, safety equipment manufacturer, or entity with an established syllabus including the following elements.

- Personal Protective Equipment
- Cutting techniques including bore cutting
- Chain Sharpening

Participants operating chainsaws must demonstrate proper operating techniques including donning PPE, saw inspection, proper starting, chain brake usage, body positioning, and use of wedges.

Youth volunteer policy: No volunteers under 18 years of age

### Tools and supplies:

Over time the Montague Wood Bank will need to develop a cache of tools and supplies to ensure the long-term success of the project. The project is currently able to access a shared trailer of volunteer tools and supplies from the Massachusetts Department of Conservation and Recreation however in the future the availability of these resources may be limited as other towns bring additional wood bank programs on-line. Tools and supplies will be procured though grants, donations, and possible town support.

Tools and supplies needed to operate a successful wood bank:

- 2 powered wood splitters and accessories
- 1 chainsaw 60-70cc and accessories
- Hand splitting tools for 4 volunteers
- PPE including gloves, eyewear, and hearing protection for 15 volunteers
- Refreshment funding (+/- \$400 annually)
- o 20-30 gallons of fuel annually

Processing Schedule:

| Partner       | Task          | Location     | Year One        | Year Two        | Year Three      |
|---------------|---------------|--------------|-----------------|-----------------|-----------------|
| DPW/Utilities | Wood          | Processing   | As needed       | As needed       | As needed       |
| others        | Donations     | Yard         | year-round      | year-round      | year-round      |
| DPW           | Site Prep w.  | Processing   | 1 day spring    | ½ day spring    | ½ day spring    |
|               | loader        | Yard         | ½ day fall      | ½ day fall      | ½ day fall      |
| Wood Bank     | Wood          | Processing   | 6 events        | 6 events        | 6 events        |
|               | Processing    | Yard         | 3 spring/3 fall | 3 spring/3 fall | 3 spring/3 fall |
| DPW           | Transfer Bins | Distribution | N/A             | ¾ day fall      | ¾ day fall      |
|               | w. loader     | Yard         |                 | ½ day winter    | ½ day winter    |
| DPW           | Snow          | Distribution | As needed       | As needed       | As needed       |
|               | Removal       | Yard         |                 |                 |                 |

Notes: Commitments on DPW time are not expected to exceed 3 days of work by a loader and loader operator per year. Snow removal assistance is already covered by existing removal duties at the Montague Recycling Center. The number of wood bank volunteer events needed to meet the project goal are estimated based on the productivity of volunteer events at surrounding area wood banks.

Distribution: A transparent and equitable distribution process is a key aspect of Montague Wood Bank project. Partnering with the Gill-Montague Senior Center will work to ensure this goal is met.

| Distribution timeline.      |                         |                       |  |  |
|-----------------------------|-------------------------|-----------------------|--|--|
|                             | Round 1 (early season)  | Round 2 (late season) |  |  |
| Application Start Date      | November 15             | January 1             |  |  |
| Distribution Period         | November 15 – January 1 | January 1 – April 1   |  |  |
| Fuel Distributed %          | 40 %                    | 60 %                  |  |  |
| Bins Distributed (30 Total) | 12                      | 18                    |  |  |

Distribution timeline:

Notes: Fuel distribution periods were established to be able to provide assistance to town residents over the duration of the heating season. Early season and late season fuel distribution percentages are based on EIA home heating fuel consumption projections.

## Eligibility:

Eligibility is limited to Montague Residents. Eligible recipients may apply for firewood from the Montague Wood bank at the Gill-Montague Senior Center. Applicants must qualify for LIHEAP to be eligible to receive fuel from the wood bank. Proof of qualification must be provided to the to the Senior Center at time of application. Only one bin per household may be issued per application period for a maximum allotment of 2 bins per year as supplies allow. Applications are accepted on a first come first served basis from the application start date for each distribution round. A minimum of 50% of wood will be allocated for seniors with an age 62+. Distribution rounds with a start date falling on a non-business day (weekend/federal holiday) will start on the following business day. Households who have received wood in round one must wait 10 business days after the start of round two before reapplying.

| Application Date | Household 1 | Household 2 | Household 3 |
|------------------|-------------|-------------|-------------|
| 11/15/2018       | 1 Bin       |             |             |
| 11/15/2018       |             | 1 Bin       |             |
| 1/2/2019         |             |             | 1 Bin       |
| 1/16/2019        |             | 1 Bin       |             |
| Total            | 1 Bin       | 2 Bins      | 1 Bin       |

Examples of household allotments for the 2018-2019 season:

Eligibility (Special Circumstances):

In times of special household need due to unforeseen or sudden circumstances (i.e. death of household member, natural disaster, ect.) the wood bank in consensus with the senior center and the town administrator may elect to waive income eligibility requirements for one-time use.

# Disqualification:

Due to the investment of donated volunteer time and town resources certain individuals and households not acting in the best spirt of the project may be barred from future participation.

General Disqualification Guidelines:

- The sale of wood bank issued firewood by program recipients is prohibited.
- The taking of firewood over the allotted amount issued without prior authorization is theft and will forfeit future ability to participate.

**Disqualification Conditions:** 

Parties actively engaged in the sale of firewood: Given the perceived potential for financial gain from donated firewood parties engaged in the sale of firewood are prohibited from participation. However, exemptions may be granted for eligible individuals who sell firewood as an employee for their own personal household heating use. Example: A farm employee may participate in the program and receive firewood. A farm proprietor who sells wood may not.

Parties caught in the unauthorized selling of program wood: Parties caught in the unauthorized sale of program wood are banned from program participation.

Parties caught in the unauthorized taking of program wood: Parties caught in the unauthorized taking of program wood on their first offence are banned for three years before being eligible for reapplication. Parties caught in the unauthorized taking of program wood on their second offence are banned from program participation.

#### **Distribution Framework:**

The Gill-Montague Council on Aging known as the "Senior Center" will serve as the manager of fuel vouchers. At the start of each heating season the Montague Wood Bank will notify the Gill-Montague Senior Center of the number of bins available for distribution based on acceptable fuel quality and volume. The Senior Center will then generate a finite number of vouchers in numerical order with the bin number printed on them. The Senior Center shall not issue more vouchers than there are adequate wood reserves for.

Using a Voucher:

Vouchers shall be in possession of the recipient until the entire bin allotment has been received. Recipients may make multiple trips to their issued bin to avoid overloading their vehicle, but must pick up all wood from the bin within two weeks. If additional time is needed, recipients shall notify the Montague Wood Bank or forfeit firewood from their allotment. Upon completion of firewood pick up the completed voucher shall be placed in the deposit box at the distribution site.

### Pick up times:

Firewood may be picked up at the Montague Recycling Center during normal hours of operation only. For hours of operation refer to the

Montague Transfer Station web page. <u>https://www.montague-</u> ma.gov/p/189/Recycling-Center-and-Transfer-Station-Info

Alternate Delivery:

For voucher holders who have limited mobility they may be able to receive wood by electing to have their own agent pick up and deliver their firewood allotment to their household. Voucher holders with limited mobility who are unable to obtain delivery of their issued firewood allotment may request a delivery made possible via a volunteer network.

# 7. Education

Wood can provide community members with a reliable source of renewable energy, however if not respected, cordwood combustion can have negative impacts on the environment as well as public health and safety. The wood bank will provide gathering place where town residents will learn about "Best Burn Practices", energy efficiency, government incentives for older woodstove change-outs, fire safety, wood processing, urban forestry, and land conservation.

A sample of educational programs to be included at a kiosk on the wood bank site: <u>https://www.epa.gov/burnwise</u>

http://www.masscec.com/commonwealth-woodstove-change-out

http://www.mass.gov/eopss/agencies/dfs/osfm/pubed/fs-topics/keep-warm-keepsafe.html

http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/urbanand-community-forestry.html

# 8. Contingency

In the event of the project ceasing to be of service to the Town of Montague, processed wood will be sold at market rate and the proceeds will be deposited in the tree committee account. Supplies and equipment will be disposed of via the town's established mechanism for surplus property disposal.