

A Report on Implementation of Harvest Notification in Vermont
2016
Vermont Forests, Parks and Recreation

Submitted to:

House Committee on Natural Resources, Fish and Wildlife
House Committee on Agriculture and Forestry
House Committee on Appropriations
Senate Committee on Natural Resources and Energy
Senate Committee on Appropriations

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Authority and Scope

The Vermont General Assembly, in Section 5 of Act 171 of 2015 (Adj. Sess.), directed the Commissioner to submit a report on implementation of timber harvest notification as follows:

“On or before December 15, 2016, the Commissioner of Forests, Parks and Recreation (Commissioner) shall submit to the House Committees on Natural Resources and Energy, on Agriculture and Forest Products, and on Appropriations and the Senate Committees on Natural Resources and Energy and on Appropriations a report recommending implementation of a harvest notification program. The report shall:

- (1) Recommend how a harvest notification program would be structured and implemented under which a landowner or timber harvester notifies the Department of Forests, Parks and Recreation of the commencement of a timber harvest. The recommendation should address:
 - (A) how a harvest notification would be provided to the State;
 - (B) who should provide notice of a harvest;
 - (C) when a harvest notification should be provided, including the harvest threshold for notice and any exemptions to notification;
 - (D) how a harvest notification should be provided to the Commissioner; and
 - (E) any additional elements necessary to implement the recommended harvest notification program.
- (2) Summarize the environmental and economic benefits to the State of the recommended harvest notification program, including whether the recommended harvest notification program would increase compliance with the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont.
- (3) Estimate the staff and additional funding needed to implement the recommended harvest notification program.
- (4) Propose how implementation of the recommended harvest notification program would be funded.
- (5) Propose draft legislation to implement the recommended harvest notification program.”

Executive Summary

Timber harvests are the foundation of the forest products industry and economy and therefore contribute significantly both directly and indirectly to the many benefits and values of Vermont's forestland. They are common throughout the state with hundreds of commercial timber harvests occurring annually. Together, these harvests are foundational to more than 10,000 jobs and \$1.5 billion dollars of the Vermont economy. In addition, these timber harvests can enhance wildlife habitat, support conservation of forestland, and sustain Vermont's rural character. Despite these contributions, there is no existing means of measuring the number, frequency or scale of harvests and no reliable mechanism with which to track or analyze trends in timber harvesting in Vermont. Implementation of a mandatory timber harvest notification program could create a means to identify the location, extent and duration of timber harvests and provide an additional avenue for Department of Forests, Parks and Recreation ("Department" or "FPR) staff foresters to advise, and at times visit active harvesting jobs. Additionally, advance notification of harvests could allow FPR and the Department of Fish and Wildlife ("DFW") to deliver targeted and time-sensitive outreach materials to landowners that outline legal obligations that affect economic and environmental outcomes of timber harvests. Landowners could also be made aware of technical resources, both written and in-person, that inform landowners of common practices that support successful harvests and of state requirements, including the state rule entitled "Acceptable Management Practices Maintaining Water Quality on Logging Jobs in Vermont" ("AMPs") and the steps they can take with their foresters and loggers to minimize soil erosion and risks to water quality.

Conducting a successful harvest requires coordination of many moving parts; landowners, consulting foresters, loggers, truckers, and mills may all be involved at some point in the process of planning or implementing a harvest. To conduct a harvest, loggers and foresters need to be available, equipment needs to be delivered, ground needs to be dry or frozen, weather needs to cooperate, mills need to be buying wood and everybody needs to work together. Requiring that the state be notified prior to the commencement of a harvest would be another step in an already complex process. Any proposal of harvest notification should be sensitive to this reality, and first clearly establish that the benefits warrant and outweigh the significant added complexity.

As described, harvests for any purpose, that would result in more than 60 cords or equivalent volume harvested would be required to provide advance notification to FPR. Harvest notification would occur at least seven days prior to the commencement of a harvesting operation, when landowners or their authorized representative would contact the Department of Forests, Parks and Recreation (FPR) via phone, mail, or an on-line form. Information supplied in the notification would include the name of the property owner, their contact information, and the names and contact information of the logging contractor and forester (if applicable) involved in the harvest, the location and estimated area of the harvest, if the harvest is associated with conversion of forest to another use, and posting location. In this context, "posting" refers to where documentation of notification would be visibly displayed on the parcel. All complete notifications would be accepted by FPR, would be considered to have satisfied the harvest notification requirement, and would then be issued a harvest notification number and digital copy of a harvest notification form. FPR would not review or approve the harvest itself, nor would it charge a fee.

Despite efforts to streamline the notification process for landowners, foresters, loggers and those in state government involved in administration of a notification system, it will be inevitable that complications will arise as a result of the diversity of purposes for harvesting and lack of landowner awareness of notification responsibilities.

Were notification to be implemented, records of harvest notifications would be automatically entered in a database linked to statewide parcel mapping data that clearly identify harvest locations and specifications. Harvests of less than 60 cords or equivalent volume, would be exempt from harvest notification. Failure to comply with the harvest notification requirements could result in enforcement and minor civil penalties under enforcement authority of the Agency of Natural Resources Department of Environmental Conservation Enforcement Division (“DEC Enforcement Division”). More complete details and considerations of a potential harvest notification process are contained within the body of this report. Because harvest notification would have many implications, some of which, but not all, are considered in this report, it is proposed that if harvest notification were to become mandatory, many of the details defining the administration of it would likely benefit from the public input and consideration associated with the rulemaking process and therefore, should be established by administrative rule.

As proposed in this report, implementation costs are estimated to total \$235,000 for the first year and \$180,000 annually thereafter. This first-year cost estimate includes a) \$30,000 for design, printing and distribution of outreach materials and b) \$25,000 for development of an online portal for submission of notifications. Annual costs include: a) \$5,000 per year for continued maintenance and distribution of outreach material b) \$5,000 per year for maintenance of the online portal and database maintenance b) \$30,000 for 1/2 FTE of administrative support directly related to the harvest notification, and c) \$140,000 for 2 FTE to centralize administrative duties of field staff allowing county foresters to provide technical assistance related to harvesting and harvest notification.

While there are many potential benefits of harvest notification, notification imposes logistical burdens on the public, administrative burdens on state government and significant financial costs. If the state is prepared to make investments in FPR that will improve its capacity to better serve landowners and improve the outcomes of timber harvests, then harvest notification would not be the first priority. For this reason, the Department of Forests, Parks and Recreation does not recommend mandatory harvest notification at this time.

In the absence of harvest notification, FPR will continue to employ and expand strategies to solve the problems that harvest notification would be designed to address. FPR will seek to develop better information related to harvesting trends which may include surveys, use of records associated with Use Value Appraisal, geospatial modeling among other tools. In efforts to improve forest management practices, FPR will seek opportunities to expand capacity to provide outreach, demonstration of best practices, trainings, and resources to landowners, foresters and loggers.

Introduction

Vermont's forests are fundamentally important to Vermont. Covering roughly seventy-five percent of the state, Vermont's forested ecosystems provide the basis for biological diversity, natural communities, wildlife habitats, scenic landscapes, and recreational opportunities. As a natural resource, forests offer an economic base for employment, tourism and recreation, and support a diverse forest products industry. Approximately eighty percent of forest land in Vermont is in private ownership. Collectively, these owners and their land provide the foundation for the benefits and values that all Vermont citizens derive from our forests.

One of the primary ways that private forestland owners directly influence forestland is through the harvesting of trees. The income that the harvests generate for landowners provides a return on their investment and can lessen the financial pressure to develop forestland, thereby supporting the conservation of forestland and the many varied benefits and values that forests provide to the state. The harvesting of trees provides the raw material for the forest products economy. Timber harvests are the foundation of this economy providing more than 10,000 jobs and \$1.5 billion dollars to the Vermont economy. When harvests and the process leading up to them are handled well, forestland owners know what to expect during the harvesting operations and are happy after the job. The ecological impact of some harvests is benign, others can have very positive impacts. Well-implemented harvests have the potential to support forest conditions that are resistant to stressors, resilient to damaging agents, and over the long term, responsive to the ecological and environmental needs and desires of Vermonters. In fact, most harvests turn out well.

However, the Department of Forests, Parks and Recreation (FPR) recognizes that there can be problems with some harvests that can be addressed:

1. Timber harvests are the foundation of the forest products industry and economy, yet there is no reliable mechanism with which to analyze trends of harvesting in the state. If there are trends in the number, location or frequency of harvests that present opportunities or challenges to the forest products economy, the State is currently unaware, and therefore ill-equipped respond in a manner beneficial for the forest, economy, or landowners. Chapter 83 of Title 10 of the Vermont Statutes Annotated, FPRs enabling legislation, clearly establishes as the policy of the state, and FPRs responsibility; the encouragement of economic management of the state's forests and woodlands, to sustain long-term forest health, integrity, and productivity, to maintain, conserve, and improve its soil resources, protect wildlife and to control forest pests, and to protect against floods, soil erosion and forest fires. See, 10 V.S.A. §2601(a). To this end, FPR is required to implement the policies of Chapter 83 of Title 10 "by assisting forestland owners and lumber operators in the cutting and marketing of forest growth, encouraging cooperation between forest owners, lumber operators, and the State of Vermont in the practice of conservation and management of forestlands..." FPR is unable to completely fulfill these obligations without accurate information of the number, location, frequency and trends of harvests in Vermont.
2. Landowners may experience dissatisfaction after harvesting. This can be related to post-harvest aesthetics, financial loss, or insufficient financial compensation, degraded environmental conditions, or logging conduct that fails to adhere to forest management plans or standards which can affect enrollment in the Use Value Appraisal (UVA) Program. Some of these problems are preventable, arising largely due to unclear expectations, insufficient communications or inquiry, and insufficient precautions taken by landowners to protect themselves and their forest.

The root of these problems may be in part related to:

- a. Lack of landowner understanding of legal, financial, or ecological risks of conducting a harvest and therefore landowners don't take precautions to avoid pitfalls.
 - b. Lack of landowner and logger understanding of best practices and legal obligations on forestry operations to protect water, forest health, or adherence to UVA plans and standards.
 - c. Lack of communication between loggers, landowners and foresters about best practices and legal obligations when conducting and closing out a harvest.
 - d. In some cases, loggers and foresters not meeting communicated expectations (whether it be in contracts, laws, management plans) related to implementation of Vermont's Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs), harvesting prescribed in management plans, or others. Often, landowners are ill-equipped to recognize when activities don't line up with a management plan, contract or law, and the logger or forester isn't held accountable.
3. Though actually quite rare, logging activity does occasionally result in erosion and discharges of sediment to waters. The current complaint based system for providing technical assistance or engaging environmental enforcement officers on logging-related sediment discharge or erosion, means that many problems are often recognized by people months or even years after the fact when the opportunity to correct or prevent problems is either gone, or significantly more difficult.

The failure to implement AMPs may be caused by:

- a. Lack of knowledge regarding how and when to apply the AMPs.
- b. Lack of willingness or motivation on the part of loggers, foresters and landowners to implement AMPs to the maximum practicable extent.

These problems are not universal. There are many landowners that know how to approach a harvest, many loggers that know their responsibilities and implement them well, and many foresters that develop complete contracts that are well enforced. Because of a broad lack of data on harvests, there is little information to quantify the successful or unsuccessful harvests. But based on experience of FPR foresters, and the technical assistance provided in the course of visits to more than 900 parcels annually, it is clear that at times the problems noted above do present themselves and result in environmental degradation and economic loss. These negative outcomes erode the social acceptance of, and damage the reputation of well implemented harvesting. Current efforts to provide education about AMPs is most often delivered to foresters and loggers. Landowners are often unaware of the AMPs and their responsibility to implement them. Effectively reaching landowners with the appropriate information at a time they will be receptive to it is difficult. Getting useful information to landowners and loggers immediately prior to harvesting has the potential to improve the ability of landowners to be effective advocates during a harvest. Delivery of information could improve landowner's and logger's understanding about risks and obligations on logging jobs and appropriate practices to mitigate risks and satisfy responsibilities. Adherence to AMPs could be improved if they were communicated in advance of harvests and there were mechanisms to enable State foresters to know of, and visit, active harvests, particularly where there is a nexus with other programs such as Use Value Appraisal (UVA). By creating a greater level of accountability for all involved, we may be able to prevent or stop discharges of sediment during some harvests and reduce the need for after-harvest assistance or enforcement actions.

Not knowing the scope and extent of harvesting occurring in Vermont puts FPR at a disadvantage when responding to questions about sustainable forest practices. A more complete understanding of annual

harvests would better enable the state to maximize economic benefits from harvests and enable the state to support policy that increases efficiencies for harvesting and invest in those parts of the state where harvesting is most sustainable and beneficial.

A harvest notification program could be a step toward providing guidance to those involved in harvests, improving compliance with water quality laws, and increasing the economic benefit of the forest products industry in Vermont.

The effects of mandatory harvest notification would be far-reaching, affecting forests, landowners, foresters and loggers operating under a wide variety of unique circumstances. Should harvest notification be required by statute then we would propose that the necessary details of implementation and associated specific requirements would be best established by administrative rule. The public involvement and consideration associated with the rulemaking process would best ensure that a harvest notification process is easy, efficient, applicable to the intended circumstances and likely to result in maximum benefits for landowners, the forest products industry and the environment, while minimizing unintended consequences. Consideration of public comment prior to or during the rulemaking process would likely result in modifications to FPR's analysis of a harvest notification process contained herein.

If the harvest notification system were to be associated with any other statewide requirements, such as mandatory implementation of some subset of the AMPs, then additional details would need to be addressed to integrate the harvest notification program with requirements not considered here and would likely include additional costs and resources not evaluated here.

Structure and implementation of Harvest Notification in accordance with Section 5 of Act 171 of 2015.

The body of this report has been structured and formatted to directly address the requirements of Section 5 in Act 171 of 2015. Additional detail on harvest notification elements, including definitions can be found in Appendix A.

Section 1. Recommend how a harvest notification program should be structured.

From Section 5, Act 171: 1. Recommend how a harvest notification program could be structured and implemented under which a landowner or timber harvester notifies the Department of Forests, Parks and Recreation of the commencement of a timber harvest. *In Section 5 of Act 171, the structural elements A, and D appear to be synonymous, and therefore A has been omitted.*

B. Who should notify the harvest?

The Landowner or the landowner's authorized representative would be required to submit a harvest notification to FPR prior to the commencement of a harvest. A landowner could authorize a representative to represent them by filing a Power of Attorney form with FPR prior to, or at the time of submitting a harvest notification to FPR.

C. When a harvest notification should be provided, including the harvest threshold for notice and any exemptions to notification.

A harvest notification would be provided at least seven days prior to commencement of a harvest. A harvest notification would remain in effect for two years. If a harvest was to extend beyond two years a harvest notification could be renewed at any time to add an additional year. FPR would implement harvest notification by requiring advance notification of all harvests except where the entire harvested volume in one calendar year is equal to or less than 60 cords or volume equivalent. One cord is the approximate equivalent of 0.5 thousand board feet or 2.5 green tons. In the process of developing a potential notification process, FPR strongly considered how to require notification of harvesting associated with forest management while exempting harvesting associated with agricultural conversion, development or other conversions of forest to new uses. It was recognized that it would be difficult to distinguish between a harvest associated with forest management and a harvest intended to convert forests to another use. Additionally, no matter the purpose of a harvest, harvest activity can present common risks to the land and landowners. It is for these reasons that the harvest volume is suggested as a possible threshold for requiring harvest notification. With respect to the outcomes of harvesting, this approach appears sound, however it comes with logistical and administrative complications. The landowners and audience involved in conversion of forests to other uses will often not be the same as those involved in timber harvesting associated with forest management. This means that a diverse audience of farmers, landowners, developers and others that FPR has not traditionally engaged with, could be required to adhere to harvest notification rules. FPR is unpracticed at engaging with this audience or operations related to forest conversion, and this audience is unpracticed at engaging with FPR. It is likely that this will present logistical and administrative difficulties for portions of the public subject to a harvest notification requirement as well as those administering the requirement.

D. How a harvest notification should be provided to the Commissioner

At least seven days prior to the cutting of trees, landowners would notify the FPR online, via mail, or over the phone. Information supplied by the landowner would inform FPR of the name of the property owner, their contact information, the location of the harvest, and the names and contact information of the logging contractor and forester involved in the harvest. All complete notifications would then be accepted by FPR. FPR would not review or approve the harvest itself, nor would it charge a fee.

Landowners could renew or amend their harvest notification at any time, which would supersede any pre-existing harvest notification.

A landowner or their representative submitting a harvest notification would provide the following information over the phone with FPR staff or by submitting a form online or in hardcopy:

- (a) The landowner's name, legal mailing address, physical address of their residence (if different from mailing address or harvest address), email address and phone number.
- (b) The name of the primary logger or contractor conducting the logging and their legal mailing address, address of their principal place of business or residence, email address and phone number.
- (c) The name of the landowner's agent or consulting forester and their legal mailing address, address of their principal place of business or residence, email address and phone number.
- (d) The location(s) where the harvest notification number will be visibly posted as required by this law.
- (e) The school property account number (SPAN) of the parcel where the harvest will occur.
- (f) The estimated date that the harvest will commence and the estimated date the harvest will be completed.
- (g) The estimated acreage of harvest area
- (h) Is the harvest associated with conversion of forest to another use?

At any time, the landowner could amend a harvest notification to update the harvest notification details, or renew a harvest notification to extend the effective period of the harvest notification for one year beyond the initial two-year effective period. To renew or amend a harvest notification a landowner would provide the following:

- (a) Approximate additional acreage of harvest, if applicable
- (b) Additional harvest posting location(s), if applicable
- (c) Amendment of any pertinent information.

Landowners amending their harvest notification could amend their harvest notification at any time by filing a hardcopy amendment form or accessing and editing their harvest notification online. Any information provided on the original harvest notification may be amended.

In addition to submitting a harvest notification over the phone or by submitting a hardcopy form, a landowner would also be able to quickly submit a notification online. An online portal that is accessible to the public would require design and testing work by staff and the public. The portal would need to allow for landowners or their representative to submit harvest notifications, and review, renew or edit notifications. This accessibility would require some security elements to limit intentional or accidental access to editing of a harvest notification.

[E. any additional elements necessary to implement the recommended harvest notification program](#)

This section relating to additional elements necessary to implement a harvest notification program, will be broken in to two parts

- Part 1. Additional programmatic elements for implementation of harvest notification and
- Part 2. Additional considerations for implementation of a harvest notification program.

[Part 1. of report element E, Additional programmatic elements for implementation of Harvest Notification](#)

Informational Resources:

Upon providing a complete harvest notification, a landowner would be provided with informational resources that inform them about how to conduct a successful harvest. Information resources would cover: how landowners can protect legal, property, and financial interests when conducting a harvest, what their obligations are for filing taxes, adhering to UVA management plans, protecting the environment, contact information of state employees or professionals in the private sector that can help. A landowner may choose to act on this information or not. Informational resources could cover:

- Guidance on working with a forester and logger
- Effective contract language
- General information on water, wildlife, and harvest economic considerations
- Access to recent stumpage reports (prices paid to landowners for their trees). It would be made clear to landowners that stumpage received on any harvest may deviate from values in the stumpage

report. Instead, stumpage received would be dependent on markets and how the unique characteristics of the harvest affect the cost of logging and value of the trees harvested.

- Introduction to laws and regulations affecting harvests, and how to access them.
- Contact information for professionals that can help

Harvest Notification Number:

Upon providing a complete harvest notification, a landowner would also receive a harvest notification number that would remain in effect for two years. During the two years that an initial harvest notification is “in effect,” a harvest would be considered to be notified and as satisfying the notification-submission element of the harvest notification requirement. Renewal of a harvest notification could occur any time and would extend the effective period of the harvest notification for one year. These unique numbers would be important to the state for compiling information about harvest trends, understanding who has received informational resources, monitoring compliance with UVA, and responding to complaints about AMPs and water quality.

Harvest Notification Database:

A database, populated automatically by online harvest notification submissions, or manually, for those harvest notifications provided on forms or over the phone, would be linked to statewide parcel mapping data to clearly identify where harvests are occurring. The database and spatial data would be available for FPR foresters and ANR staff involved with outreach and implementation of the harvesting notification program.

Posting:

A landowner that would be required to submit a harvest notification would be required to post the harvest notification number on the harvest landing(s) and at the intersection of the private road accessing the harvest area and a public road, keeping it visible to FPR staff and enforcement officials from the public road, until the closeout of the harvest is complete. The landowner would post the harvest notification number provided by FPR at the posting location(s) associated with the notified harvest. The harvest notification number would be provided to the landowner in standard format which would be available digitally or would be available for pickup from a FPR regional office.

Proposed Posting Location:

- (a) When the landing is visible from a public road, the harvest notification number would be posted and maintained in a conspicuous location at or near the principal landing(s) or yard(s) associated with the harvest.
- (b) Where the harvest is accessed by a private road system, in addition to posting of the harvest notification number at the landing, an additional copy of the harvest notification would be posted in a conspicuous location at the nearest intersection of a public road and the private road accessing the harvest.
- (c) Harvest notifications would remain posted and maintained in a legible condition and visible location until both harvesting and closeout of the operation is complete.

Compliance and Enforcement:

Enforcement of any harvest notification law and any rule adopted under it would be administered by DEC, Enforcement Division pursuant to 10 V.S.A. chapters 201 and 211, in coordination with and with assistance from FPR staff. Enforcement could be by issuance of civil citations pursuant to 10 V.S.A. §8019 as follows:

1. Failure to notify a harvest could result in a \$250 fine to the landowner.
2. Failure to Post a notified harvest could result in a \$150 fine to the landowner.

Enforcement by civil citation would require the amendment of the DEC Environmental Citations Table, a rule adopted and effective 11/20/11. 10 V.S.A. §2608 provides enforcement authority for all provisions of chapter 83 of Title 10 and all rules adopted thereunder. Thus, if harvest notification is enacted in statute as new section 2613 of Title 10, the existing enforcement authority would apply. However, 10 V.S.A. §8003 would need to be amended to add 10 V.S.A. §2613 to the list of statutes subject to the enforcement provisions of chapters 201 and 211 of Title 10. See section VI for the proposed legislation. Fines collected for enforcement of this requirement would be directed to the General Fund.

[Part 2. of report element E, Additional considerations when exploring implementation of harvest notification](#)

Informing Landowners of a Harvest Notification Requirement:

There are approximately 40,000 forested parcels in Vermont that are 10 or more acres in size. This number grows as parcels are subdivided. The owners of these parcels change over time. For mandatory harvest notification to be successful, it would be necessary to ensure that all landowners are aware of the harvest notification requirement. This requires a lot of investment on the part of state government, in particular, FPR. Materials that are effective in communicating the harvest notification requirement would need to be developed and disseminated widely and strategically to loggers, foresters, farmers, UVA enrollees, and many others. Because of the infrequency of harvesting on a particular property, continuous outreach will be necessary. This sustained effort in both delivery of materials and staff outreach will have benefits but will be costly.

Landowner Confusion and Industry Concern:

Many land use activities require approval and permits from local or state government. It is likely that harvest notification would be perceived as an application for permission to conduct harvesting. While this is not the intent, there will be some that support or oppose the harvest notification requirement because they perceive it to establish a permitting process for harvesting, meaning that a harvest would need to meet certain criteria to be permitted. This misconception may be difficult to overcome and may undermine the public support for FPR and any harvest notification program. There has been a well-stated concern that implementation of a harvest notification is a slippery slope, creating the foundation for a future in Vermont with a harvest permitting process currently in effect in other states. FPR does not support any such permitting scheme for harvesting.

Posting of Harvest Notification:

A common provision among states that have a harvest notification requirement is that landowners who submit a harvest notification must visibly post their notification at the main access to the harvest area in a location that is visible from a public road or other publicly accessible area. In our analysis, we have followed this approach but must acknowledge that this approach comes with advantages and disadvantages.

Posting would enable those responsible for monitoring compliance with such a law to quickly evaluate whether an active harvest has complied with a harvest notification law. A posted harvest notification could be easily and somewhat passively observed by the public or ANR staff as they conduct their work across the state. An active harvest with visible posting is unlikely to require follow up. An active harvest with no posting that also appears to be at the scale that would require notification would require follow up by a forester or enforcement officials. Each requirement associated with a mandatory practice, including a requirement to post harvest notification numbers, would require education and enforcement. Therefore, if harvest notification has occurred, but the harvest notification had not been posted, this would add work for staff. Additionally, the posting requirement would add an administrative responsibility to a landowner, forester or operator to maintain this visual indicator of compliance with the law.

Enforcement:

Many harvests occur each year in Vermont, though FPR has few tools to accurately quantify the number of harvests. In 2015, several hundred parcels with forestland enrolled in UVA reported harvesting more than 60 cords or equivalent volume. FPR does not have any way to estimate the additional harvests that occur on land outside of the UVA program or harvests associated with clearing of to accommodate built infrastructure, which would require notification under mandatory harvest notification. It is possible that the number of harvests that would require notification annually could be 1,200 or more. Inevitably, there will be those who fail to submit a harvest notification when one is required. In most cases, failure to submit a harvest notification would be a simple oversight, without malintent. To ensure compliance with a harvest notification requirement, it would be necessary for FPR staff to individually, or through coordination with DEC enforcement staff, to contact landowners, discuss whether the harvest meets the threshold requiring harvest notification and communicate the need to submit harvest notifications, and perhaps take enforcement action. In some cases, to determine if a harvest notification is required, it would be necessary to visit the site. At times access for staff may be denied, in which case, access orders would be necessary to determine if a harvest notification is required. Carrying out this enforcement would require significant time and social capital for FPR and DEC staff.

Confidentiality:

There will be an interest in maintaining as confidential some or all information submitted for harvest notification. Phone numbers, email addresses and mailing addresses of landowners all have the potential to be sensitive. Some landowners may view the information that would be provided to FPR -- when, where and how much area is harvested -- as sensitive and private information that should not be made public. Much of the information provided through a harvest notification would be public already, available through grandlists or forest management plans for those parcels enrolled in UVA. The Department must comply with the Access to Public Records Act, 1 V.S.A. §§315-320, which defines a public record as including any written or recorded information which is produced or acquired in the course of public agency business. Section 317(c) identifies the types of records that are exempt from public inspection and disclosure by a public agency. Therefore, an analysis would need to be conducted to determine whether certain information submitted as part of a harvest notification is or should be confidential and exempt from disclosure to the public.

IT Responsibilities:

Ensuring a properly functioning website allowing smooth submission of harvest notifications by the public and use by FPR staff requires an effective design, review and testing process. Over time, a web portal for harvest notification submission would require maintenance and updating and managing security for users of the online portal to both submit and retrieve data.

Receiving and managing information associated with a harvest notification requirement would require development and maintenance of a database. The database would be linked to statewide parcel data which has not yet been fully developed and likely will not be complete for a few more years. To be as efficient as possible it may be necessary for staff to have access to data in the field. This would require both database development and management, as well as linking and managing data to mobile devices, and training staff to use the tools. It is likely that as discussed here, these systems would be relatively simple; however, they would need to be integrated into existing workflows among staff.

Harvesting Logistics:

Conducting a successful harvest requires coordination of many moving parts; landowners, consulting foresters, loggers, truckers, and mills may all be involved at some point in the process of planning or implementing a harvest. To conduct a harvest, loggers and foresters need to be available, equipment needs to be delivered, ground needs to be dry or frozen, weather needs to cooperate, mills need to be buying wood and everybody needs to work together. Requiring that the state be notified prior to the commencement of a harvest would be another step in an already complex process.

At times, the requirement to wait seven days to commence a harvest could be onerous to logging contractors. At times, landowners may delay submission of a notification, requiring a contractor to delay commencement of a harvest. Daily overhead costs are in the thousands of dollars per day for many operators. In the context of fluctuating markets and shorter winters when managing a successful logging contractor business is increasingly difficult, unnecessary burdens need to be avoided. Any proposal of harvest notification should be sensitive to this reality, and first clearly establish that the benefits warrant and outweigh the added complexity.

Volume Threshold:

This report considers that any harvest that results in 60 cords or equivalent volume would be required to submit a harvest notification. This volume usually exceeds that which would be harvested by an individual for personal use. Inevitably there will be exceptions. During the 2016 legislative session, some testimony recommended a higher threshold to trigger harvest notification than was proposed in draft legislation. Some timber harvesting on family-owned properties may annually remove more than 60 cords because multiple homes are being heated. Some sugarmakers still boil sap with wood and may annually use more than this. However, the volume of wood harvested correlates to the risk of impact to the land. Furthermore, at this volume, harvests begin to have commercial potential and present economic and legal implications to landowners who may not be familiar with harvesting. If harvest notification were to become mandatory, harvests that exceed 60 cords or equivalent volume would be required to notify.

Exemptions:

The primary intent of harvest notification is to improve the outcome of timber harvests and increase understanding of timber harvest activity in the state. Harvests may occur for many reasons: they may be associated with forestry operations, or development or agricultural conversions or other reasons. Exemptions related to development, agricultural conversion or other changes of use away from forest uses, were considered. However, no matter the purpose of a harvest, harvest activity can present common risks to the land and landowners. As an example, the AMPs are applicable to any logging activity, regardless of the intent of the logging or fate of the harvested trees. For this reason, no exemptions beyond a threshold of volume of wood harvested was considered here.

While this appears to be a sound and equitable approach, it poses challenges for both the public who are subject to the notification rule and FPR and other departments that could be tasked with implementing it. For successful implementation, FPR will need to successfully engage with a non-traditional audience of

developers, farmers and other landowners and professionals. This will add logistical and administrative complexity to development projects, agricultural conversion and other harvests that FPR has not historically been closely involved with.

Timing and Informational Resources:

One of the main ways that harvest notification could result in a benefit to the landowner, their forest, the economy and environment is that harvest notification could provide a mechanism to deliver informational resources to landowners prior to a harvest. The information contained within the resources would be designed to equip landowners to make their own informed decisions about how to conduct a successful timber harvest. However, the timing of the harvest notification and subsequent delivery of information poses some challenges. It is intended for any harvest notification, if implemented, to be extremely easy for landowners, loggers and foresters to submit, and **should not add undue logistical challenges** to harvesting operations. However, by the time a landowner has committed to harvesting, and is ready to submit a harvest notification, many of the decisions that can be informed and guided by informational resources prior to a harvest, would already have been made. These decisions may include whether a landowner will work with a forester, will they have a contract and what will be included in that contract, and what is the landowner getting paid for the wood? As currently considered here, a landowner would submit a harvest notification seven days prior to the commencement of cutting. They would receive the informational resources between seven and four days prior to commencement of harvesting, depending on availability of email. This timing would give the landowner a very brief opportunity to modify the terms of harvesting prior to its commencement. Because the terms of a harvest are ultimately the landowner's responsibility, we maintain that requiring harvest notification seven days prior to commencement of harvesting is appropriate. However, we also recognize that this short timeframe will mean that some guidance that landowners receive upon submission of harvest notification will be difficult to act on prior to the commencement of a harvest.

Section 2. Summarize the environmental and economic benefits

From Section 5, Act 171: 2. Summarize the environmental and economic benefits to the State of the recommended harvest notification program, including whether the recommended harvest notification program would increase compliance with the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont

The intent of harvest notification would be to improve timber harvest outcomes for landowners, the environment and the economy by educating landowners, and improving the FPR's understanding of harvest trends spatially and temporally to enable the FPR to fulfill statutory obligations to implement state policy.

The benefits of harvest notification would be dependent on it being mandatory with clearly defined exceptions. On-the-ground benefits would come from improvement in landowner, forester and logger practices. However, quantifying the benefits is difficult because there is limited baseline information about timber harvests in the state, frequency and degree of non-compliance with state laws, or the degree to which access to helpful information changes behavior. It is possible that harvest notification would more significantly increase benefits on UVA enrolled land because it links activity with management plan recommendations and a system for monitoring compliance. The benefits of harvest notification on lands not enrolled may be less because harvest notification would not be linked with any management standard or

compliance monitoring; however, harvest notification would expose some landowners to forest management recommendations, many of whom may have only received advice from neighbors or loggers. This access to information may result in changes in practices benefitting the landowner and the land.

Benefits could include –

1. Informed landowners would be better equipped to advocate for themselves, their land and hold loggers and foresters accountable for compliance with AMPs, contract language, management plans or other expectations when necessary. The harvest notification and information provided by FPR may give landowners pause to confirm that they have taken the right steps to ensure that the harvest goes well. Landowners may increase use of licensed consulting foresters, use of contracts, and receipt of mill slips to insure proper payment.
2. Increase proactive implementation of AMPs, adherence to wetland rules, payment of tax on harvest income, compliance with heavy cut laws, and Use Value Appraisal plans. This is likely to result from:
 - a. Increased understanding of responsibilities among landowners, loggers and foresters resulting from access to assistance and informational materials delivered to those submitting harvest notifications.
 - b. Increased sense of accountability for compliance with responsibilities among landowners, loggers and foresters resulting from the fact that FPR is aware of the management activity.
3. Increased opportunity for FPR to provide technical assistance to improve harvesting outcomes when landowners, loggers or foresters recognize mistakes and seek assistance.
4. Increased understanding of harvest activity in Vermont. The understanding of where and when harvests are occurring and who is involved may help FPR or other organizations to target outreach to landowners and professionals in the forest products industry to improve practices or identify other opportunities to improve forest health and management that correlate to the frequency and distribution of harvests in Vermont.
5. If as a state, we could be confident that prior to logging activity, almost all landowners had a common set of information designed to help them protect themselves and their land, then as a state we would be better equipped to evaluate how to improve outreach efficacy, or if additional laws or regulations may be necessary to protect the public and the environment.

Section 3. Estimate the staff and additional funding

From Section 5, Act 171: 3. Estimate the staff and additional funding needed to implement the recommended harvest notification program.

A harvest notification system would increase demand on staff in the FPR, DEC and in ANR IT. There would be costs associated with development of outreach materials, staff time and database development and management.

Outreach Material

Initial outreach to landowners to notify them of their responsibility to submit harvest notification would require approximately \$30,000 for design, printing and distribution of outreach materials. Annually, an additional \$5,000 would be required for maintenance and continued distribution of outreach materials, forms and database maintenance.

Staff Time

A harvest notification system would require FPR staff time to administer and provide support to landowners. The administrative duties required would include fielding calls and questions, renewing and updating notifications, maintaining the database, delivering informational resources to landowners and informing landowners of legal responsibilities related to harvesting. These responsibilities would likely require 1/2 FTE.

In addition, harvest notification could increase awareness among landowners of the complexities and responsibilities associated with harvesting, and may increase FPR and ANR awareness of economic, environmental or legal issues associated with harvesting, thereby requiring additional assistance or enforcement from ANR staff not otherwise provided. The first line of communication with landowners would most often be FPR's county foresters and in some cases, state lands foresters working with FPR. FPR staff would have an ongoing role in work with landowners and others involved in harvesting and reminding them of their obligation to notify. As the foresters most frequently in the field, they would be most likely to identify or receive complaints of non-compliance and would need to follow up with landowners and communicate with enforcement on these issues. To support landowner interest in maintaining compliance with laws, to promote thoughtful forest stewardship, and provide technical assistance and support of DEC enforcement where necessary, at least an additional 2 FTE would be required. This time would be used to centralize administrative duties of county foresters and state lands foresters, support coordination between field staff and DEC to free up the availability of field staff to support landowners and provide technical assistance. These additional 2 FTE would cost approximately \$140,000 annually.

Database

Development of a harvest notification system would require assistance from Information and Technology office within ANR to develop a database, a website for submission of harvest notifications, and a process for receiving and entering hard copy notifications. This would likely require 450 hours initially, and then an additional 80 hours annually to host the notification system, which would be approximately \$25,000 for development of the web portal and approximately \$5,000 annually for ongoing maintenance.

In summary, we estimate that initial development of the web portal and outreach materials to cost \$55,000 plus an annual cost of providing staffing and outreach of \$180,000 per year.

As considered, DEC enforcement staff would likely be responsible for enforcement. Following initial adoption of any law related to the harvest notification limited enforcement would be required, because there would be a functional "grace period" following the adoption of law. However, eventually it would need to be enforced to ensure compliance. It is very possible that there would be 100 – 200 harvests that fail to submit harvest notifications annually. Costs for enforcement depend largely on the details of the rule being enforced and frequency of enforcement action. Further analysis of a potential rule and its associated details would be needed to estimate costs of enforcement.

If the harvest notification system were to be associated with any other statewide requirements, such as mandatory implementation of some subset of the AMPs, there would be additional costs not addressed here.

Section 4. Propose Funding

From Section 5, Act 171: 4. Propose how implementation of the recommended harvest notification program would be funded.

FPR has no available funds to absorb the costs associated with implementing harvest notification and would need additional funds and authority to create new positions. This would increase demand on the General Fund. We have considered the potential to require a fee for submitting a harvest notification; however, this would add cost to the administration of the program, and deter submission of harvest notification.

While there are many potential benefits of harvest notification, notification imposes logistical burdens on the public, administrative burdens on state government and significant financial costs. If the state is prepared to make investments in FPR that will increase its capacity to better serve landowners and improve the outcomes of timber harvests, then harvest notification would not be the first priority. For this reason, the Department of Forests, Parks and Recreation does not recommend mandatory harvest notification at this time.

Section 5. Propose Draft Legislation

From Section 5, Act 171: 5. Propose draft legislation to implement the recommended harvest notification program.

*** * *Harvest Notification* * ***

Sec. 1. 10 V.S.A. § 2613 is added to read:

§ 2613. HARVEST NOTIFICATION

- (a) Notification required. Except as provided in subsection (b) of this section, at least seven days prior to commencing a harvest, the landowner upon whose property the harvest is taking place shall file with the Commissioner a harvest notification on a form as prescribed by the Commissioner.
- (b) For the purposes of this section, a “harvest” shall not be limited to harvests associated with the management of forests, but shall also include harvests conducted to clear land as a precursor for development or conversion to a non-forest use.
- (b) Exemptions. A harvest would be exempt from the notification requirement if:

(1) The entire harvested volume in one year is less than 60 cords or volume equivalent. 1 cord = .5 thousand board feet. 1 cord = 2.5 green tons.

(2) Additional exemptions as defined by rule.

(c) Harvest notification. The harvest notification shall contain, at a minimum, the following information:

- i. The landowner's name, legal mailing address, physical address of their residence, email address and phone number.
- ii. The name of the primary logger or contractor conducting the logging and their legal mailing address, address of their principle place of business or residence, email address and phone number.
- iii. The name of the landowner's agent or consulting forester and their legal mailing address, address of their principle place of business or residence, email address and phone number.
- iv. The location(s) where the notification number will be visibly posted as required by paragraph (i) of this section.
- v. The school property account number (SPAN) of the parcel where the harvest will occur.
- vi. The estimated date that the harvest will commence and the estimated date the harvest will be completed.
- vii. The estimated acreage of harvest area
- viii. Whether the harvest is associated with conversion of forest to another use?

(e) Harvest number. Upon receipt of a complete harvest notification, the Commissioner shall assign a unique harvest number to the harvest.

(f) Duration. The harvest number issued by the Commissioner shall be in effect for a limited duration as prescribed by the Commissioner after which, the notification will expire.

(g) Renewal. If a harvest operation, including closeout, will extend beyond the effective period of the harvest notification, prior to its expiration, a landowner shall renew a notification in a manner prescribed by the Commissioner.

(h) Amendments. The information provided by the landowner to satisfy the notification requirement may be amended or updated by the landowner at any time in a manner prescribed by the Commissioner.

(i) Posting. Harvest notification numbers shall remain visibly posted in a manner prescribed by the Commissioner until harvests are complete.

(j) Rulemaking. The Commissioner shall adopt rules to implement the provisions of this section.

Sec. 2 10 V.S.A. §8003 is amended to read:

§8003. Applicability

- (a) The Secretary may take action under this chapter to enforce the following statutes and rules, permits, assurances, or orders implementing the following statutes, and the Board may take such action with respect to subdivision (10) of this subsection:

(27) 10 V.S.A. chapter 123, relating to threatened and endangered species; ~~and~~

(28) 30 V.S.A. §255, relating to regional coordination to reduce greenhouse gases; ~~and~~ and

(29) 10 V.S.A. §2613, relating to harvest notification.

Appendix A

Potential Elements of an Administrative Rule on harvest notification

Definitions

Amendment: A notification amendment is the editing of submitted information for an effective notification. In addition to editing submitted information, an amendment may serve to renew a notification.

Authorized Representative: means a person, company or other entity who is authorized by the landowner, and for whom the State of Vermont has a record of legal authorization, to act on the landowner's behalf to carry out specified activities related to submission of documents required of the landowner by the State of Vermont.

Commencement of Harvest: A harvest has commenced when trees that will be moved from where they fall have been cut for any purpose.

Effective Period: the time during which a notification is in effect between the submission and expiration date of a notification.

Landing: An area of land to which logs or other forest products are transported from their point of harvest in the forest, for deposition, storage, sorting, processing or pickup for delivery to markets or other destinations.

Landowner: means a person, company, or other entity which holds title to land, including joint ownership or tenants in common. Where the ownership of the timber located on a parcel is different than the fee ownership of the land, the owners of the timber are deemed to be a landowner and are jointly and severally responsible with the fee landowner to comply with this rule. Where a corporate landowner is a wholly owned subsidiary of another corporation, both parent and subsidiary are deemed to be the same landowner

Logging Contractor: means a person, company, or other entity who harvests, or contracts to harvest, a forest product.

Harvest: is any activity in which trees are cut and moved from where they fall. A harvest includes all ongoing harvest activity accessed from an individual landing.

Harvest Area: means an area of forest land where a harvest has occurred, is occurring or is planned to occur, accessed from an individual landing.

Parcel: means a contiguous tract or plot of forest land owned by a landowner. Multiple contiguous tracts, plots or parcels of forest land owned by the same landowner are considered a single parcel. Contiguous tracts bisected by a public road or roadway are considered to be a single parcel. Tracts of land joined only at a single point are not contiguous.

Posting Location: Is the street address where the notification number and required information must be visibly posted and maintained. Where the landing is visible from a public road the posting location is the street address of the landing. Where the landing is accessed by a private road the posting location is both

the landing as well as the street address of the intersection of the public road and the private road accessing the harvest area.

Public Road or Roadway: means a “highway” as defined in 19 V.S.A. §1(12) or 19 V.S.A. §1(23) and does not include a “management road” as defined in 19 V.S.A. §1(13) or a “state forest highway” as defined in 19 V.S.A. §1(19)

Notification: A notification is the registration of a harvest with the Department of Forests, Parks and Recreation by a landowner.

Notification Number: Is the unique number applied to each notified harvest. The number will be the (SPAN# xxx-xx-xxxxx) HN (x). HN where x = the number of notifications for harvests on this SPAN#.

Notification Information Packet: Is the FPR commissioner approved packet of material designed to inform landowners about practices associated with a harvest that will protect the environment, maintain compliance with state law, and protect the landowner; to be provided to each landowner in digital or hardcopy form prior to the commencement of harvesting.

Renewal: A notification renewal is a 1 year extension of the effective period of a harvest notification.

Notification Mechanics

Exemption:

A harvest is exempt from the notification requirement if:

- (a) The entire harvested volume in one year is less than 60 cords or volume equivalent. 1 cord = .5 thousand board feet. 1 cord = 2.5 green tons.

Notification:

Harvest notification: The landowner or the landowner's authorized representative shall submit a harvest notification to FPR a minimum of 7 days prior to the initiation of a harvest. FPR shall assign a unique harvest number as part of the harvest notification.

- A notification expires 2 years after the scheduled start date of the harvest.
- A notification must remain in effect until closeout is complete and may be renewed or amended at any time.

Posting:

On any notified harvest the landowner shall post the harvest notification number provided by FPR at the posting location(s) associated with the subject harvest. The individual characters comprising the notification number at the posting location shall be at least one inch tall. FPR shall issue the harvest notification in digital format, or in paper format if requested, which if printed and weatherized on 8 ½ x 11" paper, shall satisfy this requirement.

Posting Location:

- (a) When the landing is visible from a public road, the notification number shall be posted and maintained in a conspicuous location at or near the principal landing(s) or yard(s) associated with the harvest.
- (b) Where the harvest is accessed by a private road system, in addition to posting of the notification number at the landing, an additional copy of the harvest notification should be posted in a conspicuous location at the nearest intersection of a public road and the private road accessing the harvest.
- (c) Notifications shall remain posted and maintained in a legible condition and visible location until both harvesting and closeout of the operation is complete.

Required Notification Information:

Landowners submitting a harvest notification must provide the following information using an online or hardcopy form:

- (a) The landowner's name, legal mailing address, physical address of their residence, email address and phone number.
- (b) The name of the primary logger or contractor conducting the logging and their legal mailing address, address of their principle place of business or residence, email address and phone number.
- (c) The name of the landowner's agent or consulting forester and their legal mailing address, address of their principle place of business or residence, email address and phone number.
- (d) The location(s) where the notification number will be visibly posted as required by this law.
- (e) The school property account number (SPAN) of the parcel where the harvest will occur.

- (f) The estimated date that the harvest will commence and the estimated date the harvest will be completed.
- (g) The estimated acreage of harvest area
- (h) Is the harvest associated with conversion of forest to another use?

A landowner amending or renewing a harvest notification must provide the following.

- (a) Approximate additional acreage of harvest, if applicable
- (b) Additional harvest posting location(s), if applicable
- (c) Amendment of any pertinent information.

A landowner amending their harvest notification may amend their harvest notification at any time by filing a hardcopy amendment form or accessing and editing their notification online. Any information provided on the original information may be amended.

Delivery of Assistance:

Landowners submitting a harvest notification will be provided with materials designed to inform them of:

- Guidance on working with a forester and logger
- Effective contract language
- General information on water, wildlife, and harvest economic considerations
- Access to recent stumpage reports (prices paid to landowners for their trees)
- Introduction to laws and regulations affecting harvests, and how to access them.
- Contact information for professionals that can help