This report summarizes statewide results of Vermont’s Acceptable Management Practices (AMPs) Monitoring Program from January 1 to December 31, 2016.

**Background**

The “Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont” first became effective on August 15, 1987 and were adopted under the authority of Chapter 47 of Title 10 of the Vermont Statutes Annotated, Water Pollution Control (10 V.S.A. §1259). Act No. 64 of the Acts of 2015 amended 10 V.S.A. §2622 to require the Commissioner of the Department of Forests, Parks and Recreation to revise by rule the AMPs. FPR amended the rule through the rulemaking process and the new rule was adopted on October 22, 2016.

The purpose of the acceptable management practices is to provide measures for loggers, foresters, and landowners to utilize, before, during, and after logging operations to comply with the Vermont Water Quality Standards and minimize the potential for a discharge from logging operations in Vermont in accordance with 10 V.S.A. §1259.

The AMPs apply to all logging operations in Vermont and must be implemented for all logging operations regardless of the purpose of the logging. For example, logging may be conducted for silvicultural or other forest management purposes or logging may be conducted as a precursor to some other type of land use such as commercial, residential, or electric utility development. In all situations the AMPs apply to the logging activity, whenever felling and moving of trees occurs, regardless of mode or purpose.

**What Constitutes AMP and Water Quality Violations?**

A water quality violation occurs when there is a discharge of waste to waters of the State as a result of activities associated with a logging operation. Sediment, petroleum products, woody
debris, logging slash, and other hazardous materials associated with logging are wastes under the Vermont water quality statutes, water quality regulations, and AMP regulations. If the AMPs are not correctly implemented and a discharge occurs, there is a violation of the AMPs and therefore a water quality violation. In such situations, penalties may be assessed for the water quality violation as well as the AMPs that are not implemented. If no discharge occurs, the logger or landowner cannot be fined or prosecuted for not implementing the AMPs. If the AMPs are correctly implemented, there is a presumption that the logging operation is in compliance with the State water quality statutes and the Vermont Water Quality Standards even if a discharge occurs as a result of logging. However, this presumption may be overcome if a water quality analysis demonstrates that there is a discharge of wastes into waters of the State due to logging, constituting a violation of 10 V.S.A. §1259 and the Water Quality Standards (Vermont Water Quality Standards Section 2-03B.1). Therefore, although implementation of the AMPs cannot guarantee that a discharge (and a water quality violation) will not occur, the AMPs define the best practices available to prevent discharges associated with logging operations. When correctly implemented, the AMPs provide a level of protection for the landowner and/or logger from enforcement of water quality violations.

**Memorandum of Understanding**

Since the adoption of the AMPs, the Department of Forests, Parks and Recreation (FPR) has worked with representatives from the Vermont forest industry to support the Department of Environmental Conservation (DEC) Environmental Compliance Division in an effort to reduce the number and severity of discharges resulting from logging operations. A Memorandum of Understanding (MOU) was renewed in 2010 between DEC Environmental Compliance Division and FPR and remains in effect. The MOU outlines a process to be followed that provides a consistent approach to remediation and enforcement of water quality violations associated with logging operations. According to the agreement, five AMP Technical Advisory Teams (TATs) assist loggers and landowners in complying with the AMPs and conduct site inspections to respond to complaints of potential AMP violations. These teams consist of an FPR forester and a DEC Environmental Enforcement Officer, when deemed necessary. A representative of the Vermont forest industry, depending on his/her availability, may also be involved in conducting site inspections.
**AMP Site Investigations and Assistance Provided**

During 2016, AMP foresters conducted site investigations on 31 logging operations. Upon investigation, 18 of these cases either displayed an on-going discharge or exhibited evidence that a discharge had recently occurred as a result of logging. Appropriate AMPs were prescribed and immediately implemented to stop discharges to State waters and/or the logging operation was closed out to the satisfaction of the State. Enforcement and assessment of penalty were not pursued in these 16 of the 18 cases on the grounds that (1) voluntary compliance was successful, (2) the site investigation did not reveal that there was substantial failure to comply with the AMPs, and (3) the logger did not have a history of non-compliance with the AMPs in combination with discharges to State waters. The remaining 13 cases revealed no active discharge or recent evidence thereof as a result of logging.

**Department of Environmental Conservation Environmental Compliance Division**

Two cases were referred to the Environmental Compliance Division for enforcement and assessment of penalty in 2015. Both cases involve the same logging contractor and forester and are pending enforcement action.

**Requests for Technical Assistance**

There were 11 requests for technical assistance during 2016. Requests for technical assistance generally entail an AMP forester meeting with a logger at the logger’s request. The meeting is generally held on-site before a logging operation begins to provide recommendations to protect water quality and control soil erosion during and after the operation. Most assists deal specifically with stream crossings.

**Conclusions**

There continues to be a high level of cooperation between loggers and forest landowners to comply with Vermont’s Water Quality Statutes by implementing AMPs. The number of AMP cases reported and investigated has remained fairly consistent over time with no apparent upward or downward trend. The Vermont forest industry actively supports the AMP Program. The MOU between FPR and DEC Environmental Compliance Division has been an effective guide
to refer to when investigating AMP cases. The number of AMP cases referred to the DEC Environmental Compliance Division remains low in comparison to the total number of water quality cases investigated. Vermont loggers are encouraged to continue participating in AMP workshops hosted by the Logger Education to Advance Professionalism (LEAP) Program and FPR’s Watershed Forestry Program.

cc:  Michael Snyder          Cathy Kashanski
     Steven Sinclair         Kim Greenwood
     AMP Foresters           Sean McVeigh
     Forestry District Managers  Bill Sayre
     Meghan Purvee           Randy Miller
     DEC Enforcement Officers  Colleen Goodridge
     DEC Basin Planners      Mike Kline
     Darcie Johnston         Neil Kamman
     Shannon Morrison        Thea Schwartz
     Laura Lapierre
     Rick Hopkins
     Kathleen Wanner
     Jim Kellogg
## 2016 SUMMARY OF AMP

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<tr>
<th></th>
<th>District 1</th>
<th>District 2</th>
<th>District 3</th>
<th>District 4</th>
<th>District 5</th>
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<td>Number of Cases With No Evidence of Discharge</td>
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<td>Total Number of Cases Investigated**</td>
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<td>2</td>
<td>9</td>
<td>7</td>
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</table>

*Resolved either by the AMPs’ being implemented or the operation closed out to the satisfaction of the State.

**This figure is the sum of “Number of Cases With Evidence of Discharge” and “Number of Cases With No Evidence of Discharge”.

Total number of AMP activities in 2016 (Tech assists plus complaints) = 42
State of Vermont
River Basins

2. Poultney, Mettawee
3. Otter Creek, Little Otter Creek, Lewis Creek
4. Southern Lake Champlain
5. Northern Lake Champlain
6. Missisquoi
7. Lamoille
8. Winooski
9. White
10. Ottauquechee, Black, CT Direct
11. West, Williams, Saxtons, CT Direct
12. Deerfield, CT Direct
13. Stevens, Wells, Waits, Ompompanoosuc, CT Direct
14. Passumpsic
15. Upper Connecticut
16. Lake Memphremagog

Vermont Department of
Forests, Parks & Recreation