

**House Natural Resources, Fish, and Wildlife Committee
Act 250 Committee Bill Testimony - Agricultural Practices in River Corridors
February 7, 2019**

Good Afternoon Chairwoman Sheldon and Committee Members,

My name is Rob Evans, I manage the River Corridor & Floodplain Protection Program in the Agency of Natural Resources.

Our program supports multiple jurisdictions that regulate development in Flood Hazard Areas and River Corridors, including municipal permitting, Act 250, the State Flood Hazard Area & River Corridor Rule.

My prepared testimony will 1) give you a brief overview of the areas regulated, and 2) discuss current authority for regulating agricultural practices in river corridors.

Areas Regulated

The Flood Hazard Area is the regulatory zone mapped by the Federal Emergency Management Agency and is the basis of the National Flood Insurance Program. The Flood Hazard Area depicts areas that would be inundated by the “100-year” flood (more accurately, the 1 % annual chance flood). Development in mapped flood hazard areas is regulated by 90% of the Vermont’s communities enrolled in the National Flood Insurance Program typically through zoning regulations. In addition, the Flood Hazard Area is regulated through Act 250 under Criterion 1D, floodways, as well as the State Flood Hazard Area & River Corridor Rule.

Municipalities and the State are required to regulate Flood Hazard Areas in order to maintain access to federal flood insurance and hazard mitigation grants.

The shortcoming of the Flood Hazard Area is that it does not account for the fact that rivers are dynamic and change location in the river valley over time. Specifically, Flood Hazard Areas do not account for flood related erosion, which is Vermont’s primary mode of damage. Moreover, 80% of Vermont’s rivers and streams do not have a mapped Flood Hazard Area.

River Corridors are mapped by the Agency of Natural Resources and depict the space a river needs over time to accommodate erosion and depositional processes. River Corridors are an important planning and regulatory tool to avoid putting new investments in hazardous places and avoid the need to further channelize our rivers to protect those investments.

43 communities have voluntarily adopted River Corridor regulations. In addition, the State of Vermont regulates River Corridors through Act 250 and the Flood Hazard Area and River Corridor Rule.

[Before moving on, any questions on main differences between Flood Hazard Areas and River Corridors?]

Regulation of land-based agricultural practices in river corridors

The Flood Hazard Area & River Corridor Rule went into effect in March of 2015. The Rule regulates activities that are exempt from municipal regulation, which includes, state owned and operated institutions and facilities, required agricultural and forestry practices, and power generation /transmission facilities subject to the Public Utility Commission process.

The Flood Hazard Area and River Corridor General Permit allows farming as a *non-reporting* activity, when such activities do not involve the placement of structures or other above ground improvements, or earthwork that permanently alters ground elevations (e.g. fill, retaining, walls, berms, and terraces).

Required Agricultural Practices in Flood Hazard Areas need to meet a No Adverse Impact standard to ensure development does not increase flood elevations, velocities, or decrease flood storage volume. In addition, development needs to meet floodplain management standards (such as elevation, floodproofing, and anchoring requirements).

Required Agricultural Practices in River Corridors need to meet a No Adverse Impact Standard as well. Specifically, development cannot increase fluvial erosion hazards by creating a need to channelize or further channelize the river. River channelization, typically in the form of streambank armoring, may increase river instability, which exacerbates erosion hazards and sediment loading to receiving waters.

Similar to designated centers, the Rule contains provisions that allow for river corridor infill and redevelopment within the Farm Production Area, so long as it is not any closer to the river than pre-existing development.

Lastly, the definitions and regulatory standards in the Flood Hazard Area & River Corridor Rule align with standards in our Agency procedure for making determinations and recommendations under Act 250 Criterion 1D-Floodways. Unfortunately, the Act 250 Criterion 1D definitions and standards in statute are antiquated and do not align with current practice, which makes it very confusing for the regulated community and leads to inefficiency in the overall permitting process (see addendum: *Rationale and Policy Support for Revisions to Act 250 Criterion 1(D)*). The committee bill, as currently drafted, modernizes the terms and standards and brings them into alignment with current practice.

Good Afternoon, my name is Mike Kline, I manage the Rivers Program in the Agency of Natural Resources.

Agriculture-related Stream Alterations governed by Stream Alteration Rule

River Management Engineers interact with the agricultural community regulating the following instream and river corridor activities:

Berms shall not be established or constructed in a flood hazard area or river corridor unless authorized as an emergency protective measure to prevent an imminent threat to public safety.

Removal of up to 50 cubic yards of gravel per year: Is exempt from ANR permitting when the removal is from that portion of a watercourse running through or bordering on the owner's property, with at least a 72 hours-notice to the ANR River Management Engineer, prior to the removal of ten cubic yards, or more. The material removed shall be above the waterline and utilized outside of mapped flood hazard areas or river corridor. The material shall be removed only for the owner's use on the owner's property.

Streambank stabilization: Is exempt from ANR permitting when it is an approved U.S. Department of Agriculture Natural Resource Conservation Service streambank stabilization project or a streambank stabilization project approved by the Secretary of Agriculture, Food and Markets that is consistent with policies adopted by the Secretary of Natural Resources to reduce fluvial erosion hazards.

Construction of at-grade fords is a non-reporting general permit authorization when constructed perpendicular to the stream channel; properly stabilized with clean stone fill; and does not change in existing channel cross-section and bed elevation except for minor bank grading at the point of the crossing.

Maintenance of existing channelized small streams through agricultural fields less than 0.5 square miles of watershed size, is a non-reporting GP activity provided:

- a) The maintenance work is conducted in a manner which minimizes or avoids turbidity associated with the activity;
- b) vegetated buffers required under the Required Agricultural Practices (RAPs), Medium or Large Farm Operation Permits, and/or other applicable rules or permits are maintained;
- c) Erosional channels are appropriately stabilized with vegetative or structural treatments;
- d) Sediments excavated to maintain channel capacity are disposed of outside of mapped floodplains or river corridors;
- e) The work does not result in existing surface waters being converted to subsurface flows; and
- f) Project improvements that move toward attainment of the Equilibrium and Connectivity Performance Standards implemented wherever feasible.

Repair of existing and construction new or replacement bridges and culverts are authorized under the general permit when designed and constructed to meet standards for span length, opening heights, channel alignment, and (in the case of culverts) structure embeddedness to achieve equilibrium and connectivity performance standards.