

Administrative Procedures – Environmental Impact Analysis

Instructions:

In completing the environmental impact analysis, an agency analyzes and evaluates the anticipated environmental impacts (positive or negative) to be expected from adoption of the rule; compares alternatives to adopting the rule; explains the sufficiency of the environmental impact analysis.

Examples of Environmental Impacts include but are not limited to:

- Impacts on the emission of greenhouse gases
- Impacts on the discharge of pollutants to water
- Impacts on the arability of land
- Impacts on the climate
- Impacts on the flow of water
- Impacts on recreation
- Or other environmental impacts

1. TITLE OF RULE FILING:

Vermont Wetland Rules

2. ADOPTING AGENCY:

Agency of Natural Resources

3. GREENHOUSE GAS: *EXPLAIN HOW THE RULE IMPACTS THE EMISSION OF GREENHOUSE GASES (E.G. TRANSPORTATION OF PEOPLE OR GOODS; BUILDING INFRASTRUCTURE; LAND USE AND DEVELOPMENT, WASTE GENERATION, ETC.):*

The proposed rule change prevents the construction of new roads within the Class I wetland unless the road is necessary to meet a compelling public need to protect health and safety. This restriction may prevent the construction of roads that would otherwise reduce travel times by cutting through wetlands.

4. WATER: *EXPLAIN HOW THE RULE IMPACTS WATER (E.G. DISCHARGE / ELIMINATION OF POLLUTION INTO VERMONT WATERS, THE FLOW OF WATER IN THE STATE, WATER QUALITY ETC.):*

It is assumed that the Beaver Meadows Wetland provides high quality water to both Middlebury and New Haven Rivers based on in-stream water sampling, by Addison County River Watch Collaborative, for E. coli, turbidity and Phosphorous levels, lower in each watershed (Data

for 2014 and 2015). The northern part of the wetland drains into New Haven River, which is listed as Class A watershed. The New Haven and Middlebury Rivers are considered stressed (not impaired) waters in the lower watershed. The slow release of water during times of drought also helps to protect downstream waters and aquatic biota. This headwater wetland provides critical flood storage through natural damming, and absorption and slow release of rain and snowmelt.

5. **LAND: EXPLAIN HOW THE RULE IMPACTS LAND (E.G. IMPACTS ON FORESTRY, AGRICULTURE ETC.):**

The proposed rule will maintain and protect the existing functional wetland complex, and promote the ecological systems that wetland supports. The proposed reclassification will prevent additional development in the Class I wetland. The Class I designation will allow all existing structures to remain in place, and to be maintained. Forestry and silviculture activities may occur in the Class I wetland as long as they are conducted in accordance with a plan approved by the Commissioner of Forests, Parks, and Recreation. The Rule will prevent the conversion of any protected wetland into farmland. The protected wetland complexes may provide carbon sequestration.

6. **RECREATION: EXPLAIN HOW THE RULE IMPACT RECREATION IN THE STATE:**

The Beaver Meadows wetland complex is remote but has reasonable access for recreation; the Bristol Recreational Department lists the Beaver Meadows trails as an easy hike. the Town of Ripton has identified this wetland complex in their 2015 Town Plan under the Natural Historic, Scenic and Recreational Resources chapter on pages 19 and 34. In summary, the Town plan references the 2006 GMNF Forest Plan and the complex designated as an Ecological Special Area and therefore the management by the Service will be towards its protection of its geological, botanical, zoological and ecological values and opportunities for public use and interpretation. Fishing, Hunting and trapping activities occur in or around the wetland; the wetland provides habitat for species that are hunted and trapped, including beaver, moose, bear, mink. Wild rice has been documented within the wetland by the VT

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Natural Heritage Inventory Program which could be harvested, although no documents of harvesting by people have been found. The Class I designation would ensure that these recreational uses may continue for future generations.

7. CLIMATE: *EXPLAIN HOW THE RULE IMPACTS THE CLIMATE IN THE STATE:*

The rule change is not expected to have any direct effect on climate in the state, but the thick layer of peat and living vegetation in the wetland complex provides long-term carbon storage, playing an important role in mitigating climate change. By designating the wetland complex as Class I and providing the highest level of protection, there is greater assurance that the peat layer will remain intact, preventing the release of additional carbon into the atmosphere.

8. OTHER: *EXPLAIN HOW THE RULE IMPACT OTHER ASPECTS OF VERMONT'S ENVIRONMENT:*

The Beaver Meadows wetland complex contains several exceptional wetland community types, including dwarf shrub bog and black spruce woodland bog, which are both uncommon and slow-forming community types. It provides a diversity of habitat types, rare, threatened, and endangered species habitat, fish habitat including critical northern pike spawning grounds, and habitat that supports numerous wetland dependent species. The wetland complex also represents an undisturbed landscape and provides connectivity to the greater Green Mountain National Forest habitat blocks. The proposed Class I designation is a critical step towards protecting the irreplaceable functionality provided by this unique wetland complex.

9. SUFFICIENCY: *EXPLAIN THE SUFFICIENCY OF THIS ENVIRONMENTAL IMPACT ANALYSIS.*

All potential environmental impacts resulting from the proposed rule change have been considered.