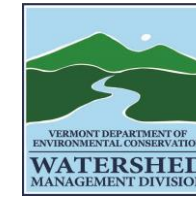


Functions & Values of Wetlands



As much as **90%** of sediments in water may be removed by the filtration by natural wetlands.

80% of US bird species rely on wetlands for breeding habitat

43% of rare species in the U.S. rely on wetlands for survival.

Wetlands host **31%** of the world's plants



Wetlands Every Year:

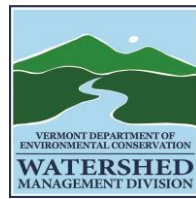
Save Middlebury at least **\$126,000** from potential flood damages



\$590 in flood protection and habitat services with just one acre



\$10 million is generated nationwide from bird photography and observation



Wetland Status and Trends

35% loss of VT wetlands before 1980. Equivalent to the size of Grand Isle County.

Just 4% of VT is wetland

39% of remaining wetland in Vermont is in conserved land.

0.2% decline in vegetated freshwater wetlands between 2004-2009.



How are our Remaining Wetlands Doing?

Nationally, 48% are in good biological condition, 32% in poor condition.

Generally, there is a higher frequency of good condition wetlands in the Green Mountains and Northeast Kingdom.

Leading problems for remaining wetlands are surface hardening, vegetation removal, ditching, & non-native plants

Fostering our remaining wetlands and restoring those historically lost improves water quality and flooding issues.

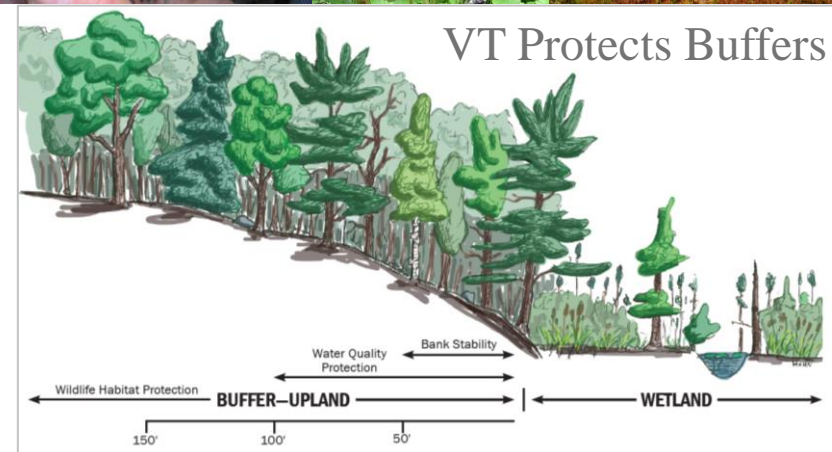
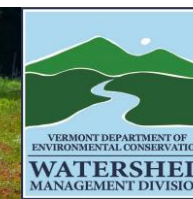


Wetland boundary identification is a science.

Wet Soils

Water-Loving Plants

Signs of Water

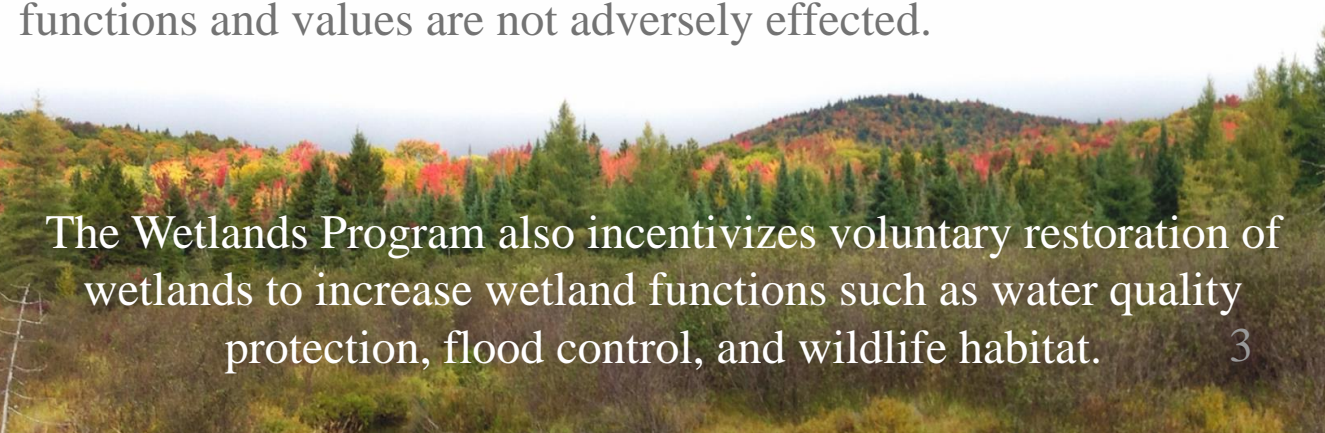


Vermont Wetland Rules regulate activities in protected wetlands

VT Wetland Classification System:
 Class I: Exceptional function and value
 Class II: Significant function and value
 Class III: Not significant, no regulation

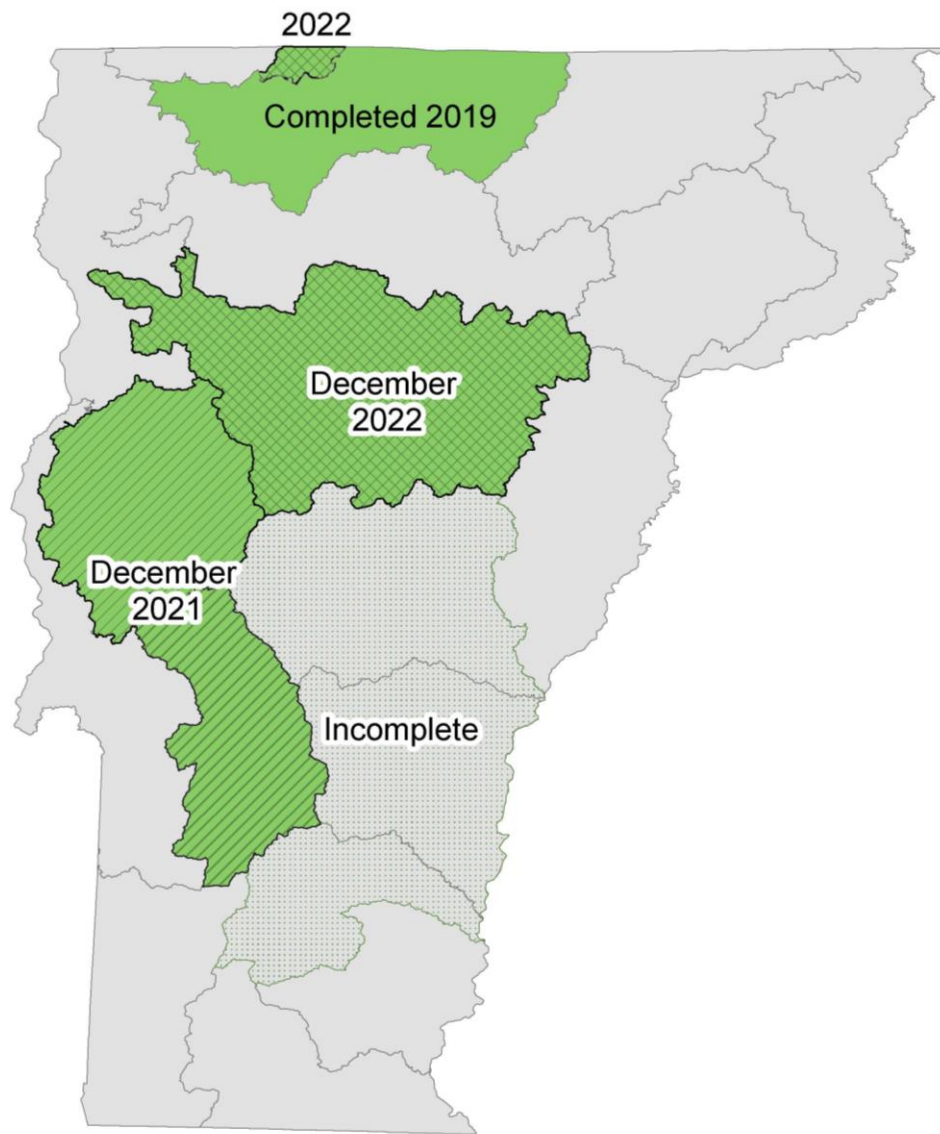
6 Review Staff
 100+ Permits
 >800 Projects Reviewed

Permits are issued when an activity cannot be placed elsewhere and functions and values are not adversely effected.

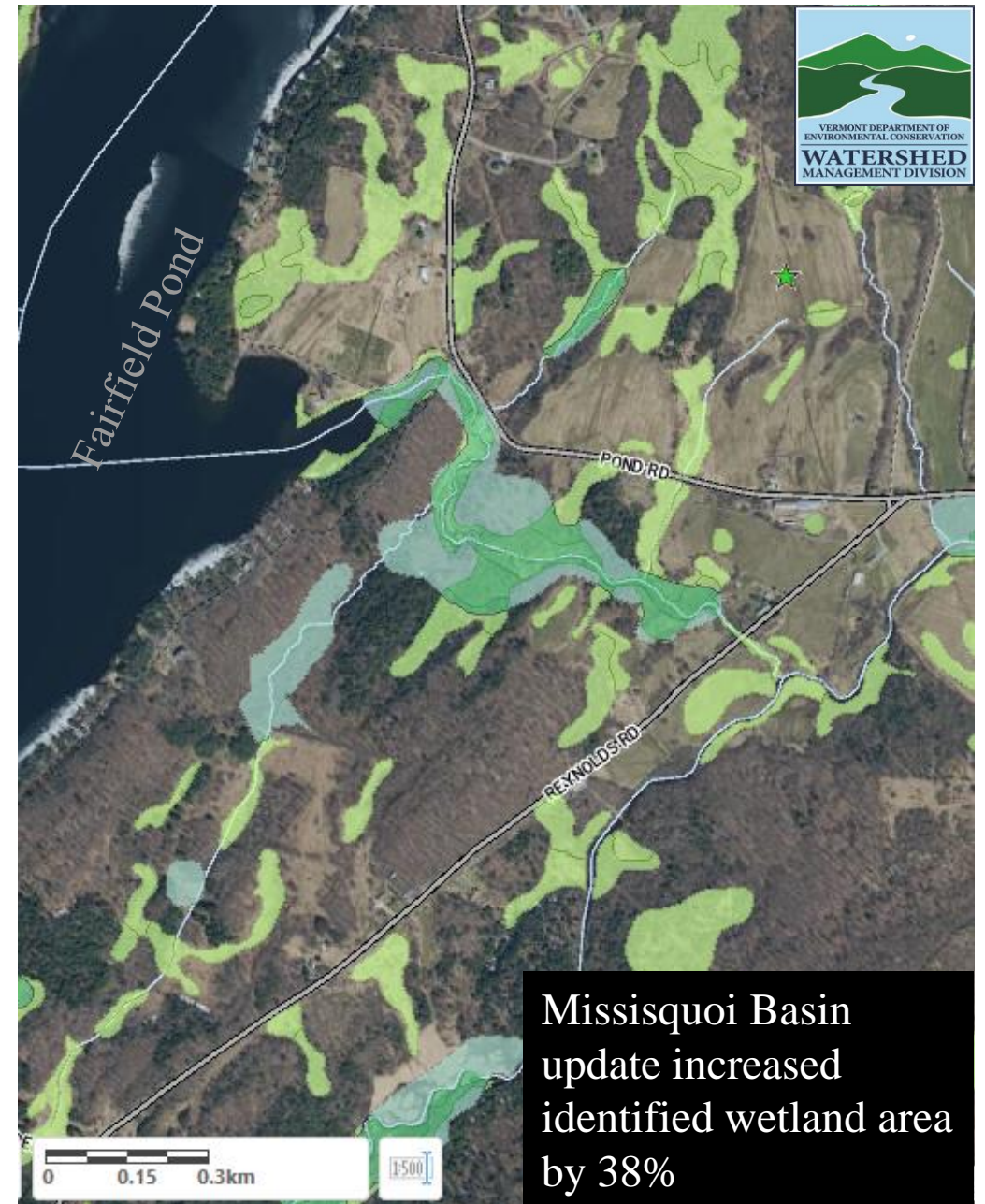


The Wetlands Program also incentivizes voluntary restoration of wetlands to increase wetland functions such as water quality protection, flood control, and wildlife habitat.

Wetland Mapping



Nearly 30% of State's National Wetland Inventory Maps Will Be Updated by 2023



Missisquoi Basin update increased identified wetland area by 38%

Wetland Rules Explain Limitations of Maps:

The Vermont Significant Wetland Inventory (VSWI) maps denote the approximate location and configuration of significant wetlands. The actual boundaries of wetlands shown on the VSWI maps shall be determined in the field in accordance with the methodology provided for in Section 3.2(a)