

Atlas Timberlands and short winters: Stuck between a river and hard place



Robert Turner

R J Turner Company, Bristol, VT

David McMath

Vermont Land Trust, Montpelier, VT

Atlas Timberlands Partnership

- 26,000 acres purchased in 1998 by Vermont Land Trust and Vermont Nature Conservancy from the Atlas Plywood Corporation. Includes 23 tracts of land in 17 towns in north central Vermont.
- These lands provided an opportunity for the partnership to explore the challenges associated with managing large tracts of timberland while balancing the ecological, economic and social values associated with the management choices



History

Long history of harvesting –
former industrial lands most
of the high value timber
harvested

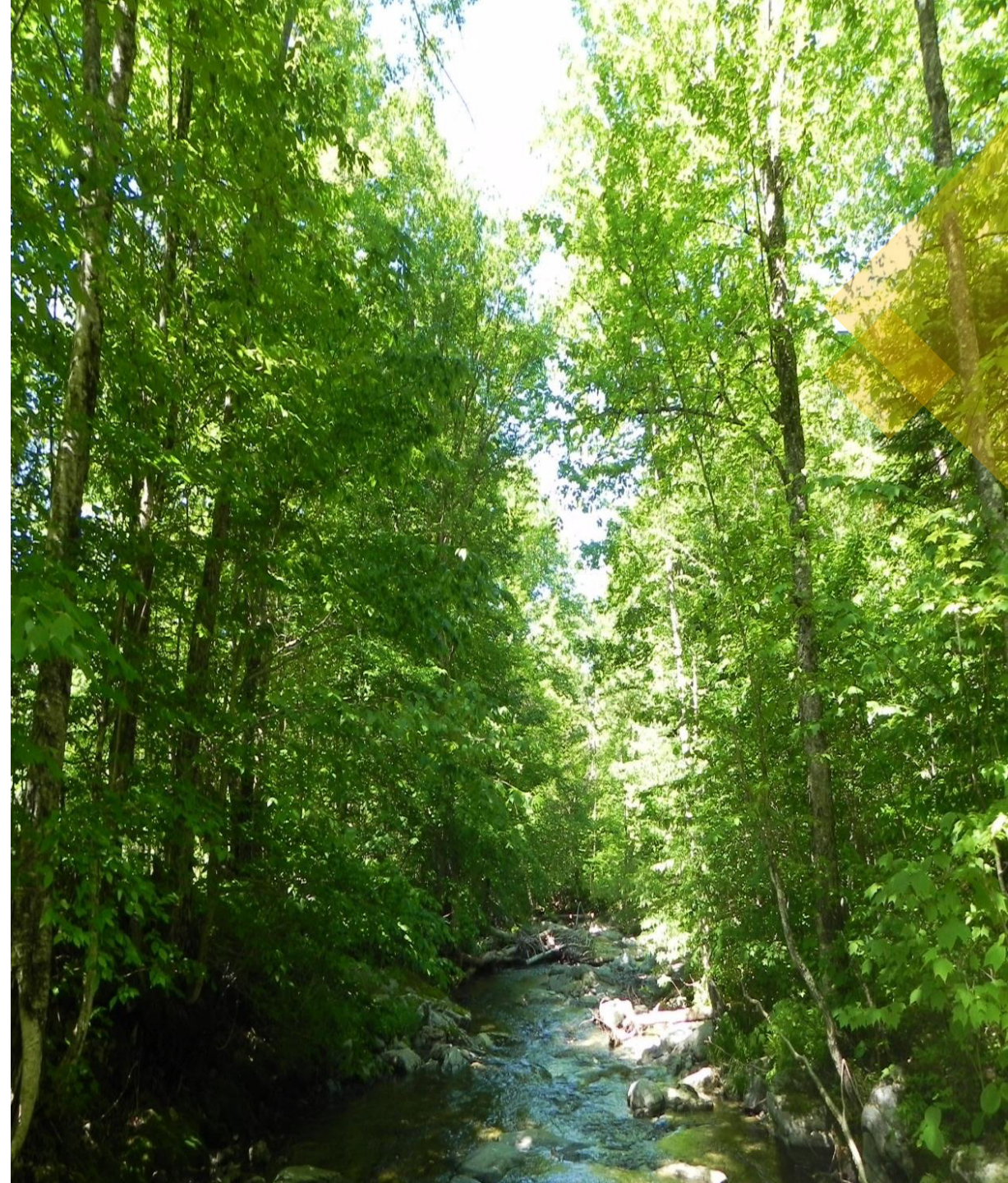
History

- Stocking at purchase: 17 – 22 cds per acre over 50% pulp and low grade sawlogs
- Generally Marlow, Lyman-marlow, Peru soils. Glacial till, shallow to bedrock or hardpan, moderate/steep slopes.
- Ailing infrastructure and long skid distance
- FSC certified 2003



Atlas Timberlands Management

- Follow AMPs/BMPs for water quality
- Increase coarse woody material
- Increase tree species diversity
- Increase forest structural diversity
- Ensure adequate seedling regeneration
- Control invasives
- Minimize roads & trails





Philosophical Change

Switch from Fixing to Preventing

Operational challenges and changes

- Harvesting equipment: Cable skidders to Cut-to-Length
- Dozers to Excavators.





Operational challenges and changes

- Snow crossings to bridge panels

Operational challenges and changes

- Portable truck and skidder bridges
- Winter haul roads to year round haul roads
- Post harvest closeout to pre-harvest closeout



Financial Impacts of Summer vs. Winter Logging



Temperature

- Higher summer temperatures
- Higher winter temperatures
- Longer growing seasons



Precipitation

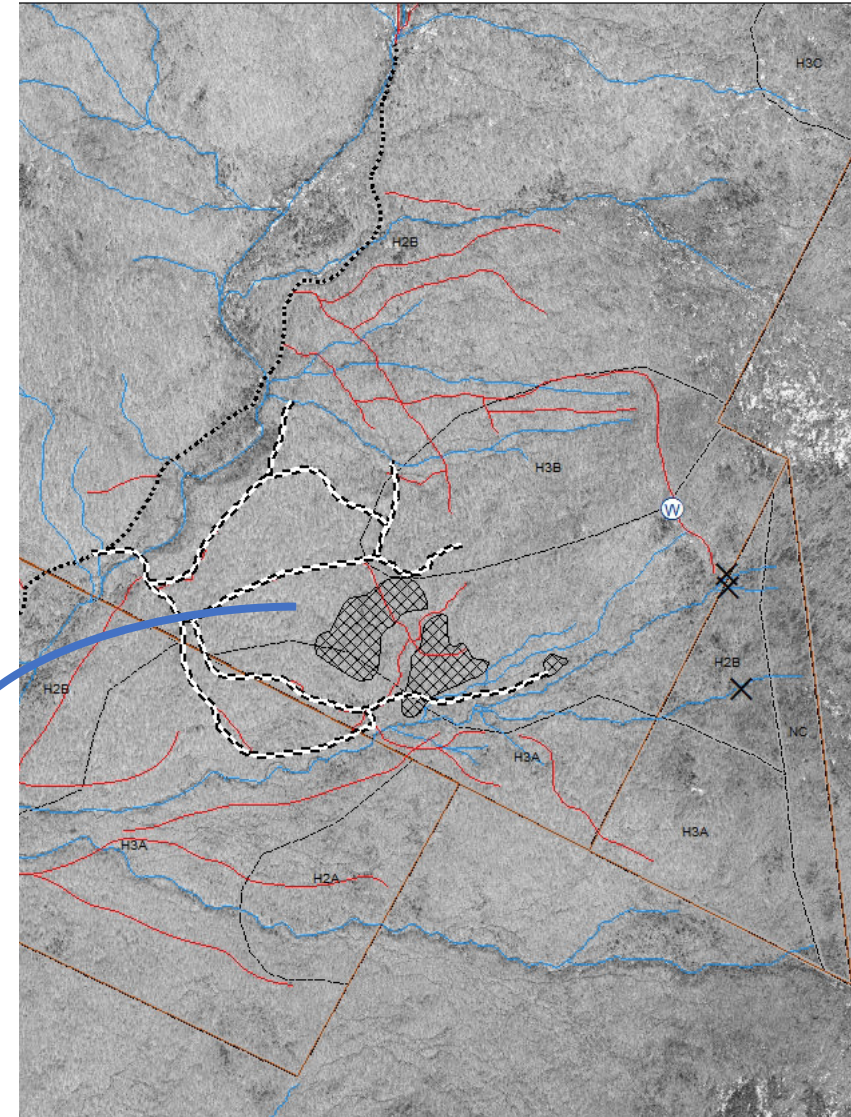
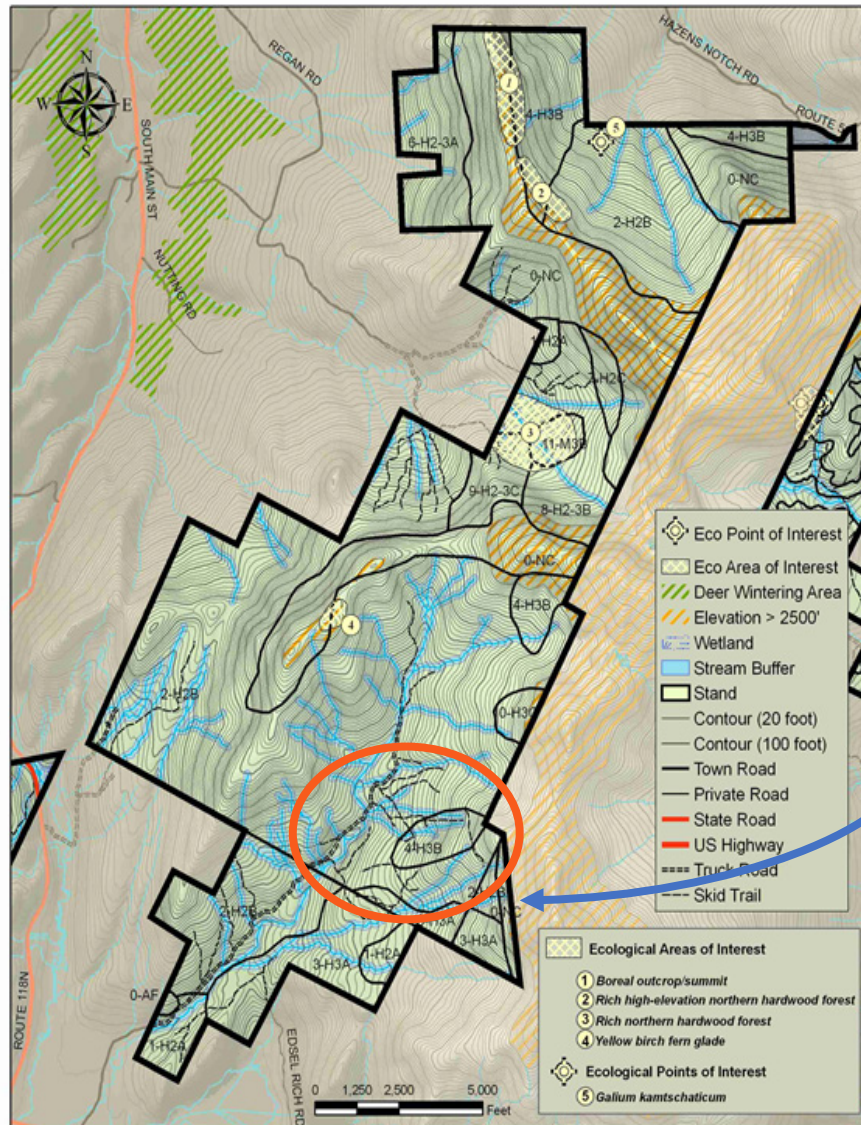
- Short-term Droughts
- Heavy precipitation
- Heavy snow pack



Extreme Events

- Wind storms
- Ice storms
- Hail

Atlas Timberlands



Road Costs---Winter

Task	Cost estimate	Notes
<u>Lower Truck Road</u>		
Fill/elevate—500' along wetland	\$4,500.	Material from ATP pit
Armor ditches	\$1,000.	
Stone 2 crossovers	\$1,000.	Shot rock
<u>Upper Truck Road</u>		
Cut back brush/trees	\$1,500.	
Ditching, stumping, widening	\$3,000.	
Replace culverts (3)	\$2,000.	
Stone crossover (1)	\$ 500.	
<u>Misc.</u>		
Skid road construction (main)	\$500.	
Plowing	\$500.	
TOTAL (Winter)	\$14,500.	

Atlas Timberlands





Road Costs--Summer

Task	Cost estimate	Notes
<u>Lower Truck Road</u>		
Fill/elevate—500' along wetland	\$4,500.	Material from ATP pit
Armor ditches	\$1,000.	
Stone 2 crossovers	\$1,000.	Shot rock
<u>Upper Truck Road</u>		
Cut back brush/trees	\$1,500.	
Ditching, stumping, widening	\$3,000.	
Replace culverts (3)	\$2,000.	
Stone crossover (1)	\$ 500.	

<u>Harvest Area</u>		
Portable skidder bridge	\$5,500.	Custom: steel, welding
Bridge abutments	\$1,000.	Concrete block
Decking	\$1,500.	Re-use, if possible
Installation	\$1,500.	
Job layout time (additional)	\$2,500.	
<u>Misc.</u>		
Skid road construction (main)	\$5,000.	
Pre-harvest waterbars	\$3,000.	
TOTAL (Summer)	\$33,500.	



Atlas Timberlands

Atlas Timberlands





| END