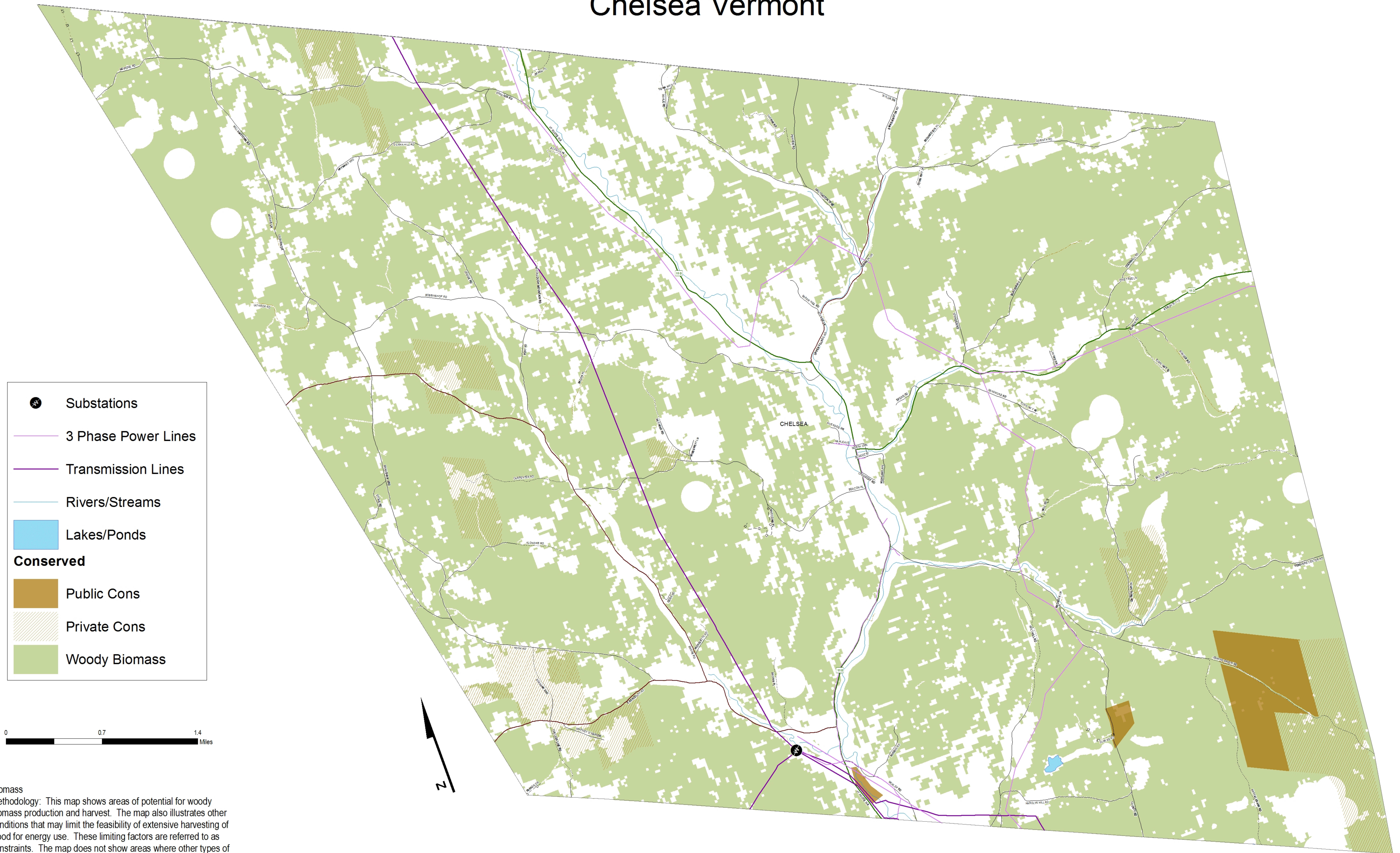


# BIOMASS ENERGY POTENTIAL

This map was created as part of a Regional Energy Planning Initiative.

## Chelsea Vermont



- Substations
- 3 Phase Power Lines
- Transmission Lines
- Rivers/Streams
- Lakes/Ponds
- Conserved**
- Public Cons
- ▨ Private Cons
- Woody Biomass

**Biomass**  
Methodology: This map shows areas of potential for woody biomass production and harvest. The map also illustrates other conditions that may limit the feasibility of extensive harvesting of wood for energy use. These limiting factors are referred to as constraints. The map does not show areas where other types of biomass, such as biomass from grasses or agricultural residue, could be grown/harvested.

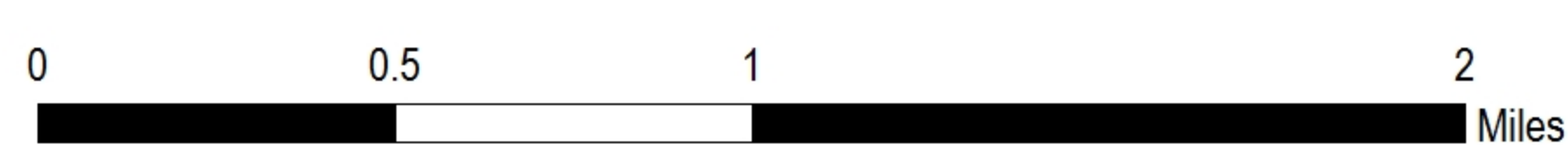
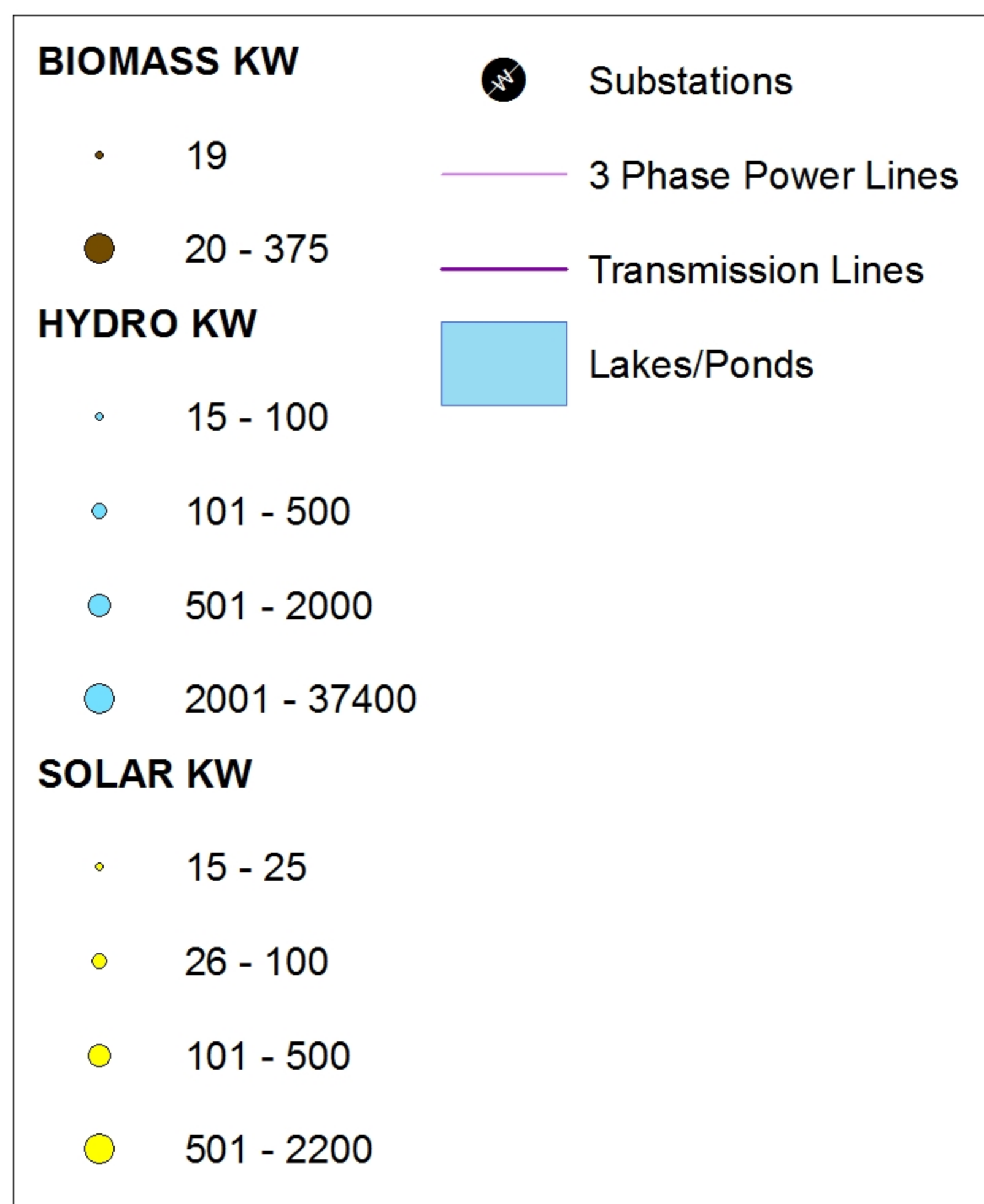
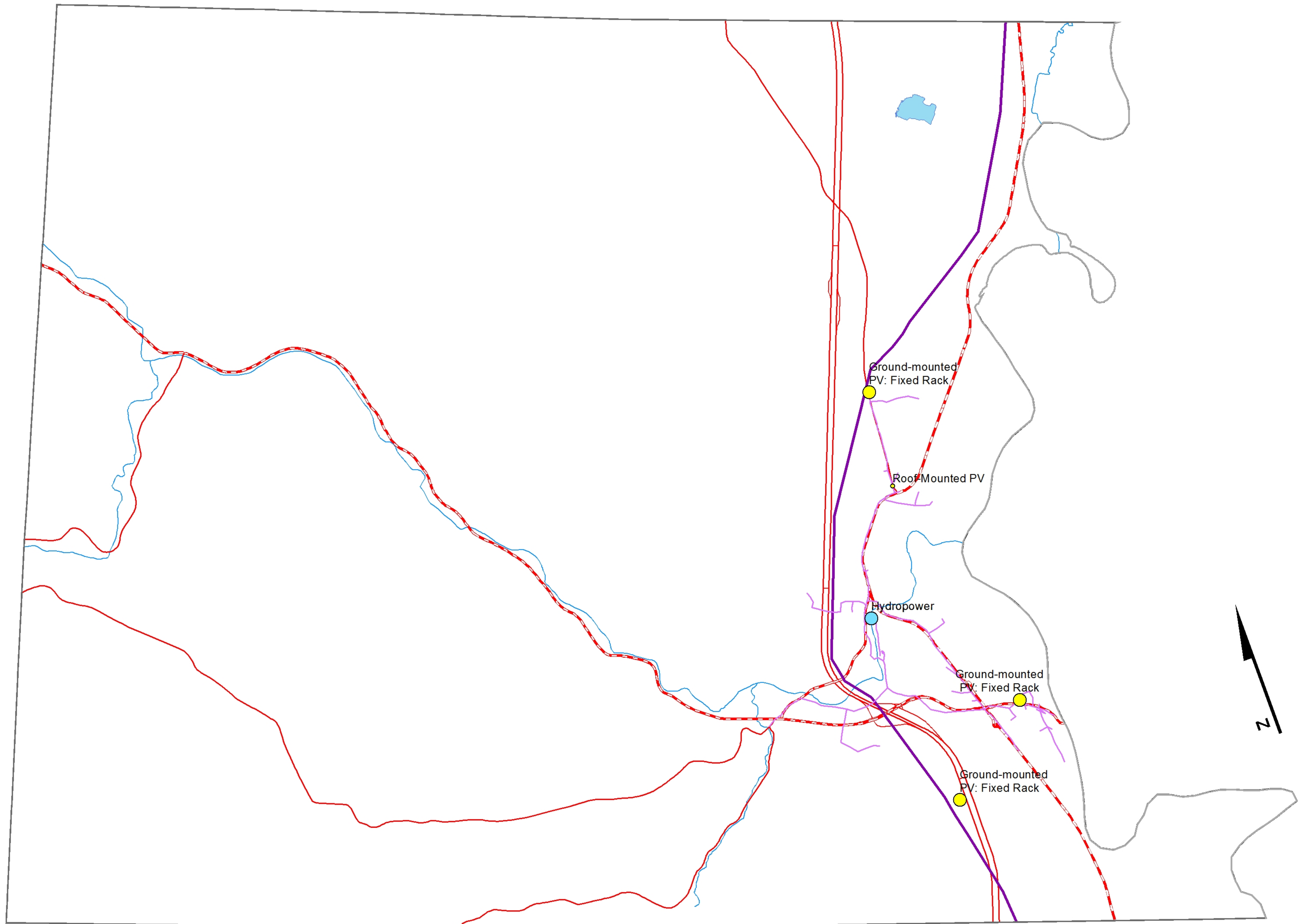
**Constraints:** Physical features or resources that make extensive harvesting infeasible are considered Level 1 constraints. Level 1 constraints include: FEMA floodways, river corridors, federal wilderness areas, rare and irreplaceable natural areas (RINAs), vernal pools, and class 1 and 2 wetlands. These areas have been removed and are not shown in any way on this map.



# EXISTING ENERGY GENERATION

This map was created as part of a Regional Energy Planning Initiative being conducted by the Two Rivers-Ottawaquechee Regional Commission, and the Vermont Public Service Department.

## Bradford Vermont

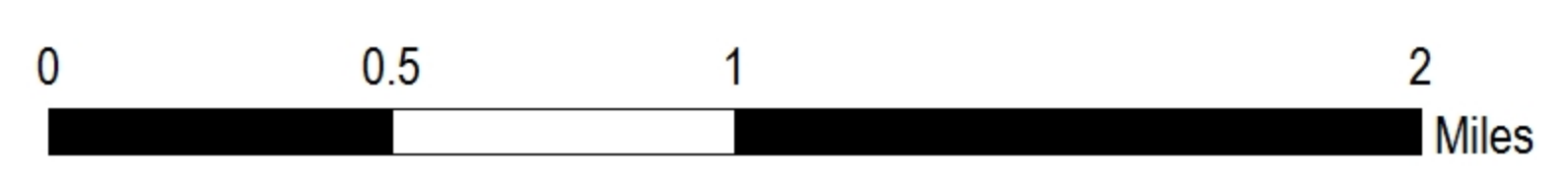
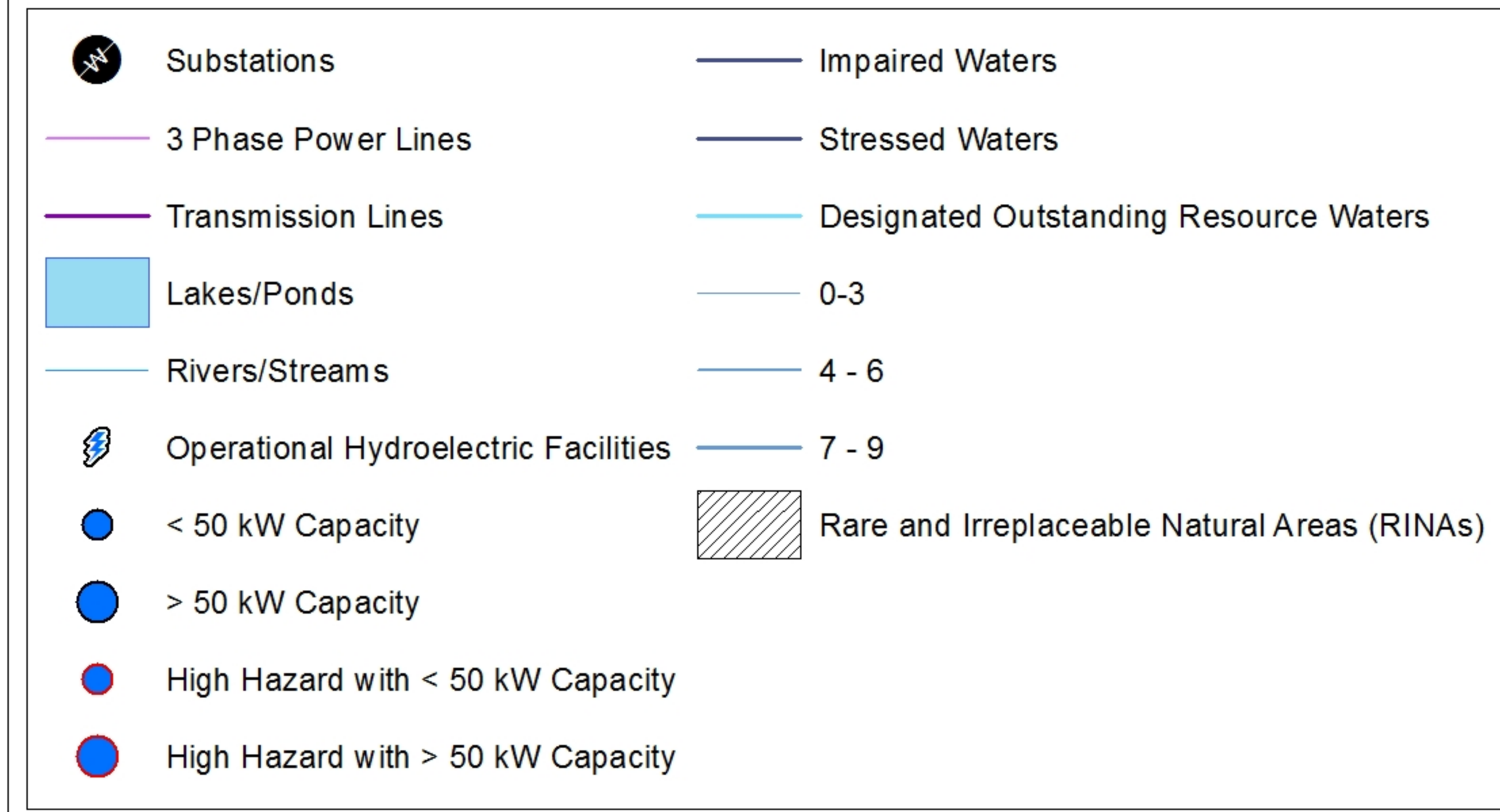
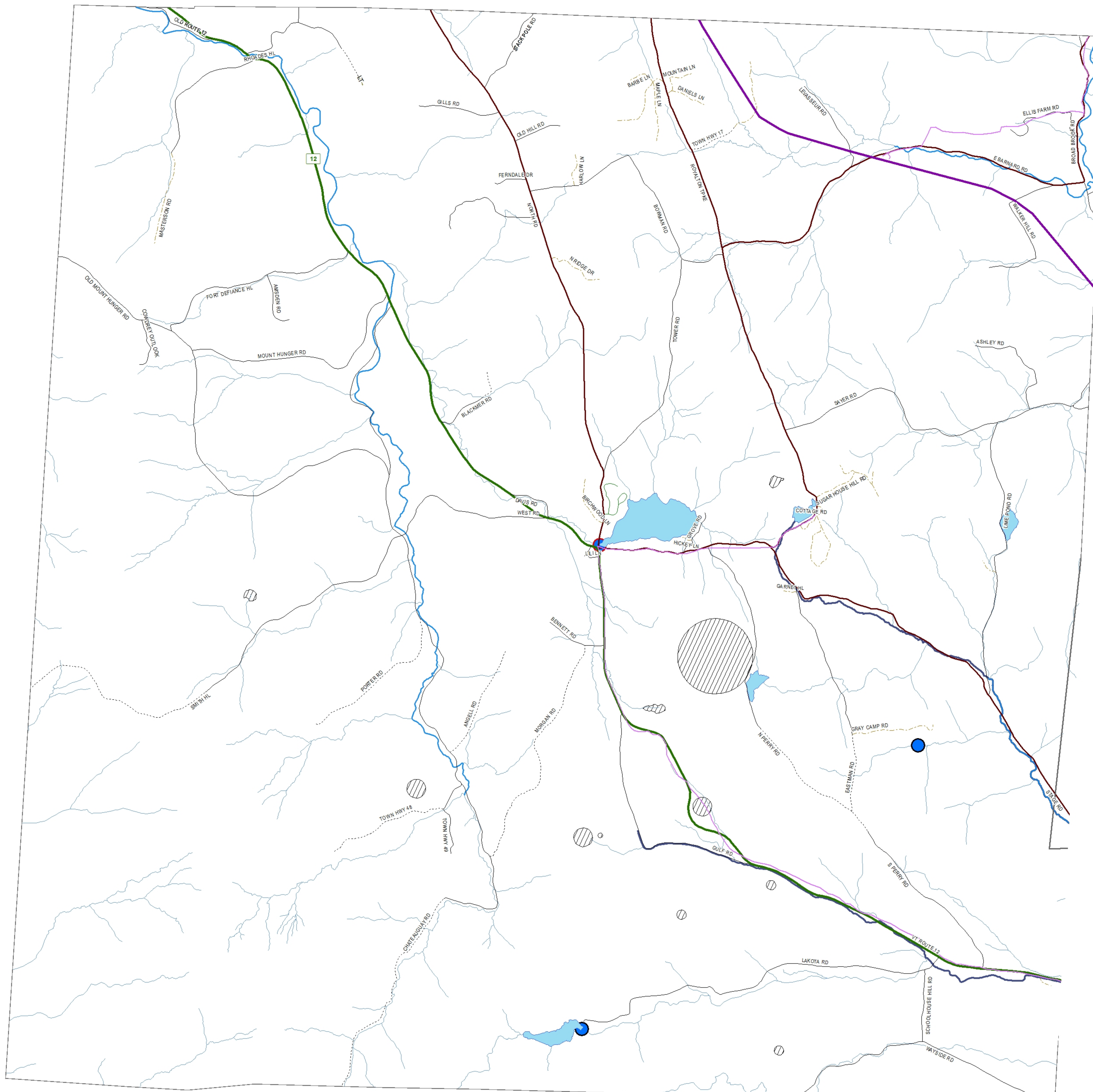




# HYDROELECTRIC ENERGY POTENTIAL

This map was created as part of a Regional Energy Planning Initiative.

## Barnard Vermont



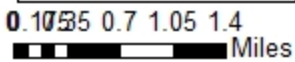
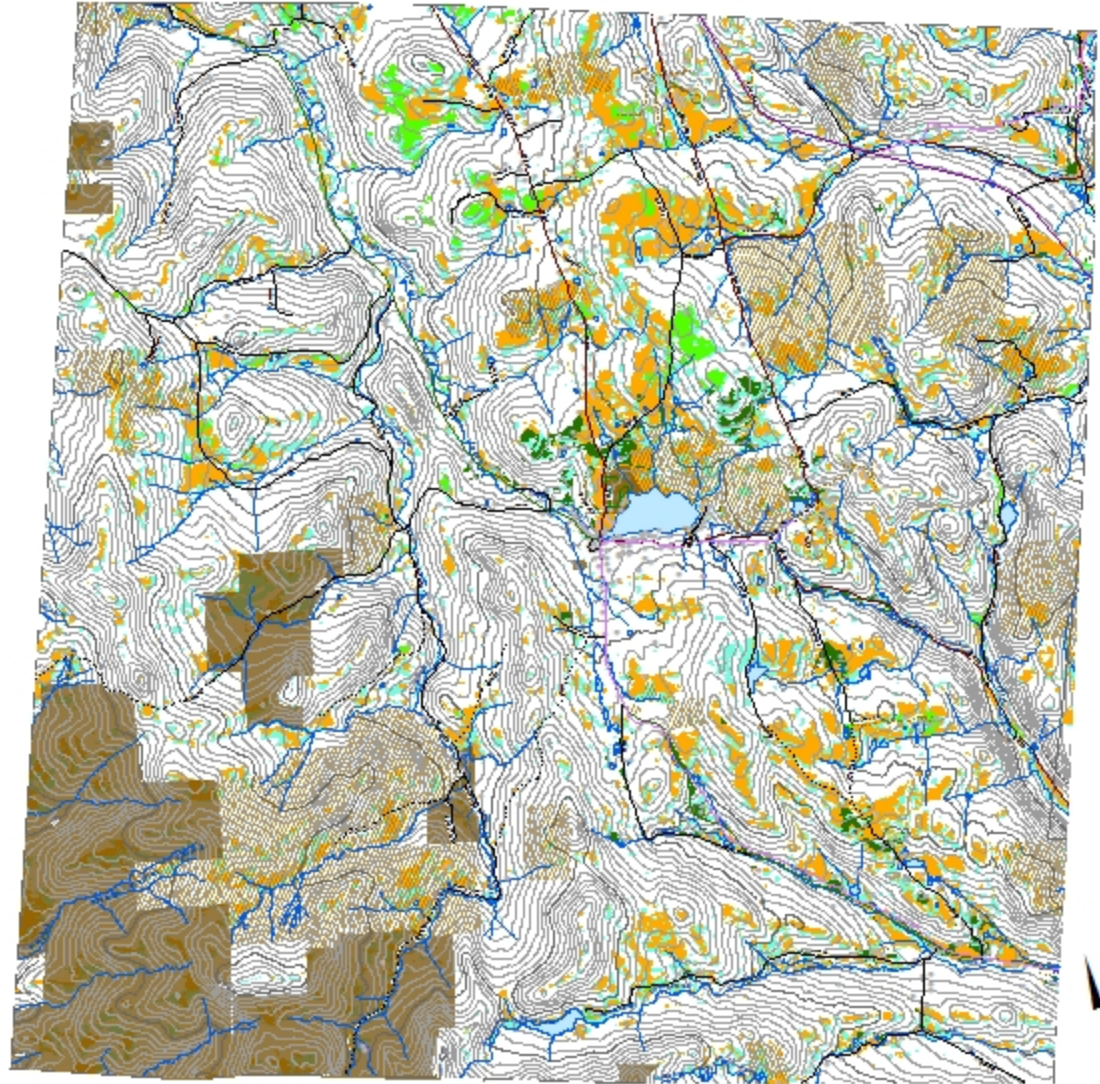
**Hydroelectric**  
 Methodology: This map shows areas of resource potential for renewable energy generation from hydroelectric facilities. Sites identified are existing dams that could be developed for hydroelectric generation as well as active hydroelectric facilities. Information on existing hydroelectric facilities was obtained from the Vermont Dam Inventory and data on potential hydroelectric sites was obtained from a study conducted by Community Hydro in 2007~. Potential hydroelectric generation capacity for several of the larger dams are noted below.

**Hydroelectric Constraint Description**  
 \* Rare and Irreplaceable Natural Areas (RINAs) are significant natural communities. They do not include the following rank descriptions: uncommon to common breeder in VT, common to very common in VT, historic in VT, not applicable, unrankable, unrankable breeding population, and extirpated.





# SOLAR ENERGY POTENTIAL



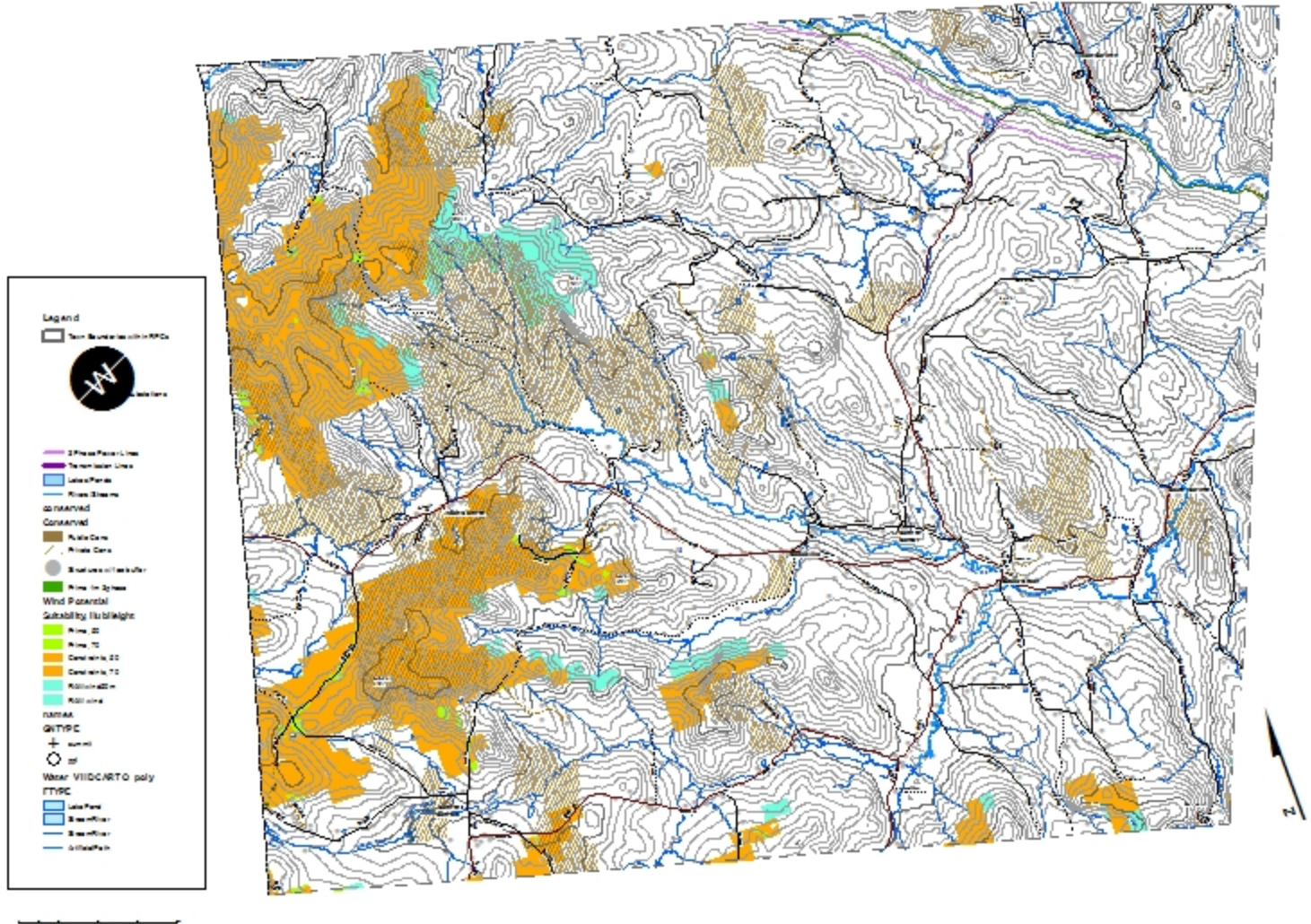
**Solar**  
 This map shows areas of potential electricity generation from solar energy. It includes areas with good access to solar radiation and also considers other conditions that may limit the feasibility of solar energy development. These limiting factors are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no constraints are present.

These maps are designed to initially identify areas and follow-up on-site work is required to verify the areas are feasible for projects. They are subject to revision and are NOT intended to grant rights or setbacks for projects.

**DARK GREEN** Prime: No Constraints within 1 mile 3-phase power  
**GREEN** Prime: No Constraints no known or possible constraints present  
**ORANGE** Constraints no known but at least one or more possible constraints  
**BLUE GREEN** Raw potential with constraints



# WIND ENERGY POTENTIAL



**Wind**  
 This map shows areas of potential wind energy development. It includes areas with good access to wind resources and also considers other conditions that may limit the feasibility of wind energy development. These limiting factors are referred to as constraints. Areas of prime wind potential exist where the natural conditions make development feasible and no constraints are present.

These maps are designed to initially identify areas and follow-up on-site work is required to verify the areas are feasible for projects. They are subject to revision and are NOT intended to green-light or fast-track projects.

**DARK GREEN Prime:** No Constraints within 1 mile of phase power  
**GREEN Prime:** No Constraints no known or possible constraints present  
**ORANGE Constraints:** no known but at least one or more possible constraints  
**BLUE GREEN Raw:** potential with constraints

**Green Constraints**  
 3rd Phase Power Lines  
 230 KV Transmission Lines  
 115 KV Transmission Lines  
 69 KV Transmission Lines  
 33 KV Transmission Lines  
 15 KV Transmission Lines  
 7.5 KV Transmission Lines  
 3.3 KV Transmission Lines  
 1.5 KV Transmission Lines  
 0.75 KV Transmission Lines

**Orange Constraints**  
 100 ft Buffer from 3rd Phase Power Lines  
 70 ft Buffer from 230 KV Transmission Lines  
 50 ft Buffer from 115 KV Transmission Lines  
 30 ft Buffer from 69 KV Transmission Lines  
 15 ft Buffer from 33 KV Transmission Lines  
 7.5 ft Buffer from 15 KV Transmission Lines  
 3.75 ft Buffer from 7.5 KV Transmission Lines  
 1.875 ft Buffer from 3.75 KV Transmission Lines  
 0.9375 ft Buffer from 1.875 KV Transmission Lines

**Blue Green Constraints**  
 100 ft Buffer from 3rd Phase Power Lines  
 70 ft Buffer from 230 KV Transmission Lines  
 50 ft Buffer from 115 KV Transmission Lines  
 30 ft Buffer from 69 KV Transmission Lines  
 15 ft Buffer from 33 KV Transmission Lines  
 7.5 ft Buffer from 15 KV Transmission Lines  
 3.75 ft Buffer from 7.5 KV Transmission Lines  
 1.875 ft Buffer from 3.75 KV Transmission Lines  
 0.9375 ft Buffer from 1.875 KV Transmission Lines