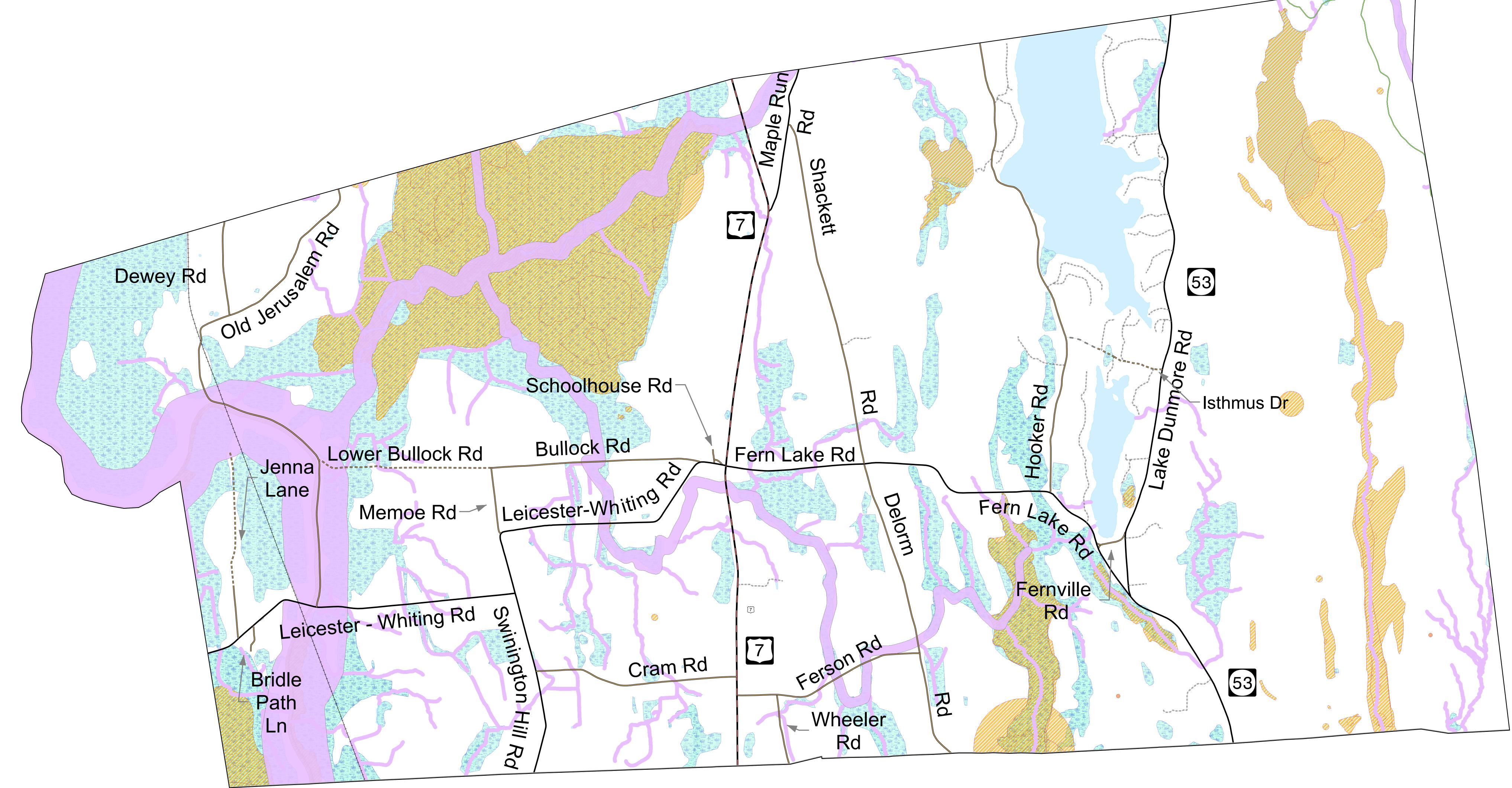
## Renewable Energy Planning: Known Constraints

- Leicester



#### Legend

Known Constraints (State Energy Planning Guidelines)

Vernal Pools (confirmed and unconfirmed)

DEC River Corridors (inc stream 5oft buffer)
FEMA Floodways
State Significant natural Communities and

Rare, Threatened and Endangered Species
National Wilderness Areas
Class 1 and Class 2 Wetlands (VSWI and advisory layers)

Class 1 and Class 2 Wetlands (VSWI and advisory layers)
Regionally or Locally Identified Critical Resources (none currently)

Vernal Pools (confirmed and unconfirmed layers)

State River Corridors (inc 50ft buffers on sm streams)

FEMA Floodways

Natural Communities and Rare, Threatened and Endangered

Vermont Significant Wetlands (Class 1 & 2 and advisory layers)

National Wilderness Areas

O 0.375 0.75 1.5

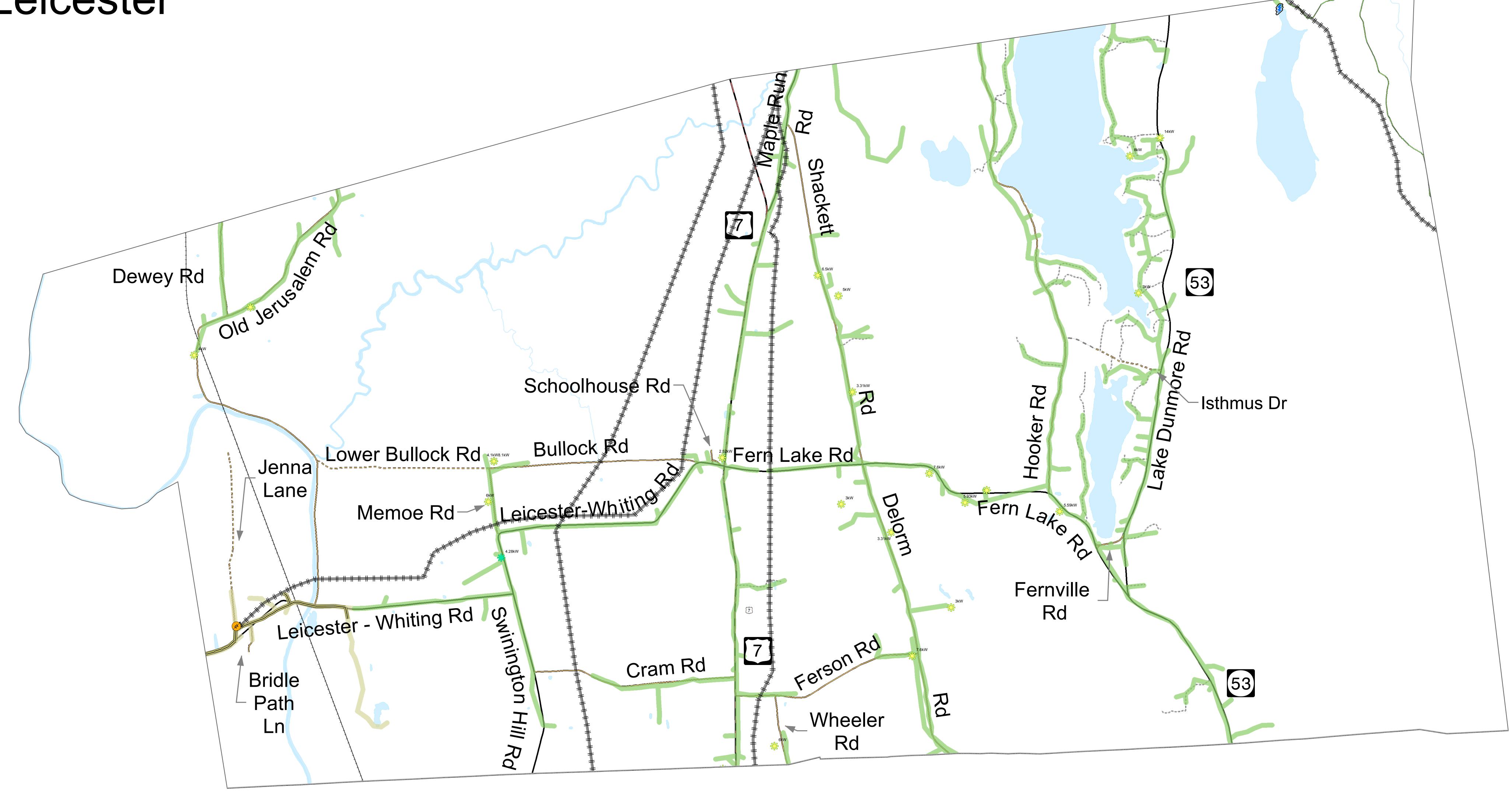
Miles

Addison County
REGIONAL PLANNING COMMISSION

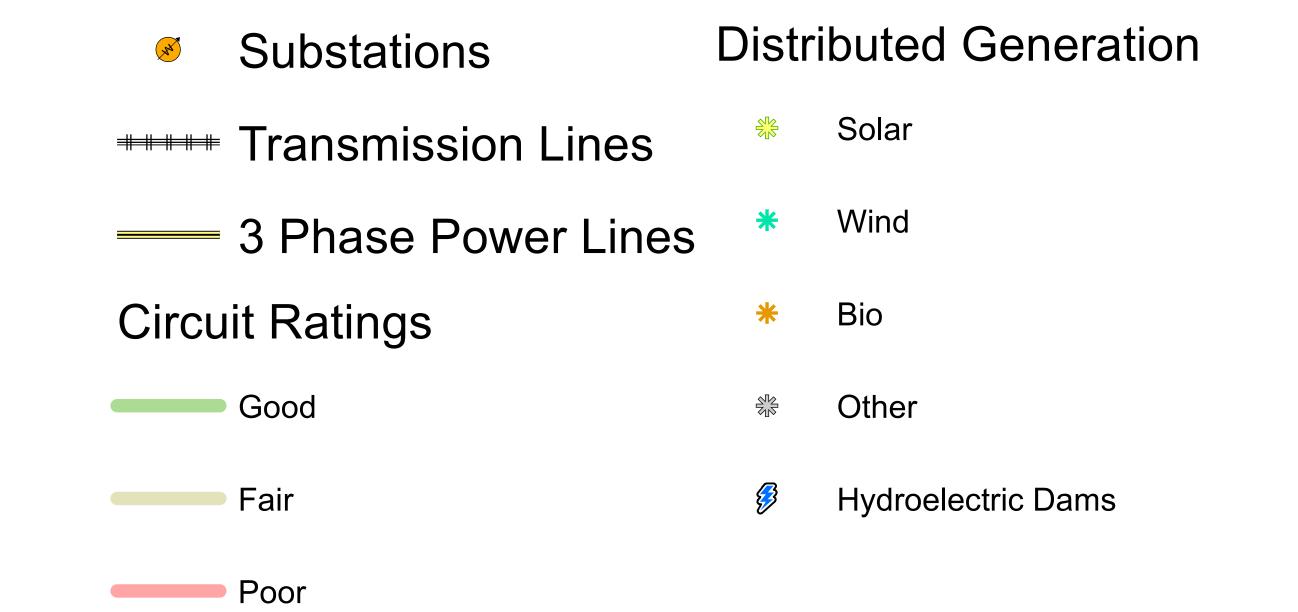
This map was created as part of a Regional Energy Planning Initiative Name with funding from the Vermont Public Service Department.

### Renewable Energy Planning: Possible Constraints - Leicester Dewey Rd Old Je. Schoolhouse Rd Isthmus Dr Bullock Rd Lower Bullock Rd Fern Lake Rd Leicester-Whiting Leicester-Whiting Jenna Lane Fern Lake Memoe Rd Fernville Leicester - Whiting Rd Sunington Rd Cram Rd Bridle Path Wheeler Un Rd Legend Agricultural Soils FEMA Special Flood Hazard Areas 0.75 **Protected Lands** Agricultural Soil Mitigation (Act 250) Possible Constraints (State Energy Planning Guidelines) Agricultural Soils (Prime, Statewide and Local USDA) FEMA Special Flood Hazard Areas Deer Wintering Areas Protected Lands (State fee lands and prvt cons lands) Act 250 Agricultural Soil Mitigation areas Addison County Deer Wintering Arreas Highest Priority Forest Blocks ANR's Vermont Conservation Design Highest Priority Forest Blocks REGIONAL PLANNING COMMISSION Regionally or Locally Identified Critical Resources (none currently) Hydric Soils This map was created as part of a Regional Energy Planning Initiative N with funding from the Vermont Public Service Department.

# Renewable Energy Potential: Transmission and Distribution Resources and Constraints - Leicester



#### Legend



Transmission and Distribution under the State Energy Planning Guidelines.

from Green Mountain Power/ACRPC, Circuit Ratings identifying capacity

Substations, Transmission lines and 3-Phase power distribution lines

loads and Distributed Generation also from Green Mountain Power

Hydroelectric facilities from agency of Natural Resources.

, 4/28/2017.

ACRPC 4/2017

O 0.375 0.75 1.5

Miles

Addison County
REGIONAL PLANNING COMMISSION

This map was created as part of a Regional Energy Planning Initiative Name with funding from the Vermont Public Service Department.

#### Renewable Energy: Potential Solar Resource Siting Areas - Leicester Dewey Rd Old Je. Schoolhouse Rd Isthmus Dr Bullock Rd Lower Bullock Rd Fern Lake Rd Memoe Rd Leicester-Whiting Lane Fernville Leicester - Whiting Rd Bridle Path Wheeler Ln Rd **Dept of Public Service Methodology Known Constraints Possible Constraints** This map shows areas of resource potential for renewable Known Constraints signal likely, though not absolute, unsuitability Possible Constraints signal conditions that would likely require for development based on statewide or local regulations or energy generation from solar, i.e. locations where renewable mitigation, and which may prove a site unsuitable after energy generation would likely be most feasible according to designated critical resources. site-specific study, based on statewide or regional/local policies the natural conditions of an area. This map also considers that are currently adopted or in effect. various other conditions, such as natural resource areas, Known Constraints include: Vernal pools, FEMA floodways, river corridors, Federal wilderness areas, Natural Communities and Rare, that may impact the feasibility of renewable energy development. Possible Constraints include: Agricultural soils, FEMA flood areas, These conditions are referred to as constraints. Areas of Threatened and Endangered Species, and wetlands (class 1 and Protected Lands, ACT 250 soil mitigation areas, Deer wintering prime solar potential exist where the natural conditions make 2) and wetland advisory layers. areas, Highest Priority Forest Blocks, and Hydric soils. development feasible and no constraints exist. These areas have been removed and are not shown on These areas are shown on the map where they coincide with areas of renewable solar potential identified in the this map. solar analysis. Legend Primary Solar Resource Siting Areas Solar Potential Analysis under the State Energy Planning Guidelines. Statewide ground based (30m USGS DEM) solar potential layer Secondary Solar Resource Siting Areas created with ESRI solar analyst by VCGI. Filtered by SLOPE (<= 14%), Addison County ASPECT (90-270 degrees) and values >= 1,000 kWh/sq meter. REGIONAL PLANNING COMMISSION This map was created as part of a Regional Energy Planning Initiative with funding from the Vermont Public Service Department. ACRPC 4/2017

#### Renewable Energy: Potential Wind Resource Siting Areas - Leicester Dewey Rd Old Je, Schoolhouse Rd-Isthmus Dr Bullock Rd Lower Bullock Rd Fern Lake Rd Lane Memoe Rd Leicester-Whiting/ Fern Lakop Fernville Leicester - Whiting Rd Q Rd Cram Rd gton Hill Rd 53 Bridle Path Wheeler Ln Rd **Dept of Public Service Methodology Possible Constraints Known Constraints** Possible Constraints signal conditions that would likely require This map shows areas of resource potential for renewable Known Constraints signal likely, though not absolute, unsuitability energy generation from solar, i.e. locations where renewable for development based on statewide or local regulations or mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies energy generation would likely be most feasible according to designated critical resources. the natural conditions of an area. This map also considers that are currently adopted or in effect. various other conditions, such as natural resource areas, Known Constraints include: Vernal pools, FEMA floodways, river . corridors, Federal wilderness areas, Natural Communities and Rare, that may impact the feasibility of renewable energy development. Possible Constraints include: Agricultural soils, FEMA flood areas, These conditions are referred to as constraints. Areas of Threatened and Endangered Species, and wetlands (class 1 and Protected Lands, ACT 250 soil mitigation areas, Deer wintering prime solar potential exist where the natural conditions make 2) and wetland advisory layers. areas, Highest Priority Forest Blocks, and Hydric soils. development feasible and no constraints exist. These areas are shown on the map where they coincide These areas have been removed and are not shown on with areas of renewable solar potential identified in the this map. solar analysis. Legend Primary Wind Resource Siting Areas Wind Potential Analysis under the State Energy Planning Guidelines. Statewide 30m, 50m, and 70m wind speed layers from Secondary Wind Resource Siting Areas Mass. Tech Collaborative wiere filtered for minimum wind speed, Addison County then merged into a single file by VCGI. **REGIONAL PLANNING COMMISSION** This map was created as part of a Regional Energy Planning Initiative N with funding from the Vermont Public Service Department. ACRPC 4/2017

## Renewable Energy: Potential Woody Biomass Resource Siting Areas - Leicester Dewey Rd Old Je, Schoolhouse Rd Isthmus Dr Bullock Rd Lower Bullock Rd Fern Lake Rd Lane

Leicester-Whiting/ Fern Lake Memoe Rd Fernville Leicester - Whiting Rd Rd Cram Rd Bridle - Path

Wheeler

Rd

#### **Dept of Public Service Methodology**

Q

This map shows areas of resource potential for renewable energy generation from solar, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as natural resource areas, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no constraints exist.

#### **Known Constraints**

Known Constraints signal likely, though not absolute, unsuitability for development based on statewide or local regulations or designated critical resources.

Known Constraints include: Vernal pools, FEMA floodways, river . corridors, Federal wilderness areas, Natural Communities and Rare, Threatened and Endangered Species, and wetlands (class 1 and 2) and wetland advisory layers.

These areas have been removed and are not shown on this map.

#### **Possible Constraints**

Possible Constraints signal conditions that would likely require mitigation, and which may prove a site unsuitable after site-specific study, based on statewide or regional/local policies that are currently adopted or in effect.

Possible Constraints include: Agricultural soils, FEMA flood areas, Protected Lands, ACT 250 soil mitigation areas, Deer wintering areas, Highest Priority Forest Blocks, and Hydric soils.

These areas are shown on the map where they coincide with areas of renewable solar potential identified in the solar analysis.

Addison County

N

**REGIONAL PLANNING COMMISSION** This map was created as part of a Regional Energy Planning Initiative with funding from the Vermont Public Service Department.

Woody Biomass Potential Analysis under the State Energy Planning Guidelines.

Ln

Statewide forest cover types from the 2006 National Land Cover Dataset (NLCD, 2006) were merged into a single file and used to calculate low-grade green tons per acre by VCGI. The forest cover areal extent was used in this analysis.

Legend

Primary Biomass Siting Areas

Secondary Biomass Siting Areas