Part 4

Section §75-26.3

Constrained Lands

ROUGH DRAFT

The following pages include proposed new section §75-26.3 of the zoning code.

The purpose of these proposed edits is:

- To develop basic regulatory control for development which encroaches or is adjacent to typical constrained or sensitive land areas such as steep slopes, wetlands, waterways and karst geology.

Note: All text shown is proposed new, unless otherwise noted.

§75-26.3 – Constrained Lands

A. Intent. The Town of Rosendale contains many geologic and natural features which are sensitive to disturbance through continued development. These areas include steep slopes, rivers, streams, lakes, wetlands and sensitive natural habitats. The method by which these areas, and their immediate vicinity, are developed is of great importance to the future well being and prosperity of the town. The purpose of this section is to identify these natural features, provide for their proper management and create reasonable protections from development while permitting continued growth.

B. Applicability. The provisions of this section apply to development within the Town of Rosendale which is proposed in the vicinity of any of the following geologic or natural features, as defined herein:

(1) Terrain slopes in excess of 10%;

(2) Rivers, streams or creeks;

(3) Lakes or ponds;

(4) Wetlands;

(5) Karst geology.

C. Steep slopes.

(1) Findings.

(a) Steep slopes are environmentally sensitive landforms and valuable natural resources, which are of benefit to the entire Town of Rosendale and the surrounding region. Steep slopes have been or are in jeopardy of being destroyed by unregulated regrading, filling, excavation, building, clearing and other such acts. Development on steep slopes often results in the need for significantly more grading and clearing than would otherwise be required, resulting in an increased disturbance to the natural beauty of the town. The environmental sensitivity of steep slopes includes increased soil erosion, loss of topsoil, alteration of drainage patterns, groundwater contamination, watercourse and wetland contamination and the loss of habitat for critical wildlife. The inadequately controlled disturbance of certain steep slopes can lead to the failure of slopes and mass-movement of earth; damage to natural environment, man-made structures and personal safety, and the loss or aesthetically pleasing landscapes.

(b) Protection of steep slopes is a matter of concern to the Town of Rosendale. The establishment of regulatory and conservation practices in critical areas are needed to protect the public health, safety and general welfare of the town. Experience has demonstrated that effective protection of steep slopes requires preservation and where they have to be disturbed, careful regulation, including stringent mitigating measures of disturbance of soil and vegetation on steep slopes.

(2) Intent.

(a) Preserve steep slopes to the greatest extent practicable and to regulate their use to protect the public interest by ensuring the maximization of benefits found to be provided by the preservation of steep slopes and by ensuring the minimization of detrimental effects though the practice of properly managed disturbance of steep slopes.

(b) Reduce water runoff, soil erosion, and rockslides by minimizing grading and by requiring revegetation.

(c) Permitting intensity of development compatible with the natural character of the slope or hillside by considering degree of slope, significant landforms, soil suitability, and existing drainage patterns.

(3) Definitions. For the purposes of this section, Steep slopes shall be defined as land having a topographic gradient equal to or greater than 10%, as follows:

(a) CLASS I SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient equal to or greater than 10% but less than 15%, measured by utilizing two-foot contours.

(b) CLASS II SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient greater than 15% but less than 25%, measured by utilizing two-foot contours.

(c) CLASS III SLOPES: Areas of terrain equal to or greater than 1,500 square feet in size which have a topographical gradient greater than 25%, measured by utilizing two-foot contours.

(d) STEEP TERRAIN WETLAND/WATERCOURSE TRANSITION AREAS: Consist of all steep terrain located within 50 feet of a watercourse, controlled wetland or lands that are regulated by the State of New York pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law).

(4) Criteria for use, protection and management.

(a) During any pre-application review or site plan review meetings with the Planning Board, the presence and location of any steep slope areas defined above shall be identified on the proposed development plans. The Planning Board may then direct the applicant to adjust or modify any proposed disturbances on site as follows:

[1] On Class I slopes, land disturbance shall be limited to areas clearly needed for building development and site improvements where such elements cannot be reasonably located elsewhere.

[2] On Class II slopes, land disturbance shall be limited, to the maximum extent practicable, to only those areas clearly needed for the following:

(i) Streets and site access roads shown on an approved plat and proposed for acceptance by the Town of Rosendale.

(ii) Open development area private rights-of-way or easements of access shown on an approved plat.

(iii) A motor-vehicle driveway from the permitted buildable area to the street-line boundary of the lot.

(iv) Footpaths, recreational trails, essential utility corridors and similar low-impact development.

[3] On Class III slopes and within steep terrain wetland/watercourse transition areas, land disturbance shall be limited, to the maximum extent practicable, to only those areas clearly needed for footpaths, trails, essential utility corridors and similar low-impact development. Additional land disturbance on Class III slopes and within steep terrain wetland/watercourse transition areas, may be authorized with Planning Board approval to enable access to or within a tract or upon an existing lot when no practical alternative for access is available and without such access substantially all reasonable use of the tract or lot would be precluded.

(5) Additional Provisions

(a) On Class II and III slopes, additional land disturbance may occur in connection with lawful temporary soil mining or timber harvesting operations conducted in a manner to avoid the adverse effects of land disturbance on such slopes and providing for appropriate site restoration.

(b) Activities, uses and construction which involve land disturbance on Class II and III slopes and within steep terrain wetland/watercourse transition areas shall be referred to the Rosendale Environmental Commission for review and advice with regard to the effects of the land disturbance, alternatives for development and mitigation measures consistent with the purpose of this chapter.

(c) Land disturbance on steep terrain within special flood hazard areas is subject to permit under §75-27.

(d) Revegetation required. Any slope exposed or created in new development on Class I, II or III slope areas shall be revegetated or landscaped with noninvasive species as soon as possible after land disturbance occurs, and such landscaping shall be properly maintained to prevent erosion.

(6) Waivers.

(a) The Planning Board may authorize development on slopes which would not otherwise be permitted under the following conditions:

[1] The proposed development is integrated into the natural slope of the terrain in such a way as to have a minimal disturbance to the immediate area with little or no regrading or clearing required; and,

[2] The boundaries of the proposed site disturbance during and after construction are agreed upon prior to approval of the site development plan. Such boundaries shall be fenced off with construction fencing prior to the start of any clearing or construction activity and shall be inspected periodically by the building inspector for compliance; and,

[3] The applicant shall include soil erosion and sediment control plans, as approved by the Planning Board, to mitigate negative impacts from the proposed disturbance; and,

[4] The Planning Board shall make a Findings Statement outlining the specific reasons the disturbance is permitted, the alternative site layouts which were considered and the reasons they were not pursued.

D. Watercourses, Waterbodies and Wetlands.

(1) Findings.

(a) Rosendale is benefited by water resources that have contributed and continue to contribute greatly to agriculture, commerce, outdoor recreation, property values, scenery and quality of life. Adequate and suitable water for water supply, domestic, municipal, industrial, agricultural and commercial uses, the growth of forests, support of fish and wildlife, recreational enjoyment and other uses is essential to the health, safety and welfare of the economic growth and prosperity of the Town.

(b) Streams, rivers, ponds, lakes, wetlands and other waterbodies or watercourses serve many important functions for water quality, ecological balance and diversity. The maintenance of their full function and benefit is closely linked to the presence of intact, natural riparian buffer areas which surround them.

(c) Waterbodies, watercourses, wetlands and their natural riparian buffers provide many essential benefits to the Town, including;

[1] The control of flooding by slowing overland runoff and absorbing and storing substantial amounts of sheet flow, thereby assisting wetlands and watercourses in controlling flooding and gradually releasing flood flows to lower watersheds.

[2] Riparian buffers provide the first line of defense in the protection of waterbodies and watercourses against the adverse impacts of stormwater-borne pollutants.

[3] The protection of water quantity and quality by preserving sources of surface water, recharging groundwater and aquifers.

[4] The protection of waterbodies and watercourses that are and may be used for water supply purposes.

[5] The protection of stream channel and stream bank stability thereby controlling and reducing erosion, flooding, and related property damage.

[6] The location of important breeding, nesting, feeding, migratory, cover, and wintering habitat for diverse fish and other wildlife species.

[7] The location of recreational uses and open space throughout the Town directly and by supporting recreation provided by other areas.

(d) Nonpoint source pollution is the primary cause of water quality problems in more than 90 percent of New York State's impaired waterbodies and watercourses. Local legislation to avoid the destructive impacts of nonpoint source pollution, by protecting watercourse and waterbody riparian areas, is warranted to reduce the damage from water-polluting and degrading activities.

(e) The Town has the authority to conserve and protect riparian areas pursuant to the police power vested in and granted to the Town of Wallkill under the Municipal Home Rule Law which recognizes the right of local governments to protect the general health, safety and well-being of persons and property therein.

(2) Definitions. For the purposes of this section, watercourses, waterbodies and wetlands shall be defined as follows;

(a) WATERCOURSE: Any river, stream or creek within the Town of Rosendale which has a NYS DEC classification rating of A, B, C, D, AA, AA(T), A(T), A(TS), B(T), C(T) or C(TS).

(b) WATERBODY: Any lake or pond within the Town of Rosendale which has an area of one acre or more.

(c) WETLAND: Any delineated wetland having an area greater than one acre, but less than 12.4 acres.

(3) Criteria for use, protection and management.

(a) During any pre-application review or site plan review meetings with the Planning Board, the presence and location of any watercourse, waterbody or wetland as defined above shall be identified on the proposed development plans for the property.

(b) The Planning Board, with referral and comment from the Environmental Commission, may require changes to the proposed site layout and mitigations and as necessary to protect the adjacent water and its associated riparian buffer area, as follows:

[1] Adjacent to any watercourses, waterbodies or wetlands on the property, any proposed site disturbances should, where possible, be located on at least 100 feet from the edge of the water in order to preserve a natural, vegetated riparian area between the proposed disturbance and the water.

[2] Where proposed site disturbances are located less than 100 feet from the water, and cannot reasonably be arranged elsewhere, the Planning Board shall direct the applicant to provide site design mitigations as deemed necessary to protect the water from potential contamination.

[3] Site disturbances within 25 feet of the water should be avoided to the maximum extent practicable, and should be limited to uses for the express purposes of recreation, water access, water crossing, watercourse maintenance or uses otherwise deemed to have a negligible or limited potential for adverse affect or contamination to the adjacent water.

[4] The proposed site development layout and its associated disturbance should be planned for the site so as to avoid or minimize encroachment near the water, as deemed most practicable by the Planning Board.

[5] Proposed land disturbance adjacent to any wetland equal to or greater than 12.4 acres in size may be required to conform to the NYS Department of Environmental Conservation requirements regarding state regulated wetland areas pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law).

(c) Site Design Mitigations. For proposed land disturbances within 100 feet of the water, the Planning Board may require one or more site design mitigations, including but not limited to the following:

[1] Proposed impervious surface areas such as paved areas, walkways, parking lots and rooftops shall be drained away from the direction of the water, directed and contained in conformance with §74 Stormwater Management and §75-28.1 Stormwater Control as approved by the Planning Board;

[2] Berms or swales to prevent stormwater migration to water resources;

[3] Limited clearing, grading or site disturbance to minimum extents practicable;

[4] Planting of new native vegetation groundcover and tress in disturbed areas;

[5] Preservation of adjacent undisturbed areas with disturbance boundaries and construction fencing;

[6] Rooftop runoff control and mitigation;

[7] The use of raingardens, open vegetative channels or other localized bioretention areas for redirection and containment of stormwater runoff;

[8] Limiting the use or size of impervious ground surfaces;

[9] The use of pervious surfaces such as pervious concrete, pervious asphalt or pervious pavers;

[10] Reduction of building footprint/roof areas;

[11] Enhanced runoff control, temporary erosion and sediment controls during construction;

[12] On-site construction & mitigation monitoring;

[13] Mitigation fees.

(d) Additional provisions.

[1] The Planning Board shall consider watercourses, waterbodies and wetlands located on adjacent properties and downhill from the proposed site disturbance when considering appropriate site design arrangements or mitigations.

[2] When determining appropriate site design arrangements or mitigations, the Planning Board shall consider the relative importance of the adjacent water, the slope of the terrain and the potential for the proposed use or its construction to contaminate the water.

[3] Design mitigations should be selected by the Planning Board with the goal to reduce or eliminate any soil erosion, stormwater runoff or other contaminants from entering the water resource which could be introduced as a result of the proposed construction disturbance and use activities.

[4] Where crossing of a water resource is necessary, such crossing shall be designed and constructed so as to minimize disturbance to the water and associated riparian buffer to the maximum extent practicable.

[5] In areas where no significant natural vegetation is present between the proposed disturbance and the water, and the extents of the site disturbance are within 100 feet of the water, the Planning Board may require new native vegetation to be planted within the setback as directed to provide adequate protection.

E. Karst Geology

(1) Findings.

(a) Karst geology is present within certain areas in the Town of Rosendale, and is comprised of soluble limestone and other bedrock which is easily erodible by groundwater, often resulting in the presence of sinkholes, caves and underground streams and aquifers. These areas also provide habitat for a diversity of highly specialized and sensitive vertebrate and invertebrate animals.

(b) The inherent erodability of karst geology makes it a sensitive natural feature which can present difficulties or hazards to surface development. Sinkholes can develop as underground caves erode, significantly undermining structural stability above.

(c) Karst areas do not provide the same level of groundwater filtration as other bedrocks. Contaminants such as stormwater pollutants and septic systems leeching into the ground in a karst area often will be introduced into the groundwater, significantly reducing water quality for local residents.

(d) The Town has the authority to conserve karst geology and their immediate areas pursuant to the police power vested in and granted to the Town of Wallkill under the Municipal Home Rule Law which recognizes the right of local governments to protect the general health, safety and well-being of persons and property therein.

(2) Classification. For the purposes of this section, the presence of Karst geology shall be classified as follows;

(a) Moderate Potential: Areas of land which have a moderate potential for the presence of subsurface karst geologic features, as identified by the Town of Rosendale Natural Resources Inventory Maps.

(b) Very High Potential: Areas of land which have a very high potential for the presence of subsurface karst geologic features, as identified by the Town of Rosendale Natural Resources Inventory Maps.

(3) Criteria for use, protection and management.

(a) During any pre-application review or site plan review meetings with the Planning Board, the potential presence and location of any karst geology as defined above shall be identified on the proposed development plans for the property.

(b) The Planning Board, with referral and comment from the Environmental Commission, may require subsurface investigation, changes to the proposed site layout and mitigations and as necessary to identify and protect the sensitive geologic features, as follows:

[1] Within any area mapped as Moderate Potential for Karst Geology, the Planning Board shall advise the applicant of the inherent risks associated with development activity on or adjacent to karst geologic formations, and recommend that field investigation be conducted to determine the actual presence or absence of karst.

[2] Within any area mapped as Very High Potential for Karst Geology, the Planning Board shall advise the applicant of the inherent risks associated with development activity on or adjacent to karst geologic formations, and require the applicant to conduct field investigation to determine the actual presence or absence of karst.

(c) Karst field investigation and subsurface testing.

[1] Field investigation and any subsurface testing for the presence of karst geology shall be conducted by a registered engineer or other professional as approved by the Planning Board. The Planning Board may require the applicant to submit funds to be placed in escrow with the Town to cover the fees associated with the professional investigation.

[2] Field investigation shall be conducted in the immediate area or areas proposed for development. If field investigation results in a determination that further investigation or subsurface testing is warranted to make a final determination, such additional tests shall be conducted. The results of all investigation work shall be documented in a report to the Planning Board outlining the

specific findings and recommendations regarding the proposed development activity in those locations.

[3] Upon receipt of the report from the approved professional, the Planning Board shall make a determination regarding the appropriateness of the proposed development at that location, and may direct the applicant to adjust their proposed site layout and provide mitigations to avoid or minimize conflicts with the geologic features.

(d) Site Design Mitigations. For proposed land disturbances adjacent to known karst geologic features , the Planning Board may require one or more site design mitigations, including but not limited to the following:

[1] Provision for erosion and sediment controls shall include appropriate containment basins, silt fences and filter strips for retention of storm water runoff to reduce or eliminate infiltration into karst features and groundwater. Sediment controls should be monitored after rain and maintained for the duration of the construction;

[2] Construction staging areas for all equipment, crew and materials shall be established well away from karst features;

[3] Any fuel storage containers or similar toxic or hazardous substances shall remain within a confined staging area during construction or shall be established well away from karst features;

[4] Construction waste such as concrete and wash water from trucks shall be disposed of in an area well away from karst features;

[5] All temporary access roads for construction must have sufficient roadbed and storm water runoff drains and outlets;

[6] All proposed site disturbances shall maintain a minimum distance of 100 feet wherever reasonably practicable to maintain a natural, vegetated buffer from known adjacent karst features such as caves, springs and sinkholes;

[7] All disturbed areas shall be appropriately revegetated with native groundcover and trees as directed by the Planning Board. Revegetation shall be inspected during and after construction by the Building Inspector.

F. Penalties and Fines.

(1) In addition to or as an alternative to any penalty provided herein or by law, site clearing or grading prior to development approval by the Town is prohibited, and may be subject to fines not less than $300 nor more than $900 or imprisonment for a period not to exceed six months, or both.

(2) Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this chapter, the Building Inspector may prevent the occupancy of said building or land.

(3) Restoration of lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the Town of Rosendale may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

Editor's Note – Associated Definitions to this section:

LAND DISTURBANCE — Site preparation, consisting of the removal of vegetation and/or the excavation, filling, grading or removal of earth, soil or rock, or retaining structures.

Town of Rosendale
Steep Slopes

Legend

Surface Water

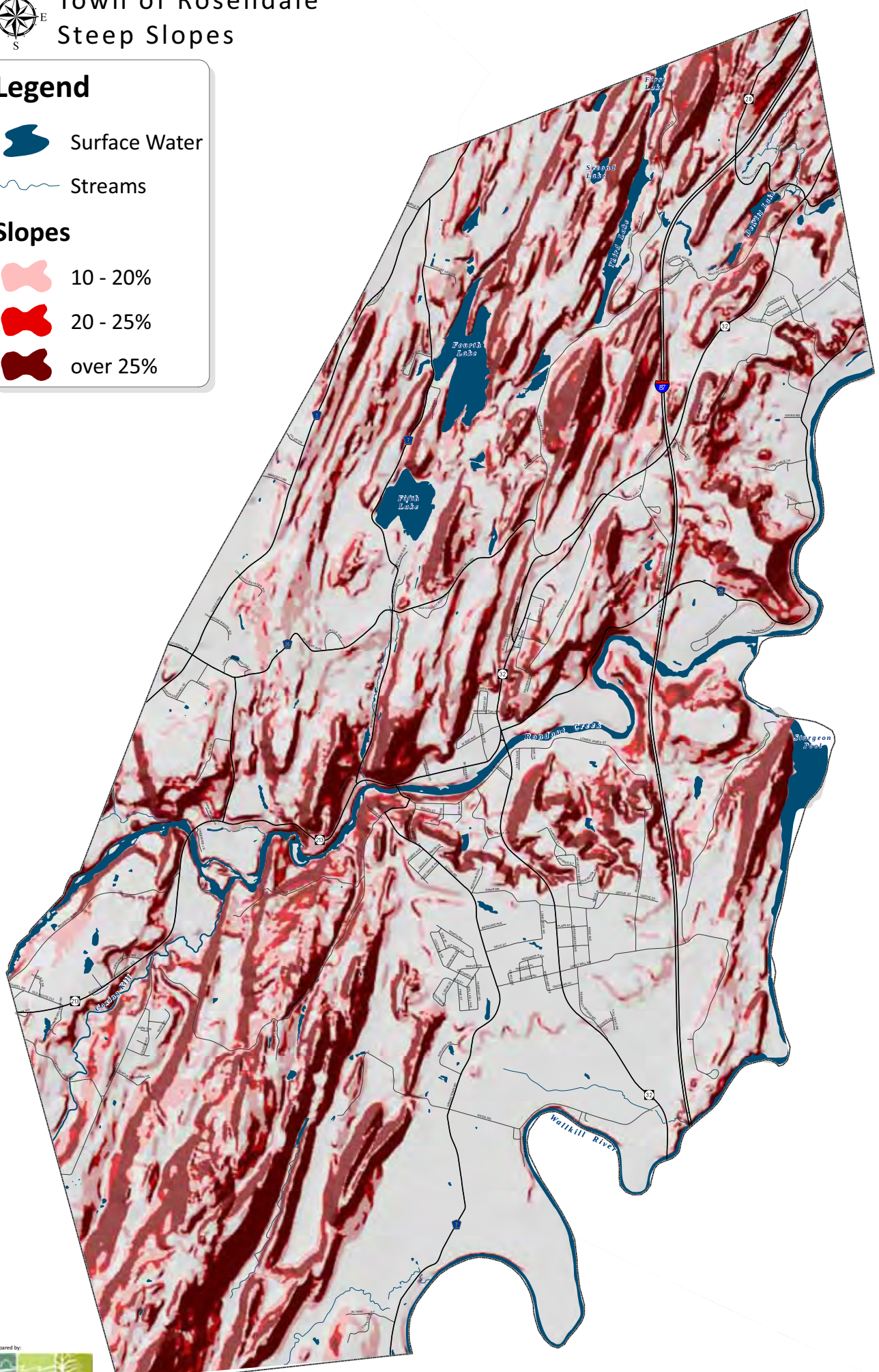
Streams

Slopes

10 - 20%

20 - 25%

over 25%



Map prepared by:

BEHAN PLANNING AND DESIGN

Data Sources:
Ulster County Information Services
Town of Rosendale, Hudsonia
For Conceptual Planning Purposes Only

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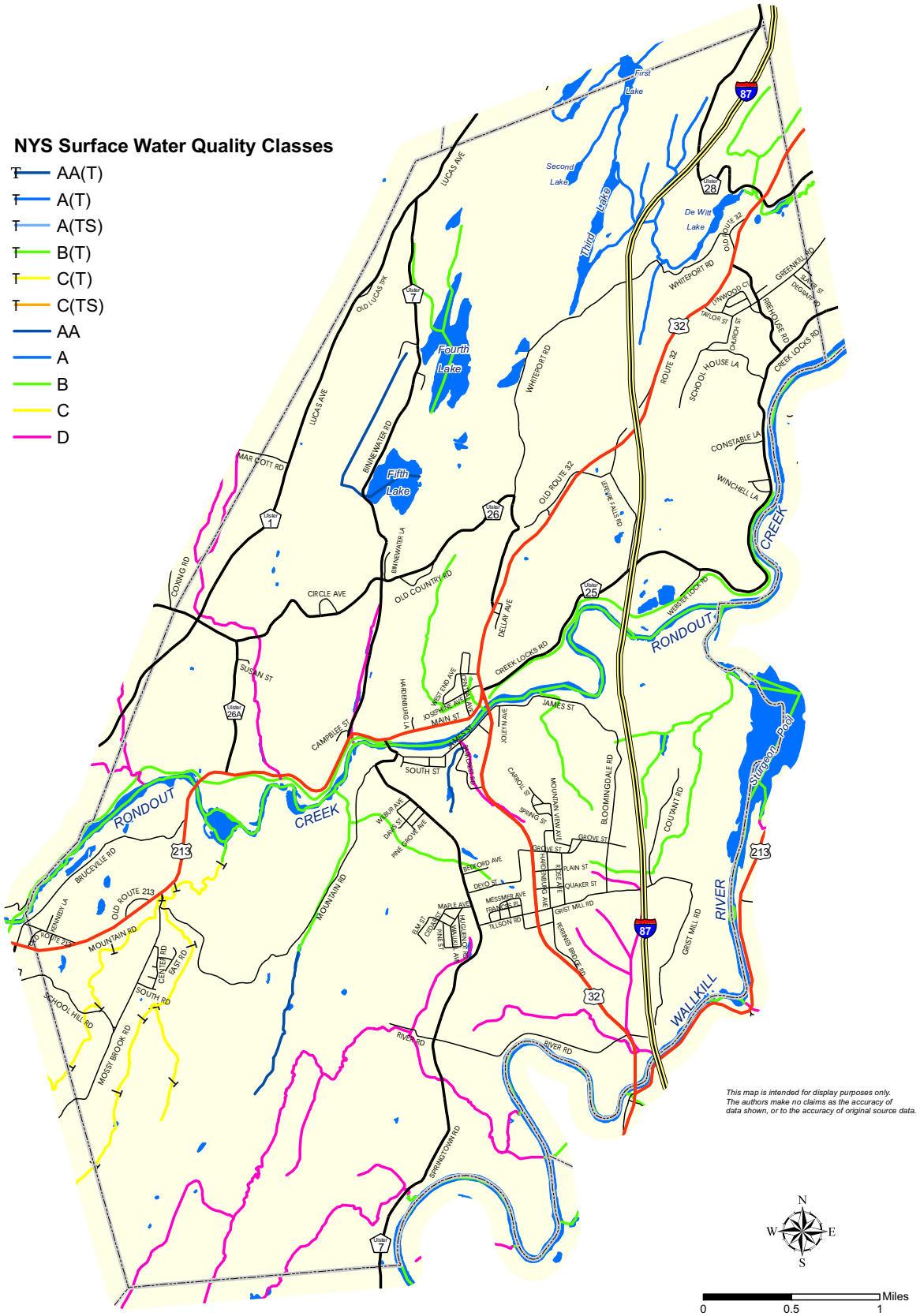


Town of Rosendale
Open Space Inventory

SURFACE WATER QUALITY

WORKING DRAFT

Legend

- Lakes, Ponds, Rivers
- New York State Thruway
- State Roads
- County Roads
- Local Roads

Map produced 6/3/06 by the Ulster County Environmental Management Council, PO Box 557, Stone Ridge, NY 12484

Datum and Projection: NAD27, UTM Zone 18

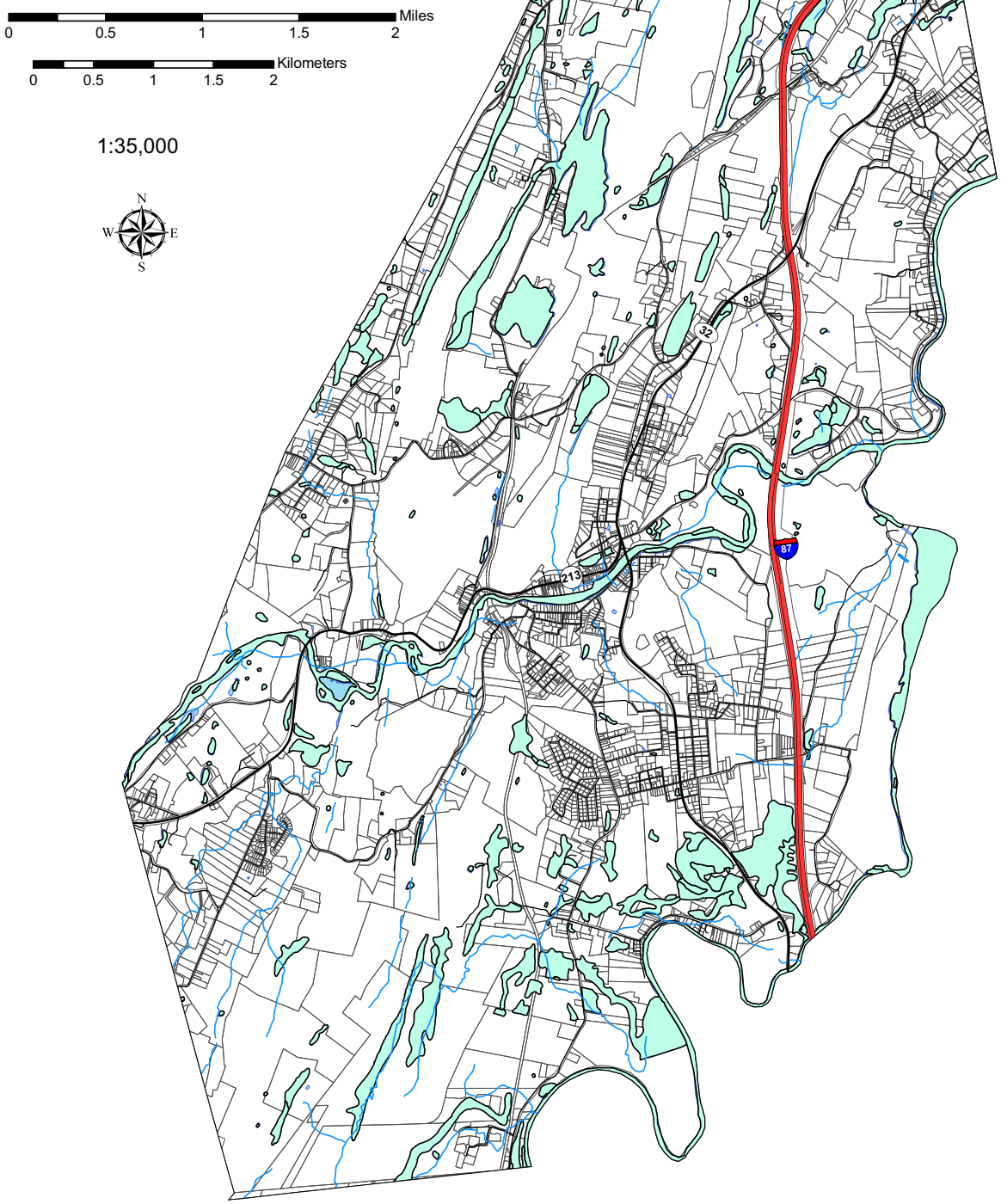
Data Sources:
– Municipalities from NYS DOT Civil Boundaries data (downloaded 2/04 from NYS GIS Clearinghouse)
– Lakes, Ponds, Rivers, Streams from NYS DEC DOW 2005

Mapping support provided by the Ulster County EMC/WQMA

SURFACE WATER QUALITY

Town of Rosendale
Natural Resources Inventory

NATIONAL WETLANDS INVENTORY



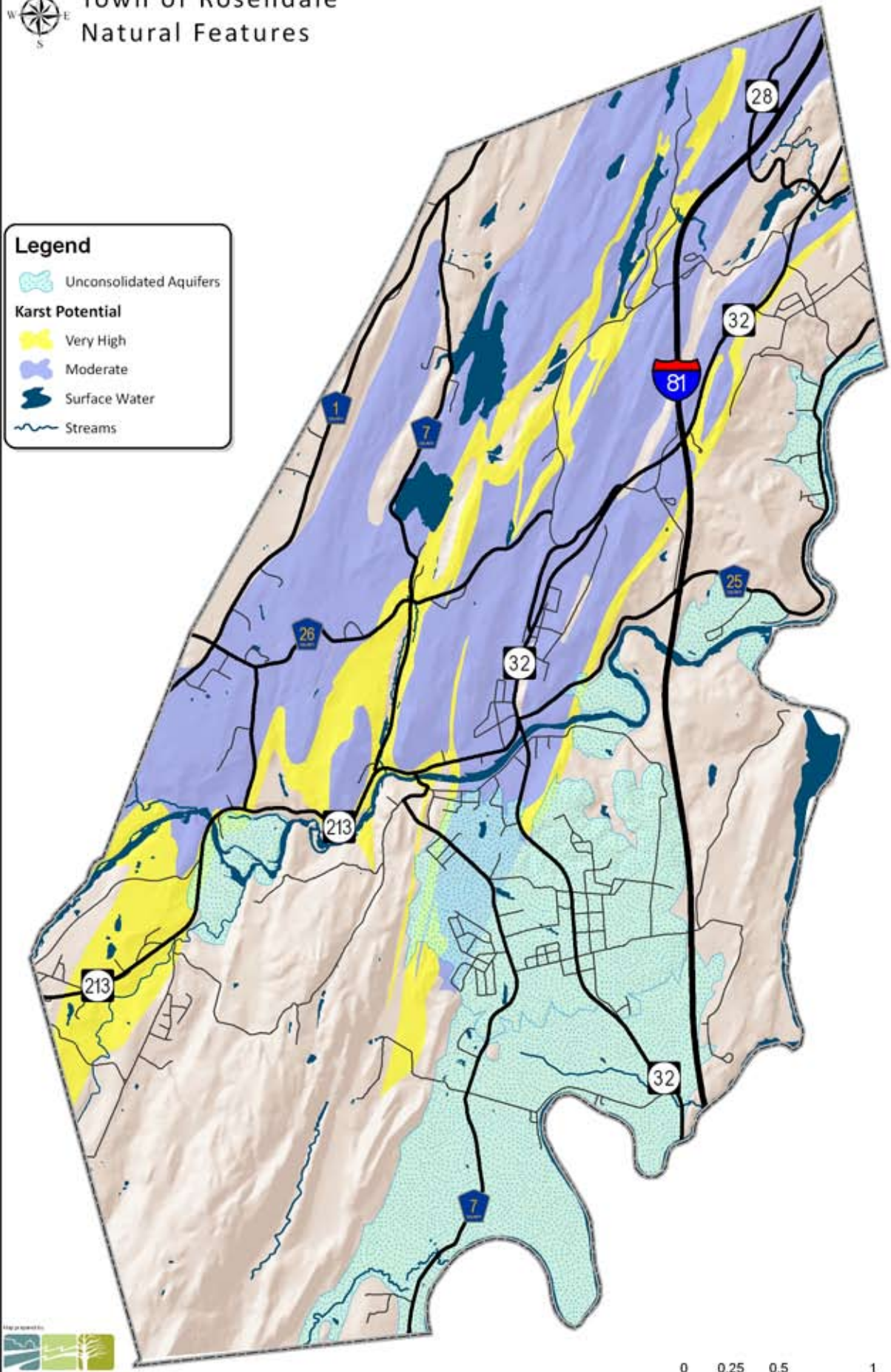
Map produced for the Town of Rosendale
Environmental Conservation Commission, December 2009

Data Sources:
Municipal boundary: NYS Department of Transportation
Roads: Ulster County Information Service (2008)
Waterbodies: DEC Division of Water
Parcels: Ulster County Information Services (2008)
National Wetlands Inventory: US Fish and Wildlife Services
National Wetlands Inventory Streams: US Fish and Wildlife Services

Legend

- National Wetlands Inventory Streams
- National Wetlands Inventory
- **Surface Waters**
- **Tax Parcels**

Town of Rosendale
Natural Features



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