

Watershed Community Recognition: Sierzenga Farm

Drinking water, originating from lake resources, requires conscientious and collective stewardship within its drainage area or watershed.

The 208 square miles of Owasco Lake watershed covers portions of Cayuga, Onondaga, and Tompkins counties. Residents, farmers, and businesses are implementing sustainability practices around the watershed to protect natural resources, and ultimately, the lake itself!

Exposed soils, especially on the landscape of the Owasco Lake watershed, can slide or erode easily during heavy rains and wash away through fast-flowing gullies of water. Eroding soils can transport valuable nutrients from the landscape, eventually depositing them into the nearest stream or lake. Throughout the Finger Lakes region, watershed sourced nutrients feed algae and degrade biological conditions in receiving waters used for consumption and/or recreation.

Spring is a season of collective haste to “drape the landscape” of the watershed with crops, grasses, and trees that are used to reduce runoff by retaining soil and nutrients from seasonal heavy rains and erosive forces. These critical efforts to protect soils can result in a significant, positive impact on water quality and are particularly important for reducing nutrients loading to the lake, and subsequently, reducing the occurrence of harmful algal blooms.

While conducting recent surveillance, the Owasco Lake Watershed Inspection and Protection Division has observed an upward trend in efforts from the watershed community to voluntarily implement soil

stabilization practices throughout our landscape. Practices that have expanded greatly in recent years include, but are not limited to: 1) roadside ditch seedings and armoring, 2) erosion controls on construction sites, 3) field cover crops, 4) seeding of eroding gullies, and 5) crop “setbacks” away from ditches.

Among the many agricultural operations striving to expand protective practices throughout the watershed, the Sierzenga crop farm demonstrates a “gold standard”. The Sierzenga Farm is a commodity-oriented operation, growing and selling corn, wheat, and soybean grain crops throughout the northeastern portion of the Owasco Lake Watershed. However, according to Mr. Jim Sierzenga, the retention of the farm’s most precious commodity, soil, is critical for the longevity of their business and paramount for protection.

Headquartered on Town Hall Road and progressing through 100 years on the landscape in the Town of Owasco, Jim Sierzenga is devoted to sustaining the inherited passion of land stewardship his father began in the early 1900s.

The early and ongoing recognition of the value and significance of retaining soil has become second nature to Jim, not only for the protection of Sucker Brook and Dutch Hollow stream segments and Owasco Lake, but also preservation and sustainability of crop production for another 100+ years. As a lifelong Owasco Lake recreationist and land steward, Jim strives to be a model of voluntary initiatives to protect his precious soil and water resources. His relentless

efforts include the implementation of simple, highly effective practices that address the most vulnerable parts of the landscape he manages: roadside ditches and steep slope crop fields.

Jim's sensitivity and resolve towards minimizing soil loss is recognized through the suite of protection practices easily visible when passing through his manicured piece of the watershed. From miles of field-road ditch buffers, acres of minimal soil disturbance tillage, multiple water and sediment control basins and cover crops, to grassed waterways and steep slope strip cropping, the level of protective measures implemented and maintained throughout the farm's 2,600 acres is remarkable! Jim takes great pride in his approach to nutrient balance on the landscape for crop needs, removal, and replenishment. He recognizes that "good crops remove nutrients which must be continuously reincorporated". Recycling plant residues or pieces, after harvesting, is a common practice utilized by the farm to replenish nutrients, reducing the need for additional fertilizer application and protecting the ground from heavy rain and snow melt. Each year, he says, "at least 75% (~2,000 acres) of our ground is covered with crop residues or planted cover crops". Additionally, he estimates "approximately 25 acres of soil erosion prevention structures" and "at least 20 grassed waterways" have been voluntarily installed in recent years. Jim says his farm "has not used a conventional plow to turn soil completely over in 25 years and soils on at least half of the farm's acreage is left undisturbed each year". He adds, "any tillage that is done is minimum, leaving as much residue (plant matter) as possible in the top 4 to 6 inches, to minimize erosion".

Weather dependent businesses face the constant challenge to adapt to changing weather patterns and conditions. Jim, like many farm managers, hopes for the best weather but prepares his land for the worst. At a moment's notice, rainfall has the potential to wash away exposed soil, resulting in massive economic losses. Jim says "it is unacceptable to watch my soils wash away at a given moment". He emphasizes that "once our soil washes away, it is forever gone, and the farms' most precious commodity is lost!"

Consistent evaluation on the performance of soil protection practices is routine at the Sierzenga Farm. If a practice fails or does not perform according to design, the effort to remediate is not delayed. Repairs are swift and robust. He can cite examples of intensive care actions implemented on each of his fields. Most recently, he recalls, a steep slope in a field just northwest of the North Road and Swartout Road intersection experienced substantial soil erosion during a heavy rain event, creating a gully. The triage response was swift. Jim explained corrective actions included "immediate seeding of the area into permanent grass, resulting in establishment of a vegetated, stable water conveyance to a nearby wetland for storage and retention."

The Sierzenga's personal stewardship over their portion of the watershed is evident through their willingness to describe efforts, highlight achievements, and display the fortified crop lands. Understanding the relationship of soil with economic prosperity and environmental protection is paramount to the Sierzenga's. As you pass through their piece of the watershed, they hope you will take notice!

Submitted by: Andrew “Drew”
Snell, Owasco Lake Watershed
Inspection and Protection Division



Jim Sierzenga takes a moment to check on his field practices including a surface water diversion and edge of field buffer strip.