

The Legislature of Rockland County



HARRIET D. CORNELL
Legislator – District 10
Chair, Environmental Committee

MINUTES
ENVIRONMENTAL COMMITTEE
WEDNESDAY, June 25, 2014
7:00 PM

MEMBERS PRESENT

LEG. H. CORNELL, CHAIR
LEG. N. LOW-HOGAN, VICE-CHAIR

MEMBERS ABSENT

LEG. CHAIR A. WOLFE
LEG. T. EARL
LEG. B. KANTROWITZ
LEG. F. SPARACO
LEG. C. CAREY

OTHERS PRESENT

E. YEGER ESQ.
M. POINTING
M. CEPLO
S. CURTI
B. KLIMEK
LEG. D. JOBSON
S. BOTTO
A. PINZOW
A. ENGLANDER
S. POWERS

CHAIR CORNELL CALLED THE MEETING TO ORDER AT 7:00 PM

ADOPTION OF THE MINUTES OF THE 6/11/14 MEETING

NO QUORUM

2. REF. #4124 - DISCUSSION ITEM – INPUT ON WATER USAGE
(HON. HARRIET D. CORNELL, LEGISLATURE)

DISCUSSED

Action: Counsel will research Connecticut and New Jersey laws regarding licensure of irrigation contractors, and laws in western states that have instituted incentives for increased efficiencies in water irrigation systems.

Chair Cornell stated that this was an informal discussion for the specific purpose of seeking input from the public on a draft law, as there is time to make changes before a formal public hearing in early September. At this first meeting she had invited the Professional Landscapers Association and golf course managers to participate. The purpose of the Water Conservation Act is to find ways to save water in Rockland County.

My name is Stephen Botto, president of the Professional Landscape Association of Rockland County and owner operator of Steve Botto Inc. Landscaping. I have been in the horticultural industry for 34 years. I speak to you tonight, to commend your efforts in water conservation. I feel water, our most precious resource, is taken for granted and most times wasted.

I do oppose the lingo associated with this proposed law. I am joined here tonight by some of the leaders of the horticultural industry, Matt Celfo from Rockland Country Golf Course and Brian Klimec from Greenworld Irrigation. They will speak to you more specifically on how the proposed law will have a dramatic impact on their business and the industry as a whole. Matt will touch on some of the needs of the golf course industry and reasons for overhead irrigation in timely fashions. Brian will discuss some of the advancements in the irrigation industry namely smart timers and soil sensors that actually calculate watering needs of plants as it pertains to soil type rather than the outdated rain sensor.

Back in 2002, Rockland was experiencing one of the worst droughts in history. Precipitation through August of 2001, was slightly behind normal levels and as we approached the fall of that year, precipitation virtually stopped. The winter of 2001 – 2002, snow was non-existent and temperatures were unseasonable mild, putting Rockland in poor shape for the spring season. Dr. Joan Facelle had no other choice then to continue the succession of drought stages and declare a stage 3 in early March of

2002. At the time, that stage declared no automatic irrigation of lawns and shrubs and she stated that residents should refrain from planting new lawns, trees and shrubs. This threw shock waves through my industry as we realized our business / livelihood were to be impacted incredibly. We, the landscape association, protested and our concerns were finally heard in many discussions with the legislature and the department of health. The result, the drought stages were re written and instead of just impacting one industry for water conservation, all businesses would be responsible for a 20% reduction in water usage in stage 3 and 25% reduction for stage 4. (STORY)

My point is all businesses should share in this responsibility.

Items on the proposed law need to be outlined for better understanding. A 45 day permit for new installations seems cumbersome. In a department that has difficulty in regulating other laws (example: 48 hour notification, Flow law of 2008 with haulers permits and now the Water Conservation Act, how are they going to handle? It's easy to pass laws and those that abide by them take on another expense while those that fly under the radar, get away free. As I have always stated, a burden for licensed contractors, and those under the radar, no contest.

Time restrictions and opposite / alternate days, are not practical. When a plant or plants hit what's know a PWP (permanent wilting point) there is no coming back. For the nursery trade, when plants are shipped in for outside states, the nursery stock is usually in need of irrigation immediately. They don't have the luxury of waiting until appropriate time so that they can water and save their stock.

I think education is of the utmost importance. Yes, water is wasted, wasted on many other things other than watering plant life. Dripping faucets, leaky pools, and constant running of water in commercial kitchens and food processing plants are all items that should be entertained on this proposal. I provide a newsletter to all my clients on a monthly basis. I inform them of what's happening in the landscape, insects, disease, plant availability and especially weather and water topics. I derive my information not only from what is apparent but other newsletter articles such as Short Cutt, a publication from the Cornell Cooperative Extension and other landscape associations that has information of precipitation rates, soil moisture, and future forecasts. I stress the importance of watering to all my clients that watering should be done less frequently and more thoroughly for better root system development. I'm passionate about my business and about the horticultural field in general. I'm a life-long Rocklander and will be till the day I die. I'm here to help in any way and as many of you know always available to work towards a fair and practical proposal. Unfortunately this is not.

Chairwoman Cornell stated that the language of the draft law was not written in stone; that she had specifically invited the landscape association members and golf course managers to attend the meeting because she knew that they were very environmentally conscious and astute about water issues. She said nothing was being voted on that night, and she intended to continue seeking information and recommendations—and was very appreciative of the willingness of professionals to share their knowledge and insights.

Leg. Low-Hogan asked for an explanation about S. Botto's comment that alternate days weren't practical because certain plants might wilt, since every other day watering would sustain plants. S. Botto said that he was referring more to nurseries. Plants are shipped pretty dry and could arrive on a day not allowed watering. It is not practical to keep applying for a permit when deliveries arrive seven days per week. B. Klimek, Greenworld Irrigation Specialists, stated that smart timers and sensors become a thinking timer. Weather sensors determine when water is needed. Irrigation audits can be done on sprinkler systems. Most systems he tests are only 40% effective. In dry states, it is mandatory to use these sensors and they save a lot of water. Over 40% of water was saved at the Crystal Hill Condominiums in Pomona. He suggested a five-year plan to move towards sensors. Billions of gallons of water could be saved. It costs about \$200-250 for timers and about \$150-200 for sensors. He spoke about the efficiency of sprinkler systems being an important factor in water conservation and that there are no laws in Rockland County for irrigation systems. There are two kinds of sensors, soil moisture sensors and weather sensors. Both are about the same price and are made to go together. Both don't have to be used, but having one is better than nothing. If a person has a system within ten years old, it can be retrofitted. Chair Cornell asked how other parts of the country do five-year transitions. B. Klimek said that others could help with writing the law and in other states they provide rebates. He said there should be standards in Rockland County for Irrigation System Operators, including tests to become a contractor. B. Klimek said that we wouldn't need a desalinization plant, if the more efficient irrigation systems were used. There are systems that can address both shady and sunny areas. S. Botto said that rain sensors are an outdated technology. B. Klimek spoke about a sensor system he put on his property that saved \$380 the first year and \$420 the second year, and that every year you save money. The Crystal Hill Condominiums in Pomona recouped their whole investment the

first year. Rain shut-off devices or sensors are old technology. Soil moisture and weather sensors are much better. M. Pointing, United Water, stated that they have an evapotranspiration program (ET) that existed for four years and is published daily on their web-site and in the Journal News. ET tells customers that don't have sensors how long they should irrigate. ET allows people to use a low-cost savings. He agreed and advocated for the inspection of irrigation systems. He said that many tap into the service line before going through the water meter, so it is non-revenue water and unauthorized and unbilled. M. Pointing called for licensed individuals to install these systems and said that United Water wants meters at boundaries. B. Klimek said that United Water's ET is accurate. Most people overwater, but new technology would prevent that. On hot days, everyone increases the water used, and three days later, they don't decrease it. M. Ceplo, Certified Golf Course Superintendent, Rockland Country Club, said that water conservation was a long time coming, but was always put on a side burner. He spoke about the water usage by other industries, like swimming pool companies, house painters, and car washing and asked if those would be on only odd/even days. He said that non-potable water was hard to enforce, if someone owns their own well or a golf course that has their own pond. There could be a situation where one nursery could water and another could not. He asked what if someone wants to add a well? Chair Cornell said that she recalled that when we had a drought, the restrictions applied to all, including well-owners. M. Ceplo agreed, but said that this law pertains to non-drought conditions. Chair Cornell asked what changes would he need to see in the law, because it was important to hear from golf course managers. The law is not meant to be punitive, but is something we can all work on. Chair Cornell added that, if presented properly, we can begin to make an impact and people in this business can help us lay out a path. M. Ceplo stated that the drought regulations from the Department of Health probably needed to be amended and that DOH does not have the capacity to enforce regulations when there is no drought. He said that an Industrial Conservation Plan had been done, so that businesses have a plan if a drought occurs. All business should have a water conservation plan, even if there are no droughts. He said that Rockland County needs an education program. Golf courses and landscapers are easy targets. The Mall use of water just from the air conditioning system is significant and so is water usage by restaurants. One industry shouldn't be targeted. Chair Cornell assured all that they were not looking to target those industries, but were seeking their input. She asked if B. Klimek could send the committee information about the sensors and irrigation systems and contact info for the Crystal Hill Condos. B. Klimek said the EPA has a Water Sense Program, similar to Energy Star, of approved irrigation products that conserve water on their website, including products like low-flow toilets. Leg. Low-Hogan asked if there was a particular county doing tax rebates? B. Klimek said he would get the committee information and that we could just copy what they are doing out west and in southern New Jersey, where they are having water problems. M. Ceplo urged the committee to keep looking at Green Infrastructure (GI) projects. He said that 75% of water still comes from aquifers and that there is a benefit to recharging water via rain barrels, green gardens, etc. A lot of this is education. Chair Cornell said that she is a great believer in education and stated that reaching children was essential; that children had converted parents to important steps like recycling. A. Englander, AL Sustainability LLC, said that GI is really something that should be looked into to capture stormwater in Rockland County. He said the plumbing code should be amended to allow some water from gray water, like from washing machines, to be used for toilets. S. Botto said that stormwater management was of utmost importance now. His business has permeable pavers, so every drop of water that hits his property, stays there. He said that it should be mandatory for new properties or renovations to use permeable, GI surfaces. S. Curti, Curti's Landscaping, stated that lots of towns and building departments don't recognize impervious surfaces, like permeable pavers. He didn't know if legislation was needed, but maybe building departments could be encouraged. He said in Lake George, it is mandatory to have permeable paver driveways. Chair Cornell said that the information gathered this evening was more valuable than hoped for and thanked everyone for their contributions.

Previously submitted by Jesse Shannon, Golf Course Superintendent, Manhattan Woods Golf Club:

"At Manhattan Woods we have identified golf course water sources and make a commitment to judicious and responsible water use. Our facility's water use practices and efforts to conserve water consist of incorporating and tracking weather data, evapo-transpiration rates, and soil moisture meter readings completed by experienced employees all of which make up our day to day water management practices. Currently, we irrigate only 57 of 192 acres of property, which has been reduced from the past irrigation usage of 75 acres. The selection and planting of low water use species of turf grasses has also been implemented throughout the golf course. As a result, we have reduced or eliminated irrigation on all unused or minimally used portions of the property.

Other projects to improve our water conservation efforts include the installment of a concrete water diversion basin installed in the runoff area from a spring fed pond. A 15" pipe was installed after construction of the golf course to divert water to the irrigation pond for use on the golf course during drought periods. Hand watering techniques or spot watering target areas is implemented throughout the season for water resource conservation.

The irrigation department is led by an experienced irrigation technician who focuses solely on routine system checks including proper water distribution, water usage, water testing, pump maintenance, water quantity and resource, water well pumps, usage monitoring, computer programming and upgrades on all satellites and components. Periodic irrigation system audits are also completed to measure and calculate the distribution uniformity and net precipitation

rate of the irrigation system as a whole, with auditing as one of our tools to manage our water usage on the golf course and focus on using less water in our conservation efforts.

A water management training program has been initiated at the club to create awareness, accountability, and to develop the staffs knowledge as well as experience when dealing with all watering programs and techniques. Each employee responsible for watering must complete a 20 hour supervised training program where he or she learns the importance of water conservation and the effects on environmental issues, turf management, and playability.

Moisture meters are used daily to provide reliable information to indicate to our staff where and when to apply water to the turf. This practice allows for improved playing conditions, development of watering needs of the turf and benchmarks to follow, differences, and also anomalies, all of which play an important role in turf management.

As golf course managers we realize how valuable our course is to sustain not only good water on the course but also contribute to good water quality off the course. We closely examine the water on the course, direction of flow and retention areas (ponds, streams, etc.) which better enable us to realize the benefits of good water quality. Water testing sites are marked throughout the golf courses which are continually sampled for water quality. All areas are continually monitored in-house to test for pH, nitrate-nitrogen, phosphate, dissolved oxygen, alkalinity, turbidity and temperature. We visually and objectively monitor the health of our water features to detect impaired water quality, identify causes, and correct problems as needed. We learn where the water is coming from, where it is traveling to, and take note of our role in maintaining and improving the water while it is on the property.

A home owner has a few options which can be cost effective for water conservation when dealing with lawn and gardens. The first recommendation would be to seed lawns with fescue blends which are a more drought resistant turf grass and can last through drought periods much better than typical ryegrass and bluegrass blends most typically found in nurseries and local hardware and home improvement stores. The same goes for flower beds. If more people focused on native perennials which can typically take droughty or dry conditions rather than your typical annual flowers which need constant watering to stay alive. Once perennials are established they rarely need watering.

Second would be to have homeowners develop simple agronomic plan to the maintenance of their lawns. Beginning a simple aerification or thatch removal program on the surface of the turfgrass. This process also improves rooting and allows for improved oxygen, water infiltration and reduces compaction of the root zone areas allowing for healthier more sustainable turfgrass throughout the stressful summer months. This process can be performed by the homeowner during the spring and fall or contracted out by your local landscaper.

The reduction of the use of fertilizer is also an important recommendation which normally falls on deaf ears when it comes to homeowners who typically think that green lush grass is healthy grass?! In a way it can be, but most of the time over fertilizing occurs leaving the plants susceptible to common fungus diseases which seem to mimic drought or dry symptoms which typically stimulates many to begin to over water figuring they are going to alleviate the problem whereas adding to the problem and increasing the disease development while taking away from the beauty of their lawns. Almost all turfgrasses can sustain themselves during basic drought periods and yes they may go brown or (dormant) for a period but as the environmental conditions change, and temperatures begin to drop they will notice the brown areas begin to rebound and green back up!

These practices of overfertilizers are also one of our biggest problems when dealing with the pollution of our streams, lakes, and rivers. As the excess fertilizer is leached from the soil most of the material finds its way into our waterways and tributaries which builds up overtime and causes a lot of disruption to the ecosystem in which surround our homes.

Proper irrigation installation will also allow for water conservation with the use of site specific watering techniques rather than broadcast of watering throughout including areas that normally might not need water from day to day. Also, watering during the early morning hours when evapotranspiration is at its lowest point and the applied water is absorbed into the rootzone and taken up by the plant and not evaporated by watering during the hottest times of the day."

MEETING ADJOURNED 7:53 PM

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