

## **CLUP Chapter 5 Technical Staff Worksession**

### **Items held in the “Parking Lot “**

**Friday, December 3, 2010, 9:00 a.m., Southaven Lodge**

Commission member representatives present: Ms. Brenda Prusinowski and Mr. John Turner (for Brookhaven), Mr. Daniel McCormick and Ms. Jill Lewis (for Riverhead), Mr. Marty Shea (for Southampton), Ms. Susan Lienau and Mr. Daniel Gulizio (for Suffolk County Planning).

Others present: Mr. William Spitz (for New York State Department of Environmental Conservation), Mr. Larry Costantino, Ms. Meg Shutka, Mr. Luke Ormond (all from Brookhaven Town), Ms. Julie Hargrave, Mr. John Pavacic, Ms. Judy Jakobsen, Ms. Carol Sholl and Mr. John Milazzo (Commission staff)

### **Introduction**

The Commission and member agency staff assembled to continue the review of CLUP Amendments, specifically Chapter 5, Standards and Guidelines for Land Use. The group achieved consensus on some items and other items held in the “Parking Lot” are summarized below. The Staff did not complete review of Chapter 5; therefore, an additional meeting was felt to be required to complete the review of the Chapter.

### **Parking Lot Items**

#### **5.3.1 Applicability and other policies**

- *“Agriculture or horticulture in the Compatible Growth Area is encouraged to comply with best management practices.”* Suggest replacing the word “encouraged” with more directive language.
- Clearing for new or expanded agricultural activities. Clarify under NYS Environmental Conservation Law (ECL) 57 and NYS Agriculture and Markets Law if:
  - the activity of farming is “non-development”
  - if new clearing for new agricultural activity in the CGA is considered development, then it is subject to Standards of the CLUP
  - if new clearing for new agricultural activity in the Core is considered development, then it is subject to the Hardship requirements for review and a decision by the Commission

*(The Commission has issued several decisions in the past in regard to clearing related to agriculture. These are attached for your review. In the first decision resolution, dated October 19, 2005 and pertaining to the application of Metz Farms to clear in the CGA, the Commission approved the clearing of portions of a parcel "...depicted as lightly wooded and grass field..." as well as a "...small portion of..." a wooded area. In the second matter, which entailed a proposal by Gladys Gherardi to develop a vineyard on 37 acres of a 57-acre site in the Core containing native vegetation, the Commission determined in its adopted resolution of June 21, 2006, that the "...site preparation activities required for the Gherardi proposal such as clearing, excavation or the material alteration of grade or vegetation or activities which will result in a material increase in the intensity of land use or environmental impact thereof would constitute development and would require a hardship exemption before any such activities may commence on the site..."). In the Gherardi case, the applicant litigated, and on August 1, 2007, the Commission's decision was upheld by the Court.*

*Development if it meets definition pursuant to NYS ECL § 57-0107 (13) (c):*

*"commencement of mining, excavation or material alteration of grade or vegetation on a parcel of land excluding environmental restoration activities;"*

*Non-development if it meets definition pursuant to NYS ECL § 57-0107 (13) (v):*

*"the use of any land for the purpose of agriculture or horticulture;"*

*Definition of Agriculture pursuant to NYS ECL § 57-0107(14):*

*"Agriculture" or "horticulture" shall mean any production of plants or animals useful to man, including but not limited to: forage or sod crops; grains and feed crops; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, and including the breeding and grazing of any or all of such animals; bees and apiary products; fur animals; trees and forest products; fruits of all kinds including wineries; vegetables; nursery, floral, ornamental and greenhouse products and farmstands for selling products raised or produced on site and other associated structures required for their production."*

*See attached definitions in NYS Ag & Markets Law Section 25-AA § 301.*

- Obtain references for most current State Agriculture and Markets Law to clarify the status of farms.

*(The New York State Constitution and New York State Agriculture and Markets Law both contain references to agriculture. The State Constitution states that one of the policies of New York State is to “encourage the development and improvement of its agricultural lands for the production of food and other agricultural products” and that the State legislature must “... include adequate provision for ... the protection of agricultural lands.”*

*In addition, the State Agriculture and Markets Law declares that the “agricultural industry is basic to the life of our state” and reiterates that it is the policy of the state to “...promote, foster and encourage the agricultural industry.” The law also indicates that one of the duties of the State Department of Agriculture and Markets is the “...improvement of the fertility and productiveness of farm lands and the restoration to fertility and productiveness of unoccupied and unproductive land.” The Agriculture and Markets Law also contains provisions which require the Department to “provide for the operation of the state soil and water conservation committee...,” establish integrated pest management (IPM) programs and voluntary programs for “Agricultural Environmental Planning and Implementation” in conjunction with the soil and water conservation committee and Cornell Cooperative Extension. Finally, Article 11A of the law contains an entire section devoted to “Agricultural Environmental Management (AEM)” which includes measures such as best management practices and coordination with NYSDEC in regard to SPDES regulation of agriculture. (Attached appendices contain more complete excerpts from the State Constitution and State Agriculture and Markets Law.)*

*The CLUP referenced a document entitled Controlling Agricultural Nonpoint Source Water Pollution in New York State (Bureau of Technical Services and Research, Division of Water, New York State Department of Environmental Conservation, 1991). An update will either be located or a reference to its replacement will be inserted. A related document entitled “Division of Water Technical and Operation Guidance Series (5.1.3) Investigation of Agricultural Sources of Water Pollution, dated April 1, 1987 and reissued July 22, 1996, is attached, along with a series of informative documents from the New York State Soil and Water Conservation Committee which pertain to Agricultural Environmental Management (discussed above).*

### **5.3.2 State Environmental Quality Review Act (SEQRA)**

Broaden the existing language and add reference to other actions under environmental review that a Supplemental EIS may be required for non site-specific projects such as Town Hamlet Plans and Comprehensive Plans.

#### **5.3.3.1.2 Sewage treatment plant discharge**

- Concern was raised in regard to the potential impacts of drawdown caused by STP operations on wetlands and streams in the Central Pine Barrens, such as in the Flanders and Riverside areas of the Town of Southampton.
- If an STP discharge is outside of the Central Pine Barrens, it may result in impacts on the groundwater table.
- The SGPA Plan discouraged STPs from the Central Pine Barrens. However, if adverse impacts on groundwater levels and wetlands result from the requirement to discharge outside of the Central Pine Barrens, the Commission may need to re-examine this requirement and its intent.

*The Central Pine Barrens was included within the Central Suffolk SGPA which was divided into three subareas: Western, comprising an area essentially north of the Long Island Expressway and west of the Brookhaven Town-Riverhead Town border, the Southern comprising the area south and east of the Western segment and south of the Peconic River (including that portion within the South Fork) and the Northern comprising the area north and east of the Western segment and north of the Peconic River (including that portion within the North Fork). The “Problems and Concerns” section of the Central Suffolk SGPA discussion (pages 3-73 and 3-80 of the SGPA Plan) states:*

*“Sewage treatment plants (STPs) are a major category of point sources within the SGPA. There are 28 existing and 10 proposed STPs. Not all existing plants have tertiary treatment (nitrogen removal) but operator of all those with flows over 30,000 gpd are now required to upgrade to include denitrification...The ability of existing tertiary plants to produce effluent meeting the 10 ppm drinking water standard for nitrate has been inconsistent at best, due primarily to inconsistent operation and maintenance. Shallow groundwater quality downgradient of these plants often reflects their suboptimal performance, and the potential for impacting water supplies, both public and private, clearly exists...”*

*The discussion of the Western Sector on page 3-83 states “There is a great need to upgrade and expand sewage treatment, especially in the northwestern portion of the area. As indicated in the County sponsored North Central Brookhaven Waste management Study, both expansion and consolidation are technically feasible. If sewerage could be extended to serve existing higher density and new developments and effluent quality could be assured, groundwater quality would be improved.”*

*Under “Recommendations” on page 3-84, the SGPA Plan states “Suffolk County should continue its efforts to upgrade, consolidate and expand sewage collection and treatment within the northwestern portion of this sector.”*

*Accordingly, it appears the SGPA plan did not recommend an outright prohibition on STPs in the Central Pine Barrens but recommended upgrades of STPs and expansion of sewage treatment where appropriate along with ensuring consistency in the quality of effluent generated by existing STPs.*

#### **5.3.3.1.5 Nitrate-nitrogen**

- Identify the origin of density criteria, clarify the residential and non-residential equivalent requirements and clarify how they are applied to projects.
- Provide background to support the 2.5 mg/l goal and quantifiable evidence this is the goal the CLUP aims to achieve or should it be more or less restrictive, based on scientific evidence.

*The origin of the 2.5 mg/l guideline is based on a number of prior water resource studies specific to Long Island as well as studies, guidance and regulations generated by other, similar public entities in the northeastern United States.*

*The New Jersey Pinelands National Reserve, a joint Federal-State designated environmental preservation and management area, was created in 1978, some 15 years before our own Central Pine Barrens. The New Jersey Pinelands is a region with natural and physical features very similar to those of the Central Pine Barrens. The New Jersey Pinelands Commission prepared and adopted a Comprehensive Management Plan (CMP) in 1981. Both the establishing statutes and this plan served as models for the Central Pine Barrens.*

*The Pinelands CMP, in recognition of the significance and fragility of its potable groundwater aquifer (again, similar to our own) acknowledged that some aspects*

*of land use development could have significant adverse impacts on groundwater quality. This included the effects of nitrates generated by wastewater treatment systems. Accordingly, the CMP instituted a groundwater standard of 2.0 mg/l for nitrate-nitrogen, which was also applied to surface water and determined that this was the maximum concentration that could be allowed in order to ensure protection of groundwater and surface water quality. Individual on-site wastewater treatment systems for new single-family residential development on individual lots were required to meet the 2.0 mg/l standard, unless the lot was at least 3.2 acres in size. In such cases, individual lots equal to or greater than 3.2 acres in size could be developed with a maximum of one dwelling unit and could use a conventional on-site wastewater treatment system, as dilution analyses determined that a density of 1 dwelling unit per 3.2 acres would produce a nitrate-nitrogen concentration of 2.0 mg/l.*

*One of the oldest but nevertheless important examples of these studies is The Long Island Comprehensive Waste Treatment Management Plan (1978), more commonly known as the “208 Study” as it was prepared pursuant to authorization under Section 208 of the Federal Water Pollution Control Act Amendments of 1972 (also known as the Federal “Clean Water Act”). One of the key elements of the 208 Study was its division of the groundwater aquifer underlying Long Island into Hydrogeologic units or zones based on both the existing quality of groundwater in these areas and whether or not groundwater recharge was predominantly vertical (“deep recharge”) or horizontal (“shallow recharge”). The 208 Study proposed a series of recommendations, some of which were applicable to the entire aquifer and others specific to a particular Hydrogeologic Zone. The majority of the most sensitive deep-recharge zone identified in the 208 Study, Hydrogeologic Zone III, is coincident with the Central Pine Barrens.*

*The 208 Study identified nitrate-nitrogen as a key contaminant to be managed. Chapter 3 of Volume I of the 208 Study, entitled “Alternative Wastewater Management Programs” provided a detailed discussion of the significance of nitrate-nitrogen. Section 3.2, “Identification of Wastewater Management Needs,” discusses both the importance of nitrate-nitrogen as a surrogate for other contaminants and the Federal drinking water limit of 10 mg/l which serves as a maximum threshold to be measured against:*

*“There exists a Federal drinking water standard of ten milligrams NO<sub>3</sub>-N per liter. Nitrogen is the only parameter common to almost all public health and natural resource concerns for which total loadings can be*

*calculated. Control of this contaminant from each source will in many cases lead to reduction or elimination of other pollutants.”*

*Later, this finding is reiterated in this section with the following statement:*

*“As described previously, groundwater is the sole source of drinking water on Long Island. Therefore, if the public health standard is to be satisfied, the nitrate-nitrogen concentration in groundwater should not exceed ten milligrams per liter.”*

*In a subsequent part of Section 3.2, the discussion focuses on the need to developing a nitrate-nitrogen standard or guideline of less than 10 mg/l based on the fact that levels of nitrate vary; there are therefore times at which the 10 mg/l standard will be exceeded at specific locations and, as a result, establishing a standard lower than 10 mg/l (based on public health impacts) will reduce the number of exceedances of the 10 mg/l level:*

*“...Groundwater quality on Long Island is highly variable both in time and from place to place. In order, therefore, to satisfy the drinking water standard, this variation should be accommodated. A statistical analysis of groundwater data, obtained from wells in Nassau County, indicated that if the mean nitrate-nitrogen concentrations in the Upper Glacial aquifer was six milligrams per liter, then there is a 90 percent chance that well samples will contain levels of nitrate-nitrogen less than ten milligrams per liter.”*

*Although this result is preliminary, it is a useful criterion for managing the Region’s nitrogen sources in a manner that ensures that the drinking water standard of ten milligrams per liter will probably not be violated in the Upper Glacial aquifer.”*

*Volume II of the 208 Study entitled “Summary Documentation,” devoted an entire portion to this issue in Section 5, “Nitrates.” The analyses discussed in Subsection 5.6, entitled “Assessment of Nitrogen Source Effects on Groundwater Quality,” included a study of the relationship between population density and associated nitrate-nitrogen concentrations in groundwater.*

*The 208 Study also went beyond a narrow focus on the public health implications of high levels of nitrate-nitrogen and therefore also examined the impacts of nitrate-nitrogen on surface water quality, which receives its freshwater inputs from Long Island’s groundwater, and the overall ecological health of Long Island’s marine environments:*

*“Surface water quality analyses, undertaken within the 208 program, have demonstrated that levels of oxygen are largely determined by algal respiration and photosynthesis, and by the utilization of oxygen in the bacterial decomposition of dead algal material and other detritus. Large diurnal fluctuations of oxygen are highly undesirable. In particular, larvae of shellfish and other juvenile fish are vulnerable to low levels of oxygen. Given the dependence of algal production on nitrogen, it follows that controls that limit nitrogen will in turn reduce the range of oxygen fluctuations.”*

*“...The results show that a total nitrogen concentration of 0.4 milligrams per liter or less...will minimize diurnal fluctuations in dissolved oxygen levels.”*

*Section 3.2.1 of the 208 Study re-emphasizes the importance of Hydrogeologic Zone III and provides a general summary of measures that should be undertaken to protect this zone:*

*“Zone III is an area of low density, primarily non-agricultural land use, which still has good quality groundwater in both the Upper Glacial and Magothy aquifers. Median nitrate-nitrogen concentrations in water from wells in this area have always been low. Moreover, since the hydraulic conductivity of both aquifers are high, there is considerable potential for water supply development in this zone. This zone should be protected by applying land use restrictions, as well as strict pollution source controls. In this zone, control of non-point sources is necessary for the protection of the resource itself, and the entire zone should be governed by non-degradation regulations.”*

*In Section 3.3.1.1, the 208 Study examined a range of potential alternatives to conventional wastewater treatment systems in order to address water quality impacts of existing systems and regulatory criteria. The 208 Study noted “...an attempt was made to correlate traditional population density with nitrate-nitrogen (NO<sub>3</sub>-N) concentrations in the Upper Glacial aquifer. Although the results were not statistically conclusive, they indicated that population density was an important factor that had to be considered in establishing sewer service areas. The Study went on to note that “...protection of the Magothy, potential for on-lot systems failure and protection of surface waters-were combined to develop the various sewerage alternatives.” Alternatives examined for Hydrogeologic Zone III included requiring sewerage at densities as low as 1 dwelling unit per acre.*

*Section 5 of the 208 Study, entitled “Preferred Plan Alternatives,” reduced the menu of alternatives to those felt to be most appropriate. Subsection 5.2, “Recommendations by Hydrogeologic Zone and Surface Water Element” provided the specific recommendations for each Zone. For Hydrogeologic Zone III, the recommendations were as follows:*

*“Structural Recommendations*

- 1. Require collection and treatment at densities of one or more dwelling units per acre in those areas where large lot development and preservation of existing large land holdings are infeasible due to existing or planned development.*
- 2. Require advanced wastewater treatment with nitrogen removal for treatment plants recharging effluent to ground or surface waters.*

*Non-Structural Recommendations*

- 1. Land use controls should be the primary method for protecting this valuable groundwater resource. Where residential development is allowed, require large lot development (two acre zoning or greater. Encourage the preservation of existing large land holdings, and natural vegetation.”*

*As is noted in the non-structural recommendations above, two-acre zoning was recommended for Hydrogeologic Zone III, which equated to an average nitrate-nitrogen concentration of between 2 and 3 mg/l.*

*Article 6 of the Suffolk County Health Code, which determines the maximum density of residential development allowed to utilize individual on-site wastewater treatment systems and which established a wastewater flow of 300 gallons per day for single-family dwellings, is based on the work of the 208 Study and also serves as a basis for the CLUP. The 300 gallon per day calculation is based on population density equivalents and mass loading of nitrogen for a single-family residence (assuming approximately 3 persons per dwelling unit). Although the more recent invention of “low-flow” plumbing may have reduced overall hydraulic flow, SCDHS has advised that the concentration has increased and mass loading has not changed. Although household size has changed somewhat over time, more recent analyses have upheld the 208 Study’s calculations that a density of 1 dwelling per acre would produce a nitrate-nitrogen concentration in groundwater of 4 mg/l and that a density of 2 dwelling units per acre would produce a concentration of 6 mg/l.*

*In 1983, Hughes and Porter, of the Cornell University Water Resources Program in its Center for Environmental Research, published a report entitled “Land Use and Ground Water Quality in the Pine Barrens of Southampton.” The majority of the study area was located in the present-day Central Pine Barrens and included portions of both the present-day CGA and Core. The study stated its main purpose as “...to provide a sound technical basis so that management decisions in the Pine Barrens can be based on preservation of the quality of the recharge to ground water.” The study examined the impacts of various land uses on groundwater quality, including sewage and fertilizer.*

*The Hughes and Porter study made certain land use category classifications, with the low density residential category of R1 defined as 0 to 2 dwellings per acre and 2.7 persons per acre and higher residential density category of R2 defined as 2 to 5 dwellings per acre and 9.5 persons per acre. It found that the R1 land use category generated an overall nitrogen concentration in recharge of 4.7 mg/l and the R2 category generated an overall nitrogen concentration in recharge of 9.3 mg/l.*

*Building on the 208 Study’s analysis of the probability of exceeding the 10 mg/l drinking water standard Hughes and Porter reiterated that if the average nitrate concentration generated by development were 6 mg/l, there was a 90% probability that the 10 mg/l drinking water standard would not be exceeded at any one time but at 3 mg/l there was a 99% probability that the 10 mg/l standard would not be exceeded and at 2 mg/l only a 99.9% probability. In Section 5.2 of their report, entitled “Suggested Criteria,” Hughes and Porter stated:*

*“Six mg/l has been used as a planning standard in areas where significant degradation has occurred and expensive remedial measures such as sewerage are being considered. However, this criterion still allows 1 water sample in 10 to violate the standard. In a critical aquifer recharge area the goal of planning is to keep all of the water drinkable virtually all of the time. Therefore, in this case, a more stringent criterion seems appropriate.”*

*Hughes and Porter also noted the need to maintain surface water nitrogen concentrations below 0.4 mg/l to ensure dissolved oxygen levels remained high enough so as not to adversely impact fish. In addition, they observed that:*

*“The New Jersey Pinelands Commission adopted a standard of 2 mg/l for discharges to ground water in the New Jersey Pinelands (an ecological system similar to the Long Island Pine Barrens), with the intent of preventing eutrophication of fresh water wetlands.”*

*As a result, Hughes and Porter, made the following recommendation:*

*“Taking all these factors into account, we suggest that either 2 or 3 mg/l would make a reasonable planning criterion for nitrogen discharges to groundwater.”*

*The subsequent Brown Tide Comprehensive Assessment and Management Program (“BTCAMP”) of 1992 built upon the work of the 208 Study and went further in attempting to assess and analyze the causes of the brown tide in the Peconic Bay system which adversely impacted its bay scallop population and overall ecological health. The BTCAMP study was featured prominently in the analyses conducted in the GEIS prepared for the 1995 Central Pine Barrens Comprehensive Land Use Plan (the “CLUP”) and served as one of the bases for the standards, guidelines and recommendations of the CLUP.*

*As a significant portion of the contributing groundwater watershed and surface watershed lies within the Central Pine Barrens, including the headwaters of the Peconic River, the BTCAMP study closely examined the impacts of development on groundwater and surface waters in the Peconic Bay system and watershed. Page v of the BTCAMP study states:*

*“Specific recommendations include a minimum zoning of two acres per unit in the Peconic River region to protect the excellent surface water quality in the river, which is dependent on groundwater quality.”*

*The BTCAMP study emphasized the significance of nutrients, such as nitrate-nitrogen, in their impacts on surface water quality and ecological health in the Peconic Bay system and watershed. Section 7 of the BTCAMP Summary, entitled “Summary of Findings, Conclusions and Recommendations,” in building upon the work of the 208 study, noted:*

*“....the L.I. 208 Study marine water quality guideline of 0.4 mg/l total nitrogen should be modified to 0.5 mg/l for Flanders Bay and the tidal portions of the Peconic River so that a water quality standard of 5.0 mg/l dissolved oxygen may be maintained in these areas.”*

*This section also stated:*

*“However, modeling analysis (Cornell, 1983) and field sampling (L.I. 208 Study, Comprehensive Water Resources Management Plan) have indicated that a development density of 1.0 unit per acre (less than or equal to 1 unit per acre is defined as low density) would result in an average groundwater nitrogen concentration of 0.5 mg/l. A density of 0.5*

*units per acre (i.e., two-acre zoning) would result in a nitrogen recharge concentration of approximately 2.6 mg/l. Additional benefits could be realized through the use of fertilizer controls or even lower densities.”*

*In a section entitled “Summary of Recommendations, Prevention of Degradation – Peconic River and Flanders Bay,” the BTCAMP Summary states the following:*

*“To prevent future, substantial degradation of groundwater and, subsequently, Peconic River surface water, developable residential land in the Peconic River groundwater-contributing area should be upzoned to a minimum of two acres. Developable commercial, industrial and institutional land uses should be controlled such that the nitrogen impacts on groundwater are comparable to that of two-acre residential zoning. Additional natural resource protection could be attained by even more stringent land use controls, such as three to five acre zoning.”*

*Finally, during the preparation of the CLUP, a number of committees and working groups were established to focus on specific areas. One of these was the Hydrology Committee which focuses on groundwater and surface water resources. In its deliberations, the Hydrology Committee received a number of communications. One of these was an October 20, 1994 letter from the SCDHS to the Commission (attached). In this letter, the SCDHS urged that the CLUP be made consistent with SCDHS Article 6 criteria, including reducing its proposed 6 mg/l groundwater standard for nitrogen and residential density requirements to coincide with Article 6. The letter reiterated that a 6 mg/l standard would equate to a 1 dwelling unit/.5 acre density whereas 4 mg/l would equate to a 1 dwelling unit/1 acre density. The October 20, 1994 letter also stated that the more stringent standard of 2 to 3 mg/l, equivalent to a density of 1 dwelling unit per 2 acres, and proposed in the BTCAMP study and by the Peconic Estuary Program be adopted for that portion of the Central Pine Barrens located within the groundwater contributing area of the Peconic River. These recommendations were also reiterated and reaffirmed in an October 14, 1994 letter from the Peconic Estuary Program’s Policy Chair who was also the director of the US Environmental Protection Agency’s Water Management Division (attached).*

- The 2.5 mg/l standard does not apply to existing or background nitrate-nitrogen concentrations. It applies to proposed projects and any future expansions of those projects that exceed 2.5 mg/l.

### **5.3.3.3 Wellhead and groundwater protection**

Suggest adding language that applicants must demonstrate compliance of their projects with the standard.

#### **5.3.3.3.1 Significant discharges and public supply well locations**

- Develop language to apply this as a Standard.
- Address how project impacts will be evaluated when a project site falls within a SWAP groundwater contribution area.
- Is SWAP information accessible?
- Provide background on the origin of proposed changes in this Standard.

*The Central Pine Barrens Advisory Committee discussed the potential use of SWAP data at its meeting November 14, 2006. At the meeting, the Chair of the AC (also the CEO of the SCWA) noted that there were new groundwater models (SWAP or Source Water Assessment Plan maps) which were more accurate and would provide for increased protection of groundwater wells. During the AC meeting of August 2, 2007, the Chair of the AC indicated that use of SWAP maps would allow SCDHS to review potential impacts of sewage treatment plant location on source water areas and would allow SCDHS, as well as developers, to adjust such STP locations accordingly. The AC approved the use of SWAP information at its meeting of August 2, 2007. All of these discussions were believed to be an outgrowth of the work on Source Water areas being conducted by SCDHS, with the assistance of the SCWA. The work was intended to better define the actual parts of the underlying aquifer which contributed groundwater to a particular drinking water well. The actual source water areas could vary based on the depth of a well, location of a well, well size, specific aspects of the water-bearing strata and other factors.*

Commission staff reaching out to Suffolk County Department of Health for input on their review process.

#### **5.3.3.3.2 Private well protection**

- Clarify language in the Standard to measure impacts related to compliance with this Standard.
- Research origin of change to identify wells within a “500” foot radius of a well site (as SCDHS only requires 150 feet). Should the radius be larger, smaller, or remain 500 feet?
- The location of such private wells should be shown on development applications and made a requirement of a complete application.

#### **5.3.3.4 Wetlands, surface waters and stormwater runoff**

- Applications must include the identification and delineation of any and all Federal, State, and locally regulated wetlands. Any wetlands present on a site must be illustrated on any site plan, subdivision map, or any plans included in an application.
- The Stormwater Pollution Prevention Plan requirements found in Town Codes should be referenced here.

##### **5.3.3.4.1 Non-disturbance buffers**

- Revise language that refers to larger buffers and implementation (*which states “The Commission reserves the right to require a stricter and larger nondisturbance buffer as warranted in a specific instance.”*) to state that Towns can also require or impose a stricter or and larger buffer.
- Need to add that Commission can require restoration within disturbed areas of buffers, such as to restore native vegetation as in the case of LIPA, on applications that come before the Commission (for projects that do not comply with the Standards and over which a Town has no authority). Once the disturbed area within the buffer is successfully revegetated, then that portion should be deemed “non-disturbance.”
- Move last sentence in this Standard related to compliance, which states “*Compliance with this standard shall only be determined to exist by the Commission upon receipt of final, official copies of all New York State Department of Environmental Conservation and municipal permit(s) and satisfaction of any conditions on such permits*” to the beginning of the chapter and apply to the whole chapter.
- Concern expressed with last new phrase which begins “*Compliance with this standard shall only be ...*” Requiring this standard could cause a default approval in some cases.
- Suggest changing language in the last part of the paragraph, which begins “*Compliance with this standard shall only be ...,*” to refer only to non-conforming projects under Commission review.

##### **5.3.3.4.4 Reduction of Impervious Surfaces**

- Consider incorporating the intent and goal(s) of this Standard into the Open Space Standard where it may be more applicable.
- Revise last sentence of standard to say “Landbanked parking shall not be counted toward meeting the open space standard.”

#### **5.3.3.4.5 Natural recharge, drainage, and ponds**

- Where recharge basins are referenced in this Standard, add the word “constructed” to distinguish between natural and constructed areas.
- The Standard aims to encourage natural drainage areas and should distinguish between natural drainage areas and constructed areas. However, it should be clear that regardless of the “construction,” drainage areas are considered part of the developed area and subject to Standards.
- Remove word “significant” in this Standard.
- Consider moving this Standard into or cross-referencing this Standard with the Open Space Standard where it may be more applicable.

#### **5.3.3.4.6 Soil erosion and stormwater runoff control during construction**

Stronger language is suggested and the insertion of a statement that projects must comply with EPA Phase 2 Stormwater requirements.

#### **5.3.3.5 Development in the CGA that Requires PBC Redemptions**

- Riverhead and Southampton are opposed to a mandatory redemption requirement.
- Brookhaven expressed concern with a 25 percent requirement.

*(\*Note – subsequent to this worksession, the Commission moved to consider the adoption of 5.3.3.5 with a 15% redemption rate. A public hearing and meetings with the three Central Pine Barrens Towns were conducted and public comment was provided. The Town of Riverhead maintained its opposition to this proposed provision.)*

#### **5.3.3.6 Coordinated design for open space, habitat, and soil protection**

- Revise the lengthy preface in this Standard to be more direct and concise. The purpose and intent should be more clearly stated. The second paragraph regarding “Conservation Design” may not belong in this section.
- Consider incorporating provisions for flag lots where only the bulk of the lot is subject to the Clearing Standard and the flagpole driveway is excluded from the clearing calculation. This would be consistent with Town Code(s) (e.g., Southampton Town Code § 330-67A (4) (a), “...except on flagpole lots, where the area of the pole shall be exempt from the total lot area and the total amount of clearing permitted”).
- Define open space. Obtain Town Law 278 definition of open space for review.

*Section 278 of the New York State Town Law, which pertains to cluster development, does not contain a formal definition of the term “open space.” It does utilize and refer to the term “open lands.” However, Section 278 does provide guidance regarding the purpose of clustering and the intent of setting aside and preserving open space. Subsection 1 (a) (“Definitions”), states the following:*

*“(a) ‘cluster development’ shall mean a subdivision plat or plats, approved pursuant to this article, in which the applicable zoning ordinance or local law is modified to provide an alternative permitted method for the layout, configuration and design of lots, buildings and structures, roads, utility lines and other infrastructure, parks, and landscaping in order to preserve the natural and scenic qualities of **open lands**.”*

*Subsection 2(b) states the following:*

*“(b) The purpose of a cluster development shall be to enable and encourage flexibility of design and development of land in such a manner as to preserve the natural and scenic qualities of **open lands**.”*

*Subsection 3, “Conditions,” states the following:*

*“(c) The planning board as a condition of plat approval may establish such conditions on the ownership, use, and maintenance of such **open lands** shown on the plat as it deems necessary to assure the preservation of the natural and scenic qualities of such **open lands**. The town board may require that such conditions shall be approved by the town board before the plat may be approved for filing.”*

The following definitions of open space were collected from sources including Suffolk County, Town of Southampton, Town of Riverhead, NYSDEC website, NYSDEC & NYSDOS, New York State, USLegal.com, and US EPA.

## **Suffolk County**

Laws of Suffolk County, New York, v. 92 updated 12-30-2010

Part III Administrative Local Laws

Chapter 25, Conservation Easements

Section 25-2 – Definitions

“OPEN SPACE or OPEN AREA -- Any space or area characterized by natural scenic beauty or whose existing openness, natural condition or present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development or would maintain or enhance the conservation of natural or scenic resources. For the purposes of this definition, natural resources shall include, but not be limited to, agricultural lands, defined as "open lands," actually used in bona fide agricultural production.”

### **Town of Southampton**

Town Code Chapter 247 – Open Space

Article II – Alienation of Open Space

Section 247-13 – Definitions

“OPEN SPACE or OPEN AREA -- Any area or space characterized by natural scenic beauty or whose existing openness, natural condition or present state of use enhances the present or potential value of abutting or surrounding development or maintains or enhances the conservation of natural or scenic resources. For purposes of this section, natural resources shall include but not be limited to agricultural lands used or possessing the potential for use in bona fide agricultural production.”

### **Town of Riverhead**

Chapter 14 – Community Preservation

Article V – Acquisition and Use of Open Spaces, Parks and Park Preserves

Section 14-37 – Definitions

“OPEN SPACE - Undeveloped and essentially unimproved land that is important to conserve and maintain either for the quality and character of the lives of Town residents or for the preservation of their common heritage.”

### **NYSDEC website**

<http://www.dec.ny.gov/lands/317.html>

“Definition of Open Space

Open space may be defined as an area of land or water that either remains in its natural state or is used for agriculture, free from intensive development for residential, commercial, industrial or institutional use. Open space can be publicly or privately owned. It includes agricultural and forest land, undeveloped coastal and estuarine lands, undeveloped scenic lands, public parks and preserves. It also includes water bodies such as lakes and bays. The definition of open space depends on the context. In a big city, a vacant lot or a small marsh can be open space. A small park or a narrow corridor for walking or bicycling is open space, though it may be surrounded by developed areas. Cultural and historic resources are part of the heritage of New York State and are often protected along with open space.”

## **NYSDOS & NYSDEC**

Local Open Space Planning Guide (2004)

“Open Space is land that is not intensively developed for residential, commercial, industrial or institutional use. It serves many purposes, whether it is publicly or privately owned. It includes agricultural and forest land, undeveloped shorelines, undeveloped scenic lands, public parks and preserves. It also includes water bodies such as lakes and bays. What is defined as open space depends in part on its surroundings. A vacant lot, community garden or small marsh can be open space in a big city. A narrow corridor or pathway for walking or bicycling is open space even though it is surrounded by developed areas. Historic and archeological sites are often associated with significant open spaces and are a part of our common heritage. “

## **New York State**

Environmental Conservation Law

§ 52-0101. Definitions.

“4. Environmentally sensitive lands project” means a state project to preserve aquifer recharge areas, areas of exceptional scenic beauty or exceptional forest character, open space, pine barrens, public access, trailways, unique character, wetlands, and wildlife habitat, as defined below:

(d) ‘Open space’ means open or natural land in or near urban or suburban areas necessary to serve the scenic or recreation needs thereof.”

## **New York State Real Property Tax Law**

\* § 491. Conservation easement agreement exemption; certain towns.

“2. Definitions. For the purpose of this section, the following terms shall have the following meanings: "open space" or "open area" means any space or area characterized by natural scenic beauty or whose existing openness, natural condition or present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development or would maintain or enhance the conservation of natural or scenic resources. For the purposes of this definition, "natural resources" shall include, but not be limited to, agricultural lands defined as open lands actually used in bona fide agricultural production.”

### **USLegal.com**

#### Open Space Law and Legal Definitions

<http://definitions.uslegal.com/o/open-space>

“Open space generally refers to undeveloped land or water area. Specific definitions vary by jurisdiction, so local laws should be consulted for applicable requirements. The following is an example of a local law dealing with open space land:

Open Space land is defined as either:

- (1) Any land area zoned for open space by a comprehensive land use plan adopted by a city or county legislative authority, or
- (2) Any land area in which the preservation in its present use would:
  - a. Conserve and enhance natural or scenic resources
  - b. Protect streams or water supply
  - c. Promote conservation of soils, wetlands, beaches or tidal marshes
  - d. Enhance the value to the public of abutting or neighboring parks, forest, wildlife preserves, nature reservations or sanctuaries or other open space
  - e. Enhance recreation opportunities
  - f. Preserve historic sites
  - g. Preserve visual quality along highway, road, and street corridor or scenic vistas; or
  - h. Retain in its natural state tracts of land not less than one acre situated in an urban area and open public use on such conditions as may be reasonably required by the granting authority.

## US EPA

<http://www.epa.gov/owow/NPS/ordinance/mol3.htm>

Model Ordinances to Protect Local Resources (path: EPA Home > Water > Wetlands, Oceans and Watersheds > Polluted Runoff (Nonpoint Source Pollution) > Model Ordinances to Protect Local Resources > Open Space Development > Model Ordinances Language)

“Open Space

A portion of a development site that is permanently set aside for public or private use and will not be developed. Open space may be used as community open space or preserved as green space.”

### Figure 5-1

- For Southampton only, review Aquifer Protection Overlay District (APOD) Clearing Standards and consider adding a separate table for Southampton that is consistent with the Town Code’s existing requirements, as Southampton’s is based on lot size, not zoning, and is generally more restrictive than the Central Pine Barrens standard, specifically since open space and clearing restrictions apply to subdivisions of land, as per Town Code § 247-8, *Farmland and Watershed Protection*, and § 330-67, *Protection of Natural Vegetation*, respectively.
  - See Town of Southampton Town Code Section §247-8 (H):
    - § 247-8. Farmland and watershed protection.
      - H. Where a parcel is located in Residence Zone CR-200, CR-120 or R-120 and is in the Aquifer Protection Overlay District, at least 65% of the parcel shall be preserved. In CR-80 or R-80 within the Aquifer Protection Overlay District, 50% shall be preserved. In all other cases in the Aquifer Protection Overlay District, 35% shall be preserved.
  - See Town of Southampton Town Code §330-67 (A)(4)(a):
    - § 330-67. Protection of natural vegetation.
      - A. To ensure maximum water recharge and to minimize the potential for fertilized vegetation, natural vegetation located on a tract or lot shall be preserved to the maximum extent possible, consistent with the following parameters:
        - (4) Residential lots and tracts.

- (a) For residential lots, the amount of disturbance of natural vegetation shall not exceed the following percentages, *except on flagpole lots, where the area of the pole shall be exempt from the total lot area and the total amount of clearing permitted:*

<b>Lot Size (square feet)</b>	<b>Percentage of Site</b>
1 to 15,000	75%
15,001 to 30,000	60%
30,001 to 60,000	50%
60,001 to 90,000	35%
90,001 to 140,000	25%
140,001 to 200,000	20%
200,001 or greater	15%

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- In the four to five+ acre zoning districts, clarify the clearing percentage and remove exclusions for septic systems and driveways coverage (Towns of Southampton and Brookhaven to provide pertinent Town code sections).

#### **5.3.3.6.1.3 Residential Overlay District and Redemption of PBCs**

- Clarify the clearing percentage and average lot size applied to meet this Standard.
- The increased clearing allowed with PBC redemption should also be cross-referenced in Chapter 6.
  - On July 18, 2001, the Commission adopted a resolution for Graystone Estates that applied a clearing limit of 46% to 1.5-acre lots, as opposed to a CLUP 35% clearing limit applicable to 2-acre lots. The limit was increased to 46% due to the redemption of two Pine Barrens Credits for the project.

#### **5.3.3.6.1.5 Relief from clearing**

- Move the statement regarding persons seeks relief from clearing requirements must file a CGA Hardship to the intent of the Standard rather than as its own standard.
- The Hardship requirement is applicable to BZA subdivisions as well.

#### **5.3.3.6.1.6 Split Core/CGA site**

- Brookhaven to review the intent of this Standard and provide input.
- For clarity, cross reference Chapter 6, specifically Section 6.3.3.5, which may result in greater clearing in the CGA portion of the site to protect the Core portion. Address timing of credit redemption if and when Credits are issued for the Core portion.
  - In a recent decision on an application in the CGA (The Meadows at Yaphank PDD CGA-DRS resolution dated 10/19/11, since the project offered and the Commission required the redemption of Pine Barrens Credits, the Commission imposed the following condition: *“Prior to the issuance of any building permits or physical activity on the project site, the applicant shall redeem a minimum of five (5) Pine Barrens Credits for the Project and provide proof of this transaction to the Commission.”*

#### **5.3.3.6.1.7 Cleared sites**

- Clarify jurisdiction and the review process for overcleared sites to come into conformance, jurisdiction to approve revegetation, plans and timing to review and approve mitigation for overclearing violation. Distinguish between clearing which occurred before the Long Island Pine Barrens Protection Act with clearing that occurred after the Act.
- Outline the approach for an applicant who seeks to partially remedy a clearing violation and seeks Hardship relief.
- Clarify when Town can grant relief and revegetation as it relates to standards and only Commission can grant relief to exceed CLUP standards.
- Planning Board can grant relief for clearing but clearing in excess of standard requires hardship subject to Commission review and decision.

#### **5.3.3.7.2 Bird conservation and protection**

John Turner to provide additional information to clarify this Standard, including:

- Clarification on how to apply the Standard to development project applications.
- Copy of the NYC Audubon Bird Safe Building Guidelines reference (attached).
- Copy of proposed Federal legislation that addresses this issue (attached).

## **General comments on the Chapter**

1. It is incumbent on an applicant to demonstrate compliance with Standards prior to a determination by the Commission.
2. Within each Standard:
  - a. First reference compliance with other applicable regulations and requirements
  - b. Provide rationale where CLUP standards are more restrictive than other agency requirements.

## **Next Steps**

Mr. Pavacic stated that one or two additional meetings would be scheduled, with the first likely to occur in mid- to late-January 2011 to complete the review of Chapter 5 and to discuss parking lot items. It is likely that one meeting would be scheduled just for the review of the latter half of Chapter 5 and the second just for the Parking Lot items.