

BEYOND LAND ACQUISITION



October 2017

A proposal for a more focused, effective program

Delaware County submits that the compensated leasing of stream buffers and other sensitive areas will simultaneously provide greater water quality protection per dollar and greater sustainability for communities than the current Land Acquisition Program.

Beyond Land Acquisition

A PROPOSAL FOR A MORE FOCUSED, EFFECTIVE PROGRAM

Introduction

The New York City Department of Environmental Protection's (NYCDEP) Land Acquisition Program (LAP) has been an active part of the West-of-Hudson watershed's landscape since 1997. Promoted as a voluntary process by which the NYCDEP can purchase property and conservation easements in the name of water quality protection, the LAP has impacted over 100,000 acres in Delaware County alone.

In its December 10, 2010 Final Environmental Impact Statement for the Extended New York City Watershed Land Acquisition Program (LAP), the NYCDEP concluded that the acquisition of fee and conservation easement interest of 105,043 acres by the NYCDEP and the Watershed Agricultural Council (WAC) in the West of Hudson Watershed – the maximum acquisition authorized under the 2010 Water Supply Permit – would not have a significant adverse impact on land use or community character. This conclusion was based, among other things, on detailed Town Level Assessments for twenty West-of-Hudson towns, including analyses of available developable land, projections of residential development, and projected LAP acquisitions. In April of 2017, the NYCDEP issued draft updated Town Level Assessments.

Delaware County has submitted a report discussing the NYCDEP's Town Level Assessments, the challenges presented by their methodology (and any "paper exercise" methodology, for that matter), and the results of the County's own town level assessments. The County's report goes beyond a discussion of available developable land and the myriad ways that "developable" could be defined – it also provides simple build-out analyses conducted for each of the towns. These build-out analyses assume that every potential parcel has road frontage and topography conducive to building. The result is a percentage of potential impervious surface coverage for each town – again, assuming that every acre is buildable – given a scenario where development has proceeded to the maximum extent allowed by current land use regulations. Across the county, the average maximum future impervious surface coverage is 8.24% (controlling for skew by removing two outlier towns), including the already-existing impervious surface area. This type

of calculation eliminates the need for debate regarding the extent of development pressure in the future, whereby the NYCDEP assumes worst-case, high-development scenarios and the watershed municipalities argue the suppressive track record of the economy, topography, and regulatory climate. While local land use regulations have the potential to change in their degree of permissiveness, it is the County's stance that its build-out analyses so egregiously overestimate maximum impervious surface that any future land use leniency is accounted for. Not only that, but the County acknowledges that maintaining a sustainable landscape is in the best interest of its economy and environment – further reducing the likelihood that the maximum impervious surface would ever be reached.

The Impacts of Impervious Surface

The LAP is based upon the well-established premise that impervious surfaces within a watershed have the capacity to negatively impact water quality. Given varying conditions in soil type, climate, and land cover, and given varying metrics by which water quality is assessed, there is no single threshold for impervious surface cover above which water quality is certain to be impaired (or, conversely, below which water quality is certain *not* to be impaired). A recent Korean study established that managing impervious surface coverage within 10% was in the best interest of water quality protection, while acknowledging that other studies pegged thresholds as low as 3.6% and as high as 15%¹. While an Alaskan study published in 2003 noted the first changes in water quality at low levels of impervious surface cover (4% - 5.8%), the authors indicated that the proximity of the impervious surface to the watercourse highly influenced its effect on water quality². In the West-of-Hudson watershed, impervious surface is already prohibited within 100 feet of a watercourse.

The on-the-ground reality of development in the West-of-Hudson watershed is one that is constrained by mountains and rivers. The slopes are often steep, the access is often poor, and the floodplains are seldom a wise choice for siting homes and businesses. Watershed municipalities harbor no delusions of grandeur when it comes to future development, but they possess the perfectly rational desire to remain rural but flexible – to have *choices* – when replacing flood-damaged housing stock, relocating flood-damaged businesses, expanding successful businesses, when siting municipal projects, and in trying to maintain a viable tax base.

Delaware County's "full build-out" calculations result in relatively low maximum impervious surface percentages that – in most cases – barely begin to approach thresholds at which water

quality impacts might be noted. The County acknowledges that individual subbasins may experience higher percentages of impervious surface at maximum buildout, but fully believes that the impacts from any future development would be mitigated by existing regulations and best management practices.

Protecting Water Quality More Efficiently

The County believes that the following five points are crucial to any discussion regarding future development, impervious surface, and the LAP moving forward:

1. The purpose of the LAP is to prevent development (as opposed to merely amassing open space).
2. The purpose of preventing development (and its associated impervious surface) is the protection of water quality.
3. The average percentage of maximum impervious surface possible in Delaware County is 8.24%, which represents an average of 4.19% of *new* impervious surface.
4. The NYCDEP would have to acquire significant acreages in order to prevent that remaining possible development.
5. There are already programs and regulations that more directly address and prevent potential sources of water quality impairment.

Given the above, the LAP – as currently implemented – does not efficiently protect water quality. Neither the County’s nor the NYCDEP’s interests are served by the NYCDEP continuing to expend significant resources to acquire land. The water quality improvements of the last two decades have been attributable in part to the regulations promulgated by the NYCDEP, and perhaps more so to the innovative and time-proven partnerships between the NYCDEP and the watershed stakeholders. In light of these successful partnership programs, Delaware County proposes a change to the LAP – a change that would involve local communities working with the NYCDEP to identify the most effective lands for stream health and water quality while helping residents remain good stewards of their land.

To maximize flexibility – and in turn, sustainability – Delaware County looked to other water quality initiatives and land conservation organizations for a program that would maximize water quality protection while reducing the amount of land made unavailable for development.

The County determined that (aside from regulations that address direct impairments and best management practices for the indirect) the most cost-effective protection comes from buffers – especially forested ones – along surface waters and springs.

The County acknowledges that streamside buffer programs already exist within the watershed and is proposing to help expand and supplement those programs to fill in the gaps. The Streamside Acquisition Program is operated through the Catskill Center for Conservation and Development, whereby NYCDEP funds are used to acquire fee simple or conservation easement interests in stream buffers. The United States Department of Agriculture’s Farm Service Agency administers the Conservation Reserve Program (CRP) and the Conservation Reserve Enhancement Program (CREP), both of which provide annual rental payments for agricultural landowners to remove sensitive lands from production and introduce conservation practices. These lease-based programs generally afford protection for at least ten to fifteen years, at which point a landowner can renew the lease.

An Alternative Program

Delaware County proposes a “sensitive lands” partnership program to supplement the existing options – one that addresses those streamside landowners who are not willing to sell their properties outright, who are not interested in committing to permanent easements, and who may not qualify for CRP/CREP. It is envisioned that landowners would sign a renewable lease in return for annual rental payments on not only stream buffers, but any sensitive lands related to water quality. This includes wetlands and source waters / springs.

The County envisions a scenario where municipalities would have the choice of continuing to allow the NYCDEP to pursue the broader LAP, or opting into the sensitive lands program. In choosing the latter, they would agree to support and participate in the program – especially all education and outreach efforts to inform landowners of its availability.

SENSITIVE LANDS PROGRAM

WHO: Landowners with streams, wetlands, and/or source water resources.

WHAT: Buffers determined by the best-informed stream science and protection standards.

WHEN: Lease lengths may vary, with perhaps a 15-year minimum and a 99-year maximum.

WHERE: Watershed municipalities that choose to opt in.

WHY: To provide an alternative to broad-based land acquisition as previously practiced.

HOW MUCH: Annual rental payments may be based on the water quality afforded and the length of the lease (incentivizing longer lease terms).

While the amount of annual rental payments has yet to be determined, the County is supportive of amounts that truly encourage landowners to take part. The County is also supportive of a sliding scale that would incentivize longer lease terms and/or renewal.

Conclusion

In proposing an alternative program that benefits both water quality and long-term sustainability of watershed communities, Delaware County believes that two of the NYCDEP's established long-term LAP goals³ would be accomplished: maximizing the water quality benefit of acquisition and promoting the wise use of acquisition funds over the long term. Sensitive lands leases will be possible in all manner of landscapes – including hamlets – while allowing both landowners and municipalities to maintain flexibility. While concern may arise regarding the lack of permanence in protecting sensitive lands, Delaware County currently experiences approximately 95% success in renewing CREP contracts – an encouraging number for a short-term program and one that would likely be reflected in a sensitive lands program. This proposal is merely the first step of a larger, more inclusive discussion in which the details of the program can be determined, and the County is optimistic that the conversation will move all watershed stakeholders in a positive direction.

¹ Kim H, Jeong H, Jeon J, Bae S. The Impact of Impervious Surface on Water Quality and Its Threshold in Korea. *Water*. 2016; 8(4):111.

² Ourso R.T. & Frenzel, S.A. Identification of linear and threshold responses in streams along a gradient of urbanization in Anchorage, Alaska. *Hydrobiologia*. 2003; 501: 117. <https://doi.org/10.1023/A:1026211808745>

³ New York City Department of Environmental Protection. Long-Term Land Acquisition Plan 2012 to 2022. 2009. 16-17.