New York City Department of Environmental Protection **Bureau of Water Supply**

Land Acquisition Program 2019-2020 Solicitation Plan for the Catskill/Delaware System

October 2018

Prepared in accordance with Section 4.2 of the NYSDOH 2017 Filtration Avoidance Determination



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1. Introduction

The 2017 Filtration Avoidance Determination (FAD) requires the New York City Department of Environmental Protection (DEP) to submit plans for each two-year period to solicit 350,000 acres through the Land Acquisition Program (LAP) through 2024; this cumulative goal translates to an average of 50,000 acres per year over the seven-year period 2018-2024. The 2017 FAD allows that acreage solicited through two of LAP's satellite programs, the Streamside Acquisition Program (SAP) and New York City-Funded Flood Buyout Program (NYCFFBO), may be credited five acres for every one acre solicited. The 2017 FAD further allows that up to 20,000 acres per year of SAP, NYCFFBO, and Watershed Agricultural Council (WAC) solicitations may be credited towards DEP's overall solicitation goal. Thus, the core LAP's annual solicitation target is generally around 30,000 acres per year.

This 2019-2020 Solicitation Plan summarizes recent program activity and outlines projected solicitation activities for calendar years 2019 and 2020 for core LAP (fee simple and conservation easements acquired by DEP) and the following LAP satellite programs: SAP, NYCFFBO, the WAC Farm Easement Program (WAC CE), and the WAC Forest Easement Pilot Program (WAC FE). It is worth noting that in April 2018, following extensive negotiations with a broad range of watershed stakeholders, DEP submitted to the NYS Department of Health (NYSDOH) the City's "Proposed Modifications to the Long-Term Land Acquisition Plan 2012-2022" (2018 Solicitation Modifications). As noted below, NYSDOH has not yet made a determination on DEP's proposed 2018 Solicitation Modifications. If that determination requires a reassessment of the assumptions in this Plan concerning how those proposed modifications will be implemented, DEP will update this 2019-2020 Solicitation Plan.

2. Recent Program Activity

As shown in Table 1, the LAP has acquired 151,614 acres of land in the Catskill/Delaware System as of September 30, 2018. In the period covered by the 2017-2018 Solicitation Plan to date (January 1, 2017 through September 30, 2018), the LAP has acquired a total of 9,555 acres while three of the LAP's satellite programs – SAP, NYCFFBO and WAC FE – secured their first purchase contracts and held their first closings.

Program Category	Number of Parcels	Acres Acquired	Purchase Price				
DEP Fee Simple *	1,396	95,765	\$366,693,000				
DEP CE	170	24,984	\$72,236,000				
SAP	16	121	\$841,000				
NYCFFBO	11	41	\$2,125,000				
WAC CE	153	27,382	\$40,520,000				
WAC FE	6	2,321	\$2,169,000				
Program Totals:	1,752	151,614	\$484,584,000				

Table 1. LAP acquisitions to date in the Catskill/Delaware System by program category.

* Includes properties acquired by the City as part of a FEMA Flood Buyout Program.

3. Solicitation Accomplishments (2012-2017) and Goals (2018-2020)

This 2019-2020 Solicitation Plan calls for a continuation of targeted solicitations in accordance with the 2017 FAD and the 2012-2022 Long-Term Land Acquisition Plan, with certain changes resulting from the proposed 2018 Solicitation Modifications.

As shown in Table 2a, the LAP met the 300,000-acre solicitation goal set by the prior FAD for the six-year period 2012-2017. Table 2b shows projected solicitation goals for the current year (2018) and the next two years. DEP projects that core LAP will solicit approximately 22,000 acres in 2018 (about 19,000 acres have been solicited to date), which is somewhat under the LAP's 30,000-acre average goal, as DEP adjusts solicitation to address concerns raised by watershed stakeholders regarding the 2018 Solicitation Modifications. To achieve the new seven-year FAD goal of 350,000 acres, DEP expects to increase core LAP solicitations to 34,000 acres starting in 2019. Solicitations for satellite programs are expected to meet or exceed the 20,000-acre annual credit during the timeframe covered by this 2019-2020 Solicitation Plan.

Year	Core LAP	WAC CE + FE	SAP (1)	NYCFFBO ⁽²⁾	Annual Credit
2012	64,904	2,439	n/a	n/a	67,343
2013	40,702	4,626	n/a	n/a	45,328
2014	38,785	11,202	n/a	n/a	48,785
2015	49,961	46,171	0	0	59,961
2016	36,436	28,799	620	34	46,436
2017	25,933	41,625	1,432	17	35,933
6-Year Total:	256,721	134,862	2,052	51	303,786

Table 2a. Actual LAP Solicitations 2012-2017, in acres.

Table 2b. Projected LAP Solicitations 2018-2020, in acres.

Year	Core LAP	WAC CE + FE	SAP ⁽¹⁾	NYCFFBO ⁽²⁾	Annual Credit
2018	22,000	25,000	1,000	25	42,000
2019	34,000	25,000	1,000	25	54,000
2020	34,000	25,000	1,200	25	54,000
3-Year Total:	90,000	75,000	3,200	75	150,000

Notes:

 Under the prior FAD, SAP and NYCFFBO acreage are credited two acres for each acre solicited. Under the 2017 FAD, this credit is five acres for each acre solicited. The figures above are the actual solicited acres and do not include the applicable credit.

(2) Annual Total Credit is calculated as LAP solicitation plus the maximum credit for satellite programs (10,000 acres under the prior FAD and 20,000 acres under the 2017 FAD).

4. Satellite Program Status and 2019-2020 Solicitation Plans

Under the prior FAD, DEP formally tracked solicitations for the LAP satellite programs for the first time, with up to 10,000 acres credited in a given calendar year towards the cumulative LAP solicitation goal. This credit has been raised to 20,000 acres under the 2017 FAD, and covers the three satellite programs that were launched under the prior FAD, in addition to the ongoing WAC Farm Easement Program:

4.1. WAC Forest Easement Pilot Program

WAC started to actively solicit properties for the pilot Forest Easement Program during 2015, primarily the owners of private forestland comprising 100 or more acres with an approved WAC Forest Management Plan or an active Forest Management Plan enrolled in the NYS Forest Tax Abatement Program. During 2019 and 2020, DEP anticipates that WAC will continue cycling through this large pool of owners, with a focus on properties with compelling surface water features and intact forest cover.

WAC signed the first forest easement contract in September 2017 and closed on the first forest easement contract in September 2018. To date, WAC has signed eight forest easement contracts totaling over 2,700 acres, including a single easement covering more than 1,000 acres in the Cannonsville Basin (Town of Walton).

4.2 Streamside Acquisition Program

The Catskill Center manages this \$5 million pilot program that is currently active only in the Schoharie Basin. Since the Catskill Center initiated active solicitation in 2016, the SAP has solicited close to 3,000 acres, focusing primarily on small and mid-sized parcels (averaging nine acres in size) with intact, forested buffers along streams and wetlands. To date, the SAP has secured 16 signed contracts on over 120 acres of riparian land; the first two closings occurred in 2018.

DEP anticipates that the Catskill Center will maintain the same solicitation priorities during 2019-2020 as in previous years. DEP further anticipates that solicitation during 2019-2020 will likely include re-solicitation of properties along selected stream reaches, targeted solicitation in proximity to previously acquired properties, and solicitation in hamlet areas should a municipality pass a resolution to opt-in to the SAP within designated areas.

The 2017 FAD requires that DEP add \$3 million to continue the SAP in the Schoharie Basin through 2022; the 2017 FAD also contains a provision whereby the NYS Department of Environmental Conservation may direct the City to expand the SAP to the entire West of Hudson (WOH) watershed. Since the timing of a potential program expansion is unknown at this time, this 2019-2020 Solicitation Plan assumes, as shown in Table 2b, that annual SAP solicitation will range from 1,000 to 1,200 acres during the next two years.

4.3 New York City-Funded Flood Buyout Program

The City developed the NYCFFBO in close collaboration with watershed communities, therefore properties are generally identified for participation by local municipalities through a Local Flood Analysis or another local planning effort; occasionally, an individual landowner whose property has undergone erosion or inundation will request to participate. Each Town or County has a non-City Outreach Coordinator who vets landowner inquiries for this program.

Although total acreage solicited to date is small (34 acres in 2016 and 17 acres in 2017), the NYCFFBO has already considered 36 projects for acquisition. Eleven properties have entered into contract, of which two have closed. As an indication of program interest, the eleven contracts are spread among six municipalities in four watershed counties (Delaware, Greene, Schoharie and Ulster). Based on this level of interest, DEP anticipates that solicitation in 2019 and 2020 will continue at a steady pace of approximately 25 acres per year.

5. Core LAP Solicitation Priorities and Methods 2019-2020

The City's primary methods and priorities for LAP solicitation are embodied in the 1997 Watershed Memorandum of Agreement (MOA) and subsequent Water Supply Permits issued by NYSDEC. However, future solicitation for the core LAP, now in its 21st year, will be guided by three more recent policy considerations:

- DEP issued its Long-Term Land Acquisition Plan 2012-2022 in 2009, which identified goals and methods designed to focus future acquisitions on those portions of the Catskill/Delaware System with relatively lower levels of land in permanently-protected status. Since 2009, as detailed further in Section 5.1 below, LAP has successfully incorporated key components of the Long-Term Plan into its solicitation strategy for fee simple and conservation easement properties, and these strategies are expected to continue in 2019 and 2020.
- As a result of extensive stakeholder negotiations, DEP issued Updated Town Level Assessments in April 2017 and the Proposed Solicitation Modifications in April 2018. The latter are designed to address concerns raised by watershed communities regarding the continued acquisition of developable land, while maintaining a robust core LAP in accordance with the FAD. As detailed in Section 5.2 below, the proposed modifications should result in some reduction in the City's acquisition of a) developable lands that are relatively distant from surface water features and b) land in close proximity to hamlets and other population centers.
- As previously described, DEP and its partners have begun implementation of three significant LAP satellite programs since 2014. Now that these programs are in full operation, DEP and the FAD regulators have the opportunity to evaluate the role of core LAP in this evolving context. DEP anticipates that solicitation for core LAP and the various satellite programs will evolve in ways that will complement the strengths of each program. In addition, the National Academy of Sciences, Engineering and Medicine has convened an Expert Panel that is currently evaluating the portfolio of DEP's Watershed

Protection Programs. DEP anticipates that core LAP activities and possibly satellite programs will be influenced by the Panel's recommendations.

5.1 Long-Term Plan Priorities

Overall, through continued implementation of the 2012-2022 Long-Term Land Acquisition Plan, DEP has increased protection levels in the Catskill/Delaware System from 34% in 2009 to 39.2% today. However, the Long-Term Plan sought to focus future LAP solicitation and acquisitions in WOH basins and sub-basins with less than 40% protected land. These "Areas of Focus" are primarily comprised of the three largest reservoir basins: Cannonsville, Pepacton and Schoharie. Within these Areas of Focus, DEP has acquired over 45,971 acres since January 1, 2010 and increased the level of protection from 31% to 36.4%. Continued solicitation of properties with surface water features in these basins will serve as the focus of core LAP solicitations in 2019 and 2020.

The LAP Parcel Ranking tool provides an efficient and flexible method to identify the most appropriate properties for solicitation based on the best combination of features for watershed protection. The tool uses three inputs (size, percent surface water features, and slope) to develop a ranking of any given set of properties relative to others in the set. Prior to sending out LAP solicitation letters, DEP undertakes further qualitative evaluations to assess additional information such as road frontage, feasible access, adjacencies, parcel configuration, and other features that are not accounted for by the ranking tool.

DEP also uses variable solicitation schedules to increase the frequency of contact in the areas of greatest interest for land acquisition. Improved acquisition rates in the Areas of Focus can be largely attributed to this strategy. Despite the fact that the 2012-2022 Long-Term Plan refocused LAP solicitation on less-protected WOH basins, DEP continues to pursue important properties throughout the Catskill/Delaware System. In 2017, for example, DEP signed two large contracts in the West Branch Reservoir Basin totaling over 370 acres.

5.2 Proposed 2018 Solicitation Modifications

DEP's proposed 2018 Solicitation Modifications are pending a determination from NYSDOH. These Solicitation Modifications would create additional constraints on the acquisition of fee simple and conservation easement properties in Priority Areas 2, 3 and 4. However, solicitation in Priority Areas 1A and 1B would not be impacted. In addition, because the 2018 Solicitation Modifications are intended to constrain core LAP only, DEP anticipates that solicitation for the LAP satellite programs will not be impacted.

In recognition of community concerns, but acknowledging that the 2018 Solicitation Modifications are not yet approved or adopted formally, DEP proposes to continue refining core LAP solicitation strategies in the near-term. DEP will exercise discretion to focus solicitation of properties in Priority Areas 2, 3 and 4 based on the spirit of Proposals 1a, 1b, 1c and 3 that were included in the 2018 Solicitation Modifications. Proposal 2, which involves granting WOH towns the ability to designate an additional 100 acres as off-limits for acquisition, can only be implemented based on a municipal resolution, so LAP solicitation will be unaffected unless and until any such resolutions occur. These proposals are listed below, along with a brief discussion of anticipated impacts on LAP solicitation efforts:

- Proposal 1a: Raise the minimum Surface Water Criteria (SWC) needed for acquisition from 7% to 15% for properties that do not adjoin City land. DEP anticipates that this proposal would have minimal impact on solicitation, since it only addresses properties that do not adjoin previously acquired City land. Most properties solicited for core LAP acquisition in recent years have either adjoined City land or contained SWC in excess of 7%.
- Proposal 1b: Within a half-mile zone around the 1997 hamlet designated areas, raise the minimum SWC needed for acquisition to 30%. DEP anticipates that this proposal would have moderate impact on solicitation, since it would reduce the universe of eligible properties near certain hamlets. Properties with a high percentage of SWC would continue to be favored for solicitation. This proposal would result in less solicitation and acquisition of potentially developable land around population centers.
- Proposal 1c: If DEP has acquired either 60% of the 2010 Environmental Impact Statement projections or more than 2,000 acres, raise the minimum SWC to 50% within the half-mile zones around the 1997 hamlet designated areas. DEP anticipates that this proposal would have moderate impact on solicitation, since it is similar to Proposal 1b but would currently apply only to the towns of Andes, Walton, Delhi, Middletown, Roxbury, Kortright, Bovina and Windham. In these towns, additional properties may not be desirable for solicitation due to the configurations needed to achieve the 50% SWC threshold. To address community concerns, DEP proposes to focus on properties with a high proportion of surface water features when soliciting in close proximity to population centers.
- Proposal 3: Limit DEP to incoming solicitation only in a town once 100% of the FEIS projection is reached, or in which more than 4,000 acres have been acquired since 2010. This proposal would currently include Andes, Delhi and Walton. This proposal would have a significant impact on solicitation in affected towns. Landowner-initiated solicitation will continue in Andes, Delhi and Walton, but LAP would no longer have the ability to reach out to the owners of certain properties.

6. Summary

This 2019-2020 Solicitation Plan outlines that DEP anticipates soliciting 42,000 acres in 2018 (comprised of 22,000 core LAP acres plus 20,000 credited acres from satellite programs) followed by another 108,000 acres during 2019-2020 (comprised of 68,000 core LAP acres plus 40,000 credited acres from satellite programs). Based on these projections, DEP anticipates soliciting an estimated 150,000 acres through 2020, to be counted towards the cumulative 2017 FAD goals of 350,000 total acres through 2024.

In addition, if the City's FAD regulators endorse all or part of the 2018 Solicitation Modifications proposed by DEP, those modifications will further influence the location and characteristics of core LAP solicitation covered by this 2019-2020 Solicitation Plan.