CHAPTER 11

ANALYSIS OF ALTERNATIVES

INTRODUCTION

This chapter considers several alternatives to the Proposed Action. As described in Chapter 1, "Project Description," the objective of the proposed action is to acquire fee simple and conservation easement interests to protect environmentally-sensitive land in the New York City (City) watershed as a part of the City's overall Watershed Protection Program. LAP is a key component of the City's efforts to continue to provide high quality drinking water without filtration of the Catskill-Delaware (Cat-Del) System,[1] which provides water to over 9 million residents of the City and other communities in New York State. The program is mandated under the 2007 USEPA Filtration Avoidance Determination (FAD). Land acquisition was similarly a key component of the 1997 and 2002 FADs.

The State Environmental Quality Review Act (SEQRA) and City Environmental Quality Review (CEQR) process require that alternatives to the proposed action be identified and evaluated as part of the EIS process. The alternatives analysis should: (1) present reasonable options for reducing or eliminating project impacts, while substantively meeting project goals and objectives; (2) demonstrate a reasonable range of options to the proposed action; and (3) compare potential impacts under alternative approaches for meeting project objectives. The range of alternatives to be considered is determined by the nature, goals, and objectives of the specific action and its potential impacts, as disclosed by the technical impact assessments (see Chapters 2 through 10).

Each alternative is to be described to the extent that impacts can be compared with the impacts identified for the proposed action. Therefore, the level of detail in the analysis is dependent on the alternative and the project impacts. When limited impacts are identified, a qualitative assessment is appropriate. Where a significant impact of the proposed action has been disclosed, or where the alternative may disclose a significant impact in an area where the proposed action had none, it is appropriate to provide additional detail on impacts under the alternative.

This chapter of the Draft EIS assesses the impact of four alternatives to the Extended LAP (the proposed action as described in Chapter 1). It examines the potential impact of alternatives to the proposed action on land use, socioeconomic conditions, community character and other conditions in the watershed. The following alternatives will be evaluated:

- The "No Action" alternative; since LAP is a requirement of the FAD, this alternative assumes that New York City's water supply would be filtered.
- A Greater-Impact Alternative, in which the amount of land projected to be acquired under the Extended LAP in fee simple and through conservation easements is 10 percent greater

[1] Although the Catskill watershed and Delaware watershed are distinct geographical features, they are functionally managed together and for regulatory purposes are considered a single integrated system.

than estimated in the reasonable worst case scenario evaluated for the Proposed Action; and the authorization for the program is extended through 2027;

- A Lesser-Impact Alternative; in which the amount of land to be acquired under the Extended LAP in fee simple and through conservation easements is 10 percent less than estimated in the reasonable worst-case scenario evaluated for the Proposed Action; and

- A No Hamlet Expansion Alternative in which the amount of land to be acquired is the same as under the Extended LAP in fee simple and through conservation easements, but the proposed hamlet expansions discussed in Chapter 1 are eliminated. The original hamlet areas designated pursuant to the MOA would remain in place – but they would not be expanded. Other aspects of the program would remain the same as analyzed under the Proposed Action.

Each of these alternatives is examined below.

NO ACTION ALTERNATIVE

The No Action Alternative presents environmental conditions that would exist if the proposed action were not implemented. The assessment of the No Action Alternative is required for all Environmental Impact Statements (EISs).

The No Action Alternative would put the City in violation of the 2007 Filtration Avoidance Determination (FAD) issued by USEPA, which requires the City to pursue the Land Acquisition Program. If the City does not comply with the 2007 FAD, NYSDOH could require that the Catskill/Delaware System be filtered. Filtration of the Catskill/Delaware System would require the siting, design, construction, and operation of a drinking water filtration plant and could result in potential environmental impacts to the local community where the facility is sited and considerable costs to water and sewer ratepayers.

For this EIS, the Proposed Action is the acquisition of a new Water Supply Permit to allow for the continued acquisition of land under the Land Acquisition Program. It is not within the scope of the environmental review, nor is it reasonable or proper to assess the entire Long-Term Watershed Protection Program or FAD requirements within this review.[1] Nor is it required under SEQRA that a cost-benefit analysis be conducted of LAP compared to other elements of the FAD. The analysis included cumulative effects from other FAD requirements to the extent they are overlapping and could result in potential significant adverse impacts such as the Watershed Rules and Regulations limits on development in certain areas of the watershed. It has been determined, based on the analysis in this EIS, that the Extended LAP will have a beneficial effect on water quality and no potential significant adverse impacts on land use, community character, or socioeconomic conditions.

Under the No Action Alternative, in the West-of-Hudson and East-of-Hudson Watersheds, the Land Use, Community Character Socioeconomic, Water Quality and Open Space conditions would be the same as those discussed under the *Future Conditions Without the Proposed Action* sections in each chapter above.

[1] The entire Long Term Watershed Protection Program was the subject of a previous environmental review that resulting in a Negative Declaration, dated September 2007.

GREATER IMPACT ALTERNATIVE

This section discusses the potential impacts of an action in which NYCDEP acquires 10 percent more land than projected, and the NYCDEP Land Acquisition Program is extended for five additional years, through 2027 (the Greater Impact Alternative").

Reasonable worst case estimates of the amount of land to be acquired under the Extended LAP are provided in Chapter 1, *Project Description*. The analysis in this alternative assumes that NYCDEP would acquire an additional 10 percent above those reasonable worst case projections. Based on this approach NYCDEP purchases in fee simple and conservation easements in the West-of-Hudson watershed between 2010 and 2027 would total 89,043, as compared with 80,948 acres through 2022 in the reasonable worst case scenario. Purchases of farm easements by the Watershed Agricultural Council from 2010 through 2027 are not expected to exceed the level projected as the reasonable worst case scenario – 16,000 acres.

This alternative is considered to be an extremely conservative (i.e. high impact) estimate of land to be acquired under the Extended LAP. The proposed action scenario described in Chapter 1 uses very conservative assumptions to estimate the amount of land to be acquired under the Extended LAP. It is highly unlikely that, even under a 5-year renewal of the Water Supply Permit, additional land would be acquired beyond the levels analyzed under the proposed action. Nevertheless, NYCDEP is providing the following analysis that examines acquisitions of 10 percent more land.

SOCIOECONOMIC CONDITIONS

West-of-Hudson

Impacts on Supply of Developable Land

This section discusses the Greater Impact Alternative's projected potential impact through 2027 on the supply of developable land in watershed towns.

This alternative uses the same process as that described in Chapter 3 to project remaining developable land but here to 2027 instead of 2022. After removing towns with less than 5 percent of their area within the watershed, a four-step process was undertaken to estimate the impact of NYCDEP's LAP program on developable land at the town level through 2022

Step 1: Assume the same amount of available developable land in 2009 as determined in Chapter 3.
Step 2: Assume the same reasonable worst case rate of housing demand as determined in Chapter 3, but adds five years of additional development through 2027.
Step 3: Assume that NYCDEP would acquire ten percent more land than under the reasonable worst case scenario, and estimate the portion of those lands that are developable
Step 4: Estimate remaining developable land in 2027 after housing demand and LAP acquisitions.

The town-by-town results of this analysis are presented in Table 11-1. (The towns are ranked in reverse order of the percentage of the town's 2009 supply of developable land remaining in 2027.) The analysis concludes that all 34 towns have sufficient land available to accommodate both the projected acquisitions under LAP through 2027, and the projected rate of residential development beyond 2027.

As Table 11-1 shows, for the 34 towns collectively, land to be acquired by LAP between 2010 and 2027 represents about 11.7 percent of 2009's available developable land; and new residential development over that time period is estimated to consume 7.9 percent. (It was estimated in Chapter 3 that under the proposed action, the land to be acquired by LAP between 2010 and 2022 would represent 10.8 percent of the 34 towns' 2009 supply of developable land, and that new residential development during the same period would consume 5.5 percent.) Overall, the Greater Impact Alternative is projected to result in approximately 80.4 percent of 2009's available developable land would still remain in 2027, as compared with 83.7 percent under the proposed action. Each town would have at least 60 percent of its 2009 supply of developable land remaining in 2027, as compared with a minimum of 66 percent under the proposed action. As discussed above and in Chapter 3 in detail, due to the very conservative nature of the analysis, which represents more than a reasonable worst case scenario, the percentage of developable land remaining in 2027 is likely to be higher.

In some towns – including Olive, Windham, Lexington, Conesville and Neversink – the estimates of developable land remaining in 2027 that are presented in Table 11-1 are significantly lower than those for 2022 that are presented in Chapter 3. In most cases, however, this is primarily a result of projecting through 2027 the relatively high rates of residential development used in Chapter 3 to estimate the land required to support new development through 2022. For the 34 towns collectively, the additional acreage projected to be acquired through 2027 represents about 1 percent of the towns' collective supply of developable land, while new residential development between 2022 and 2027 accounts for about 2.5 percent.

Table 11-1: Remaining developable acreage in 2027, by town, after projected Extended LAP activity plus 10 percent and development through 2027. (Cells with bold and yellow show where criteria for more detailed town level assessment was met or exceeded.)

County	Town	Available developable acres, 2009	Projected developable land acquired through 2027	Developable land needed for housing through 2027	Developable land left in 2027	% of 2009 developable land left in 2027	LAP contribution	Housing contribution
Greene	Lexington	3,475	958	445	2,072	60%	**27.6%**	**12.8%**
Ulster	Denning	4,187	1,495	97	2,595	62%	**35.7%**	2.3%
Greene	Prattsville	2,773	901	142	1,730	62%	**32.5%**	5.1%
Ulster	Olive	5,684	958	1,060	3,666	64%	16.9%	**18.6%**
Ulster	Hardenburgh	2,692	699	235	1,758	65%	**26.0%**	8.7%
Greene	Ashland	3,351	768	369	2,215	66%	**22.9%**	**11.0%**
Sullivan	Neversink	12,797	2,017	2,127	8,510	67%	16.9%	**16.6%**
Schoharie	Conesville	5,525	1,051	793	3,681	67%	19.0%	**14.4%**
Greene	Windham	5,272	968	765	3,539	67%	18.4%	**14.5%**
Greene	Halcott	1,668	428	112	1,127	68%	**25.7%**	6.7%
Ulster	Shandaken	1,444	203	264	977	68%	14.1%	**18.3%**
Delaware	Andes	7,221	1,619	689	4,912	68%	**22.4%**	9.5%
Delaware	Stamford	4,939	552	281	3,421	69%	**25.0%**	5.7%
Greene	Jewett	6,292	1,158	723	4,411	70%	18.4%	**11.5%**
Delaware	Hamden	6,146	797	993	4,356	71%	13.0%	**16.2%**
Delaware	Middletown	7,455	1,310	727	5,419	73%	17.6%	9.7%
Greene	Hunter	6,722	1,283	494	4,945	74%	19.1%	7.3%
Delaware	Delhi	5,851	1,090	375	4,387	75%	18.6%	6.4%
Ulster	Woodstock	6,759	923	679	5,157	76%	13.7%	**10.0%**
Delaware	Bovina	3,726	782	96	2,849	76%	**21.0%**	2.6%
Delaware	Roxbury	5,927	1,047	306	4,574	77%	17.7%	5.2%
Delaware	Walton	8,845	1,395	466	6,985	79%	15.8%	5.3%
Delaware	Tompkins	10,947	1,336	810	8,801	80%	12.2%	7.4%
Delaware	Kortright	8,370	693	575	7,102	85%	8.3%	6.9%
Ulster	Hurley	5,003	147	580	4,276	85%	2.9%	**11.6%**
Schoharie	Jefferson	8,722	229	906	7,587	87%	2.6%	**10.4%**
Delaware	Meredith	13,063	907	665	11,491	88%	6.9%	5.1%
Schoharie	Gilboa	10,583	785	355	9,443	89%	7.4%	3.4%
Delaware	Masonville	10,890	458	633	9,799	90%	4.2%	5.8%
Ulster	Wawarsing	23,610	1,054	1,136	21,420	91%	4.5%	4.8%
Delaware	Deposit	4,052	26	326	3,700	91%	0.6%	8.0%
Delaware	Colchester	9,406	258	419	8,728	93%	2.7%	4.5%
Delaware	Harpersfield	9,959	342	283	9,334	94%	3.4%	2.8%
Delaware	Franklin	19,006	420	737	17,849	94%	2.2%	3.9%
	TOTAL	**252,361**	**29,055**	**19,664**	**202,816**	**80%**	**11.7%**	**7.9%**

For the region as a whole, this analysis strongly suggests that the projected level of acquisitions by NYCDEP under this Greater Impact Alternative will not significantly constrain the amount of new development in the West-of-Hudson watershed – either between now and 2027 or afterward. As with the proposed action, it would preserve sensitive natural lands, while keeping future development in hamlet and expanded areas where much of it currently occurs.

As in Chapter 3, towns that met either of two criteria were selected for further review:

- Those in which LAP is projected to acquire 20 percent or more of the town's 2009 supply of developable land; and
- Those in which 10 percent or more of the town's 2009 supply of developable land is projected to be consumed by residential development and LAP is projected to acquire more than 5 percent of the town's 2009 supply of developable land.

As shown in Table 11-1, 16 towns (those with bold text in the LAP contribution or housing contribution columns) meet these criteria. All but one of these towns – Woodstock – is among the towns for which individual town-level assessments were presented in Chapter 4. In Woodstock, the Greater Impact Alternative would increase the percentage of the Town's 2009 supply that could be acquired under LAP from 12.4 percent as of 2022 to 13.7 percent as of 2027; and developable land needed to support projected residential development would increase from 7.0 percent of the 2009 supply of such land in 2022 to 10.0 percent in 2027. However, any potential for conflict between LAP acquisitions and the need for land for new development would be quite limited, since LAP acquisitions would take place entirely within the much less developed western half of the Town (that is, within the watershed), while new development is most likely to occur in the eastern (non-watershed) portion of the Town, in and near the hamlets of Woodstock, Bearsville and Zena. A more detailed assessment of the Program's impact on Woodstock is provided in the last section of this Chapter.

In the remaining 17 towns (those not shaded in yellow in Table 11-1), the percentage of the town's 2009 supply of developable land that would still remain in 2027 ranges from 73 to 94 percent.

In some towns, particularly those with mountainous terrain or other natural features not easily developed, or that include large areas of land already protected by New York State or New York City, or that are already highly developed, the supply of developable land may already be limited. An additional analysis was therefore performed to evaluate the percent of a town's total land area that is developable and the effects of land acquisition on that supply.

Table 11-2 lists six towns where the supply of developable land in 2009 is estimated to be less than 10 percent of the town's total land area, or less than 3,000 acres.

Table 11-2: Towns with less than 10 percent or fewer than 3,000 acres of developable town area land remaining in 2009 under Greater Impact Alternative

County	Town	Total town land	Available developable acres, 2009	Developable land left in 2027	% of town area developable, 2009	% of town area developable, 2027
Ulster	Shandaken	78,875	1,444	977	1.8%	1.2%
Ulster	Hardenburgh	51,756	2,692	1,758	5.2%	3.4%
Ulster	Denning	65,430	4,187	2,595	6.4%	4.0%
Greene	Lexington	51,274	3,475	2,072	6.8%	4.0%
Greene	Halcott	14,375	1,598	1,127	11.1%	7.8%
Greene	Prattsville	13,786	2,773	1,730	20.1%	12.5%

The towns listed in Table 11-2 include several that are developed at low densities – including Denning, Hardenburgh, Halcott and Prattsville – where, given the projected rate of new development, the limited supply of developable land is unlikely to be a significant constraint on development between 2022 and 2027.

Among the towns listed in Table 11-2 or highlighted in Table 11-1, Shandaken appears to be the only case where a very limited supply of developable land could potentially lead to a conflict between the projected level of acquisitions under the Extended LAP and the need for land to accommodate new development. This potential for conflict was noted in Chapter 3; in this alternative, with 10 percent more land to be acquired through 2027, the potential for conflict would be somewhat greater. As also noted in Chapter 3, however, NYCDEP and the Town have agreed on a change in the way LAP operates in Shandaken that should substantially reduce the potential for conflict. Under this agreement, LAP would no longer actively solicit individual landowners in Shandaken, but would instead only pursue properties of interest whose owners initiate negotiations with NYCDEP.

Among the other towns highlighted in Table 11-1, there may also be some potential for conflict in Windham – not because the supply of land is relatively limited, but because the demand for land for development has been strong during the past decade, and could be in the future. As in Shandaken, a 10 percent increase in projected acquisitions under the Extended LAP would increase somewhat the potential for conflict. In this case, any potential conflict between the Extended LAP and the need for land to accommodate future development could be alleviated by the proposed near-quadrupling of the Town's designated hamlet areas, to a total of 3,942 acres. The expanded hamlet areas would cover 14 percent of the town's land area, and would help ensure that a substantial amount of land remains available for new development through 2027 and beyond, especially since the proposed expansion areas are located in those parts of Windham where much of the Town's development is occurring.

Other Socioeconomic Conditions, Land Use and Community Character

Beyond its impact on the supply of developable land, any incremental effect of the Greater Impact Alternative on socioeconomic conditions in West-of-Hudson watershed towns – over and above the effects of the proposed action, as discussed in Chapter 3 – are likely to be minimal.

As noted in Chapter 3, it is difficult to project real estate market conditions in the West-of-Hudson region through 2022; projecting through 2027 is correspondingly more uncertain. But using the best available information and reasonable projections, an increase of 10 percent in the

acreage to be acquired under the Extended LAP would be unlikely to have a significant impact on land prices, over and above those cited for the proposed action in Chapter Three.

Relative to the very limited effects of the Extended LAP on specific industries that were cited in Chapter 3, extending the program through 2027 and increasing the acreage to be acquired by 10 percent would have at most a very minor impact. In some parts of the watershed, increasing the amount of land to be acquired by 10 percent might allow a smaller number of additional landowners (including farmers) to sell all or part of their land (but as discussed in Chapter 3, giving farmers the option to sell land to NYCDEP is not a significant factor in the decline of agriculture in the region).

A 10 percent increase in land to be acquired would slightly increase the possibility of dislocating mining or timbering operations from land acquired under the Extended LAP. As was discussed in Chapter 3, however, LAP has only acquired a very few marginal, largely depleted mining sites, and this is not likely to change. Forestry is allowed on LAP lands subject to conditions. Moreover, as also noted in Chapter 3, NYCDEP policies governing activities that are permitted on City lands and eased land lessen LAP's potential impact on extractive industries. This suggests that the affected activities would either not be impacted, or would occur elsewhere in the region – not that they would be lost due to a LAP acquisition.

On the positive side, a 10 percent increase in the land to be acquired is likely to result in a commensurate increase in the areas opened for public recreational use, which could increase LAP's value as an amenity for local residents, and could potentially attract additional visitors.

As discussed in Chapter 3, the Extended LAP would have no significant impact on local government revenues between 2010 and 2022. Extending the program through 2027 and increasing the amount of land to be acquired by 10 percent would not change this result. Extending LAP through 2027 and increasing the land projected to be acquired by 10 percent is unlikely to have any substantial impact on the character of watershed communities, apart from additionally protecting that character. It would increase slightly the amount of protected land in watershed towns – thus helping to maintain the low-density, rural character that is typical of most of these towns, and helping to protect the natural environment that is highly valued by many residents. And as noted above, a 10 percent increase in the land to be acquired could also increase the areas open for public recreation – which is also an amenity valued by many residents.

Any potential conflict between additional acquisitions and the towns' economic development goals could be alleviated by the proposed expansion of designated hamlet areas – a topic further discussed in the last section of this chapter.

East-of-Hudson

As noted in Chapters 2 and 3, the impact of the proposed action on land use, community character and socioeconomic conditions in the East-of-Hudson region would be very limited – primarily because the amount of land projected to be acquired in the East-of-Hudson region totals only 1,517 acres, spread across four towns. As shown below in Table 11-3, the impact of increasing by 10 percent the total acreage to be acquired is small in both relative and absolute terms.

Table 11-3: Greater impact alternative on East-of-Hudson towns

County	Town	Available developable acres, 2009	Projected developable land acquired through 2027	Developable land needed for housing through 2027	Developable land left in 2027	% of 2009 developable land left in 2027	LAP contribution	Housing contribution	% of town area developable, 2009	% of town area developable, 2027
Dutchess	East Fishkill	4,192	129	2,148	1,914	45.7%	3.1%	51.2%	11.4%	5.2%
Putnam	Carmel	1,520	89	1,192	238	15.7%	5.8%	78.5%	6.3%	1.0%
Putnam	Kent	2,096	362	254	1,480	70.6%	17.3%	12.1%	7.8%	5.5%
Putnam	Putnam Valley	5,560	11	806	4,743	85.3%	0.2%	14.5%	20.2%	17.3%
	TOTAL	**13,368**	**591**	**4,401**	**8,376**	**62.7%**	**4.4%**	**32.9%**	**11.4%**	**7.1%**

Under the Greater Impact Alternative, projected acquisitions by NYCDP would increase from 1,517 acres to 1,669. Under this alternative, the percentage of developable land remaining in 2027 declines from the 9,724 acres estimated in Chapter 3 for the proposed action to 8,376 – but this change is due almost entirely to the additional residential development that is projected to occur between 2022 and 2027.

WATER QUALITY AND NATURAL RESOURCES, OPEN SPACE

As described in Chapter 5 *Water Quality and Natural Resources* and Chapter 6 *Open Space and Recreation*, LAP provides benefits to water quality, natural resources and open space. If NYCDEP acquires 10 percent more land than what was projected under the proposed action, more benefits may be realized in terms of protecting water quality, natural resources, and preserving open space.

CULTURAL RESOURCES

Under the Greater Impact Alternative, the same protocol as described in Chapter 7, *Cultural Resources*, would be applied with respect to protecting and preserving historical and archaeological resources.

LESSER IMPACT ALTERNATIVE

This section discusses the potential impacts of an action in which NYCDEP acquires 10 percent less land than was projected for the proposed action in Chapter 1, *Project Description*. Based on this approach, NYCDEP acquisitions in fee simple and conservation easements in the West-of-Hudson watershed between 2010 and 2022 would total 72,853 acres, as compared with 80,948 acres through 2022 in the reasonable worst-case scenario. Purchases of farm easements by the Watershed Agricultural Council from 2010 through 2022 would total 14,400 acres, as compared to 16,000 acres through 2022 in the Proposed Action's reasonable worst case scenario.

SOCIOECONOMIC CONDITIONS

West-of-Hudson

Impacts on Supply of Developable Land

This section discusses the Lesser Impact Alternative's projected potential impact through 2022 on the supply of developable land in watershed towns. This alternative uses the same process as that described in Chapter 3 to project remaining developable land in 2022. After removing towns

with less than 5 percent of their area within the watershed, a four-step process was undertaken to estimate the impact of NYCDEP's Extended LAP program on developable land at the town level through 2022.

Step 1: Assume the same amount of available developable land in 2009 as determined in Chapter 3.
Step 2: Assume the same reasonable worst case rate of housing demand as determined in Chapter 3.
Step 3: Assume that NYCDEP will acquire ten percent less land than the reasonable worst case scenario, and estimate the portion of those lands that are developable.
Step 4: Estimate remaining developable land in 2022 after housing demand and LAP acquisitions.

The amount of developable land acquired was estimated using the methods described in the *Methodology* section above.

The town-by-town results of this analysis are presented in Table 11-4, (The towns are ranked in descending order of the percentage of the town's 2009 supply of developable land remaining in 2022.) The analysis suggests that all 34 towns have sufficient land available to accommodate both the projected acquisitions under LAP, and the projected rate of residential development through 2022.

As Table 11-4 shows, for the 34 towns collectively, land to be acquired by LAP between 2010 and 2022 represents about 9.7 percent of 2009's available developable land; and new residential development over that time period is estimated to consume 5.5 percent. (It was estimated in Chapter 3 that under the proposed action, the land to be acquired by LAP between 2010 and 2022 would represent 10.8. percent of the 34 towns' 2009 supply of developable land, and that new residential development during the same period would consume 5.5 percent.) For the 34 towns as a whole, approximately 84.8 percent of 2009's available developable land would still remain in 2022, as compared with 83.7 percent under the reasonable worst-case scenario. Each town would have at least 68 percent of its 2009 supply of developable land remaining in 2022, as compared with a minimum of 66 percent under the reasonable worst-case scenario. As discussed above and in Chapter 3 in detail, due to the very conservative nature of the analysis, the percentage of developable land remaining in 2022 is likely to be higher.

For the region as a whole, the impact of the Lesser Impact Alternative on the availability of land for development would not differ materially from the impact of the proposed action, as assessed in Chapter 3. In neither case would the projected level of acquisition significantly constrain new development in the West-of-Hudson watershed between 2010 and 2022.

Table 11-4: Remaining developable acreage in 2022, by town, after Extended LAP activity minus 10 percent and development through 2022. (Cells with bold and yellow show where criteria for more detailed town level assessment was met or exceeded.)

County	Town	Available developable acres, 2009	Projected developable land acquired through 2022 - 10%	Developable land needed for housing through 2022	Developable land left in 2022	% of 2009 developable land left in 2022	LAP contribution	Housing contribution
Greene	Lexington	3,475	784	314	2,377	68.4%	**22.6%**	9.0%
Ulster	Denning	4,187	1,223	71	2,893	69.1%	**29.2%**	1.7%
Greene	Prattsville	2,773	738	100	1,935	69.8%	**26.6%**	3.6%
Ulster	Olive	5,684	784	748	4,152	73.0%	13.8%	**13.2%**
Ulster	Hardenburgh	2,692	572	166	1,954	72.6%	**21.2%**	6.2%
Greene	Ashland	3,351	628	260	2,463	73.5%	18.7%	7.8%
Sullivan	Neversink	12,797	1,778	1,501	9,517	74.4%	13.9%	**11.7%**
Schoharie	Conesville	5,525	860	560	4,105	74.3%	15.6%	**10.1%**
Greene	Windham	5,272	792	540	3,940	74.7%	15.0%	**10.2%**
Greene	Halcott	1,668	350	79	1,238	74.2%	**21.0%**	4.8%
Ulster	Shandaken	1,444	167	186	1,091	75.6%	11.5%	**12.9%**
Delaware	Andes	7,221	1,325	486	5,410	74.9%	18.3%	6.7%
Delaware	Stamford	4,939	1,068	199	3,673	74.4%	**21.6%**	4.0%
Greene	Jewett	6,292	947	511	4,835	76.8%	15.1%	8.1%
Delaware	Hamden	6,146	652	701	4,793	78.0%	10.6%	**11.4%**
Delaware	Middletown	7,455	1,072	513	5,870	78.7%	14.4%	6.9%
Greene	Hunter	6,722	1,049	348	5,324	79.2%	15.6%	5.2%
Delaware	Delhi	5,851	891	264	4,695	80.2%	15.2%	4.5%
Ulster	Woodstock	6,759	755	479	5,524	81.7%	11.2%	7.1%
Delaware	Bovina	3,726	640	68	3,019	81.0%	17.2%	1.8%
Delaware	Roxbury	5,927	856	216	4,855	81.9%	14.4%	3.6%
Delaware	Walton	8,845	1,141	329	7,375	83.4%	12.9%	3.7%
Delaware	Tompkins	10,947	1,094	572	9,282	84.8%	10.0%	5.2%
Delaware	Kortright	8,370	567	406	7,397	88.4%	6.8%	4.9%
Ulster	Hurley	5,003	120	410	4,473	89.4%	2.4%	8.2%
Schoharie	Jefferson	8,722	187	639	7,895	90.5%	2.1%	7.3%
Delaware	Meredith	13,063	742	469	11,852	90.7%	5.7%	3.6%
Schoharie	Gilboa	10,583	643	251	9,690	91.6%	6.1%	2.4%
Delaware	Masonville	10,890	375	447	10,068	92.5%	3.4%	4.1%
Ulster	Wawarsing	23,610	863	802	21,946	93.0%	3.7%	3.4%
Delaware	Deposit	4,052	21	230	3,800	93.8%	0.5%	5.7%
Delaware	Colchester	9,406	211	296	8,899	94.6%	2.2%	3.1%
Delaware	Harpersfield	9,959	280	200	9,479	95.2%	2.8%	2.0%
Delaware	Franklin	19,006	343	520	18,142	95.5%	1.8%	2.7%
	TOTAL	**252,361**	**24,516**	**13,883**	**213,963**	**84.8%**	**9.7%**	**5.5%**

Table 11-4 highlights the towns in which, even under the Lesser-Impact Alternative, the projected level of acquisitions between 2010 and 2022 accounts for at least 20 percent of the Town's 2009 supply of developable land, or the projected level of residential development consumes at least 10 percent of that supply – the thresholds used in Chapter 3 to identify towns for further review. More detailed assessments of the nine of the towns highlighted in yellow in Table 11-4 are already included in Chapter 4.

In the remaining 25 towns (those not shaded in yellow in Table 11-4), the percentage of the town's 2009 supply of developable land still remaining in 2022 ranges from 73.5 to 95.5 percent.

Table 11-5 lists six towns where the supply of developable land in 2009 is estimated to be less than 10 percent of the town's total land area, or less than 3,000 acres.

Table 11-5: Towns with less than 10 percent or fewer than 3,000 acres of developable town area land remaining in 2009 under Lesser Impact Alternative

County	Town	Total town land	Available developable acres, 2009	Developable land left in 2022	% of town area developable, 2009	% of town area developable, 2022
Ulster	Shandaken	78,875	1,444	1,091	1.8%	1.4%
Ulster	Hardenburgh	51,756	2,692	1,954	5.2%	3.8%
Ulster	Denning	65,430	4,187	2,893	6.4%	4.4%
Greene	Lexington	51,274	3,475	2,377	6.8%	4.6%
Greene	Halcott	14,375	1,598	1,238	11.1%	8.6%
Greene	Prattsville	13,786	2,773	1,935	20.1%	14.0%

Other Socioeconomic Conditions, Land Use and Community Character

A 10 percent decrease in the acreage projected to be acquired under the Extended LAP would have very little effect on the program's impact on socioeconomic conditions, land use patterns or the character of communities in the watershed. Such a reduction could marginally reduce the potential for conflicts in a few towns between the Extended LAP and the need for land for future development – but the effect would not be substantial. There could be a marginal reduction in the potential for displacement of mining or timber harvesting as a result of acquisition of land by NYCDEP; but as discussed in the Greater Impact Alternative analysis, the potential for such displacement does not appear to be significant in any case. A 10 percent reduction in the acreage to be acquired could also result in a commensurate reduction in the areas that could be opened by NYCDEP for public recreational use.

A 10 percent reduction would be unlikely to affect hamlet areas and village centers in the watershed towns, since the reduction in land to be acquired would generally take place outside these areas.

East-of-Hudson

As noted in Chapters 2 and 3, the impact of the proposed action on land use, community character and socioeconomic conditions in the East-of-Hudson region would be quite limited – primarily because the amount of land projected to be acquired in the East-of-Hudson region under the proposed action totals only 1,517 acres, spread across four towns.

Under the Lesser Impact Alternative, the land to be acquired in the East-of-Hudson watershed region would decline by 10 percent, to 1,365 acres of which developable land would total 484 acres (see Table 11-6).. There would be slightly less potential for conflict between the Extended LAP and the need for land to accommodate new development than in there would be under the proposed action – but in either case, the impact would be negligible.

Table 11-6: Lesser Impact Alternative in East-of-Hudson towns

County	Town	Available developable acres, 2009	Projected developable land acquired through 2022 (-10%)	Developable land needed for housing through 2022	Developable land left in 2022	% of 2009 developable land left in 2022	LAP contribution	Housing contribution	% of town area developable, 2009	% of town area developable, 2022
Dutchess	East Fishkill	4,192	106	1,516	2,570	61.3%	2.5%	36.2%	11.4%	7.0%
Putnam	Carmel	1,520	73	842	605	39.8%	4.8%	55.4%	6.3%	2.5%
Putnam	Kent	2,096	296	180	1,621	77.3%	14.1%	8.6%	7.8%	6.0%
Putnam	Putnam Valley	5,560	9	569	4,982	89.6%	0.2%	10.2%	20.2%	18.1%
	TOTAL	**13,368**	**484**	**3,107**	**9,777**	**73.1%**	**3.6%**	**23.2%**	**11.4%**	**8.3%**

WATER QUALITY AND NATURAL RESOURCES, OPEN SPACE

As described in Chapter 5, *Water Quality and Natural Resources,* and Chapter 6, *Open Space and Recreation*, LAP provides benefits to water quality, natural resources and open space. If NYCDEP acquires 10 percent less land than the proposed action, these benefits may be reduced, but the action would still provide benefits.

CULTURAL RESOURCES

Under the Lesser Impact Alternative, the same protocol as described in Chapter 7, *Cultural Resources,* would be applied with respect to protecting and preserving historical and archaeological resources.

NO EXPANSION OF DESIGNATED HAMLET AREAS

The final alternative to be considered is one in which there would be no expansion of designated hamlet areas. The hamlet areas originally designated by watershed towns pursuant to the 1997 MOA would remain in place and LAP activity would not occur in these areas to the extent these towns have precluded acquisitions. This alternative is being considered because the negotiations over the Extended LAP with stakeholders are ongoing and the hamlet expansions are under discussion, although NYCDEP has agreed and remains committed to including the expanded hamlet areas. For this alternatives analysis, it is assumed that the total amount of land to be acquired by NYCDEP in fee simple or through conservation easements or by WAC would remain as described in Chapter 1. Without the expanded hamlets, however, this alternative assumes that some of the land acquired would be in the areas proposed for hamlet expansions.

Because the MOA did not provide for designation of hamlet areas east of the Hudson, the proposed action (as described in Chapter 1) does not include expansion of hamlet areas in East-

of-Hudson towns. The No Hamlet Expansion Alternative would thus not affect the analysis of the East-of-Hudson region and is not considered here.

Table 11-7 shows the number of acres included in each town's designated areas pursuant to the MOA and the number of acres in the proposed expansion areas. As shown, the proposed expansion areas (including a proposed expansion in the Town of Walton to which the parties have not yet agreed) cover a total of 27,449 acres.

Among the 16 towns in which hamlet expansions have been proposed, the impact of not expanding the designated hamlet areas is likely to vary from town to town, based on a number of factors:

- The scale of LAP acquisitions in the town through 2022, and their projected impact on the town's supply of developable land;
- The pace and location of new development in the town, the acreage required to support it, and its projected impact on the supply of developable land;
- The extent to which any major development planned for the towns are known to be located within the proposed expansion areas;
- The size of the proposed expansion areas, relative to the overall size of the town;
- The acreage within the proposed expansion areas already solicited by LAP; and
- LAP's projected "success rate."

Broadly speaking, eliminating the proposed hamlet expansions would not necessarily alter the total amount of land to be acquired within the 16 affected towns – but it would affect where the acquired land is located, and the potential for conflict between projected LAP acquisitions and requirements for land to support projected future development.

Table 11-8:

- Highlights the size of each proposed expansion area relative both the existing MOA designated hamlet areas, and to the size of the town as a whole;
- Identifies the amount of land within each expansion area already solicited by NYCDEP or potentially available for WAC easements; and
- Projects the acreage that NYCDEP and WAC might acquire[1] in what would have been each town's proposed expansion areas.

This calculation suggests that under the No Hamlet Expansion Alternative, 3,975 acres could be acquired in fee, CEs or WAC within the proposed expansion areas of the 15 towns where the parties have reached agreement on the proposed hamlet expansions, and potentially more than 700 additional acres in the area Walton has proposed to add to its 1997 designated areas

[1] Based on NYCDEP's projected "success rate," based on past experience, that it could potentially acquire through 2022; and an assumption that, for the West-of-Hudson watershed as a whole, WAC will succeed in acquiring easements on about 18 percent of all potentially eligible farm land.

Table 11-7: Number of acres in existing designated hamlet areas, and proposed hamlet expansions, by town

County/Town	Existing Designated Hamlet Area, Acres	Proposed Expansion, Acres	Total Hamlet Areas, Acres
Delaware County			
Andes	1,052	0	1,052
Bovina	392	0	392
Delhi	2,346	2,759	5,105
Hamden	420	2,439	2,859
Harpersfield	405	1,295	1,700
Kortright	250	3,853	4,103
Meredith	73	71	144
Middletown	1,734	296	2,030
Roxbury	957	440	1,397
Stamford	1,331	0	1,331
Tompkins	109	0	109
Walton	1,503	3,269	4,772
SUBTOTAL	**10,572**	**14,422**	**24,994**
Greene County			
Ashland	362	1,684	2,046
Halcott	69	0	69
Hunter	3,251	2,891	6,142
Jewett	652	2,015	2,667
Lexington	362	375	737
Prattsville	207	0	207
Windham	1,148	2,794	3,942
SUBTOTAL	**6,051**	**9,759**	**15,810**
Schoharie County			
Conesville	275	1,566	1,841
Ulster County			
Denning	1,107	0	1,107
Olive	547	1,333	1,880
Shandaken	1,561	0	1,561
SUBTOTAL	**3,215**	**1,333**	**4,548**
Sullivan County			
Neversink	1,197	0	1,197
TOTAL	**21,311**	**27,581**	**48,892**

Table 11-8: Solicited acres and projected fee and CE acquisitions in proposed expansion areas

Town	MOA designated acres	Proposed expansion acres	PEA as % of total town acres	Solicited acres in PEA	Success rate	Projected fee and CE acquisitions in PEA	Acres in MOA PEA Available for WAC CE	Projected WAC CE in PEA/MOA	Total DEP and WAC Acres Projected
Delhi	2,346	2,759	7%	1,112	20%	222	818	147	369
Hamden	420	2,439	6%	834	20%	167	1,027	185	352
Harpersfield	405	1,295	5%	369	20%	74	847	152	226
Kortright	250	3,853	10%	1,779	20%	356	1,743	314	670
Masonville	0	150	0%	0	20%	0	0	0	0
Meredith	73	71	0%	60	20%	12	17	0	12
Middletown	1,734	296	0%	208	20%	42	48	0	42
Roxbury	957	440	1%	104	20%	21	342	62	83
Sidney	0	219	1%	34	20%	7	0	0	7
Ashland	362	1,684	11%	1,080	27%	292	17	0	292
Hunter	3,251	2,891	5%	1,912	27%	516	0	0	516
Jewett	652	2,015	6%	1,177	27%	318	0	0	318
Lexington	362	375	1%	375	27%	101	0	0	101
Windham	1,148	2,794	10%	1,886	27%	509	0	0	509
Conesville	275	1,566	6%	1,113	25%	278	583	105	383
Olive	547	1,333	3%	381	25%	95	0	0	95
Total	**12,782**	**24,180**		**12,424**		**3,010**	**5,442**	**965**	**3,975**
Walton	1,503	3,269	5%	2,588	20%	518	1,169	210	728

In some towns, as table 11-8 shows, the proposed expansion area (PEA) as a proportion of the Town's total area is variable. In some towns, the number of acres that the Extended LAP could potentially acquire in what had been the proposed expansion areas for this and other reasons, would be relatively small. In others, the proposed expansion areas represent a much larger share of the Town's total area – as much as 11 percent in Ashland – and the number of acres that the Extended LAP could acquire in these areas could also be larger –in Windham, Hunter and Walton, potentially more than 500 acres.

Taking into account the factors outlined above, there appear to be seven towns where elimination of the proposed hamlet expansions could have the greatest impact. The potential impact of the No Hamlet Expansion Alternative in each of these towns is discussed below.

Windham

As shown in Table 11-7, the proposed expansion of Windham's designated hamlet area is 2,926 acres that would bring the designated area to a total of 4,074 acres. Since development pressures have been stronger in Windham in recent years than in any other West-of-Hudson town, the demand for land within the proposed expansion areas during the next decade could potentially be strong. As discussed in Chapter 4, much of Windham's recent development has tended to occur on small parcels in the proposed expansion area. As shown in Table 11-8, nearly two-thirds of the land in the expansion areas has already been solicited by NYCDEP. If a significant portion of the land in the proposed expansion area were to be acquired under the Extended LAP, the result in some cases could be to shift new development away from the edge of the Town's core hamlets, and toward outlying areas in Windham. Other projects that might be feasible only in or near the Town's principal hamlets ranging from higher density housing to resort-related development could potentially not occur at all.

Hunter

Agreement has also been reached among the parties on expansion of Hunter's designated areas by 2,891 acres, to a total of 6,142 acres. These additional designations would provide space to accommodate growth on the outskirts of the Villages of Hunter and Tannersville, and along a portion of Route 23A. As shown in Table 11-8, more than two-thirds of the land in the expansion areas has already been solicited by NYCDEP. As in Windham, acquisition of any

significant portion of the proposed expansion areas through the Extended LAP could result in some development projects shifting toward outlying areas of the Town – or in some projects that need a relatively close-in location not being undertaken at all.

Ashland

The impact of the No Hamlet Expansion Alternative could be particularly significant in Ashland, for several reasons. The proposed expansion areas represent a significant portion of the Town's total area; and more than 60 percent of the land within the expansion areas has already been solicited by NYCDEP. The town has been one of the fastest-growing in the watershed during the past decade; acquisition of portions of the proposed expansion areas under the Extended LAP could, as in Hunter and Windham, shift some of the anticipated development to outlying areas.

Jewett

While somewhat less vulnerable than the three towns cited above, Jewett could also be affected by the elimination of the proposed hamlet expansion. The percentage of the Town's total area that would be included within the proposed expansion area is lower than in Windham or Ashland; and the percentage of land within the expansion area already solicited by NYCDEP is also lower. Thus, while the No Hamlet Expansion Alternative might result in some shifting of development from the expansion areas to outlying areas of the Town, such shifts would likely be less extensive in Jewett than in Windham, Hunter or Ashland.

Conesville

Because the hamlet areas originally designated by the Town are relatively small – totaling only 275 acres – expansion may be particularly important for providing room for further development in Conesville. Moreover, the percentage of land within Conesville's expansion area already solicited by NYCDEP – 71 percent – is among the highest in the 16 towns with proposed hamlet expansions. The acreage acquired by NYCDEP in this area could thus be substantial (278 acres) and as noted in Table 11-8, WAC easements could add another 105 acres to this total.

Delhi

Delhi's proposed hamlet expansion is among the largest – both in acres and as a percentage of the Town's total area. The percentage of land within the area already solicited by NYCDEP is relatively low (40 percent). Nevertheless, the acreage that could potentially be acquired either in fee simple or through NYCDEP and WAC easements is substantial – a total of 369 acres, as shown in Table 11-8. Because there is relatively little land available for development within the Village of Delhi – Delaware County's largest village, the County seat, and the principal center of civic and commercial activity for much of the County – ensuring the availability of land for development beyond the originally-designated hamlet area may be important to the Town's future. It could be particularly important, for example, for the development of a supply of rental housing that is adequate to meet the needs of both SUNY students and full-time residents, and to the development of housing that is affordable for county, municipal, SUNY and other public employees.

Hamden

As noted in Chapter 3, past WAC easements in Hamden have removed land from potential development in and near the Town's existing designated hamlet areas. Under the No Hamlet Expansion Alternative, this problem could be aggravated by the potential acquisition of WAC

easements on 185 additional acres, and additional acquisitions by NYCDEP totaling 167 acres, within what would have been Hamden's proposed hamlet expansion area.

Harpersfield

Because the amount of land already solicited by NYCDEP in Harpersfield's proposed expansion area is relatively small, projected acquisitions in fee simple or through NYCDEP conservation within this area total only 74 acres. However, WAC easements (as shown in Table 11-8) could add 152 acres to this total, increasing the potential for conflict between future acquisitions the need for land to accommodate new development.

Kortright

As noted in Chapter 3, the land projected to be acquired in fee simple or through conservation easements in Kortright under the Extended LAP includes only 5 percent of the Town's estimated supply of developable land as of 2009. At first glance, it might thus appear that the town does not need a major expansion of its designated hamlet area in order to ensure the availability of land to support future development. However, because of the remote location of the northern parts of Kortright, the southern portion of the Town may offer the best prospects for future development. It thus may be particularly important for Kortright to ensure the availability of land in the south, rather than shifting development into more remote areas. Under the No Hamlet Expansion Alternative, it is projected that NYCDEP and WAC could, as shown in Table 11-8, acquire 670 acres within what had been the Town's proposed hamlet expansion areas.

Walton

Walton's proposed hamlet expansion (which is still under discussion with NYCDEP, the regulatory agencies and other stakeholders) totals 3,269 acres, making it one of the largest of the 16 proposed expansions. More than 79 percent of the land that would be covered by the proposed expansion has already been solicited by NYCDEP. Elimination of the proposed hamlet expansion could thus result in NYCDEP and WAC acquisition of more than 700 acres within the expansion area. In Chapter 3 it was projected that as of 2022 Walton would still have 82 percent of its 2009 supply of developable land remaining, after taking into account projected LAP acquisitions and projected residential development. While in the aggregate the Town's supply of developable land may be adequate, it is important to note that commercial and industrial activity in the town are heavily concentrated in and around the Village of Walton. Ensuring the availability of land in this area may thus be important to future development of the Town's economy.

Other Socioeconomic Conditions, Land Use and Community Character

Overall, elimination of the proposed hamlet expansions could have several negative effects on land use, socioeconomic conditions and community character in watershed towns. It could result in new development "leapfrogging" the proposed expansion areas, and shifting to locations further away from the existing hamlets and village centers. Because development in outlying locations is likely to be at lower densities, eliminating the proposed hamlet expansion could result in greater consumption of land for any given level of development. It could also increase the distance that residents need to travel for shopping and basic services with associated increased traffic, air and noise generation. The potential for development to leapfrog to outlying areas could reduce somewhat the Extended LAP's contribution to preserving the low density, rural character and high-quality natural environment that many residents of watershed towns wish to preserve.

Eliminating the proposed expansion would not support the ongoing efforts toward economic and community revitalization in the region's hamlets and village centers – a priority for many West-of-Hudson watershed towns. In some cases, acquisition of land or easements in these areas by NYCDEP or WAC could result in certain types of development (that which requires relatively close-to-town locations) not occurring at all. Examples of such development could include housing for older residents – other affordable housing – and higher-density residential development around ski centers. Any extensive acquisition of land or easements in these areas by either NYCDEP or WAC could also have the effect of precluding the expansion of existing commercial or industrial businesses – or the development and growth of new businesses – within the affected areas.

Implementation of the Extended LAP without the proposed hamlet expansions could thus potentially lead to a conflict within the hamlet expansion areas between the projected level of acquisitions under the Extended LAP and community character and economic development goals including the need for land to support affordable and higher density housing and commercial businesses which typically would occur in these areas as well as maintaining rural character and natural resources in outlying areas.

WATER QUALITY AND NATURAL RESOURCES, OPEN SPACE

As discussed in Chapter 5, *Water Quality and Natural Resources*, concentrating growth in designated areas is a principle of smart growth and a means of reducing sprawl and growth of impervious cover in sensitive areas of the watershed. Land Acquisition under the No Hamlet Alternative would still provide water quality benefits; however, development may occur in areas that are more sensitive to water quality, and the benefits of the Extended LAP may not be as fully realized.

CULTURAL RESOURCES

Under the No Hamlet Expansion Alternative, the same protocol as described in Chapter 7, *Cultural Resources*, would be applied with respect to protecting and preserving historical and archaeological resources.

TOWN LEVEL ASSESSMENT FOR WOODSTOCK TO SUPPORT GREATER IMPACT ALTERNATIVE

EXISTING CONDITIONS

The Town of Woodstock is located in northern Ulster County, at the eastern edge of the West-of-Hudson watershed region. The Town's resident population in 2008 was estimated at 6,346 – an increase of one percent since 1990. The hamlet of Woodstock – which is located outside the watershed – is the Town's largest population center, accounting for about one-third of all residents, and its leading commercial center.

Figure 11-1: Map of watershed towns

Town of Woodstock – Quick Facts	
Land area:	43,321 acres
Percent of town land area within the watershed (including reservoirs):	52%
Percent of land protected	30%
Population (estimated), 2008:	6,346
Median age (estimated), 2008	50.0
Median household income (estimated), 2008	$60,000

Unlike most other watershed towns, 19 percent of Woodstock's land is higher-density residential use, reflecting the concentration of a substantial part of the Town's population in its hamlets. An additional 21 percent is low-density residential, and another 24 percent is vacant land. Woodstock currently has very little agricultural land – about 49 acres, all of which is located outside the watershed. Commercial, industrial and community uses account for about 4 percent of the Town's land, with almost all of these uses being located outside the boundaries of the watershed. (See Table 11-9)

Woodstock has long been well-known as a center for the arts, music and entertainment. Its businesses and cultural institutions include galleries, studios, theaters, museums and music venues, and an annual film festival, as well as restaurants and visitor accommodations. The Town is also home to Ametek Rotron, an aerospace firm that, with 350 employees, is among the region's largest manufacturing enterprises.

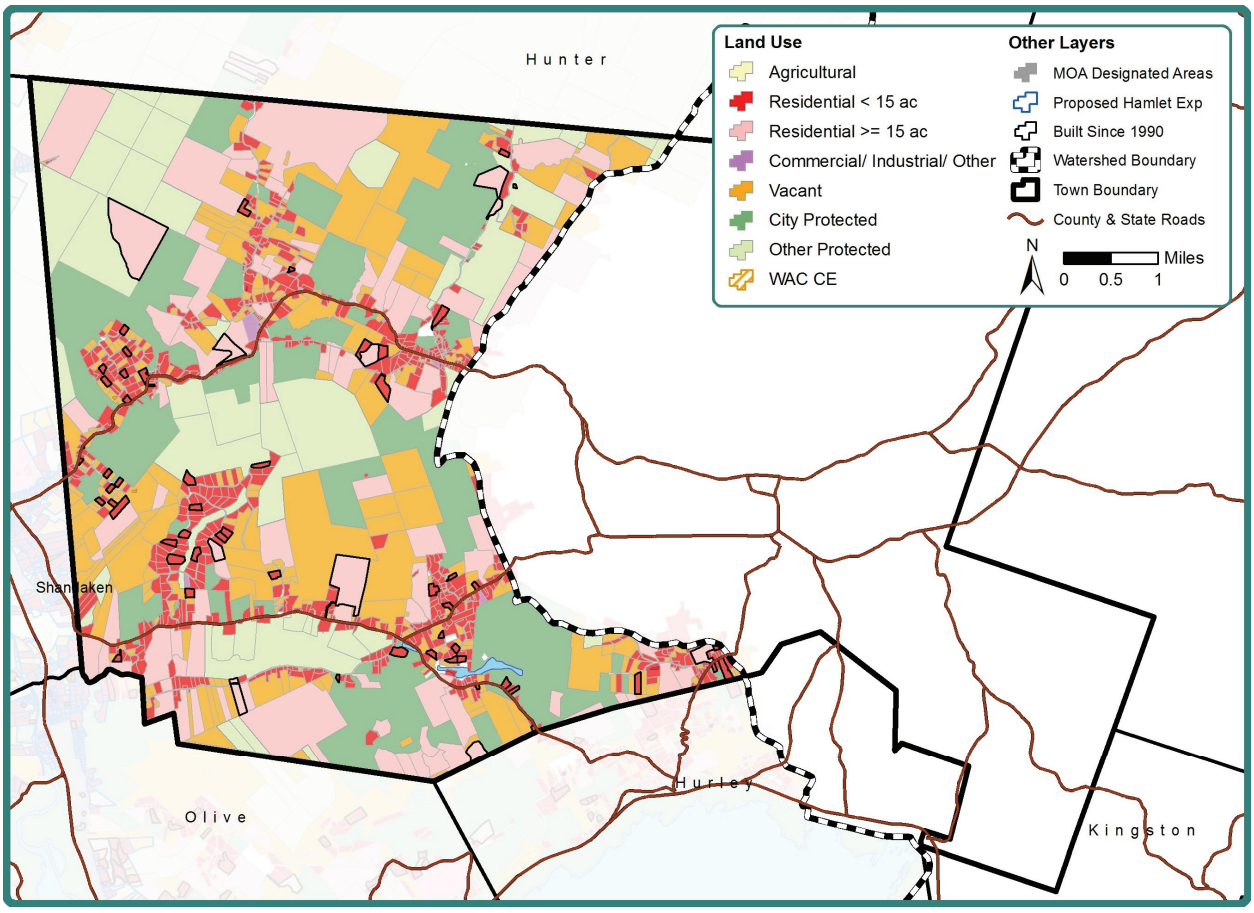
About 13 percent of all housing units in Woodstock in 2000 were for seasonal or recreational use – one of the lowest percentages among all west-of-Hudson watershed towns.

Much of the recent development that has occurred in the watershed portion of Woodstock since 1990 (as shown in the black highlighted parcels on Figure 11-2) has been clustered in and near the hamlets along Route 212 and Wittenburg Road, including Lake Hill, Willow and Wittenburg. Based on estimates supplied by DemographicsNow, we estimate that between 2000 and 2009, approximately 153 new housing units were built in Woodstock.

Table 11-9: Land Uses by Type

	In Watershed		Out Watershed		Total	
Land Use	*Acres*	*% of Total*	*Acres*	*% of Total*	*Acres*	*% of Total*
Agricultural	0	0%	49	0%	49	0%
High-Density Residential	2,817	13%	5,975	27%	8,792	19%
Low-Density Residential	4,851	22%	4,505	21%	9,356	21%
Commercial/Other	50	0%	1,553	7%	1,603	4%
State/Other Protected	4,419	20%	3,888	18%	8,307	18%
City Protected	5,039	23%	N/A	N/A	6,524	14%
Vacant	4,970	22%	5,882	27%	10,852	24%
Total	**22,346**		**20,975**		**43,321**	

Figure 11-2: Map of Woodstock showing land use and protected land within the Watershed



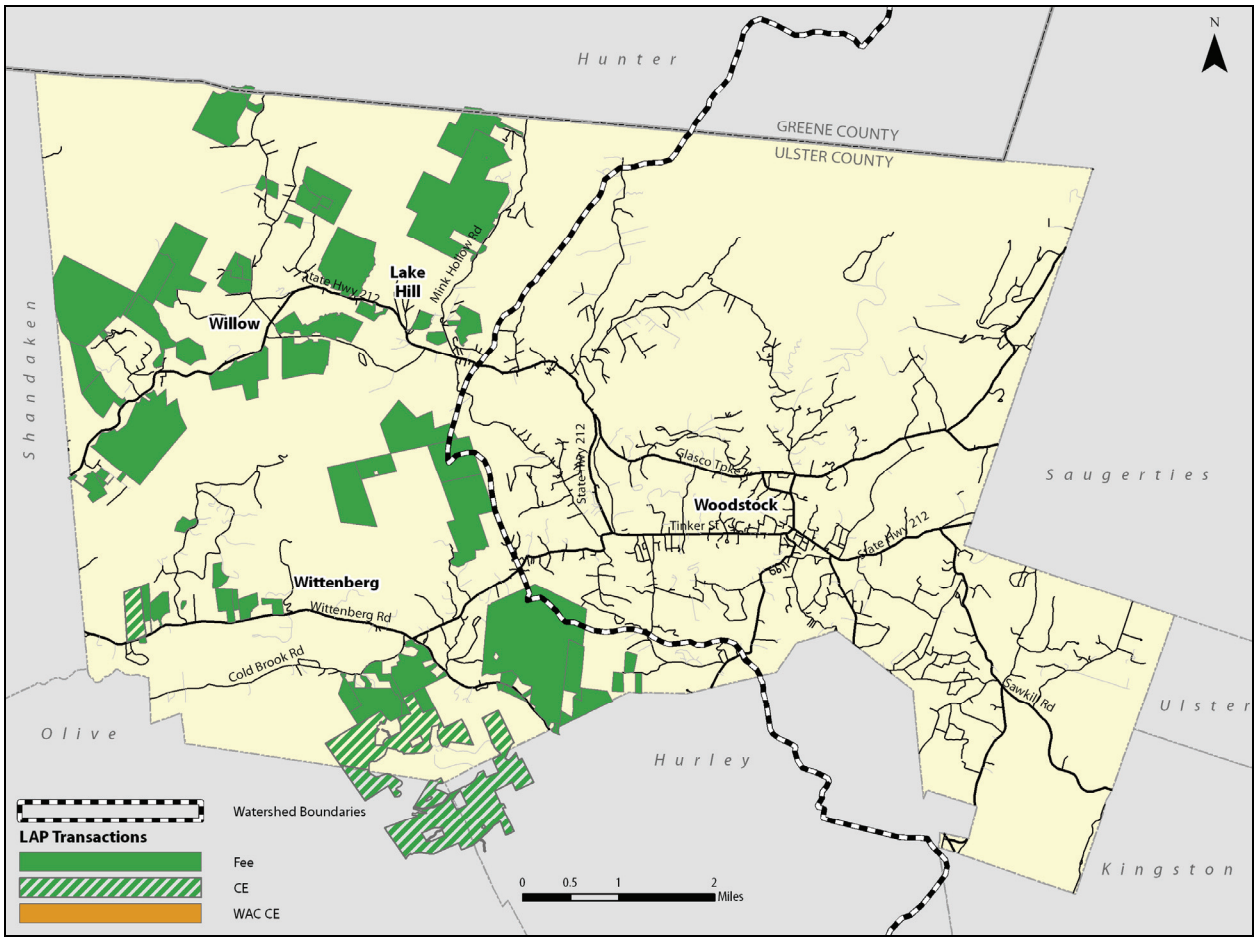
Previous LAP Activity

Through June 2009, NYCDEP had acquired a total of 5,120 acres in Woodstock pursuant to the 1997 MOA. As shown in Table 11-10 below, purchases in fee simple account for about 92 percent of all acquisitions in the town. Figure 11-3 shows the location of LAP properties in Woodstock, by type of acquisition.

Table 11-10: Acquisitions in the Town of Woodstock through July 2009

Type of acquisition	Acres
Fee simple	4,700
Conservation easements	420
WAC agricultural easements	0
Total acquired	**5,120**

Figure 11-3: Map of LAP properties in Woodstock, by type of acquisition



Of the 4,700 acres that NYCDEP acquired in fee simple as of July 2009, 1,212 acres – 26 percent of the total – had been opened for public recreational use.

FUTURE CONDITIONS WITHOUT THE PROPOSED ACTION

Between 2010 and 2025, as discussed in Chapter 3, the resident population of Ulster County is expected to grow by about 3 percent, somewhat slower than the rate of growth during the past two decades. For purposes of constructing a "reasonable worst-case scenario," we have nevertheless estimated future residential development based on the rate of development during the past two decades. Assuming the pace of new development in Woodstock (as measured by new residential units) remains the same as it was between 1990 and 2008 (about 17 units per year), it is estimate that the land required to support new development through 2027 will total approximately 1,112 acres, including 679 acres of land characterized as developable[1] – about 10 percent of the Town's supply of such land as of 2009.

[1] For purposes of this analysis, developable land includes all privately-owned vacant land and low-density residential land (the total area of all residential parcels of 15 or more acres,

Currently-planned development includes a complex of 50 units of affordable housing, to be developed in the hamlet of Woodstock by the Rural Ulster Preservation Corporation. In addition to new residential development, the Town could see some additional growth in arts-related uses, and in small businesses that serve local residents and visitors to Woodstock.

The Town's 2003 Comprehensive Plan outlines the following goals:

- *Protect, maintain, and enhance the quality of Woodstock's natural setting and ecosystems (e.g., forests, streams, drainage systems, groundwater sources, wetlands, meadows, and others) to preserve the distinctive natural setting and ensure a sustainable future for the Town and its residents.*

- *Maintain balance between small-scale recreation opportunities and large-scale environmental features to provide a variety of recreational and cultural opportunities for all residents and visitors.*

- *Preserve and enhance existing hamlet centers as complementary buttresses to the overall quality of life in the Town.*

- *Since affordability breeds diversity, which spurs economic and cultural dynamism, the Town should encourage a variety of housing types to accommodate the varying needs of all Woodstock residents including seniors, starting artists, and young families.*

- *Protect and enhance the town's community, cultural, environmental, and natural resources to maintain Woodstock as a location of choice for residents, artists, artisans, entrepreneurs and others seeking a dynamic cultural life in a rural setting.*

- *Provide an integrated transportation system that can serve a variety of needs in a manner that is safe, economical, ecologically sound, and aesthetically pleasing.*

- *Continue to provide high quality municipal services to every resident in the community that protects the natural environment; regards residents' needs; and protects the health, safety, and general welfare of the community.*

FUTURE CONDITIONS WITH THE GREATER IMPACT ALTERNATIVE

Based on LAP's experience in Woodstock to date, NYCDEP estimates that under the proposed action, it could acquire an additional 2,357 acres in the Town between 2010 and 2022, either in

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reduced by 5 acres per parcel to allow for existing homes on these parcels), but excludes from these two categories land that has any one or more of the following characteristics: a 100-foot buffer on streams and waterbodies, a 300-foot buffer on reservoirs and reservoir stems, DEC-mapped wetlands with a 100-foot buffer, federal jurisdiction wetlands with no buffer, FEMA 100-year floodplains, or slopes of greater than 15 percent. Land with any one or more of these characteristic in considered undevelopable.

fee simple or through conservation easements. Under the Greater-Impact Alternative, NYCDEP estimates that it could acquire 2,593 acres between 2010 and 2027. Based on the percentage of the Town's low-density residential and vacant land that is developable as of 2009, it is estimated that these acquisitions under the Greater Impact Alternative will include approximately 923 acres of developable land – about 13.7 percent of the Town's supply of developable vacant and low-density residential land as of 2009.

As shown in Table 11-11, it is thus estimated that after taking into account both LAP acquisitions and the land required to support new development, Woodstock will still be left with 5,157 acres of developable vacant and low-density residential land in 2027 – approximately 76 percent of the Town's current stock of such land.

Table11-11: Remaining developable land after LAP and housing development, 2010-2027

Developable vacant or low-density residential land in 2009		6,759 acres
LAP Acquisitions, 2010-2027		
Projected fee and CE acquisitions	2,593 acres	
Developable vacant or low-density residential land acquired		923 acres
Residential Development, 2010-2027		
Projected housing units built	289 units	
Land needed for housing	1,112 acres	
Developable portion of land needed for housing		679 acres
Remaining Town Land after LAP and Residential Development		
Developable vacant or low-density residential land after LAP and development in 2027		5,157 acres
Percent of 2009 developable vacant or low-density residential land remaining in 2027		76 percent

The Greater-Impact Alternative can also be assessed in terms of its potential impact on the character of the Town of Woodstock. Broadly speaking, this alternative appears to be fully consistent with the goals set out in the Town's draft comprehensive plan in 2003.

The acquisitions projected under the Greater-Impact Alternative would help protect the primarily low-density character and natural environment of the western portion of Woodstock, while having no direct impact in the southeastern portion of the Town – in and near the hamlets of Woodstock, Bearsville and Zena – that are the most likely areas for new development.

With respect to open space and recreation, the Town's goals are consistent with those of NYCDEP. The Town's Comprehensive Plan states:

> *The western portion of the town is located within the New York City Watershed and, as a result, the New York City Department of Environmental Protection (DEP) has targeted the more environmentally sensitive of these lands for acquisition on a willing buyer/willing seller basis. Their intent is to acquire lands to prohibit development and thus protect water quality. Interestingly, DEP's goals are consistent with the goals of this comprehensive plan - to protect the natural environment. However, as lands are acquired they may present new opportunities to expand the recreational resources in the community. To meet this future need, coordinate with DEP to continue to allow public*

access for hiking, hunting, and fishing on city-acquired land per the New York City watershed protection effort.

Because the Town's largest and most developed hamlets are outside the watershed, the projected acquisitions would not affect the character of these areas, or their capacity for further development. (Woodstock is one of several watershed towns that, pursuant to the 1997 MOA, chose not to designate any hamlet areas within the watershed portion of the town. In 2009, the Town also chose not to propose any new hamlet-area designations.) Both the proposed action and the Greater-Impact Alternative thus appear to be generally consistent with the goal of preserving and enhancing these hamlets.

CONCLUSIONS

Under both the proposed action and the Greater-Impact Alternative, additional acquisitions by NYCDEP would be limited to the western portion of the town – the area within the boundaries of the watershed, consisting primarily of low-density residential properties, privately-owned vacant land and land already protected by New York City or New York State. Even with the projected acquisition of nearly 2,600 acres under the Greater-Impact Alternative, there appears to be an adequate supply of land in the non-watershed portions of the Town (and to a lesser extent, within the watershed) to support the projected level of new development. And beyond their potential impact on the supply of developable land, both the proposed action and the Greater-Impact Alternative appear to be consistent with the goals defined in Woodstock's 2003 draft comprehensive plan.

On the basis of the analyses described above and in Chapters 2 and 3, neither the Extended LAP nor the Greater-Impact Alternative would be expected to result in any potentially significant adverse impacts on land use, socioeconomic conditions or community character in Woodstock.