

## **1.0 EXECUTIVE SUMMARY**

This is a Draft Environmental Impact Statement ("DEIS") prepared pursuant to the requirements of the New York State Environmental Quality Review Act ("SEQRA") for an action being proposed by the Village of Cayuga Heights ("VCH" or "Village") referred to herein as the Cayuga Heights Deer Management Plan ("CHDMP").

This DEIS evaluates potential significant environmental impacts associated with the implementation of CHDMP, discusses possible mitigation measures and possible alternatives that would achieve the same objectives, and a no action alternative. This document incorporates existing studies previously undertaken by the Village of Cayuga Heights or volunteer citizen groups.

### **Site Location**

The land within the municipal boundaries of the Village of Cayuga Heights is the site of the proposed action. The VCH is an incorporated Village located in the Town of Ithaca, Tompkins County, New York. The Village lies at the southern end of Cayuga Lake, north of the City of Ithaca and south of the Village of Lansing.

### **Project Background, Public Purpose and Need**

In the late 1990's Cornell University conducted a survey of 438 property owners in the Cayuga Heights area to ascertain their view on the deer population. There were mixed views on the white tail deer population in the Village. A study committee was subsequently formed with a view towards reducing the deer population. Efforts were made at deer sterilization in the early 2000s, but ultimately did not result in long term herd reduction.

At the present time, the estimated population of deer in the 1.8 square mile Village of Cayuga Heights ranges between 160 and 200.

This density of deer is very high and if left unattended will continue to impact biodiversity and contribute to undesirable deer/human conflicts such as vehicular damage, potential injuries to animals and people, increased incidence of landscape damage and water contamination through substantially higher levels of untreated wastes in stormwater runoff.

It is the intent of the VCH Deer Management Plan to address these concerns. With the area of Cayuga Heights being 1.8 square miles, to minimize losses in animal and plant diversity and these other impacts, the Village has determined that the deer population in the Village would need to be a total of 30 or fewer.

### **Description of Action**

Acknowledging the need to reduce the number of deer in the Village of Cayuga Heights, the Village Board of Trustees is considering implementation of a proposal consistent with the recommendations of the Village's Deer Remediation Advisory Committee (the DRAC) for a Phased Options Approach ("POA") to deer management. The DRAC recommends that the Village begin the POA with the surgical sterilization of approximately 20-60 does (female deer) within a two-year period, followed by culling of the remainder of the herd in the year subsequent to completion of the sterilization program, followed by a program of ongoing maintenance of the herd size as necessary through further sterilization and culling. It is expected that this program will, once implemented, result in a reduced and stable deer herd in approximately three to five years.

A more detailed description of the protocols for sterilization and culling is provided in Chapter 4 of this DEIS.

**Approvals Needed**

Approvals will be required from the NYSDEC (pursuant to Environmental Conservation Law Section 11-0521) for the sterilization program and the culling program. The NYSDEC is therefore an involved agency under the provisions of SEQRA.

The VCH Board of Trustees will need to take action on the final details of the deer management program and fund its activities.

No other agency approvals have been identified.

**Potential Impacts - Land Use**

Since most of the land in the VHC is privately owned, land use impacts from implementation of the Cayuga Heights Deer Management plan will involve a short term disruption to suburban activities when the sterilization and culling activities actually occur.

Sterilization activities are not expected to have any long term, adverse impact on residents' ability to engage in the customary land use activities in the vicinity of the netting sites or elsewhere in the Village.

The impacts on land use associated with culling activities would be short-term and occur only during the actual culling events. Culling sites would be closely monitored to prevent human activity during the operation. During those times, land use activities in the culling sites will be highly restricted. Carrying out the operation at night is expected to reduce the impact of the restrictions. Noise associated with firearm discharge will represent a short term disruption to the nighttime ambient noise conditions, which is typically low in the suburban environment.

Those deer taken by culling will be processed for food. There will be an immediate reduction in deer numbers resulting from the culling operation. The smaller deer

population will likely reduce deer/car accidents, which is a benefit for the remaining deer (deer are often injured and not killed by such accidents) and a benefit to the Village.

It is expected that in the long term, local vegetative diversity and wildlife habitat will improve and therefore more food would be available to remaining deer than is currently present due to the over-browsing that has occurred in the deer's range.

Culling activities are likely to involve the discharge of firearms in the VCH. Mr. Anthony Denicola, the owner of a firm that carries out deer culling activities, advises that in 15 years of such work and the culling of some 9,000 to 10,000 deer, there has never been an incident of harm to people, nontarget animals or property in connection with said activities (personal communication, 9/28/10).

The noise from firearms will represent a short term disruption to local ambient conditions, especially if it occurs after dark or in the pre-dawn hours. Given the goals for annual culling numbers, the actual number of firearm retorts will be minor and occur over a relatively short period of time.

With no record of incidents, and oversight of the operations by the NYSDEC and local police, the likelihood of a significant adverse impact to normal human activities from culling activities as anticipated and described herein is projected to be exceedingly low.

### **Impacts on Public Policy**

The proposed action will require a permit from the New York State Department of Environmental Conservation. It is expected that the permit will have a duration as well as specific conditions attached to it that will represent a variance from current State and Village code relative to deer management.

Thus, the proposed action represents a policy change that will permit the sterilization and culling of deer in the Village - activities that are not currently permitted under New York State law.

### **Community Viewpoints**

Because of the polarization of views on the matter of deer density and management, it is likely that any action taken (including no-action) will have some impact on community views.

Actual implementation of the proposed program may result in deeper polarization within the community and possibly further protest and objection. It is possible that implementation of the proposed program will require involvement of the VCH police department to enforce the law and protect public safety.

While the culling of deer, as proposed by the Village, may be experienced as a potential significant impact to the social conscience of a portion of the VCH community, under the rules of the New York State Environmental Quality Review Act, community controversy is not criteria for determining significance.

### **Potential Socioeconomic Impacts**

The proposed program of sterilization and culling is budgeted to cost approximately \$150,000 per year. These expenditures will occur for a five-year term and will bring about most of the sterilization and culling anticipated as part of this program. The estimated cost allocated for sterilizing a deer is approximately \$1,100 per animal and may be higher or lower depending upon the party selected to carry out the work. The estimated cost of culling is approximately \$500 dollars per animal. In addition to the costs of sterilization and culling, the budget would also cover the salary of a deer management professional, a modeling/tracking study and a contingency amount to cover unforeseen expenses.

The result of a successful sterilization and culling program will be a stabilized deer herd of approximately 30 animals. The overpopulation issues will be substantially reduced

and it is possible that the costs associated with the high density deer population (diminished plant and animal diversity and habitat, vehicular accidents, tick borne diseases, landscape loss, etc.), as discussed in Chapter 3 will be substantially reduced as well.

### **Mitigation Measures**

Mitigation measures have been incorporated into the project plans as presently set forth and those measures are intended to minimize the impacts of the project. The reduction of the deer herd, while representing a short term loss of deer, will actually have multiple beneficial impacts as set forth herein, that include potentially reduced habitat impacts, reduced vehicular accident rates, reduced landscape loss, and reduced incidents of Lyme disease.

Project plans already include numerous provisions to protect public safety.

No significant unavoidable adverse impacts have been identified in connection with the proposed deer management plan. Therefore, under the provisions of the New York State Environmental Quality Review Act, no additional mitigation measures are warranted.

### **Alternatives Reviewed**

#### **No Action Alternative**

Under this alternative, no management of the deer herd would take place. No Action will result in continued growth of the deer herd in Cayuga Heights. Given the complaints about the deer population and the ongoing impacts of biodiversity and habitat loss, deer/vehicle incidents, landscape damage and tick borne diseases, the No Action alternative will simply exacerbate the current situation.

It is possible that if the herd grows significantly, lack of food will either result in wasting disease or result in increased deer population in areas outside the VCH.

If the No Action alternative is selected, activities associated with sterilization and culling as identified earlier in this DEIS will not occur.

While the costs of the deer management program would not be expended from the Village budget in the No Action alternative, the ongoing costs of loss of biodiversity and habitat, vehicular accidents, landscape loss and replacement and Lyme disease treatment would remain similar to existing conditions or potentially increase as the density of the deer herd increases.

The No Action alternative would likely have far more negative impact than the proposed action.

### **Sterilization Only, No Culling**

Under this alternative, no culling would take place and greater numbers of deer would need to be sterilized in order to stabilize the herd at the numbers recommended by the DRAC. This option is slower and more expensive than culling alone or the combined approach of culling and sterilization. It would take three to five years to stabilize the herd and herd reduction would not be evident for five to six years based on projections by the DRAC.

No culling would take place and thus community objections to this aspect of the proposed program would be placated. No discharge of firearms would need to occur within the Village.

### **Only Culling - No Sterilization**

This is the most cost effective method of reducing the size of the deer herd and also the most controversial. Maintenance of the herd would be required at a higher level, according to the DRAC, because the remaining deer will continue to breed. Culling would most likely need to be ongoing and would disrupt Village harmony for potentially an extended period. Under this alternative, the continued discharge of firearms to maintain desired herd size would take place and the circumstances associated with that activity as described earlier in this DEIS would continue on and off for the foreseeable future.

### **Sterilization in Combination with Culling by Trapping**

At the present time, trapping and killing deer is not permitted under the wildlife regulations of the State of New York. However, if relief could be secured from that provision via the deer management permit, an alternative to using firearms to cull deer would be to trap deer and use a captive bolt gun. This device instantly kills the animal and is an acceptable form of euthanasia as per the American Veterinary Medical Association. . A captive bolt gun has a steel bolt that is powered by either compressed air or a blank cartridge. The bolt is driven into the animal's brain. It has the same effect on the animal as a firearm with a live bullet. A captive bolt gun is safer than a firearm.

This is a slower process than culling and more labor intensive. Multiple traps could be employed and deer could be culled over an extended period with minor disruption to the local community.

The costs of this process are not known. If such work is carried out by a deer management person retained by the Village or the Village police, it is possible that the costs would be less expensive than retaining contractors to shoot deer. If this alternative were to be pursued, a more detailed review of costs would be warranted.