

## **4.0 POTENTIAL IMPACTS**

### **4.1 Potential Land Use and Zoning Impacts**

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**

It is anticipated that the bulk of the sterilization program would take place over a two year period and involve approximately 20 to 60 does. Given this schedule, it would not be expected that the physical activities to achieve sterilization would be significantly disruptive as they would be of a short duration over several months annually.

The most common approach to sterilization would be to use a dart with a demobilizing substance and a transmitter. Typically a deer is shot from a vehicle with the dart and it takes generally about 10 minutes for the deer to demobilize. However, dart guns can only be used in the Village by police because there is a prohibition on the discharging of firearms.

An alternative scenario is to attract the female animal with bait and use a drop net or clover trap. The animal is then injected with an immobilizing agent, hobbled and blindfolded and transported to a facility, either mobile or permanent where a tubal ligation surgical procedure can be undertaken by a trained veterinarian.

The optimal time to carry out the sterilization work is late summer to early fall, before the animals breed. It can also be done in winter when the deer are easier to attract to the bait sites and capture. According to animal management specialists at Cornell, it

would be relatively easy to perform 20 surgeries in a month and more if additional specialists were retained.

It would be expected that two to three sites would be established for capturing the deer. The work is done in the evening hours or pre-dawn time frame when deer are actively feeding.

Sites would need to be established with local property owners. The short-term impact of these activities on land use would be minor. Technicians would man the drop nets or set up the clover traps depending on which approach was selected, and remove and sterilize deer based on the number of targeted sterilizations to take place.

After the procedure is completed and the animals tagged, they would be returned to the area of trapping and released.

Depending on decisions made by the Trustees, the sterilization effort could take place over one or more seasons.

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

### Culling

The DMD will work with the VCH Police Chief and the Department of Environmental Conservation officer to develop and oversee the culling protocol and hiring of licensed professional sharpshooters. There are private contracting companies that perform these kinds of operation and it is expected that such a contractor may be hired to carry out the culling task.

### *Common Culling Protocol*

The protocol for culling varies from situation to situation. However, generally a meeting is held with participating volunteer landowners so they may understand what is involved in a remote euthanasia program. Once deer distribution is assessed, access to private properties is obtained and then safe shooting areas are selected.

A baiting program is established to pattern the deer and bring them to the selected areas. Shooting lanes are then cleared to ensure that there are no obstructions in the trajectory of the bullet. Patterns of human activity in the site vicinity are recorded to ensure maximum safety and discretion. Specialized weapon systems designed for select site characteristics may then be selected based on maximal shooting range, acceptable noise, proximity to homes and deer abundance.

Deer are euthanized with a single shot to the head to ensure a humane kill and minimize the likelihood of the deer exiting the culling area. Frangible rounds are used that fragment on impact and rarely leave the animal's body.

Subsequent to a decision by the landowner and the New York State DEC and the Village to implement a culling operation, the following procedures would be commonly used:

Prior to initiating any field activities the target area and surrounding properties would be thoroughly surveyed with topographic mapping and aerial photographs followed by field confirmation. Every occupied structure would be identified and areas of connectivity be noted in order to proceed with the work in a safe, discreet, efficient manner.

Bait sites would be selected with the involvement of the landowner, the DEC, and the Village. Each site is selected based on human safety and deer accessibility.

Field operations would be conducted during the hours of minimal human activity. During the removal operation an intensive reconnaissance for people and non-target animals is undertaken to prevent any mishap.

Typically deer of all ages and sexes are harvested. However, adult does are prioritized. Deer are shot from a vehicle with a rifle during the night using spotlights. Some deer may be shot over bait from a tree stand with a rifle during the day or at night. Night vision equipment would be used if permitted by the DEC. State law prohibits use of suppressed firearms except by police. Thus, the noise of a firearm being discharged is an unavoidable consequence of the culling program, as it is currently contemplated.

During the activity, there is continuous communication between community members, municipal officials and the culling agent, to keep all parties fully informed regarding field activities and avoid conflicts.

Deer carcasses are discretely field dressed (to the greatest extent practical) and transported to a location for processing. It is anticipated that processed venison will be donated to local charities or food banks.

Permission will be needed from landowners to allow the discharge of a fire arm within 500 feet of their businesses and homes to assemble the required area. It is estimated that an area of 18 acres will be necessary for each culling site.

For safety reasons, the DEC and the DRAC have recommended against publicizing culling sites and times. Some Village residents have expressed their view that safety would be enhanced by publicizing the sites and times. The VCH Board may enact a local law making it illegal, and punishable by fine, to interfere in any portion of a culling operation.

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

deter human activity during the operation. During those times, land use activities in the culling sites may be highly restricted. Carrying out the operation at night reduces the impact of the restrictions however. Noise associated with firearm discharge will represent a short term disruption to the night time ambient noise conditions, which is typically low in the suburban environment.

Impacts on the deer population from culling will be the 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 deer and a benefit for the Village (deer are often injured and not killed by such accidents).

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 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 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 very low.

#### **4.2 Potential Policy Impacts**

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 law relative to deer management (see letter from NYSDEC in Appendix H).

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 allowed under New York State law, without specific permission.

#### **4.3 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 a criteria for determining significance.

#### **4.4 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. The estimated cost of culling is \$400 to \$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 (ecological damage, vehicular accidents, tick borne diseases, landscape loss, etc.), as discussed in Chapter 3 will be substantially reduced as well.