

OTHER SCHEDULED ITEMS

BELVEDERE CITY COUNCIL
MARCH 13, 2017

To: Mayor and City Council

From: Beth Pollard, Interim City Manager

Subject: **Response to Council questions and suggestions re: Deer from the November Council meeting**

Recommended Motion/Item Description

That the City Council review the information received in response to its inquiries and suggestions at its meeting of November 14, 2016, and provide direction to staff for additional information and/or action.

Background

In 2016, the topic of deer management was considered by the City Council at six of its regular meetings. In addition, on October 2016, the City hosted a two-hour community forum in which a panel of speakers with knowledge about deer presented information on deer behavior, coexistence and procedures to reduce the size of the deer population. Attendees had an opportunity to ask questions of the panel. The presenters discussed deer behavior and biology, response to deer issues in Marin, tools to help residents live with the deer, and ways in which the City could reduce the number of deer in Belvedere. The meeting was videotaped by Community Media Center of Marin and may be viewed at: <https://youtu.be/1qe7tDGbfgE>. Previously, the City Council heard a presentation from the Marin Sonoma Mosquito & Vector Control District (MSMVCD) on Lyme disease and tick bite ecology in Marin.

During its last regular meeting agenda item on deer management, on November 14, 2016, the City Council raised questions and suggestions about deer, deer management and options. Former City Manager Mary Neilan contacted the community forum panelists to obtain their responses to those questions and suggestions; these responses are attached.

Discussion

The issues under discussion have generally included concerns about impacts of deer living in Belvedere on the one hand, and concerns about methods of deer management that involve measures such as sterilization or immunecontraception on the other hand. Fencing, deer resistant plant material, and deer repellent are strategies in use by property owners; whether these or other approaches are appropriate for the foreseeable future has been the subject of consideration by the community and Council.

Upon reviewing the information provided, the next action for City Council is to provide direction to staff on more information needed, and/or action.

Fiscal Impact

No fiscal impact to receive information. There could be fiscal impacts and/or staff time to obtaining additional information or directing action.

Recommendation

Staff seeks Council direction as to what additional information is needed or questions answered on this topic and any actions, steps toward action, or other considerations.

Attachments

- City Council Inquiries from November 14, 2016, and Responses Received.
- Additional information about deer and deer management issues can be found on the City's website (<http://www.cityofbelvedere.org/index.aspx?NID=245>) or accessed in the City Clerk's office at City Hall. The following information is available on the website or at City Hall:
 - 125 pieces of correspondence received by the City Council
 - Video of the October 26, 2016, Community Forum on Deer in Belvedere
 - June 2009 City of Belvedere Deer Study prepared by WRA Environmental Consultants
 - November 9, 2009, report to City Council on findings and recommendations of the 2009 Deer Committee
 - White Buffalo, Inc. presentation to The Villages Golf & Country Club in San Jose on October 12, 2012
 - "Living with Deer" Marin Humane Society publication
 - Agendas, staff reports, meeting audio, minutes, and other publications from the following past meeting dates:
 - November 14, 2016, regular City Council – “Discussion on next steps regarding deer in Belvedere”
 - October 26, 2016, Community Forum on Deer in Belvedere
 - October 10, 2016, regular City Council – “Presentation by MSMVCD on Lyme disease and tick bite ecology”
 - September 12, 2016, regular City Council – “Consider plans for a Community Forum on Deer”
 - August 8, 2016, regular City Council – “Consider proposal to conduct Deer population count and suggestion to hold a Community Meeting on the topic of Deer”
 - June 13, 2016, regular City Council – “Consider setting a special City Council meeting to hear presentation from White Buffalo, Inc.; consider adopting resolution authorizing an application to the Ca. Dept of Fish and Wildlife for a permit to conduct a deer sterilization project; discussion of next steps”
 - May 9, 2016, regular City Council – “Presentation from the 2016 Deer Group”

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

- 1. City should conduct a deer count – can we get help from Marin Humane? Department of Fish & Wildlife? Would using a deer feeding station to entice the animals to one location result in an accurate count?**

Cindy Machado of Marin Humane Society (MHS) said her organization was not equipped to help or advise on this.

Craig Stowers of the Department of Fish and Wildlife (DFW) responded that the options are limited.

“Limited in your environment that’s for sure....direct observation (perhaps form a team (or several teams), break the island up into sections, then have the teams perform counts over several nights at the same time.....cameras might help if you can get willing landowners to allow them to be placed on their property....or DNA which, although expensive, will give you the best results and a tighter estimate.”

John Krause of DWF added: “It would seem that the folks counting would probably need private property permission, since observations only from roads would be missing a lot of area.”

- 2. What size herd is optimal for Belvedere?**

There is no right answer to this question, depends on community tolerance for the impacts of the deer population. At the Community Forum, experts observed that the deer in Belvedere appeared healthy, suggesting their number does not exceed the biological carrying capacity of the City.

- 3. What is the procedure to gain access to private property? What are the risks?**

Each property owner would need to sign a release, indemnify the City and may need to name the City as additional insured on their homeowners insurance. The City’s Risk Authority will have specific requirements. The City Attorney also noted that if a private property owner is unwilling to allow entry onto his/her property, then the only way that the city can obtain access is through an administrative abatement warrant which requires that we provide a superior court judge with the factual basis for the warrant.

- 4. What outcome does the Council/Community wish to see? Is it achievable? How would the Council measure the success of a project?**

These are questions for the Council to discuss.

- 5. Consider increased maintenance of public spaces, review “temporary” deer fence rules and enforcement, create a list of truly deer resistant plants and effective deterrents, consider promoting netting as deer deterrent for plants, provide community with Lyme disease education program**

City Clerk, Planning and Public Works staff can follow up on these suggestions, with the use of staff time.

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

6. City needs a reliable way to track and evaluate deer encounters/accidents

The Police Chief can work with MHS on this.

7. Need clarity on whether City would be liable for injury or property damage caused by deer

From the City Attorney:

The City is not liable for injury or property damage caused by the deer. If the City were to be sued based on such a theory, then the action should be summarily dismissed based on governmental immunities and the absence of any theory of liability against the City. Such a case, if it were to be filed, should be defended and the dismissal obtained by attorneys paid by our joint powers insurance authority coverage.

8. Invite White Buffalo to meet with Council – city will pay air fare; check with Deer Committee for additional funding.

Dr. Anthony DeNicola, from White Buffalo, has stated he is available to visit Belvedere. Members of the community previously indicated they would host and pay his consulting fee.

9. Follow up questions for Dept. of Fish & Wildlife and US Humane Society

- a. **What criteria would be used by the state to evaluate a proposal for a research project of deer sterilization or contraception (size of herd, accessibility, damage to environment, health of deer, community support?)**
- b. **Does it appear Belvedere would meet the requirements?**
- c. **Need more information on new PZP option that does not require tranquilization – clarify procedure and when it will be available**
- d. **Based on observations from site visit, could sterilization or contraception program be successful here given terrain, existing development and lack of open space? Other challenges?**
- e. **What are the pros/cons of ovariectomies, tubal ligation, contraception**
- f. **What is best timing of procedures to avoid spontaneous abortions**
- g. **What would the various procedures cost, short and long term?**
- h. **What is the likely effect of a sterilization project on the Belvedere deer herd, short and long term?**

Email from Craig Stowers, California Department of Fish & Wildlife, 11/16/16:

The entire Scientific Collecting Permit process is extensively described on our web-site at <https://www.wildlife.ca.gov/Licensing/Scientific-Collecting>. Each of the applications submitted will be forwarded to the respective programs involved in the effort for their input, so if/when this

City Council inquiries in bold
Responses in italics

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

one is submitted it will come to the deer program for review. It's hard for me to say whether a Belvedere proposal would meet the requirements of the program when there is really no proposal to review....but I can say it must provide all the information requested at the above link, must be submitted through proper channels with the application fee provided or it will not pass any administrative review performed by the other functions involved. Once it meets the administrative criteria it gets passed along to program for comment.

On our tour of the area I did see small areas that appeared to be heavily utilized by deer...but I don't know if that realistically can be termed "economic damage" plus lethal options appear to be off the table so we don't really have a depredation permit option. The only other option open to us is the SCP process (anytime any one touches wildlife in this State for pretty much any reason this is the process we have been given to use). I would say that the key things we would look for is an initial population estimate (how can we ever tell if this is a successful operation if we don't have a base to measure from?), and then the animal care/well-being factor included the process/materials used to capture the animals and/or treat them with a chemical contraceptive. We would consult with our veterinarians on that aspect....and if all the standards are met then we could issue the permit. Belvedere certainly has the opportunity to put together a proposal and submit it, but I can't pre-evaluate something that doesn't yet exist.

Some of the other questions may best be answered by Stephanie, but in my experience at The Villages I would say that although the non-chemical methods provide certainty that the individual animal will no longer produce it is extremely expensive in terms of time and money plus it is really hard on the animals. Any time we capture any animals we know there is a risk of losing individuals – it's happened on almost every capture I've ever been a part of – and that is a factor that must be considered prior to implementing them. If you decide to go the non-chemical route I'm sure it would be quite successful in preventing reproduction for a time...but Belvedere is not a closed population so new deer will eventually move in time, plus it appears to me that there is a significant portion of the population there that wants no part of this and that will make any capture or darting operation very difficult to implement with any success. We had some timing issues at The Villages that can absolutely be avoided – just need to perform the operations much earlier in the year than we did there but that was a scheduling issue and we resolved it by changing techniques (I'm not convinced there ever were any "spontaneous abortions" there as we never saw any evidence to support it and the first time I heard of it was in LouAnn's presentation at the meeting).

[FYI from Mary: In a conversation with Darren Shaw, General Manager of the Villages, he also noted that the ovariectomies resulted in some does aborting, which is why DeNicola performed tubal ligation on the remaining does.]

As far as the differences go, all captures are hard on the animals and there is a risk of losing them. But if done successfully that's a treatment that never needs to be repeated whereas the chemical contraceptive has to be done at least annually and we may have to capture them anyway just to mark them as being treated. One is much more expensive and risky but once it's done it's done – the other is less risky for the animals but over the long-term may be just as expensive as capturing and surgically treating them.

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

All of the residents need to understand a basic fact.....if this project goes forward it will result in less deer being seen on the island. That's the whole point right – reduce the population to a level where it can be “tolerated” by the humans also living on the island. Short term impacts will be slight unless we start losing deer due to the operations....long term impacts will be an almost complete reduction of fawns (no one should expect to see them in the spring) and a gradual decline in the population as the older age deer die-out and aren't replaced by the fawns that used to replace them. That will occur over time and there is no getting around it.

I'll leave the more technical questions for Stephanie to answer as she has much more experience than me with that. I hope I helped with some of this information and you know where to find me if you need more.

Email from Stephanie Boyles Griffin, United States Humane Society (USHS), 12/9/16

Thank you for your questions. See my answers below. I've deferred to Craig and John on questions that I don't have the authority to answer.

- a. **What criteria would be used by the state to evaluate a proposal for a research project of deer sterilization or contraception (size of herd, accessibility, damage to environment, health of deer, community support?)**

I have to defer to California Fish & Wildlife on the agency's criteria.

As discussed during the public presentation, The USHS is currently attempting to identify projects sites to test two different fertility control options for managing deer populations: immunocontraception using the vaccine porcine zona pellucida (PZP) and surgical sterilization via ovariectomies. Both options require field researchers to access deer at close range in order to anesthetize the animals with chemical immobilization drugs to mark them with ear-tags (for individual identification) and to conduct surgical sterilization procedures or administer immunocontraception vaccines. Capturing deer can be completed using many methods (traps, nets, etc.), but the most humane method in most cases is via chemical immobilization (CI) drugs delivered with darts. For these reasons, the two most important factors that determine whether or not a deer fertility control project can be conducted in a safe, humane manner in a given community are deer approachability and accessibility. If our trained wildlife field researchers are unable to approach (within 10-40 yards) and access (via private property owner cooperation) a high proportion of the existing doe population, then we would be unable to treat enough animals (i.e. 65-85% of the existing female population) to have an impact on the population growth rate and/or the existing population over time.

- b. **Does it appear Belvedere would meet the requirements?**

After visiting Belvedere and meeting with a wide variety of residents (either by phone or in person), at this time, our main concern is that we would not have permission to access the amount private property that would be necessary to ensure that we could treat a high proportion of the existing doe population. That could change if the community works to

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

generate resident support for a fertility control project, and if it does, then we could reassess the feasibility of conducting a fertility control project there.

c. We'd like more information on new contraception option that does not require tranquilization – please clarify procedure and when it will be available.

The HSUS has submitted an application to the Environmental Protection Agency (EPA) to register PZP for use in cervids, which would include black-tailed deer. We hope that happens this year, but that's up to the EPA. Not us. If the EPA registers the vaccine for use in cervids this year, the HSUS would apply this year to register this vaccine in California for use in wild cervids in urban and suburban communities where lethal methods may not be logistically feasible and/or socially acceptable (i.e. a community like Belvedere Island). If the California Department of Agriculture registers the vaccine and the community is interested in developing a PZP program, we would work with the community to prepare and submit a permit application to California Fish & Wildlife and it would be up to them as to whether or not to approve its use. We'll know more by this time next year.

The other option is to ask Fish and Wildlife if they would permit us to conduct a deer fertility control research project on Belvedere Island – if they would, then we could work with the community to prepare and submit a research proposal to California Fish and Wildlife for consideration. That could be done anytime once we know whether or not the agency would be willing to consider such a proposal from Belvedere. Craig and John would be the best people to ask about that.

d. Based on observations from site visit, could sterilization or contraception program be successful here given terrain, existing development and lack of open space? Other challenges?

See answer to questions to questions (a) and (b) – the first hurdle that would need to be addressed is community accessibility and cooperation. Unless there's a high proportion of residents who support and will allow our darting teams access to their property to dart and retrieve deer, we would not be able to treat enough does to have an impact on population growth and reduction.

e. What are the pros/cons of ovariectomies, tubal ligation, contraception? Why chose one over the other?

This was all covered in the presentation I gave, but in a nutshell:

Immunocontraception is the most non-invasive approach available at this time, especially if we're just treating the deer with the vaccine and we don't have to chemically immobilize them, capture them, tag them, treat them and then release them. PZP is reversible so we would need to re-treat the does every year or every two-three years depending on which formulation of the PZP vaccine was chosen.

Ovariectomies/tubal ligations are more invasive as they require surgery to remove the ovaries or perform a tubal ligation which could potentially increase the risk of unintended

CITY COUNCIL INQUIRIES, NOVEMBER 14, 2016, AND RESPONSES

mortalities. Unlike PZP, surgical sterilization is not reversible – it's is permanent – and therefore, re-treating does every year or every two to three years is not necessary.

I suggest that leaders in Belvedere speak with leaders in communities that are currently conducting these programs [i.e. Mayor Swiderski in Hastings-On-Hudson (PZP) and the folks at Clifftondeer.org about the project in Cincinnati (ovariectomies)] to find out why they went with one option as opposed to another. I can put you in touch with them if that would be helpful.

f. What is best timing of procedures to avoid spontaneous abortions?

Early to late fall is the best time to perform either ovariectomies and/or tubal ligations. PZP treatments can be done during this time as well.

g. What would the various procedures cost, short and long term?

Costs are site specific and depend a great deal on the number of deer involved. Once a census has been conducted, we would be able to provide with a good faith estimate on a research or management project.

h. What is the likely effect of a sterilization project on the Belvedere deer herd, short and long term?

It's reasonable to expect that if a high enough proportion of does are treated that the community would see rapid population stabilization and then gradual population reduction over time. There are currently several ongoing deer surgical sterilization studies being conducted throughout the U.S. in places like San Jose, Cayuga Heights, NY, Staten Island, East Hampton NY, Cincinnati OH, and Fairfax City VA (to name a few), but these projects take three to five years to complete and the data on them has not been published, so until it is, it would be hard to say exactly what the impact would be on the deer living on Belvedere Island.

However, as I said during my presentation, the community should be focusing first on deer impacts and focus on deer population management as a last resort. A lot of complaints that the community receives are site specific and are best resolved with site-specific mitigation (i.e. repellents, strategic, aesthetically pleasing exclusion approaches, etc.).