Agenda Report

July 17, 2023

TO: Honorable Mayor and City Council

THROUGH: Public Safety Committee (June 21, 2023)

FROM: Public Health Department

SUBJECT: REQUEST FOR DIRECTION TO RESPOND TO CONCERNS RELATED TO HUMAN-COYOTE INTERACTIONS

RECOMMENDATION:

It is recommended that the City Council:

1. Find the proposed action is exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15061(b)(3). The Common Sense Exemption states that CEQA only applies to projects that may have an effect on the environment; and

2. Provide direction on whether to initiate one of the identified options or an alternative option not presented in this agenda report.

BACKGROUND:

In August 2019, the City Council adopted the Urban Wildlife Management Plan ("UWMP") developed by the Pasadena Public Health Department ("Department"). The UWMP provides guidance for City staff when responding to wildlife interactions including cougars, bears, and coyotes. The UWMP reflects recommendations and guidance from the California Department of Fish and Wildlife ("CDFW"), which serves as the lead state agency for fish and wildlife resources in the state of California. Using a three-pronged approach, the UWMP balances wildlife respect and protection while also protecting public safety by:
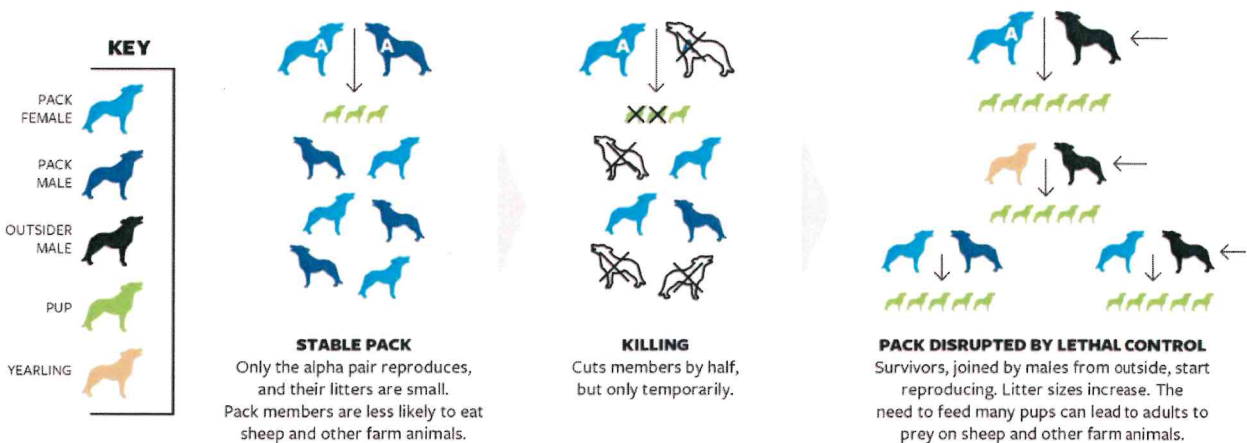
1. Educating the public on ways to coexist with wildlife;
2. Enforcing laws and regulations to prohibit the feeding of wildlife; and
3. Protecting the public by establishing response tiers for wildlife and human interactions.

The City places a high value on its wildlife but some species adapted to urban environments, such as coyotes, have the potential for problems or conflicts in certain situations. The approach in the UWMP focuses on preventing human-wildlife conflict but when conflicts emerge, the UWMP recommends corrective measures that do not harm wildlife or their habitats. In instances where coyotes pose a risk to the health and safety of humans, the UWMP specifies the City may use lethal control measures (i.e., trapping and euthanizing) to remove the threat as a last resort in the tiered response process. To date, the City has not taken any such measures but if the need ever arises, the City will consult with CDFW to ensure any potential actions for coyote abatement are conducted in a humane manner and in compliance with state and local laws. State law requires coyotes be released where trapped or humanely euthanized. Use of firearms is prohibited in the City and there are several state restrictions on trapping methods.

The guidance in the UWMP does not apply to Pasadena residents, businesses, or homeowner associations in pursuit of their legal rights in dealing with wildlife. State regulations for trapping of any non-game mammal can be found across multiple statutes. Property owners are allowed to trap on their own property if they receive a trap identification from CDFW and written consent from all property owners within 150 feet of the trap location. While the City does not have a role in authorizing property owners to address wildlife concerns, staff strongly recommend residents seek CDFW guidance to ensure compliance with state law and engage certified professionals since the needed tools and skillsets make it a challenge for most individuals to do on their own.

Summary of Related Research

Lethal control is not an effective strategy for reducing human-coyote encounters and conflicts, primarily because disruption to coyote pack structures can impact the ability of the pack to defend their territory, lead to the inflow of coyotes from other areas, and trigger increased reproduction as a result. In the research, this increase in reproduction is called a "rebound effect" or "compensatory reproduction". The Humane Society of the United States offers a helpful graphic demonstrating why removing coyotes doesn't work.

KEY		
PACK FEMALE		
PACK MALE		
OUTSIDER MALE		
PUP		
YEARLING		

STABLE PACK
Only the alpha pair reproduces, and their litters are small. Pack members are less likely to eat sheep and other farm animals.

KILLING
Cuts members by half, but only temporarily.

PACK DISRUPTED BY LETHAL CONTROL
Survivors, joined by males from outside, start reproducing. Litter sizes increase. The need to feed many pups can lead to adults to prey on sheep and other farm animals.

Source: Humane Society of the United States, 2023

The foundation for the "rebound effect" can be found in coyote research published in the 1970s and 1980s[1]. A coyote family usually has one breeding (or alpha) female. The alpha produces one litter per year with an average of six pups. Litter size is generally between four to seven pups but can be smaller or larger. Litter size is tied to the alpha's nutritional status and is a function of food availability and coyote population density. As food availability increases, litter size is likely to increase as well. Conversely, litter sizes may decrease as coyote population density increases.

The alpha female produces more pups than are ultimately wanted in the pack. Young coyotes may leave the pack at about nine to eleven months of age becoming transients. Transients move through narrow undefended zones that exist between pack territories as they search for an open habitat to occupy or a group to join. While juveniles often die during their search, coyote eradication programs are unsuccessful in large part due to these transients. Removing coyotes reduces the ability of a pack to defend an area where transient coyotes enter. At any given time of the year, transients are immediately available to replenish any voids created by killing resident coyotes. If the alpha male or alpha female in a pack is killed, the resulting effect may be ovulation in other breeding-age females in the pack and an increase in the number of litters as well as the number of pups per litter.

A study of Colorado coyotes[2] compared the impact of lethal control on population density by exploiting (i.e., trapping and killing) coyotes in one area and using coyotes in a nearby area as a control. In the area where lethal control was used, the coyote population density decreased by as much as 70% but the vacancies in the pack were quickly filled by immigrating coyotes. Within 8 months, the population density within the removal area had recovered through increased litter size, a litter sex ratio favoring females, and a slight increase in yearling reproduction.

A study of coyotes in the southeastern United States[3] found coyotes in areas where exploitation was occurring to have a higher reproduction rate primarily due to high immigration of juvenile males from neighboring areas. The study concluded that it would be impossible to implement a trapping program over a sufficiently large area to limit the regional pool of immigrant coyotes and that control efforts are unlikely to reduce coyote populations for longer than a few months.

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[1] Connolly and W.M. Longhurst (1975). The Effects of Control on Coyote Populations. University of California, Division Agricultural Sciences Bulletin.

Knowlton and Stoddart (1983). Coyote Population Mechanics: Another Look Proc. Natural Regulation of Wildlife Populations Forest, Wildlife, and Range Expt. Sta. University of Idaho Sept 1983. And

Sterling BW, Conley, and M.R. Conely (1983). Simulations of Demographic Compensation in Coyote Populations. J Wildlife Manage 47:11

[2] Gese, Eric, "Demographic and Spatial Responses of Coyotes to Changes in Food and Exploitation" (2005). Wildlife Damage Management Conferences -- Proceedings. 131.

[3] Kilgo, John & Shaw, Christopher & Vukovich, Mark & Conroy, Michael & Ruth, Charles. (2017). Reproductive characteristics of a coyote population before and during exploitation. The Journal of Wildlife Management. 81. 10.1002/jwmg.21329.

Non-lethal control techniques such as hazing, removing coyote attractants, keeping pets indoors, strengthening properties against coyote intrusion, and enforcing laws prohibiting the feeding of wildlife can be effective if they are consistently and correctly applied throughout a neighborhood.

Coyotes are naturally fearful of humans and hazing helps maintain that fear, which is essential to deterring them from yards, backyards, and suburban open spaces. Hazing, also known as "fear conditioning", is defined as the immediate use of deterrents to move an animal out of an area or discourage undesirable behavior or activity. Hazing techniques include making loud noises, spraying water, using bright lights, throwing objects, and shouting. Pasadena Humane and CDFW offer coyote workshops to promote a culture of consistent hazing in every coyote interaction.

Coyotes are opportunistic and their ability to thrive in urban settings reflects their strong ability to adapt to the resources available. According to research conducted by California State University Northridge and the National Park Service in 2020[4], between 60 to 75 percent of the urban coyote diet is garbage, ornamental fruits, and cats. The study found that coyotes in Los Angeles urban areas are taking advantage of food sources that humans don't secure allowing coyotes to view human activity as a source of food, leading to habituation. Frequent coyote visits to the same location or sightings of coyotes resting in areas where there is typically human activity is a strong sign that someone is intentionally or inadvertently feeding coyotes.

Reported Coyote Concerns
The UWMP defines key terms related to coyote interactions (Attachment A), classifies coyote behavior (Attachment B), and uses a color-coded system to assess threat levels of the behavior (Attachment C). The color-coded system classifies coyote behavior by threat level from normal coyote behavior at a low threat level (Green) to a confirmed, unprovoked attack on a human at a high threat level (Red). The UWMP classification of coyote behavior and related threat levels align with the San Gabriel Valley Council of Governments ("SGVCOG") Regional Coyote Management Framework, which is the foundation for approaches to coyote concerns for several neighboring cities such as Alhambra, Arcadia, Glendora, Irwindale, Rosemead, and San Marino.

The UWMP recommends community members report coyote concerns to different agencies based on the threat level including the Citizen Service Center ("CSC"), Pasadena Humane, and Pasadena Police Department. The response to concerns is based on the authority and roles of the City and partner agencies as summarized in Table 1.

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[4] National Park Service (2020). "New Study Says Urban Coyotes Eat Garbage, Ornamental Fruit and Domestic Cats". https://www.nps.gov/samo/learn/news/new-study-says-urban-coyotes-eat-garbage-ornamental-fruit-and-domestic-cats.htm. Accessed on June 19, 2023.

Table 1. Summary of Threat Levels and Corresponding Response

Threat Level	Assessment	Response	Responding Agency
Green	Normal coyote behavior	• Public education on normal coyote behavior, hazing techniques, and pet safety	• City staff • Pasadena Humane
Yellow	Mildly habituated coyote behavior	• Public education on normal coyote behavior and pet safety, yard audit checklist, and teaching aggressive hazing techniques	• City staff • Pasadena Humane
Orange	Aggressive habituated coyote behavior	• Public education on normal coyote behavior and pet safety, yard audit checklist, and teaching aggressive hazing techniques • Community meetings to raise public awareness and education	• City staff • Pasadena Humane
Red	Provoked or unprovoked attack requiring investigation and action	• All response actions listed in Level Orange • Locate and abate the responsible coyote(s)	• City staff • Pasadena Humane • CA Fish & Wildlife

Recently, some Pasadena residents have expressed growing concerns about coyote behavior in their neighborhoods. In early February 2023, the Public Health Department was joined by representatives of Pasadena Humane and the CDFW at a neighborhood association meeting in the southwest area of the city to discuss coyote concerns. At the Public Safety Committee held on April 19, 2023, the concerns were reiterated and residents presented separate reports of coyotes entering an enclosed yard, injuring an unattended pet, and killing an unattended pet. The UWMP classifies these behaviors as mildly habituated coyote behavior. Other concerns shared at the meeting included coyotes being active during the day, stalking residents while walking their pets, and sitting in the front yard of residential properties. All of these concerns are classified as normal coyote behavior.

In calendar year 2022, the City received 159 calls reporting coyote concerns including twelve calls related to a coyote attack resulting in an injury or death of a pet; ten for unattended pets and two for attended pets. Using the threat assessment framework in the UWMP, nearly 54% of the reported concerns were for normal coyote behavior, 26% for mildly habituated coyote behavior, and 12% for aggressive habituated coyote behavior. There were no calls for provoked or unprovoked attacks on a human. As of May 30, 2023, the City has received 51 calls reporting coyote concerns in calendar year 2023, 22% less than the prior year for the same period. Two of the reported concerns were for coyote attacks resulting in the death of unattended pets.

Chart 1. Reported Concerns by Threat Level (Jan 1, 2022 to May 30, 2023)
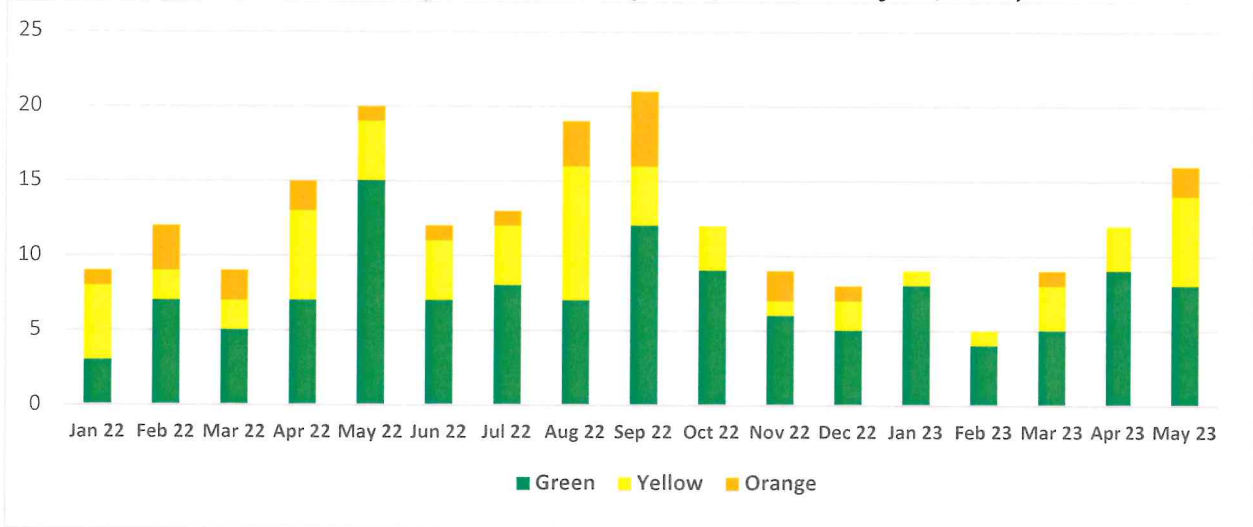
The Department returned to the Public Safety Committee on June 21, 2023, to follow-up on Committee requests made at the prior meeting including a review of the City of Torrance lethal control program, seek more information on the SGVCOG Coyote Management Task Force, and to provide recommendations for addressing the community concerns reported at the April 19, 2023, Public Safety Committee meeting.

Summary of Responses to Public Safety Committee Requests

City of Torrance Lethal Control Program
Torrance has a population of 147,000, a geographic area of roughly 21 square miles, and is close to natural resources – all similar to Pasadena. Of the 88 cities in Los Angeles County, the City of Torrance is the only city to use lethal control as a proactive approach to reduce the coyote population. Several other cities align with the City of Pasadena and consider lethal control only in circumstances where a coyote is involved in an unprovoked, confirmed attack on a human or showing aggressive behavior (e.g., bare teeth, lunging, nipping, etc.) toward humans.

In September 2019, the City of Torrance amended the Coyote Management Plan they adopted in June 2016 to establish a five-month trapping season from October to March each year. In November 2021, the Coyote Management Plan was amended to start weekday trapping (Monday through Friday) year-round. In September 2022, the Plan was amended to add weekends to the year-round trapping program, allowing the program to operate every day of the week.

Since the inception of the lethal control program, the City of Torrance has expended $256,000 to trap and kill 78 coyotes and has appropriated an additional $26,400 to provide services over the next four months. Despite the start of the lethal control program in September 2019, coyote sightings increased by 14% the following year. In the last eight months, 217 coyote sightings have been reported but the height of the coyote activity season is still to come. Notably, 23 cat fatalities were reported in the last

eight months but there is no baseline data for comparison. Due to limited published data, it is difficult to assess if the program is achieving the desired results.

Period	Coyotes Trapped	Coyote Sightings	Dog Attack	Cat Attack	Dog Fatality	Cat Fatality	Cost
Oct 2019 – Mar 2020	14	276	Not reported	Not reported	Not reported	Not reported	$74,000
Oct 2020 – Mar 2021	15	315	Not reported	Not reported	Not reported	Not reported	$74,000
Oct 2021 – Sep 2022	31	Not reported	Not reported	Not reported	Not reported	Not reported	$55,200
Oct 2022 – May 2023	18	217*	5	4	0	23	$52,800

*Data is for approximately 8 months but does not include the period of the year when coyote activity is heightened.

SGVCOG Coyote Management Task Force
The SGVCOG's Coyote Management Task Force collaborated with the CDFW, County of Los Angeles, and the University of California to develop the San Gabriel Valley Regional Coyote Management Framework ("RCMF"). The goal of the RCMF is to discourage the habituation of coyotes in an urban environment by using education, behavior modification, and a robust human/coyote reporting and responding system. The RCMF emphasizes the importance of coexistence, changing human behavior to eliminate coyote attractants, and promote a culture of hazing. The RCMF notes that non-selective coyote removal programs are ineffective for reducing coyote population sizes or preventing human-coyote conflicts in the long run.

The Coyote Management Task Force also established the Neighborhood Coyote Program which offers similar services currently provided by Pasadena Humane and the City of Pasadena including reporting tools, workshops and training, and pet safety planning. In addition, the Program offers other services including an educational access line, referrals to resources, and crisis intervention. The Program does not conduct field visits or offer trapping services. The Neighborhood Coyote Program provides a regional approach to coyote management and serves as the central organization providing public outreach services and access to a reporting tool for member cities.

Recommendations for Addressing Community Concerns
The research supports the position that lethal control is not an effective method for reducing coyote populations and by extension reducing human-coyote conflicts. Non-lethal control measures offer a practical and cost-effective approach to addressing human-coyote conflicts but they require community members to implement personal prevention measures correctly and consistently across entire neighborhoods. Resident concern about their safety and the safety of their loved ones and pets adds to the urgency for resolving human-coyote conflicts. Approaches that produce immediate

results do not appear readily available. Rather than pursue unproven approaches, staff recommends collecting data and learning from experts who may help bolster existing practices or identify additional effective approaches.

The following recommended actions focus on gaining a better understanding of the local coyote population, learning from experts to better understand how the research applies to Pasadena, and empowering residents through education and support for improving their properties to deter coyote intrusion.

The five recommendations include:
1. Increase public outreach services.
2. Improve local coyote reporting systems.
3. Convene a panel of coyote experts to improve our collective understanding of effective approaches.
4. Hire a consultant to conduct a field study where community concerns are heightened.
5. Support residents to strengthen their properties against coyote intrusion.

1. Increase public outreach services. There is a need to build on or expand current services offered by Pasadena Humane and Citizen Service Center to provide outreach and education to promote a culture of hazing, removal of coyote attractants, and compliance with laws prohibiting wildlife feeding. Dedicated resources are needed to focus on responding to coyote concerns including a campaign to offer public education and encourage the public to report coyote sightings.

2. Improve local coyote reporting systems. The UWMP provides different avenues for reporting concerns based on the nature of the concern and the authority of various agencies. Reporting concerns needs to be streamlined and consolidated into one point of contact to make it easier for residents to share their concerns. In addition, the Department recommends seeking reporting system improvements so concerns can be presented spatially using Geographic Information Systems (GIS). Data can support the identification of hotspots so that targeted intervention can be conducted to address hyperlocal concerns.

3. Convene a panel of coyote experts to improve our collective understanding of effective approaches. Recently, there has been a surge in local research on urban coyotes in Los Angeles County drawing researchers from local universities and practitioners from several agencies studying coyote behavior and methods for addressing human-coyote conflicts. A panel of experts may be helpful to staff and residents as we seek to understand the latest research, identify approaches for educating the public, address problematic coyote behavior, and learn about best practices in data collection and analysis.

4. Hire a consultant to conduct a field study where community concerns are heightened. Culver City and Manhattan Beach recently hired consultants to prepare comprehensive coyote reports. For one or more areas of the city where concerns are

heightened, a field study would help assess the neighborhood coyote population, directly observe coyotes to understand their behavior, and identify neighborhood food sources and other attractants.

5. Support residents to strengthen their properties against coyote intrusion. There are several effective methods for strengthening properties against coyote intrusion including coyote rollers, taller fencing, and lighting. Potential options for exploration including offering incentives or financial assistance to property owners, providing technical assistance to comply with the zoning code in historic districts, and reviewing the zoning code to assess conflicts between coyote deterrents and zoning restrictions.

Options for City Council Consideration

The Department seeks City Council direction on whether to initiate one of the following options, including the pursuit of an alternative option not presented in this agenda report.

Option 1: Direct staff to take steps necessary to amend the Urban Wildlife Management Plan to implement a seasonal coyote trapping program, possibly during the height of pup dispersal season and mating season (October to March).

Option 2: Direct staff to take steps necessary to amend the Urban Wildlife Management Plan to implement a year-round coyote trapping program.

Option 3: Direct staff to implement one or more of the five staff recommendations listed in the response to the Public Safety Committee.

Option 4: Direct staff to take no action at this time.

Option 5: Direct staff to pursue an alternative option not presented in this report.

COUNCIL POLICY CONSIDERATION:

The request for direction aligns with the City Council's strategic plan goal to ensure public safety.

ENVIRONMENTAL ANALYSIS:

This request for City Council direction is exempt from CEQA review pursuant to State CEQA Guidelines section 15061(b)(3). The request is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to the provisions of CEQA. As the currently recommended action is only for the City Council to provide direction to staff to study and explore potential future actions, there is no possibility that the currently recommended

action will have a significant effect on the environment. Staff will complete additional environmental review, if necessary and dependent on City Council direction, if and when the UWMP is proposed for amendment and/or if a future action has the potential for resulting in a significant environmental effect.
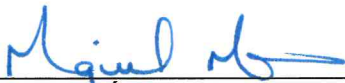
FISCAL IMPACT:

This report is provided to receive direction from the City Council. There is no fiscal impact anticipated as part of this agenda item. Any potential costs related to the pursuit of one or more of the options identified will be included in future discussions.

Respectfully submitted,

MANUEL CARMONA, MPA
Acting Director
Public Health Department

Approved by:

MIGUEL MÁRQUEZ
City Manager

Attachments:

Attachment A – Definitions of Coyote Interactions
Attachment B – Coyote Behavior Classification and Recommended Response
Attachment C – Threat Classifications