Memorandum

Date: March 26, 2020
To: Meghen Quinn, Hargreaves Jones
From: Sheri Mayta – GPA Consulting Senior Biologist
Subject: Silver Lake Reservoir Complex Master Plan Project
FENCING & WILDLIFE Memo

FENCING AND WILDLIFE

Impacts on Fencing and Wildlife
Fences can severely restrict wildlife movement or create a complete barrier to wildlife of all sizes (Paige, 2012). Improperly designed or located fences can dramatically reduce the carrying capacity of a given area. Impermeable fences can fragment habitat into small islands of resources, and prevent access to resources, such as food and water, or increase the energy required for wildlife to take advantage of resources. Tall chain-link and/or wooden or metal fences with closely spaced vertical or horizontal planks are especially unfriendly to wildlife. In fact, chain-link fencing is highly effective in excluding wildlife (Arizona Game and Fish, 2020). Large, low-flying birds, may collide with fences and break wings, impale themselves on barbs, or become tangled in wires. Ducks, geese, hawks, and owls are especially vulnerable. Waterfowl fly into fences that run along waterways, and hawks and owls may careen into fences when swooping in on prey. (Paige, 2012). Fences with loose wires or inappropriately spaced wires and/or pickets can ensnare birds and large mammals and prevent passage entirely. In a landscape with smaller and more distant habitat patches, impermeable fencing reduces the effectiveness of a habitat corridor by limiting access to food and water, to other populations to maintain genetic diversity, and makes animals more vulnerable to wildfire, disease and drought (Sonoma Land Trust, 2014). Designing a fence to provide wildlife with free travel to and between important habitats and corridors, as well as access to water is ideal.

An Ideal Fence for Wildlife
A wildlife-friendly fence includes the following characteristics:

- Animals should be able to jump over and crawl under easily to minimize the chance of injury.
- Fencing should be high/visible. It is especially important to protect low-flying birds, such as owls and geese.
Wildlife-Friendly Fence Types
A post and rail fences are ideal for wildlife. This type of fence is highly visible. A 2-rail fence is preferable to a 3-rail fence for wildlife. The top rail should be low enough for adult animals to jump over, preferably 40” or less, and no more than 42” high. Unless the fence is low enough to be easily jumped over and there is ample clearance underneath, boards or planks are not recommended, as these can create a visual barrier.

Any tall residential fence, whether wrought iron, plank, picket, or chain-link, should be used only for small areas around the home, and not for larger perimeter fences. If a fence provides a complete barrier, an open gate may allow animals to find a way in but not out. Be sure vertical planks or bars are spaced closely enough that animals will not try to push through and become trapped. Many residential areas are in wildlife migratory corridors. Using landscaping instead of fencing, or using only low, very permeable fences, allows wildlife to move freely through neighborhoods (Paige, 2012).

RECOMMENDATIONS
Resistance to removing the fence has been voiced by community members concerned about controlling access to the water and reservoirs at night. Aesthetically pleasing wildlife-friendly fencing alternatives are available, and when combined with education about urban wildlife and limiting human access to designated areas such as paths and viewing platforms, helps protect wildlife while increasing wildlife access to important habitat.

We recommend replacing tall fences along the perimeter of the complex with wildlife-friendly fencing to designate and protect habitat areas, maximize wildlife movement, and prevent wildlife injuries or mortality.

REFERENCES