



# Fresno Metropolitan Flood Control District

## ***Stormwater Basin Dewatering and Goslings FAQ***

These questions were compiled from telephone calls and e-mails received by the Fresno Metropolitan Flood Control District during similar dewatering operations. The responses were composed by District staff and a local biologist from the California Department of Fish and Wildlife.

### ***Why are basins dewatered?***

In most cases, basins are dewatered for either 1) maintenance, 2) construction, and/or 3) excavation.

The most common reason is **maintenance** to remove silt. Urban stormwater contains pollutants attached to silt that it picks up as it flows through streets and gutters. These pollutants come from vehicles (oil, gas, etc.), homes (pesticides, fertilizers, etc.), and businesses. If silt is left to accumulate in a basin, the attached pollutants can potentially leach into the groundwater aquifer. Therefore, the silt is removed periodically (approximately every 5 years) so that pollutants can't build up to regulated levels.

In addition, silt is fairly dense and decreases the ability of water to percolate into the underlying soils and eventually to the groundwater aquifer. The Fresno-Clovis area has a declining groundwater table that is currently more than 100 feet below the ground surface. Maintaining percolation rates in stormwater basins maximizes the amount of water recharged back to the groundwater aquifer; it also aids in lowering basin water levels, reducing the need for winter pumping and, therefore greater flood protection.

In many instances, **construction or excavation** necessitate dewatering. Often, silt removal is added to the project. Silt removal does not materially extend the duration of the project and eliminates an additional near-future costly dewatering.

### ***Why can't the District wait to dewater the basin until the goslings can fly?***

The District must complete maintenance and construction work during the spring and summer months when the basins are not needed to store stormwater. The District dewateres, on average, 20-30+ basins during the spring and summer months for critical

maintenance, construction, and excavation projects. This is a large amount of work to be accomplished during this 6-month period and would be impossible to accomplish if we were to wait the 2-3 month long period needed for the goslings to be able to fly. Therefore, the District must work through the spring and summer months.

### ***What does the District do for the goslings when a basin is dewatered?***

The District places pools of water for the goslings. This water is meant for hydration, although, many geese have been observed swimming in the pools as well. Access ramps are placed to allow the goslings to get into and out of the pools.

### ***Without shade, or water to keep cool, will the goslings survive?***

Yes, while the geese probably would enjoy shade during warmer days, it is not a necessity for their survival. Geese, in a natural setting, generally spend most of the day in the sun. Goslings have an internal resting body temperature of around 100°F, which helps to provide a greater tolerance to outdoor heat than humans have. In addition, the goslings have feathers which keep the direct sunlight off of their bodies. The District has provided shade structures at basins being dewatered, the use of these structures by birds has been minimal. Geese also shed body heat by drinking, and the pools provided by the District have enough water to allow them to do so.

### ***There are only a few small pools. Is this enough water for the wildlife?***

Yes. The goslings need water and food, but not necessarily water for cooling (see previous question regarding this). The pools provide ample water for hydration during the short maintenance period.

## ***What do the goslings eat?***

Goslings are mainly grazers and feed off the vegetation in the basin, the quantity of which is generally unaffected by the dewatering. Another important part of their diet is insects, which provide valuable protein that young birds need for muscle development and body growth. During the summer months, the grass surrounding the basins turns brown and looks unappealing to the human eye. There is still plenty of food for the geese during this time.

## ***There doesn't seem to be enough food for the geese in the basin, should I feed them?***

The District and the California Department of Fish and Wildlife discourage feeding for several reasons. Human food such as bread, is not part of a goose's natural diet and can lead to major health and developmental problems. Feeding geese also leads to a lesser reliance on foraging for natural food and encourages these migratory birds to become residents. Since their survival rate is much greater in ponding basins, feeding will encourage population growth, which will lead to overcrowding, disease and starvation. If the existing vegetation in the basin was not sufficient for the geese, they likely would not have taken up residence in the basin, or would have relocated.



## ***Will the geese survive in a dewatered basin with just a few pools?***

District basins are typically dewatered a minimum of every 5 years. In the past 10 years, District staff has observed that the goose populations have increased 300% - 400%. Goose populations have grown despite a minimum of 1-2 dewaterings per basin over 10 years.

In the wild, biologists estimate that a clutch of goslings has a survival rate of less than 50%. In ponding basins, District staff estimates that 60% - 80% of a gosling clutch survives. So not only do goslings survive in District basins, despite dewatering projects, they thrive. Goslings need food and water to survive, both of which are provided in dewatered basins.

## ***Why can't we just move the goslings to another basin that has water in it?***

It's against federal and state law to move wildlife. At first glance, relocation seems like the easy answer, but moving wildlife spreads disease, causes stress that can kill the birds being moved and adds additional pressure on the animals at the relocation site due to the increase competition for resources and territories. It is better for the birds to stay put rather than risk relocation.

## ***Why can't you build a separate ponding area in the basin to hold water for the geese while the rest of the basin is dewatered?***

Separate ponding areas have been created in the past by building temporary berms on the basin floors. Building such temporary structures increases the length of time required to maintain each site, and increases the costs to taxpayers without providing an urban storm drainage or groundwater recharge benefit to the community. Those are the functions on which the District is authorized to spend taxpayer dollars. In the unusual instances where accommodating wildlife with structural changes to basins does not add to project costs or completion time, District staff strives to do so.

## ***I want to help the geese. What can I do?***

Honestly, the best thing to do is leave them alone and enjoy viewing them from a distance. The resident populations of geese here in Fresno have become part of the local community. They are born and live out their lives in our communities. If we all work together to disrupt their life cycles as little as possible, we will have healthy populations of geese for many years to come.

## ***For questions not answered here***

For wildlife-related questions, call the Wildlife Management Section of the California Department of Fish and Wildlife at (559) 243-4005. Biologists on staff can answer questions about geese or other wildlife observed in District basins.



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