

Will Manatees Fuel Water War?

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ORANGE CITY

A boom in sea-cow births at Blue Spring State Park could pit manatee against man in a battle over the spring's water.

Longtime manatee-watcher Wayne Hartley predicts another record-setting season for the manatee herd. But that unexpected success means west Volusia cities could have to shut off wells and turn to more expensive sources of water so there will be enough for the manatees.

Wednesday's bitter cold brought about 197 manatees to the spring run, with Hartley confirming his daily roll call from his canoe.

The 197 tally is shy of the all-time record of 227 manatees in a single day, set on Friday. Hartley is sure he will see more than 279 manatees by the end of the winter, surpassing last season's total. And he's seen some 25 calves in the spring, yet another record.

"Not too long ago, you were happy to see four calves, but now 15 to 20 a year is the norm," said Hartley, a park-service specialist who has tracked the herd for 30 years. "Hopefully, that's a sign that we're doing something right for the manatees."

For the west Volusia cities, it means a looming deadline without a clear solution. None of the local utilities have decided where to get those future supplies of water. But the projections suggest that in a decade, Deltona, DeLand, Orange City and the neighborhoods under the county utility will have to find 30 million gallons of water a day, potentially from a St. Johns River plant costing up to \$500 million.

"The amount of water that we have to find elsewhere is more than we expected," said Deltona spokesman Lee Lopez. "But we're actively looking at alternative water sources."

Blue Spring ranks among the state's most potent springs, with water gushing from its boil at an average annual rate of 1,174 gallons per second, or 157 cubic feet. The constant 72 degree water provides a vital winter refuge for manatees, which can't survive the cold.

Hartley has watched the population grow from the 26 sea cows at the spring in 1980. With some females giving birth every two years, he has tracked successive generations and named each calf.

He has also identified manatees from other parts of Florida who have become Blue Spring regulars. Sometimes, a Cape Canaveral manatee will make the Orange City spring its winter refuge. South Florida-bound manatees stop by before continuing their migration. Some days, there are so many manatees, it's hard for him to count them all. A brisk wind on Wednesday made it hard to distinguish each cow from a mass of gray bodies.

But the birth rate has far exceeded expectations. This winter, Hartley, who recognizes most of the manatees, said there are many first-time moms, such as Fran and Josie, and reliably fertile sea cows like Georgia. Even Lilith, who recently recovered from a deep boat-strike scar with two clear propeller cuts, has a calf.

The growth rate over the past three winters soars above the 7 percent growth rate that the St. Johns River Water Management District used to calculate what should be the legal minimum standard for the spring flow.

The district, after a long and controversial process, established that minimum flow in 2006 based on what manatees need in the future. But it also sets a standard to judge how much drinking water west Volusia can pump. The regulation made it clear that as the manatee population grows, those wells would have to cut back pumping.

A draft St. Johns study projects that in 2019, the pumping would take too much water from the spring flow. And by 2025, west Volusia wells would be allowed to pump only 20 percent of the water needed for the projected population. That's 30 million gallons of water a day that utilities would have to get elsewhere.

The utilities are researching their options. Some are involved in Seminole County's proposal to tap into the St. Johns River. DeLand is part of the Coquina Coast group researching ways to make seawater drinkable. The utilities have also hired a consultant to study other ways to make up that gap.

In the meantime, the St. Johns district is refining models used to forecast future spring flow against the potential groundwater pumping -- and how those models should be used in setting future limits on groundwater.

If the manatee birth boom continues, that could change the way the St. Johns district manages the water supply.

"We could find ourselves in a position of revisiting the minimum flow regime, and it could make it even more difficult for the cities to keep up with the Blue Spring requirements," said Jim Gross, technical program manager with the district.

Gross said it's too soon to say whether that will be necessary. And the forecasts aren't precise enough to say what the limit will be in 2019.

But that's a target west Volusia shouldn't lose from its sight.

"It's not news to us the end of the road on groundwater is very near. We've been preaching this gospel for years," Gross said.

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