

## **URGENT FISH KILL NOTICE**

The recent extended cold temperature has resulted in a temporary change in the canal/lake maintenance routines. Northern Staff and contractors primary responsibility includes keeping Northern's waterways clear of debris and aquatic weeds. As a result of the recent cold temperatures the majority of efforts have temporarily shifted to the clearing of dead fish.

Fish Kills typically occur in South Florida when water temperatures drop as a result of extended cold weather. Initially, the cold itself causes the fish to die; second, the protective mucus that coats each fish is weakened by the cold and can totally disappear. This leaves the fish vulnerable to bacteria and other adverse elements in its environment which cause further harm. The longer the cold temperatures remain, the greater the potential for mortality and secondary effects.

Currently Northern Staff is coordinating fish clean-up activities in all Units of Development.

The following is an excerpt from the January 22, 2010 Miami Herald further describing the effects of cold weather on Florida's fish population:

*Fish in every part of the state were hammered by this month's record-setting cold snap. The toll in South Florida, a haven for warm-water species, was particularly extensive, too large to even venture a guess at numbers. And despite the subsequent warm-up, scientists warn that the big bad chill of 2010 will continue to claim victims for weeks.*

*"Based on what I saw in 1977 and 1989, there is a good chance we'll have a second wave," said William Loftus, a longtime aquatic ecologist for Everglades National Park.*

*During those last two major cold fronts, weakened survivors succumbed to infections from common bacteria, such as aeromonas, that they would normally ward off, he said.*

*"It's a nasty-looking thing," he said. "It's a tissue eater. It creates open ulcers on the side of the fish."*

*In response, the Florida Fish and Wildlife Conservation Commission on Friday ordered an emergency statewide closure of the snook fishery until at least September, and imposed temporary closures for bonefish and tarpon until April. Catch-and-release is still allowed for all three species.*

*Veteran Everglades fishing guide Benny Blanco believes the die-off was so severe -- particularly for snook, a prized game and eating fish particularly sensitive to cold -- that he would support taking them off the dinner table for years.*

*"I haven't see a swimming snook in 10 days," Blanco said Monday, after returning from a charter trip to the Glades. "All I have seen is floating snook."*

*Judging by the floating carcasses, the most widespread kills were in Florida Bay and Whitewater Bay in the park. Water temperatures in the bay hovered in the low 50s for days and, according to the National Weather Service, dipped to a record 47.8 degrees at their lowest.*