

Corporate Social Responsibility and Sustainability Report

(Independently Verified)



2000
2010

Preserving and enhancing biodiversity in the wetlands of Florida

TITAN America's Pennsuco operations are located within the Lake Belt region of Miami-Dade County in Florida. This area adjacent to the Everglades National Park and associated water conservation areas, has been historically characterized as 'wet prairie'. In addition to man-induced disturbances over the past 40 years within the Lake Belt region the wet prairie lands of the Lake Belt region have been increasingly converted to forest by the invasive tree *Melaleuca quinquenervia* (melaleuca). The wetland areas within and adjacent to Pennsuco are dominated by invasive exotics including *Melaleuca* and *Casurina equisetifolia* (Australian pine).

As part of the new mining permit and the wetland permit, TITAN will be mitigating approximately 250 acres of land around its limestone quarries, targeting at preserving and enhancing biodiversity in the wetlands developed on 'littoral shelves' of inactive quarries.

The littoral shelf area is a freshwater marsh dominated by spike rush, native species present and exotic species. The top of bank of the littoral shelf is dominated by invasive exotic Australian pine (*Casuarina equisetifolia*). The initial step was to remove all the exotic and undesirable species from the area to allow for re-colonization by native species and to increase foraging habitats for wading birds. According to the plan, all of the exotics were removed from the mitigation area during the second quarter of 2010 and TITAN will continue the maintenance until 2013.

In addition, TITAN America has volunteered to do a littoral shelf demonstration project on its property. The purpose of this demonstration project is to test the effectiveness of the alternate design before implementing it on a Lake Belt-wide basis. The new littoral shelves will have a low water feeding area for wading birds, including a refugium to provide a source of prey fish for wading birds during droughts.

TITAN will closely monitor the wading bird population within the littoral shelves. The vegetation within the demonstration project will also be monitored annually at the end of each dry season and exotic species will be treated if they exceed the 5% coverage limit specified in the permits.



Nerolina Australian



Pit B&C: On-going maintenance (January 2011).



Pit D&E South (June 2008).



Pit D&E South (June 2009).



Pit D&E South (June 2010).