

# Project Overview



## REPAIR OF DETERIORATED SUBMERGED TIMBER PILES

**Name:** Port O'Connor Timber Pile Repair  
**Type:** Pile Repair  
**Location:** Port O'Connor, TX  
**Completed:** February 2012

### PROBLEM

19 Piles in water at a boat dock in Port O'Connor Texas were badly deteriorated near the splash zone. A few piles were so deteriorated that more than 75% of the surface near the splash zone was gone. The dock owner needed a repair of the existing piles compared to new due to the cost and operation replacing piles would bring having to replace the whole dock. All piles were submerged in water bringing a level of difficulty to the repair without the use of divers. Also, 75% of the piles were located underneath the deck, making access more difficult. The multiple problems faced with the repair of the dock was a perfect fit for the use of the PileMedic™ system.



### SOLUTION

PileMedic™ FRP Repair System was selected to strengthen and prevent deterioration of the submerged timbers piles. 19 piles required strengthening and corrosion control.

Using 4ft wide Quakewrap PileMedic, we would apply an underwater resin to the jacket, then above the water we placed and wrap the PileMedic around the pile 2 full times. We would secure the PileMedic in place and connect another piece using the same underwater resin until we have achieved the desired jacket size for the repair. Once the full jacket is in place we then proceeded to inject the jacket with an under water curing grout completely encapsulating the pile. Once the resin and grout is cured, the pile will then be brought back to strength and protected from future deteriorating causing elements.

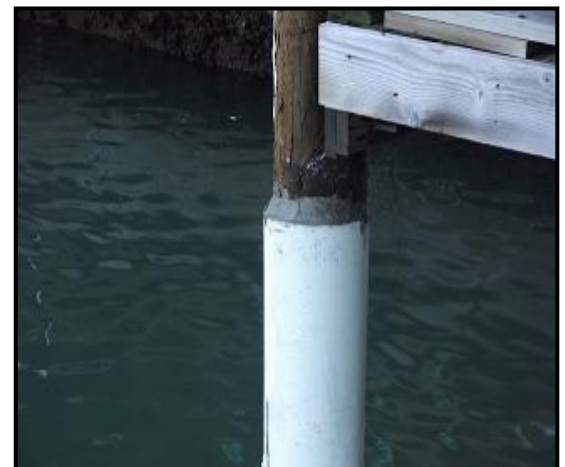


### TECHNICAL HIGHLIGHTS

- Highly deteriorated submerged timber piles were repaired and strengthened using the PileMedic™ system.
- PileMedic™ PLG60.60 Biaxial Glass Laminate was used along with QuakeBond™ 220UR Underwater Resin.
- 19 Piles were cleaned and repaired in less than a week.

### CREDITS

Consultant: QuakeWrap, Inc., Tucson, AZ  
Contractor: FRP Construction, LLC, Tucson, AZ



*"The Future in Pile Renovation"*