



## Riprap: Nature to the Rescue

Wikipedia tells us that riprap is also known as rip rap, rip-rap, shot rock, rock armor or rubble. That list gives us plenty of names to call this fix for a crumbling shore line: loose stone used to prevent or repair erosion of a shore line. Riprap is an eco-friendly solution using a product of nature in the fight against erosion.



(photo: example of rocks used for riprap)

We need riprap here at Chickamauga Fly & Bait Casting Club to prevent erosion caused by waves breaking on our shore. The waves come from wind, weather, and a much higher amount of boat traffic on the creek from the growth in new housing developments. We installed riprap at CFBCC a few years ago, and it has held up pretty well except in a couple of areas difficult to reach because of the presence of trees or because installation had to be done from the water side.

This coming year we have budgeted to add riprap to the shore by our day dock. We will be installing a foundation of landscape fabric and big stones along the shore line that will be designed to protect our shore from wave action that causes erosion. We will be using more rocks for this new riprap and rocks of different sizes (#3-6) so that the rocks blend and pack together.

Being able to install this new riprap depends on our getting approval from both state and federal agencies. Bruce Malone speaks from first hand experience at CFBCC, describing the process this way: First, an application must be submitted to the Tennessee Department of Environmental Resources for approval of the project. CFBCC pays a non-refundable fee of \$500 to apply for this approval. TDEC stipulates the length, height, materials to be used, vegetation that can be disturbed, time-frame for completion and other aspects of the project if approved. Once TDEC grants a permit, an application must be submitted to TVA with another non-refundable fee. TVA sends an employee out to view the request and study its need and impact. Assuming that TVA agrees that the request is appropriate, the permit process next goes to the U.S. Army Corps of Engineers for its review and judgment. At this point the request is either approved or denied.

For our CFBCC riprap project, the Board submitted the application to TDEC and that application has been approved. We are now waiting to hear from TVA. If they give approval, we will seek the required permit from the U. S. Army of Corps of Engineers.

After all permits are received, volunteers on the Board will search for a contractor with experience. After finding such a contractor, these volunteers will hire, schedule, and supervise the installation of the riprap.

Once again we have confirmation of the forever truth about CFBCC: we are a Community of Volunteers.