

J. Strom Thurmond Lake
Rip-Rap Installation for Bank Stabilization

Placement of Rip-Rap along the shoreline of public property to prevent erosion is authorized as Bank Stabilization under Nationwide Permit No. 13, as described in Part B (13) of our Nationwide Permit Program published in the December 13, 1996 Federal Register, Vol. 61, No. 241, Pages 65874-65922 (61 FR). Use of this Nationwide Permit is valid only if the activity is conducted in accordance with the information submitted and meets the conditions applicable to the Nationwide Permit in Part C. Nationwide Permit Conditions and the 1993 J. Strom Thurmond Shoreline Management Plan.

Bank stabilization activities are authorized for erosion prevention provided the activity meets all the following criteria:

- a. No material is placed in excess of the minimum needed for erosion protection;
- b. The bank stabilization activity is less than 500 feet in length;
- c. The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the normal pool (330 msl);
- d. No material is placed in any special aquatic site, including wetlands;
- e. No material is of the type, or is placed in any location, or in any manner, so as to impair surface water flow into or out of any wetland area;
- f. No material is placed in a manner that will be eroded by normal or expected high flows; and,
- g. The activity is part of a single and complete project.

To effectively place rip-rap for bank stabilization the existing bank should be sloped back and existing stumps removed, to allow the rip-rap to settle properly. A trench should be excavated at the base of the project. Once the trench is filled with rock, it will serve as a toe to hold the rip-rap in place. Also, geo-fabric or filter cloth should be placed under the rip-rap to prevent movement of the underlying soil through the stone. A set of steps may be authorized as part of the project for safe access across the rip-rap to the shoreline or a boat dock facility.

In addition to Nationwide Permit requirements, J. Strom Thurmond Project requires that installation of rip-rap meet all the following criteria.

- a. The attached form for rip-rap installations is completed and signed;
- b. The bank stabilization project is a minimum of ten (10) feet;
- c. Only clean material free of solid waste and contaminants is used;
- d. Rip-rap is placed within the 323 and 338 msl elevations and follows the existing shoreline;
- e. The bank is graded to a slope of 2:1 (horizontal distance: elevation) or flatter;
- f. Stone size class ranges from 6-18 inches; and,
- g. Depth or thickness of rip-rap is between 1.5-2.5 feet.

* After your application has been approved, you will receive a written letter of authorization.

J. Strom Thurmond Lake
Application for Installation of Rip-Rap

Applicant: _____ **Address:** _____
(Please print)

Home phone: _____ **Work Phone:** _____

Subdivision: _____ **Lot #:** _____ **Permit #:** _____
(Project Location)

County: _____ **State:** _____

Total Length of project along shoreline: _____ *linear feet*

Lower Elevation of bank stabilization project: _____ *msl*

Upper Elevation of bank stabilization project: _____ *msl*

Average Height = Upper Elevation – Lower Elevation: _____ *feet*

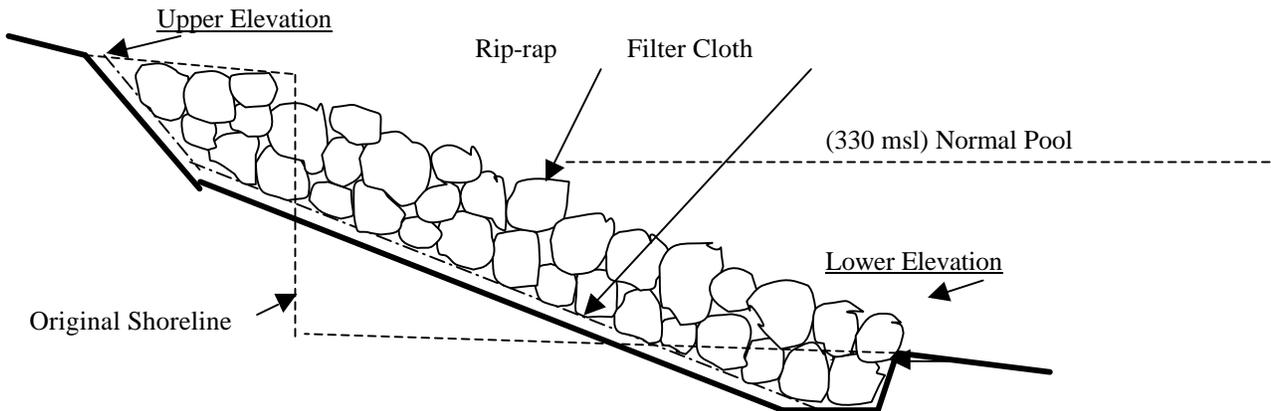
Average Width of project from Upper Elevation to Lower Elevation: _____ *feet*

Approximate slope ratio of project (Average Width/ Average Height): _____ : 1

Average Depth (thickness of rip-rip): _____ *feet*

Total Cubic Yards = (Total Length x Average Width x Average Depth) / 27 = _____ *cu. yds.*

Applicant Signature: _____ **Date:** _____



If you have any questions or need additional information, please contact the Shoreline Section at the J. Strom Thurmond Project Office by calling 1-800-533-3478.