DEPARTMENT OF THE ARMY PERMIT

Permittee: Nebraska Game and Parks Commission

Permit No: Regional General Permit 89-01 NE 89-24001 Amendment #4

Issuing Office: Omaha District, Corps of Engineers

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Construct breakwaters and various types of revetments (see attached drawings). No single and complete project will exceed 1,000 feet. Construction materials will consist of broken concrete, rock riprap, untreated timber/lumber, wire basket gabions, native plant materials, tire mats, and geoweb fabric. Topsoil, sand &/or gravel may be used as a back-fill material. The slope of reshaped or armored banks may vary from 1(h): 1(v) to 3(h): 1(v). Breakwater dikes may be constructed in intensively used recreation areas. Breakwaters will be limited to a length of 100 feet, 15-foot top width, heights varying between 3 and 10 feet, and side slopes varying from 1(h): 1(v) to 3(h): 1(v). River rock (a by-product of gravel mining) may be used as a top covering material on the breakwater structures. This Regional General Permit cannot be used at the following five areas: Harold Andersen WMA, Blue Hole WMA, Jack Sinn Memorial WMA, Meridian WMA, and Peterson WMA.

Project Location:

Lakes and reservoirs in the State of Nebraska that are owned, leased, or maintained by the Nebraska Game and Parks Commission with the exception of Harold Andersen WMA, Blue Hole WMA, Jack Sinn Memorial WMA, Meridian WMA, and Peterson WMA.

Permit Conditions:

General Conditions:

- 1. The time limit for completing the work authorized ends on **See Special Condition #18**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

ENG Form 1721, Nov 86

EDITION OF SEP 82 IS OBSOLETE.

(33 CFR 320-

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- 5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

- 1. After a detailed and careful review of all of the conditions contained in this permit, the Permittee does acknowledge that, although said conditions were required by the Corps of Engineers, nonetheless, the Permittee agreed to those conditions voluntarily to facilitate issuance of the permit and the Permittee will comply fully with all the terms of the permit conditions.
- 2. The Permittee shall notify the appropriate Nebraska Regulatory Office when work on the project commences and immediately upon project completion.
- 3. The time limit for completing the authorized activity is three (3) years from the authorization determination. If more time is required to complete a project, the Permittee may submit a time extension request at least one month prior to the deadline.
- 4. Application for all proposed activities authorized by this Regional General Permit must include:
- a. A recent aerial photograph of the water body on which the activity will be located with the locations of existing and proposed structures highlighted.
 - b. Perimeter of lake/reservoir (in feet) at normal/conservation pool.
- c. Total length of perimeter already armored/protected and what type of armoring was used. If jetties/breakwaters have been used, make note of how many structures have been constructed and their centerline lengths.
- 5. If using any riprap other than quarry graded/sized rock riprap, the following shall apply:
- a. All riprap, if authorized, including broken concrete, must meet the requirements in gradation conditions below and must be chemically acceptable, free of protruding reinforcing steel or wire mesh or other construction debris (i.e., lath, plaster, asphalt, scrap iron, etc.).
- b. Any material used shall be reasonably well-graded material to create a dense erosion resistant structure.
- c. The material shall range in size from 6 to 36 inches in maximum dimension. The average mean dimension shall be approximately 13 inches and the protection layer thickness shall be 1 to 1½ times the largest rock dimension. Variations to this gradation can be considered on a case by case basis, but must be accompanied by a design analysis that supports the variation.
- d. The material shall be angular in shape. No more than 30% of the material shall have the maximum dimension more than $2\frac{1}{2}$ times the minimum dimension and no material shall have the maximum dimension more than $3\frac{1}{2}$ times the minimum.
 - e. For revetments only, if broken concrete riprap is used, the exposed riprap shall be covered from the

top of the structure down to the ordinary high water mark (or conservation pool elevation) with a minimum of six inches of soil compacted into the voids of the riprap and immediately seeded with a mix of native grasses, forbs and a cover crop. Soil cover and seeding shall be completed immediately upon completion of construction and maintained in a permanently vegetated condition. The planted vegetation may require maintenance such as reseeding, watering, grazing restrictions, fencing, etc.

- f. Encroachment of riprap into the water body shall be kept to a minimum.
- g. The top elevation of the riprap shall not exceed the top elevation of the bank.
- 6. Revetments shall follow the existing bank contours. A 30-foot buffer strip measuring landward from the top bank for the length of the revetment shall be established to native vegetation and maintained in this condition.
- 7. No activity is authorized under this Regional General Permit which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act or which is likely to destroy or adversely modify the critical habitat of such species. Authorization of an activity under this regional general permit does not authorize the take of a threatened or endangered species as defined under the Federal Endangered Species Act.
- 8. No activity is authorized under this Regional General Permit which is likely to jeopardize the continued existence of a threatened or endangered species as identified under the Nebraska Non-game Endangered Species Conservation Act.
- 9. No activity may occur in a component of the National Wild and Scenic River System, in a river officially designated by Congress as a study river for possible inclusion in the system while the river is in an official study status or on a National Rivers Inventory river, unless the National Park Service states, in writing, that the proposed activity will not adversely affect the Wild and Scenic River designation, study status or a National Rivers Inventory river.
- 10. The Permittee and/or the Permittee's contractor or any of the employees, subcontractors or other persons working in the performance of a contract or contracts to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the Nebraska Regulatory Office. Notification shall be by telephone or FAX within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the Permittee is notified by the Nebraska Regulatory Office.
- 11. Appropriate soil erosion and sediment controls shall be used and maintained in effective operating condition during construction and all exposed soil and other fill materials shall be permanently stabilized at the earliest practicable date. Vegetation clearing shall be limited to the minimum required for project construction.
- 12. Discharges of fill material in spawning areas are not authorized during the spawning season(s).
- 13. Discharges of fill material in breeding areas of migratory waterfowl are not authorized during the breeding season(s).
- 14. The permittee shall avoid impacts to wetlands to the maximum extent possible and compensate for unavoidable impacts. Wetland mitigation shall be required if wetland impacts exceed 1/10-acre.

- 15. No discharge of dredged or fill material shall occur in the proximity of a public water supply intake.
- 16. No discharge of dredged or fill material shall consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material discharged shall be free from toxic pollutants in toxic amounts.
- 17. The Permittee shall submit a signed compliance certificate to the appropriate Corps of Engineers field office for each authorization.
- 18. The time limit for completing the work authorized herein is three (3) years from the date of the authorization. If additional time is needed to complete the authorized activity, a written request for a time extension must be submitted to the Nebraska Regulatory Office at least one month prior to the expiration date.

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the River and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, tribal, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work.
 - e. Damage claims associated with any future modification, suspension, or revocation of this permit.
- 4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.

- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

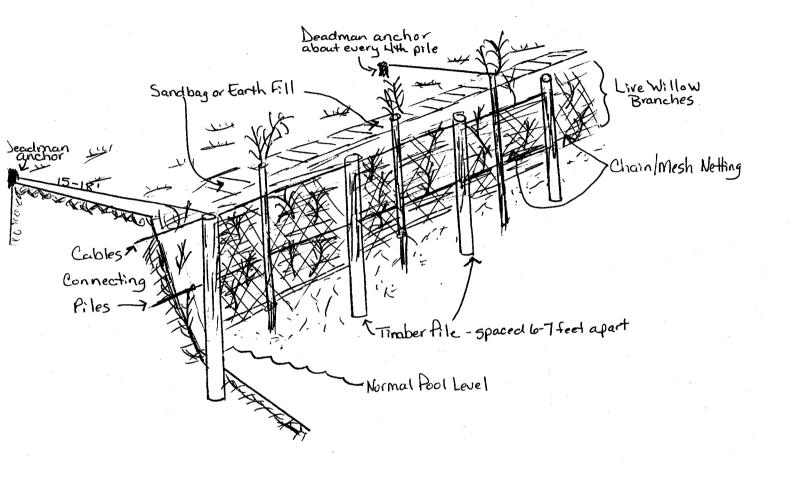
Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.	
(PERMITTEE)	(DATE)
This permit becomes effective when the Federal office	cial, designated to act for the Secretary of the Army, has signed below.
DAVID C. PRESS	
COLONEL, CORPS OF ENGINEERS DISTRICT ENGINEER	
By:	
Martha Chieply	Date
Chief, Regulatory Branch	
Operations Division	
and conditions of this permit will continue to be bind	it are still in existence at the time the property is transferred, the terms ing on the new owner(s) of the property. To validate the transfer of this ompliance with its terms and conditions, have the transferee sign and

date below.

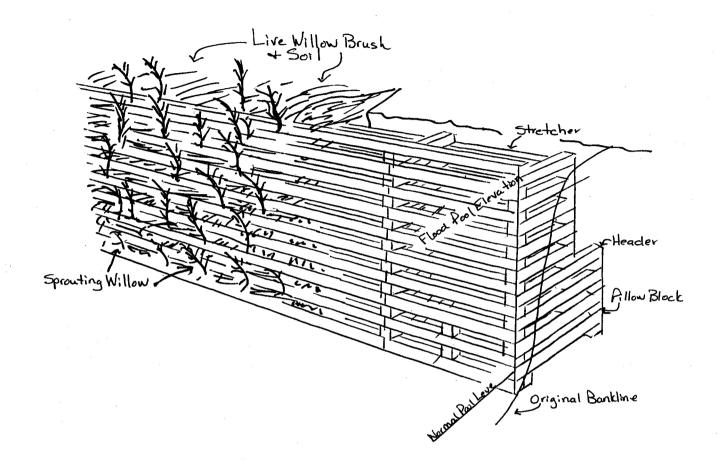
(TRANSFEREE)

*U.S. GPO: 1988-520-324

(DATE)

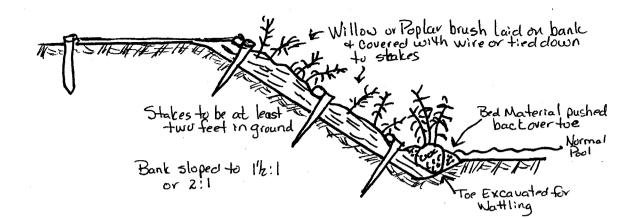


Method #1
Pile and Facine Revetment

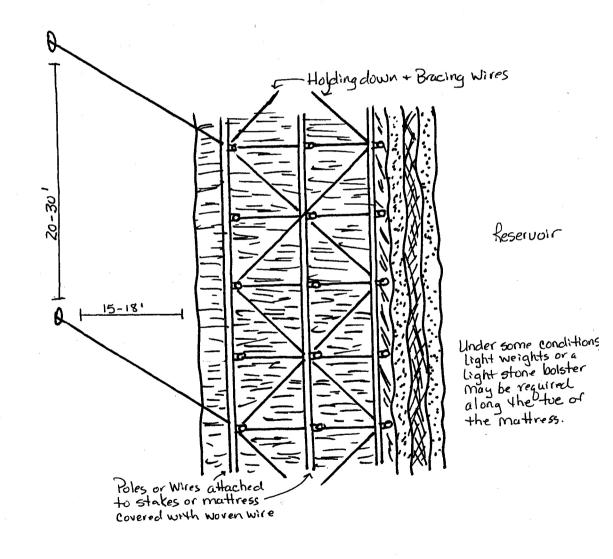


Method #2 Timber Crib Wall with Willow Sprouts

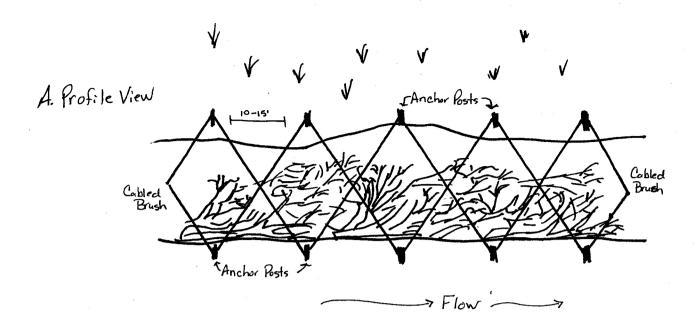
A. Profile View

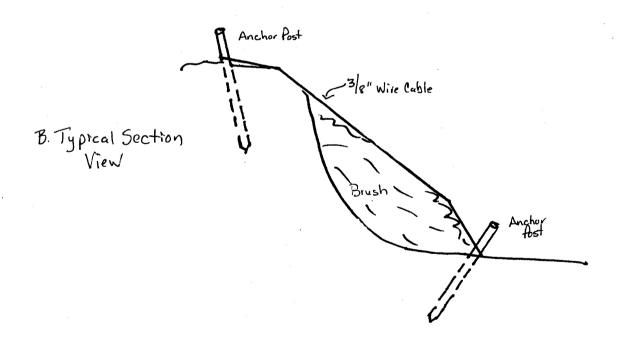


B. Plan View



Method #3 Brush Mattress

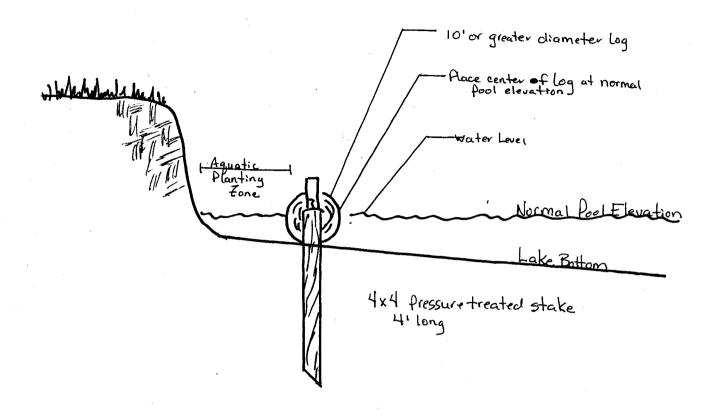




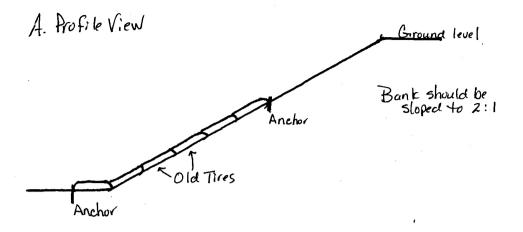
Method #4 Cable Brush Revetment

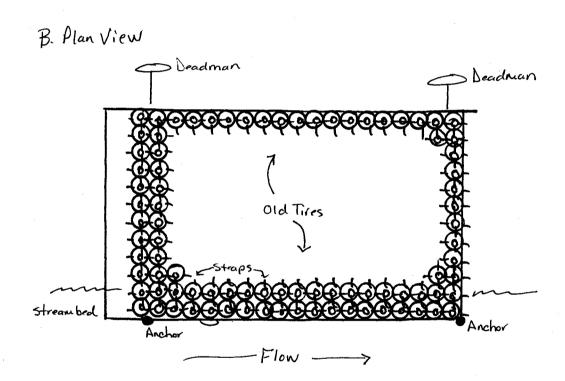
Deadman Deadma

Method #5
Cabled Tree Revetment



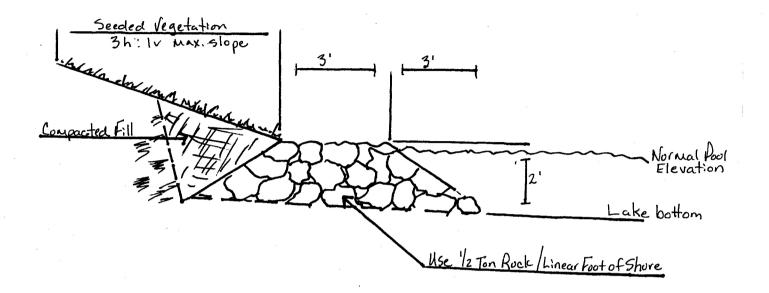
Method #6
Aquatic Planting



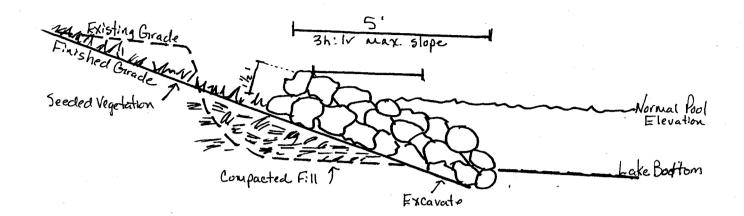


Method #7 Tire Mattress

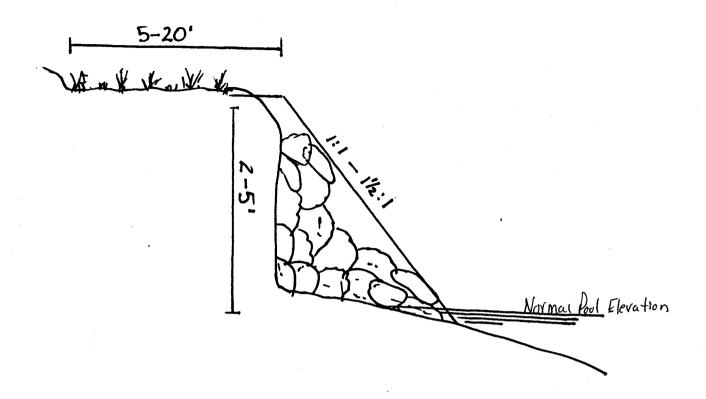
The area where the mat is to be placed should be sloped to provide a uniform base for maximum efficiency. Place the tires beginning at the toe of the bank and extend upward. The tires should be placed securely against the adjoining tires and strapped together and to the anchor cables. The wire strand (3/8" minimum) anchor cable should stretch from the top of the bank to the stream bed. Each row of tires would then be anchored to this cable. This anchor cable would be attached to the bank and bed by either deadman or screw-type anchors. For added stabilization, plant a willow sprout in the center of each tire and overseed the mat with a mixture of native grasses.



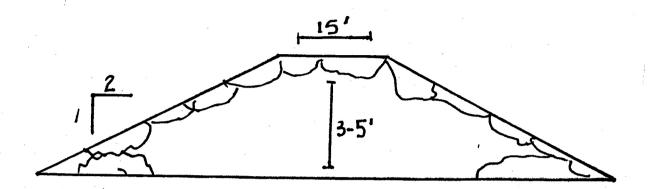
Method #10 Stone-Toe Revetment with Backfill



Method #11
Backfill and Slope with Revetment



Method #12 Typical Revetment with No Additional Bank Shaping



Method #13
Breakwater
Typical Cross-Section