



**DEPARTMENT OF THE ARMY**  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CORALVILLE LAKE PROJECT  
2850 PRAIRIE DU CHIEN RD NE  
IOWA CITY, IOWA 52240-7820

CEMVR-OD-C  
April 8, 2016

SHORELINE MANAGEMENT PLAN

CORALVILLE LAKE

**1. Purpose and Scope.**

**A. Purpose.** The purpose of this Shoreline Management Plan is to provide policy and guidance on the management of the shoreline at Coralville Lake, Iowa. It is designed to provide a balanced approach between shoreline use and preserving and protecting the natural resources of the project.

**B. Scope.** This plan is applicable to Coralville Lake. Shoreline shall be construed as that portion of a project that is owned in fee by the United States whether or not it is covered by water. Easement lands held by the United States are not considered under this plan, but are subject to the restrictions stated in the easement document.

**C. References.**

- 1) Section 4, 1944 Flood Control Act, as amended, (16 USC 460d).
- 2) The Rivers and Harbors Act of 1894, as amended and supplemented (33 USC 1).
- 3) Section 10, River and Harbor Act of 1899 (33 USC 403).
- 4) National Historic Preservation Act of 1966 (P.L. 89-665; 80 Stat.915) as amended (54 USC 300101 et seq.).
- 5) The National Environmental Policy Act of 1969, (42 USC 4321, et seq.)
- 6) The Clean Water Act (33 USC 1344, et seq.).
- 7) The Water Resources Development Act of 1986 (P.L. 99-662).
- 8) Title 36, Chapter III, Part 327, Code of Federal Regulations, "Rules and Regulations Governing Public Use of Water Resource Development Projects Administered by the Chief of Engineers."
- 9) Executive Order 12088 (13 Oct 78).
- 10) 33 CFR 320-330, "Regulatory Programs of the Corps of Engineers".
- 11) Engineer Regulation 1130-2-406 (28 May 1999), "Shoreline Management at Civil Works Projects".
- 12) ER 1130-2-400, "Management of Natural Resources and Outdoor Recreation at Civil Works Water Resource Projects."
- 13) ER 1130-2-540, "Environmental Stewardship Operation and Maintenance Guidance and Procedures".

14) EM 385-1-1, "Safety and Health Requirements Manual".

15) An Act for the Preservation of American Antiquities, June 8, 1906, PL 59-209.

**D. Policy.** It is the policy of the Chief of Engineers to manage and protect the shorelines of all Lakes under Corps of Engineers (Corps) jurisdiction. All management activities will be conducted in a manner that will promote the safe and healthful use of these shorelines for recreational purposes by the public, while safeguarding fish and wildlife habitat, cultural resources, aesthetic quality and natural environmental conditions. Ready access to and exit from these shorelines shall be provided for the general public in accordance with reference C.1 of this section. It is the objective of the Corps to minimize the appearance of private exclusive use of public property and to maximize benefits to the general public. All Federal and State laws, rules and regulations are in force in the hunting, taking or trapping of all fish and game species. The Operations Manager will be the only authorized representative to act on behalf of the District Commander in regards to shoreline management.

**E. Goal.** The goal of all management actions by the Corps of Engineers is to achieve a balance between authorized shoreline uses and resource protection for the benefit of the general public. Priority is given to the protection of the resource over uses that may have detrimental effects on that resource.

The objectives of the Shoreline Management Plan are to:

- (1) Preserve, protect and enhance the environmental quality of Coralville Lake.
- (2) Promote the safe and healthful use of the Coralville Lake shoreline for recreational purposes by the general public.
- (3) Manage the use of public property in a manner that maintains a balance between authorized non-exclusive use and protection of the resource for general public use.
- (4) Promote restoration of the shoreline where degradation has or may occur.
- (5) Protect aesthetic quality and sustain natural conditions of the shoreline.
- (6) Minimize the impact upon resources where shoreline use is authorized.
- (7) Protect and enhance the fish and wildlife within the area.

**2. Development of Shoreline Management Plan.** A Shoreline Management Plan is required for each Corps of Engineers project where shoreline use is allowed. The original Lakeshore Management Plan was developed by the Corps through a public participation process and put into effect in 1981. This plan allocated the lakeshore for the entire lake into classifications or zones and outlined authorized activities for each zone. Examples of such activities were fee schedules for permits, specifications for community docks, guidelines for vegetation alteration and debris removal.

A change in the nationwide regulation (ER 1130-2-406) governing shoreline management at Civil Works Projects, dated 31 October 1990, made it necessary to revise and update the

original plan. In formulating the revised Shoreline Management Plan, the previous allocation of the shoreline was carefully reviewed to determine if the existing zones were appropriate and adequately served the needs of the public. The Shoreline Management Plan is required to be reviewed every five years to determine if an update/revision is necessary. The next review will be conducted five years from the approved date of this plan.

3. **Eligible Parties.** Individuals eligible to have a community dock or other permitted facilities as outlined in this regulation are limited to:

A. Persons with a dock currently on the lake.

B. Persons who rent or own property adjoining Government lands in the vicinity of designated “Limited Development Areas”.

C. Persons who reside adjacent to or with legal access to areas designated as “Limited Development”.

4. **Shoreline Allocation.**

A. **General.** Shoreline allocation (zoning) is the designation of Corps property into various land management zones. Corps land use allocations are based on the best way to manage and protect project resources for the benefit of the general public while at the same time providing an appropriate level of permitted shoreline use to adjacent property owners. The entire shoreline of Coralville Lake has been allocated into one of the zoning areas outlined in Paragraph B and delineated on the map found in Appendix A. A large scale aerial photograph with marked zones is available for viewing at the Coralville Lake project office. The zoning classification assigned to an area applies to the land from the water’s edge to the project boundary.

B. **Zones.**

1) **Limited Development:** These are shoreline areas in which private shoreline uses or facilities are authorized through the issuance of a permit or license by the Corps. The specific activities that can be permitted are listed in Paragraph 10. Activities or structures may be allowed only after the licensee or permittee has taken steps to ensure the protection of the environmental resource.

2) **Public Recreation:** Public Recreation areas are those areas designated for commercial concessionaire facilities, Federal, state or other similar public use. No private shoreline use facilities and/or activities will be permitted within or near designated or developed public recreation areas. The term “near” depends on the terrain, road system, and other local conditions, so actual distances must be established on a case by case basis. No modification of land forms or vegetation by private individuals or groups of individuals is permitted in public recreation areas.

- 3) **Protected Shoreline:** Areas where no shoreline use permits are authorized for mooring posts, private floating facilities or fixed recreation facilities. The areas are designated as protected in order to maintain aesthetic features or to protect specific resources. Factors considered in a protected designation may include the potential for erosion, excessive siltation, exposure to high wind or wave action, fish and wildlife habitat, cultural resources and water depth. Normal foot traffic for access, hiking, fishing or other activities, not involving alteration of the resource, is allowed in a Protected Shoreline Area. The only other permitted uses allowed in these areas are erosion protection utilizing riprap or a permit for debris removal. These uses may be allowed only *after* the Operations Manager has determined that no adverse environmental impact will result and a permit or license has been issued to the individual by the Corps. No permission is required for entry upon Protected Shoreline Areas and no individual shall attempt to impede free access by the general public to these lands.
- 4) **Prohibited Access:** Areas in which public access is not allowed for health, safety or security reasons. They are accessible to authorized personnel only.
- 5) **Other Agency Managed Areas:** Are those areas outgranted to another Federal, state, or public agencies or educational institutions where the shoreline is protected from private use facilities and/or activities. Development of public facilities in these locations is determined and authorized by the Master Plan and lease agreement. No private shoreline development will be permitted within or near designated or developed public recreation areas. The term “near” depends on the terrain, road system, and other local conditions, so actual distances must be established on a case by case basis. No modification of land forms or vegetation by private individuals or groups of individuals is permitted in these areas.

C. **Zoning Changes.** Re-designating zoning classifications is considered a major change to the Shoreline Management Plan and requires public involvement as a part of the formal revision process. Requested changes which have significant benefits and no adverse impacts may be incorporated into the revised plan. The revised plan will be subject to public review and comment prior to submission to the Commander, Mississippi Valley Division, for final review and approval.

5. **Development Permitted.** In no case, will privately owned facilities receiving a permit (called “permitted facilities”) reach a density exceeding 50% of the lineal shoreline footage at normal summer pool within the designated Limited Development areas. Docks will be a minimum of 50 feet apart, as measured from the nearest point to the nearest point. At least one-third of the cove or channel must remain open for navigation. Water depth at lakeside/end of dock must be a minimum of four feet at normal summer pool. No permitted facilities will be allowed in present or future designated recreation sites.

**6. Permits and Licenses.**

Shoreline development can be authorized on project lands designated as Limited Development Areas through the issuance of a permit or license by the Corps.

Applications, along with detailed plans or drawings for all structures or actions requiring a permit and/or license, will be made to the Operations Manager located at the Coralville Lake Project Office. The Operations Manager or their representative will make an initial inspection of the area in question with the applicant. If the license application appears feasible, the Operations Manager will forward the application plans, specifications, special conditions along with their recommendations to the District Office Real Estate Division for processing. In the event that the application is clearly not feasible, the request will be denied at the field level by the Operations Manager and a record of the action, with the reasons for the denial, will be provided in writing to the applicant and documented in the project files.

All shoreline use permits will be issued by the District Commander or his/her representative (Operations Manager). Inspections for compliance with the conditions of the permit or license shall be the responsibility of the Operations Manager or their representative. Any noncompliance with the provisions of the permit or license will be addressed and corrected at the field level when possible. In the event that any noncompliance cannot be resolved at the field level, recommendations for the revocation of the permit or license will be promptly forwarded to the District Commander or his/her authorized representative for action.

In the event that a permit is revoked, certain appeal rights are available to the permittee. By giving 30 days written notice, either by certified or registered letter, the District Commander may revoke a permit whenever it is determined that the public interest necessitates such revocation or when it is determined that the permittee has failed to comply with the conditions of the permit. The revocation notice shall contain the reasons for such action. The permittee has 30 days to request a hearing if a revocation letter is received.

In spite of the above conditions, the District Commander may revoke a permit or license if, in their opinion, emergency conditions warrant such action.

- 7. Conditions of Permits or Licenses.** All privately owned facilities located on water resource projects must be covered by a permit or license. All facilities not covered will be considered unauthorized structures and will be removed without delay in accordance with Title 36, CFR Part 327.20. In addition, the individual responsible for the unauthorized structure is subject to all penalties provided by applicable statutes.

No private facility will be allowed on Corps land until such time as the licensee or permittee has a valid instrument in their possession and the private facility has been constructed in accordance with approved plans, inspected and approved by the Operations Manager or their representative.

Any construction carried out on Corps land (i.e. seawalls, docks, steps, etc.) shall be at the direction of, and under the supervision of, the Operations Manager or their representative. In the event that such construction does not meet minimum required standards, work will be

promptly halted until those standards are met. If the necessary standards are not promptly met, the authorized permitting document will be revoked and the structure shall be removed by the owner, and the site restored to its original condition. In the event the owner does not remove the structure within 30 calendar days of a written notice to do so, the structure will be impounded and removed by project personnel. Impoundment procedures will be carried out in accordance with current regulations. The only exception to impoundment provisions as stated in this paragraph is the appeal rights for private floating facilities outlined in Section 6, paragraph 4.

Whenever possible, all existing permits and licenses held by an individual will be combined to reduce costs and administrative paperwork. While the duration of the different instruments varies with the nature of the document, whenever possible the expiration dates will be coordinated to a common date, so that the renewals can be accomplished simultaneously.

Permits and licenses are nontransferable. Refunds will not be made for any unused portion of a permit or license that the grantee terminates before the expiration date. Upon the sale of adjacent private property or the death of the grantee and his/her legal spouse, the instrument is null and void.

- 8. Durations and Fees Charged for Permits or Licenses.** Fees for permits are established by Headquarters, U.S. Army Corps of Engineers and are applicable nationwide. These fees may be subject to periodic update. Changes in the fees do not constitute a major revision of the Shoreline Management Plan; therefore an update of the Plan is not required for fee changes. Duration of permits or licenses and fees for such privileges shall be as follows:
- A.** Dock and mooring post permits may be valid for 5 years from the date it is approved by the Operations Manager or their representative. The charge is \$10.00 for a permit and the first year, plus \$5.00 inspection fee per annum for the following 4 years, for a total of \$30.00 over the life of the permit. Fees must be paid within 30 days of the application approval date. Authorized and approved modifications will be done at no additional charge to the permittee.
  - B.** The fact that a permittee has obtained a Corps permit for a Community Dock in no way absolves them from obtaining required State or local permits, if any.
  - C.** All other facilities will be covered by a license. Generally, a license is issued for a term of 5 years. The fee charged is fair market rental in accordance with applicable Real Estate regulations. All fees for the life of the instrument will be rendered before the instrument will be issued. In the event that the instrument is terminated before its expiration date, no portion of the fees will be rebated for the unused tenure of the instrument.
  - D.** Fees may be paid in the form of check, money order, or credit card made payable to: FAO, USAED, ROCK ISLAND. Permittees paying with a credit card must provide card information to the Coralville Lake office including credit card type, card number,

expiration date, CRV code on back of card and name as it appears on the card. Only the exact amount of the fees will be accepted. Cash is not accepted.

**9. Existing Permitted Facilities**

**A. Private Facilities Located in Areas not Designated for Limited Development.** In the event that any legal private facilities are currently located in an area not zoned as Limited Development (none are known to exist at this time), the instrument holder may renew their permit or license on the expiration date of the permit or license during the lifetime of the licensee or until they terminate their interest in the facility. At that time, the instrument is automatically voided and the facility will be removed at the licensee's expense within 30 calendar days of the expiration date.

No new permits or licenses will be issued in areas other than those designated as Limited Development.

**B. Private Floating Facilities.** All individual docks, installed prior to 01 September 1979, will be allowed to remain at their present site as long as the original permit holder (or spouse) maintains the dock facility in a safe and satisfactory manner (none are known to exist). All repairs will be made in accordance with standards prescribed for a community boat dock.

Any community docks located in areas not zoned for Limited Development (none are known to exist), will not contain the usual provisions for "add on" slips. If a member of a group terminates their interest in the dock, their portion of the dock will be removed within 30 calendar days of termination date and will not be reissued. Upon final approval of this SMP, should a private floating facility inadvertently be issued in an area zoned as protected shoreline it will be allowed to remain until which time the original dock permit holder terminates their interest in the dock, or fails to maintain the structure. The owner will be required to remove the structure. In the event that the owner does not remove the facility within 30 calendar days after receiving written notice to remove, the structure may be impounded by Corps personnel or a citation issued under Title 36, CFR 327.

**10. Approved Private Facilities or Actions That May Be Permitted or Licensed.**

**A. Community Boat Docks.** See Appendix B.

**B. Mooring Posts.** Mooring posts will be permitted in the Limited Development Areas only. They must consist of one or more concrete anchors of sufficient size to hold the vessel being moored. A mooring post consists of a wooden 4 x 4 (or equivalent) purchased by the permittee. The mooring post must be firmly anchored into the ground with permit sign attached facing the water. Plans for mooring posts shall be approved prior to installation by the Operations Manager or their representative.

**C. Stairways or Steps.** See Appendix C.

**D. Erosion Control Devices.** See Appendix D.

**E. Foot Paths and/or Foot Bridges.** See Appendix E.

**F. Vegetation Alteration, Tree Cutting, Trimming and Burning.** See Appendix F.

**11. Prohibited Items.** The following are prohibited:

**A.** Boat houses.

**B.** Piers.

**C.** Buoys.

**D.** Any building or structure not covered by a permit or license.

**E.** Any sewage outfall or structure not covered by a license.

**F.** Wells or water springs.

**G.** Fences.

**H.** Devices such as fenders, bumpers, camels or matting made from old tires, logs, etc.

**I.** Garbage, debris, refuse dumps or garbage pickup points.

**J.** Boat ramps.

**K.** Roadways, turn-arounds, and parking areas not covered by a license.

**L.** Electrical lines and/or water lines.

**M.** Landscaping.

1) Flower or vegetable gardens.

2) Formal arrangements of hedges and shrubs.

3) Painting or whitewashing tree trunks, boulders, stumps or rock outcrops. They shall be left in their natural condition.

4) Swings, picnic tables, signs, patios, and/or personal items.

**N.** Disturbance to significant archaeological sites



- 1) Disturbance of significant archaeological sites (called an historic property) or the removal of any artifact is prohibited. Disturbing or removing any cultural item is subject to the provisions and sanctions of the Antiquities Act of 1906 and/or Title 36, Part 327.14, CFR.
- 2) No permit or license will be issued by the District Commander or his/her authorized representative for any structure or action that will affect an historic property until the site has been assessed under 36 CFR 800, the regulations implementing Section 106 of the National Historic Preservation Act and the necessary steps to avoid, minimize, or mitigate the effects of the action have been taken.
- 3) The alteration of the natural terrain by making cuts or fills, unless in conjunction with construction of a legal authorized facility, is prohibited.

## **12. Boundary Identification.**

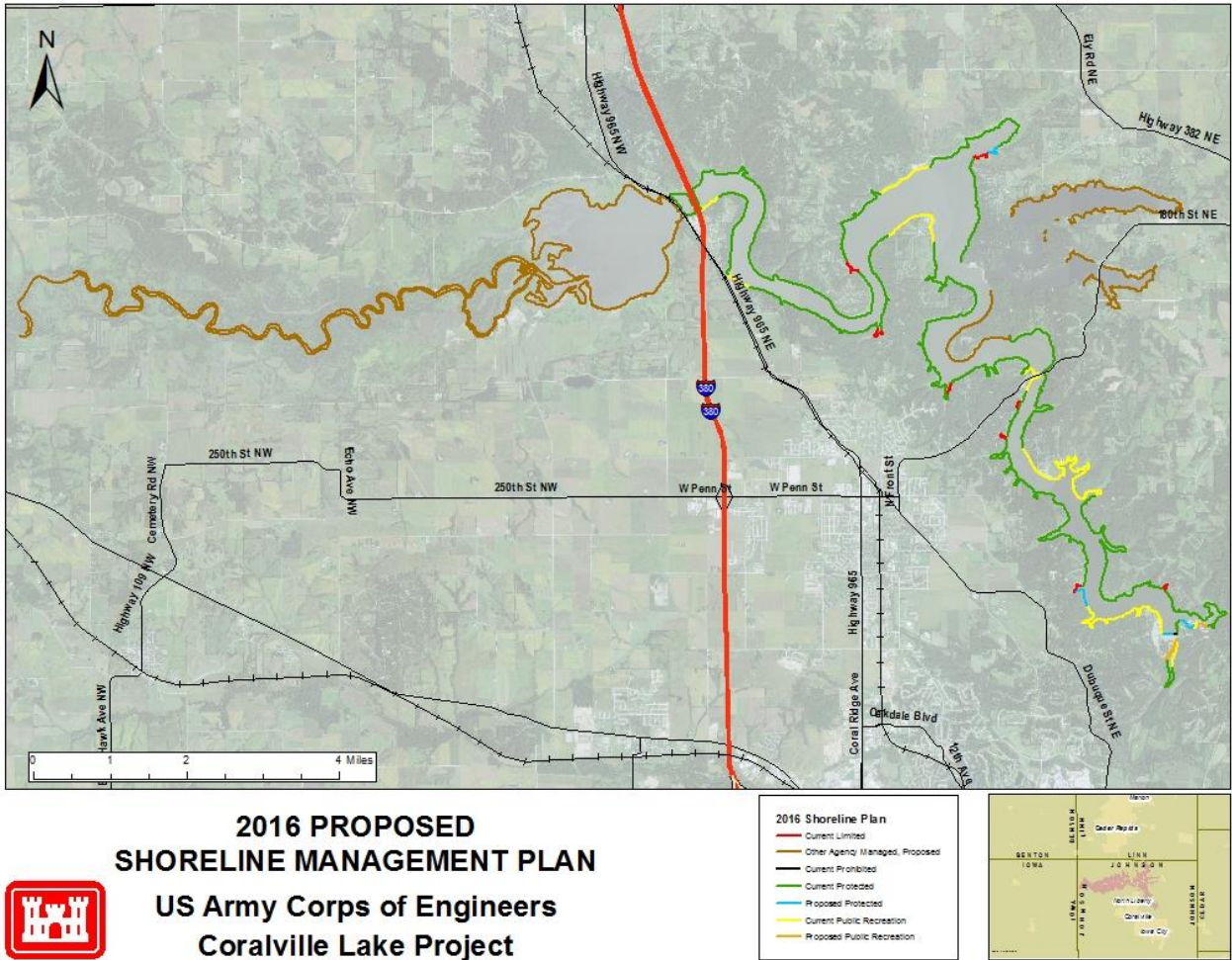
- A. Corps of Engineers Actions.** The property line between the Corps of Engineers fee title (federally-owned) property and that of adjacent private property has been surveyed and marked at each turning point by brass monuments set in concrete, with boundary posts installed between each monument. Trees located on or near the property line may also be marked to help establish the line. Corps personnel periodically inspect and maintain the boundary line. Adjacent landowners should contact the Corps office before initiating any work near the boundary line.
- B. Landowner Actions.** It is the adjacent landowner's responsibility to ascertain the exact location of the boundary line prior to initiating any action which might result in a trespass or encroachment upon government property. Landowners should rely on the services of a licensed surveyor to identify the boundary to avoid encroachments or trespass. The government is not responsible for any costs incurred by adjacent landowners in delineating the boundary line.

# APPENDIX A

## Shoreline Management Plan, Coralville Lake

### Zone Maps

[Click Here for a High Resolution Version of the Map](#)



## APPENDIX B

### Shoreline Management Plan, Coralville Lake

#### Community Boat Dock Specifications

1. **General.** Permits are granted on a group basis.
2. **Requirements.**
  - A. Name, signature, address, boat license number or numbers and lot number of each member of the group shall be furnished on a separate sheet of paper attached to completed application.
  - B. Vicinity and Site Map: Show location of proposed facility in relation to Coralville Lake, including U.S. Government Tract Number.
  - C. All community boat docks must meet or exceed the minimum design standards. The docks may be privately constructed or of a manufacturer's standard design.
  - D. Plans and specifications for the dock must accompany the application. The dock plan will show the configuration of the dock and the relation of the dock to shore including location of walkways and shore anchors.
  - E. Plans and specifications are subject to the approval of the Operations Manager. Signs will be constructed and maintained as directed by the Operations Manager solely at the applicant(s) expense.
  - F. See the back of the application for other information and conditions concerning the permit.
3. **Minimum Design Standards.**
  - A. All wood material shall be seasoned dimension stock lumber, either pressure or surface treated with pentachlorophenol or other standard wood preservatives, or marine grade. The only exception to this requirement is that non-treated deck planking may be used at the option of the permittee, since some treatment methods render the wood surfaces slippery when wet. Failure to treat, however, will reduce the life of the decking.
  - B. Anchoring devices will consist of metal standoffs, metal cable or chain firmly attached to the dock and to suitable anchoring devices on the shore. Cable anchor connections to the dock are to be by ¾" eyebolts. Trees are not to be used for anchoring devices. Spuds or cable anchor devices that extend seaward of the dock are not permitted. The permittee is responsible for retrieving an unsecured dock to prevent it from becoming a navigation hazard.

- C. Bracing will be designed so that the structure will have sufficient flexibility whereby wave actions will not damage the structure or roof system.
- D. Flotation shall be polystyrene logs, foam filled container, (i.e., corrugated metal pipe), or fiberglass cylinders, or a standard manufactured item if it meets the above flotation requirements. Barrels, drums, metal tubs or similar items, whether new or used, will not be permitted as flotation devices. No flotation device that will become waterlogged or sink when punctured will be permitted. Use of polystyrene material is recommended. Flotation shall be adequate to maintain a stable and safe dock.
- E. Polystyrene quantities required for community docks are:

Main Dock		Slip	
Length (ft)	Polystyrene (cf)	Length (ft)	Polystyrene (cf)
10	33	15	33
12	39	16	35
14	46	17	37
16	52	18	39
18	59	19	40
20	65	20	41

- 4. Appurtenant structures permitted in conjunction with community docks are:
  - A. Foot lockers or storage lockers. These lockers may not exceed one locker per slip. Height of lockers may not exceed 5 feet, width and depth may not exceed 4' x 4'. Lockers may be positioned with the maximum dimension either vertical or horizontal. However, all positioning shall be uniform on any given dock.
  - B. Bumper strips around docks are optional. A strip of white material, no more than 2 inches wide, may be affixed or painted on the vertical seaward edge of the dock to provide for night visibility. Reflectors may be used in lieu of the white material if desired. Reflectors must be spaced no closer than 3 feet apart. The remainder of the dock must be a neutral color so as to blend into the natural background.
  - C. Roofing may be permitted over the slip portion of a dock. The body of the dock, fingers or walkways, will not be covered. If the covering is of a standard manufacturer's item, the maximum height of the eave of the roof is 7.0 feet. Sides, canvas siding or awnings on the docks are not permitted.
  - D. Roofs may be flat (slightly sloped) or pitched. "Slightly sloped" means designed to provide adequate drainage. Types of roofing material must be light and durable. Types applicable are fiberglass panels, corrugated roofing, metal or plastic, and other types that are equivalent. All roofing material must be a neutral color so as to blend into the natural background. White, Yellow, orange, or other high visibility paints or coloring may not be used.

E. Polystyrene quantities required for community covered docks are:

Main Dock		Slip	
Length (ft)	Polystyrene (cf)	Length (ft)	Polystyrene (cf)
10	38	15	40
12	44	16	42
14	50	17	44
16	55	18	47
18	60	19	50
20	65	20	52

5. **Construction Details.** In wood construction, all connections must be secured with galvanized bolts, screws, nails and washers to resist movement that would tend to dismantle the structure. In covered docks, all columns must be adequately braced to resist wind and wave actions. Roofs must be securely fastened to the dock structure to resist wind uplift.

## APPENDIX C

### Shoreline Management Plan, Coralville Lake

#### Requirements for the Installation and Use of Stairways or Steps

1. **General.** Stairways and steps may be allowed in Limited Development Areas through the issuance of a license by the Real Estate Division. These structures will be approved only where necessary to provide safe access to the shoreline. They will not be authorized for landscaping or ornamental purposes or over gentle terrain presenting no major obstacles to foot traffic. It is the government's intent to limit the number of pathways, to the greatest extent possible, to minimize impact on natural resources. In areas where more than one adjacent property owner has applied for a pathway license, joint use of a new or existing pathway will be required to the greatest extent possible. Licensees cannot restrict use of such pathways, even when it is a portion of a licensed facility located on government property.
2. **Specifications.** The basic structure must blend in with its natural environment and follow the natural line of the slope. It should not extend appreciably above its surroundings or out into the lake.
  - A. **Materials.** The preferred building material is pressure-treated dimension lumber. However, other materials may be considered as well. Cross ties, telephone poles and other materials containing creosote are not allowed. Metal staircases, placed concrete steps and steps constructed of mortared block, brick, or stone are not permitted.
  - B. **Anchoring.** All steps or stairways will be firmly anchored in place. Trees shall not be used as an anchoring device. Handrails shall not be attached to trees.
  - C. **Painting.** New steps and stairways may not be painted. A clear sealer may be applied to wooden materials. Existing wooden structures that were previously painted may continue to be painted a neutral color.
3. **Design.** The top of the structure will be flat with no vertical extensions which might cause injury. A minimum width of 30" is required for the inside of the step. A maximum width of 48" is allowed for the outside of the stairs including the posts and handrails.

The individual pieces used to construct the steps shall be securely connected to ensure stability. The upright intermediate posts must be at least 4" x 4" treated lumber and buried at least 3 feet into the ground. Added stabilization by the use of concrete may be necessary. The bottom set of posts must be at least 6" x 6" posts. Only treated lumber posts may be used. No metal posts are allowed. The steepness of the slope and the length of the steps will decide the distance between the supports. The posts can be up to a maximum of 8 feet apart.

The minimum thickness for the horizontal stringer and steps is a 2" thick treated board. The risers must be a 2" x 12" sized boards. The depth of the steps must be at least 12"

- 4. Construction.** Disturbance to the work site and the surrounding area will be kept to a minimum. To protect from erosion, any disturbed areas surrounding the building site will be graded, seeded and mulched or rocked with riprap or natural stone by the permittee. Any damage caused by vehicles, equipment, etc., needed for construction or hauling will be repaired immediately by the permittee. Trees, shrubs or other protective vegetation should not be disturbed, damaged or removed without prior approval of a Corps representative.

Other conditions or requirements may be included before a plan is accepted. The minimum specifications provided may not be enough depending on the individual conditions of the site, so larger or stronger material may be required at the discretion of the Operations Manager. Any unsafe conditions or degeneration in the structure must be repaired as soon as possible by the permittee.

- 5. Existing Permitted Structures.** Existing steps and stairways that do not meet the guidelines in this plan will be allowed to remain for the lifetime of the current licensee or their spouse as long as they are maintained in a safe condition. Should the structure become unsafe or the adjoining property be sold, the structure will be replaced with an approved structure or be removed and the area restored in accordance with the conditions in the license.

## APPENDIX D

### Shoreline Management Plan, Coralville Lake

#### Erosion Control Devices

1. **General.** Erosion control devices may be authorized by a Shoreline Use Permit or license in Limited Development Areas and Protected Shoreline Areas where bank stabilization is needed to prevent the loss of shoreline due to wave action. These devices are subject to the provision of Section 404 of the Clean Water Act when fill material or stone protection will be placed below normal summer pool. Due to the mutually derived benefit from these structures, no fee is charged for shoreline erosion protection permits.
2. **Conditions.** Structures may be riprap, stone filled baskets (Gabions), seawalls or vegetative cover in Limited Development Areas. In Protected Shoreline Areas, only riprap and vegetative controls may be used. A Shoreline Use Permit is required prior to initiating any construction activities. A written description of the access route, placement plan and safety considerations are required before a permit will be issued. Any unsafe conditions found by the Operations Manager or their representative will result in denial or revocation of the permit and/or suspension of operations.
3. **Design Guidance for the Placement of Riprap.**
  - A. The materials that may be used include riprap, gabions or natural stone. Broken asphalt material, concrete and random fill are prohibited. All material must be free from toxic pollutants.
  - B. The riprap structure should blend in with its natural environment and follow the natural curves of the shoreline. It may extend above normal pool level to cover the entire eroded slope. Stone shall be placed on a slope no steeper than a 1.0 vertical to 1.5 horizontal. Some cutting, trenching or grading of the slope may be required to provide an adequate base for the rock. This will prevent undercutting or slippage of the riprap. When any excavated material is used to shape the bank, it must be compacted by equipment traveling over the area. Equipment must not pass over in-place stone.
  - C. Unless a deviation is approved by the Operations Manager, all trees in the bank protection work area shall be removed. Trees at the edge of the bank that are leaning, appear unstable, or located where failure of the tree could adversely impact bank protection, shall be cut down. The banks must be cleared of all stumps, logs and debris before placing stone.
  - D. A maximum of one cubic yard of riprap per running foot of shoreline and ten cubic yards of miscellaneous fill per project may be placed on the eroded areas. Maximum length of shoreline per project is five hundred (500) feet. Additional permits are required for projects over five hundred (500) feet in length. The layer of stone to be placed on the bank slope must be a minimum of eighteen (18) inches thick.



- E. All construction work must be done when the pool level is down from normal summer pool level. Under normal operating conditions, the lake level is drawn down 4' in elevation from March 20 to May 20. Work must be discontinued when, no matter the reason, pool levels rise and inundate the work area(s).
- F. Disturbance of the surrounding area must be kept to a minimum. Disturbed areas must be graded and reseeded or rip-rapped by the permittee to prevent further erosion. Any damage caused by vehicles or equipment during construction must be repaired immediately by the permittee to the satisfaction of the Operations Manager. Trees, shrubs, and other types of protected vegetation adjacent to the work area may not be disturbed, damaged, or removed without prior approval.
4. **Vegetative Controls.** The use of vegetation or plantings may be approved for erosion control. Any such proposal should be submitted to the Operations Manager for evaluation and approval.

## APPENDIX E

### Shoreline Management Plan, Coralville Lake

#### Improved Foot Paths and Foot Bridges

1. **General.** Improved foot paths and foot bridges may be authorized under the provisions of a license to adjoining property owners in an area that is zoned Limited Development. The use of motorized conveyances on licensed foot paths may be authorized for landowners with disabilities as outlined below.
2. **Improved Foot Paths.** Improved foot paths may not exceed 5 feet in width and may be paved with creek gravel, crushed stone, tan bark, wood chips, stepping stones or other readily removable material. Asphalt or concrete may not be used for foot path surfacing. Landscaping timbers may be used to edge the path and confine the paving material; however, such timbers shall be securely anchored to prevent them from floating away during periods of inundation. Small culverts and ditches will be permitted on a case by case basis. No significant alteration of the terrain (over 6" cut and fill) will be permitted for a foot path. The slope of the path should be held to a minimum by using a meandering design to reduce erosion damage.
3. **Foot Bridges.** Foot bridges may be authorized where necessary to traverse ditches or ravines that impede access to the shoreline or a dock. Bridges will not be authorized for ornamental or landscaping purposes. Bridges must be constructed of pressure treated wood. Cross ties, telephone poles and creosote treated materials may not be used. Bridges may not be painted but a clear sealer may be applied. Structures must be firmly anchored to prevent flotation. Trees cannot be used for anchoring devices, or as any part of the structure.
4. **Use of Motorized Carts on Authorized Paths.**
  - A. **Eligibility.** Adjacent landowners (or members of their household) who have a permanent disability which impairs their mobility may be given permission to use a motorized cart on government property for accessing the shoreline where their legal boat mooring facility is located. The Operations Manager may require documented proof of the disability where it is not obvious. Acceptable documents could be: a certificate/statement from a licensed physician; documents issued by a Federal Agency such as the Veteran's Administration, Social Security Office; or a document issued by a State agency. The documentation provided must clearly state a reason for the permanent mobility impairment.
  - B. **Authorized Use.** Only the disabled individual will be authorized to drive or be a passenger in a motorized conveyance operated for the purpose of accessing the shoreline. The conveyance may be a golf cart, riding mower or a similar low-speed vehicle. The conveyance must have a Corps of Engineers issued permit tag displayed. Three- or four-wheel all terrain vehicles (ATV's) and motorcycles will not be allowed. Any violation of

this condition will be considered a violation of Part 327.2c of Title 36 CFR and handled as such.

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## APPENDIX F

### Shoreline Management Plan, Coralville Lake

#### Vegetation Alteration

1. **General.** Vegetation Alteration permits are issued only to individuals owning or renting property abutting Corps fee title land that is designated as a Limited Development Area, subject to the conditions contained in this Appendix. Vegetation Alteration permits are issued for the purpose of improving the access to the lakeshore for the adjacent property owners. The alteration of vegetation to solely provide a view of the lake or a dock, to develop a lawn type appearance or to portray the appearance of an extension of private ownership onto Corps land will not be permitted. Areas where extensive vegetation alteration has occurred in the past must be restored by a gradual reduction in the amount of mowing/alteration previously allowed. Permits will not be issued in areas where negative environmental impacts would result due to the removal of vegetation. Permits that were issued prior to the effective date of this plan will be grandfathered as to size and configuration for the lifetime of the permit holder and his/her spouse.
2. **Size and Configuration.** The size and configuration of the area allowed to be mowed or altered will depend on whether or not the adjacent shoreline has been protected from erosion.
  - A. **Protected from Erosion.** If the shoreline is protected from erosion, Vegetation Alteration permits may be issued. The width of the mowing/alteration area shall be determined by the Operations Manager on a case-by-case basis. Under no circumstances will the width of the mowing/alteration area exceed 150 feet. This permitted configuration will be allowed to all the subsequent property owners as long as the shoreline protection is viable and all other permit requirements are met.
  - B. **Unprotected from Erosion.** If the shoreline is unprotected from erosion, the area in which vegetation alteration may be performed shall consist of an area that is a maximum of 50 feet wide and a maximum of 20 feet in depth from shoreline. A 10 foot wide (maximum) mowed strip can connect this area to the government boundary line. The 10 foot wide strip should be meandering to prevent rapid runoff and accelerated erosion. No increase in the current size of the mowed area is allowed if the present permit exceeds new guidelines. Upon sale of the adjacent property, the area in which vegetation alteration is permitted will be reduced to the new guidelines.
3. **Scope.** Vegetation alteration may consist of removing selected trees or underbrush, trimming, pruning, mowing and driftwood removal. Prior to the removal of any vegetation, the permittee shall meet with a Corps representative who will outline the limits of the permit area and who will designate certain trees or stems that must be left in the permit area. No tree or shrub with a base diameter of 3" or larger at 6" above the ground will be cut. Dead trees may be removed with the issuance of a separate permit. A stocking density of one tree for each ten foot square may be maintained. In no case will clear cutting be allowed.

- A. Mowing.** Vegetation within the permit area may be controlled by mowing with small riding mowers, push mowers or weed cutters using string cutting heads. Agricultural or industrial tractors or mowers shall be used only with prior approval from the Operations Manager. Permittees shall exercise care to protect the vegetation designated to remain.
- B. Pruning and Trimming.** Trees within the permit area that are larger than three inches in diameter breast high (DBH) may be trimmed. Side branches may be removed from the ground to a height of seven feet above the ground or one-half the total tree height, whichever is less. DBH is defined as diameter breast height approximately 4-1/2 feet above ground level.
- C. Under-brushing.** Permittees may elect to selectively remove certain undesirable vegetation within the permit area such as poison ivy, sumac, autumn olive, European honeysuckle, multiflora rose, vines, briars and thistles in lieu of mowing.
- D. Removal of Driftwood and Floating Debris.** Driftwood, downed timber and other floating debris within the permit area can be removed by the authority of the Vegetation Alteration Permit. The permit area for drift removal will be for a width of shoreline not greater than that of the adjoining lot. Disposal shall be by burning as outlined in Paragraph 4 below or by removal and disposal off site.
- E. Herbicides.** The use of herbicides or any other chemical is prohibited unless authorized by the Operations Manager.
- 4. Burning.** All driftwood, wooden debris, treetops, etc., may be burned unless prohibited by State or local laws and regulations. All burning shall be confined to the area on the lake bottom between spring draw down pool and the normal summer pool, or to an area designated by the Operations Manager or their representative. All applicable burning and clean air codes, laws, rules and regulations shall be followed. In the event that a burning permit is required, it is incumbent upon the permittee to obtain the permit and to present it to authorized Corps personnel if requested. In the event that burning is prohibited or undesirable, the debris may be removed and disposed of off government property.
- 5. Delineation of Boundary Line.** The holder of each Vegetation Alteration permit shall delineate the boundary between Corps land and private property in a clear, but unobtrusive manner. This provision applies to new permits as well as grandfathered permits that are covered in Paragraph 2. This delineation may include, but is not limited to, boundary plantings, fencing, bird houses, etc. The delineation will be accomplished at no cost to the government. The permittee may submit an alternate method of delineating the boundary line to the Operations Manager for approval; however, any such alternate method must not impede the inspection of the boundary by Corps personnel. The permittee shall not move or otherwise disturb any monument or survey marker. A permit tag provided by the Corps of Engineers must be posted at the site facing the water.
- 6. Term of Permits.** Vegetation Alteration permits typically are issued for a five year period. Expiration dates will be on 31 December of the appropriate calendar year. In certain

instances where a permittee holds other permits and/or licenses, the Vegetation Alteration permit may be consolidated with other instruments to allow for a common expiration date. The Operations Manager may issue one-time Vegetation Alteration permits for activities such as removing a hazardous dead tree or removal of driftwood. The one-time permits will be short in duration (1 to 30 days) and no fee will be charged.

7. **Revocation of a Vegetation Alteration Permit.** The Operations Manager may revoke Vegetation Alteration permits in instances where the permittee has exceeded the authorized scope of the permit. The permittee may be required to restore the area to a condition satisfactory to the Operations Manager at the permittees expense. The Operations Manager may revoke vegetation permits in instances where negative environmental impacts are occurring due to the actions of the permittee that are within the scope of the permit.

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