SHORELINE MANAGEMENT GUIDELINES (SMG)

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The purpose of these Shoreline Management Guidelines is to provide detailed procedures and criteria to regulate activities within reservoirs managed by Duke Energy. The objectives of these guidelines are:

- To protect Duke Energy's power generation interests on these reservoirs;
- To protect and enhance the scenic, cultural, environmental, public safety and public recreational values of the reservoirs; and
- To meet Federal regulatory requirements.

Any occupancy or use of Project lands and waters within the Project Boundaries of FERC-licensed reservoirs or Duke Energy-owned land within or adjoining the reservoir boundaries requires prior written authorization by Duke Energy. Duke Energy-Lake Services (DE-LS) is responsible for the continuous monitoring of activities within the boundaries of Duke Energy reservoirs to ensure activities are consistent with established company policies and license requirements. These guidelines provide permitting criteria and procedures covering the following six programs.

- MARINA FACILITIES PROGRAM (Section 1)
- CONVEYANCE PROGRAM (Section 2)
- EXCAVATION PROGRAM (Section 3)
- PRIVATE FACILITIES PROGRAM (Section 4)
- SHORELINE STABILIZATION PROGRAM (Section 5)
- MISCELLANEOUS RESERVOIR USES PROGRAM (Section 6)

This document also contains general policies that are not lake-specific (Section 7) and vegetation management requirements (Section 8).

The policies and requirements described in this document supersede those of all similar, previous documents including:

- Duke Power Shoreline Management Guidelines dated June 1, 1996, (including color and black/white versions);
- Duke Power Shoreline Management Guidelines dated January 31, 1994, and October 1, 1994; and
- Undated Duke Power brochures entitled, "Living With Our Lakes" and "Safe and Attractive Lakes Are Everyone's Job."

3-Step Review Process for All Lake Use Permit Activity Requests

DE-LS staff uses a 3-step review process for all lake use permit activity requests. Each request is evaluated based on review of the applicable Lake Use Policy Statements, the Shoreline Management Plan maps (where applicable) and associated lake use restrictions, and compliance with the DE-LS Shoreline Management Guidelines.

Lake Use Policy Statements (LUPS) – The LUPS delineate the types of access and activities that may be allowed on all reservoirs owned or managed by DE-LS based on license requirements (for all licensed hydro reservoirs); federal, state, and/or local regulations; and specific business management objectives. These policy statements cover all reservoirs owned or managed by Duke Energy including those in the Catawba-Wateree system. This fact, coupled with the strategic business sensitivity of these statements, requires that these documents remain internal to DE-LS. Specific license or other regulatory requirements that are also a part of these policies are publicly available.

The LUPS allow for review of four basic types of lake access: 1) Private Access; 2) Public Recreational Access; 3) Public Infrastructure Access; and 4) Business/Industrial Access on the lakes with existing private and business development (James, Rhodhiss, Hickory, Lookout Shoals, Norman, Mountain Island, Wylie, Fishing Creek, Cedar Creek, Wateree, Keowee and Jocassee). Public infrastructure and business/industrial access will be allowed in accordance with the FERC's Standard Land Use articles included in the licenses for the Catawba-Wateree and Keowee-Toxaway Projects. DE-LS will not authorize any additional private access on Great Falls Reservoir, but public recreational access will be allowed as required to meet the terms of the new FERC licenses.

Shoreline Management Plan (SMP) – The SMP is a set of maps showing various types and uses of the shoreline including areas protected for environmental or habitat values, areas of existing development, and areas of potential development. The SMP also includes lake use restrictions associated with the important shoreline characteristics. The SMP and associated lake use restrictions were developed in consultation with wildlife resource agencies and other stakeholders. The SMP is a tool that can be used by DE-LS, the resource management agencies, the FERC, and others for review of requests for use of the Project and its resources.

Shoreline Management Guidelines (SMG) – The SMG are a set of detailed procedures and criteria that regulate activities within reservoirs owned or managed by DE-LS. The development of these guidelines for permitting activities within the Project Boundaries is required by Duke Energy's FERC license in its Standard Land Use article. DE-LS reserves the right to make minor alterations to these guidelines without public notice, resource agency, or FERC review to ensure permitting flexibility in the continuous monitoring and regulation of lake use permitting activities. DE-LS expects to make major revisions to the SMG periodically with input from resource agencies, local governments, and other interested stakeholders using a stakeholder team. DE-LS will convene this stakeholder team prior to making major revisions to the SMG. Additionally, the FERC may order modifications to the guidelines as provided for in the FERC's Standard Land Use article in new licenses.

The 3-step review process (LUPS>SMP>SMG) includes LUPS consultation to ensure the proposed activity is allowed on the subject reservoir. It includes a review of the SMP to ensure the proposal is allowed along a general portion of the reservoir shoreline and is consistent with the lake use restrictions associated with each shoreline classification for that part of the reservoir. It also includes a review of the SMG along with an assessment of the specific characteristics of the site before allowing any activity to be permitted. In summary, the 3-step review process includes policy considerations, reservoir-specific classifications and characteristics, and finally, site-specific classifications and characteristics to ensure all activities that are permitted will be consistent with the purposes of the LUPS, SMP, and SMG.

Archaeological and Historical Resources

DE-LS has developed guidelines to protect known and unknown archaeological and historic resources that may be affected by the implementation of the SMG. For purposes of implementing these SMG, the Eastern Band of Cherokee Indians (EBCI) Tribal Historic Preservation Office (THPO) and the Catawba Indian Nation (CIN) THPO have the same consultation status as the State Historic Preservation Office (SHPO) in both North Carolina and South Carolina. In the event that an applicant discovers historic or archaeological resources during construction of an approved activity, the applicant must stop work immediately and contact DE-LS. In the event that anyone discovers a potential site of archaeological or historic significance including a gravesite within the Project, the individual must immediately notify DE-LS. DE-LS encourages anyone who witnesses persons collecting artifacts to notify local law enforcement personnel. Applicants for lake use permits in areas with a moderate to high probability for archaeological and historical sites may be required to conduct additional consultation with the THPO.

Applicants for lake use permitting activities that involve activities identified in the Cultural Resource Programmatic Agreement (CRPA) developed as part of the Catawba-Wateree SMP as non-exempt activities within the Project Boundaries of the Catawba-Wateree Project and the Keowee-Toxaway Project must consult with the applicable THPO. A separate form (available from DE-LS) and any supporting information must be submitted to the THPO for review and consultation.

EVALUATION PROCESS FOR LAKE USE PERMIT REQUESTS

For FERC-licensed lakes, there are two basic types of lake uses: *Project uses* and *Non-project uses* (see Glossary). Project uses are essentially those lake uses that are required to safely operate/maintain project structures (e.g., dam, powerhouse, substation, and flow control structures) or that are required to comply with the license (e.g., construction of license-required public recreation areas or license-required wildlife enhancements). All other lake uses are considered Non-project uses. Project uses take priority over Non-project uses and, where conflicts between the two types arise, non-project uses will normally have to be modified or possibly eliminated to ensure the hydro project can be safely operated and maintained in accordance with the FERC license. In addition, per the FERC's policy, the public should be given the maximum practicable access to project lands and waters and the FERC will not allow private interests to override the public's right to use the FERC project area.

Considering the above facts and the significant existing and growing development along these lakes' shorelines, DE-LS must remain as objective as possible during the application review process, particularly for non-project use requests, to ensure fairness to applicants and to meet the objectives stated in the General Section. DE-LS therefore handles requests for non-project uses somewhat differently from project uses as defined in the general process descriptions below.

Evaluation Process for Non-project Uses

The evaluation process used by DE-LS to review a requested non-project use generally consists of the 11 steps described in this section (Figure 1). The exact order of these steps and the information necessary will vary somewhat between the six permitting programs designed primarily for non-project uses (i.e., Private Facilities Program,

Shoreline Stabilization Program, Excavation Program, Marina Facilities Program, Conveyance Program, and Miscellaneous Reservoir Uses Program).

NOTE FOR COMBINATIONS OF ACTIVITIES: Sometimes lake use permit requests will involve combinations of two or more activities. DE-LS requires applicants to submit complete applications for all activities requested. These multiple activity requests will be handled by combining activities within the predominant program they support and utilizing the applicable individual activity permit forms as components of the complete application. For example, suppose an applicant wanted to construct a dock along the shoreline of his/her individual project-front lot but also needed to excavate a boating access channel and stabilize his/her shoreline with rip-rap in order to use and maintain the dock. The applicant would need to complete and submit a Private Facilities application (for the dock) with an Excavation application and a Shoreline Stabilization application attached as components of the overall application package. Submittal of these applications at the same time allows DE-LS and any reviewing agencies to evaluate potential activity impacts cumulatively, saves processing time, and also minimizes the chance that one of the proposed activities could be approved, but a potential necessary supporting activity (e.g., the excavation work) would not be approved at a later date. The DE-LS Fee Schedule includes fee reductions for certain combinations of applications to foster this prior planning by applicants.

NOTE FOR ALL NON-PROJECT USE APPLICANTS: DE-LS is neither the advocate nor the adversary for non-project use applications. The applicant, not DE-LS or any designated contractor of DE-LS is entirely responsible for negotiating the application process.

STEP 1: Request Initiation

The applicant initiates the request by contacting the DE-LS Office and providing the necessary basic information (e.g., applicant's name, address, phone number, lake, county, city name, subdivision name, lot number, type of lake use desired, intended users). (Note: Requests for conducting preliminary permitting reviews will be handled strictly by the Process for Conducting Preliminary Reviews of Shoreline Tracts for Lake Use Permitting Feasibility.)

STEP 2: Lake Use Policy Review

DE-LS reviews the Lake Use Policy Statements to determine if the proposed activity is allowed on the subject lake. The Lake Use Policy Statements provide general guidance on development within and access to lakes used or controlled by Duke Energy, including identification of activities that are/are not allowed on given lakes. (NOTE: If the proposed activity is not allowed, the applicant will receive written documentation denying the request.)

STEP 3: Applicant Completes Application Form(s) and Consultation

Provided the proposed activity is not denied in Step 2, the applicant is forwarded the appropriate DE-LS application form(s) to be completed and returned to DE-LS along with a check for any applicable fees and Habitat Enhancement Fund payments and security deposits (if applicable). Application forms for any non-Duke Energy permits that are required must be obtained from the applicable permitting authority. Some of the permitting programs (e.g., Marina Facilities, Conveyance, and Excavation) normally

require consultation with local, state, and federal agencies and applicants may be required to have a Draft Applicant Prepared Environmental Assessment (DAPEA) completed before DE-LS will accept their application. As a minimum, all Marina Facilities, Conveyance, and Excavation applicants are required to complete certain parts of the DE-LS application form(s) and obtain a release from DE-LS before beginning the required agency consultation process. Applicants for activities requiring a DAPEA are also required to use a contractor, approved by DE-LS, to prepare the DAPEA before submitting the application package to DE-LS. Applicants will be required to pay for the services provided by the approved DAPEA contractor in addition to any application filing fee(s), fund payment(s), and security deposit(s).

STEP 4: Shoreline Management Plan Review

DE-LS reviews the Shoreline Management Plan (SMP) (if applicable) to determine if the proposed activity is consistent with the Existing or Future Use Classification for that part of the lake. As it pertains to these guidelines, this plan is presently only in place for lakes on the Catawba-Wateree Project. An on-site meeting between a DE-LS Representative and the applicant and/or applicant's contractor will normally be included in this step. (NOTE: If the proposed activity doesn't comply with the SMP and the applicant will not/cannot modify the request to gain compliance, the applicant will receive written documentation denying the request and the fees, fund payments, and security deposits will be returned.)

STEP 5: Shoreline Management Guidelines Review

DE-LS conducts a review of the SMG to determine if the proposed activity complies with the current guidelines. (NOTE: If the proposed activity does not comply with the SMG and the applicant will not/cannot modify the request to gain compliance, the applicant will receive written documentation denying the request and the fees, fund payments, and security deposits will be returned.)

STEP 6: Lake Services Completes Application Review

DE-LS accepts the completed application and any applicable fees, fund payments, and security deposits from the applicant. DE-LS reviews the application for correctness of information to ensure all the proper permits and authorizations have been obtained from any required local, state, or federal agencies and verify that all permitting and operational issues have been resolved. An on-site meeting between a DE-LS Representative and the applicant and/or applicant's contractor will almost always occur with or before this step. (Note: DE-LS will not accept applications that are incomplete.)

DE-LS returns the application to the applicant for any necessary corrections or modifications. DE-LS will only proceed to Step 7 when the following requirements have been satisfied:

- The application is correctly completed and includes all the necessary documentation.
- The "Applicant's Agreement Letter" is signed.
- The proposed use fully complies with the LUPS, the SMP (if applicable), and the SMG.

- All issues raised during the agency consultation phase have been resolved or otherwise satisfactorily addressed through a significant good-faith effort by the applicant (as determined by DE-LS in its sole discretion), and all required non-Duke Energy permits are in-hand.
- There are no unresolved operational concerns (as determined by DE-LS in its sole discretion).
- DE-LS agrees with results of any EA.
- The applicable fees, fund payments, and security deposits have been received. (Note: In addition to the standard fees and deposits, the applicant is also expected to arrange and pay for the cost of any studies or other requirements necessary to fully resolve operational or permitting issues.)
- Any required reviews (as determined by DE-LS in its sole discretion) by Duke Energy's Law Department have been completed.

STEP 7: FERC Approval Requested

Once Steps 1 - 6 are complete, Duke Energy files the completed application with the FERC (if applicable). The FERC review typically takes several months (two months minimum) and usually includes a public notice period (published in the Federal Register, on the FERC website, and the Legal section of local newspapers) in which the general public may submit comments to the FERC either favoring or opposing application approval. The FERC may issue Additional Information Requests to Duke Energy to aid in application review and DE-LS will require the applicant to provide DE-LS with the necessary information. The FERC review typically culminates with an order or letter from the FERC to Duke Energy authorizing the company to approve the request as-filed, authorizing approval with specified conditions, or directing Duke Energy to deny the request. (NOTE: If the lake use is denied, the applicant will receive written documentation from DE-LS, including a copy of the FERC order. Any security deposits will be returned, but fees will not be returned).

STEP 8: Issuance of Permit

Once a FERC approval order or letter (if applicable) is received, DE-LS provides the applicant with two copies of the users' agreement, lease, or easement document to be executed, notarized (if applicable), and returned to DE-LS along with any required additional fees. Some activities also require the applicant to provide DE-LS with proof of insurance naming Duke Energy as additionally insured at this point. Once the required documents and fees are received by DE-LS and the above steps are complete, DE-LS will provide the applicant with a copy of any FERC approval order/letter and written authorization (e.g., approved application form) to proceed with the proposed activity. Lease and easement documents must also be recorded at the local Register of Deeds office. Duke Energy will handle this recording and will forward the applicant a copy of the fully executed and recorded lease/easement under separate cover. (Note: In addition to the standard fees and deposits, the applicant is also expected to pay for the cost of any additional studies or license requirements imposed upon Duke Energy as a result of the application.)

STEP 9: Compliance Monitoring

DE-LS inspects the activity to monitor compliance. Inspections will be conducted after construction is complete and periodic inspections of the work in-progress will generally be conducted for larger projects. (NOTE: The applicant must notify DE-LS when construction is initiated and completed.) Provided no violations occur and the activity is conducted in accordance with the approved application, the DE-LS Representative will approve the final structure or activity and attach any applicable permitting tags. If a violation is detected, the DE-LS Representative may immediately issue Stop-Work Directives, verbally and/or written via certified mail, to the applicant and/or applicant's contractor. Consequences for Violations will be incurred and construction cannot resume until additional written authorization is received from DE-LS.

STEP 10: Application File Close-out

DE-LS closes out the application file. Applicable data is entered on the application form and into the database and documents are filed. Security deposits are returned, provided no violations occurred.

STEP 11: Operating Programs

The approved facility may then be subject to one or more DE-LS operating programs. These programs are designed to ensure that long-term facility operation does not conflict with DE-LS objectives. These programs may include, but are not limited to, periodic compliance inspections, annual user fee collection, and identification of structures requiring repair.

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SECTION 1 – MARINA FACILITIES PROGRAM

A. General

All parties desiring to construct, expand, or rebuild a marina facility (see Glossary for definitions of *Commercial Marina, Residential Marina*, and *True Public Marina* facilities; also see *SMP Classifications/Lake Use Restrictions Document*) within the Project Boundaries of a Duke Energy lake must first contact DE-LS and obtain written authorization prior to beginning any activity/construction. Applications that include resource agency consultation and an approval order from the FERC may also be required for certain activities. DE-LS will require the applicant to enter into a lease or users' agreement/permit to ensure that long-term operation of the marina facility does not conflict with DE-LS objectives. (***NOTE FOR ALL NON-PROJECT USE APPLICANTS****: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as Marina Facilities. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities.*)

B. Criteria for Commercial Marina Facilities

(e.g., public marinas, yacht clubs, restaurants, and short-term campgrounds [≤ 14 days])

1. Special Rulings – Since every possible scenario can not be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Proximity to Existing Facilities – New Commercial Marina Facilities will not be authorized in areas within a half-mile radius of an existing Commercial Marina Facility or areas where more than fifty percent of the shoreline within a half-mile radius is identified in the SMP as an Existing Residential classification (Figure 1B-1).

3. 50-ft Environmental Offset – New or expanded Commercial Marina Facilities may not be constructed within the 50-ft Environmental Offset (Figure 1B-2) associated with an Environmental classification identified in the SMP unless the permitted facility currently exists within the offset.

4. Compliance with Regulations – All facilities must comply with all applicable local, state, and federal regulations. Also, all necessary governmental permits or approvals, a FERC order (if applicable), and written authorization from DE-LS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundaries or on any Duke Energy-owned peripheral strip.

5. Length of Facilities – New, expanded, or rebuilt facilities shall not extend more than one-third the distance to the opposite shoreline as measured from the full pond contour or extend more than 120 ft waterward of the full pond contour, whichever is more limiting (Figure 1B-3). Additionally, facilities must be situated or constructed in size, dimension, or design such that an average-size moored watercraft will not interfere with access to other facilities and not obstruct ingress and egress of watercraft. (*Exception: Facilities operated as True Public Marinas may be considered for a maximum length of 200 ft, provided the facility meets all other requirements and continues to be operated as a True Public Marina.*)

6. Waste Disposal Facilities Required – Publicly available restrooms and marine pump-out facilities must be provided as a minimum to be considered a True Public Marina.

7. Mooring Requirements – Facilities shall not use mooring buoys or similar detached structures to independently moor vessels. Mooring locations must be limited to areas within slips and along the outer edges of piers/docks as end ties.

8. Flotation Materials – Flotation for all facilities shall be of materials manufactured specifically for marine use. Materials must not lose significant buoyancy if punctured, must not generally be subject to damage by animals, and must resist breaking apart under a broad range of wave energies. Uncoated, beaded polystyrene will not be permitted for any new construction or as replacement for existing facilities. Reuse of plastic, metal, or other previously used drums or containers for encasement or flotation purposes is prohibited. Existing flotation on previously approved structures is authorized until it has severely deteriorated and is no longer serviceable, at which time it must be replaced with approved flotation.

9. Reflectors – Reflectors or reflective tape must be placed and maintained by the applicant on the two furthermost corners of the structure that extend into the water and along the sides of the structure at reasonable intervals from the end back toward the shore.

10. Lighting – Low-pressure sodium lights with time or motion sensors to turn lights off when not needed are preferred. All outdoor fixtures should be fully shielded and installed in such a way that light is not emitted above the lowest part of the fixture. Incandescent lights should be well-shielded, low-wattage lamps that include time or motion sensors to turn lights off when not needed.

11. Minimum Elevation of Decking – The top of all fixed pier decking (not including handrails) must be at least one vertical foot above the full pond elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate watercraft boarding and entry.

12. Enclosure of Facilities – The sides of covered slips are not to be enclosed. Handrails may be put on for safety, but must not be enclosed.

13. Non-Allowable Non-Boating Structures – The addition of facilities not related to water access is prohibited except for gas docks or docks associated with marine sanitation device pump-out stations. Consideration may be given for small facilities (e.g., benches and picnic tables), provided they are identified in the application.

14. Allowable Non-Boating Structures – True Public Marina Facilities may include fishing piers/platforms/boardwalks or other similar non-boating structures. The extraneous facilities can only be used for the purpose identified in the facility application. These facilities will be assessed a single user fee, provided the facility does not provide boating access.

15. Narrow Coves – Expanding Commercial Marina Facilities (except for waivers allowed for True Public Marina Facilities) will not be allowed in narrow coves on the cove-head side of the point where the cove narrows to 300 ft or less in width (Figure 1B-4).

16. Cut-Off Areas – New or expanded Commercial Marina Facilities may be significantly restricted in number of boat launching/docking/mooring locations or completely prohibited within *cut-off areas* (see Glossary), depending on the available boating capacity within the cut-off area. The applicant will be required to evaluate boating capacity as part of the Commercial Marina Facility application for facilities within cut-off areas.

17. Electric Utility Line Rights-of-Way – New or expanded Commercial Marina Facilities including the Project area covered by the lakebed lease/user's agreement/permit will not be authorized within the right-of-way limits of any existing or planned overhead, electricity-carrying utility line.

18. Location of Boat Ramps – New boat ramps for Commercial Marina Facility use shall not be located in the backs of coves if any portion of the cove between the proposed boat ramp location and the main channel is 300 ft or less in width (Figure 1B-4).

19. Maximum Facility Size – New or expanded Commercial Marina Facilities may be considered for a maximum number of 200 boat slips/docking/mooring locations. (*Exception: Commercial Marina Facilities designated as True Public Marinas may be considered for more than 200 boat slips/docking/mooring locations*.)

20. Facility Amenities Application Details – All Commercial Marina Facility boat launching/docking/mooring locations, whether in confined slips alongside the outermost slip fingers or at any other location, must be specified in the application along with the maximum launching/docking/mooring capacity for the facility. Facilities that include a boat ramp must also specify the number of car/trailer parking spaces that will be available for boat ramp users and evidence that supports the rate of use of the ramp. Facilities that include dry storage for boats must also specify the number of boats the storage area can hold plus the number of parking spaces for dry storage users and evidence that supports the rate of use of the storage area access.

21. Low Impact Design – Low Impact Development practices for storm water management shall be incorporated to the maximum practicable extent into the design of any boat ramp facility located within the Project Boundaries.

22. Capacity of Slips – Unless a boat slip or docking/mooring location is specifically designed to accommodate additional watercraft (e.g., double boat slip) and the capacity is specified in the application, only one watercraft at a time shall be moored within a boat slip or docking/mooring location.

23. Floats for Personal Watercraft and Boatlifts – Floats for docking of personal watercraft (PWC) or boatlifts may be added to a previously permitted Commercial Marina Facility without additional written approval from Duke Energy, provided that:

    a. Any applicable Non-Duke Energy permits or approvals have been received;

    b. The PWC floats or boatlifts are installed within the confines of a slip in the previously approved facility;

    c. The addition of the PWC floats or boatlifts do not increase the total number of watercraft that the facility is designed to accommodate as identified in the application; or

d. The facility owner sends a letter to DE-LS documenting that the above requirements are true, along with an attached drawing of the facility that identifies the locations of the added PWC floats or boatlifts.

24. Lease/Users' Agreement – All new or expanded Commercial Marina Facility applicants are required to enter into a lease/users' agreement/permit for the FERC Project area that the facility will occupy. The Project area covered by the lease/users' agreement/permit must meet the following basic criteria:

    a. The area cannot include structures permitted under the Private Facilities Program;

    b. The area must include minimum clear maneuvering distances surrounding the boating structures of twice the slip length on the side of boat ingress and egress and 15 ft from all other sides (Figure 1B-5);

    c. The area cannot extend beyond the mid-point of the cove (Figure 1B-6); and

    d. All moored watercraft must be within the confines of the lease area.

25. Timing of Lease/Users' Agreement – All new, expanded or rebuilt, Commercial Marina Facilities must have an executed lease, permit, or other instrument of conveyance from Duke Energy within 18 months following issuance of a FERC order or within 18 months following receipt of the instrument of conveyance if a FERC order is not required.

26. True Public Marina Expansion – Expansion of existing True Public Marinas may be exempted from adhering to certain requirements limiting expansion of other existing Commercial Marina Facilities. True Public Marinas may be considered for expansion even if:

    a. The facility is behind a point where the cove narrows to 300 ft or less;

    b. The facility expansion would exceed the maximum of 200 boat slips; or

    c. The facility expansion is within the 200 ft setback from the outermost project-front property corners or from any privately owned in holdings. Additionally, an existing Residential Marina Facility may be converted to a Commercial Marina Facility use only if the facility qualifies as a True Public Marina. All expansions are subject to local, state and federal resource agency review.

27. Waste Disposal Facilities – Any proposed new, expanded or rebuilt dry storage facility adjoining the Project Boundaries, Commercial Marina Facility, or Commercial Marina Facility that is renewing or transferring its project area lease/permit must provide a commercially manufactured sanitary marine pump-out system as a regular and customary service if any of the following criteria are met:

    a. The facility will have > 65 docking/mooring/storage spaces for watercraft;

    b. The facility will include gasoline dispensing equipment (other than hand-carried, portable tanks);

    c. The facility will moor/store > 25 watercraft with Marine Sanitation Devices (MSD);

    d. The facility will moor a watercraft that is specifically used to provide cruises to the public where meals are served; or

e. The facility will moor watercraft that will be used for human habitation. (*Exception: A Commercial Marina Facility may be exempted from the requirement to provide on-site marine pump-out facilities, as a result of items a–c only, if written proof from a state or local agency is provided to document that the facility will not be allowed to dispose of waste collected from watercraft because of state or local regulations*.)

28. Liquid and Solid Waste Facilities – Structures built within the Project Boundaries must not contain sinks, toilets, showers, or any other type of device that could cause any liquid or solid waste to be discharged into the lake. (*Exception: Gasoline dispensing equipment, water supply lines supported by approved pump-out facilities, or facilities for which such devices were specifically approved under a complete, Commercial Marina Facility application post-marked to DE-LS prior to June 1, 1996, are exempted from this requirement.*)

29. Gasoline Dispensing – New, expanded, or rebuilt Commercial Marina Facilities that are approved to dispense gasoline within the Project Boundaries must provide petroleum absorbent materials or similar best available technology at all the slips dedicated/available for gasoline dispensing.

30. Setbacks – All facilities shall be set back along the shoreline at least 200 ft from the outermost project-front property corners of the development, from any privately owned in-holdings that are not part of the proposed commercial facility, and/or according to local government zoning requirements, whichever provides for a greater distance. This setback along the shoreline is determined by creating a 200-ft radius from the property corners on the project-front (Figure 1B-7).

31. Islands – New Commercial Marina Facilities for boat launching/docking/mooring will not be authorized for construction from islands.

32. Water Willow Beds – Applicants are encouraged to avoid activities that could have an adverse impact upon existing water willow beds. Unavoidable impacts should be confined to the sides of water willow beds to minimize disruption of their function as shallow water fish habitat. No floating structures or other extraneous facilities (e.g., gazebos, decks) may be constructed over water willow beds. The width of walkways over water willow beds will be limited to three ft. Removal of water willow for continued lake access may be allowed, but only for the specific and limited area necessary.

33. Deadline for Completing Construction – The construction of any facility must be completed as described in the approved application and within the approved *build-out period* (see Glossary). The initial build-out period for Commercial Marina Facilities is 18 months from the date of application approval by DE-LS. A one-year extension may be approved by DE-LS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing what approved activities have been completed, what approved activities remain to be completed and the reason for the delay, along with any applicable fees (including an extension fee). If during an extension period additional guidelines are imposed, the remaining construction will be required to comply with the additional guidelines to the maximum practicable extent. Failure to construct a facility within the total, approved build-out period with one extension (i.e., 30 months total) will require the applicant to contact all agencies that issued permits and document the originally issued permits are still valid or acquire reissued permits

for those that have expired. This will allow the issuance of a second 12-month extension (i.e., 42 months total), which will require payment of a second application filing fee and security deposit, and forfeiture of the original deposit. If the applicant does not complete all activities within this final 12-month extension period, DE-LS will notify the applicant in writing that all approvals have been withdrawn and reauthorization to complete construction of the facilities will require re-entry into the application review and approval process (including, as a minimum, providing a new construction schedule, detailed description of the facilities to be constructed and the applicable fees and security deposits), and such reauthorization may not be granted. Construction will not be allowed to resume until additional written authorization is received from DE-LS.

34. Applicant – The applicant must be a natural person; a corporation, partnership, or a limited liability company (duly formed and registered); or a division of government, and must be the owner of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. The lessee/permittee/grantee must be a corporation, partnership, or a limited liability company (duly formed and registered); or a division of government, and must be the owner of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. DE-LS will hold the adjoining property owner fully responsible for the permitted lake use (including maintaining structures in good repair). This responsibility is considered to transfer automatically along with ownership of the adjoining tract. It is therefore the responsibility of the property owner to ensure that authorization for the permitted use and any conveyance documents for facilities within the Project Boundaries or peripheral strip are transferred should there be a change in ownership of the adjoining tract and/or facility.

35. Conversion of Existing Residential Marina Facilities – Existing Residential Marina Facilities shall not be converted to Commercial Marina Facility use except for conversion to a True Public Marina.

36. Conversion of Existing Commercial Marina Facilities – Existing Commercial Marina Facilities may be converted to Residential Marina Facility use, provided the applicant successfully completes the Marina Facilities application process again and pays the applicable fees. All of the Residential Marina Facility criteria must be met and the applicant will also have to sign a new lease/users' agreement/permit that is consistent with the documents required of new Residential Marina Facilities.

C. Criteria for Residential Marina Facilities

(e.g., townhouses, condominiums, apartments, long-term campgrounds [> 14 days], subdivision access lots)

1. Special Rulings – Since not every possible scenario can be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Compliance with Regulations – All facilities must comply with all applicable local, state, and federal regulations. In addition, all necessary governmental permits or approvals, a FERC order (if applicable) and written authorization from DE-LS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundaries or on any Duke Energy-owned peripheral strip.

3. Length of Facilities – New, expanded or rebuilt facilities shall not extend more than one-third the distance to the opposite shoreline as measured from the full pond contour or extend more than 120 ft waterward of the full pond contour, whichever is more limiting (Figure 1B-3). Additionally, facilities must be situated or constructed in size, dimension, or design such that an average-size moored watercraft will not interfere with access to other facilities and not obstruct ingress and egress of watercraft.

4. 50-ft Environmental Offset – New Residential Marina Facilities may not be constructed within the 50-ft Environmental Offset (Figure 1B-2) associated with an Environmental classification identified in the SMP.

5. Flotation Materials – Flotation for all facilities shall be of materials manufactured for marine use. Materials must not lose significant buoyancy if punctured, must not generally be subject to damage by animals, and must resist breaking apart under a broad range of wave energies. Uncoated, beaded polystyrene will not be permitted for any new construction or as replacement for existing facilities. Reuse of plastic, metal, or other previously used drums or containers for encasement or flotation purposes is prohibited. Existing flotation on previously approved structures is authorized until it has severely deteriorated and is no longer serviceable, at which time it must be replaced with approved flotation.

6. Reflectors – Reflectors or reflective tape must be placed and maintained by the applicant on the two furthermost corners of the structure that extend into the water and at reasonable intervals along the sides of the structure from the end back toward the shore.

7. Lighting – Low-pressure sodium lights with time or motion sensors to turn lights off when not needed are preferred. All outdoor fixtures should be fully shielded and installed in such a way that light is not emitted above the lowest part of the fixture. Incandescent lights should be well-shielded, low-wattage lamps that include time or motion sensors to turn lights off when not needed.

8. Minimum Elevation of Decking – The top of all fixed pier decking (not including handrails) must be at least one vertical foot above the full pond elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate watercraft boarding and entry.

9. Enclosed Piers – The sides of piers are not to be enclosed. Handrails may be put on for safety, but must not be enclosed.

10. Non-Water Access Facilities – The addition of facilities not related to water access is prohibited except for docks associated with marine sanitation device pump-out stations. Consideration may be given for small facilities (e.g., benches, picnic tables), provided they are identified in the application.

11. Common Access Boardwalks – Common access boardwalks are not allowed for Residential Marina Facilities.

12. Narrow Coves – New Residential Marina Facilities will not be allowed in narrow cove areas on the cove-head side of the point where the cove narrows to 300 ft or less in width (Figure 1B-4).

13. Boat Ramps in Coves – New boat ramps for Residential Marina Facility use shall not be located in the backs of coves if any portion of the cove between the

proposed boat ramp location and the main channel is 300 ft or less in width (Figure 1B-4).

14. Cut-Off Areas – New Residential Marina Facilities may be significantly restricted in number of boat launching/docking/mooring locations or completely prohibited within *cut-off areas* (see Glossary), depending on the available boating capacity within the cut-off area. The applicant will be required to evaluate boating capacity as part of the Residential Marina Facility application for facilities within cut-off areas.

15. Electric Utility Line Rights-of-Way – New Residential Marina Facilities will not be authorized within the right-of-way limits of any existing or planned overhead, electricity-carrying utility line.

16. Facility Amenities Application Details – All Residential Marina Facility boat launching/docking/mooring locations, whether in confined slips alongside the outer most slip fingers or at any other location, must be specified in the application along with the maximum launching/docking/mooring capacity for the facility. Facilities that include a boat ramp must also specify the number of car/trailer parking spaces that will be available for boat ramp users and evidence that supports the rate of use of the ramp. Facilities that include dry storage for boats must also specify the number of boats the storage area can hold plus the number of parking spaces for dry storage users and evidence that supports the rate of use of the storage area ramp.

    (*Exception: A single-slip courtesy dock may be requested, provided the facility is restricted both in the subdivision covenants and the Duke Energy lease/users' agreement/permit to only allow watercraft use for pick-up/drop-off of passengers, pump-out of waste or fueling from hand-carried portable tanks, and specifically prevented from use by mooring unattended watercraft. The courtesy dock will not count against the total number of Residential Marina slips/moorings/docking locations requested.) (**Note**: Specifically assigned refueling slips must have petroleum absorbent materials or similar best available technology at all the slips dedicated/available for gasoline dispensing.*)

17. Capacity of Slips – Unless a boat slip or docking/mooring location is specifically designed to accommodate additional watercraft (e.g., double boat slip) and the capacity is specified in the application, only one watercraft at a time shall be moored within a boat slip or docking/mooring location.

18. Floats for Personal Watercraft and Boatlifts – Floats for docking of PWC or boatlifts may be added to a previously permitted Residential Marina Facility without additional Duke Energy written approval, provided that:

    a. Any applicable Non-Duke Energy permits or approvals have been received;

    b. The PWC floats or boatlifts are installed within the confines of a slip in the previously approved facility;

    c. The addition of the PWC floats or boatlifts do not increase the total number of watercraft that the facility is designed to accommodate as identified in the previously approved application; and

    d. The facility owner sends a letter to DE-LS documenting that the above requirements are true, along with an attached drawing of the facility that identifies the locations of the added PWC floats or boatlifts.

19. Timing of Lease/Users' Agreement – All new, rebuilt or expanded Residential Marina Facilities must have an executed lease, permit or other instrument of conveyance from Duke Energy within 18 months following issuance of a FERC order or within 18 months following receipt of the instrument of conveyance if a FERC order is not required.

20. Lease/Users' Agreement – All new Residential Marina Facility applicants are required to enter into a lease/users' agreement/permit for the FERC Project area that the facility will occupy. The Project area covered by the lease/users' agreement/permit must meet the following basic criteria:

    a. The area cannot include structures permitted under the Private Facilities Program;

    b. The area must include minimum clear maneuvering distances surrounding the boating structures of twice the slip length on the side of boat ingress and egress and 15 ft from all other sides (Figure 1B-5);

    c. The area cannot extend beyond the mid-point of the cove (Figure 1B-6); and

    d. All moored watercraft must be within the confines of the lease area.

21. Waste Disposal Facilities Required – Any proposed new or rebuilt Residential Marina Facility or Residential Marina Facility that is renewing or transferring its Project area lease/permit must provide on-site sanitation facilities for marine pump-out and/or disposal of waste if any of the following criteria are met:

    a. The facility will have > 65 docking/mooring spaces for watercraft;

    b. The facility will moor > 25 watercraft with Marine Sanitation Devices (MSD); and

    c. The facility will moor watercraft that will be used for human habitation.

    (*Exception: A Residential Marina Facility may be exempted from the requirement to provide on-site marine pump-out facilities, as a result of Items a or b only, if written proof from a state or local agency is provided to document that the facility will not be allowed to dispose of waste collected from watercraft because of state or local regulations*.)

22. Liquid and Solid Waste Facilities – Structures built within the Project Boundaries must not contain sinks, toilets, showers, or any other type of device that could cause any liquid or solid waste to be discharged into the lake. (*Exception: Water supply lines supported by approved marine pump-out facilities are exempted from this requirement*.)

23. Gasoline Dispensing – New or rebuilt Residential Marina Facilities that have dedicated slips for boat refueling from single individually-owned containers must provide petroleum absorbent materials or similar best available technology at all the slips dedicated for refueling. On reservoirs that have no Commercial Marina Facilities, all new or rebuilt, Residential Marina Facility slips will be required to provide petroleum absorbent materials or similar best available technology at all slips in the facility.

24. Setbacks – All facilities shall be set back along the shoreline at least 200 ft from the outermost project-front property corners of the development, from any privately owned in-holdings that are not part of the proposed residential development (i.e., the owner will not be a member of the homeowners'

association), and/or according to local government zoning requirements, whichever provides for a greater distance. This setback along the shoreline is determined by creating a 200-ft radius from the property corners on the project-front (Figure 1B-7).

25. Covered Boat Slips – No covered boat slips, structural boat covers, or *boat shelters* (see Glossary) will be allowed at Residential Marina Facilities.

26. Islands – New Residential Marina Facilities for boat launching/docking/mooring will not be authorized for construction from islands.

27. Deadline for Completing Construction – The construction of any facility must be completed as described in the approved application and within the approved *build-out period* (see Glossary). The initial build-out period for Residential Marina Facilities is eighteen (18) months from the date of application approval by DE-LS. A one-year extension may be approved by DE-LS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing what approved activities have been completed, what approved activities remain to be completed, and the reason for the delay, along with any applicable fees (including an extension fee). If during an extension period additional guidelines are imposed, the remaining construction will be required to comply with the additional guidelines to the maximum practicable extent. Failure to construct a facility within the total, approved build-out period with one extension (i.e., 30 months total) will require the applicant to contact all agencies that issued permits and document the originally issued permits are still valid or acquire reissued permits for those that have expired. This will allow the issuance of a second 12-month extension (i.e., 42 months total) which will require payment of a second application filing fee and security deposit, and forfeiture of the original deposit. If the applicant does not complete all activities within this final 12-month extension period, DE-LS will notify the applicant in writing that all approvals have been withdrawn and reauthorization to complete construction of the facilities will require re-entry into the application review and approval process (including, as a minimum, providing a new construction schedule, detailed description of the facilities to be constructed, and the applicable fees and security deposits), and such reauthorization may not be granted. Construction will not be allowed to resume until additional written authorization is received from DE-LS.

28. Applicant – The applicant must be a natural person; a corporation, partnership, or a limited liability company (duly formed and registered); or a division of government, and must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. The lessee/permittee/grantee must be a corporation, partnership, or a limited liability company (duly formed and registered); or a division of government, and must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. DE-LS will hold the adjoining property owner fully responsible for the permitted lake use (including maintaining structures in good repair). This responsibility is considered to transfer automatically along with ownership of the adjoining tract. It is therefore the responsibility of the property owner to ensure that authorization for the permitted use and any conveyance documents for facilities within the Project Boundaries or peripheral strip are transferred should there be a change in ownership of the adjoining tract and/or facility.

29. Assigned Slips for Project-Front Lots – A project-front lot may be assigned a slip in the Residential Marina Facility, if the applicant so chooses. The slip for the project-front lot will not increase the total maximum number of Residential Marina slips the applicant may request. The project-front lot will not be considered for an Individual Private Facility, or for a slip in a Common-Use Facility, and the applicant must clearly show this fact on the subdivision plat submitted with the development's Residential Marina Facility application.

30. Reevaluation of Shoreline – Once a Residential Marina Facility application for a development is approved by Duke Energy, the shoreline within the original development cannot be reevaluated for subsequent expansion in number of approved Residential Marina Facility slips. This holds true even if a portion of the original development's shoreline is resold to another developer for another development, or if the original developer did not request the maximum number of Residential Marina Facility slips.

31. Subdivision Access Lots – The proposed Residential Marina Facility must meet the following basic guidance concerning subdivision access lots:

    a. The master plan must show that the lots will be owned in fee by the development homeowners' association when established and any changes to the master plan directly or indirectly impacting the marina facility (e.g., slip eligibility, marina location, configuration), will require refiling the application;

    b. The lots must have at least 100 ft of shoreline suitable for Commercial Marina Facility or Residential Marina Facility use as measured along the Project Boundaries; and

    c. The access lot(s) shall not be located in coves any portion of which is 300 ft or less in width as measured from the proposed access lot location out to the main channel.

    (*Exception: Developments whose original, complete Residential Marina Facilities application was post-marked to Duke Energy before June 1, 1996, may be exempted from any subdivision access lot requirements that were also not met at the time of original application*.)

32. Review of Associated Applications – In a development proposed to provide Residential Marina Facility access, the developer must submit a complete application and receive written confirmation from DE-LS and/or notification that the application has been submitted to Duke Energy's Law Department for preparation in filing with the FERC (if applicable), or a copy of the homeowner's covenants and final recorded subdivision plat approved by the local government planning and zoning office must be submitted acknowledging the location of the planned facilities prior to DE-LS reviewing applications under the Private Facilities, Excavation and Shoreline Stabilization Programs for lake use activities submitted by private individual lot owners.

33. Conversion of Existing Commercial Marina Facilities – Existing Commercial Marina Facilities may be converted to Residential Marina Facility use, provided the applicant successfully completes the Marina Facilities application process again and pays the applicable fees. All of the Residential Marina Facility criteria must be met and the applicant will also be required to sign a new lease/users' agreement/permit consistent with the documents required of new Residential Marina Facilities.

34. Conversion of Existing Residential Marina Facilities – Existing Residential Marina Facilities shall not be converted to Commercial Marina Facility use except for conversion to a True Public Marina.

D. Shoreline Preservation Incentive Program

1. Description of Program – In the interest of preserving undisturbed shoreline to protect wildlife habitat, an incentive program is offered for development projects. The program allows more boat slips than would be allowed under criteria in previous versions of the SMG so long as the applicant preserves and leaves undisturbed at least 20 percent of the shoreline available for boat dock construction. In exchange for preserving this shoreline, the applicant may be allowed the multiple of boat slips/moorings/docking locations for every 100 ft of shoreline preserved as indicated in the table below. These multiples may be increased as also indicated in the table if the preserved shoreline is accompanied with a buffer contiguous with and directly landward of the preserved shoreline. These additional boat slips/moorings/docking locations would be constructed in a multi-slip facility that would serve lots or dwelling units in the subdivision whether or not they front on the water or the Project Boundaries. The total number of slips/moorings/docking locations within the incentive program cannot exceed the total number of off-water lots or dwelling units in the development and must be contiguous with the development that includes the preserved shoreline. The number of slips/moorings/docking locations will be rounded down as part of the incentive program.

Eligible Shoreline Preserved (percent)		Boatslip Multiple per 100 ft of Shoreline Preserved		
At Least	But Less Than	With No Buffer	With 50-Ft Buffer	With 150-Ft Buffer
20	25	1.5	2.5	3.5
25	50	2.5	3.5	4.5
50	-	4.5	5.0	6.0

2. Eligible Shoreline – Any shoreline not eligible for lake use permitting activities, such as those classified as Environmental, Natural, Natural Isolated Berm, Bottomland Hardwood Areas, Public Infrastructure, etc., would not be counted in the calculation of shoreline footage eligible for the incentive. The incentive preserved areas are in addition to the areas that will already be protected by one of these classifications.

3. Upland Buffer Incentive – An additional incentive (see table above) may apply if the applicant also preserves in a buffer (between 50 ft and 200 ft) additional land upland and continuous to the preserved shoreline. No additional incentive will be provided for buffers less that 50 ft upland of the Project Boundaries. The incentive multiples for buffer widths between 50 ft and 200 ft will be interpolated or extrapolated, as appropriate, from the incentive numbers in the above table.

4. Upland Buffer Associated with Protected Shoreline Areas – As an additional incentive to conserve upland habitat, an applicant may agree to preserve lands upland and contiguous with shoreline areas that are already protected through the SMP classifications of Environmental, Natural, Natural Isolated Berm, or

Bottomland Hardwood Areas. For every two acres of the applicant's property outside the Project Boundaries preserved and left undisturbed, the applicant becomes eligible for one additional boat slip/docking/mooring location.

5. Alternative Upland Buffer Associated with Protected Shoreline Areas – In lieu of Criteria 4, the applicant may request a maximum of one additional boat slip/docking/mooring location for preserving a buffer of 100 ft in width upland of the Project Boundaries that is contiguous with a protected habitat classification (i.e., Environmental, Natural, Natural Isolated Berm, or Bottomland Hardwood Areas). All preserved land above the Project Boundaries must encompass the entire length along the shoreline of the protected habitat shoreline. The minimum protected shoreline length to be eligible for this additional access is 100 ft. The SMP indicates the lateral extent of any single protected classification(s) along the shoreline that is/are eligible for an additional slip(s)/mooring(s)/docking location(s).

6. Identification of Upland Buffers in Application – To be eligible for the incentive program, the preserved land – buffers associated with preserved shoreline or acreage or buffers preserved upland of an Environmental, Natural, Natural Isolated Berm, or Bottomland Hardwood Areas classifications – must be specifically identified in the application and must:

   a. Include adequate protections in the form of a permanent conservation easement or conservation-type agreement, identified in the protective covenants of the development and managed by the homeowner's/boat slip owner's association or other conservation entity approved by DE-LS;

   b. Be identified by survey stamped by a Registered Land Surveyor, provided by the applicant and included in the application that is also recorded in the county where the property is located;

   c. Be specifically addressed in the application along with a verifiable calculation of the preserved shoreline and the associated slip(s)/mooring(s)/docking location(s);

   d. Be provided under the incentive program along with a master plan of the development including all project-front lots and the location of the multi-slip marina facility;

   e. Be in addition to any shoreline within a protected classification as identified in the SMP; and

   f. Be in contiguous segments of not less than 800 ft for developments with more than 800 total ft of preserved shoreline.

7. Shoreline Stabilization – There may be instances where the shoreline to be preserved is subject to significant erosion that could be detrimental to the purpose of preserving riparian habitat. In these cases, DE-LS, in consultation with the appropriate wildlife resource agency, will determine whether the habitat values of this shoreline would benefit from habitat friendly stabilization, such as bioengineering or enhanced rip-rap, which then may be permitted on a case by case basis.

8. Since the intent is to preserve important shoreline habitat areas, DE-LS will make the final eligibility determinations on a case-by-case basis. (*Note: Shoreline areas that are not developable for multi-slip marina uses [e.g., their SMP*

classification, if applicable, does not allow Commercial Marina Facility or Residential Marina Facility use] are not eligible to accommodate the Residential Marina Facility although their shoreline will be used in the calculation for preservation and additional off-water access. Also note that the above limitations describe the maximum number of slips/moorings/docking locations that may be requested. Site-specific conditions may further restrict, or even eliminate, the number of boat slips/docking/mooring locations that can be considered for approval.)

E. Criteria for Rebuilds of Existing, Previously Approved, Marina Facilities

(See Glossary to note difference between a *Facility Rebuild* and *Facility Emergency Repair, Facility Expansion*, and *Facility Maintenance.*)

1. Special Rulings – Since not every possible scenario can be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Compliance with Regulations – All facilities must comply with all applicable local, state, and federal regulations. In addition, all necessary governmental permits or approvals, a FERC order (if applicable) and written authorization from DE-LS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundaries.

3. Facility Rebuilds – Applications for *facility rebuilds* (see Glossary) of existing Marina Facilities must conform to the SMG that are in place for new or expanded facilities at the time of the rebuild application. The following waivers may be considered:

   a. Any criterion that is specifically stated as being exclusively for new and/or expanded facilities;

   b. Any criterion that is specifically exempted according to a stated exception;

   c. The 200-ft setback requirement, if the existing structure was initially approved before January 31, 1994, and the rebuilt structure does not further reduce the setback provided;

   d. The subdivision access lot and minimum project area lease/user's agreement/permit requirements, if necessary to prevent creating non-compliances for other, previously permitted facilities;

   e. The requirement for each slip in the facility to be attributed to 100 ft or more of shoreline suitable for Residential Marina Facility or Commercial Marina Facility use;

   f. The need for the applicant to own the adjoining property in fee simple if the facility was originally permitted without such ownership and the applicant has made a substantial, good-faith effort to acquire fee simple to a subdivision access lot. (***Note****: The applicant may be required to post a bond to guarantee performance of lease/permit requirements.*); and

   g. The need to consult with agencies that do not issue a permit of their own, provided no excavation is needed, or consultation is not otherwise required (e.g., by the Cultural Resources Programmatic Agreement or similar documents).

(Exception: True Public Marina Facilities will be considered for rebuild even if the rebuilt facility or a portion of the facility cannot comply with the current guidelines. If compliance with the current guidelines is not possible, then the replacement facility must not deviate further from the current guidelines than the existing facility. This exception is provided only to True Public Marina Facilities.)

4. Rebuilds of Multiple-Slip Facilities – Existing multiple-slip facilities, originally approved under the Private Facilities Program (i.e., community use piers), may be rebuilt under the Marina Facilities Program as a Residential Marina Facility, although its use does not conform to the existing guidelines or shoreline classification. As a general rule, applications for rebuilds (see Glossary to note difference from *Facility Expansion*) of these existing multiple-slip private facilities are subject to the same permitting criteria and review processes as new Marina Facilities. (*Note: Such applications will need to be reviewed by all the required consulting agencies, since their original approval was not reviewed and they will now involve conveyance by lease/user's agreement/permit of Project property*.) The following may be considered:

   a. Waiver of the 200-ft setback requirement, provided that the existing structure was initially approved before January 31, 1994, and the rebuilt structure does not further reduce the setback provided.

   b. Waiver of the *minimum lease/easement area* requirements (see Glossary) where there would be unavoidable impacts to existing permitted structures.

   c. Waiver of the requirement that there be 100 ft of developable shoreline, as defined in the SMP for private facilities or Marina Facilities, for each slip in the facility.

   (*Note: Existing facilities that exceed 120 ft in length or the one-third cover width limitation must be rebuilt to meet these criteria to be considered for waivers a–c.*)

5. Lease/Users' Agreement – Applicants requesting to rebuild their facilities must enter into a new lease/users' agreement/permit with new terms and conditions (including increased user fees for the entire facility even if only a portion is rebuilt) to comply with the current requirements.

6. Removal of Old Facilities Prior to Rebuilds – Applicants requesting to rebuild their facility must ensure that all structures being replaced are completely removed from the Project Boundaries and the Duke Energy-owned peripheral strip prior to starting any new construction.

7. Electric Utility Line Rights-of-Way – Rebuilds of Marina Facilities within the right-of-way limits of any existing or planned overhead, electricity-carrying utility line may be considered for approval, provided that:

   a. The structure and the Project area covered by the lakebed lease/users' agreement/permit will be removed from within the right-of-way limits to the maximum practicable extent;

   b. Neither the numbers of structures nor the lakebed area under lease/user's agreement/permit within the right-of-way will be increased;

   c. All necessary design limitations (e.g., no roofs) have been incorporated and a special lease/user's agreement/permit has been signed by the applicant; and

d. The applicant receives written approval from the utility line owner.

F. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally-licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the Licensee. Duke Energy supports use of the project lands and waters for a variety of activities provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS, prior to initiating these revised guidelines, which are not compatible with the requirements as contained herein. These structures may be maintained although their use does not conform to the enclosed guidelines. When it becomes necessary to rebuild (see Glossary definition of *Facility Rebuild*) a previously approved, non-conforming structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

G. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

   - Unwanted delays;
   - Loss of security deposits;
   - Suspension or cancellation of approved applications;

- Increases in fees;
- Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
- Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following.

   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
   - Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a set management fee of $1,000, is paid.
   - Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

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SECTION 2 – CONVEYANCE PROGRAM

A. General

Many non-boating activities that cross or are located within a lake's Project Boundaries require a formal written conveyance from DE-LS, and an order approving the conveyance from the FERC (if applicable) **before** beginning any construction within the Project Boundaries. The types of uses for which a conveyance is required are construction, replacement, expansion, realignment, or significant maintenance of the following: roadways, causeways, and bridges; water lines and water intakes (except for single home use which are covered under the Miscellaneous Reservoir Uses Program); discharging effluent lines and non-discharging sewer lines; stormwater outlets; transmission, distribution, and retail lines for telephone, telegraph, cable TV, railroad signal, petroleum product, and electric utilities; and other uses if deemed necessary by DE-LS. Successful conveyance applicants will also be required to enter into an easement, lease, or users' agreement/permit to ensure that long-term operation of the facility does not conflict with DE-LS objectives. (***NOTE FOR ALL NON-PROJECT USE APPLICANTS****: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as Conveyance applications. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities*.)

B. Criteria for Conveyances

1. Special Rulings – Since every possible scenario can not be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Compliance with Regulations – All facilities must comply with all applicable local, state, and federal regulations. In addition, all necessary governmental permits or approvals, a FERC order (if applicable) and written authorization from DE-LS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundaries or on any Duke Energy-owned peripheral strip.

3. 50-ft Environmental Offset – New or expanded conveyance activities may not be constructed within the 50-ft Environmental Offset (Figure 2B-1) associated with an Environmental classification identified in the SMP unless the permitted activity currently exists within the offset.

4. Lighting – Low-pressure sodium lights with time or motion sensors to turn lights off when not needed are preferred. All outdoor fixtures should be fully shielded and installed in such a way that light is not emitted above the lowest part of the fixture. Incandescent lights should be well-shielded, low-wattage lamps that include time or motion sensors to turn lights off when not needed.

5. Timing of Lease/Users' Agreement – All conveyance activities associated with new, rebuilt, or expanded facilities must have an executed easement, lease, permit, or other instrument of conveyance with Duke Energy within 18 months following issuance of a FERC order or within 18 months following receipt of the instrument of conveyance if a FERC order is not required.

6. Submarine Utility Lines – All submarine utility lines must be buried a minimum of two ft below the lakebed in all parts of the full pond area that they cross. (*Exception: Exposed submarine utility lines may be allowed in areas five ft below the maximum drawdown on lakes Keowee and Jocassee or where the lakebed elevation is deeper than the Critical Reservoir Elevation [CRE] [see Glossary] on the specific lake provided that the exposed portion of the submarine utility line is: (a) laid upon the lakebed; (b) substantially anchored; and (c) shielded if necessary to prevent damage by boat anchors. A Lake Facility Safety Plan may also be required [Figure 2B-2]*.)

7. Water Intakes – New, expanded, or rebuilt permanent Large Water Intakes (i.e., greater than or equal to 1 million gallons per day [MGD] maximum instantaneous capacity) should be fully operational with the reservoir level at or above the *Critical Reservoir Elevation* (CRE) (see Glossary) that is required for full hydroelectric station operation on the specific lake or five ft below the maximum drawdown on lakes Keowee and Jocassee. All applicants are required to demonstrate the proposed means to address this requirement by providing an engineering feasibility evaluation stamped by a licensed professional engineer. Exceptions for shallower intakes will only be considered if there is overwhelming evidence included in the feasibility evaluation that an intake cannot be practicably constructed (economic factors will be considered although costs will not be the sole factor in determining practicability) to allow full unimpeded operation of the intake up to its proposed maximum instantaneous capacity with the reservoir level at or above the CRE that is required for full hydroelectric station operation or five ft below the maximum drawdown on lakes Keowee and Jocassee. The evaluation and justification for any such exceptions for approval of shallower intakes must further consider the proposed intake's relationship with the CRE needed for any existing Large Water Intakes used for Public Water Supply, industrial or regional non-hydroelectric power plant operation on the specific lake. DE-LS will not normally approve applications for permanent Large Water Intakes that require reservoir levels above the existing CRE for the specific lake or intakes higher in elevation than five ft below the maximum drawdown on lakes Keowee and Jocassee. Also, DE-LS will not normally approve expanded or rebuilt permanent Large Water Intakes that require reservoir levels for full unimpeded operation up to its proposed maximum instantaneous capacity that are above the existing CRE for the original intake or higher in elevation than five ft below the maximum drawdown on lakes Keowee and Jocassee.

8. Screens on Water Intakes – New, expanded, or rebuilt permanent Large Water Intakes (greater than or equal to 1 MGD maximum instantaneous capacity) and permanent small water intakes (less than 1 MGD maximum instantaneous capacity) should, to the maximum practicable extent: (a) use passive screens; (b) provide screen openings not to exceed one centimeter; and (c) provide a maximum intake velocity of 0.5 fps or less. For waters with anadromous fish, the applicant must consult with appropriate federal and state resource agencies and determine the appropriate intake and screen design specifications.

9. Submerged Effluent Outfalls – New, expanded, or rebuilt submerged effluent outfalls should be completely submerged and fully operational with the reservoir level at or above the Critical Reservoir Elevation (CRE) (see Glossary) that is required for full hydroelectric station operation on the specific lake or five ft below the maximum drawdown on lakes Keowee and Jocassee. All applicants are

required to demonstrate the proposed means to address this requirement by providing an engineering feasibility evaluation stamped by a licensed professional engineer. Exceptions for shallower outfalls will only be considered for: (a) non-submerged outfalls; or (b) submerged outfalls if there is overwhelming evidence included in the feasibility evaluation that the submerged outfall cannot be practicably constructed (economic factors will be considered although costs will not be the sole factor in determining practicability) to allow full unimpeded operation of the outfall up to its proposed capacity with the reservoir level at or above the CRE that is required for full hydroelectric station operation or five ft below the maximum drawdown on lakes Keowee and Jocassee. The evaluation and justification for any such exceptions for approval of shallower outfalls must further consider the proposed outfall's relationship with the maximum drawdown on lakes Keowee and Jocassee or the CRE needed for any existing Large Water Intakes used for Public Water Supply, industrial or regional non-hydroelectric power plant operation on the specific lake. DE-LS will not normally approve applications for submerged outfalls higher in elevation than five ft below the maximum drawdown on lakes Keowee and Jocassee or that require reservoir levels above the existing CRE for the specific lake for full unimpeded operation of the outfall up to its proposed capacity. Also, DE-LS will not normally approve expanded or rebuilt submerged outfalls that require higher reservoir levels for full unimpeded operation than reservoir levels required for the original outfall.

10. Non-Public Bridges Accessing Privately-Owned Islands – New construction of non-public bridges that will cross the full pond contour, except those that are intended to provide access to privately-owned island(s), will not be authorized.

11. Non-Public Bridges, Causeways, and Roadways – New construction of any non-public bridges (except for access to privately-owned islands), non-public causeways, non-public roadways (beyond those minimal width driveways necessary for access to other approved lake use facilities), non-public dams, and non-public dikes will not be authorized within the FERC Project Boundaries or on any Duke Energy-owned peripheral strip (Figure 2B-3).

12. Bridge Clearance for New Bridges – Any proposed new public or non-public bridge that will cross the full pond contour in an area considered navigable in the peak recreation season must have a clearance height at least 12 ft above the full pond elevation for at least the middle third of its span or 10 ft of width, whichever is greater.

13. Bridge Clearance for Existing Bridges – Any replacement, expansion, or realignment of existing bridges must not reduce the existing clearance height from full pond elevation in areas considered navigable in the peak recreation season.

14. Dams, Dikes, and Causeways – New construction of any dams, dikes, or causeways that cut off the backs of Project coves from the rest of the Project area will not be authorized.

15. Lake Facility Safety Plans – A Lake Facility Safety Plan, where required, must be developed by the applicant delineating the methods used to secure an area during construction and warn boaters of any potential public safety or navigational hazards. Any signage or warning/safety devices necessary for the safe construction and subsequent operation of proposed facilities/activities must

be provided and maintained by the applicant and are typically identified in a Lake Facility Safety Plan.

16. Agency Concurrence with Lake Facility Safety Plans – Where required, a Lake Facility Safety Plan must be developed by the applicant with the concurrence of the state wildlife agency and marine commission (where applicable) and submitted as part of a complete lake use permit application. The safety plan must include a plan and schedule for installation, maintenance, and inspection of the warning/safety devices needed for lake user safety, with responsibilities listed and verified by confirmation letters from the responsible entity(s).

17. Facilities Requiring Lake Facility Safety Plans – As a minimum, Lake Facility Safety Plans will be required for: (a) all proposed new, expanded, or rebuilt bridges and causeways that cross the full pond contour in areas that are considered navigable in the Peak Recreation Season (see Glossary) (i.e., areas that have at least a 10-ft wide by 3-ft deep channel with lake level at its target summertime elevation); (b) all Large Water Intakes (greater than a 1 MGD maximum instantaneous capacity); and (c) all submerged effluent outfalls and dry hydrant intake lines that are exposed at reservoir levels above the Critical Reservoir Elevation (CRE) on the specific lake or are less than five ft above the maximum drawdown on lakes Keowee and Jocassee. Applicants for these types of facilities, as well as any others as may be determined by DE-LS, must submit a Lake Facility Safety Plan as part of their lake use permit application.

18. Applications for Electricity-Carrying Utility Lines – Applicants for new construction of electricity-carrying utility lines (both overhead and submarine) will be required to show in their applications why it is not feasible to redesign the line to: (a) Remove the line's right-of-way completely from the full pond area (**preferred**); (b) Incorporate the line crossing need by expanding an existing line crossing, rather than creating a new one; or (c) Install the line by using directional boring techniques. Applicants for expansion/rebuild of existing, electricity-carrying utility lines will also be required to show in their applications why it is not feasible to remove the line's right-of-way completely from the full pond area or to incorporate the line into another existing line crossing. All proposed utility line crossings must comply with the US Army Corps of Engineers requirements and the then-current National Electric Safety Code or Pipeline Safety Regulations (as applicable), and compliance must be certified by a registered land surveyor and a licensed professional engineer.

19. Overhead Electricity-Carrying Utility Line Prohibitions – Duke Energy will not authorize:

    a. Any construction of new non-Duke Energy overhead, electricity-carrying utility line crossings whose right-of-way limits would cross existing boat launching / docking / mooring, parking, or storage facilities within the full pond contour or Duke Energy-owned public access area.

    b. Any expansions or rebuilds of previously approved overhead, electricity-carrying utility lines whose right-of-way limits would cross existing boat launching/docking/mooring, parking, or storage facilities unless all of the following requirements are met:

1) The line crossing and its right-of-way limits are designed to avoid the lakebed area used by the boating facilities to the maximum extent practicable.

2) The line crossing is designed with the higher clearance height as required by the National Electric Safety Code or US Army Corps of Engineers requirements for lines crossing boating access facilities.

20. Support Structures for Overhead Electricity-Carrying Utility Lines – Structural supports and guy wires for overhead, electricity-carrying utility lines must be located outside the full pond contour to the maximum practicable extent.

21. Wastewater Effluent Discharges in Cut-Off Areas – Unless there is no other feasible alternative, wastewater effluent lines that discharge directly into *cut-off areas* (see Glossary) that were created by dams, dikes, or causeways will not be authorized.

22. Deadline for Completing Construction – The construction of any facility must be completed as described in the approved application and within the approved *build-out period* (see Glossary). The initial build-out period for conveyance activities is 18 months from the date of application approval by DE-LS. A one-year extension may be approved by DE-LS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing what approved activities have been completed, what approved activities remain to be completed, and the reason for the delay, along with any applicable fees (including an extension fee). If during an extension period additional guidelines are imposed, the remaining construction will be required to comply with the additional guidelines to the maximum practicable extent. Failure to construct a facility within the total, approved build-out period with one extension (i.e., 30 months total) will require the applicant to contact all agencies that issued permits and document the originally issued permits are still valid or acquire reissued permits for those that have expired. This will allow the issuance of a second 12-month extension (i.e., 42 months total) which will require payment of a second application filing fee and security deposit, and forfeiture of the original deposit. If the applicant does not complete all activities within this final 12-month extension period, DE-LS will notify the applicant in writing that all approvals have been withdrawn and reauthorization to complete construction of the facilities will require re-entry into the application review and approval process (including, as a minimum, providing a new construction schedule, detailed description of the facilities to be constructed, and the applicable fees and security deposits), and such reauthorization may not be granted. Construction will not be allowed to resume until additional written authorization is received from DE-LS. (*Exception: Public facilities may be eligible for up to two additional, one-year time extensions not available to other type facilities [total potential build-out period is five and a half years]. To be eligible, the applicant must show that at least fifty percent of the remaining proposed facilities were completed during the previously approved time extension*.)

23. Applicant – The applicant must be a natural person; a corporation, partnership, or a limited liability company (duly formed and registered); or a division of government, and must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. The lessee/permittee/grantee must be a corporation, partnership, or a

limited liability company (duly formed and registered); or a division of government, and must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. DE-LS will hold the adjoining property owner fully responsible for the permitted lake use (including maintaining structures in good repair). This responsibility is considered to transfer automatically along with ownership of the adjoining tract. It is therefore the responsibility of the property owner to ensure that authorization for the permitted use and any conveyance documents for facilities within the Project Boundaries or peripheral strip are transferred should there be a change in ownership of the adjoining tract and/or facility.

(*Exception: An easement may be considered as a substantial equity interest in lieu of fee simple ownership of the adjoining tract where fee simple ownership is not customary [e.g., for public need projects where the applicant is a public entity].*)

24. Lease/Users' Agreement – All conveyance applicants are required to enter into a lease, easement, permit, or users' agreement for the FERC Project area that the facility will occupy.

25. Public Access Areas – Conveyance proposals for non-Project use activities should generally avoid crossing a Duke Energy-owned public access area. Any conveyance activity for a non-Project use that crosses a Duke Energy-owned public access area will have increased permitting requirements and siting limitations (e.g., crossing location limited to very few areas, future limitations on expansion).

C. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally-licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the licensee. Duke Energy supports use of the Project lands and waters for a variety of activities, provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS, prior to initiating these revised guidelines, which are not compatible with the requirements as contained herein. These structures may be maintained although their use does not conform to the enclosed guidelines. When it becomes necessary to rebuild a previously approved, non-conforming

structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

D. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

- Unwanted delays;
- Loss of security deposits;
- Suspension or cancellation of approved applications;
- Increases in fees;
- Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
- Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following.

- Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
- Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
- Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
- Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a fixed management fee of $1,000, is paid.

- Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

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SECTION 3 – EXCAVATION PROGRAM

A. General

DE-LS has developed an Excavation Programmatic Agreement (PA) in consultation with resource agencies, and the requirements of this PA are incorporated in the Excavation Program. The Excavation Programmatic Agreement establishes guidance for obtaining authorization for the removal of soil, sand, silt, or rock materials from within the FERC Project boundaries of Duke Energy lakes. The Excavation Program does not circumvent the necessity for the applicant to obtain prior federal (e.g., US Army Corps of Engineers), state (e.g., NC Dept. of Environment and Natural Resources [NC-DENR], SC Dept. of Health and Environmental Control [SCDHEC]) and local (e.g., county) approvals as determined by those agencies for any excavation activities. This program will ensure compliance with federal, state, and local regulations, including those of the FERC. DE-LS may issue permits for minor excavation activities such as those required to support the installation and maintenance of bulkheads, boat launching, and access to docking facilities, small water intakes, utility lines, or other activities that do not require FERC approval. Excavation applications require review by the appropriate resource agencies and some also require FERC approval. Any excavation or shoreline stabilization work needed to support a FERC application is also subject to FERC approval and will be included as a component of the primary FERC application. All parties desiring to excavate within the Project Boundaries must first contact DE-LS and obtain written authorization prior to beginning work. DE-LS may require the applicant to enter into a lease/permit or other form of conveyance and sign a user's agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with DE-LS objectives. (***NOTE FOR ALL NON-PROJECT USE APPLICANTS****: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as those for Excavation. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities*.)

B. Criteria for an Excavation

1. Special Rulings – Since every possible scenario can not be anticipated, DE-LS reserve the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Compliance with Regulations – All excavations must comply with all applicable local, state, and federal regulations. Also, any necessary governmental permits or approvals, a FERC order (if applicable), and written authorization from DE-LS must be obtained by the applicant prior to beginning work within the Project Boundaries.

3. South Carolina – All excavations in South Carolina, less than 150 cubic yards, must conform to the requirements of the General Permits issued by the SCDHEC or the US Army Corps of Engineers, as applicable. Applicants in South Carolina proposing excavations that are not covered under the General Permit, or are greater than 150 cubic yards, must receive prior authorization from the SCDHEC or the US Army Corps of Engineers, as applicable before submitting their completed application to DE-LS.

4. Fish Spawning – In both North Carolina and South Carolina, excavation activities must not occur during the months of March, April, May, and June because of potential impacts to fish spawning areas.

5. Water Willow Beds – Excavation is not allowed within water willow beds except as necessary to maintain access to previously approved facilities.

6. 50-ft Environmental Offset – New excavation activities are not allowed within the 50-ft Environmental Offset (Figure 3B-1) associated with an Environmental classification identified in the SMP except as necessary to allow continued access to a previously approved facility (Figure 3B-2).

7. Individual Permit Requirement – The Excavation Programmatic Agreement and the General Permits in both North Carolina and South Carolina allow Duke Energy to authorize excavations, provided the applicant notifies the appropriate agencies and all necessary permits are obtained prior to beginning any excavation. Applicants should limit their excavation activities where practicable to meet the requirements of the applicable General Permit and/or the Excavation Programmatic Agreement; otherwise, an individual permit will have to be obtained from the proper agency and FERC review may be required.

8. FERC review is required for:

    a. All excavations, except for *maintenance excavations* (see Glossary), that will exceed 2000 cubic yards of material removed. (***Note**: All excavation volumes that the applicant [e.g., developer] proposes to remove as part of a planned project [e.g., an entire subdivision] will be added together for comparison against this 2000 cubic yard limit to facilitate review of potential cumulative impacts. If lot purchasers file subsequent excavation application requests, their requests will be evaluated on an individual basis*.)

    b. Any excavation activity that is required to support another proposed lake use request that requires FERC review (e.g., construction of a large marina not within the scope of the land use article).

9. Placement of Excavated Material – All excavated material must be placed in upland areas landward of the Project Boundaries and confined to prevent erosion and sedimentation.

10. Staging of Excavation Work – All excavation work, including equipment setup, must not encroach into or in front of adjoining property unless specific written authorization is given by the affected property owner(s) (typically through their participation as co-applicants). All excavation work must be confined to the delineated excavation area in front of the applicant's property with the exception of access channels, which typically run perpendicular to the shoreline within the nearest one-third of the cove area and/or parallel to the shoreline within the middle third of the cove area that is controlled by Duke Energy.

11. Best Management Practices for Excavated Materials – All excavated material must be handled following Best Management Practices as defined by each state unless special consideration is given in writing by the SCDHEC or the NCDENR-Division of Land Quality.

12. Double Handling – Double handling of excavated material within the full pond elevation contour will not be allowed. Therefore, all excavated material must be placed above the full pond elevation contour in one handling unless the spoil

material is loaded in a barge for transport outside the Project Boundaries. Barge-loaded spoil must be directly off-loaded outside the full pond elevation contour and cannot be loaded into transport equipment (e.g., trucks, conveyors) within the full pond elevation contour.

13. Erosion and Sedimentation Control – All excavated material and disturbed shoreline must be stabilized to prevent erosion and runoff into the lake.

14. Minimization of Disturbance – Applicants must excavate and disturb only what is absolutely necessary to achieve the excavation projects stated purpose (Figures 3B-3 through 3B-5).

15. Unauthorized Excavation Activities – Excavation permits will not be issued for the following activities:

    a. Channeling to create additional shoreline or any other excavation that would alter the Project Boundaries or full pond elevation contour;

    b. Any excavation that would impact threatened or endangered species, historic properties, or environmentally important areas;

    c. Excavation activities not associated with maintaining access to an existing permitted facility or a proposed facility for which the owner has submitted an application and received written approval from DE-LS for its construction; and

    d. Excavation activities that support a new marina facility (i.e., within five years of DE-LS approval) if excavation was not part of the original application

    (*Note: Areas with characteristics listed under item b above may be identified in the SMP [where applicable]. Also note that certain public need projects undertaken by public entities may not have another practicable alternative, and therefore may have some unavoidable impacts on the lake's scenic, environmental, and cultural values. Such public need projects may be allowable, provided the applicant can develop an adequate mitigation plan*.)

16. Sand Mining – Sand mining operations within the Project Boundaries, usually on headwater portions of the reservoir, may be authorized in accordance with the Excavation and Conveyance Program guidelines to the maximum practicable extent. Operations outside the Project Boundaries on Duke Energy property will have to be authorized with concurrence of Duke Energy's Real Estate Department.

17. Return Water – Return water associated with hydraulic excavation must re-enter the lake in the same general vicinity and cove as the excavation, to the maximum practicable extent.

18. Access Channels Side Slopes – Access channels and boat basins must have side slopes excavated to a slope of 3 to 1, except where safety requirements may dictate a flatter slope.

19. Size of Access Channels and Boat Basins – Access channels and boat basins shall not extend beyond one-half the cove width in cove areas where the opposing shoreline is classified as Environmental (including 50-ft Environmental Offsets) in the SMP.

20. Explosives – The use of explosives within the Project Boundaries supporting excavation activities will be allowed for public need projects where the applicant is usually a public entity (e.g., municipality, state transportation department, utility

line owner supporting a regional public need) and there is no other practicable alternative. The limited use of explosives may also be allowed to facilitate removal of man-made structures (e.g., bridge pilings, intake structures), provided their use can be substantiated based on need rather than preference and the use adheres to all local, state, and federal regulations. DE-LS must be provided the appropriate documentation to ensure compliance with all regulations prior to the use of any explosives. Any other uses of explosives to excavate within the Project Boundaries will not be authorized.

21. Deadline for Completing Excavations – All excavations must be completed as described in the approved application and within 18 months following the date of application approval by DE-LS. The only potential exception to this is for excavations that are necessary for construction of large facilities (e.g., large marinas, large water intakes) where the facility application schedule allows for a longer time period. A single 12-month extension may be considered if the applicant files a written request with DE-LS, prior to expiration of the 18-month application approval, explaining why the additional time is needed. If during an extension period additional guidelines are imposed, the excavation will be required to comply with the additional guidelines to the maximum extent practicable.

22. Applicant as Owner/Leaseholder – The applicant must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip. If the applicant is not claiming to be the owner or leaseholder of said property, then written authorization from the owner(s) and proof of title to the property must be provided to carry out the proposal within the Project Boundaries adjacent to their land. DE-LS will hold the applicant and/or the land owner fully responsible for the permitted lake use. This responsibility will run with the land and will transfer automatically along with changes in ownership and/or leases of the adjoining tract.

23. Review of Associated Applications – In a development proposed to provide Residential Marina access, the developer must submit a complete application and receive written confirmation from DE-LS that the application has been submitted to Duke Energy's Law Department for preparation in filing with the FERC (if applicable); or a copy of the homeowner's covenants and the final recorded subdivision plat, approved by the county or local jurisdiction's planning and zoning office, must be submitted acknowledging the location of the planned facilities prior to DE-LS reviewing applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses and Shoreline Stabilization programs.

24. Excavation Contract – A copy of the contract between the applicant and the excavation contractor must be provided with the completed Excavation Program Application Form.

C. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the Licensee. Duke Energy supports use of the Project lands and waters for a

variety of activities, provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS, prior to initiating these revised guidelines, which are not compatible with the requirements as contained herein. These structures may be maintained although their use does not conform to the enclosed guidelines. When it becomes necessary to rebuild (see Glossary definition of *Facility Rebuild*) a previously approved, non-conforming structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

D. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

   - Unwanted delays;
   - Loss of security deposits;
   - Suspension or cancellation of approved applications;
   - Increases in fees;
   - Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
   - Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following:

- Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
- Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
- Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
- Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a fixed management fee of $1,000, is paid.
- Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

SECTION 4 – PRIVATE FACILITIES PROGRAM

A. General

All parties desiring to construct an individual private facility or Common-Use Facility must first contact DE-LS and obtain written authorization from DE-LS prior to beginning any activity/construction within the Project Boundaries or on Duke Energy property. All facilities must be constructed from the applicant's deeded or leased project-front lot for the purpose of providing private access for the owner or leaseholder of the project-front property. Facilities supporting multi-family type homes or owners of lots that do not have project frontage must be handled through the Marina Facilities Program. DE-LS may require the applicant to enter into a lease or other form of conveyance and sign a user's agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with DE-LS objectives. (***NOTE FOR ALL NON-PROJECT USE APPLICANTS****: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as Private Facility applications. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities*.)

B. Criteria for Private Facilities

1. Special Rulings – Since every possible scenario can not be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Projection of Property Lines – For new, expanded, or rebuilt facilities, property lines will be projected by DE-LS by extending an imaginary line perpendicular to the Project Boundaries at each property corner. These projected lines are determined by bisecting the angle formed by the two lakefront property lines that intersect at each property corner. Additionally, facilities must be situated or constructed in size, dimension, or design such that an average-size moored watercraft will not interfere with access to other facilities and not obstruct ingress and egress of watercraft or extend across projected property lines. On reservoirs with local ordinances that dictate property line projections utilizing a different methodology, DE-LS will accept projection in accordance with local regulations with enforcement being the responsibility of the governing entity. Unless the necessary written release is received from the adjoining property owner, no part of the proposed private facility (including anchoring systems) or moored watercraft may cross the property lines as projected (Figure 4B-1). (***Note****: Pier Zones are planning tools used in some developments, but their use does not supersede requirements of the DE-LS SMG, the General Permits in South Carolina, or county or local jurisdiction's requirements in either North Carolina or South Carolina*.)

3. Term of Encroachment Agreements – Written release to encroach across a projected property line remains valid for the life of the permit. If a permit is authorized with a written release but is not constructed during the 12-month build-out, and ownership of the property being encroached upon changes, then authorization from the new owner will be required as part of the issuance of a new permit.

4. Facility Criteria – DE-LS, in its sole discretion, will determine if facilities (even those assigned hull identification numbers or registration numbers) moored or permanently attached to a structure are considered within the criteria of the Private or Marina facilities programs.

5. Compliance with Regulations – All facilities must comply with all applicable local, state, and federal regulations. Also, the applicant, prior to beginning any activity/construction within the Project Boundaries, must obtain all necessary governmental permits or approvals and written authorization from DE-LS.

6. Maneuvering Area – New or expanded Private Facilities must provide a clear maneuvering area of at least 25 ft between the farthermost portion of the facility (including any moored watercraft) and the opposite shoreline measured at full pond or any existing permitted facility located along the opposite shoreline. Additionally, no new or expanded Private Facilities will be authorized in cove areas less than 25 ft wide (Figure 4B-2).

7. 50-ft Environmental Offset – New or expanded Private Facilities may not be constructed within the 50-ft Environmental Offset (Figure 4B-3) associated with an Environmental classification identified in the SMP unless the permitted facility currently exists within the offset.

8. Water Willow Beds – Applicants are encouraged to avoid activities that could have an adverse impact upon existing water willow beds. Unavoidable impacts should be confined to the sides of water willow beds to minimize disruption of their function as shallow water fish habitat. No floating structures or other extraneous facilities (e.g., gazebos, decks) may be constructed over water willow beds. The width of walkways over water willow beds will be limited to less than three feet. Removal of water willow for continued lake access may be allowed but only for the specific and limited area necessary.

9. Length of Facilities – New, expanded, or rebuilt facilities or mooring buoys shall not extend more than one-third the distance to the opposite shoreline as measured from full pond or extend more than 120 ft lakeward of the full pond, whichever is more limiting (Figure 1B-3). Additionally, facilities must be situated or constructed in size, dimension, or design such that an average-size moored watercraft will not interfere with access to other facilities and not obstruct ingress and egress of watercraft.

10. Flotation Materials – Flotation for all facilities and boat mooring buoys shall be of materials manufactured for marine use. Materials must not lose significant buoyancy if punctured, must not generally be subject to damage by animals, and must resist breaking apart under a broad range of wave energies. Uncoated, beaded polystyrene will not be permitted for any new construction or as replacement for existing facilities. Reuse of plastic, metal, or other previously used drums or containers for encasement or flotation purposes is prohibited. Existing flotation on previously approved structures is authorized until it has severely deteriorated and is no longer serviceable, at which time it must be replaced with approved flotation.

11. Reflectors – Reflectors or reflective tape must be placed and maintained by the applicant on the two furthermost corners of the structure that extend into the water and placed along the sides of the structure from the end back toward the shore.

12. Lighting – Low-pressure sodium lights with time or motion sensors to turn lights off when not needed are preferred. All outdoor fixtures should be fully shielded and installed in such a way that light is not emitted above the lowest part of the fixture. Incandescent lights should be well-shielded, low-wattage lamps that include time or motion sensors to turn lights off when not needed.

13. Minimum Elevation of Decking – All fixed pier decking (not including handrails) must be at least one foot above the full pond elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate boat entry.

14. Enclosure of Facilities – The sides of gazebos, boat shelters, and covered boat slips are not to be enclosed. This includes, but is not limited, to siding and latticework. The bottom portion of gazebos may be enclosed, provided the gazebo is not the furthermost portion of the pier structure. Handrails may be put on for safety, but must not be enclosed.

15. Storage Closet / Locker – Covered boat slips and boat shelters may have one 4 ft by 6 ft (or smaller) enclosed storage closet/locker on one of the corners of the structure closest to shore. (***Note**: This construction must be noted in the application*.)

16. Roofs – Canopy roofs are permitted provided the sides are not enclosed. The canopy must not block cross vision any more than a standard pitched roof.

17. Boat Covers – *Boat covers* (see Glossary) may be permitted provided the following:

    a. The fabric and frame are the same dimensions as the watercraft;

    b. The roof, if a stand-alone structure, is not flat and does not exceed 12 ft in height as measured from the top of the roof to full pond;

    c. The device, if free-standing, does not allow the entire facility to exceed the total square footage limitations for an Individual Private Facility; and

    d. There are no storage compartments placed under boat covers.

18. Liquid and Solid Waste Facilities – Structures built within the Project Boundaries must not contain sinks, toilets, showers, spigots, or any other type of device, which could cause any liquid or solid waste to be discharged into the lake. (*Exception: Water supply lines supporting approved pump-out facilities are exempted from this requirement*.)

19. Houseboats – Watercraft used for habitation shall not be permanently moored at private docks. Permanent mooring must be at marinas that provide pump-out facilities for marine sanitation devices. A watercraft is considered habitable if any of the following exists:

    a. Sleeping overnight on the boat for two or more consecutive nights;

    b. Staying on, around, or within the moored boat for periods exceeding 24 continuous hours;

    c. Hardwiring electric power or hard piping plumbing to the boat; or

    d. Establishing a mailing address for the boat.

20. Boat Ramps – DE-LS will no longer allow the construction of boat ramps for individual private use.

21. Covered Boat Slips – No covered boat slips, boat covers, or *boat shelters* (see Glossary) will be allowed at Common-Use Facilities with more than two slips.

22. Common-Use Facilities – Common-Use Facilities with three or more slips are not eligible for mooring additional watercraft including PWCs.

23. Maximum Size – Maximum allowed slips and surface areas are as follows:

Facility	Number of Slips or Hoists	Maximum Allowed Square Footage (sq. ft)
Individual Private	2 or less*	1,000
Common Use	2 or less*	1,000
Common Use	3 - 8	1,000
Common Use	9 - 10	1,200
Common Use	> 10	N/A**

* A total of two PWC mooring devices are allowed in addition to this maximum.

** Common-Use Facilities that serve a development and are greater than 10 slips are considered Residential Marina Facilities under the Commercial Marina Facilities Program and must be filed with the FERC.

24. Facilities per Project-Front Lot – Unless DE-LS permitted the facility before June 1, 1996, no more than one pier/dock or one Common Use boat slip per project-front lot will be considered for approval. Ownership/interest in a Common-Use Facility that is provided as part of a master-planned development eliminates the option of having a separate facility at the lot attributed a slip in a Common-Use Facility. An individual property owner that is assigned a slip in a Common-Use Facility that is part of a master-planned development may not transition out of the common use arrangement and construct a pier from their property.

25. Converting from a Common-Use Facility – Individual property owners who have ownership/interest in a Common-Use Facility that is not a part of a master-planned development may transition out of the common use arrangement and construct a pier from their own project-front property only if the remaining Common-Use Facility can comply with the guidelines in effect at the time of transition. If modifications are required of the Common-Use Facility, then construction of the Private Facility from an individual project-front lot will not be allowed until the modifications to the Common-Use Facility are complete.

26. Two-Story Structures – Decks, gazebos, covered boat slips, and boat shelters must be single-story structures. They may be roofed and designed to allow second story use (e.g., sundeck); however, the second story must not be roofed creating a two-story roofed structure.

27. Non-Conforming Structures – Facilities permitted under previous guidelines that exceed the current maximum allowable square footage will not be allowed to have any additions made to the existing facility including, but not limited to, adding roofs or decks above any existing portion of the facility.

28. Pilings and Uncovered Boat Hoists – Pilings and uncovered boat hoists constructed alongside a facility do not typically count towards the maximum

square footage but they are considered facility expansions and must meet all other permitting requirements (e.g., maximum number of watercraft, applicable property line projections, and length restrictions).

29. Deadline for Completing Construction – The construction of any facility must be completed as described in the approved application within 12 months following the date of application approval by DE-LS. Failure to complete construction within the build-out period will require the applicant to file a new application within the then-current guidelines. The filing will include any applicable fees and security deposits.

30. Applicant – The applicant for a lake use permit must be the owner or the leaseholder of the tract of land immediately adjoining the Project Boundaries or the Duke Energy-owned peripheral strip. The applicant and subsequent permittee is fully responsible for the permitted lake use including maintaining structures in good repair.

31. Permit Transfer – The responsibilities associated with the lake use permit shall transfer to any new owners or leaseholders of the adjoining land. Duke Energy will transfer the permit at no cost to the new owner or leaseholder, provided either the existing facility meets the current SMG or was permitted by DE-LS prior to the effective date of these revised SMG. To initiate the transfer, the new owner or leaseholder must contact DE-LS and sign both the transferred permit and the "User's Agreement Letter". DE-LS will approve the transfer after determining the facility meets the criteria for approval.

32. Minimum Shoreline Requirement – A lot having less than 100 ft of shoreline (as measured along the Project Boundaries) that is suitable for Residential use in the SMP will not be considered for a pier or common-use slip unless it was subdivided and recorded prior to September 1, 2006. (*Note: In the case of lots subdivided and recorded prior to September 1, 2006, the applicant may be allowed to construct up to 10 square ft of pier for every linear foot of developable shoreline so long as the lot has at least 75 linear ft of shoreline. Lots subdivided and recorded before June 1, 1996, that have less than 75 ft of shoreline are also eligible for 10 square ft of pier for every linear foot of developable shoreline*.) (*Note: The 50-ft Environmental Offset may count in the determination of total shoreline footage eligibility requirements needed for a pier, but it may not be built on and must be left undisturbed*.)

33. Private Facilities In Lease Areas – Private Facilities will not be authorized within areas leased or under a use agreement for Marina Facilities.

34. Electric Utility Line Rights-of-Way – Duke Energy will not authorize lake use permits associated with the new construction or expansion of boat launching/docking/mooring facilities that extend into a power line right-of-way containing existing or planned overhead lines.

35. Boardwalks – Boardwalks in the backs of coves are not allowed within the full pond contour. Boardwalks within the Project Boundaries that extend into any regulated buffer area (e.g., Catawba River Basin Permanent Riparian Buffer Protection Rules [15A NCAC 2B.0243]) may only be authorized if the facility is for a single private project-front lot and so long as there is no violation of any applicable buffer regulations. That portion of the facility that extends into the

Project Boundaries will be included in the maximum square footage calculation and is limited to a maximum width along the Project Boundaries of 25 ft.

36. Relocation and Reconfiguration – Relocation or reconfiguration of an existing facility is considered new construction, and the guidelines in effect at the time of the proposed relocation or reconfiguration will apply.

37. Rebuilds of Multiple-Slip Facilities – Existing multiple-slip facilities, originally approved under the Private Facilities Program (i.e., community use piers), may be rebuilt under the Marina Facilities Program as a Residential Marina Facility, although its use does not conform to the existing guidelines or shoreline classification. As a general rule, applications for rebuilds (see Glossary to note difference from *Facility Expansion*) of these existing multiple-slip private facilities are subject to the same permitting criteria and review processes as new Marina Facilities. (*Note: Such applications will need to be reviewed by all the required consulting agencies, since their original approval was not reviewed and they will now involve conveyance by lease/user's agreement/permit of Project property*.) The following may be considered:

    a. Waiver of the 200-ft setback requirement, provided that the existing structure was initially approved before January 31, 1994, and the rebuilt structure does not further reduce the setback provided.

    b. Waiver of the *minimum lease/easement area* requirements (see Glossary) where there would be unavoidable impacts to existing permitted structures.

    c. Waiver of the requirement that there be 100 ft of developable shoreline, as defined in the SMP for private facilities or Marina Facilities, for each slip in the facility.

    (*Note: Existing facilities that exceed 120 ft in length or the one-third cove width limitation must be rebuilt to meet these criteria to be considered for waivers a–c.*)

38. Residential Marinas – In a development proposed to provide both private piers and Residential Marina access, see also the criteria associated with the Marina Program located in Section 1.

C. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally-licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the Licensee. Duke Energy supports use of the Project lands and waters for a variety of activities, provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS, prior to initiating these revised guidelines, which are not compatible with the requirements as contained herein. These structures may be maintained although their use does not conform to the enclosed guidelines. When it becomes necessary to rebuild (see Glossary definition of *Facility Rebuild*) a previously approved, non-conforming structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

D. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

    - Unwanted delays;
    - Loss of security deposits;
    - Suspension or cancellation of approved applications;
    - Increases in fees;
    - Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
    - Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following.

    - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
    - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.

- Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
- Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a set management fee of $1,000, is paid.
- Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

SECTION 5 – SHORELINE STABILIZATION PROGRAM

A. General

All parties desiring to stabilize shoreline or plant shoreline or aquatic vegetation must first contact DE-LS and obtain written authorization prior to beginning any activity/construction inside the Project Boundaries or on Duke Energy property. Shoreline stabilization is encouraged to control soil erosion in high-energy areas. Applicants are encouraged to use bioengineering techniques and landscape plantings before using rip-rap. Seawalls should be the last option for shoreline stabilization. In certain areas, an engineering justification may be required for the use of seawalls (see Figure 5A-1 for Shoreline Stabilization Technique Selection Process). DE-LS may require the applicant to enter into a lease or other form of conveyance and sign a user's agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with DE-LS objectives. (*NOTE FOR ALL NON-PROJECT USE APPLICANTS: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as Shoreline Stabilization. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities*.)

B. Criteria for Shoreline Stabilization

1. Special Rulings – Since every possible scenario can not be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines or to prevent violating the intent of the permitting programs.

2. Projection of Property Lines – Property lines will be projected by DE-LS by extending an imaginary line perpendicular to the Project Boundaries at each property corner. These projected lines are determined by bisecting the angle formed by the two lakefront property lines that intersect at each property corner. On reservoirs with local ordinances that dictate property line projections utilizing a different methodology, DE-LS will accept projection in accordance with local regulations with enforcement being the responsibility of the governing entity. Unless the necessary written release is received from the adjoining property owner, no part of the proposed shoreline stabilization (including anchoring systems) may cross the property lines as projected (Figure 4B-1). (*Note: Pier Zones are planning tools used in some developments, but their use does not supersede requirements of the DE-LS SMG, the General Permits in South Carolina, or county or local jurisdiction's requirements in either North Carolina or South Carolina*.)

3. Compliance with Regulations – All stabilization must comply with all local, state, and federal regulations. Also, prior to beginning any activity/construction within the Project Boundaries, the applicant must obtain all necessary governmental permits or approvals, and written authorization from DE-LS, especially for any stabilization activities associated with water willow beds.

4. Clearing to Support Stabilization Projects – Minimal clearing within the Project Boundaries is allowed to create corridors for equipment access for stabilization projects. Access corridors should be incorporated into permanent pier/dock access corridors (i.e., footpaths) where practical. Native vegetation removed to

accommodate construction access for shoreline stabilization shall be replaced in accordance with the Vegetation Management Requirements with native vegetation of a similar species or type.

5. Water Willow Beds – Applicants are encouraged to avoid activities (including stabilization) that could have an adverse impact upon existing water willow beds. Bioengineering is a preferred shoreline stabilization technique and is encouraged, especially in eroded areas associated with water willow beds. Shoreline stabilization activities are limited to the eroded bank and any unavoidable impacts to existing water willow beds, as a result of stabilization installation, require replanting water willow in the impacted area(s). Rip-rap installed below the normal lake level elevation and associated with water willow beds must be limited to one layer deep to allow spaces between the stone for water willow recruitment. Removal of water willow for continued lake access may be allowed, but only for the specific and limited area necessary. Removal of water willow by means of chemical application can only be conducted in accordance with state and federal pesticide application regulations.

6. Rip-Rap Use with Bulkheads – A layer of rip-rap (Class B or larger) extending six feet lakeward from full pond must be placed along the entire base of all bulkheads (except for loosely stacked, dry-stacked boulder walls). The six foot requirement for steep slopes is measured vertically. For more gradual slopes where the vertical measurement would prove impractical, a horizontal measure may be used (Figure 5B-2).

7. Bioengineering Vegetation – The types of plantings used in bioengineering and landscape-planting projects should be native to North Carolina and South Carolina, and must be reviewed and approved by DE-LS prior to introduction.

8. Seawalls – Seawalls are not allowed in areas with an average eroded bank height of less than three feet.

9. Bioengineering – Proposals for stabilization where the eroded bank height is less than two ft may use approved bioengineering technique and enhanced rip-rap technique only (see Figure 5B-3 for example of acceptable enhanced rip-rap technique).

10. Length of Shoreline to be Stabilized – An individual permit from the SCDHEC for activities in South Carolina and the US Army Corps of Engineers for activities in North Carolina is required for stabilization that exceeds 500 linear ft of shoreline. Multiple applications for less than 500 ft of stabilization activities on a parcel exceeding 500 linear ft will not be accepted within a five year timeframe.

11. Stabilization of Banks Three Ft or Higher – Stabilization of eroded banks that are three ft in height or higher or that are not associated with water willow beds must include Class B or larger size rip-rap with filter cloth and/or significant live staking, planting, or other forms of bioengineering within the rip-rap.

12. Bank Reshaping – Stabilization of eroded banks that are three feet in height or higher may be considered for bank reshape by either cut or fill techniques, provided the following:

    a. The stabilized bank uses a combination of rip-rap (not installed any higher than one foot above full pond) and bioengineering techniques;

b. The cut or filled area, above the height of the rip-rap, is stabilized using vegetation in density and composition similar to other naturally vegetated areas in the vicinity of the stabilized shoreline;

c. The toe of the rip-rap is vegetated if the lower limit of the rock provides a stable beach-shelf at an elevation two to four feet below full pond elevation;

d. The work can be conducted in accordance with all applicable buffer regulations; and

e. The amount of cut or fill does not substantially alter the full pond contour, is strictly limited to only that necessary to provide a stable angle for rip-rap and revegetation, and is specifically quantified in the written authorization from DE-LS for the project.

13. Timeframe for Stabilization – No stabilization is allowed from March 1 through June 30 in areas identified as Impact Minimization Zones in Duke Energy's SMP.

14. Impact Minimization Zones – Stabilization in Impact Minimization Zones requires review and approval by the applicable state wildlife agency. Mitigation may be required on a case-specific basis by the wildlife agency.

15. 50-ft Environmental Offset – New or expanded stabilization activities (excluding bioengineering) may not be undertaken within the 50-ft Environmental Offset (Figure 5B-4) associated with an Environmental classification identified in the SMP.

16. Materials – Tires, scrap metal, crushed block, construction/demolition debris, or other types of material that are not aesthetically acceptable are not allowed for stabilization.

17. Rip-rap – Rip-rap use should be limited to only that necessary to adequately stabilize the existing eroded bank. Rip-rap must be confined to the area between six feet below the full pond elevation and full pond elevation except where the entire placement is above the FERC Project Boundaries or where severely eroded banks must be sloped back or terraced to provide minimum bank stability and where permissible based on any local or state buffer requirements.

18. Deadline for Completing Construction – The construction of any facility must be completed as described in the approved application within 12 months from the date of application approval by DE-LS. Failure to complete construction within this 12-month period will require the applicant to file a new application within the then-current guidelines. The filing will include any applicable fees and security deposits.

19. Applicant – The applicant must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundaries or Duke Energy-owned peripheral strip, or have the written permission of the underlying property owner on water rights tracts (i.e., Duke Energy only has a flowage easement). DE-LS will hold the applicant fully responsible for ongoing adherence to the SMG and all activities associated with the permitted use (including maintaining structures in good repair). This responsibility runs with the land and transfers automatically to any subsequent owners or lessees of the adjoining land.

20. Review of Associated Applications – In a development proposed to provide Residential Marina access, the developer must submit a complete application and receive written confirmation from DE-LS that the application has been

submitted to Duke Energy's Law Department for preparation in filing with the FERC (if applicable), or a copy of the homeowner's covenants and the final recorded subdivision plat, approved by the county or local jurisdiction's planning and zoning office, must be submitted acknowledging the location of the planned facilities prior to DE-LS reviewing applications for lake use activities under the Private Facilities, Excavation Miscellaneous Reservoir Uses and Shoreline Stabilization programs.

C. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally-licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the Licensee. Duke Energy supports use of the Project lands and waters for a variety of activities, provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS prior to initiating these revised guidelines, which are not consistent with the requirements as contained herein. These structures may be maintained although their use does not conform to the current guidelines. When it becomes necessary to rebuild (see Glossary definition of *Facility Rebuild*) a previously approved, non-conforming structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

D. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

- Unwanted delays;
- Loss of security deposits;
- Suspension or cancellation of approved applications;
- Increases in fees;
- Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
- Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following:

   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
   - Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a fixed management fee of $1,000, is paid.
   - Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

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SECTION 6 – MISCELLANEOUS RESERVOIR USES PROGRAM

A. General

The following section addresses less frequent types of requests received by DE-LS for uses within the Project Boundaries or on Duke Energy property. Applicants for many of these activities and other activities that may affect Duke Energy property must first contact DE-LS and obtain written authorization prior to beginning any activity/construction inside the FERC Project Boundaries or on Duke Energy property. Application forms and supporting information from the other Lake Use Permitting Programs will be used where applicable for these requests. There may be instances where no application form or other documentation exists that can be used to process a request and in such cases, an applicant may be required to submit a letter of application for the proposal. DE-LS may require the applicant to enter into a lease or other form of conveyance and/or sign a user's agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with DE-LS objectives. Since every possible scenario cannot be anticipated, DE-LS reserves the right to make special rulings in cases not specifically covered by these guidelines. (***NOTE FOR ALL NON-PROJECT USE APPLICANTS****: Duke Energy is neither the advocate nor the adversary for non-Project use applications, such as those for Miscellaneous Reservoir Uses. The applicant, not DE-LS, is responsible for negotiating the application process with other permitting and regulatory authorities*.)

B. Uses Controlled by Duke Energy

1. Advertising Signs – Advertising signs within the Project Boundaries will not be authorized, except for inconspicuous manufacturer's labels on permitted structures or temporary "For Sale" signs on boats docked at Duke Energy-approved structures.

2. Inflatable Recreation Equipment – Duke Energy will not authorize the use and placement of any large water-based recreational equipment (see Glossary to differentiate between *Water-based Recreational Equipment* and *Water Toys*) within the Project Boundaries. Existing items considered to fall within the definition of water-based recreational equipment are not authorized and must be removed from within the Project Boundaries and Duke Energy property.

3. Fish Attractors – Duke Energy does not object to the placing of fish attractors made of natural woody material (e.g., brush, Christmas trees) or PVC that are securely tied together and properly anchored so as not to become a hazard to navigation and to remain: 1) at a depth greater than the *Critical Reservoir Elevation* (CRE) (see Glossary) on the specific lake or five ft below the maximum drawdown on lakes Keowee and Jocassee; 2) covered by an approved boat docking facility; or 3) in close association with an approved pier. Nylon rope should be used to tie the materials together and for connecting materials to the anchor. Anchors should consist of concrete blocks or other suitable weight. No materials that are environmentally unacceptable (e.g., car batteries, tires) should be used for anchors or as cover materials.

   Shallow water fish attractors may be placed by wildlife resource agency personnel or individual property owners adjoining the Project Boundaries subject

to the following conditions. Attractors may be placed either (i) underneath the structure or (ii) in shallow water areas associated with a pier, but not directly underneath the structure, provided the attractor: 1) is within 20 ft of the structure; 2) does not extend lakeward any further than the farthest portion of the structure; 3) does not cross the lot lines of the adjoining property, projected lakeward perpendicular to the shoreline; and 4) does not block navigation. (*Note: These requirements are not intended to conflict with trees that fall into the Project Boundaries and provide fish and wildlife habitat and are not a hazard to navigation*.) Applications are made by letter from the applicant.

4. Special Events on Duke Energy Public Access Areas – Permission to use a Duke Energy public access area for a special event (event) (e.g., fishing tournaments, public festivals, boat race headquarters) will be reviewed on a case-by-case basis, and may be approved, provided that:

   a. The applicant applies by letter to DE-LS.

   b. Applications must include a complete narrative description of the event and a graphic site plan for the proposed use of the access area.

   c. With the exception of fishing tournaments, the footprint of the proposed event occupies no more than 50% of the functional surface area of the access area.

   d. The access area remains open for use by the general public for boat launching during the full extent of the event.

   e. The event is not exclusive to any user group.

   f. All trash and debris is removed from the access area as needed during the event and, at a minimum, on a daily basis, and at the end of the event.

   g. Public restrooms (e.g., Port-a-Jons) are provided by the applicant if required by Duke Energy or other regulatory agencies.

   h. Vendors of food, concessions, souvenirs, etc. may be permitted on a case-by-case basis as determined by Duke Energy in its sole discretion. The applicant must specifically identify proposed vendors/vendor areas by type in the narrative description and on the site plan for the proposed event.

   i. It is the applicant's responsibility to ensure that the proposed use of the access area complies with all local, state, and federal guidelines/ordinances.

   j. All required permits are the responsibility of the applicant and copies must be provided to Duke Energy to initiate Duke Energy's review of the application. Specifically, written approval by the applicable state wildlife resource agency must be provided to Duke Energy to initiate Duke Energy's review of the application. Wildlife resource agency and DE-LS review will include consideration of potential conflicts with previously scheduled events, potential impact of the proposed use on the primary function of the access area, potential site impacts, and other factors. Additional resource agency consultation may also be required as determined by Duke Energy.

   k. The applicant executes a lease agreement with Duke Energy with terms, including liability indemnification and insurance requirements, and pays any applicable fees, as specified by Duke Energy.

5. Heat Exchange Coils for Heat Pumps (Geo-thermal Systems) – DE-LS may authorize these structures, provided they do not cause a safety, navigational or

environmental hazard. The coils must be anchored to the lakebed and located at or below the *Critical Reservoir Elevation* (CRE) (see Glossary) on the specific lake or five ft below the maximum drawdown on lakes Keowee and Jocassee unless attached underneath an existing permitted facility in such a manner that the coils and return/supply line will not become a safety, navigational or environmental hazard. All supply/return piping not attached underneath an existing permitted facility must be buried in accordance with the guidelines for submarine utility lines included in the Conveyance Program and located adjacent to the confines of the applicant's project-front property. Applications are made by letter from the applicant.

6. Minor Water Withdrawals – DE-LS may authorize a single irrigation pump for private home use, provided the pump has a rated horsepower of 2 hp or less and is used exclusively for the adjoining project-front lot. Applications are made by letter from the applicant. DE-LS may also authorize small water intakes that do not exceed a maximum instantaneous withdrawal rate of 1 million gallons per day (MGD) within the Conveyance Program (filing with the FERC typically not required). All minor water withdrawals should, to the maximum practicable extent: (a) use passive screens; (b) provide screen openings not to exceed one centimeter; and (c) provide a maximum intake velocity of 0.5 fps or less. For waters with anadromous fish, the applicant must consult with appropriate federal and state resource agencies and determine the appropriate intake and screen design specifications. Additionally, all minor water withdrawals must meet the requirements for submarine utility lines included in the Conveyance Program unless the intake line and intake head are attached underneath an approved facility (e.g., private pier, marina slip). (*NOTE: Major water withdrawals include both single and cumulative water withdrawals exceeding a 1 MGD maximum instantaneous withdrawal capacity. These larger withdrawals must be approved under the Conveyance Program and require FERC approval. Additionally, in North Carolina, withdrawals greater than or equal to 100 thousand gallons per day require registration with the NCDENR-Division of Water Resources*.)

7. Satellite Dishes – DE-LS will not authorize these facilities to be located within the Project Boundaries of a reservoir.

8. Ski Ramps/Slalom Courses – DE-LS may authorize ski ramps, slalom courses, and other similar structures, provided: 1) the state wildlife resources agency approves of the activity; 2) the facility and its use will not impact areas identified as Environmental on the SMP; 3) SCDHEC approval is obtained in South Carolina; 4) there are no objections from adjacent property owners; and 5) the applicant complies with the terms and conditions of the "User's Agreement". Applications are made by letter from the applicant.

9. Private Swimming Areas – DE-LS will not authorize private individuals to "rope off" or exclude the public from a portion of the Project area for the purpose of creating a private swimming area.

10. Concession Sales at Public Access Areas – DE-LS will not allow any sales on the access areas except for areas under lease to an entity or concession sales that are in association with an approved special event, identified and managed by the event sponsor.

11. Special Use Facilities – These are facilities which are similar in nature to those permitted under the Private Facilities Program, but are not associated with a

single-family type private residence and are used as part of the operation of an organization or business. The types of facilities that may be included are piers, boat slips, boat shelters, and covered boat slips, etc. Some examples of organizations that use this type of facility are hunting clubs, ski clubs, churches, industries or businesses for employee recreation areas, and agencies for monitoring piers, etc. These types of facilities will be permitted using the Private Facilities Program and Conveyance Program guidelines (including application forms) to the maximum extent practicable. Applicants may be required to lease the underlying Project property and may be assessed annual user fees.

12. Business Staging Areas – These are facilities or areas along the shoreline that are used to support a business directly associated with one of the lake use permitting activities (e.g., loading ramp for shoreline stabilization, pier to moor construction/excavation equipment, barge mooring area, pier assembly area), temporary staging areas for public infrastructure construction and maintenance, and temporary sales piers for large developments. These types of facilities will be permitted using the Private Facilities Program and Conveyance Program guidelines (including application forms) to the maximum extent practicable. Applicants will be required to enter into a conveyance agreement (for operations that exceed two years in duration); sign user's agreement letter(s); obtain individual permits for activities outside the scope of the General Permits; obtain all necessary local, state, and federal permits; and pay annual user's fees. Areas used for a period greater than two years will be required to complete a Conveyance Application including filing a notification with the FERC.

13. Wildlife Enhancement Activities – DE-LS may authorize wildlife enhancement activities such as wood duck boxes and other similar structures, regardless of the shoreline classification, provided the activity does not pose a hazard to public safety or navigation, the state wildlife agency approves of the activity, and there are no objections from adjacent property owners. In South Carolina, approval is obtained from SCDHEC. Applications to Duke Energy are made by letter from the applicant.

14. Project Operation and Public Service Facilities – This category includes new and existing facilities needed to directly support comprehensive management of the lakes used by Duke Energy or public agencies (e.g., rescue squads; Power Squadron and US Coast Guard Auxiliary emergency support facilities; state wildlife agency management facilities; police department non-recreational facilities; Duke Energy mosquito control facilities; Duke Energy hydro, fossil, and nuclear power non-recreational facilities) to carry out their official responsibilities The construction of new facilities and the maintenance of existing facilities may have more flexible permitting requirements, provided the applicant can provide justification based on a legitimate need and not just a preference. Applications are reviewed on a case-by-case basis and consultation of the Sr. Lake Services Representative(s) is required.

15. Explosives – The limited use of explosives may be allowed to facilitate the removal of man-made structures (i.e., bridge pilings, intake structures), provided their use can be substantiated based on need rather than preference and the use adheres to all local, state, and federal regulations. The use of explosives within the Project Boundaries supporting excavation activities will be allowed for public need projects where the applicant is usually a public entity (e.g., municipality, state transportation department, utility line owner supporting a regional public

need) and there is no other practicable alternative. DE-LS must be provided the appropriate documentation to ensure compliance with all regulations prior to the use of any explosives. Any other uses of explosives to excavate within the Project Boundaries will not be authorized.

16. Dry Hydrants – Fire hydrants that draw water from the reservoir for fire protection may be reviewed by letter from the applicant. The applicant must be an official representing a municipal, state, federal or volunteer fire fighting organization. The applicant must indicate the location, pipe diameter, and fire department/district being served and responsible for maintenance of the structure. The intake line must meet the requirements for submarine utility lines under the Conveyance Program to the maximum practicable extent. Unless attached to an existing facility in such a manner that the intake will not become a safety or navigational hazard, the intake should be located at/below the CRE required for any existing Large Water Intakes used for Public Water Supply, industrial or regional non-hydroelectric power plant operation on the specific lake or five ft below the maximum drawdown on lakes Keowee and Jocassee. This depth requirement is necessary to provide for the reliability of the hydrant even during drawdown conditions and to ensure the intake does not pose a hazard to navigation and public safety. In cases where lake topography makes meeting the requirements for submarine utility lines impracticable, the intake and/or intake line may be considered at a lesser depth, provided the applicant can provide a Lake Facility Safety Plan that clearly marks along the shoreline and with a buoy(s) the location of the intake and/or intake line. Standardized signs 2 ft by 3 ft in dimension with the wording “Danger Stay Clear, Underwater Fire Intake”, will be provided by DE-LS and must be installed conspicuously and maintained along the shoreline by the applicant. Additionally, at least one, 10-inch diameter cylindrical buoy, provided and maintained by the applicant, that extends a minimum of 36 inches above the surface of the water with the word “Danger” and the open diamond shape, must remain stationed at all times lakeward and no further than 10 ft of the dry hydrant line intake structure.

C. Uses Under the Control of Other Agencies

1. Boat Race Courses – Under the control of the U.S. Coast Guard.

2. Kites, Parasails, Ultra-light Aircraft, and Hang Gliders – If regulated, under the control of the Federal Aviation Administration (FAA) while airborne and state wildlife agency and/or local planning and zoning office while on water.

3. Navigational Aids – Under the control of the state wildlife agency and/or applicable marine commission.

4. No-Wake Buoys – Under the control of applicable marine commission and state wildlife agency.

5. Seaplanes – Under the control of the FAA while airborne and state wildlife agency and/or local planning and zoning office while on water, if regulated.

6. Vending Operations on Water – Under the control of the county Health Department.

7. Net Pens and Aquaculture Operations – These uses are not authorized.

D. Caution

1. Authorization Required from Licensee – Adjoining property owners should be aware that conducting activities within the Project Boundaries of a federally-licensed hydroelectric project (e.g., Catawba-Wateree and Keowee-Toxaway Projects) is a privilege that can only be granted with authorization from the Licensee. Duke Energy supports use of the Project lands and waters for a variety of activities, provided the use meets the regulatory requirements of the license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. Protected Areas – There are some areas of the lake where facilities may not be permitted because of environmental considerations, development patterns, physical lake characteristics, impacts to cultural resources, or other reasons. These areas may be identified in the SMP (where applicable).

3. Minimization of Impacts – The permittee must make every reasonable effort to minimize any adverse impact on fish, wildlife, and other natural resources.

4. Non-Authorized Uses – There are some types of lake uses that cannot be authorized. Refer to Section 7B for a listing of commonly requested uses that Duke Energy will not authorize.

5. Non-Conforming Structures – There are existing structures and improvements permitted by DE-LS, prior to initiating these revised guidelines, which are not compatible with the requirements as contained herein. These structures may be maintained although their use does not conform to the enclosed guidelines. When it becomes necessary to rebuild (see Glossary definition of *Facility Rebuild*) a previously approved, non-conforming structure, the rebuilt structure must comply with the guidelines in effect at the time of replacement to the maximum practicable extent.

6. Flood Easements – In general, Duke Energy has reserved, on a tract-by-tract basis, a deeded flood easement extending 10 ft or more vertically above the full pond elevation contour on all lakes it owns or operates, to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prevent construction of dwellings and other permanent structures, Duke Energy strongly recommends that adjoining property owners avoid building such permanent structures within flood easement areas. Buffer regulations must also be considered for any construction or alteration of vegetation above the full pond contour elevation.

E. Consequences for Violations

1. Penalties – DE-LS representatives will issue Stop-Work Directives for any violations that are detected within the Project Boundaries of a reservoir. Consequences for violations will include one or more of the following:

    - Unwanted delays;
    - Loss of security deposits;
    - Suspension or cancellation of approved applications;
    - Increases in fees;

- Modification or removal of non-complying structures and restoration of disturbed areas at the owner's expense; and
- Loss of any consideration for future reservoir use applications.

2. Violation Examples – Examples of specific violations and their applicable penalties include the following:

   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (no existing pier/dock): Restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized major cutting of the vegetated area (see Section 8) within the Project Boundaries (existing pier/dock): Removal of the pier/dock from Project property and restoration with approved native vegetation. Loss of consideration for lake use permitting activities for up to five years depending on severity and subject to successful plant restoration.
   - Unauthorized minor cutting of trees within the vegetated area (see Section 8) within the Project Boundaries: Restoration as required in the Vegetation Management Requirements for approved tree removal.
   - Refusal to remove an unapproved, dilapidated, or unsafe structure: Removal of the structure from the Project property by DE-LS. Loss of consideration for lake use permitting activities until cost of removal, which includes all removal costs including DE-LS or contractor expenses, landfill fees, and a set management fee of $1,000, is paid.
   - Unauthorized structure built within the Project Boundaries: After-the-fact application may be accepted if structure conforms to the specific requirements. Fee will be twice the current permit fee to cover additional management costs. Non-complying structures will be subject to modification or removal and restoration of disturbed areas at the owner's expense.

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SECTION 7 – GENERAL POLICIES THAT ARE NOT LAKE-SPECIFIC

The policies stated in this subsection apply to all lakes within the Catawba-Wateree Project, unless specifically stated otherwise.

A. Lake Uses Allowed Without Specific Duke Energy Written Approval

There are some lake uses that are implicit parts of Duke Energy's lake access philosophy and therefore do not require any specific written permission from Duke Energy. These *implicit uses* (see Glossary) include:

1. Ingress and Egress – Ingress and egress by adjoining property owners to view the lake or to access Duke Energy approved lake use facilities either for their use or for *facility maintenance* or *facility emergency repair* (see Glossary for differences between *Facility Maintenance, Facility Emergency Repair, Facility Rebuild*, and *Facility Expansion*.)
2. Management of Dead Trees – Ability for adjoining property owners to remove dead trees consistent with any local buffer ordinances or habitat protection requirements provided by the resource agencies.
3. Public Recreation – Pursuit of any lawful public recreation activity within the FERC Project Boundaries of a licensed lake or the full pond contour of an unlicensed lake that does not violate Duke Energy's Public Safety Plan, create a public nuisance as declared by law enforcement officials, create a public health/safety hazard, or otherwise endanger people or trespass on or damage property. Exceptions are any public recreation activity specifically identified as not being allowed in this document or that requires Duke Energy's written approval.
4. Public Access Areas – DE-LS will allow uses of the Duke Energy-owned public access areas for boat launching and bank fishing with the following activities prohibited:
    a. Littering;
    b. Consuming alcoholic beverages or other controlled substances;
    c. Destroying or defacing property or harassing wildlife;
    d. Disorderly conduct;
    e. Parking in non-designated areas;
    f. Discharging firearms;
    g. Operation of motorized trail bikes or off road vehicles;
    h. Open fires (unless allowed by the leasing agency or facilities are specifically provided by Duke Energy for this purpose); and
    i. Camping (unless allowed by the leasing agency or facilities are specifically provided by Duke Energy for this purpose).

B. Lake Uses That Are Not Authorized

Considering the objectives of these SMG as stated in the introduction, a number of potential lake uses will not be authorized. The following list includes some of the more frequently requested lake uses that will not be approved within the full pond contour, the FERC Project Boundaries, or within any Duke Energy-owned peripheral strip of a Duke Energy-operated lake. (*Note: Some of these uses have been allowed by Duke Energy in the past. Applications for rebuilds or permit/lease/easement transfers or renewals of any previously approved facilities for the listed uses will be reviewed on a case-by-case basis and require approval, at a minimum, by the management of DE-LS*.)

1. Septic tanks, septic drain lines and drain fields, toilet facilities, sinks, water faucets, showers, or any other type of device that could produce a wastewater discharge, except for certain Marina Facilities, Public Recreation Facilities, or Conveyance Facilities necessary for waste disposal (e.g., marine pump-out facilities);
2. Stormwater inlet pipes and their associated settling basins;
3. Washing (except with biodegradable detergents specifically formulated for use in reservoirs), painting, or resurfacing of vehicles or watercraft;
4. Any portion of a private dwelling;
5. Any facility including, but not limited to, porches, patios, decks, driveways, or other structures(s) not permitted as part of a Private Facilities Permit;
6. Swimming pools, except at Public Recreational Facilities specifically approved for that use;
7. Camping, except at Commercial Marina Facilities or Public Recreational Facilities specifically approved for that use;
8. Littering or dumping of trash and debris;
9. Abandonment of personal property including, but not limited to, vehicles, watercraft, boat trailers, lake use facilities, and building materials;
10. Pens, kennels, or other facilities for the housing and care of pets;
11. Fences, except as necessary to confine livestock watering to a small area of the shoreline;
12. Net pens and aquaculture operations;
13. Placement of structures designed to submerge and then resurface, except for buoys for ski slalom and boating courses, and boat hoists associated with an approved facility;
14. Wells, except where necessary to support an approved Project Use Facility;
15. Rope swings, cables, platforms, or springboards used for diving and swimming that are not associated with an approved facility or located outside of Public Recreation or Commercial Marina Facilities specifically approved for that use;
16. Any use that violates an applicable federal, state, or local law or regulation; and
17. Any other use that is determined to be unacceptable by Duke Energy, in its sole discretion.

C. Authority and Responsibility of Lake Use Permit Applicants

Except for the implicit uses described above, all other lake uses must be authorized in writing by Duke Energy through one of the lake use permitting programs. Occasionally, questions arise concerning what exactly the applicant is getting when they receive an approved lake use permit from Duke Energy. Duke Energy has incorporated some type of user's agreement/permit, lease, or easement document in the vast majority of lake use permits the company issues in an effort to ensure applicants understand what they do/do not own, their maintenance responsibilities, and their authority with regard to controlling actions of others within the lake area. The following information also helps clarify those issues.

1. Responsibilities of Applicant – The applicant is the owner of the approved lake use facility during construction and once it is complete. Duke Energy holds the applicant completely responsible for:

    a. The safety of themselves and others they allow to use the facility (i.e., use at your own risk);

    b. Payment of any applicable fees and taxes;

    c. Maintaining the facility in a state of good repair;

    d. Ensuring the facility does not create a public nuisance or public health/safety hazard (including marking facilities during and after construction to reduce hazards to navigation and public safety);

    e. Ensuring the facility remains in compliance with all applicable federal, state, and local regulations and codes, as well as directives of the FERC, Duke Energy, and any jurisdictional agency, including modification of the facility in the future if necessary; and

    f. Removing the facility in its entirety and restoring the disturbed area as necessary at their own expense should the facility's use be discontinued, or if directed to do so by Duke Energy or any entity having the legal authority to do so.

2. Transfer of Applicant Responsibilities – If ownership of the adjoining property changes, then responsibility for the lake use facility also changes. Facility owners must contact Duke Energy to get their applicable permits transferred to the new owner when property ownership changes. Note that some types of lake uses require written transfer of lease/easement/user's agreement/permit documents when property ownership changes.

3. Non-Structural Lake Uses – Some types of approved lake uses (e.g., excavations) do not include any structures. The applicant is still responsible for ensuring the approved use does not create a public nuisance or public health/safety hazard, and that it is modified as needed in the future to comply with any applicable regulations or Duke Energy lake management requirements.

4. Land Ownership – Duke Energy lake use permits do not transfer title to any land.

5. Cancellation of Lake Use Permits – The Private Facilities and Shoreline Stabilization Programs' permits are simply permission to use the applicable land for construction, operation, use, and maintenance of the approved structure. Consistent with the approval, the permit may be cancelled by Duke Energy and

the permittee would be required to remove the structure and restore the disturbed area at their expense.

6. Leases and Easements – The Marina Facilities Program and Conveyance Program have leases or easements (except for water rights tracts which have permits/user's agreements). These programs generally result in much larger facilities or facilities with a much greater potential for impact than the Private Facilities or Shoreline Stabilization Programs. To limit company liabilities and comply with the Standard Land Use Article, Duke Energy uses leases, permits and easements to assign the minimal property rights necessary to construct, operate, use, and maintain the approved facility. These programs will also have a specified term and a cancellation clause covering what happens if the agreement is cancelled or not renewed at expiration.

7. Public Access – Lake use permit holders have the authority to prevent others from trespassing on the structures they have built. They do not, however, have any authority to impede anyone from pursuit of the lawful public recreational enjoyment of FERC Project lands and waters. Except as specified otherwise in this document or other Duke Energy documents (e.g., Public Safety Plan), anyone may fish around/under structures built by others, may walk/wade/fish within the FERC Project Boundaries or any Duke Energy-owned peripheral strip, boat in the lake's waters, etc., without having to obtain permission to do so.

D. Storm Damage and Facility Repair/Replacement

A facility may be entirely rebuilt and consideration given to waiver of any application filing fees if it can be substantiated that the reason for the rebuild is the result of an act of God (e.g., significant high water, high wind, heavy snow, fire as a result of a direct lightning strike) that destroys enough of a facility that it can no longer be used and cannot be repaired within what is considered a maintenance activity. A documented, written application must be made to DE-LS within six months following the verifiable date of the event. Consideration for complete restoration will only be given to permitted facilities that complied with the SMG in effect (if applicable) at the time of construction. The need to obtain written release from an adjoining property owner if the original facility encroached across the projected property line may not be required especially if there is no practicable alternative for reconstruction of the facility within the current guidelines in another location. Consideration will not be given to facilities that have been previously identified and not repaired as part of the Structure Renovation Program or other written directives (e.g., Stop-Work Notice, navigation hazard/public safety notification) from DE-LS.

E. Use of Islands

For FERC licensed lakes, islands are normally fully within the FERC Project Boundaries, and the FERC's general policy for maximizing public recreation uses of Project lands would apply. The islands are within the FERC Project boundaries on all Duke Energy-owned, licensed lakes except under the existing license issued in 1958 for the Catawba-Wateree Project. These guidelines apply to islands on the Catawba-Wateree Project regardless of whether the islands are included as Project lands. Their location makes them attractive stops for boaters, yet their small size usually intensifies concerns about user impacts and waste disposal. Public recreation opportunity support is the primary intended use of all Duke Energy-owned islands, except for certain Duke Energy-owned

islands with special management considerations (e.g., cultural resources, heron rookeries, safety concerns, etc.).

Duke Energy allows the boating public to pursue lawful recreation activities on all Duke Energy-owned islands at the user's own risk, provided that:

1. Fires and Camping – No fires are built and no camping is conducted outside of specifically approved facilities that are managed by a Non-Duke Energy entity that has leased the site for public recreation uses.

2. Nighttime Use – Other than hunting and nighttime bank fishing, no uses occur between 30 minutes after sunset and 30 minutes before the following sunrise, unless specifically allowed by a non-Duke Energy entity that has leased the site for public recreation uses. (*Note: In Mecklenburg and Gaston counties, per the request of local law enforcement, islands are posted as No Trespassing from sunrise to sunset including prohibiting nighttime bank fishing and hunting*.)

3. Site-specific Restrictions – Use of the island has not been restricted for other reasons (e.g., environmental sensitivity, cultural resource protection, history of unruly gatherings).

4. Island Users' Responsibilities – Island users remain responsible for their own safety and activities including, but not limited to:

    a. Taking trash with them or depositing it within trash receptacles provided by a non-Duke Energy entity that has leased the site for public recreation, environmental/scenic protection, or cultural resource protection;

    b. Taking personal property with them;

    c. Ensuring they do not create a public nuisance or public health/safety hazard as declared by a law enforcement or public health official having jurisdictional authority;

    d. Ensuring no trees are cut;

    e. Ensuring no structures are built, unless specifically authorized in writing by DE-LS; and

    f. Ensuring no removal of natural vegetation or cultural resources (artifacts).

F. Hunting and Trapping

1. Compliance with Regulations – Both hunting and trapping are public recreation activities. Hunting and trapping may be pursued at the user's own risk within the full pond contour or on Duke Energy-owned islands within lakes operated by Duke Energy. All such hunting and trapping must be done in accordance with the applicable federal, state, and local regulations.

2. Facilities – Except for construction of duck blinds (for waterfowl hunting), no other facility construction will be permitted within the Project Boundaries for the sole purpose of supporting hunting or trapping.

3. Duck Blinds – Duck blinds must be constructed within and as close to the full pond contour as reasonably attainable. In no cases shall they extend beyond one-third the distance to the opposite shoreline or 120 ft from the full pond contour, whichever is more restrictive. Duck blinds that are located such that water depth would be greater than six ft with the lake at its full pond level must

also be fitted with reflectors. Duck blinds must also include a conspicuously located weatherproof marking that clearly identifies the name, address, and phone number of the individual or group responsible for the blind. Duck blinds may be used by any hunter(s) at any time allowed by law and are used on a first-come, first-served basis. Duck blind owners, however, must ensure the blind is maintained in a state of good repair and must remove it in its entirety if it's not planned to be used during the next waterfowl season or if directed to do so by Duke Energy or the state wildlife agency.

4. Traps – Traps must not injure other lake users or pets owned by lake neighbors. Leg-hold traps and snares are specifically prohibited. Traps must be checked regularly during use according to state law and must be removed when not in use or when directed to do so by Duke Energy or the state wildlife agency. Traps must also be fitted with a weatherproof marking providing the name, address, and phone number of the responsible party.

G. Handling of Lakeside Buffers, Building Setbacks, and Minimum Lot Sizes

Maintenance of vegetated lakeside buffers is an important factor in protecting and enhancing a lake's values. Buffers primarily filter runoff and can help reduce shoreline erosion when vegetation extends to the shoreline, thus helping to reduce sedimentation and protect water quality. They also provide wildlife corridors and habitat and can enhance recreational opportunities.

1. With regard to lakeside buffer policies, Duke Energy:

   a. Supports maintaining existing buffers in their natural vegetated state, except where necessary to operate its electric business; where limited pruning, topping, thinning, or clearing is necessary to facilitate reasonable access to Duke Energy-approved, water-dependent structures; to provide nominal width pathways, trails, and walkways to allow recreation access or to provide reasonable views of the water from adjoining properties; all such vegetation removal being done in accordance with the Vegetation Area Management Requirements (see Section 8) and any applicable ordinances.

   b. Encourages lake use permit applicants to plan their work to avoid and minimize buffer impacts to the maximum practicable extent.

   c. Reserves the right to delay or refuse lake use permit approval, cancel existing permits, or take other necessary actions when adjoining property owners violate buffer restrictions or the vegetation removal or erosion control criteria within local buffer ordinances.

   d. Will not allow vegetation removal in some specifically designated areas (e.g., areas classified as Environmental on the SMP) to support non-public projects.

   e. Participates in development of local buffer ordinances.

   f. Will not support releasing adjoining property owners from buffer regulation requirements including, but not limited to, providing release statements, unless it is very clear that every effort has been made by the adjoining property owner to alter their plans to avoid/minimize the buffer disturbance.

2. With regard to building setbacks and minimum lot size policies, Duke Energy will not become involved in the practice by some jurisdictions of using land within the

full pond contour of a Duke Energy-owned lake as land area for consideration toward meeting minimum lot size or building setback regulations, even if Duke Energy only holds a flowage easement on the lakebed tract in question.

H. Native Shoreline and Aquatic Vegetation Management

1. Shoreline and aquatic plants are important components of the aquatic life in lakes, rivers, and streams. They provide a number of contributions to the overall health of a water body including:
   a. Food and shelter to many shoreline and aquatic animals;
   b. Use of nutrients from land surface runoff, thus helping to maintain good water quality;
   c. Improved clarity by allowing suspended silt and clay particles to settle out; and
   d. Increase dissolved oxygen levels in the water and thus supporting aquatic life.
2. Growth of native aquatic and shoreline plants is preferred to the growth of exotic (i.e., non-native) species.
   a. Shoreline stabilization using native plants, in areas where shoreline slope and wave energy are compatible with plantings, will normally be successful if the activity is carefully planned and carried out.
3. Duke Energy supports the planting of native North Carolina and South Carolina plant species within and adjoining the full pond contours of Duke Energy-owned lakes for the purposes of shoreline stabilization or establishing or restoring wildlife/fisheries habitat.
4. Duke Energy will not authorize the planting of any plant species within the full pond contour of any Duke Energy-owned lake or on Duke Energy-owned shoreline property that is not native to North Carolina and South Carolina or is not otherwise approved by Duke Energy.
5. Plans for the introduction of vegetation within the full pond contour of a Duke Energy-owned lake or on Duke Energy property must be submitted in writing to DE-LS. Plans must contain a species list of the proposed plant species to be used and a planting diagram and schedule. Plant species selection and schedules should consider site conditions to optimize survival.
6. Duke Energy will not authorize removal of native aquatic vegetation unless it is necessary for continued lake access (e.g., swimming areas). In these specific instances, removal may be allowed, provided that removal of only vegetation necessary for limited access in specifically identified areas is approved in writing by DE-LS.

I. Contractor Use of Duke Energy-owned Access Areas

Duke Energy is required under the license granted by the FERC for the FERC licensed Projects to arrange for the construction, maintenance, and management of public access areas. As licensee, one of Duke Energy's primary responsibilities for management of these areas is to ensure that any activity at the access areas does not prohibit or

interfere with the public's use of the area for boating, fishing, or other authorized recreational uses.

Duke Energy recognizes the service provided by lake construction contractors to project-front property owners (e.g., commercial marina operators, individual pier owners) for facility construction/maintenance and shoreline stabilization activities, and the necessity for lake access for these activities while minimizing environmental impacts. Duke Energy further recognizes that these public access areas provide a convenient means for lake construction contractors to obtain access to the lakes to carry out their activities. However, contractors' use of access areas can potentially interfere with the public's use of the access areas, cause damage to the areas, and create liability concerns for Duke Energy. Therefore, conditional use of these areas is primarily being offered to allow a point of access to the lake with only very limited availability of the site for minor approved staging activities.

To ensure that contractors' use of the public access areas does not prohibit or hinder the public from using the access areas in the manner intended and to address the other items noted above, DE-LS has implemented a number of requirements regarding contractors' use of the public access areas. In general, authorization for generic limited use of the area may be requested for an entire year. Otherwise, special permits with specific concessions will be required for more complex work activities. Duke Energy will only consider allowing use of the public access areas to provide a point of access for individual construction activities if the respective lake construction contractor complies with the following requirements:

1. Metal Cable Anchors – No cable anchors will be allowed in any location on the access area.

2. Launching Ramps – Damage to ramps may occur as a result of contractors using these ramps to load or unload heavy equipment and materials such as tractor-trailers, loaders, tractors, pole-trailers, tandem-axle trucks, etc. These ramps were designed and built for boat launching and retrieval only and are generally not intended to support heavy equipment. These ramps are not to be used for any activity other than that included in the Special Use Permit. In no event shall rip rap or other rock be loaded, unloaded, or transferred on the access area, including the boat ramp(s).

3. Prohibited Activities – DE-LS has allowed the access areas to be used as staging areas, as a courtesy to lake construction contractors and adjoining property owners, as long as the work being performed did not interfere with public recreation and access. Duke Energy and the North Carolina Wildlife Resources Commission (for Duke-owned access areas in NC) will continue to allow permitted use of these areas with the understanding that the following work practices are not allowed:

    a. Parking commercial vehicles – All contractor vehicles must be parked in designated spaces. Parking will be allowed in the turnarounds long enough to unload material, at which time the vehicle will need to be moved to a designated space.

    b. Leaving docks/equipment unattended – Docks and equipment will not be left unattended at the access areas at any time.

c. Restricting public access – Structures and/or materials will not be placed on the access area or within the lake in a manner that restricts recreational use by the public.

d. Using the area during hours of primary recreation – The area shall not be used by contractors from 9:00am–6:00pm on weekends and holidays during the period from April 1 through September 30.

e. Using heavy equipment – Use of heavy equipment is generally not permitted on the access area. Permission is not granted to use the boat ramps for any activity other than that specified in the Special Use Permit.

f. Loading, unloading, or transfer of rip-rap or other rock – In no event shall rip-rap or other rock be loaded, unloaded, or transferred on the access area, including the boat ramp(s).

g. Using the area for more than point of access – Use of the area is primarily for access to the lake. Staging activities are not permitted unless specified and approved by NCWRC in the Special Use Permit.

h. Demolition activities – Debris may be loaded onto trailers for removal from the lake utilizing the boat ramp as a point of access, but demolition activities are prohibited at the access area.

i. Clearing vegetation and other damage – Removal of any vegetation from the access area is prohibited. In no event shall use of the area result in damage to access area facilities including, but not limited to, entrance roads, parking lots, turn-arounds, ramps, piers, pilings, signs, landscaping, and shoreline stabilization (including bioengineering).

j. Encroaching in front of adjoining property – Materials and/or structures shall not encroach across the imaginary projection of the property line between the access area and any adjoining property.

4. Existing Conditions – Contractors are expected to leave the area(s) in the same or better condition as when they arrived by removing all their equipment and materials, and removing any trash and construction debris they generate. Contractors are also expected to immediately report and make arrangements for reimbursement for any damage they cause as a result of utilizing the site. Duke Energy considers commercial use of the areas to be a privilege that can and will be revoked individually or as a whole for any reason if deemed necessary by DE-LS, the applicable wildlife resource management agency, or the access area lessee.

5. Insurance – Contractors must provide each year to DE-LS, prior to long-term access area use, a certificate of insurance endorsed to add the NCWRC (for use of Duke-owned access areas in NC) and Duke Energy as an additional insured including waivers of any right of subrogation of the insurers against the NCWRC and Duke Energy, its officers, directors, and employees. Contractors shall and will require each Subcontractor to (a) furnish properly executed certificates of insurance to DE-LS prior to commencement of work, which certificates shall clearly evidence all coverage's required and provide that such insurance shall not be terminated nor expire except on thirty days' prior written notice to DE-LS; (b) maintain such insurance from the time work first commences until completion of

the work under this agreement; and (c) replace such certificates for policies expiring prior to completion of work under this agreement.

J. Other Uses of Duke Energy-owned Access Areas

As Licensee, one of Duke Energy's primary responsibilities for management of the Duke Energy-owned Access Areas is to ensure that any activity at the areas does not prohibit or interfere with the public's use of the area for boating, fishing, or other authorized recreational uses. Use of these areas by entities in support of a business (e.g., storage of materials or boats), unless allowed as a Special Event or Contractor Use and identified in an application submitted and approved by DE-LS, is prohibited.

SECTION 8 – VEGETATION MANAGEMENT REQUIREMENTS

Vegetation management and maintenance of vegetated terrestrial and riparian areas is an important factor in protecting and enhancing a lake's values. Riparian and terrestrial areas primarily filter runoff and can help reduce shoreline erosion when vegetation extends to and/or below the shoreline, thus helping to reduce sedimentation and protect water quality. Vegetated shorelines also provide wildlife corridors and habitat and can enhance recreational opportunities. Therefore, DE-LS has developed requirements to protect riparian wildlife corridors on shoreline property within the FERC Project boundaries, in consultation with various lake stakeholders and stakeholder teams, as part of the relicensing process for the Catawba-Wateree Hydroelectric Project (FERC Project No. 2232), and with consideration given to impacts to private landowners with property adjoining the FERC Project Boundaries.

These Vegetated Management Requirements apply to lands within the FERC Project Boundaries of the Catawba-Wateree Project and Keowee-Toxaway Project:

RESERVOIR	FERC PROJECT #
Lake James	2232
Lake Rhodhiss	2232
Lake Hickory	2232
Lookout Shoals Lake	2232
Lake Norman	2232
Mountain Island Lake	2232
Lake Wylie	2232
Fishing Creek Reservoir	2232
Great Falls Reservoir	2232
Cedar Creek Reservoir	2232
Lake Wateree	2232
Lake Keowee	2503
Lake Jocassee	2503

A. General

Protection of areas (riparian and terrestrial) for wildlife movement is considered important by state and federal wildlife resource agencies concerned with the potential for development adjoining these environmentally important areas, and consideration should also be given to impacts to private landowners adjoining these areas.

1. The Duke Energy property within the Project Boundaries shall be maintained in a vegetated forested condition, where existing, that is typical of forested areas of the region. A properly vegetated area shall include canopy trees, sub-canopy trees, shrubs, herbaceous plants, and forest floor leaf and humus layers.

2. No clearing, thinning, spraying, planting, or sowing of any vegetation, except for removal of hazardous trees in imminent danger of falling on an individual, a structure or a proposed structure (constructed outside the Project Boundaries), or removal of non-native invasive plants and poisonous plants, shall be undertaken by any person or party without written concurrence from DE-LS, unless the alteration is consistent with an approved activity authorized by local ordinance or the Catawba River Riparian Buffer Rules in North Carolina. Non-native invasive plant lists can be found on the Internet at the following addresses:

   http://plants.usda.gov/cgi_bin/topics.cgi?earl=noxious.cgi

   http://www.nps.gov/plants/alien/

B. Vegetation Planting

Protection and enhancement of the important habitat areas can be accomplished by accommodating and supplementing the exiting native vegetation.

1. Vegetation native to the Piedmont region shall be required. (*Note: A sample plant list of commonly acceptable vegetation native to the Piedmont Region is available from DE-LS*.)
2. Native vegetation beneficial to wildlife shall be encouraged.
3. Turf grasses (e.g., fescue, Bermuda) shall not be planted and may not be allowed to become permanently established.
4. Native ground cover other than permanent turf grasses may be planted as an enhancement to existing native vegetation.
5. Permanent grasses (not including turf grasses) and other native vegetative cover may be permitted in conjunction with shoreline stabilization projects with written concurrence from DE-LS.

C. Vegetation Removal and Disturbance – General

Access to the lake over Project lands and waters can be accommodated, provided a primarily vegetated buffer is maintained with limited clearing.

1. Hand-Held Tools – Clearing, thinning, and pruning shall generally be accomplished with hand-held tools.
2. Mechanical Clearing – Mechanical clearing (e.g., bulldozers, backhoes, or other heavy equipment) shall not be used (Note 1) unless in conjunction with a shoreline stabilization project or as a remedial activity, approved by DE-LS, as a result of pest infestations. Disturbance for installation of stabilizing structures shall be restricted to the minimum needed to gain access and install stabilizing structures and shall not include clearing outside of the limits of the stabilization project.
3. Forest Floor – All soil and existing forest floor leaf and humus layers shall remain undisturbed and intact except for the construction of footpaths, authorized clearing, or the minimum disturbance needed to stabilize shoreline or install a DE-LS-approved structure.
4. Footpaths – Footpaths for individual lots shall be no more than four ft wide and should be designed in a winding manner, avoiding trees (> 3 inches *diameter at breast height [dbh]*) (see Glossary) and/or stepped to prevent surface runoff and

erosion. The least damaging alternative that will prevent erosion and sedimentation shall be selected.

5. Standing Trees – Standing trees that are dead, diseased, and in imminent danger of falling on an individual or structure may be removed without specific written concurrence from DE-LS. Dead trees that do not pose a hazard can provide habitat for wildlife, and adjoining property owners are encouraged to leave dead large diameter trees standing whenever possible.

6. Fallen Trees – Trees that fall into the lake and do not block or unnecessarily restrict navigational access should be left in place to benefit fish and/or wildlife.

7. Fallen Trees as Fish Habitat – Trees that are allowed to be cut from the land or shoreline, and where there is a desire to create fish habitat, should be securely anchored along the shoreline to improve fish and/or wildlife habitat or placed in the buffer as a downed log. Trees should be securely attached or anchored to prevent movement away from the shoreline. Trees that need to be cut but are away from the shoreline should be placed within the buffer to serve as downed logs.

8. Viewshed Management – Standing live trees (> 3 inches dbh) that are intentionally removed for the creation of viewsheds or access paths shall be replaced by a quantity of trees totaling the diameter of the tree removed. Replacement trees are not to be less than two inches in diameter (e.g., three 2-inch trees may replace one 6-inch tree). Diameter shall be measured at breast height (dbh) four and a half ft above the base of the tree. Replacement trees should be a native "ecological equivalent" of what is removed (i.e., a tree removed from the canopy should be replaced with a similar species that also has the potential to reach the canopy and sub-canopy trees should be replaced with similar sub-canopy species). Soil types, soil moisture, and shade tolerance should be considered when selecting replacement trees.

9. Pruning – Individual trees may not be pruned except for viewsheds and access paths as provided below.

10. Debris Removal Following Storms – Activities necessary for clearing debris and pruning existing trees as a result of substantial alteration of the natural forested canopy by extreme weather conditions (e.g., wind and ice storms) will be considered on an individual basis.

11. Grubbing or Grinding Tree Stumps – Grubbing or grinding of tree stumps of any size is not allowed except in the establishment of footpaths (large trees > 10 dbh must be avoided) and as approved as part of authorized stabilization activities.

12. Herbicide Use – Chemicals (herbicides) approved for use in water shall not be used to kill native non-invasive vegetation. Chemicals (herbicides) approved for use on land shall not be used to kill native non-invasive vegetation except poison ivy, poison sumac, and/or poison oak or exotic species listed in the NCDENR-Division of Parks and Recreation Exotic Plant Guidelines #30 as allowed in the Catawba River Basin Permanent Riparian Buffer Protection Rules.

13. Aquatic Herbicides – Chemical control of vegetation in or over water must be by approved aquatic herbicides. In North Carolina, approved aquatic herbicides applied to a public water body must be applied by a state certified aquatic pesticide applicator. In South Carolina, herbicides applied to a water body used

for public drinking water must have permission from the SCDHEC. In addition, all aquatic herbicide labels require applicators to notify a state natural resource agency before their application of a herbicide to public waters.

D. Viewsheds

Viewsheds are intended to allow adjoining home or structure owner's views of the lake and/or other surrounding natural features while maintaining a vegetated forested condition that includes a varied forest canopy (Figures 8D-1 through 8D-4).

1. A single viewshed may be established in consultation with a DE-LS representative once a home or building is constructed.
2. An on-site meeting between the DE-LS representative, the home or business owner, and any landscape contractor is required to establish the viewshed. The meeting will result in an approval letter that specifically identifies and lists all activities that can be accomplished to provide a viewshed including, but not limited to, pruning, topping, tree and/or vegetation removal, tree and/or vegetation replanting, etc.
3. Selective pruning/limbing may be allowed in accordance with the requirements of the Catawba River Basin Permanent Riparian Buffer Protection Rules to facilitate a viewshed. Native shrubs and vines shall not be pruned from the ground to a height of four ft.
4. A joint single viewshed may be created by two adjoining property owners with written concurrence from DE-LS.
5. Minimal topping and removal of only selected trees will be considered to establish a viewshed.
6. Viewsheds will not be allowed to be created within the Project Boundaries within the confines of adjoining areas designated as Environmental on the SMP.

Notes

1. Eminent Domain – Activities conducted by federal, state, or local governments, railroads, public utilities, or other entities that typically have the power of eminent domain (e.g., utility or roadway right of way, construction, and maintenance) are not subject to the provisions of this Section. However, such activities, where practical, should be conducted in a manner that is consistent with these requirements.
2. Approvals Prior to Adoption of Requirements – The provisions of these requirements shall not apply to DE-LS-approved maintenance or rebuild activities or activities (e.g., pier/docks, stabilization, mowing) which were allowed and/or approved by DE-LS prior to September 1, 2006.
3. North Carolina Catawba River Basin Permanent Riparian Buffer Protection Rules – The Catawba River Basin Permanent Riparian Buffer Protection Rules have been in effect since August 1, 2004 (a temporary rule was in effect from July 1, 2001 until July 31, 2004) in North Carolina. The temporary buffer protection rule and now the permanent rule 15A NCAC 2B.0243 requires maintaining and protecting existing 50-ft wide vegetated riparian (shoreline) areas along the mainstem lake shorelines from Lake James to Lake Wylie. This rule does not require establishment of new buffers unless the existing use in the buffer area

changes. The footprints of existing uses such as agriculture, buildings, commercial and other facilities, maintained lawns, and utility lines are exempt. Within this 50 ft of buffer, the first 30 ft closest to the water, referred to as Zone 1, is to remain undisturbed with the exception of certain activities. The outer 20 ft, referred to as Zone 2, must be vegetated, but certain additional uses are allowed.

4. Local Riparian Buffer Ordinances – All local governments that have land use authority along the mainstem of the Catawba River may adopt local riparian buffer ordinances. These local riparian buffer ordinances in North Carolina may be approved by the NCDENR- Division of Water Quality if it is determined by the Division that the local ordinances provide equal to or greater protection for water quality than the Catawba River Riparian Buffer Rule. Buffer regulations in South Carolina are governed by local ordinance.

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GLOSSARY

Activity – Any occupancy or use of lands and waters within the Project Boundaries or Duke Energy-owned peripheral strip.

Annual Average Capacity – A term used in conjunction with water intakes and wastewater effluent discharges to refer to the raw water withdrawal rate or wastewater discharge rate, both of which are expressed in million gallons per day (MGD) that the facility would have to operate at continuously for the calendar year in question to withdraw or discharge a given total volume of water. *(Note: See differences between annual peak capacity and ultimate capacity*.)

Annual Peak Capacity – A term used in conjunction with water intakes and wastewater effluent discharges to refer to the highest instantaneous raw water withdrawal rate or wastewater discharge rate, both of which are expressed in million gallons per day (MGD) that the facility will reach in a given calendar year. (*Note: See differences between annual average capacity and ultimate capacity*.)

Application – A Duke Energy form upon which the applicant describes and officially requests a given lake use. Each permitting program will typically have one or more application forms.

Area of Potential Effect – Term used when considering potential lake use activity effects on historic and archaeological resources and describing the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if any such properties exist.

Boat Cover – A structurally simple device (i.e., frame) with an outer-woven fabric cover that conforms specifically to the size (i.e., length, width, and height) of a single watercraft.

Boat house/Covered Boat Slip – A floating, single-story roofed structure with open sides and designed for long-term or temporary watercraft storage. (*Note: In the past, boathouses could also have enclosed sides, but this practice is no longer authorized.*)

Boat ramp/Marine Railway – An inclined structure extending from the shoreline into the lake for the purpose of launching and retrieving watercraft.

Boat Shelter – A non-floating, single-story roofed structure with open sides and designed for long-term or temporary watercraft storage. (*Note: In the past, boat shelters could also have enclosed sides, but this practice is no longer authorized*.)

Boat Slip – Also referred to simply as a slip, it is an unroofed structure designed for temporary or long-term watercraft storage. A boat slip is normally 10 ft wide by 20 ft long and confined by at least three sides; however, other sizes do exist and fewer than three sides may be confined. Boat slip is synonymous with the term “boat docking location” and means one boat slip can accommodate only one watercraft at a time.

Boat Lift/hoist – A mooring device that lifts the watercraft above the lake level normally utilizing buoyant pontoons or a series of cables and winches. By definition, the area where the boatlift/hoist is located is also considered a boat slip.

Build-out Period – Time period allowed to complete construction, excavation or shoreline stabilization work under an approved Duke Energy lake use permit. The build-out period

begins with the date of application approval by DE-LS and ends with the last date of any approved time extensions.

Business/Industrial Access – Lake access that directly supports a privately-owned industrial or commercial business, but which has little to no effect on boating. Examples include, but are not limited to, water intakes and discharges for factories, sand mining operations, certain utility connections, plant/business access roads, and commercial business staging areas.

Catawba-Wateree Hydroelectric Project – A hydroelectric project (also referred to simply as the Project) located on the Catawba and Wateree rivers and their tributaries in North Carolina and South Carolina. The Project consists of 11 hydroelectric developments, each having a reservoir formed by one or more dams and one or more hydroelectric stations. The Project is operated pursuant to a license issued by the FERC (FERC Project No. 2232).

Causeway – A raised road crossing a ravine, stream, or portion of a lake on which soil and/or rock are placed to build up the roadbed to a point where surface water will not typically over-top the road. Culvert pipes are typically used to allow surface water to pass under/through the road.

Commercial Marina Facility – A shoreline classification and the related business operation that involves the non-project use of project lands and waters for facilities where boats can be launched, retrieved, or moored and where provisions for food services or convenience retailing, including petroleum dispensing, wet and dry storage of watercraft, and other activities customarily associated with marinas and yacht clubs are made. (*Note: See Glossary for definitions of True Public Marina, Residential Marina, Project Use, and non-project use to differentiate between the different types and uses of marinas*.)

Common-Use Facility – A shared boat dock or other recreational facility that can accommodate no more than 10 watercraft at a time and is intended to serve only the owners or leaseholders of private, project-front lots. (*Note: Common-Use Facilities may not serve off-water lots or any lot containing a multi-family dwelling*.)

Conveyance – The granting of rights for the use of Project lands and waters under a given set of conditions. Duke Energy may use easements, rights-of-way, leases, certain types of user's agreements/permits, or fee title transfers to grant these rights.

Cove Width – Horizontal length of the shortest imaginary line extending from the full pond contour on one side of a cove and connecting to the full pond contour on the opposite side of the cove. Except for constricted coves, the cove width will not decrease as one moves from the head (i.e., closed end) of the cove to its mouth (i.e., open end).

Critical Reservoir Elevation (CRE) – Unless it is otherwise stated as applying only to a specific intake or type of intake, the Critical Reservoir Elevation is the highest level of water in a reservoir (measured in feet above Mean Sea Level (msl) or feet relative to the full pond contour with 100.0 ft. corresponding to full pond) below which any Large Water Intake used for Public Water Supply or industrial uses, or any regional power plant intake located on the reservoir will not operate at its Licensee-approved capacity.

Cut-off Area – Portion of the lake that is physically cut off for navigational purposes from the majority of the lake by a man-made structure (e.g., existing dam, causeway, low bridge) or a natural feature when the lake is at or above its normal target operating level during the peak recreation season.

Diameter at Breast Height (dbh) – The diameter of the stem of a tree measured at 4.5 ft from the ground. On sloping ground, this measurement is taken on the uphill side.

Dock/pier – A structure for storing/mooring watercraft or providing other recreational access to a lake (e.g., fishing).

Double Handling – The placement of excavated material within the Project Boundaries before final removal.

Earthfill – The placement of unauthorized fill material (soil or rock) within the Project Boundaries.

Easement – The granting or definition of certain rights in real property within the Project Boundaries or on Duke Energy property. Easements are typically handled through the Conveyance Program and are used to regulate activities such as utility lines, roadway crossings, water intakes, and discharges.

Encroachment – Lake use structure or activity, which was placed/done without obtaining the necessary permits/approvals.

Environmental Assessment (EA) – The process of examining proposed projects and their reasonable alternatives for potential environmental impacts prior to making decisions on implementation. The Environmental Assessment document is prepared by the FERC staff or a DE-LS-approved contractor and evaluates the Project's merits and no-action alternatives to determine a conclusion and make appropriate recommendations to the FERC and/or Duke Energy concerning project approval, disapproval, or modification.

Environmental Offset – An area measured laterally along the shoreline that extends 50 ft from an Environmental classification. This area along the shoreline within the Project Boundaries shall remain undisturbed and act as a buffer between the Environmental classification and any future lake use permitting activities except for maintenance and access to previously approved facilities.

Environmentally-Important Areas – Areas along the shoreline within the Project Boundaries that provide important habitat for fish and wildlife. These areas may have additional lake use restrictions because of their unique character.

Excavation/Dredging – Removal of soil or rock material, either by hand or with mechanized equipment, from within the Project Boundaries by permit only.

FERC – Federal Energy Regulatory Commission. The FERC is responsible for licensing and ensuring regulatory compliance for the nation's non-federal hydropower projects.

Facility – A structure or combination of structures that is/are placed within the Project Boundaries by the applicant.

Facility Emergency Repair – The immediate and major repair of an existing facility to prevent imminent loss of personnel property, human life, or a major environmental incident. The need for a facility emergency repair will typically arise from catastrophic structural failure and the risks are too great to afford going through normal lake use permitting channels. (*Note: Facility owners must notify DE-LS personnel in a timely manner following an emergency repair. Only those repairs needed to stabilize the situation and remove the immediate risks are considered emergency repairs. Any additional modifications or modifications that are not done immediately must go through required permitting channels*.)

Facility Expansion – The modification of an existing facility that results in an increase of its lakeward extension, increases in calculated square footage, an increase in the number of boats it can accommodate, increases in water quantities withdrawn from or discharged to the Project, or an increase in the amount of Project area leased. (*Note: The addition of an uncovered boatlift/hoist within a previously approved slip is not considered an expansion*.)

Facility Maintenance – The ongoing minor repair of an existing permitted facility (i.e., structure or combination of structures) that does not involve repair of more than 25% of a primary component or any combination of primary components (e.g., decking, joists, roof, rafters) with each individual component at or less than 25% or complete repair of one single primary component (e.g., decking, joists, roof, rafters) of that facility in any amount or complete repair of one single structure (e.g., boathouse, float, stationary pier) in a multi-structure facility, within a calendar year. Replacement of flotation and pilings, in any amount, is considered maintenance. (*Note: Maintenance activities are minor in nature compared to rebuilds, and require application and written authorization from DE-LS prior to initiation*.)

If a primary component or any combination of primary components (with each individual component at or less than 25 %) becomes in such a state of disrepair that more than 25% repair or complete repair of more than one single component or complete repair of one single structure in a multi-structure facility within a calendar year is the only practical alternative, then the work would be considered a rebuild and not maintenance. (*Note: Of the three types of facility modification –expansion, maintenance, and rebuild– Facility Maintenance is the most minor in nature*.)

Facility Rebuild – The total replacement of an existing, permitted facility or replacement of more than 25% of a primary component (e.g., decking, joists, roof, rafters) when rebuilding a single component (or any combination of components when rebuilding more than one component of an existing permitted facility) or any other repair or replacement of the facility if a single structure in a multi-structure facility is replaced within a calendar year.

Facility Reconfiguration – The modification of an existing facility that is not considered a Facility Expansion but merely a rearrangement of the orientation of the combination of structures that comprise a permitted facility. Reconfiguration is only allowed with permitted facilities that comply with the current guidelines in effect at the time of the proposed reconfiguration. (*Note: Reconfiguration requests are considered to be minor in nature and similar to Facility Maintenance. However, since on-site inspections are required for reconfiguration requests, the same fees will apply as those charged for a Facility Rebuild*.)

Facility Reduction – The removal of any portion of a permitted facility from within the Project Boundaries. (*Note: The reduction must be approved in writing by DE-LS and does not require the entire facility to comply with the guidelines in effect at the time of reduction for non-conforming facilities*.)

Fee – A dollar amount paid by the applicant or lake user to Duke Energy to help offset Duke Energy's costs for operating a comprehensive lake management program.

Float – A floating platform for use by swimmers or for docking watercraft, which is attached to a permitted structure.

Flood Easement – An easement (typically covering 10 or more ft vertical above full pond elevation) that is reserved on a tract-by-tract basis to protect Duke Energy from liability

claims following high water events and to reserve certain rights necessary for operation of the company's electric business.

Full Pond Elevation – The elevation, measured in feet above mean sea level (ft msl), of the top of a lake's spillway or the top of the floodgates (if applicable).

Historic Property (HP) – Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.

Houseboat – Watercraft equipped with facilities customarily found necessary to support human habitation (e.g., enclosed cabin, restroom, sink, or shower, sleeping facility).

Implicit Uses – Lake uses that are implied parts of Duke Energy's lake access philosophy and therefore do not require any specific written approval from Duke Energy (see Section 7A.).

Individual Private Facility – A facility that provides access to the lake for the owner of a single, project-front lot. Individual private facilities may include, but are not limited to, piers, docks, boathouses, boat shelters, floats, boat slips, existing boat ramps, and marine railways. (*Note: Individual private facilities may not serve multiple project-front lots, off-water lots, or any lot containing a multi-family dwelling*.)

Lake Access Service Programs – Broad-based Duke Energy programs that are needed as a result of allowed lake access or that directly benefit lake users (e.g., lake use permitting programs, mosquito and aquatic weed control programs, lake facility operation and maintenance programs, shoreline management and public recreation planning programs, public safety programs, dam repair programs).

Lake Access – Ability to use land or water within the Project Boundaries or Duke Energy-owned peripheral strip of a Duke Energy lake. Uses include, but are not limited to, piers, existing boat ramps and marine railways, mooring buoys, boathouses, boat shelters, boatlifts, marinas, utility line, roadway and other infrastructure rights-of-way, excavation areas, shoreline stabilization devices, beaches, water intakes, wastewater discharges, boating access areas, bankfishing areas, public parks, trails, and sand mining operations.

Lake Use Permit Request – A written request from any party requesting written authorization from Duke Energy (i.e., a permit) to use land or water within the full pond contour, Project Boundaries, or Duke Energy-owned peripheral strip of a Duke Energy lake.

Large Water Intake – Any water intake (e.g., public water supply, industrial, agricultural, power plant, etc.) having a maximum instantaneous capacity greater than or equal to one Million Gallons per Day (MGD) that withdraws water from the Catawba-Wateree River Basin..

Licensee – The entity holding a hydroelectric project's operating license from the FERC at any given time. As of July 2006, the Licensee for the Catawba-Wateree Hydro Project (FERC No. 2232) and the Keowee-Toxaway Hydro Project (FERC No. 2503) is Duke Power Company LLC, doing business as Duke Energy Carolinas, LLC.

Low Inflow Protocol (LIP) – The written protocol (see Appendix C: Low Inflow Protocol) that provides procedures for how the Project will be operated by the Licensee and how other water users should respond during low inflow periods. The LIP was developed on the basis that all parties with interests in water quantity will reduce their water consumption as needed and therefore share the responsibility of conserving the limited

water supply. The LIP also identifies communications channels to help coordinate between water users.

Maintenance Excavation – The removal of accumulated sand/sediments, needed to restore the necessary water depth to allow the continued use of a previously approved lake use activity (not including facility expansion).

Marine Railway – An inclined structure consisting of a combination of tracks and a cradle, normally extending from a boathouse or boat shelter, for the purpose of launching and retrieving watercraft.

Minimum Lease/Easement Area – The conveyed area typically associated with leases or easements of Project property that includes the minimum area necessary for boating access. This maneuvering area consists of 2 times the slip length at the point of slip ingress/egress and 15 ft along all other sides of the facility.

Mitigation – Actions required of the applicant/lake user for a proposed activity to offset the activity's impacts and to ensure the lake's scenic, environmental, recreational, and cultural values are protected and enhanced. *(Note: Applicants/lake users should first seek to avoid any such impacts. If complete avoidance is not feasible or practicable, then redesigns should be explored to minimize impacts before mitigation is considered*.)

Non-Conforming Structure – An existing, previously permitted lake structure that does not comply with later revisions of the SMG or other permitting policies.

Non-Project Uses – Term used by the FERC to identify all uses of FERC Project land and water except those directly associated with the hydro station, the lake's dams and flow diversion devices, and the license-required uses (e.g., specific public recreational and environmental enhancements).

Normal Drawdown – The vertical distance in feet from the full pond elevation to the lowest lake elevation that is normally targeted in a calendar year. (*Note: The actual, lowest lake level reached in a given year may vary significantly from the normal drawdown target due to a number of factors including, but not limited to, weather conditions and electricity demand*.)

Normal Full Pond Elevation – Also referred to simply as full pond, this is the level of a reservoir that corresponds to the point at which water would first begin to spill from the reservoir's dam(s) if the licensee took no action. This level corresponds to the lowest point along the top of the spillway (including flashboards) for reservoirs without floodgates and to the lowest point along the top of the floodgates for reservoirs that have them. To avoid confusion among the many reservoirs the licensee operates; it has adopted the practice of referring to the Full Pond Elevation for all of its reservoirs as equal to 100.0 ft relative.

Normal Maximum Elevation – The level of a reservoir, measured in feet above mean sea level (ft msl) or feet relative to the full pond contour with 100.0 ft corresponding to full pond, that defines the top of the reservoir's Normal Operating Range for a given day of the year. If inflows and outflows to the reservoir are kept within some reasonable range of the average or expected amounts, hydroelectric project equipment is operating properly, and no protocols for abnormal conditions have been implemented, reservoir level excursions above the Normal Maximum Elevation should not occur.

Normal Minimum Elevation – The level of a reservoir, measured in feet above mean sea level (ft msl) or feet relative to the full pond contour with 100.0 ft corresponding to full pond, that defines the bottom of the reservoir's Normal Operating Range for a given day

of the year. If inflows and outflows to the reservoir are kept within some reasonable range of the average or expected amounts, hydroelectric project equipment is operating properly, and no protocols for abnormal conditions have been implemented, reservoir level excursions below the Normal Minimum Elevation should not occur.

Normal Operating Range for Lake Levels – The band of reservoir levels within which the Licensee normally attempts to maintain a given reservoir that it operates on a given day. Each reservoir has its own specific Normal Operating Range, and that range is bounded by a Normal Maximum Elevation and a Normal Minimum Elevation. If inflows and outflows to the reservoir are kept within some reasonable range of the average or expected amounts, hydroelectric project equipment is operating properly, and no protocols for abnormal conditions have been implemented, reservoir level excursions outside of the Normal Operating Range should not occur.

Off-water Lot – A tract of land that is defined by a registered survey plat and that does not have a common boundary with the full pond elevation contour, the Project Boundaries, or the Duke Energy-owned peripheral strip bordering a Duke Energy lake.

Peripheral Strip – Also referred to as the *shoreline strip*, it is the strip of Duke Energy-owned land adjoining and lying above the full pond elevation of some Duke Energy lakes. In certain areas there may be little to no peripheral strip, whereas in others, such as portions of Belews Lake and Lakes Keowee and Jocassee, the peripheral strip may extend to a contour 10 to 15 vertical ft or more above full pond elevation. Except for the implicit uses, all uses of land and water within the peripheral strip must be authorized by Duke Energy.

Permanent Water Intake – Any intake (e.g., power plant, public water supply, industrial) that is used as a primary means of transporting water to immobile processing facilities.

Permit – The written authorization from Duke Energy that is required prior to beginning any construction, excavation, shoreline stabilization, vegetation removal, or activating a conveyance within the full pond contour, Project Boundaries, or Duke Energy-owned peripheral strip of a Duke Energy lake.

Pier Zone – A planning tool used by some real estate developers to aid property owners in defining an area in which water-based facilities may be constructed. Where they exist, these pier zones will often be incorporated into subdivision covenants. The use of pier zones does not supersede the requirements of the applicable SMG criteria, ordinances, or regulations (e.g., General Permits in South Carolina and county requirements limiting crossing of projected property lines, pier lengths). Duke Energy also does not handle enforcement of pier zones and the presence of a pier zone does not guarantee any form of lake access will actually be approved by Duke Energy.

Power Line Rights-of-Way – Strip of land identified by an easement, fee-simple deed description, or other means that contains or is planned to contain any type of power line. Examples of power lines include transmission, distribution, and retail lines (both Duke Energy and non-Duke Energy, overhead and underground) for transmitting electric power, cable TV lines, telephone lines, telegraph lines, railroad signal lines, or any type of line that carries electric power.

Private Access – Lake access that is restricted to selected individuals according to where they live, where they work, membership in a specific club, etc. Examples include, but are not limited to, Individual Private Facilities, common-use facilities, slips in Residential Marina Facilities, slips in marinas developed for clubs, recreation areas for

employees of a specific company, slips for non-transient campgrounds (i.e., rent for more than 14 days), heat exchange coil zones for heat pumps, and private roadways.

Private Roadway – Any combination of roads, causeways, bridges, etc. that do not meet the requirements of a public roadway.

Project Boundaries – The area surrounding hydroelectric project facilities and features necessary to operate the Project as delineated in Exhibit F, G or K of the FERC license.

Project-front Lot – A tract of land that is defined by a registered survey plat and that has a common boundary with the full pond elevation contour, the Project Boundaries, or the Duke Energy-owned peripheral strip bordering a Duke Energy lake.

Project Uses – A term used in conjunction with FERC licensed projects to include those uses of FERC Project land and water that are required for construction, operation and maintenance of the Project's dam(s), powerhouse(s), electric transmission facilities (typically powerhouse to and including the tie station), and any facilities required to meet the Project's licensing commitments for recreation and wildlife management. Project uses are considered mandatory by the FERC and other uses must not be allowed to impair them.

Property Reclamation – Adding significant fill material, beyond the customary minimum amount of backfilling necessary for a Duke Energy-permitted shoreline stabilization activity, to re-establish dry land in areas where shoreline erosion has caused the loss of dry land owned by adjoining property owners.

Public Entity – Agency, organization, department, etc. that is charged with providing services and/or maintaining basic facilities for the general public.

Public Infrastructure Access – Non-recreational lake access that directly supports regional public infrastructure needs. Examples include, but are not limited to, county, municipal, or utility water intakes and discharges, public roadway, and utility line rights-of-way, railroad crossings, boat mooring/launching facilities for emergency response activities and for state and local law enforcement support.

Public Recreational Access – Lake access that provides for the operation and management of recreational opportunities for the general public that directly support the requirements of Duke Energy's FERC licenses and are not restricted to selected individuals. Examples include, but are not limited to, Duke Energy-owned public access areas, federal, state, and local parks and recreation areas and True Public Marinas.

Public Roadway – Any combination of roads, causeways, bridges, etc. that is required to meet transportation needs of the general public, is open to the general public for their use, and is maintained by a public entity.

Public Water Supply – any water delivery system owned and/or operated by any governmental or private entity that utilizes waters from the Catawba-Wateree River Basin for the public interest including drinking water; residential, commercial, industrial, and institutional uses; irrigation, and/or other public uses.

Registered Survey – Scaled drawing, prepared and stamped by a duly licensed Registered Land Surveyor, to provide a metes and bounds description of a particular tract of land. (*Note: A survey plat does not have to be recorded at the local Register of Deeds Office to be considered a registered survey*.)

Residential Marina Facility – A shoreline classification that involves the non-project use of project lands and waters for facilities where watercraft can be launched, retrieved, or

moored for the purpose of providing access to the lake for certain residential property owners (e.g., off-water and project-front lots, non-transient campgrounds, multi-family dwellings). Residential properties associated with this classification include townhouses, condominiums, apartments, some campgrounds, and subdivision access lots.

Rip-Rap – Large crushed stone Class B or larger.

Seawall – Also called a retaining wall or bulkhead, a seawall is a vertical wall constructed at or near the Project Boundaries for shoreline stabilization. Seawalls commonly consist of treated wood, masonry, formed concrete, or sheet piling.

Security Deposit – A dollar amount paid by the applicant to Duke Energy at the time a permit is applied for that will be refunded if the applicant complies with all permitting program guidelines.

Shoreline Management Guidelines (SMG) – The written document that contains conditions and limitations required for certain types of access to the Project's shoreline properties, and also guidelines designed to meet the Licensee's regulatory requirements, protect the Licensee's hydroelectric generation interests, protect the scenic, cultural and environmental values of the Project's shoreline property, provide recreational benefits to the general public, and provide a guide to adjacent property owners on permitted uses of Project properties. The Shoreline Management Guidelines are often provided as additional information within the Shoreline Management Plan and provide permitting criteria that are applied on a site-specific basis.

Shoreline Management Plan (SMP) –. A written document that provides guidance to the Licensee for implementing a comprehensive lake use permitting program to manage uses of lands and waters within the FERC Project Boundaries. Components of the Shoreline Management Plan may include but are not limited to programmatic agreements for addressing specific issues, maps depicting classifications of the shoreline of each reservoir, and lake use permitting restrictions associated with each classification.

Shoreline Stabilization Expansion – An increase in the linear distance of shoreline stabilized, regardless of the stabilization technique (i.e., bulkhead, rip-rap, landscape plantings), and/or an increase in the vertical height of bulkheads.

Shoreline Stabilization Maintenance – The ongoing minor repair of existing permitted shoreline stabilization that does not involve repair of more than 25% of a primary component or any combination of primary components (e.g., pilings, deadmen, anchors, blocks, boards) with each individual component at or less than 25% or complete repair of one single primary component (e.g., pilings, deadmen, anchors, blocks, boards) of that facility in any amount, within a calendar year. Replenishing existing rip-rap or landscape plantings within the confines of the originally stabilized area of the bank is considered maintenance. (*Note: Maintenance activities are minor in nature compared to rebuilds, and require application and written authorization from DE-LS prior to initiation*.)

If a primary component or any combination of primary components (with each individual component at or less than 25%) becomes in such a state of disrepair that more than 25% repair or complete repair of more than one single component within a calendar year is the only practical alternative, then the work would be considered a rebuild and not maintenance. (*Note: Of the three types of facility modification – expansion, maintenance, and rebuild – Facility Maintenance is the most minor in nature.*)

Shoreline Stabilization Rebuild – The total replacement of existing, permitted shoreline stabilization or replacement of more than 25% of a primary component (e.g., pilings, deadmen, anchors, blocks, boards) when replacing more than one component of shoreline stabilization within a calendar year.

Small Water Intake – Any water intake (e.g., public water supply, industrial, agricultural, power plant) having a maximum instantaneous capacity less than 1 million gallons per day (MGD).

Special Ruling – Duke Energy decision on a proposed activity that is necessary due to a lack of applicable permitting processes, policies, or criteria or to prevent guideline manipulation that would allow uses that violate the intent of the permitting programs.

Stop-Work Directive – Verbal or written statement from DE-LS directing an immediate halt to an activity within the Project Boundaries or peripheral strip. Such directives are issued when any violation of this manual is detected. Violations will have negative consequences for the applicant and additional written authorization from DE-LS is required before the activity can resume.

Subdivision – An area of land that has been divided into multiple residential lots.

Subdivision Access Lot – A tract of project-front property within the boundaries of a residential subdivision that has been set aside for providing lake access for owners of off-water and/or project-front lots.

Substantial Equity Interest – Financial interest in real property adjoining a Duke Energy lake that significantly exceeds the value of facilities an applicant desires to place within the Project Boundaries or on the Duke Energy-owned peripheral strip. (*Note: To retain full legal compliance avenues, Duke Energy will normally only consider lake use permit requests from applicants who have a substantial equity interest [as determined by Duke Energy in its sole discretion]. With few exceptions, this equity interest must be established through fee-simple ownership of the adjoining property. Easements may be considered as a substantial equity interest where fee-simple ownership is not customary [e.g., for public need projects where the applicant is a public entity].*)

Temporary Water Intake – Any intake (e.g., irrigation, industrial, agricultural, fire suppression) that is used on an intermittent and/or short-term (less than one year) basis that can have the supply line removed and/or installed in one day.

True Public Marina (TPM) – A business operation that involves the public's use of project lands and waters for facilities where boats can be launched, retrieved or moored and where activities customarily associated with marinas are provided to the public. There is no predetermination of user groups for the use of any of the land or water-based facilities, no membership requirements, and transient services (e.g., use of the gas dock, restrooms, or pump-out facility) do not require wet slip or dry storage rental. Land and water-based services for transient users are provided at less than or equal to a reasonable and customary fee. (*Exception: There are existing Marina Facilities that are characteristically operated as True Public Marinas although they allow Residential Marina-type access on a very limited basis. These existing marinas may be afforded the same considerations provided new True Public Marina facilities if the number of wetslips and dry storage bays dedicated for Residential Marina-type access is ≤ 10% of the total number of wetslips and dry storage bays within the marina facility and any considerations are approved by DE-LS. This exception only applies to the very limited number of exiting marina facilities that meet the ≤ 10% requirement as of January 1, 2006*.)

Ultimate Capacity – A term used in conjunction with water intakes and wastewater effluent discharges to refer to the maximum, instantaneous raw water withdrawal rate or wastewater discharge rate, both of which are expressed in million gallons per day (MGD), that the facility is designed to achieve throughout its design life. (*Note: See differences between annual average capacity and annual peak capacity*.)

Utility Line Crossing – Any combination of wires, cables, or pipelines and their associated structural supports that are used to transport energy, fuel, telecommunications signals, water, wastewater, etc. and that fall within a common maintenance right-of-way which crosses any part of the FERC Project Boundaries or Duke Energy-owned peripheral strip. Examples include, but are not limited to, transmission, distribution, and retail lines for telephone, telegraph, cable TV, railroad signal, petroleum product, and electric utilities; water mains; and sewer lines.

Variance – Selective deviation from applicable and established permitting policies and criteria to allow a proposed activity's approval. (*Note: Except for project uses and non-project uses for public infrastructure access, Duke Energy will not consider variance requests from its established policies and criteria; and even then, only in cases where there is no other feasible alternative and a variance is clearly the best option for meeting the specific lake user needs while still preserving the DE-LS Goals and Objectives*.)

Violation – Any activity within the Project Boundaries or peripheral strip that does not comply with the requirements established by this manual.

Watercraft – A boat, personal watercraft (e.g., jet ski), or any vessel that can transport a person on water.

Water-based Recreational Equipment – Any large recreational equipment placed within the Project Boundaries that is not specifically designed to be used in conjunction with watercraft. (*Note: These items include, but are not limited to, trampolines, sliding and diving boards not permanently attached to a permitted structure, blobs, > three-person towables, and other large inflatable recreational items*.)

Water Toys – Any small recreational equipment that is temporarily placed within the Project Boundaries that is primarily used in conjunction with moving watercraft. (*Note: These items include, but are not limited to, ski and inner tubes, ski bobs, and less than three-person towables*.)

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FIGURES

List of Figures

[1] Figure number refers first to the Section (e.g., Marina Facilities Program), second to the Paragraph within the Section, and third to the sequential figure number within that Section.

5B-4 No New or Expanded Stabilization Activities within 50-Foot Environmental Area Offset

8D-1 C-W[2] Viewshed Guidelines (Steep Slope)

8D-2 C-W Viewshed Guidelines (Gradual Slope)

8D-2a K-T Viewshed Guidelines

8D-3 Viewshed Examples

8D-4 Viewshed Examples

[2] C-W refers to the Catawba-Wateree Hydro Project

DUKE ENERGY EVALUATION PROCESS FOR NON-PROJECT-USE REQUESTS

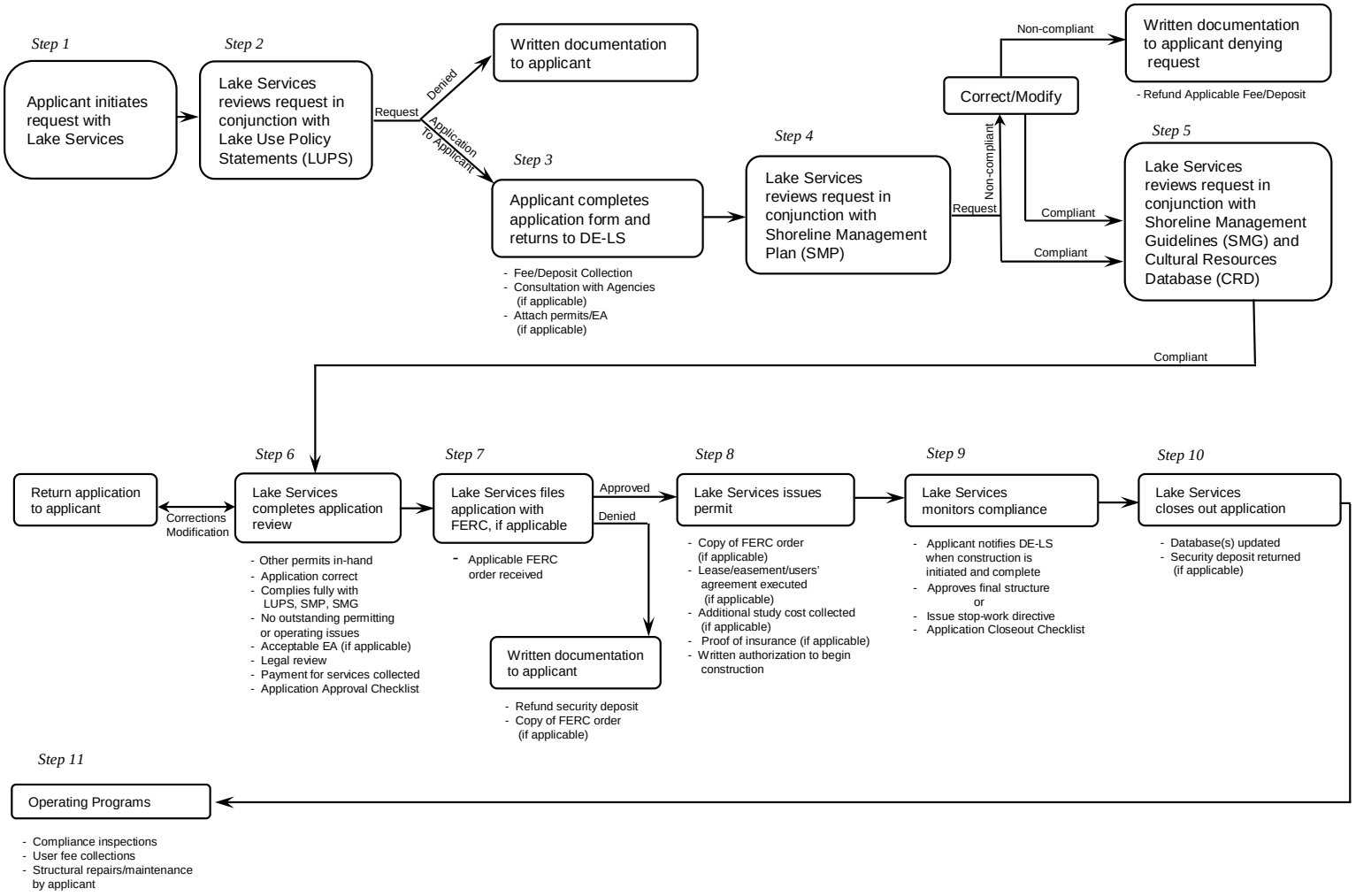
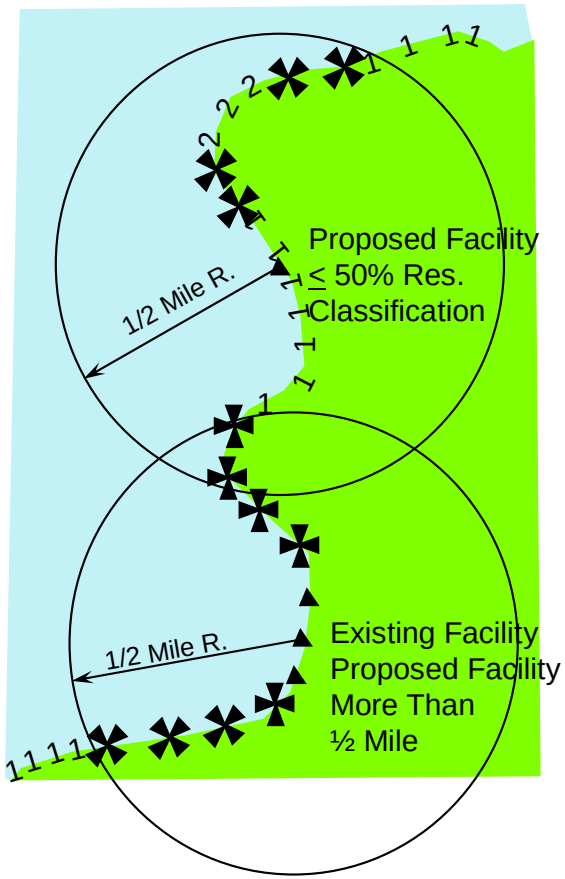
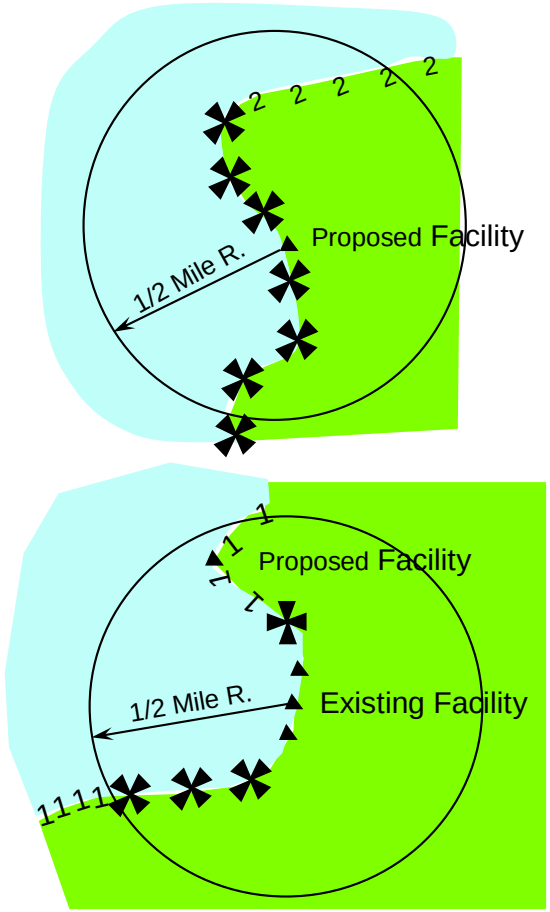


Figure 1

LOCATION OF NEW COMMERCIAL MARINA FACILITIES



Compliant



Non-Compliant

Figure 1B-1

NO NEW OR EXPANDED FACILITIES WITHIN 50-FOOT ENVIRONMENTAL AREA OFFSET

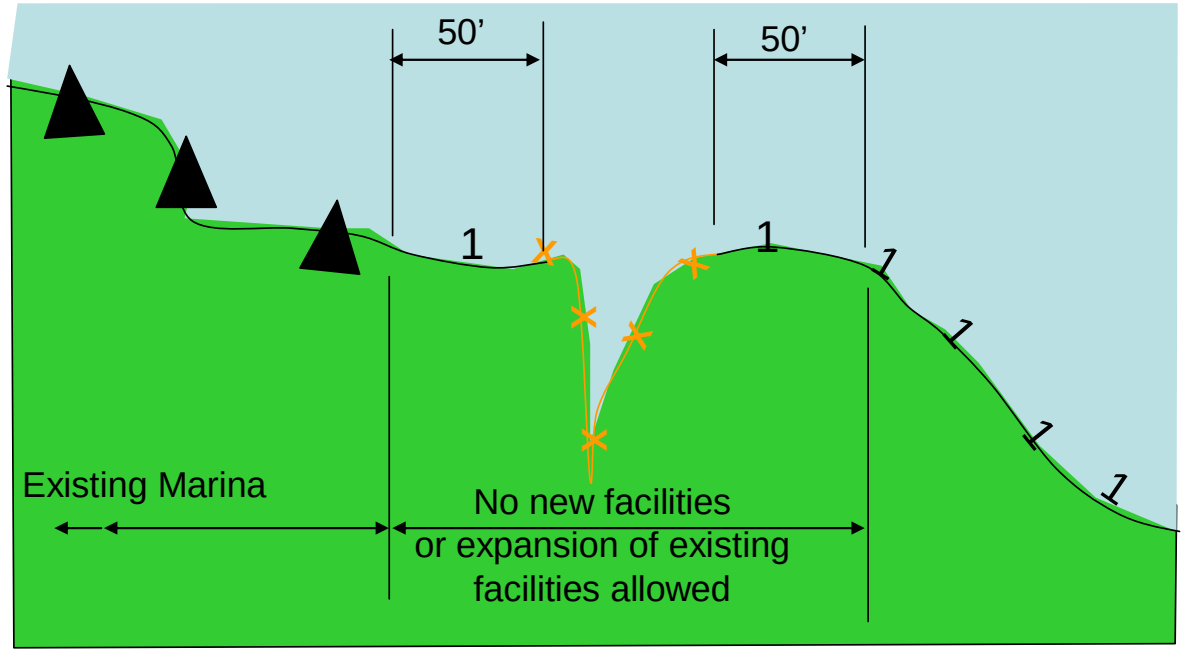


Figure 1B-2

OPEN CHANNEL REQUIREMENTS

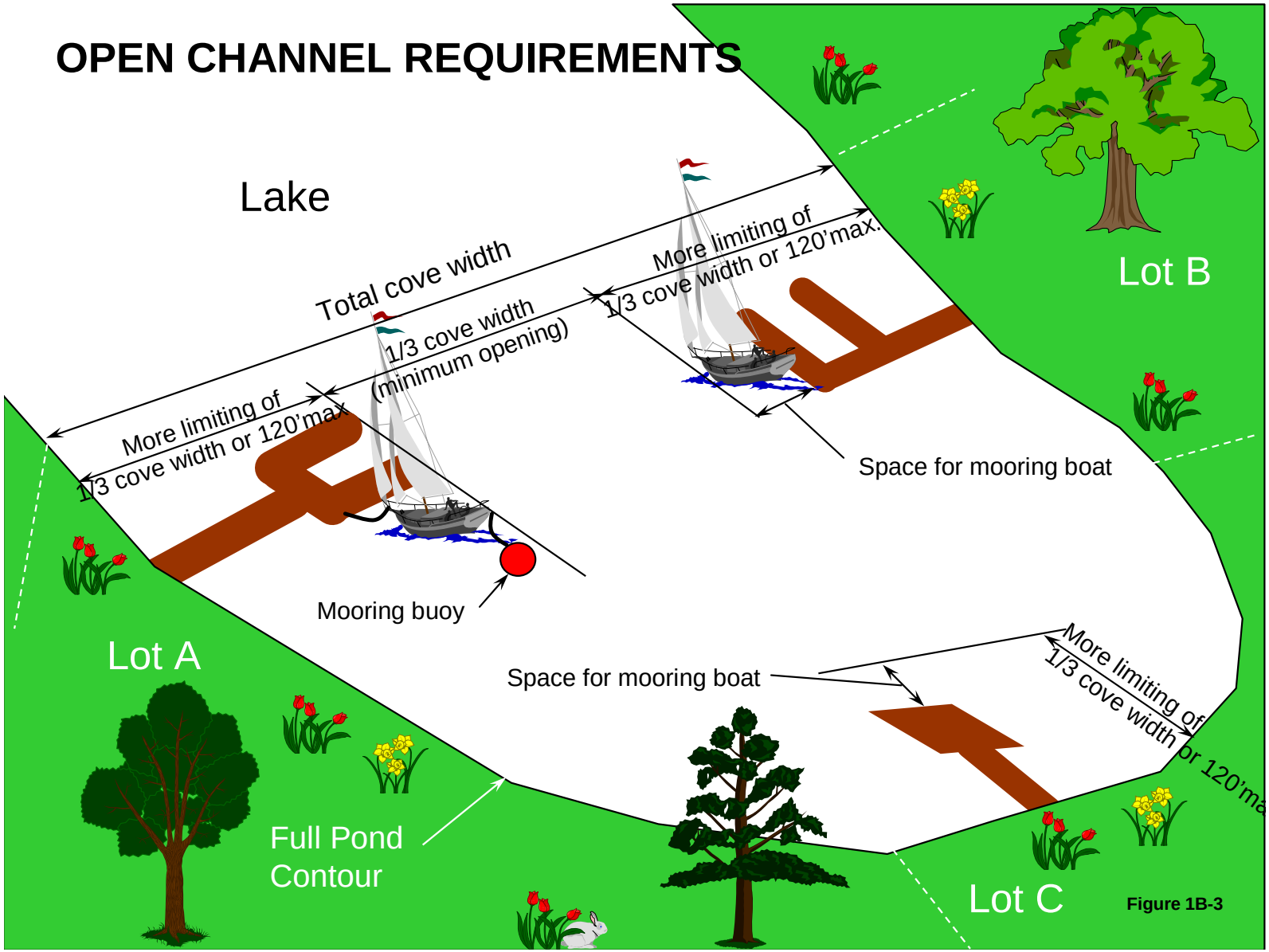


Figure 1B-3

NO NEW OR EXPANDED MARINA FACILITIES IN NARROW COVES

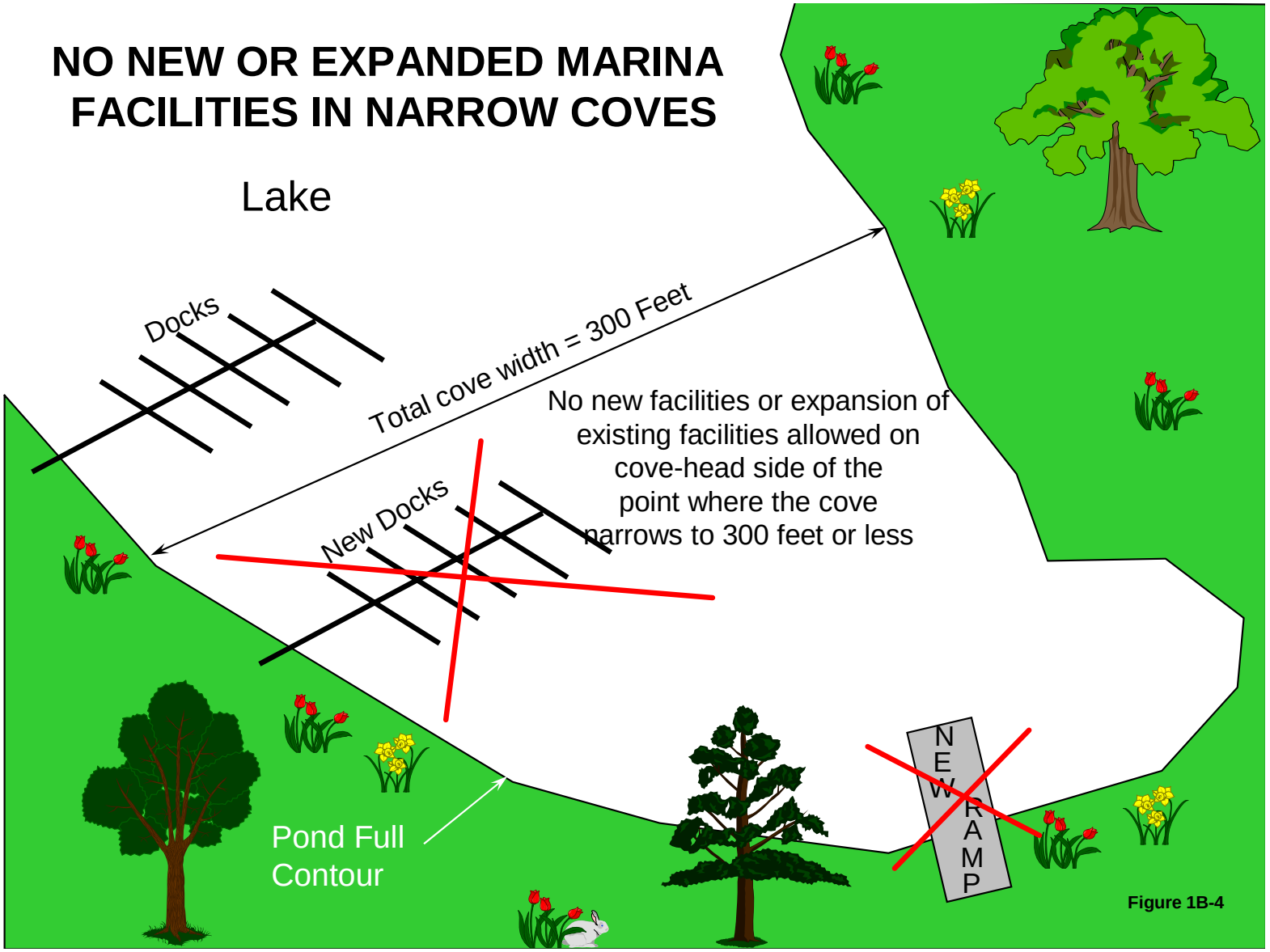


Figure 1B-4

MINIMUM GUIDANCE FOR METES AND BOUNDS DESCRIPTION OF PROJECT AREA LEASES/USE AGREEMENTS FOR MARINA FACILITIES

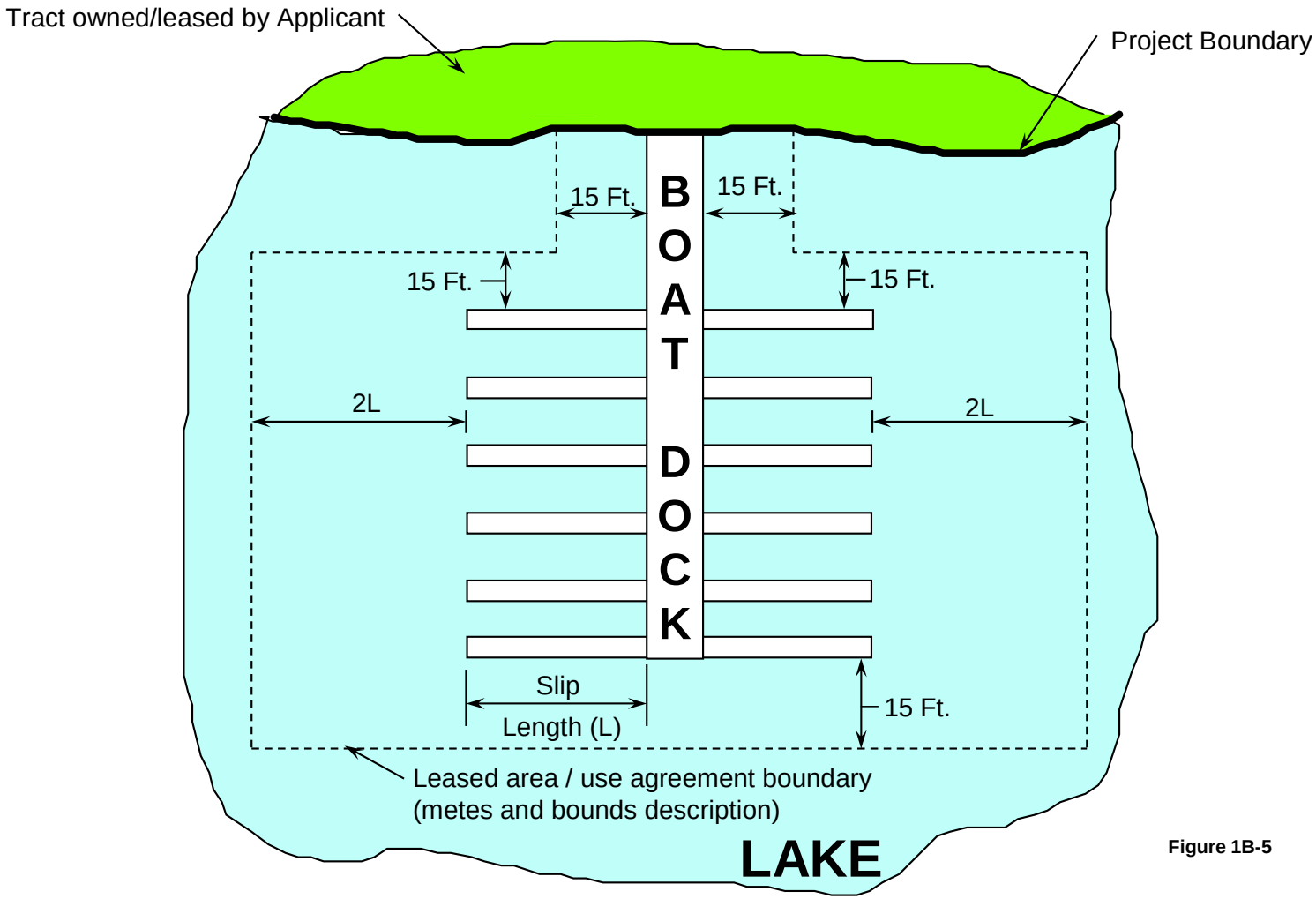


Figure 1B-5

OPEN CHANNEL REQUIREMENTS FOR NEW/EXPANDING MARINA FACILITY

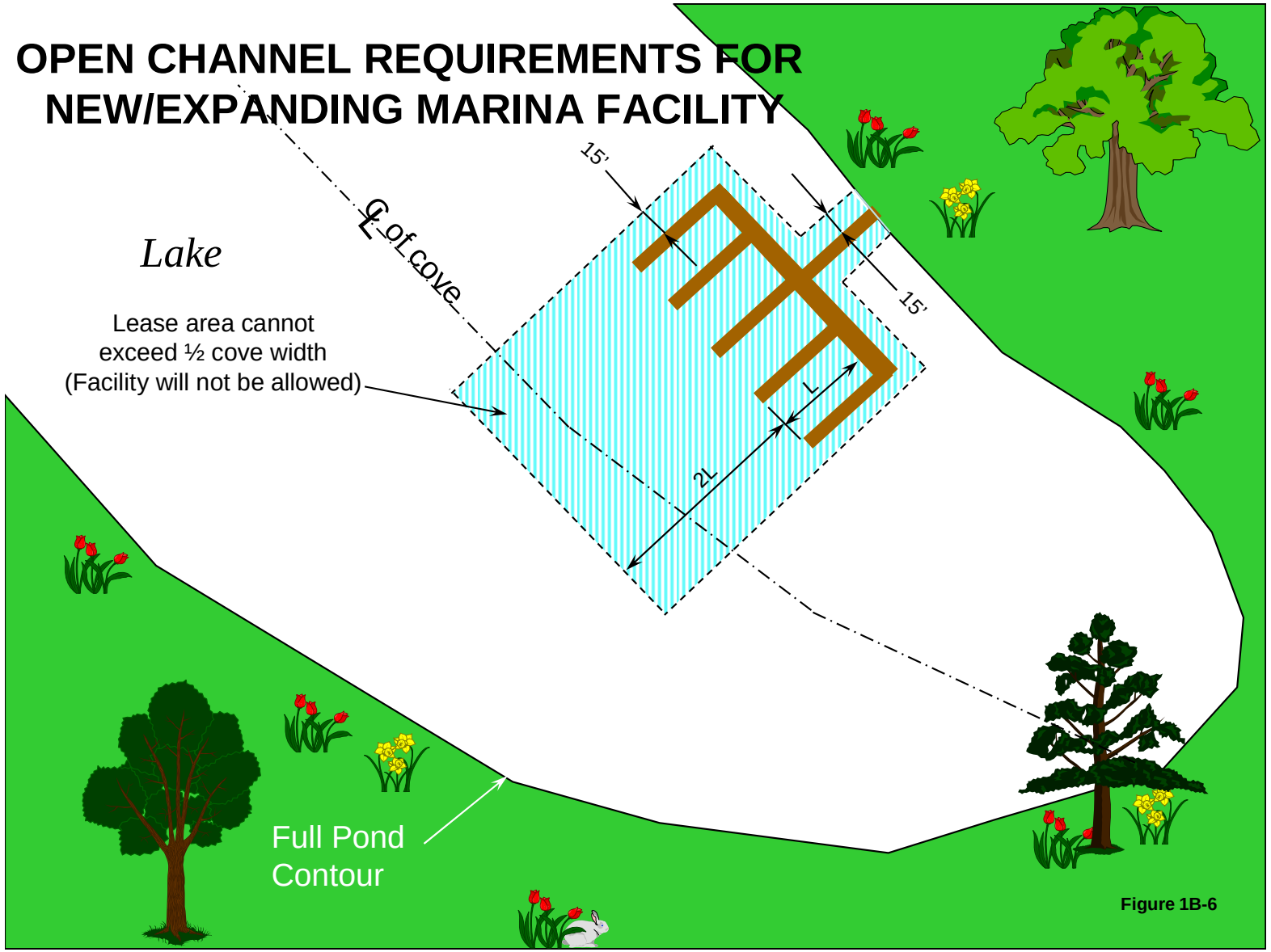


Figure 1B-6

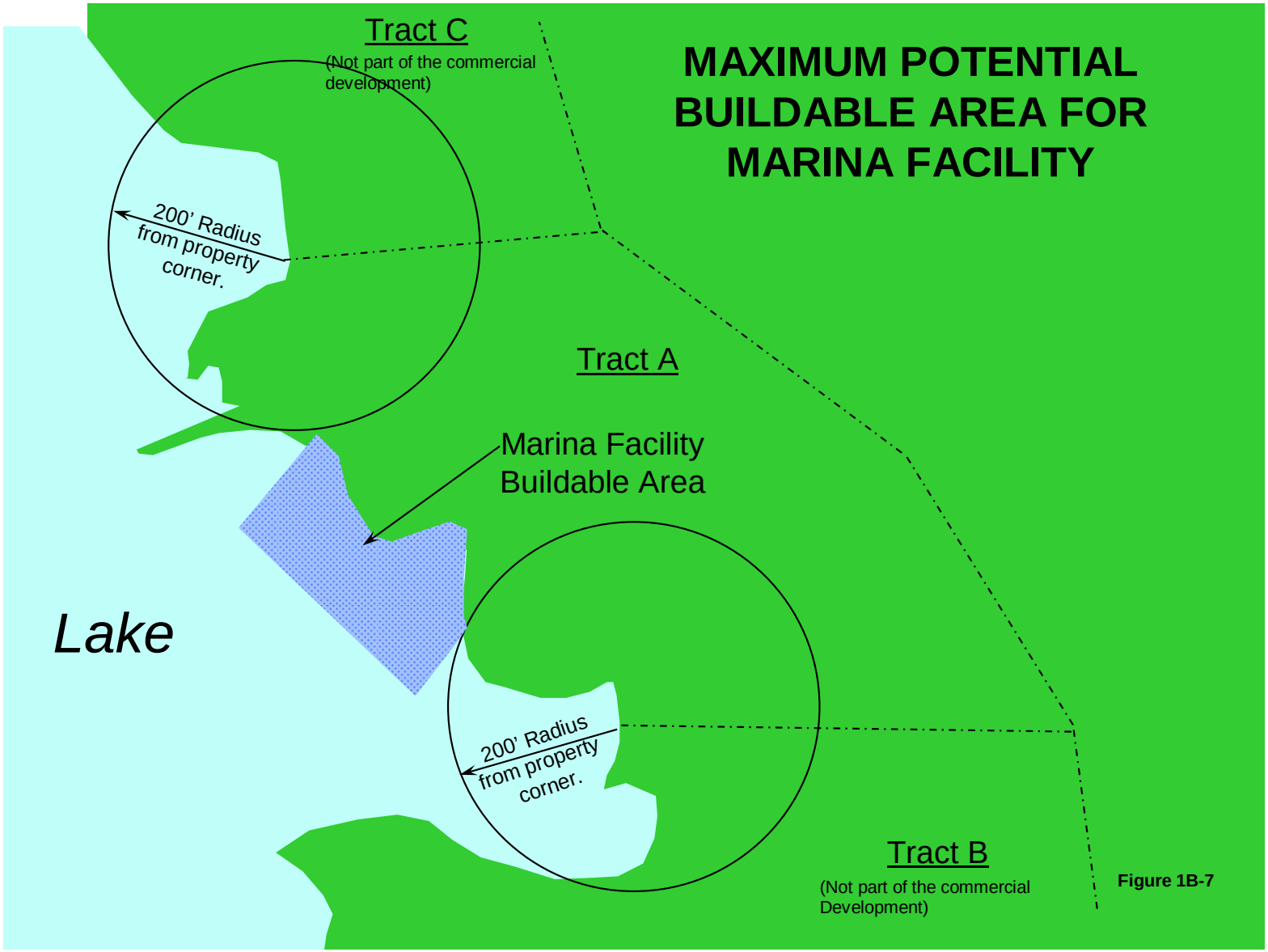
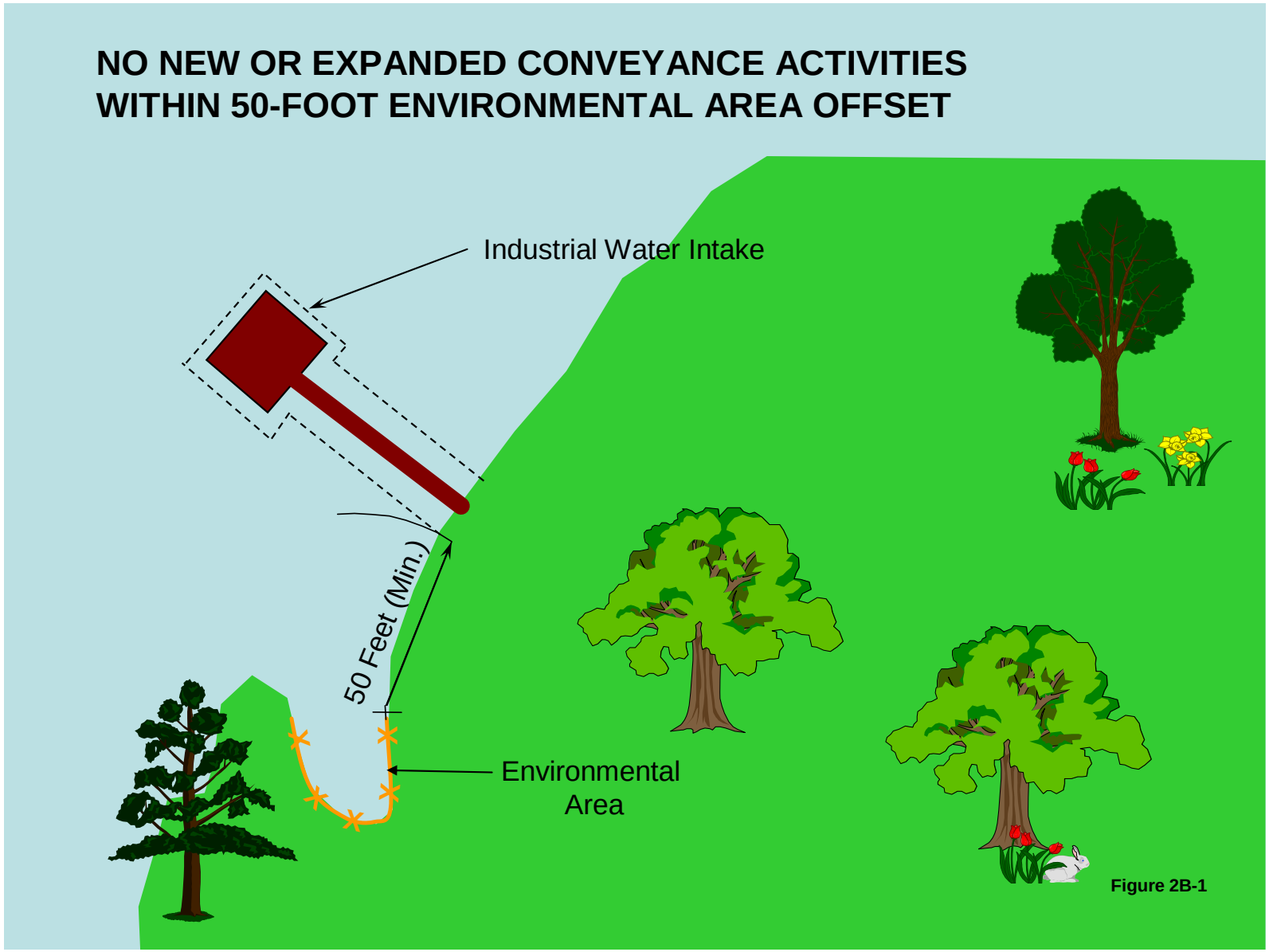

Tract C
(Not part of the commercial development)
MAXIMUM POTENTIAL BUILDABLE AREA FOR MARINA FACILITY
200' Radius from property corner.
Tract A
Marina Facility Buildable Area
Lake
200' Radius from property corner.
Tract B
(Not part of the commercial Development)

Figure 1B-7


NO NEW OR EXPANDED CONVEYANCE ACTIVITIES
WITHIN 50-FOOT ENVIRONMENTAL AREA OFFSET
Industrial Water Intake
50 Feet (Min.)
Environmental
Area
Figure 2B-1

SUBMARINE UTILITY LINE AND INTAKE/OUTFALL REQUIREMENTS

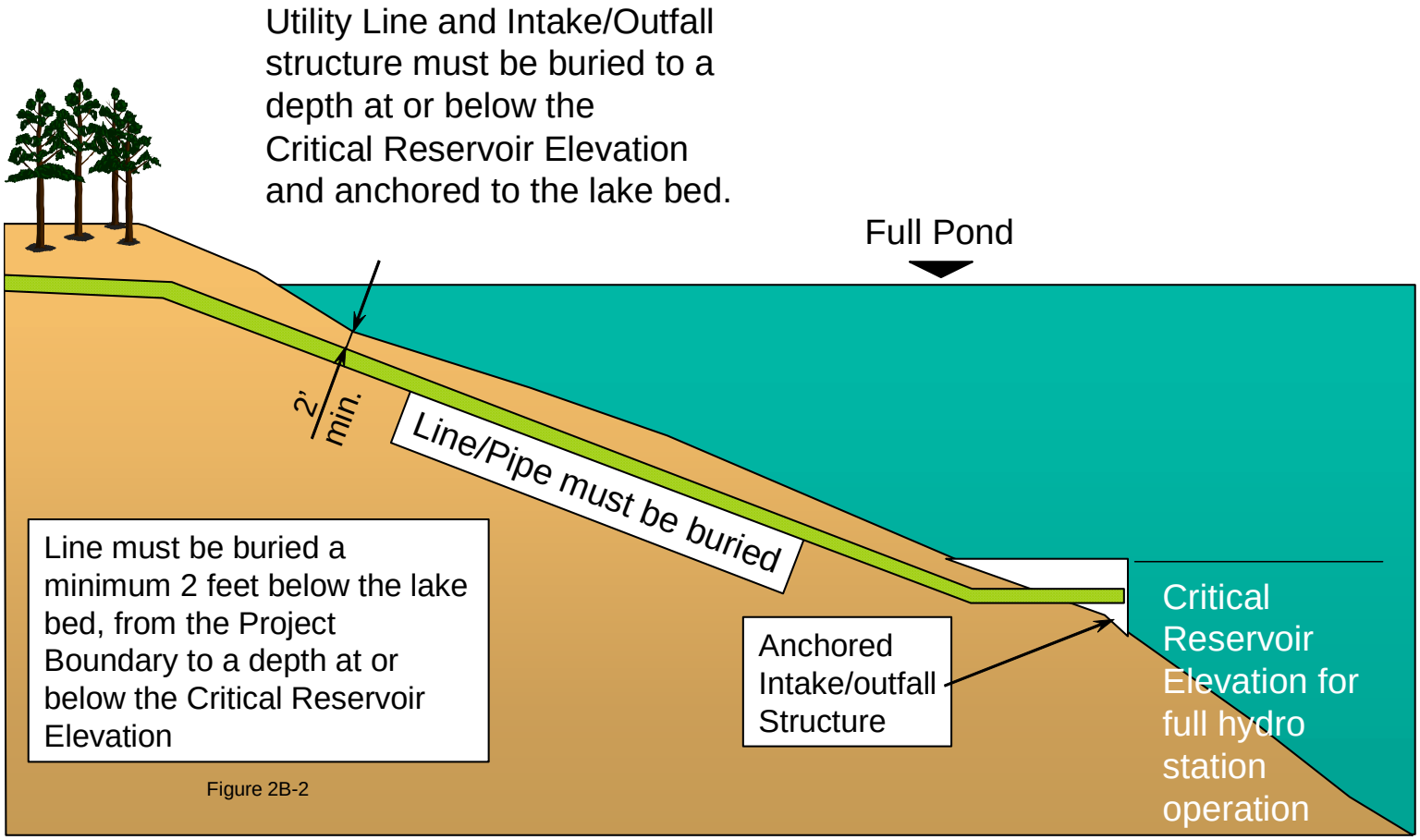


Figure 2B-2

NEW NON-PUBLIC CONSTRUCTION WITHIN THE FERC PROJECT BOUNDARY OR ON ANY DUKE-OWNED PERIPHERAL STRIP

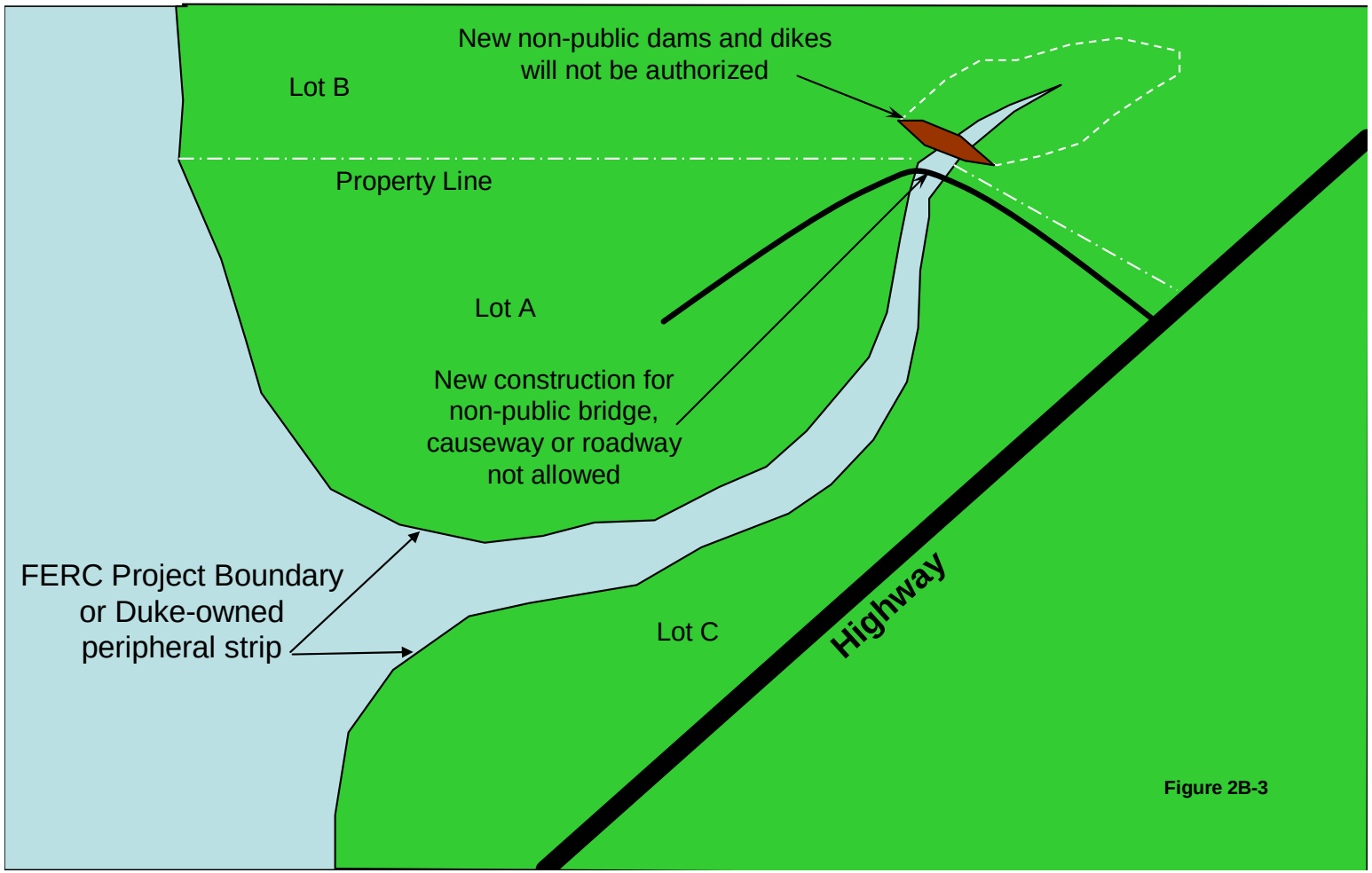
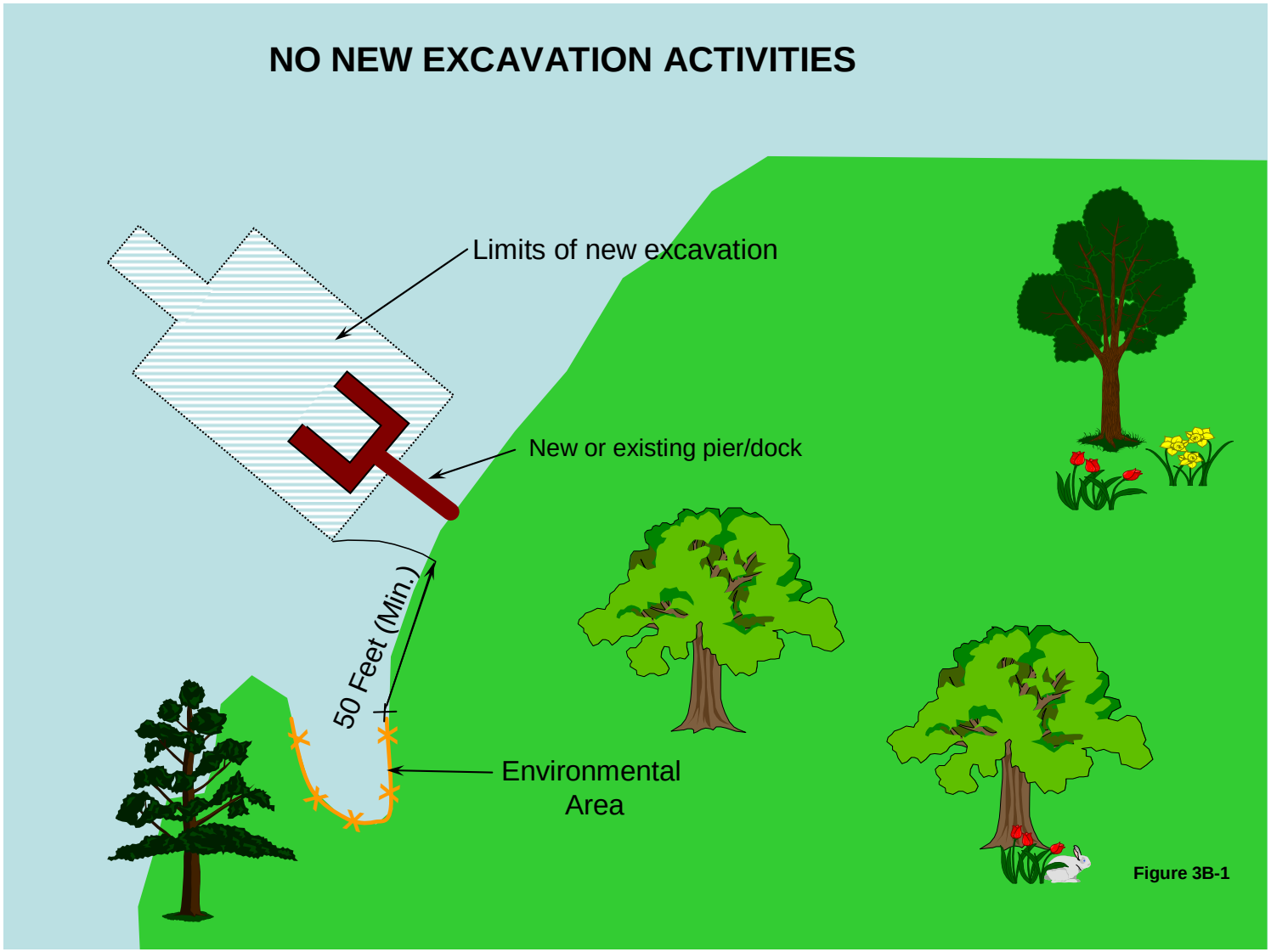
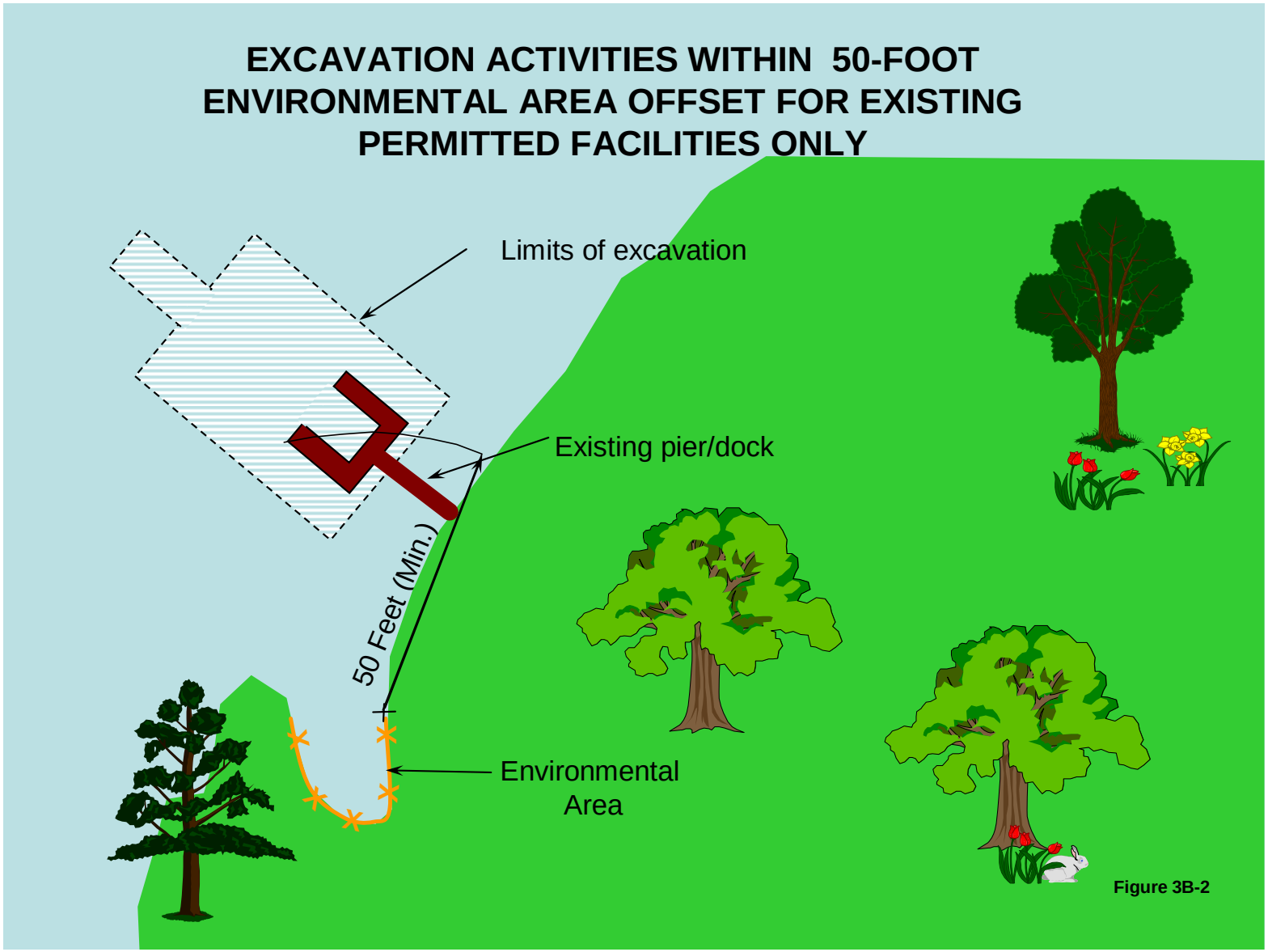
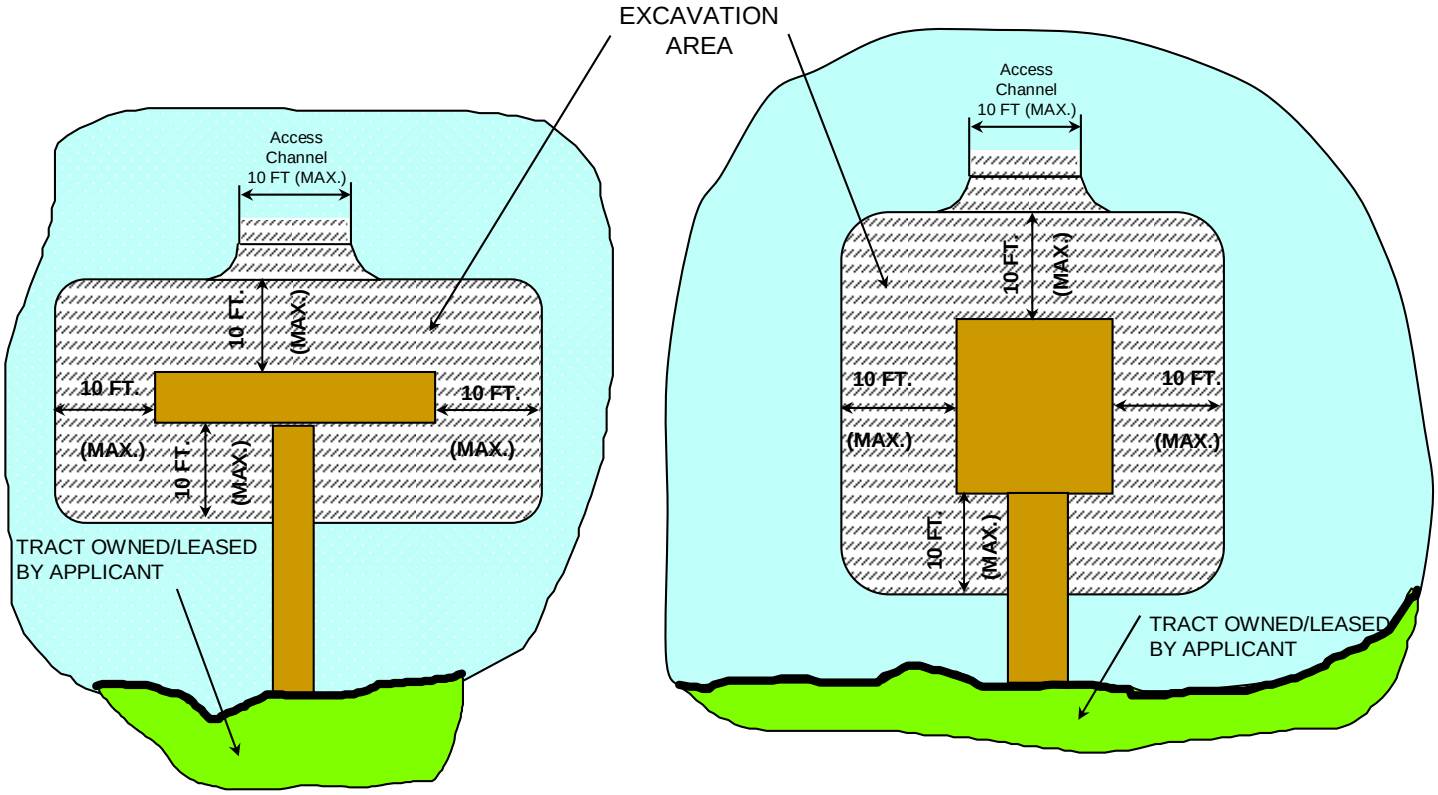


Figure 2B-3


NO NEW EXCAVATION ACTIVITIES
Limits of new excavation
New or existing pier/dock
50 Feet (Min.)
Environmental
Area
Figure 3B-1


EXCAVATION ACTIVITIES WITHIN 50-FOOT ENVIRONMENTAL AREA OFFSET FOR EXISTING PERMITTED FACILITIES ONLY
Limits of excavation
Existing pier/dock
50 Feet (Min.)
Environmental Area
Figure 3B-2

GUIDANCE FOR MINIMIZING EXCAVATIONS NEEDED FOR A "T" CONFIG. AND AN "I" CONFIG. FACILITY



"T" CONFIGURATION FACILITY

"I" CONFIGURATION FACILITY

Figure 3B-3

GUIDANCE FOR MINIMIZING EXCAVATIONS NEEDED FOR SINGLE-SLIP AND MULTI-SLIP FACILITIES

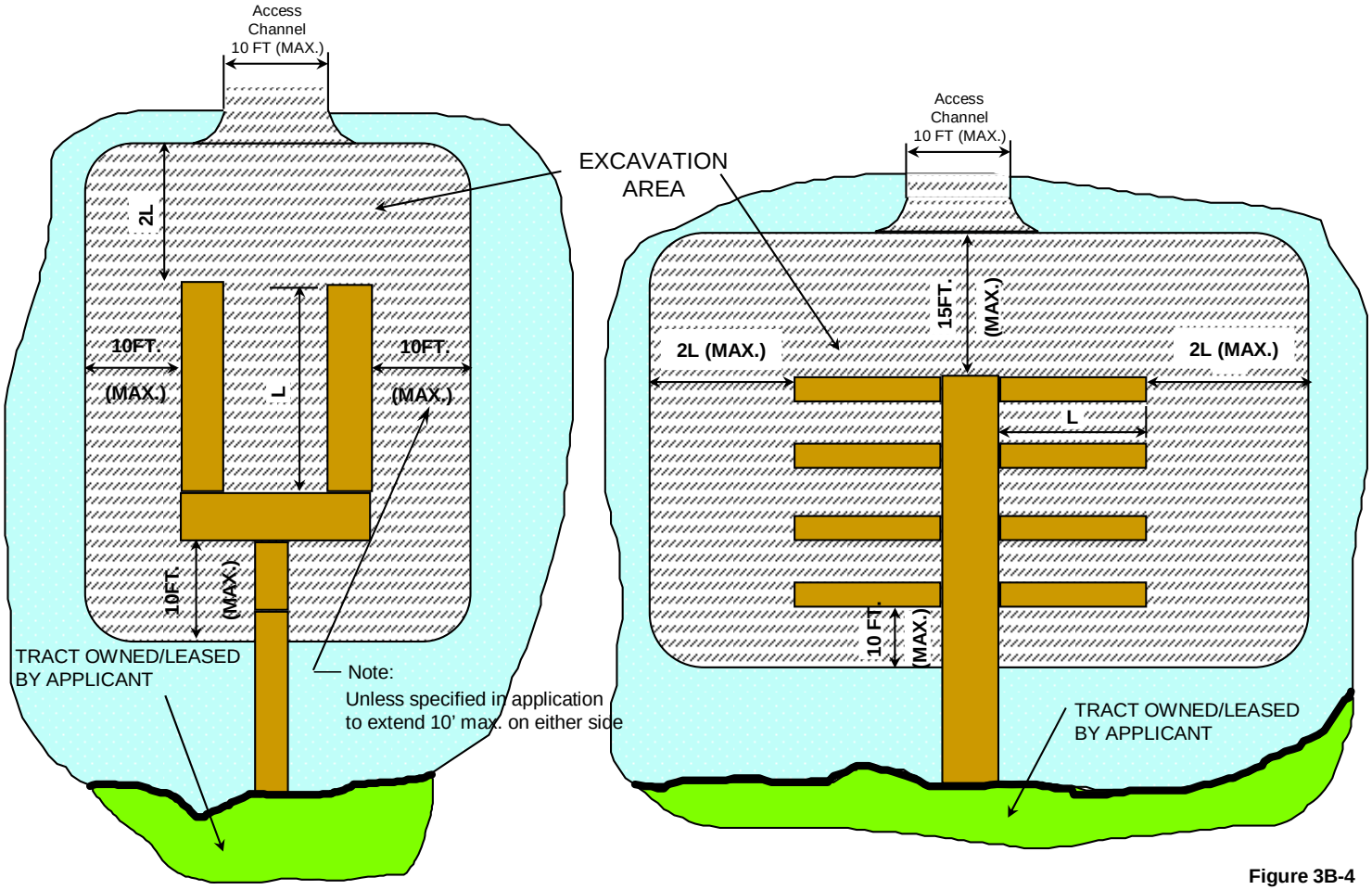
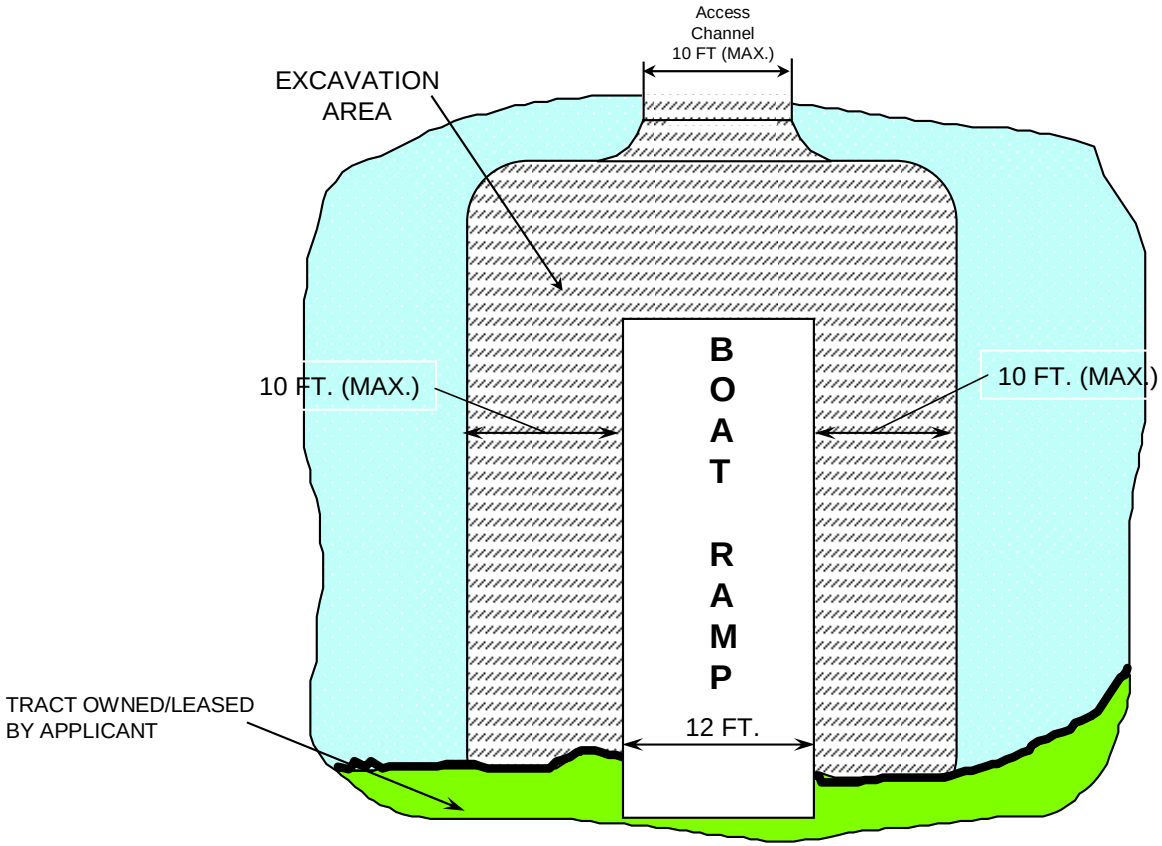


Figure 3B-4

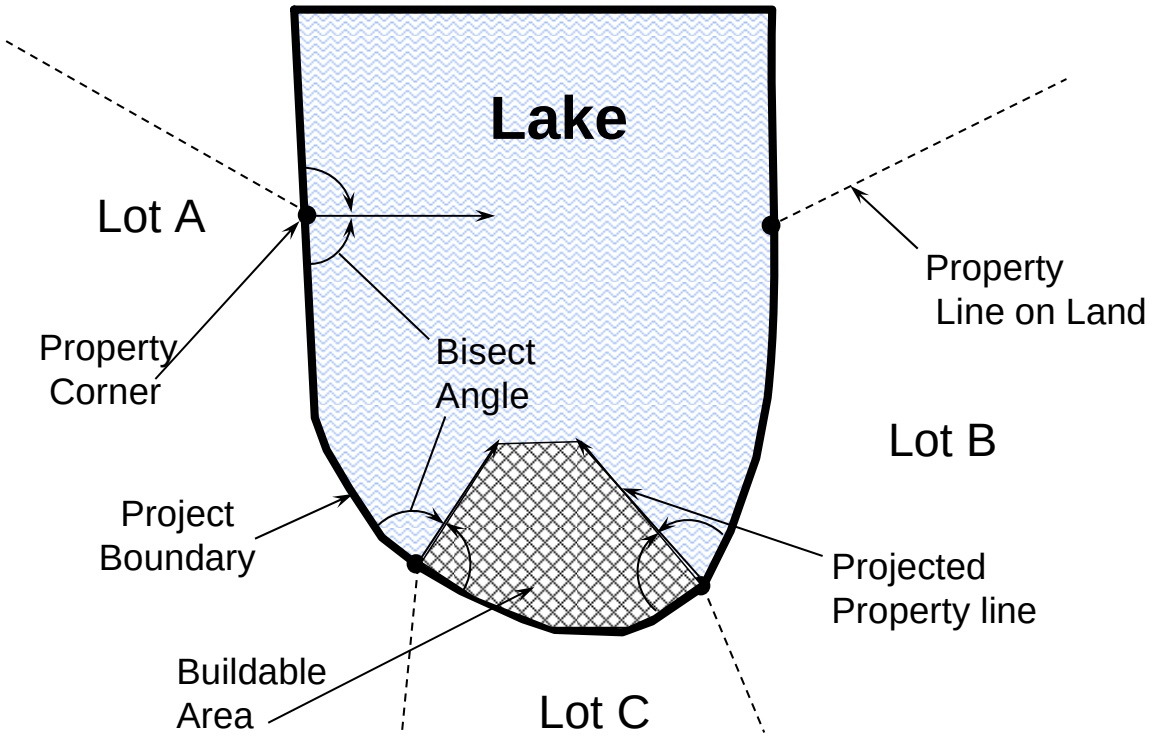
GUIDANCE FOR MINIMIZING EXCAVATIONS NEEDED FOR MAINTENANCE OF SINGLE LANE BOAT RAMP



SINGLE LANE BOAT RAMP

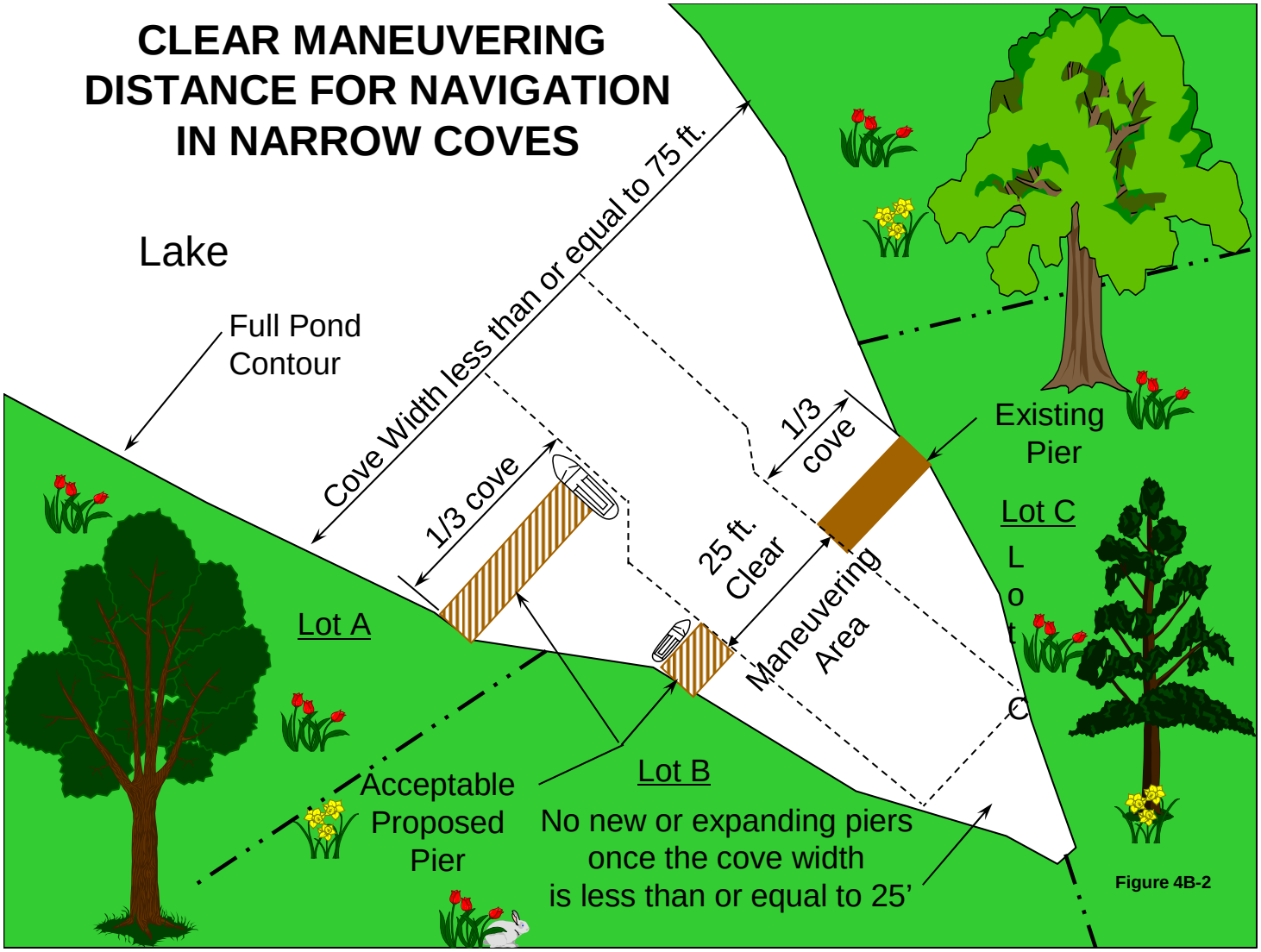
Figure 3B-5

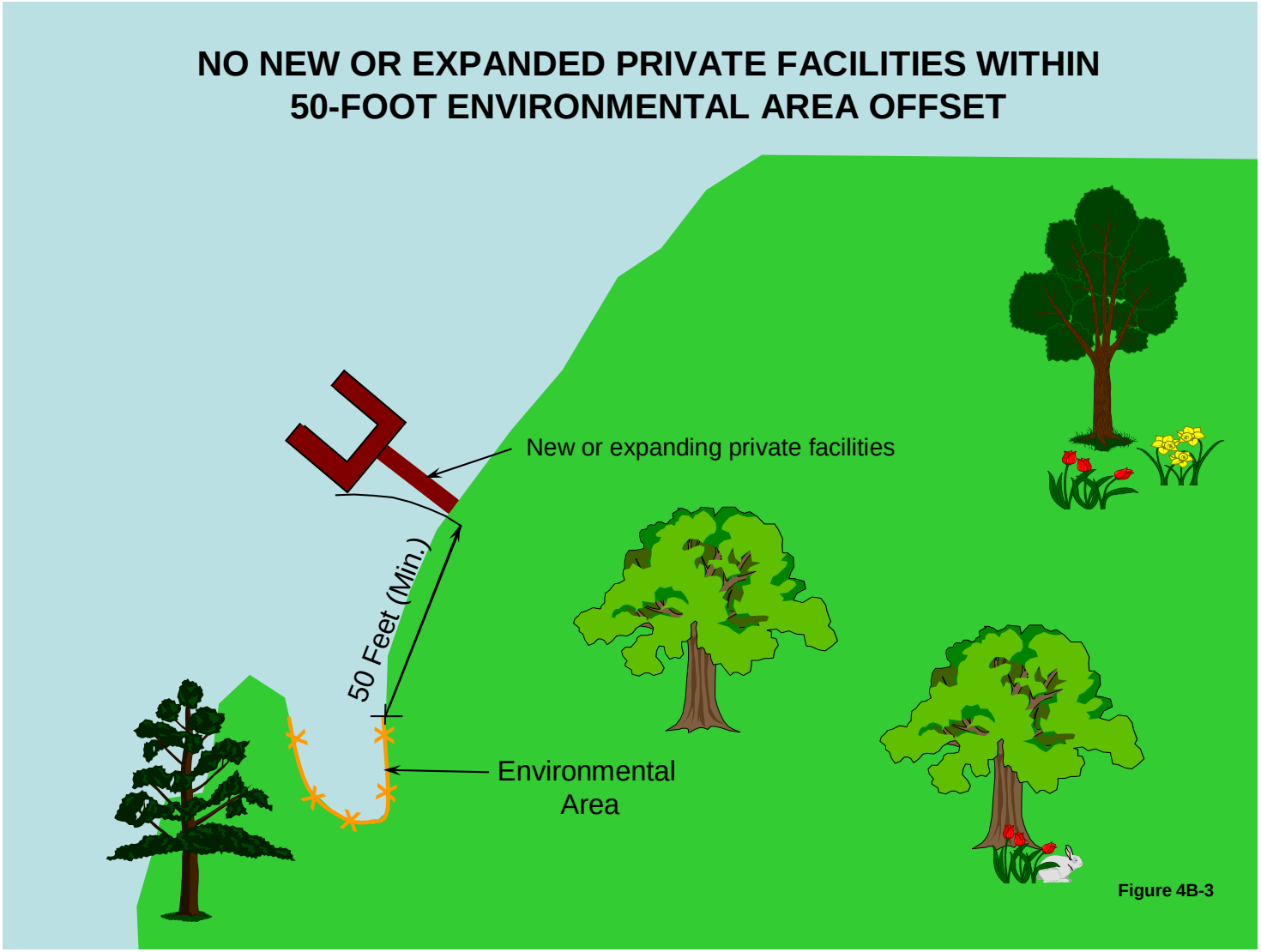
TYPICAL DUKE ENERGY-LAKE SERVICES PROPERTY LINE PROJECTION



(NOTE: Local ordinances may provide an alternative property line projection methodology)

Figure 4B-1


CLEAR MANEUVERING DISTANCE FOR NAVIGATION IN NARROW COVES
Lake
Full Pond Contour
Cove Width less than or equal to 75 ft.
1/3 cove
1/3 cove
Existing Pier
Lot C
Lot A
25 ft. Clear Maneuvering Area
Lot B
Acceptable Proposed Pier
No new or expanding piers once the cove width is less than or equal to 25'
Figure 4B-2


NO NEW OR EXPANDED PRIVATE FACILITIES WITHIN
50-FOOT ENVIRONMENTAL AREA OFFSET
New or expanding private facilities
50 Feet (Min.)
Environmental
Area
Figure 4B-3

SHORELINE STABILIZATION TECHNIQUE SELECTION PROCESS

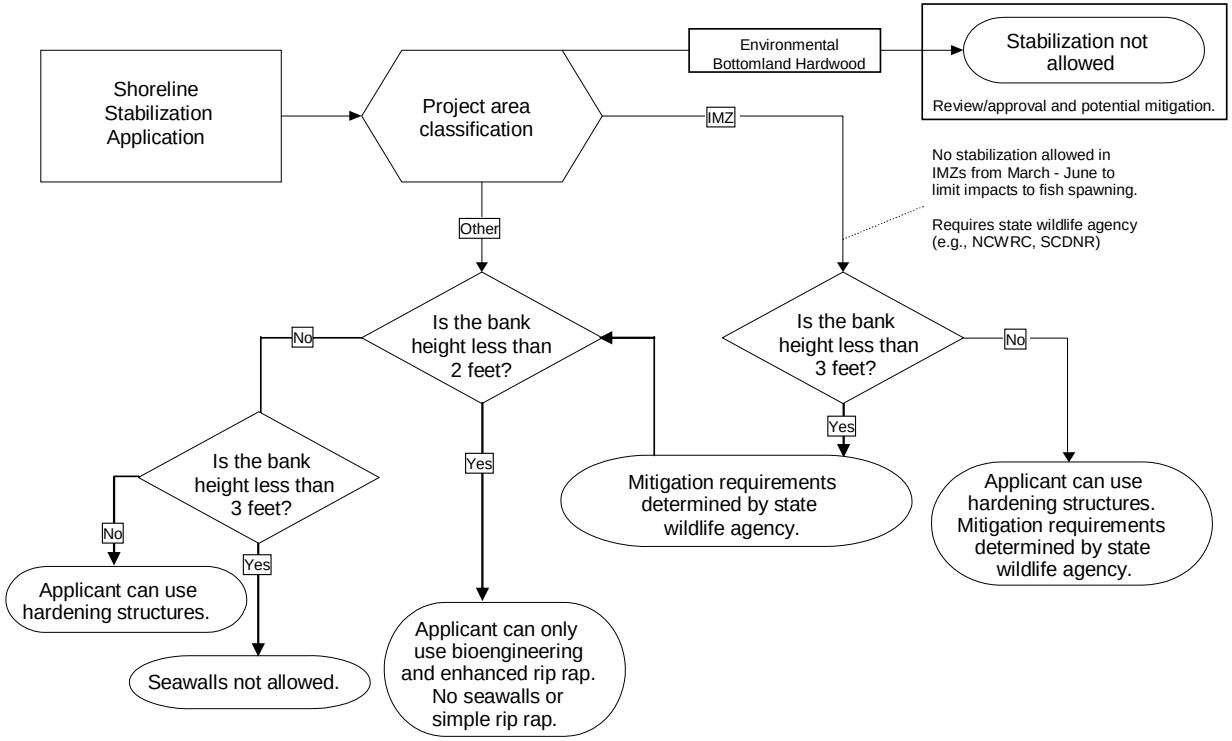


Figure 5A-1

TYPICAL SEAWALL FOR SHORELINE STABILIZATION

Note: Rip-Rap Class B or larger must be placed along the base of all seawalls and extend a minimum of 6 feet.

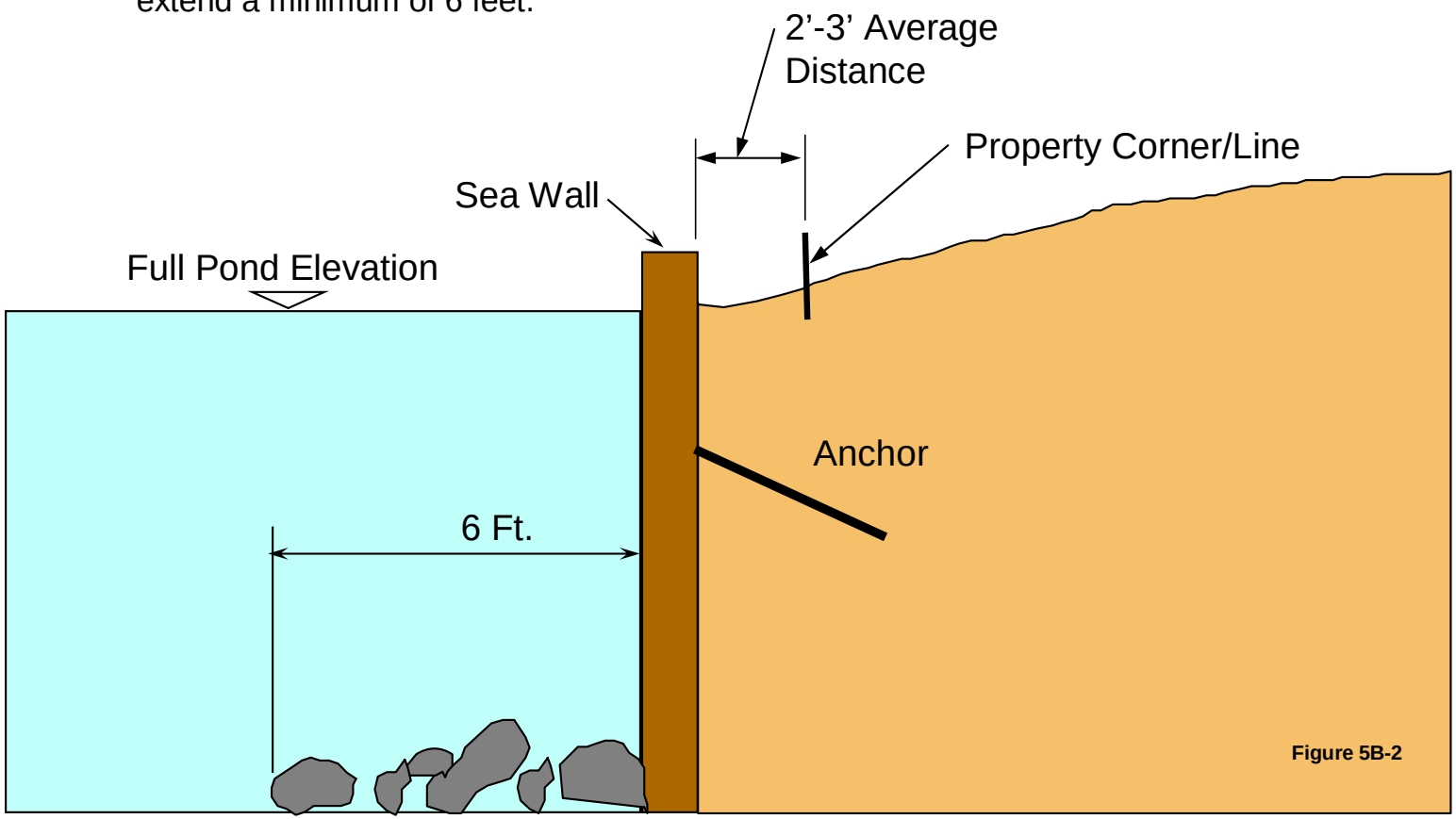
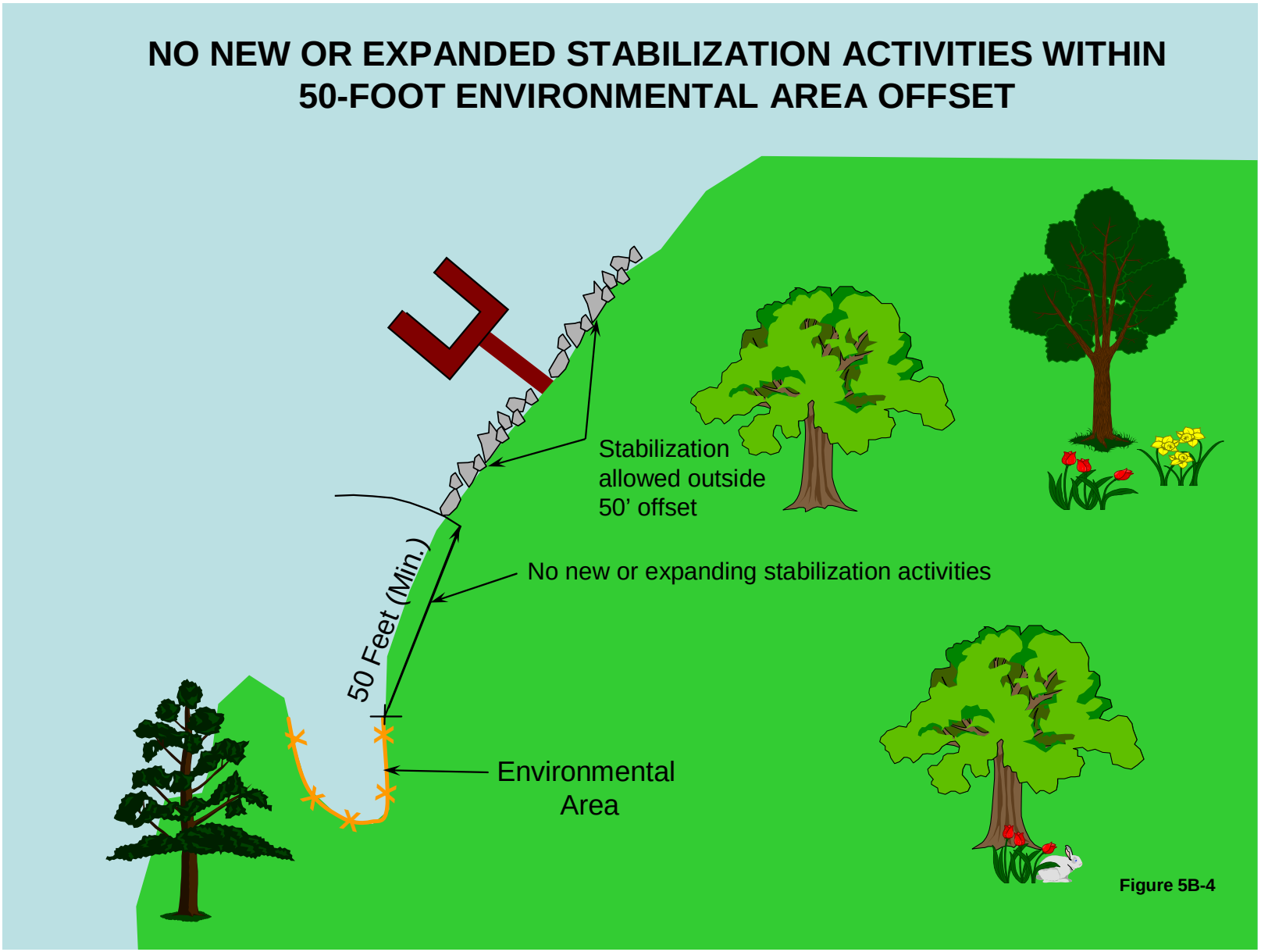


Figure 5B-2

ENHANCED RIP-RAP (WITH BOULDERS AND PLANTINGS)

Figure 5B-3


NO NEW OR EXPANDED STABILIZATION ACTIVITIES WITHIN
50-FOOT ENVIRONMENTAL AREA OFFSET
Stabilization
allowed outside
50’ offset
No new or expanding stabilization activities
50 Feet (Min.)
Environmental
Area
Figure 5B-4

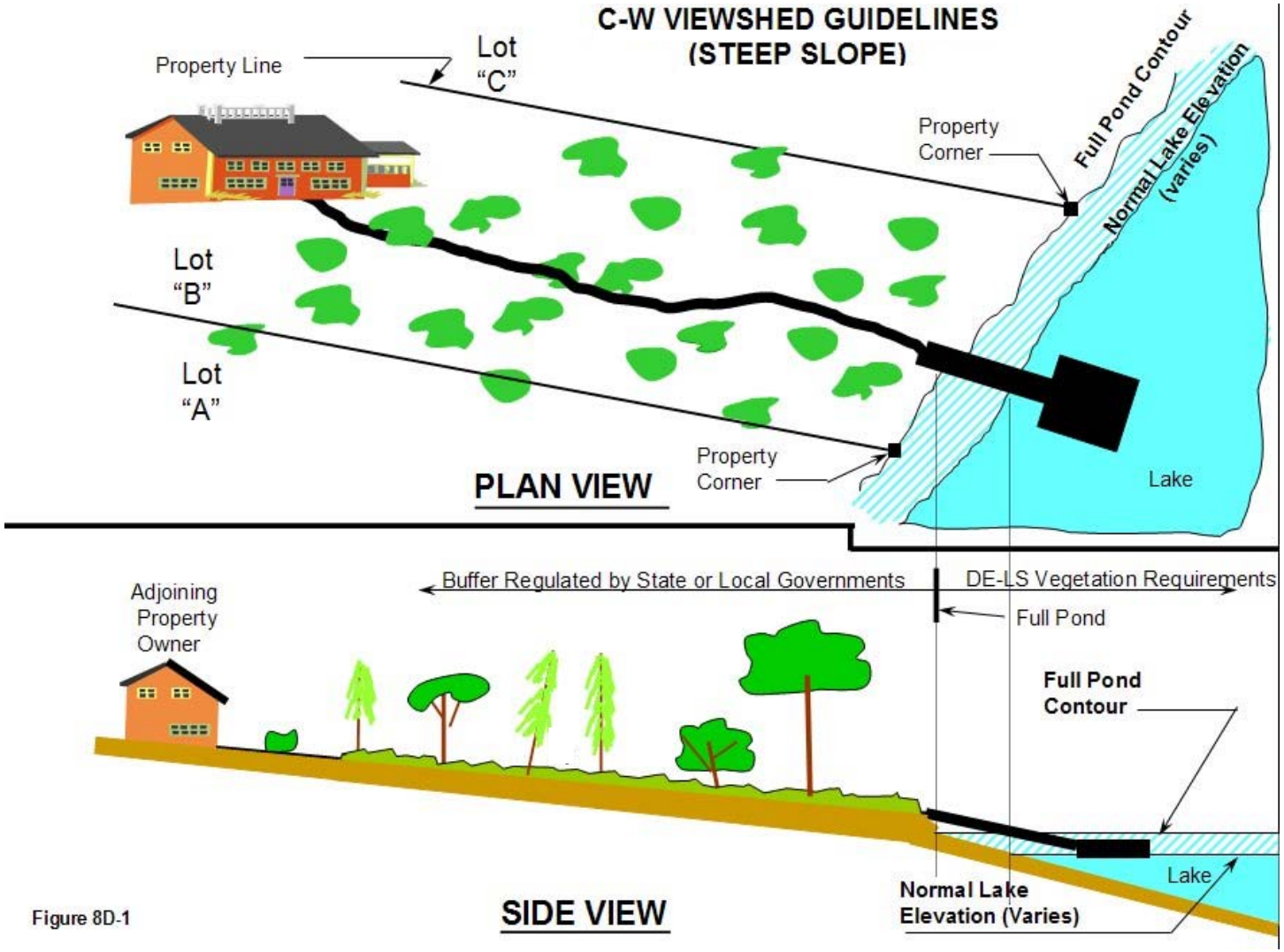

C-W VIEWSHED GUIDELINES
(STEEP SLOPE)
Property Line
Lot
"C"
Property
Corner
Full Pond Contour
Normal Lake Elevation
(varies)
Lot
"B"
Lot
"A"
Property
Corner
Lake
PLAN VIEW
Buffer Regulated by State or Local Governments
DE-LS Vegetation Requirements
Full Pond
Adjoining
Property
Owner
Full Pond
Contour
Lake
Normal Lake
Elevation (Varies)
SIDE VIEW

Figure 8D-1

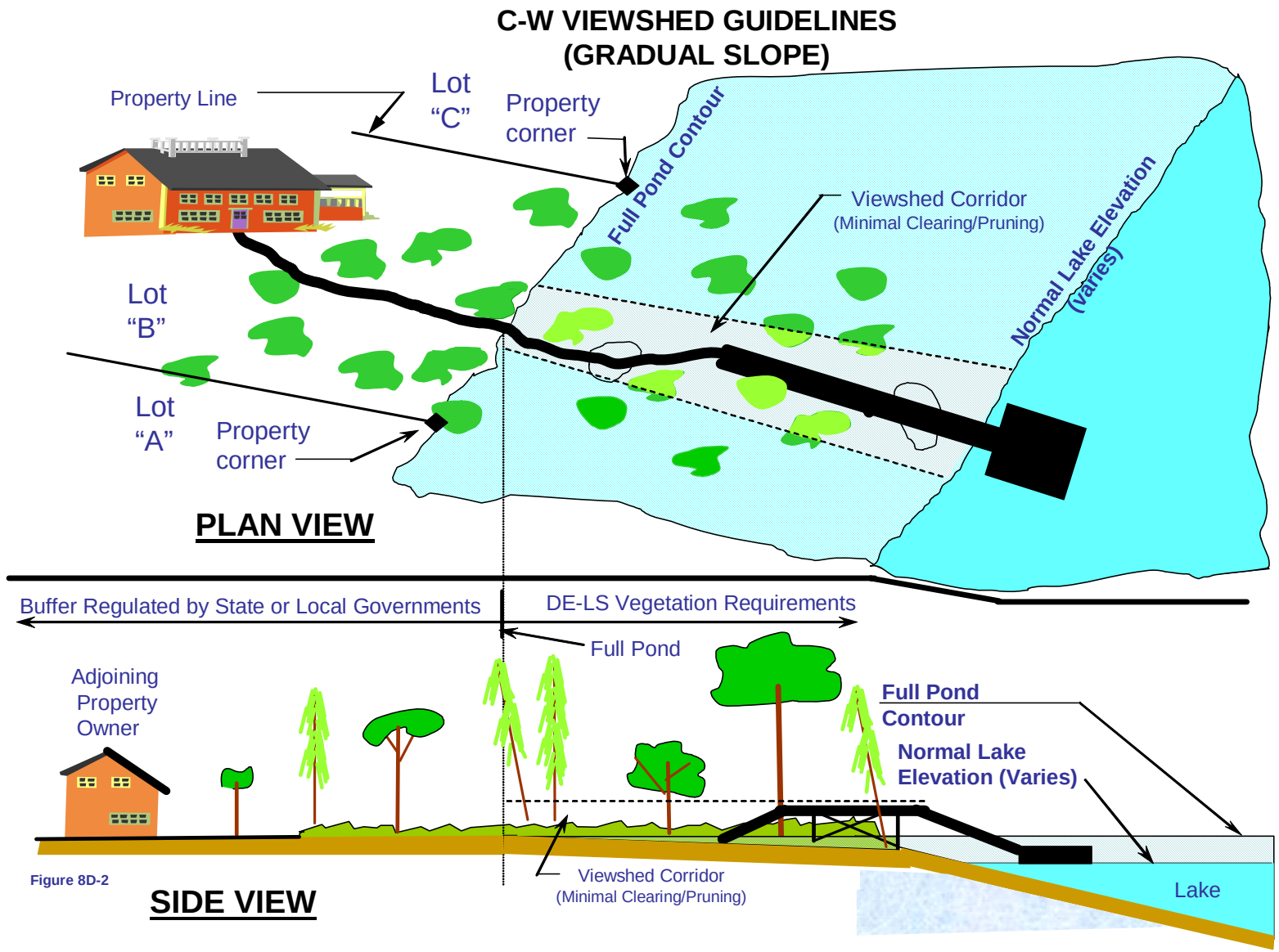

C-W VIEWSHED GUIDELINES
(GRADUAL SLOPE)
Property Line
Lot
"C"
Property
corner
Full Pond Contour
Viewshed Corridor
(Minimal Clearing/Pruning)
Normal Lake Elevation
(Varies)
Lot
"B"
Lot
"A"
Property
corner
PLAN VIEW
Buffer Regulated by State or Local Governments
DE-LS Vegetation Requirements
Full Pond
Adjoining
Property
Owner
Full Pond
Contour
Normal Lake
Elevation (Varies)
Viewshed Corridor
(Minimal Clearing/Pruning)
Lake
SIDE VIEW

Figure 8D-2

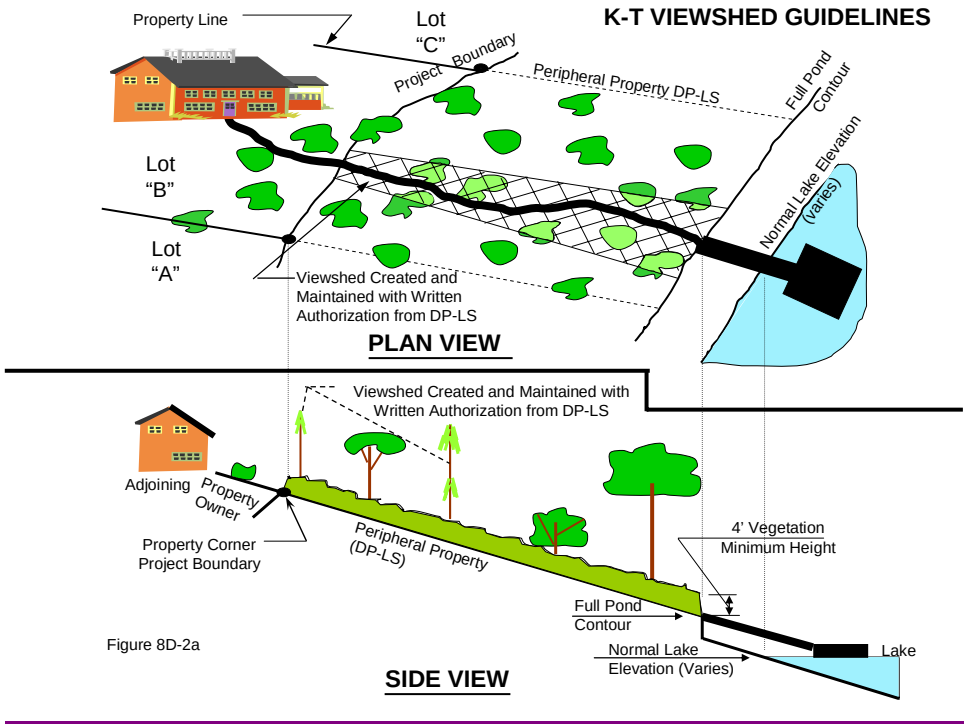

K-T VIEWSHED GUIDELINES
Property Line
Lot "C"
Project Boundary
Peripheral Property DP-LS
Full Pond Contour
Normal Lake Elevation (Varies)
Lot "B"
Lot "A"
Viewshed Created and Maintained with Written Authorization from DP-LS
PLAN VIEW
Viewshed Created and Maintained with Written Authorization from DP-LS
Adjoining Property Owner
Property Corner Project Boundary
Peripheral Property (DP-LS)
4' Vegetation Minimum Height
Full Pond Contour
Normal Lake Elevation (Varies)
Lake
SIDE VIEW

Figure 8D-2a

VIEWSHED EXAMPLES

ACCEPTABLE

UNACCEPTABLE

Figure 8D-3

VIEWSHED EXAMPLES

ACCEPTABLE

UNACCEPTABLE

Figure 8D-4

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TRUE PUBLIC MARINA REQUIREMENTS

The following information will be used to determine the classification of marinas at the projects. To be classified as a ***True Public Marina***, the facility must meet all of the requirements in sections 1 - 3. Section 4 identifies the application fee and security deposit to be paid.

1. No predetermination of user groups for any of the existing or proposed land and water-based facilities.
    a. No Residential Marina Facility access (existing or proposed) except those existing marina facilities that are characteristically operated as True Public Marinas although they allow Residential Marina-type access on a very limited basis. These existing marinas may be afforded the same considerations provided new True Public Marina facilities if the number of wetslips and dry storage bays dedicated for Residential Marina-type access is $\leq$ 10% of the total number of wetslips and dry storage bays within the marina facility and any considerations are approved by DE-LS. This exception only applies to the very limited number of existing marina facilities that meet the $\leq$ 10% requirement as of 1/1/06.
    b. No membership requirements
    c. Transient services do not require wet or dry storage rental
2. Existing and/or proposed facilities will provide land and water based recreation services for transient users at less than or equal to a reasonable and customary fee.
    a. Services are available for transient users
    b. Offers services for lake and land based users
3. Provides publicly available marine pump-out and restroom facilities.
4. Application filing fee and security deposit reductions
    a. If adding only the following type of facilities; courtesy dock, hiking trail, wildlife viewing , gas dock, fishing pier, boat ramp, swimming area, beach, boat repair/servicing, public restrooms or any other truly public service, then the application fee and security deposit will be reduced by 100%.
    b. If adding facilities that will be rented for greater than 14 days, but less than or equal to 365 days, there will be a 50% reduction in the application fee and security deposit.
    c. If the plan is the same as b., but also includes adding more types of items in 2 a., then the application fee and security deposit will be reduced by 100%.

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SHORELINE STABILIZATION TECHNIQUE SELECTION PROCESS

General Conditions

1. All seawalls must have Class B or larger rip-rap extending 6 feet lakeward from the base.
2. Considering current lake level operating targets and variability and the desire to prevent unnecessary impacts, rip-rap must be confined to the area between 6 feet below full pond elevation and no more than one foot above full pond elevation to the maximum practicable extent. Potential exceptions include areas where entire placement is above the FERC Project Boundary, where banks are already eroded above the full pond elevation or where severely eroded banks must be sloped back or terraced to provide minimum bank stability.
3. Seawalls are not allowed in areas with an average eroded bank height of less than 3 feet.
4. Proposals for stabilization where bank height is less than 2 feet can use approved bioengineering techniques and enhanced rip-rap techniques only.
5. The bank height is the average height of the eroded shoreline (measured from the original lake bed to the top of the eroded bank) in the area to be stabilized.
6. Bio-engineering is a stabilization approach that uses natural and living material.
7. Bio-Bioengineering techniques may include use of rip-rap with live stakes, rock filled gabions, live staked crib walls, biologs, and numerous other approaches.
8. Applicants can use bioengineering, rip-rap, seawalls or any combination of stabilization techniques where use of hardening structures are allowed.
9. Stabilization in an IMZ requires review/approval by the applicable state wildlife agency and reasonable mitigation requirements as determined through consultation with the state wildlife agencies.
10. Stabilization is not allowed from March 1 through June 30 in areas identified as IMZs in the SMP.
11. New or expanded stabilization activities (excluding bioengineering) may not be undertaken within the 50-foot Environmental Offset associated with an Environmental classification in the SMP.
12. Stabilization of eroded banks that are 3 feet in height or higher may be considered for bank reshaping by either cut or fill techniques provided:
    a. The stabilized bank uses a combination of rip-rap (not installed any higher than one foot above full pond) and bioengineering techniques;
    b. The cut or filled area, above the height of the rip-rap, is stabilized using vegetation in density and composition similar to other naturally vegetated areas in the vicinity of the stabilized shoreline;
    c. The toe of the rip-rap is vegetated if the lower limit of the rock provides a stable beach-shelf at an elevation 2-4 feet below full pond;

d. The work can be conducted in accordance with all applicable buffer regulations; and

e. The amount of cut or fill does not substantially alter the full pond contour, is strictly limited to only that necessary to provide a stable angle for rip-rap and revegetation, and is specifically quantified in the written authorization from DE-LS for the project.

13. Stabilization in areas classified as Natural, due to the presence of significant cultural resources, should not have artifacts impacted by using any shoreline stabilization techniques.

14. Applicants are encouraged to avoid activities (including stabilization) that could have an adverse impact upon existing water willow beds. Rip-rap installed below the normal lake level elevation and associated with water willow beds must be limited to one layer deep to allow spaces between the stone for water willow recruitment.

SHORELINE STABILIZATION TECHNIQUE SELECTION PROCESS

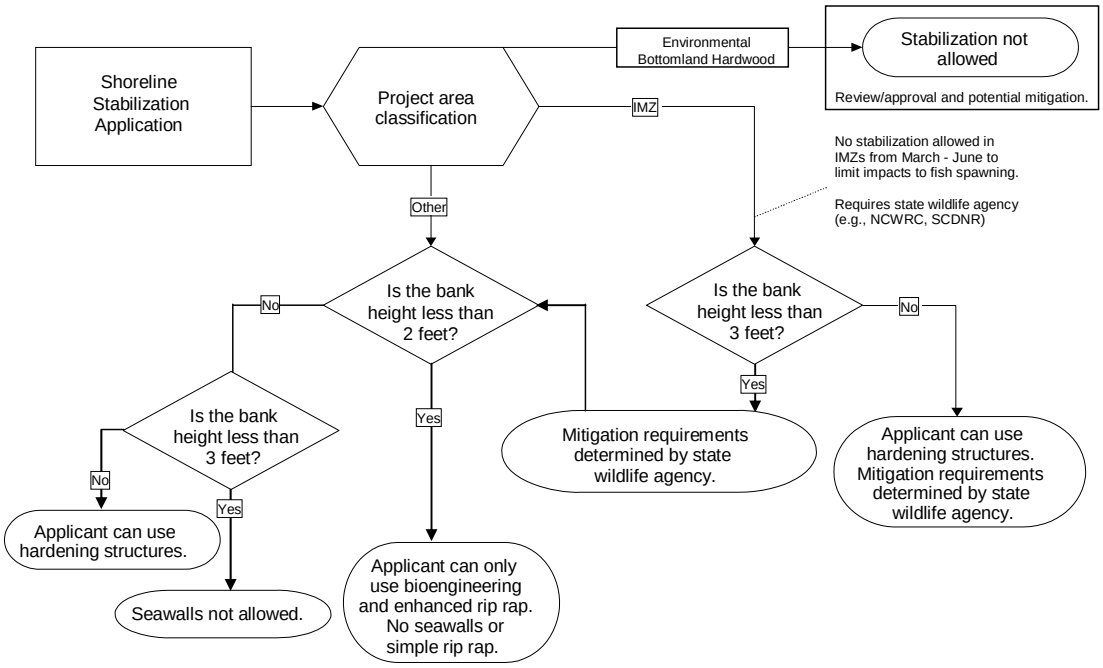

Figure 5A-1

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