



Keowee-Toxaway Project Shoreline Management Guidelines September 1, 2014

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Acronyms and Abbreviations

ac	acres
AMSL	above mean sea level
CRE	Critical Reservoir Elevation
DAPEA	draft applicant prepared Environmental Assessment
dbh	diameter at breast height
DE	Duke Energy
DELS	Duke Energy Lake Services
EA	environmental assessment
EBCI	Eastern Band of Cherokee Indians
FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
fps	feet per second
ft	feet or foot
GIS	Geographic Information System
GPS	Global Positioning System
HPMP	Historic Properties Management Plan
HSOL	Hydro Station Operational Limit
IMZ	Impact Minimization Zone
Keowee-Toxaway Project	Keowee-Toxaway Hydroelectric Project
LIP	Low Inflow Protocol
MGD	million gallons per day
mi	miles
MSD	Marine Sanitation Device
NCDENR	North Carolina Department of Environment and Natural Resources
Project	Keowee-Toxaway Hydroelectric Project
PVC	polyvinyl chloride
PWC	personal watercraft
RMP	Recreation Management Plan
SCDHEC	South Carolina Department of Health and Environmental Control
SHPO	State Historic Preservation Office

SMG	Shoreline Management Guidelines
SMP	Shoreline Management Plan
SSTSP	Shoreline Stabilization Technique Selection Process
SWFHS	Shallow Water Fish Habitat Survey
THPO	Tribal Historic Preservation Office
TPM	True Public Marina

1.0 Overview of the Shoreline Management Guidelines

The purpose of these Shoreline Management Guidelines (SMG) is to provide detailed procedures and criteria to regulate activities within the Project Boundary at Lake Jocassee and Lake Keowee. 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
- To meet regulatory requirements

Any occupancy or use of Project lands and waters within the Project Boundary at Lake Jocassee and Lake Keowee requires prior written authorization by Duke Energy. Duke Energy, through its Lake Services department (DELS) is responsible for the continuous monitoring of activities within the Project Boundary to ensure activities are consistent with established policies and Federal Energy Regulatory Commission (FERC) license requirements.

This document also contains general policies as presented in Section 2, vegetation management requirements as presented in Section 3, and the following programs that provide permitting criteria and procedures as presented in Sections 4 through 9:

- Marina Facilities Program (Permitting Program 1)
- Conveyance Program (Permitting Program 2)
- Excavation Program (Permitting Program 3)
- Private Facilities Program (Permitting Program 4)
- Shoreline Stabilization Program (Permitting Program 5)
- Miscellaneous Reservoir Uses Program (Permitting Program 6)

A glossary of terms used in this document is presented in Section 10, and figures supporting the application of these policies and guidelines are presented in Section 11.

The policies and requirements described in this document become effective on September 1, 2014, and they supersede those of all similar, previous documents including:

- Duke Energy Shoreline Management Guidelines dated September 1, 2006
- 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
- Undated Duke Power brochures entitled, “Living With Our Lakes” and “Safe and Attractive Lakes Are Everyone’s Job.”

1.1 Archaeological and Historical Resources

The Historic Properties Management Plan (HPMP) for the Keowee-Toxaway Project includes guidelines to protect known and unknown archaeological and historic resources potentially affected by the implementation of the SMP.

In the event a lake use permit applicant discovers historic or archaeological resources during construction of an approved activity, the applicant must stop work immediately and contact DELS. In the event anyone discovers a potential site of archaeological or historic significance including a gravesite within the Project Boundary, the individual must immediately notify DELS. DELS encourages anyone who witnesses persons collecting artifacts to notify local law enforcement personnel.

Applicants for lake use permitting activities that involve activities not identified in the HPMP as categorically excluded will be required to consult with the appropriate SHPO(s) and THPOs, as outlined in the HPMP.

1.2 Project and Non-Project Lake Uses

For FERC-licensed reservoirs, there are two basic types of lake uses: *Project uses* and *non-Project uses* (see Glossary). Project uses are essentially uses 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 Project Access Areas

or license-required wildlife enhancements).¹ 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 Project can be safely operated and maintained in accordance with the FERC license. In addition, per FERC's policy, the public should be given the maximum practicable access to Project lands and waters and 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, especially along the Lake Keowee shoreline, DELS must remain as objective as possible during the lake use permit application review process, particularly for non-Project use requests, to ensure fairness to applicants and to meet the objectives of the SMG.

1.3 Evaluation Process for Non-Project Uses

The evaluation process used by DELS to review a requested non-Project use generally consists of the 10 steps described in this section (Figure 1). (Note: All figures are presented in Section 11.) The exact order of these steps and the information necessary will vary somewhat between the six permitting programs (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. DELS 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 an individual Project-front lot but also needed to stabilize the shoreline with riprap in order to use and maintain the dock. The applicant would need to complete and submit a Private Facilities application (for the

¹ The management of lands and shoreline associated with Project Access Areas is addressed in the Project Recreation Management Plan.

dock) with a Shoreline Stabilization application attached as a component of the overall application package. Submittal of these applications at the same time allows DELS and any reviewing agencies to evaluate potential activity impacts cumulatively, saves processing time, and also minimizes the chance one of the proposed activities could be approved, but a potential necessary supporting activity would not be approved. The Duke Energy Fee Schedule includes fee reductions for certain combinations of applications to foster this prior planning by applicants.

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

STEP 1: Request Initiation

The applicant initiates the request by contacting DELS 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) or by visiting www.duke-energy.com and accessing the Lake-Use Permitting webpage.

STEP 2: Applicant Completes Application Form(s) and Consultation

The applicant is responsible for submitting the appropriate Duke Energy application form(s) along with a check for any applicable fees and security deposits (if applicable). Application forms for any required non-Duke Energy permits must be obtained from the applicable permitting authority.

Some 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 DELS will accept their application. Marina Facilities, Conveyance, and Excavation applicants are required to complete certain parts of the Duke Energy application form(s) and obtain a release from DELS before beginning the required agency consultation process. Applicants for activities requiring a DAPEA are also required to use a contractor, approved by DELS, to prepare the DAPEA before submitting the application package to DELS. Any fees required by approved DAPEA contractors are the responsibilities of applicants in addition to any application filing fee(s), fund payment(s), and security deposit(s).

STEP 3: Shoreline Classification Map Review

DELS reviews the Shoreline Classification Map and associated lake use restrictions to determine if the proposed activity is consistent with the Existing or Future Use Classification for that part of the lake. An onsite meeting between a DELS Representative and the applicant and/or applicant's contractor will normally be included in this step. (Note: If the proposed activity does not comply with the Shoreline Classification Map and associated lake use restrictions and the applicant will not/cannot modify the request to gain compliance, the applicant will receive written documentation denying the request and the fee(s), fund payment(s), and security deposit(s) will be refunded.)

STEP 4: SMG Review

DELS reviews 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 fee(s), fund payment(s), and security deposit(s) will be refunded.)

STEP 5: Duke Energy Completes Application Review

DELS accepts the completed application and DELS reviews the application to ensure the information is correct, the proper permits and authorizations have been obtained from any required local, state, and federal agencies, and permitting and operational issues have been resolved. An onsite meeting between a DELS Representative and the applicant and/or applicant's contractor will almost always occur with or before this step. (Note: DELS will not accept incomplete applications.)

At DELS' sole discretion, DELS may return the application to the applicant for any necessary corrections or modifications or if the application is determined to be incomplete. DELS will only proceed to Step 6 when the following requirements have been satisfied:

- The application is correctly completed and includes all the necessary documentation
- The "Users' Agreement Letter" is signed
- The proposed use fully complies with the Shoreline Classification Map and associated lake use restrictions (if applicable) and the SMG

- 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 DELS in its sole discretion), and required non-Duke Energy permits and government approvals are in-hand
- There are no unresolved operational concerns (as determined by DELS in its sole discretion)
- DELS agrees with results of any DAPEA
- The applicable fees, fund payments, and security deposits have been received. (Note: In addition to the standard fee(s) and deposit(s), 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 Duke Energy in its sole discretion) by Duke Energy's Law Department have been completed

STEP 6: FERC Approval Requested

Once Steps 1 through 5 are complete, Duke Energy files the completed application with FERC (if applicable). FERC review typically takes several months and usually includes a public notice period (published in the Federal Register, on FERC's website, and the legal notices section of local newspapers) in response to which the general public may submit comments to FERC either favoring or opposing application approval. FERC may issue Additional Information Requests to Duke Energy to aid in application review; in which case, DELS will require the applicant to provide DELS with the necessary information. The FERC review typically culminates with an order or letter from FERC authorizing Duke Energy to approve the request as-filed, authorizing approval with specified modifications/conditions, or directing Duke Energy to deny the request. (Note: If the lake use is denied, the applicant will receive written documentation from DELS, including a copy of the FERC order and any security deposit(s) will be returned, but any other fees will not be returned.)

STEP 7: Issuance of Permit

Once a FERC approval order or letter (if applicable) is received, DELS provides the applicant with a minimum of two copies of the users' agreement, lease, or easement document to be

executed, notarized (if applicable), and returned to DELS along with any required additional fee(s), including Habitat Enhancement Program payments. Some activities also require the applicant to provide DELS with proof of insurance (i.e., Certificate of Insurance) naming Duke Energy as additionally insured. Once the required documents and fee(s) are received by DELS and the above steps are complete, DELS 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. For applications involving a Project area lease or easement, a memorandum of lease/easement document must also be recorded at the local Register of Deeds office. Duke Energy will handle this recording (if applicable) and will forward the applicant a copy of the fully executed and recorded instrument under separate cover. (Note: In addition to the standard fee(s) and deposit(s), 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 8: Compliance Monitoring

DELS 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 DELS when construction is initiated and completed.) Provided no violations occur and the activity is conducted in accordance with the approved application, DELS will approve the final structure or activity and attach any applicable permitting tags. If a violation is detected, DELS 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 DELS.

STEP 9: Application File Close-out

DELS closes out the application file. Applicable data are entered on the application form and into the database and documents are filed. Any security deposit(s) is/are returned, provided no violations occurred.

STEP 10: Operating Programs

The approved facility may then be subject to one or more DELS operating programs. These programs are designed to ensure long-term facility operation does not conflict with Duke Energy

objectives. These programs may include, but are not limited to, periodic compliance inspections, user fee collection, and identification of structures requiring repair.

2.0 General Policies

The policies stated in this subsection apply to both Project Reservoirs unless specifically stated otherwise.

2.1 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 DELS. These *implicit uses* (see Glossary) include:

1. **Ingress and Egress**—Ingress and egress by adjoining property owners to view the lake or to access DELS-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. **Project Access Areas**—Allowable and prohibited activities at Project Access Areas are described in the Project Recreation Management Plan.
4. **Public Recreation**—Pursuit of lawful public recreation activities within the Project Boundary in accordance with the Project Recreation Management Plan.

2.2 Lake Uses That Are Not Authorized

Consistent with the objectives of the SMG, some 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 Project Boundary. (*Note: Some of these uses have been allowed by DELS 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 DELS.*)

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 Lake Use Permit approval
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, debris, animal carcasses, or other waste. Dead animal carcasses located within the Project Boundary will be removed by DELS if determined to present a health and/or navigational hazard. Removal of animal carcasses by DELS is restricted to large mammals (i.e., livestock, deer, hogs, etc.).
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. Uses that violate an applicable federal, state or local law or regulation
17. Any other use that is determined to be unacceptable by Duke Energy, in its sole discretion

2.3 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 DELS 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 users' 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 or do not own, their maintenance responsibilities, and their limited authority with regard to controlling actions of others within the Project Boundary. The following information also helps clarify those issues.

1. **Cancellation of Lake Use Permits**—The permits for the Private Facilities and Shoreline Stabilization Programs 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 DELS at any time and the permittee would be required to remove the structure and restore the disturbed area at their own expense.
2. **Land Ownership**—Duke Energy lake use permits do not transfer title to any land.
3. **Leases and Easements**—The Marina Facilities Program and Conveyance Program have leases or easements. 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 Use and Occupancy article of the FERC license, Duke Energy uses leases and easements to assign the minimal property rights necessary for the applicant 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 is not renewed at expiration.

4. **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 the use is modified as needed in the future to comply with applicable regulations or Duke Energy lake management requirements.
5. **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 Project lands and waters. Except as specified otherwise in this document or other Duke Energy documents (e.g., FERC Public Safety Plan), anyone may fish around/under structures built by others, may walk/wade/fish within the Project Boundary, boat in the lakes' waters, etc., without having to obtain permission to do so.
6. **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 FERC, Duke Energy, and any jurisdictional agency, which may include modification of the facility in the future if necessary

- 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

7. **Transfer of Applicant Responsibilities**—If ownership or leasing of the adjoining property changes, then responsibility for the lake use facility also changes. Facility owners must contact DELS to get their applicable permits transferred to the new owner when property ownership or leasing changes. Note many types of lake uses require written transfer of lease/easement/users' agreement/permit documents when property ownership changes.

2.4 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 repair would be beyond the scope of a maintenance activity. A documented, written application must be made to DELS 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 may not be required if the original facility encroached across the projected property line 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 previously identified and not repaired as part of the Structure Renovation/Removal Program or other written directives (e.g., Stop-Work Directive, navigation hazard/public safety notification) from DELS.

2.5 Use of Islands

The islands at the Project are within the FERC Project Boundary and designated as available for public recreation in the Project Recreation Management Plan. Their location makes them attractive stops for boaters, yet their small size usually intensifies concerns about user impacts and waste disposal. The primary intended use of Project islands is public recreation, except for certain islands with special management considerations (e.g., cultural resources, heron rookeries,

safety concerns, etc.). Additional information about the use of Project islands is provided in the Project Recreation Management Plan.

2.6 Hunting and Trapping

Hunting and trapping are permitted within the Project Boundary, except Project Access Areas, provided:

- 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 Project Boundary of both lakes. All such hunting and trapping must be done in accordance with the applicable federal, state, and local regulations.
- 2. Duck Blinds**—Duck blinds must be constructed within and as close to the Normal Full Pond Elevation contour as reasonably attainable. In no cases shall they extend beyond one-third the distance to the opposite shoreline or 120 ft from the Normal Full Pond Elevation contour, whichever is more restrictive. Duck blinds located such that water depth would be greater than six ft with the lake at its Normal Full Pond Elevation 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 is not planned to be used during the next waterfowl season or if directed to do so by DELS or the state wildlife agency.
- 3. Facilities**—Except for construction of duck blinds (for waterfowl hunting), no other facility construction will be permitted within the Project Boundary for the sole purpose of supporting hunting or trapping.
- 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 DELS 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.

2.7 Handling of Lakeside Buffers on Project Lands, Building Setbacks, and Minimum Lot Sizes

Maintenance of vegetated lakeside buffers is an important factor in protecting and enhancing a lake's values. Buffers 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, DELS:
 - a. Supports maintaining existing buffers in their natural vegetated state, except where necessary to operate its electric business, including limited pruning, topping, thinning, or clearing as necessary to facilitate reasonable access to Duke Energy-approved, water-dependent structures
 - b. Supports the provision of nominal width pathways, trails, and walkways to allow recreation access or to provide reasonable views of the water from adjoining properties
 - c. Requires the removal of vegetation in accordance with the Vegetation Management Requirements (see Section 3) and applicable ordinances
 - d. Encourages lake use permit applicants to plan their work to avoid and minimize buffer impacts to the maximum practicable extent
 - e. 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
 - f. Prohibits vegetation removal in some specifically designated areas (e.g., areas classified as Environmental on the Shoreline Classification Maps) to support non-public projects
 - g. Requires adjoining property owners comply with the buffer regulation requirements including, but not limited to, providing release statements, unless it is expressly clear every effort has been made by the adjoining property owner to alter their plans to avoid or minimize the buffer disturbance

2. With regard to building setbacks and minimum lot sizes, DELS will not become involved in the practice by some jurisdictions of using land within the Project Boundary as land area for consideration toward meeting minimum lot size or building setback regulations.

2.8 Native Shoreline and Aquatic Vegetation Management

Shoreline and aquatic plants are important components of the aquatic life in lakes, rivers, and streams. They contribute to the overall health of a water body by providing food and shelter to many shoreline and aquatic animals, filtering nutrients from land surface runoff, improving water clarity by allowing suspended silt and clay particles to settle, and increasing dissolved oxygen levels in the water and thus supporting aquatic life. DELS will manage native shoreline and aquatic vegetation to encourage these benefits.

1. DELS prefers native aquatic and shoreline plants instead of exotic (i.e., non-native) species. 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.
2. DELS supports the planting of native North Carolina and South Carolina plant species within and adjoining the Project Boundary for the purposes of shoreline stabilization or establishing or restoring wildlife/fisheries habitat.
3. DELS will not authorize the planting of any plant species within the Project Boundary that is not native to the state in which it is planted or is not otherwise approved by Duke Energy.
4. Plans for the introduction of vegetation within the Project Boundary of a Project Reservoir must be submitted in writing to DELS. Plans must contain a 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.
5. DELS 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 DELS.

2.9 Contractor Use of Project Access Areas

Duke Energy is required under the license granted by FERC to arrange for the construction, maintenance, and management of Project Access Areas (see Table 2.9-1). As Licensee, one of Duke Energy's primary responsibilities for management of these areas is to ensure activities at Project Access Areas do not prohibit or interfere with the public's use of the area for boating, fishing, or other authorized recreational uses.

TABLE 2.9-1 PROJECT ACCESS AREAS

JOCASSEE DEVELOPMENT PROJECT ACCESS AREAS	KEOWEE DEVELOPMENT PROJECT ACCESS AREAS
<ul style="list-style-type: none">• Devils Fork State Park• Double Springs Campground• Bootleg Access Area (undeveloped)• Handpole Ridge Access Area (undeveloped)• Grindstone Access Area (undeveloped)	<ul style="list-style-type: none">• Cane Creek Access Area• Crow Creek Access Area• Fall Creek Access Area• High Falls County Park• Keowee Town Access Area• Mile Creek County Park• South Cove County Park• Stamp Creek Access Area• Warpath Access Area• High Falls II (undeveloped)• Mosquito Point (undeveloped)

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 Project 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 Project 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 Project Access 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 lake construction contractors' use of Project 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, Duke Energy has implemented a number of requirements regarding contractors' use of the Project Access Areas. In general, contractors may request authorization for generic limited use of a Project Access Area 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 Project Access Areas to provide a point of access for individual construction activities if the respective lake construction contractor complies with the following requirements:

1. **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 Project Access Areas to be a privilege that can and will be revoked individually or as a whole for any reason if deemed necessary by DELS, the applicable wildlife resource management agency, or a Project Access Area lessee.
2. **Insurance**—Contractors must provide each year to DELS, prior to long-term Project Access Area use, a certificate of insurance endorsed to add Duke Energy as an additional insured including waivers of any right of subrogation of the insurers against Duke Energy, its officers, directors, and employees. Contractors shall and will require each Subcontractor: (a) to furnish properly executed certificates of insurance to DELS 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 DELS; (b) to maintain such insurance from the time work first commences until completion of the work; and (c) to replace such certificates for policies expiring prior to completion of work.
3. **Launching Ramps**—Damage to boat ramps may occur as a result of contractors using the 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 riprap or other rock be loaded, unloaded, or transferred on the Project Access Area, including the boat ramp(s).

4. **Metal Cable Anchors**—No cable anchors will be allowed in any location at the Project Access Area.
5. **Prohibited Activities**—The following work practices are not allowed at Project Access Areas:
 - a. **Parking commercial vehicles**—All vehicles owned or operated by lake construction contractors must be parked in designated spaces. Parking will be allowed in the turnarounds long enough to unload equipment and material, at which time the vehicle must be moved to a designated space.
 - b. **Leaving docks/equipment unattended**—Docks and equipment may not be left unattended at Project Access Areas at any time.
 - c. **Restricting public access**—Structures and/or materials may not be placed on the Project 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**—Project Access Areas shall not be used by lake construction contractors from 9:00am–6:00pm on weekends and holidays during the period April 1 through September 30.
 - e. **Using heavy equipment**—Use of heavy equipment is generally not permitted at Project Access Areas. 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 riprap or other rock**—In no event shall riprap or other rock be loaded, unloaded, or transferred on Project Access Areas, including the boat ramp(s).
 - g. **Using the area for more than point of access**—Use of Project Access Areas is primarily for access to the lake. Staging activities are not permitted unless specified and approved by the appropriate agencies 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 Project Access Areas.

- i. Clearing vegetation and other damage—Unauthorized removal of vegetation at Project Access Areas is prohibited. In no event shall use of Project Access Areas 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 Project Access Areas and adjoining property.

2.10 Other Uses of Project Access Areas

Use of Project Access Areas by entities in support of a business (e.g., storage of materials or boats) is not allowed unless approved in writing by Duke Energy.

3.0 Vegetation Management Requirements

Vegetation management and maintenance of vegetated terrestrial and riparian areas is an important factor in protecting and enhancing lake 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, DELS has developed requirements to protect riparian wildlife corridors on shoreline property within the Project Boundary, in consultation with various lake stakeholders and stakeholder teams, and with consideration given to impacts on private landowners with property adjoining the Project Boundary.

3.1 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. Land within the Project Boundary shall be maintained in a vegetated forested condition, where existing, 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 Boundary), or removal of non-native invasive plants and poisonous plants, shall be undertaken by any person or party without written concurrence from DELS. Non-native invasive plant lists can be found on the Internet at the following addresses:

<https://plants.usda.gov/java/noxiousDriver>

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

<http://www.dnr.sc.gov/invasiveweeds/>

3.2 Vegetation Planting

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

1. Vegetation native to the region shall be required. (Note: A sample plant list of commonly acceptable vegetation native to the region is available from DELS.)
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 DELS.

3.3 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. **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.
2. **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.

3. **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.
4. **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 inland should be placed within the buffer to serve as downed logs.
5. **Footpaths for Individual Lots**—Footpaths for individual lots shall be no more than four ft wide and should be designed in a winding manner to avoid trees greater than three inches in 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. Walkways must either have natural ground cover or be constructed of natural materials, follow the contour of the land, and must lead to an approved lake-use facility. Concrete, asphalt, and other impervious surfaces are not allowed within the Project Boundary.
6. **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 DELS-approved structure.
7. **Grubbing or Grinding Tree Stumps**—Grubbing or grinding of tree stumps of any size is not allowed except to create footpaths (large trees greater than 10 inches dbh must be avoided) and as approved as part of authorized stabilization activities.
8. **Hand-Held Tools**—Clearing, thinning, and pruning shall generally be accomplished with hand-held tools.
9. **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 with approval from SCDNR.

10. **Mechanical Clearing**—Mechanical clearing (e.g., bulldozers, backhoes, or other heavy equipment) shall not be used (see Note 1 at the end of Section 3.0) unless in conjunction with a shoreline stabilization project or as a remedial activity, approved by DELS, 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.
11. **Pruning**—Individual trees may not be pruned except for viewsheds and access paths as provided below.
12. **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 DELS. 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.

3.4 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 (see Section 11, Figures 2 and 3).

1. A single viewshed may be established in consultation with DELS once a home or building is constructed.
2. An on-site meeting between DELS, the home or business owner, and landscape contractors is required to establish the viewshed. The meeting will result in an approval letter that specifically identifies and lists all activities allowed 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 to facilitate a viewshed. Native shrubs and vines shall not be pruned from the ground to a height of four ft.

4. Standing live trees (greater than three inches dbh) 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-diameter trees may replace one 6-inch-diameter tree). Diameter shall be measured at breast height (dbh) four and a half feet above the base of the tree. Replacement trees should be a native “ecological equivalent” of the tree that is removed (i.e., a tree removed from the canopy should be replaced with a similar species with 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.
5. A joint single viewshed may be created by two adjoining property owners with written concurrence from DELS.
6. Minimal topping and removal of only selected trees will be considered to establish a viewshed.
7. Viewsheds will not be allowed to be created in the Project Boundary within the confines of adjoining areas designated as Environmental on the Shoreline Classification Maps.

Notes

1. **Approvals Prior to Adoption of Requirements**—The provisions of these requirements shall not apply to DELS-approved maintenance or rebuild activities or activities (e.g., pier/docks, stabilization, mowing) which were allowed and/or approved by DELS prior to September 1, 2006.
2. **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 consistent with these requirements.
3. **Local Riparian Buffer Ordinances**—Local governments with land use authority adjacent to the Project may adopt local riparian buffer ordinances. These local riparian

buffer ordinances in North Carolina may be approved by the NCDENR- Division of Water Resources if it is determined by the Division that the local ordinances provide equal to or greater protection for water quality than the SMG. Buffer regulations in South Carolina are governed by local ordinance.

4.0 Permitting Program 1—Marina Facilities

4.1 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 *Shoreline Classifications and Lake Use Restrictions* document) within the Project Boundary must first contact DELS and obtain written authorization prior to beginning any activity/construction. Resource agency consultation and an approval order from FERC may also be required before DELS can approve certain activities. DELS will require the applicant to enter into a lease or users' agreement to ensure that long-term operation of the marina facility does not conflict with Duke Energy objectives. No marina facilities, except those multi-slip facilities associated with license-required Project Access Areas (e.g., Devils Fork State Park) are allowed on Lake Jocassee. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

4.2 Criteria for Commercial Marina Facilities

The following criteria apply to Commercial Marina Facilities, including, but not limited to, public marinas, yacht clubs, restaurants, and short-term campgrounds (stays of 14 consecutive days or less).

1. **50-ft Environmental Offset**—New or expanded Commercial Marina Facilities may not be constructed within the 50-ft Environmental Offset (see Section 11, Figure 4) associated with an Environmental classification identified on the Shoreline Classification Maps unless the approved facility currently exists within the offset.
2. **Allowable Non-Boating Structures at True Public Marina**—True Public Marina (TPM) Facilities may include fishing piers/platforms/boardwalks or other similar non-boating structures (see Attachment A). The extraneous facilities can only be used for the purposes identified in the facility application. These facilities will be assessed a single user fee, provided the facility does not provide boating access.

3. **Applicant**—Applicants and lessees/grantees 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 Boundary. DELS will hold the adjoining property owner or leaseholder fully responsible for the approved lake use (including maintaining structures in good repair). This responsibility transfers automatically along with ownership or leasing of the adjoining tract. It is therefore the responsibility of the property owner or leaseholder to ensure authorization for the approved use and any conveyance documents for facilities within the Project Boundary or peripheral strip are transferred should there be a change in ownership or leasing of the adjoining tract and/or facility.
4. **Capacity of Boat 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.
5. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.
6. **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. The Residential Marina Facility criteria must be met and the applicant will also have to sign a new lease/users' agreement consistent with the documents required of new Residential Marina Facilities.
7. **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.

8. **Cut-Off Areas**—New or expanded Commercial Marina Facilities may be significantly restricted in the 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.
9. **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 DELS.
- a. A one-year extension may be approved by DELS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing which approved activities have been completed, and which 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.
 - b. 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. Upon documentation of permit validity or reissued permits, DELS may issue 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.
 - c. If the applicant does not complete all activities within this final 12-month extension period, DELS 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, at 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 DELS.

- 10. Electric Utility Line Rights-of-Way**—DELS will not authorize lake use permits for constructing new or expanded boat launching/docking/mooring facilities which extend into the right-of-way limits of existing or planned overhead, electricity-carrying utility line. For Commercial Marina Facilities, this restriction includes the Project area covered by the lakebed lease/users' agreement.
- 11. Enclosure of Facilities**—The sides of covered boat slips may not to be enclosed. Handrails may be installed for safety, but must not be enclosed.
- 12. Exceptions and Waivers for Facility Modification or Expansion to Reach Deeper Water** —Marina owners/operators may be eligible for approval to modify or expand existing Marina Facilities that were previously approved by DELS prior to December 1, 2013, if the modification or expansion is justified to reach deeper water. Certain limitations apply. DELS will accept applications over a 365-day period of time for eligible facility modifications or expansions, with the application window opening after completion of the prerequisite events outlined in the Relicensing Agreement for the Keowee-Toxaway Hydroelectric Project. DELS will provide broad public notification at least 30 days prior to this application window of opportunity becoming available. Eligible applicants may qualify for waivers of certain fees. Marina owners/operators who wish to modify or expand their existing docks to reach deeper water either before or after the application window stated above may do so with the proper approvals including written approval from DELS, but the applicant is not eligible for the fee waivers specified in the Relicensing Agreement.
- 13. Facility Amenities Application Details**—All Commercial Marina Facility boat launching/docking/mooring locations, whether in confined boat slips alongside the outermost boat 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 provide 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 provide evidence that supports the rate of use of the storage area access.

- 14. Facility Criteria**—DELS, 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 to be within the criteria of the Private Facility or Marina Facilities Programs.
- 15. 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 allowed 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.
- 16. Floats for Personal Watercraft and Boatlifts**—Floats for docking of personal watercraft (PWC) or boatlifts may be added to a previously approved Commercial Marina Facility without additional written approval from Duke Energy, provided:

 - a. All applicable non-Duke Energy permits or approvals have been received
 - b. Only one PWC float or boatlift is installed within the confines of a boat slip in the previously approved facility
 - c. The addition of the PWC floats or boatlifts do not increase the total number of watercraft the facility is designed to accommodate as identified in the application
 - d. The facility owner sends a letter to DELS documenting that the above requirements are met, along with an attached drawing of the facility identifying the locations of the added PWC floats or boatlifts
- 17. Following the Water**—Dock owners, including owners of Commercial and Residential Marinas and Public Recreation Facilities, may “follow the water” in an effort to maintain usability of their boat or dock during Low Inflow Protocol (LIP) Stages 2, 3, or 4. Dock owners shall return their boats or docks to their approved locations and

orientations and remove all temporary anchor pins within 14 calendar days following Duke Energy's public declaration of returning to LIP Stage 1, 0, or Normal. DELS may waive certain guidelines that would conflict with following the water at its sole discretion. DELS reserves the right to require boat and dock owners to immediately restore their boats and docks to their original approved locations if the owner is not complying with the applicable requirements. Dock owners who choose to follow the water shall not prevent or block access to other docks or coves or impact shoreline classified as Environmental or Natural by the Shoreline Classification Maps. Dock owners who choose not to follow the water may moor their boats at docks belonging to other property owners during periods when following the water is allowed if prior permission is obtained from the property owner. The temporary relocation of boats or docks and temporary anchoring of these facilities must not create safety, navigational, or other hazards. No electricity-carrying lines coming from the shoreline can be connected to docks while they are following the water. No written authorization is required to follow the water. Dock owners may make minor modifications to docks that would facilitate following the water (e.g., adding wheels or sleds to gangways, attaching winches to anchor cables, etc.) provided the modification does not result in increased square footage for the dock or a modification to the configuration of the dock.

- 18. Gasoline Dispensing**—New, expanded, or rebuilt Commercial Marina Facilities approved to dispense gasoline within the Project Boundary must provide petroleum absorbent materials or similar best available technology at all the boat slips dedicated/available for gasoline dispensing.
- 19. Islands**—New Commercial Marina Facilities for boat launching/docking/mooring will not be authorized for construction from islands.
- 20. Lease/Users' Agreement**—All new, expanded, or rebuilt Commercial Marina Facility applicants are required to enter into a lease/users' agreement for the Project area the facility will occupy. The Project area covered by the lease/users' agreement 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 boat slip length on the side of boat ingress and egress and 15 ft from all other sides (see Section 11, Figure 5)
 - c. The area cannot extend beyond the mid-point of the cove (see Section 11, Figure 6)
 - d. All moored watercraft must be within the confines of the area covered by the lease/users' agreement
- 21. 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 Normal Full Pond Elevation contour or extend more than 120 ft lakeward of the Normal Full Pond Elevation contour, whichever is more limiting (see Section 11, Figure 7). 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.)*
- 22. 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.
- 23. Liquid and Solid Waste Facilities**—Structures built within the Project Boundary must not contain sinks, toilets, showers, spigots, 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 supporting approved marine pump-out facilities, or facilities for which such devices were specifically approved under a complete, Commercial Marina Facility application post-marked to DELS prior to June 1, 1996, are exempted from this requirement.)*
- 24. 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 (see Section 11, Figure 8).

- 25. Low Impact Design**—Low Impact Development practices for stormwater management shall be incorporated to the maximum practicable extent into the design of any boat ramp facility located within the Project Boundary.
- 26. 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.*)
- 27. Minimum Elevation of Decking**—The top of all fixed pier decking (not including handrails) must be at least one vertical foot above the Normal Full Pond Elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate watercraft boarding.
- 28. Mooring Requirements**—Facilities shall not use mooring buoys or similar detached structures to independently moor vessels. Mooring locations must be limited to areas within boat slips and along the outer edges of piers/docks as end ties.
- 29. Narrow Coves**—New or expanded 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 (see Section 11, Figure 8).
- 30. Non-Allowable Non-Water Access Facilities**—The addition of facilities within the Project Boundary that are 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, picnic tables, etc.), provided they are identified in the application.
- 31. Reflectors**—Reflectors or reflective tape must be placed and maintained by the structure owner on the two furthestmost corners of the structure that extend into the water and along the sides of the structure at reasonable intervals from the end of the structure back toward the shore.

- 32. Setbacks**—Facilities shall be set back along the shoreline at least 200 ft from the outermost Project-front property corners of the development, at least 200 feet from any privately owned inholdings that are not part of the proposed commercial facility, and/or according to local government zoning requirements if the zoning requirements provide for a distance of greater than 200 ft. This setback along the shoreline is determined by creating a 200-ft radius circle from the property corners on the Project-front (see Section 11, Figure 9).
- 33. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.
- 34. Timing of Lease/Users' Agreement**—All new, expanded, or rebuilt Commercial Marina Facilities must have a fully executed lease and user's agreement 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.
- 35. True Public Marina Expansion**—Expansion of existing True Public Marinas may be exempted from certain requirements that limit expansion of existing Commercial Marina Facilities. True Public Marinas may be considered for expansion even if:
- The facility is behind a point where the cove narrows to 300 ft or less
 - The facility expansion would exceed the maximum of 200 boat slips
 - The facility expansion is within the 200-ft setback from the outermost Project-front property corners or from any privately owned inholdings. 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. Expansions are subject to local, state and federal resource agency review.
- 36. Waste Disposal Facilities**—Any proposed new, expanded, or rebuilt dry storage facility adjoining the Project Boundary, Commercial Marina Facility, or Commercial Marina Facility that is renewing or transferring its Project area lease or users' agreement must provide a commercially manufactured sanitary marine pump-out system as a regular and customary service if any of the following criteria are met:
- The facility will have more than 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 more than 25 watercraft with Marine Sanitation Devices (MSD)
- d. The facility will moor a watercraft specifically used to provide cruises to the public where meals are served
- 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 the facility will not be allowed to dispose of waste collected from watercraft because of state or local regulations.)

- 37. Waste Disposal Facilities Required for TPM**—Publicly available restrooms and marine pump-out facilities must be provided to be considered a True Public Marina (TPM).
- 38. Water Willow Beds**—Applicants are encouraged to avoid activities that could adversely impact 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 feet. Removal of water willow for continued lake access may be allowed, but only for the specific and limited area necessary.

4.3 Criteria for Residential Marina Facilities

The following enumerated criteria apply to Residential Marina Facilities, including, but not limited to townhouses, condominiums, apartments, long-term campgrounds (stays of more than 14 consecutive days), and subdivision access lots.

- 1. 50-ft Environmental Offset**—New or expanded Residential Marina Facilities may not be constructed within the 50-ft Environmental Offset (see Section 11, Figure 4) associated with an Environmental classification identified on the Shoreline Classification Maps unless the approved facility currently exists within the offset.

2. **Applicant**—Applicants and lessees/grantees 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 Boundary. DELS will hold the adjoining property owner or leaseholder fully responsible for the approved lake use (including maintaining structures in good repair). This responsibility transfers automatically along with ownership or leasing of the adjoining tract. It is therefore the responsibility of the property owner or leaseholder to ensure authorization for the approved use and any conveyance documents for facilities within the Project Boundary or peripheral strip are transferred should there be a change in ownership or leasing of the adjoining tract and/or facility.
3. **Assigned Boat Slips for Project-Front Lots**—A Project-front lot may be assigned a boat slip in the Residential Marina Facility if the applicant so chooses. The boat slip for the Project-front lot will not increase the total maximum number of Residential Marina boat slips the applicant may request. Any such Project-front lot will not be considered for an Individual Private Facility, or for a boat 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.
4. **Capacity of Boat 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.
5. **Common Access Boardwalks**—Common access boardwalks are not allowed for Residential Marina Facilities.
6. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.

7. **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. The Residential Marina Facility criteria must be met and the applicant will also have to sign a new lease/users' agreement consistent with the documents required of new Residential Marina Facilities.
8. **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.
9. **Covered Boat Slips**—No covered boat slips, structural boat covers, or *boat shelters* (see Glossary) will be allowed at Residential Marina Facilities.
10. **Cut-Off Areas**—New or expanded Residential Marina Facilities may be significantly restricted in the 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.
11. **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 18 months from the date of application approval by DELS.
 - a. A one-year extension may be approved by DELS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing which approved activities have been completed, which 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.

- b. 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.
 - c. If the applicant does not complete all activities within this final 12-month extension period, DELS 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 DELS.
- 12. Electric Utility Line Rights-of-Way**—DELS will not authorize lake use permits for constructing new or expanded boat launching/docking/mooring facilities which extend into the right-of-way limits of any existing or planned overhead, electricity-carrying utility line. For Residential Marina Facilities, this authorization restriction includes the Project area covered by the lakebed lease/users' agreement.
- 13. Enclosure of Facilities**—The sides of covered boat slips may not to be enclosed. Handrails may be put on for safety, but must not be enclosed.
- 14. Exceptions and Waivers for Facility Modification or Expansion to Reach Deeper Water** —Marina owners/operators may be eligible for approval to modify or expand existing Marina Facilities previously approved by DELS prior to December 1, 2013, if the modification or expansion is justified to reach deeper water. Certain limitations apply. DELS will accept applications over a 365-day period of time for eligible facility modifications or expansions, with the application window opening after completion of the prerequisite events outlined in the Relicensing Agreement for the Keowee-Toxaway Hydroelectric Project. DELS will provide broad public notification at least 30 days

prior to this application window of opportunity becoming available. Eligible applicants may qualify for an exception to waivers of certain fees. Marina owners/operators who wish to modify or expand their existing docks to reach deeper water either before or after the application window stated above may do so with the proper approvals including written approval from DELS, but the applicant is not eligible for the fee waivers specified in the Relicensing Agreement.

- 15. Facility Amenities Application Details**—All Residential Marina Facility boat launching/docking/mooring locations, whether in confined boat slips alongside the outermost boat 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 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 boat slips/moorings/docking locations requested.)

(Note: Specifically assigned refueling boat slips must have petroleum absorbent materials or similar best available technology at all the boat slips dedicated/available for gasoline dispensing.)

- 16. Facility Criteria**—DELS, 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.
- 17. Floats for Personal Watercraft and Boatlifts**—Floats for docking of PWC or boatlifts may be added to a previously approved Residential Marina Facility without additional written approval from Duke Energy, provided:
- a. All applicable non-Duke Energy permits or approvals have been received

- b. Only one PWC float or boatlift is installed within the confines of a boat slip in the previously approved facility
- c. The addition of the PWC floats or boatlifts do not increase the total number of watercraft the facility is designed to accommodate as identified in the application
- d. The facility owner sends a letter to DELS documenting the above requirements are met, along with an attached drawing of the facility that identifies the locations of the added PWC floats or boatlifts

18. 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 allowed 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. All uncoated, beaded polystyrene on existing residential docks must be removed, properly disposed of, and replaced with acceptable flotation by September 1, 2018.

19. Following the Water—Dock owners, including owners of Commercial and Residential Marinas and Public Recreation Facilities, may “follow the water” in an effort to maintain usability of their boat or dock during Low Inflow Protocol Stages 2, 3, or 4. Dock owners shall return their boats or docks to their approved locations and orientations and remove all temporary anchor pins within 14 calendar days following DELS’ public declaration of returning to LIP Stage 1, 0, or Normal. DELS may waive certain guidelines that would conflict with following the water at its sole discretion. DELS reserves the right to require boat and dock owners to immediately restore their boats and docks to their original approved locations if the owner is not complying with the applicable requirements. Dock owners who choose to follow the water shall not prevent or block access to other docks or coves or impact shoreline classified as Environmental or Natural by the Shoreline Classification Maps. Dock owners who choose not to follow the water may moor their boats at docks belonging to other

property owners during periods when following the water is allowed if prior permission is obtained from the property owner. The temporary relocation of boats or docks and temporary anchoring of these facilities must not create safety, navigational, or other hazards. No electricity-carrying lines coming from the shoreline can be connected to docks while they are following the water. No written authorization is required to follow the water. Dock owners may make minor modifications to docks that would facilitate following the water (e.g., adding wheels or sleds to gangways, attaching winches to anchor cables, etc.) provided the modification does not result in increased square footage for the dock or a modification to the configuration of the dock.

20. **Gasoline Dispensing**—New, expanded or rebuilt Residential Marina Facilities with dedicated boat slips for boat refueling from single individually-owned containers must provide petroleum absorbent materials or similar best available technology at all the boat slips dedicated for refueling.
21. **Islands**—New Residential Marina Facilities for boat launching/docking/mooring will not be authorized for construction from islands.
22. **Lease/Users' Agreement**—All new, expanded, or rebuilt Residential Marina Facility applicants are required to enter into a lease/users' agreement for the Project area the facility will occupy. The Project area covered by the lease/users' agreement 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 boat slip length on the side of boat ingress and egress and 15 ft from all other sides (see Section 11, Figure 5)
 - c. The area cannot extend beyond the mid-point of the cove (see Section 11, Figure 6)
 - d. All moored watercraft must be within the confines of the area covered by the lease/users' agreement
23. **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 Normal Full Pond Elevation contour or extend more than 120 ft lakeward of the Normal Full Pond

Elevation contour, whichever is more limiting (see Section 11, Figure 7). 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.

24. **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.
25. **Liquid and Solid Waste Facilities**—Structures built within the Project Boundary must not contain sinks, toilets, showers, spigots or any other type of device that could cause any liquid or solid waste to be discharged into the lake. (*Exception: Water supply lines supporting approved marine pump-out facilities are exempted from this requirement.*)
26. **Location of Boat Ramps**—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 (see Section 11, Figure 8).
27. **Low Impact Design**—Low Impact Development practices for stormwater management shall be incorporated to the maximum practicable extent into the design of any boat ramp facility located within the Project Boundary.
28. **Minimum Elevation of Decking**—The top of all fixed pier decking (not including handrails) must be at least one vertical foot above the Normal Full Pond Elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate watercraft boarding.
29. **Mooring Requirements**—Facilities shall not use mooring buoys or similar detached structures to independently moor vessels. Mooring locations must be limited to areas within boat slips and along the outer edges of piers/docks as end ties.

- 30. Narrow Coves**—New or expanded 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 (see Section 11, Figure 8).
- 31. Non-Water Access Facilities**—The addition of facilities within the Project Boundary that are 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, etc.), provided they are identified in the application.
- 32. 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 boat 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 boat slips.
- 33. Reflectors**—Reflectors or reflective tape must be placed and maintained by the structure owner on the two furthestmost corners of the structure that extend into the water and at reasonable intervals along the sides of the structure from the end of the structure back toward the shore.
- 34. Review of Associated Applications**— If a residential subdivision proposes to provide Residential Marina access, the developer must submit one of the following before DELS will review applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses, and Shoreline Stabilization programs:
- a. A complete Residential Marina Facilities application. A developer must receive written confirmation from DELS that the application has been submitted to Duke Energy's Law Department for preparation to file with FERC (if applicable)
 - b. A copy of the homeowners' covenants and the final recorded subdivision plat approved by the local government planning and zoning office acknowledging the location of the planned facilities

- 35. Setbacks**—All facilities shall be set back along the shoreline at least 200 ft from the outermost Project-front property corners of the development, at least 200 ft from any privately owned inholdings 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 if the zoning requirements provide for a distance of greater than 200 ft. This setback along the shoreline is determined by creating a 200-ft-radius circle from the property corners on the Project-front (see Section 11, Figure 9).
- 36. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.
- 37. Subdivision Access Lots**—The proposed Residential Marina Facility must meet the following basic guidance concerning subdivision access lots:
- a. The master plan must show 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., boat slip eligibility, marina location, and 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 Boundary
 - 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 (see Section 11, Figure 8).
- (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.)*
- 38. Timing of Lease/Users’ Agreement**—All new, rebuilt or expanded Residential Marina Facilities must have a fully executed lease or user’s agreement 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.

39. Waste Disposal Facilities Required—Any proposed new, expanded or rebuilt Residential Marina Facility or a Residential Marina Facility that is renewing or transferring its Project area lease or users' agreement 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 more than 65 docking/mooring spaces for watercraft
- b. The facility will moor more than 25 watercraft with Marine Sanitation Devices (MSD)
- 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 the facility will not be allowed to dispose of waste collected from watercraft because of state or local regulations.)

40. Water Willow Beds—Applicants are encouraged to avoid activities that could adversely impact 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 feet. Removal of water willow for continued lake access may be allowed, but only for the specific and limited area necessary.

4.4 Shoreline Preservation Incentive Program

The Shoreline Preservation Incentive Program is a program offered for development projects to preserve undisturbed shoreline to protect wildlife habitat. The criteria for the incentive program are enumerated below.

- 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 typically would be allowed 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 by 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 Boundary. The total number of boat 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 boat slips/moorings/docking locations will be rounded down as part of the incentive program.

Eligible Shoreline Preserved (percent)		Boat Slip Multiple per 100 ft of Shoreline Preserved			
At Least	But Less Than	With No Buffer	With 50-Ft Buffer	With 150-Ft Buffer	With 200-Ft Buffer
20	25	1.5	2.5	3.5	4.0
25	50	2.5	3.5	4.5	5.0
50	--	4.5	5.0	6.0	6.5

2. **Eligible Shoreline**—Any shoreline not eligible for lake use permitting activities, such as shoreline classified as Environmental, Natural, Natural Isolated Berm, Public Infrastructure, etc., will 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 wide horizontally) of additional land upland and contiguous to the preserved shoreline. No additional incentive will be provided for buffers less than 50 ft in width upland of the Project Boundary. 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, or Natural Isolated Berm. For every two acres of the applicant's property outside the Project Boundary preserved and left undisturbed, the applicant becomes eligible for one additional boat slip/docking/mooring location.
5. **Upland Buffer Associated with Protected Shoreline Areas Alternative**—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 Boundary contiguous with a protected habitat classification (i.e., Environmental, Natural, or Natural Isolated Berm). All preserved land above the Project Boundary 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 Shoreline Classification Maps indicate 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. **Upland Buffers Identification 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, or Natural Isolated Berm, 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 homeowners'/boat slip owners' association or other conservation entity approved by DELS
 - 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
 - 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, DELS, 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 riprap, which then may be permitted on a case-by-case basis.
8. **Case-by-Case Determinations**—Since the intent of the incentive program is to preserve important shoreline habitat areas, DELS will make the final eligibility determinations on a case-by-case basis.

(Note: Shoreline areas not developable for multi-slip marina uses (e.g., their shoreline classification 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 the above limitations describe the maximum number of boat 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.)

4.5 Criteria for Rebuilds of Existing, Previously Approved Marina Facilities

The criteria for rebuilding existing or previously approved marina facilities are set forth below. (See Glossary to note difference between a *Facility Rebuild* and *Facility Emergency Repair*, *Facility Expansion*, and *Facility Maintenance*.)

1. **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:
 - a. The structure and the Project area covered by the lakebed lease/users' agreement 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/users' agreement within the right-of-way will be increased
 - c. All necessary design limitations (e.g., no roofs) have been incorporated and a special lease/users' agreement has been signed by the applicant
 - d. The applicant receives written approval from the utility line owner
2. **Facility Rebuilds**—Applications for *facility rebuilds* of existing Marina Facilities must conform to the SMG in place for new or expanded facilities at the time of the rebuild application. The following waivers may be considered:
 - a. Any criterion specifically stated as being exclusively for new and/or expanded facilities
 - b. Any criterion 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/users' agreement/permit requirements, if necessary to prevent creating non-compliances for other previously permitted facilities
 - e. The requirement for each boat 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 ownership to a subdivision

access lot. (*Note: The applicant may be required to post a bond to guarantee performance of lease/users' agreement requirements.*)

- 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 HPMP 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.)

- 3. **Lease/Users' Agreement**—Applicants requesting to rebuild their facilities must enter into a new lease/users' agreement 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.

- 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, even though 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/users' agreement/permit of Project property.*) The following may be considered by DELS:

- a. Waiver of the 200-ft setback requirement, provided 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 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 boat 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 allowed by a–c above.)

5. **Removal of Old Facilities Prior to Rebuilds**—Applicants requesting to rebuild their facility must ensure structures being replaced are completely removed from the Project Boundary prior to starting any new construction.

4.6 Caution

1. **Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project’s scenic, recreational, cultural, and environmental values.
2. **Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.
3. **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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
4. **Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related

activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user may not claim or charge any damage against Duke Energy it may suffer as a result of flooding or drawdowns.

5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.
7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.
8. **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 on the Shoreline Classification Maps.

4.7 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
 - Loss of any consideration for future reservoir use applications
- 2. Examples of Violations and Penalties**—Examples of specific violations and applicable penalties include but are not limited to the following.
- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
 - The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
 - The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
 - The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
 - The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

5.0 Permitting Program 2—Conveyances

5.1 General

Many non-boating activities crossing or located within the Project Boundary require a formal written conveyance from DELS, and an order approving the conveyance from FERC (if applicable) **before** beginning any construction within the Project Boundary. A conveyance is required for the 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 is 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 DELS. 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 Duke Energy objectives. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

5.2 Criteria for Conveyances

1. **50-ft Environmental Offset**—New or expanded Conveyance activities may not be constructed within the 50-ft Environmental Offset (see Section 11, Figure 10) associated with an Environmental classification identified on the Shoreline Classification Maps unless the permitted activity currently exists within the offset.
2. **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 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).

3. **Applicant**—The applicants 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 Boundary. 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 Boundary. DELS will hold the adjoining property owner or leaseholder fully responsible for the approved lake use (including maintaining structures in good repair). This responsibility transfers automatically along with ownership or leasing of the adjoining tract. It is therefore the responsibility of the property owner or leaseholder to ensure authorization for the approved use and any conveyance documents for facilities within the Project Boundary or peripheral strip are transferred should there be a change in ownership or leasing of the adjoining tract and/or facility. For conveyance applications, 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.)
4. **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 infeasible to redesign the line to: (a) remove the line's right-of-way completely from the lakebed 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 infeasible to remove the line's right-of-way completely from the lakebed 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.
5. **Bridge Clearance for New Bridges**—Proposed new public or non-public bridges that will cross the Normal Full Pond Elevation contour in an area considered navigable (i.e.,

areas that have at least a 10-ft-wide by 3-ft-deep channel with lake level at its Normal Minimum Elevation) must have a clearance height at least 12 ft above the Normal Full Pond Elevation for at least the middle third of its span or 10 ft of width, whichever is greater.

6. **Bridge Clearance for Existing Bridges**—Replacement, expansion, or realignment of existing bridges must not reduce the existing clearance height from the Normal Full Pond Elevation.
7. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.
8. **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 (see Section 11, Figure 11).
9. **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 DELS.

A one-year extension may be approved by DELS if the applicant files a written request, prior to expiration of the 18-month build-out period, detailing which approved activities have been completed, which 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. Upon documentation of permit validity or

reissued permits, DELS may issue 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, DELS 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, at 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 DELS. *(Exception: Public facilities may be eligible for up to two additional, one-year time extensions not available to other types of facilities for a total potential build-out period of 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.)*

- 10. Facilities Requiring Lake Facility Safety Plans**—As a minimum, Lake Facility Safety Plans will be required for: (a) proposed new, expanded, or rebuilt bridges and causeways that cross the Normal Full Pond Elevation contour in areas that are considered navigable (i.e., areas that have at least a 10-ft-wide by 3-ft-deep channel with lake level at its Normal Minimum 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 exposed at reservoir levels above the Hydro Station Operational Limit (HSOL) on the specific lake. Applicants for these types of facilities, as well as any others as may be determined by DELS, must submit a Lake Facility Safety Plan as part of their lake use permit application.
- 11. 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. Signage, reflectors or other warning/safety devices necessary for the safe construction and subsequent operation of proposed facilities/activities must be provided and

maintained by the applicant/structure owner and are typically identified in a Lake Facility Safety Plan.

- 12. Lease/Easement/Users' Agreement**—All Conveyance applicants are required to enter into a lease, easement, and/or users' agreement for the Project area that the facility will occupy.
- 13. 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.
- 14. 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 Project Boundary (see Section 11, Figure 11).
- 15. Overhead Electricity-Carrying Utility Line Prohibitions**—DELS will not authorize:
 - a. 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.
 - b. 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 the following two requirements are met:
 - i. 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
 - ii. The line crossing is designed with the higher clearance height as required by the National Electric Safety Code or U.S. Army Corps of Engineers requirements for lines crossing boating access facilities
- 16. Project Access Areas**—Conveyance proposals for non-Project use activities should generally avoid crossing a Project Access Area. Any Conveyance activity for a non-

Project use that crosses a Project Access Area will have increased permitting requirements and siting limitations (e.g., crossing location limited to very few areas, future limitations on expansion, likelihood of having to move the Conveyance in the future).

- 17. Screens on Water Intakes**—New, expanded, or rebuilt permanent Large Water Intakes (greater than or equal to one MGD maximum instantaneous capacity) and permanent small water intakes (less than one 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 feet per second (fps) or less.
- 18. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.
- 19. Submarine Utility Lines**—Submarine utility lines must be buried a minimum of two ft below the lakebed in all parts of the Project Boundary area that they cross.
(Exception: Exposed submarine utility lines may be allowed in areas where the lakebed elevation is deeper than the HSOL on the specific lake provided 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 (see Section 11, Figure 12). A Lake Facility Safety Plan may also be required.)
- 20. 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 HSOL on the specific lake. 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 HSOL. DELS will not normally approve applications for submerged outfalls that require reservoir levels above the HSOL and will not approve

such outfalls that require reservoir elevations above the Critical Reservoir Elevation. Also, DELS 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.

- 21. Support Structures for Overhead Electricity-Carrying Utility Lines**—Structural supports and guy wires for overhead, electricity-carrying utility lines must be located outside the Normal Full Pond Elevation contour to the maximum practicable extent.
- 22. Timing of Lease/Easement/Users' Agreement**—Conveyance activities associated with new, rebuilt, or expanded facilities must have a fully executed easement, lease, users' agreement 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.
- 23. 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) created by dams, dikes, or causeways will not be authorized.
- 24. Water Intakes**—New, expanded, or rebuilt permanent Large Water Intakes (i.e., public, industrial, or power generation intakes greater than or equal to 1 million gallons per day (MGD) maximum instantaneous capacity) should be fully operational with the reservoir level drawn down to the HSOL. Applicants are required to demonstrate the proposed means to address this requirement by providing an engineering feasibility evaluation stamped by a licensed professional engineer. If a lake use permit applicant is unable to comply with this requirement, DELS will require the lake use permit applicant to justify, to the satisfaction of Duke Energy, a more shallow water intake with a feasibility evaluation conducted by a licensed professional engineer with water resources expertise. DELS will not authorize a new, expanded, or rebuilt permanent water intake (public, industrial, or power generation) that requires a lake elevation higher than the Critical Reservoir Elevation defined in the LIP to operate at full withdrawal capacity. DELS will not authorize new water intakes for public or industrial water supply on Lake Jocassee.

5.3 Caution

1. **Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project’s scenic, recreational, cultural, and environmental values.
2. **Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.
3. **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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
4. **Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user may not claim or charge any damage against Duke Energy it may suffer as a result of flooding or drawdowns.

5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.
7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements as contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.
8. **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 on the Shoreline Classification Maps.

5.4 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
 - Loss of any consideration for future reservoir use applications
2. **Examples of Violations and Penalties**—Examples of specific violations and applicable penalties include but are not limited to the following.

- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
- The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
- The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

6.0 Permitting Program 3—Excavations

6.1 General

DELS 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 PA establishes guidance for obtaining authorization for the removal of soil, sand, silt, or rock materials from within the Project Boundary. The Excavation Program does not circumvent the need for the applicant to obtain federal (e.g., U.S. Army Corps of Engineers), state (e.g., NC Department of Environment and Natural Resources (NCDENR), SC Department of Health and Environmental Control (SCDHEC), and local (e.g., county) approvals, as determined by those agencies for any excavation activities.

Parties desiring to excavate within the Project Boundary must first contact DELS and obtain written authorization prior to beginning work. DELS 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. All excavation applications require review by the appropriate resource agencies and some also require FERC approval. Excavation or shoreline stabilization work needed to support a FERC application for another lake use (e.g., Residential Marinas, Commercial Marinas, etc.) is also subject to FERC approval and will be included as a component of the primary FERC application. DELS may require the applicant to enter into a lease/permit or other form of conveyance and sign a users' agreement to ensure long-term operation of the facility or use of Project lands and waters does not conflict with Duke Energy objectives. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

6.2 Criteria for an Excavation

- 1. 50-ft Environmental Offset**—New excavation activities are not allowed within the 50-ft Environmental Offset (see Section 11, Figure 13) associated with an Environmental

classification identified on the Shoreline Classification Maps except as necessary to allow continued access to a previously approved facility (see Section 11, Figure 14).

2. **Access Channel 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.
3. **Applicant as Owner/Leaseholder**—The applicant must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundary. DELS will hold the property owner or leaseholder fully responsible for the permitted lake use, including maintaining structures in good repair. This responsibility will run with the land and will transfer automatically along with changes in ownership and/or leases of the adjoining tract(s).
4. **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.
5. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.
6. **Deadline for Completing Excavations**—Excavations must be completed as described in the approved application and within 18 months following the date of application approval by DELS. 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 DELS, prior to expiration of the initial 18-month period, 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.

7. **Double Handling**—Double handling of excavated material within the Normal Full Pond Elevation contour will not be allowed. Therefore, all excavated material must be placed above the Normal Full Pond Elevation contour in one handling unless the spoil material is loaded in a barge for transport to areas outside the Project Boundary. Barge-loaded spoil must be directly off-loaded outside the Normal Full Pond Elevation contour and cannot be loaded into transport equipment (e.g., trucks, conveyors) within the Normal Full Pond Elevation contour.
8. **Erosion and Sedimentation Control**—All excavated material and disturbed shoreline must be stabilized to prevent erosion and runoff into the lake.
9. **Excavation Contract**—A copy of the contract between the applicant and the excavation contractor must be provided with the completed Excavation Program Application Form.
10. **Explosives**—The use of explosives within the Project Boundary to support 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, water intake structures), provided their use can be substantiated based on need rather than preference and the use adheres to local, state, and federal regulations. DELS must be provided with the appropriate documentation to ensure compliance with regulations prior to the use of any explosives. Other uses of explosives to excavate within the Project Boundary will not be authorized.
11. **FERC Review**—FERC review is required for:
 - a. All excavations, except maintenance excavations (see Glossary), that will exceed 2000 cubic yards of material removed. (**Note:** All excavation volumes 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 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).
- 12. Fish Spawning**—Excavation activities are not allowed during the months of March, April, May, and June because of potential impacts to fish spawning areas.
- 13. Individual Permit Requirement**—The Excavation PA 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 PA; otherwise, an individual permit will have to be obtained from the proper agency and FERC review may be required.
- 14. Minimization of Disturbance**—Applicants must excavate and disturb only what is absolutely necessary to achieve the excavation project’s stated purpose (see Section 11, Figures 15 through 17).
- 15. Placement of Excavated Material**—All excavated material must be placed in upland areas landward of the Project Boundary and confined to prevent erosion and sedimentation.
- 16. 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.
- 17. Review of Associated Applications**—In a residential subdivision proposed to provide Residential Marina access, the developer must submit one of the following before DELS will review applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses, and Shoreline Stabilization programs:
 - a. A complete Residential Marina application. A developer must receive written confirmation from DELS that the application has been submitted to Duke Energy’s Law Department for preparation in filing with FERC (if applicable)

- b. A copy of the homeowners' covenants and the final recorded subdivision plat approved by the local government planning and zoning office acknowledging the location of the planned facilities.
- 18. Sand Mining**—Sand mining operations within the Project Boundary, usually on headwater portions of the reservoir, may be authorized in accordance with the Excavation Program and Conveyance Program guidelines to the maximum practicable extent.
- 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) on the Shoreline Classification Maps.
- 20. South Carolina**—Excavations in South Carolina of 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 not covered under the General Permit, or 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 DELS.
- 21. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.
- 22. 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 controlled by Duke Energy.

23. 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 Boundary or the Normal Full Pond Elevation contour of the reservoirs
- b. Any excavation that would impact federally 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 DELS for its construction
- d. Excavation activities that support a new marina facility (i.e., within five years of DELS approval) if excavation was not part of the original application

(Note: Areas with characteristics listed under item b above may be identified on the Shoreline Classification Maps. Also note 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.)

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

6.3 Caution

- 1. Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.
- 2. Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a

result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.

3. **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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
4. **Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user may not claim or charge any damage it may suffer as a result of flooding or drawdowns against Duke Energy.
5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.
7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements as contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.

8. **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 on the Shoreline Classification Maps.

6.4 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
- Loss of any consideration for future reservoir use applications

2. **Examples of Violations and Penalties**—Examples of specific violations and applicable penalties include but are not limited to the following.

- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.

- The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
- The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
- The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

7.0 Permitting Program 4—Private Facilities

7.1 General

Parties desiring to construct an Individual Private Facility or Common-Use Facility must first contact DELS and obtain written authorization prior to beginning any activity/construction within the Project Boundary.

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 without Project frontage must be handled through the Marina Facilities Program. DELS may require the applicant to enter into a lease or other form of conveyance and/or sign a users' agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with Duke Energy objectives. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

7.2 Criteria for Private Facilities

1. **50-ft Environmental Offset**—New or expanded Private Facilities may not be constructed within the 50-ft Environmental Offset (see Section 11, Figure 18) associated with an Environmental classification identified on the Shoreline Classification Maps unless the permitted facility currently exists within the offset.
2. **Applicant as Owner/Leaseholder**—The applicant must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundary. DELS will hold the property owner or leaseholder fully responsible for the permitted lake use, including maintaining structures in good repair. This responsibility will run with the land and will transfer automatically along with changes in ownership and/or leases of the adjoining tract.
3. **Boardwalks**—Boardwalks in the backs of coves are not allowed within the Normal Full Pond Elevation contour. Boardwalks within the Project Boundary that extend into

any regulated buffer area 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. The portion of the facility that extends into the Project Boundary will be included in the maximum square footage calculation and is limited to a maximum width along the Project Boundary of 25 ft.

4. **Boat Covers**—*Boat covers* (see Glossary) may be permitted provided the following conditions are met:
 - 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 the Normal Full Pond Elevation
 - c. The device, if free-standing, does not allow the entire facility to exceed the total square footage limitations for an Individual Private Facility
 - d. There are no storage compartments placed under boat covers
5. **Boat Ramps**—Construction of boat ramps for individual private use is not allowed.
6. **Common-Use Facilities**—Common-Use Facilities with three or more boat slips are not eligible for mooring additional watercraft (e.g., end ties, boat lifts, PWC floats, etc.) including PWCs.
7. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.
8. **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 to comply with this requirement, then

construction of the Individual Private Facility from an individual Project-front lot will not be allowed until the modifications to the Common-Use Facility are complete.

9. **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 boat slips.
10. **Deadline for Completing Construction**—Unless otherwise specified, construction of any facility must be completed as described in the approved application within 12 months following the date of application approval by DELS. Failure to complete construction within the *build-out period* (see Glossary) will require the applicant to file a new application within the then-current guidelines. The filing will include any applicable fees and security deposits.
11. **Electric Utility Line Rights-of-Way**—DELS will not authorize constructing new or expanded boat launching/docking/mooring facilities which extend into the right-of-way limits of any existing or planned overhead, electricity-carrying utility line.
12. **Enclosure of Facilities**—The sides of gazebos, boat shelters, and covered boat slips shall not 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 furthestmost portion of the pier structure. Handrails may be put on for safety, but shall not be enclosed.
13. **Facilities per Project-Front Lot**—Unless DELS 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. Any subdivision of property must be deeded and recorded with the applicable county authority and such recorded subdivision cannot be recombined or further subdivided to circumvent this Facilities per Project-Front Lot criteria without potential impact to any previously granted facility approval(s). 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 to a boat slip in a Common-Use Facility. An individual property owner assigned a boat 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. Developments without a Residential Marina may be allowed

to place the Common-Use Facility on property owned by the homeowners' association if it is noted in the master development plan and the development's covenants and restrictions.

- 14. Facility Criteria**—DELS, 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 to be within the criteria of the Private Facility or Marina Facilities Programs.
- 15. Flotation Materials**—Flotation for facilities and boat mooring buoys 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 allowed 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. All uncoated, beaded polystyrene on existing residential docks must be removed, properly disposed of, and replaced with acceptable flotation by September 1, 2018.
- 16. Following the Water**—Dock owners may “follow the water” in an effort to maintain usability of their boat or dock during Low Inflow Protocol (LIP) Stages 2, 3, or 4. Dock owners shall return their boats or docks to their approved locations and orientations and remove all temporary anchor pins within 14 calendar days following Duke Energy’s public declaration of returning to LIP Stage 1, 0, or Normal. DELS may waive certain guidelines that would conflict with following the water at its sole discretion. DELS reserves the right to require boat and dock owners to immediately restore their boats and docks to their original approved locations if the owner is not complying with the applicable requirements. Dock owners who choose to follow the water shall not prevent or block access to other docks or coves or impact shoreline classified as Environmental or Natural on the Shoreline Classification Maps. Dock owners who choose not to follow the water may moor their boats at docks belonging to

other property owners during periods when following the water is allowed if prior permission is obtained from the property owner. The temporary relocation of boats or docks and temporary anchoring of these facilities must not create safety, navigational, or other hazards. No electricity-carrying lines coming from the shoreline can be connected to docks while they are following the water. No written authorization is required to follow the water. Dock owners may make minor modifications to docks that would facilitate following the water (e.g., adding wheels or sleds to gangways, attaching winches to anchor cables, etc.) provided the modification does not result in increased square footage for the dock or a modification to the configuration of the dock.

17. **Houseboats**—Watercraft used for habitation shall not be permanently moored at docks permitted under the Private Facilities Program. 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
 - d. Establishing a mailing address for the boat
18. **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 the Normal Full Pond Elevation contour or extend more than 120 ft lakeward of the Normal Full Pond Elevation contour, whichever is more limiting (see Section 11, Figure 7). 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.
19. **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.

- 20. Liquid and Solid Waste Facilities**—Structures built within the Project Boundary 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 marine pump-out facilities are exempted from this requirement.*)
- 21. Maneuvering Area**—New or expanded Private Facilities must provide a clear maneuvering area of at least 25 ft between the farthestmost portion of the facility (including any moored watercraft) and the opposite shoreline measured at the Normal Full Pond Elevation contour 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 (see Section 11, Figure 19).
- 22. Maximum Size Limits**—Maximum allowed boat slips and surface areas are as follows:

Facility	Number of Boat Slips or Hoists	Maximum Allowed Square Footage ^d
Individual Private	2 or less ^a	1,000 ^b
Common-use	2 or less ^a	1,000 ^b
Common-use	3 to 8	1,000
Common-use	9 to 10	1,200
Common-use	> 10	N/A ^c

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

^b Property owners with a dock constructed or permitted on or before December 1, 2013, who wish to modify their dock to reach deeper water and improve the dock's usability during future extended droughts may follow the procedure described in Permitting Program 4 below

^c Common-Use Facilities that serve a development and have more than 10 boat slips are considered Residential Marina Facilities under the Marina Facilities Program.

^d See "Exceptions and Waivers for Facility Modification or Expansion to Reach Deeper Water" below.

Exceptions and Waivers for Facility Modification or Expansion to Reach Deeper Water —Private Facility owners may be eligible for approval to modify or expand existing Private Facilities previously approved by DELS prior to December 1, 2013, if the modification or expansion is justified to reach deeper water. Certain limitations apply. DELS will accept applications over a 365-day period of time for eligible facility modifications or expansions, with the application window opening after completion of the prerequisite events outlined in the Relicensing Agreement for the Keowee-Toxaway Hydroelectric Project. DELS will provide broad public notification at least 30 days prior to this application window of opportunity becoming available. Eligible applicants may qualify for an exception to the Maximum Size Limits for dock surface areas, an exception to the normal build-out period limit, and waivers of certain fees. Private Facility owners who wish to modify or expand their existing docks to reach deeper water either before or after the application window stated above may do so with the proper approvals including written approval from DELS, but the applicant is not eligible for the Maximum Size Limit or build-out period exceptions or fee waivers specified in the Relicensing Agreement.

23. **Minimum Elevation of Decking**—The top of all fixed pier decking (not including handrails) must be at least one vertical foot above the Normal Full Pond Elevation. Small stair-stepped landings may be constructed on the sides of stationary piers to facilitate watercraft boarding.
24. **Minimum Shoreline Requirement**—A lot having less than 100 ft of shoreline (as measured along the Project Boundary) that is suitable for Residential use on the Shoreline Classification Maps will not be considered for a pier or Common-Use boat slip unless it was subdivided and recorded prior to September 1, 2006. Any subdivision of property must be deeded and recorded with the applicable county authority and such recorded subdivision cannot be recombined or further subdivided to circumvent these Minimum Shoreline Requirement criteria without potential impact to any previously granted facility approval(s). *(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, which 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.)

- 25. Non-Conforming Structure Size Limits**—Existing 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.
- 26. Permit Transfer**—The responsibilities associated with the lake use permit shall transfer to any new owners or leaseholders of the adjoining land. DELS will transfer the permit at no cost to the new owner or leaseholder, provided either the existing facility meets the SMG in effect at the time the transfer is requested or was permitted by DELS prior to the SMG in effect at the time the transfer is requested. To initiate the transfer, the new owner or leaseholder must contact DELS and sign both the transferred permit and the “User’s Agreement Letter.” DELS will approve the transfer after determining the facility meets the criteria for approval.
- 27. 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).
- 28. Private Facilities in Areas Used for Marinas**—Private Facilities will not be authorized within areas leased or under a users’ agreement for Marina Facilities.
- 29. Projection of Property Lines**—For new, expanded, or rebuilt facilities, property lines will be projected by DELS by extending an imaginary line perpendicular to the Project Boundary at each property corner. These projected lines are determined by bisecting the angle formed by the two Project-front property lines that intersect at each property corner. 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, DELS will accept these projections 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 (see Section 11, Figure 20). *(Note: Pier Zones are planning tools used in some developments, but their use does not supersede requirements of the SMG, the General Permits in South Carolina, or county or local jurisdiction's requirements in either North Carolina or South Carolina.)*

30. 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, even though its use does not conform to the existing guidelines or Shoreline Classification Map. 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/users' agreement/permit of Project property.)* The following may be considered by DELS:

- a. Waiver of the 200-ft setback requirement, provided 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 Area* requirements (see Glossary) where there would be unavoidable impacts to existing permitted structures
- c. Waiver of the requirement for at least 100 ft of developable shoreline, as defined on the Shoreline Classification Maps for Private Facilities or Marina Facilities, for each boat 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 allowed by a–c above.)

- 31. Reflectors**—Reflectors or reflective tape must be placed and maintained by the structure owner on the two furthestmost 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.
- 32. 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.
- 33. 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 Permitting Program 1.
- 34. Review of Associated Applications**—In a residential subdivision proposed to provide Residential Marina access, the developer must submit one of the following before DELS will review applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses, and Shoreline Stabilization programs:
 1. A complete Residential Marina application. A developer must receive written confirmation from DELS that the application has been submitted to Duke Energy’s Law Department for preparation in filing with FERC (if applicable)
 2. A copy of the homeowners’ covenants and the final recorded subdivision plat approved by the local government planning and zoning office acknowledging the location of the planned facilities
- 35. 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.
- 36. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.

37. **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.*)
38. **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.
39. **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 to create a two-story roofed structure.
40. **Water Willow Beds**—Applicants are encouraged to avoid activities that could adversely impact 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 feet. Removal of water willow for continued lake access may be allowed but only for the specific and limited area necessary.

7.3 Caution

1. **Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.
2. **Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a

result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.

3. **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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
4. **Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user may not claim or charge any damage against Duke Energy it may suffer as a result of flooding or drawdowns.
5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.
7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements as contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.

8. **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 on the Shoreline Classification Maps.

7.4 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
- Loss of any consideration for future reservoir use applications

2. **Examples of Violations and Penalties**—Examples of specific violations and applicable penalties include but are not limited to the following.

- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.

- The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
- The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
- The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

8.0 Permitting Program 5—Shoreline Stabilization

8.1 General

Parties desiring to stabilize shoreline or plant shoreline or aquatic vegetation must first contact DELS and obtain written authorization prior to beginning any activity/construction inside the Project Boundary.

Shoreline stabilization is encouraged to control soil erosion in high-energy areas. Applicants are encouraged to use *bioengineering* (see Glossary) techniques and landscape plantings in place of riprap. Seawalls should be the last option for shoreline stabilization. In certain areas, an engineering justification may be required for the use of seawalls (see Section 11, Figure 21, *Shoreline Stabilization Technique Selection Process*, and Attachment B). DELS may require the applicant to enter into a lease or other form of conveyance and/or sign a users' agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with Duke Energy objectives. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

8.2 Criteria for Shoreline Stabilization

1. **50-ft Environmental Offset**—New or expanded stabilization activities (excluding bioengineering) may not be undertaken within the 50-ft Environmental Offset (see Section 11, Figure 22) associated with an Environmental classification identified on the Shoreline Classification Maps. Bioengineering may be considered within the 50-ft Environmental Offset in cases of significant erosion, as determined at the sole discretion of a DELS Representative.
2. **Applicant as Owner/Leaseholder**—The applicant must be the owner or leaseholder of the tract of land immediately adjoining the Project Boundary. DELS will hold the property owner or leaseholder fully responsible for the permitted lake use, including maintaining structures in good repair. This responsibility will run with the land and

will transfer automatically along with changes in ownership and/or leases of the adjoining tract.

3. **Bank Reshaping**—Stabilization of eroded banks 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 riprap (not installed any higher than one foot above the Normal Full Pond Elevation contour) and bioengineering techniques
 - b. The cut or filled area, above the height of the riprap, 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 riprap is vegetated if the lower limit of the rock provides a stable beach-shelf at an elevation two to four feet below Normal Full Pond Elevation
 - d. The work can be conducted in accordance with all applicable buffer regulations
 - e. The amount of cut or fill does not substantially alter the Normal Full Pond Elevation contour, is strictly limited to only that necessary to provide a stable angle for riprap and revegetation, and is specifically quantified in the written authorization from DELS for the project
4. **Bioengineering**—Proposals for stabilization where the eroded bank height is less than two ft may use approved bioengineering techniques and enhanced riprap techniques (see Glossary) (see Section 11, Figure 23 for example of acceptable enhanced riprap technique).
5. **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 DELS prior to introduction.
6. **Clearing to Support Stabilization Projects**—Minimal clearing within the Project Boundary 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.
7. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.

8. **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 DELS. Failure to complete construction within this 12-month *build-out period* (see Glossary) will require the applicant to file a new application within the then-current guidelines. The filing will include any applicable fees and security deposits.
9. **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.
10. **Length of Shoreline to be Stabilized**—An individual permit from the SCDHEC for activities in South Carolina and the U.S. Army Corps of Engineers for activities in North Carolina is required for stabilization exceeding 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. **Materials**—Tires, scrap metal, crushed block, construction/demolition debris, or other types of material that are not aesthetically acceptable are not allowed to be used for stabilization.
12. **Projection of Property Lines**—Property lines will be projected by DELS by extending an imaginary line perpendicular to the Project Boundary at each property corner. These projected lines are determined by bisecting the angle formed by the two Project-front property lines that intersect at each property corner. On reservoirs with local ordinances that dictate property line projections utilizing a different methodology, DELS will accept projections 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 (see Section 11, Figure 20). (*Note: Pier Zones are planning tools used in some*

developments, but their use does not supersede requirements of the SMG, the General Permits in South Carolina, or county or local jurisdiction's requirements in either North Carolina or South Carolina.)

- 13. Review of Associated Applications**—In a residential subdivision proposed to provide Residential Marina access, the developer must submit one of the following before DELS will review applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses, and Shoreline Stabilization programs:

 - a. A complete Residential Marina application. A developer must receive written confirmation from DELS that the application has been submitted to Duke Energy's Law Department for preparation in filing with FERC (if applicable)
 - b. A copy of the homeowners' covenants and the final recorded subdivision plat approved by the local government planning and zoning office acknowledging the location of the planned facilities
- 14. Riprap**—Riprap use should be limited only to that necessary to adequately stabilize the existing eroded bank. Riprap must be confined to the area between six feet below the Normal Full Pond Elevation and the Normal Full Pond Elevation except where the entire placement is above the Project Boundary or where severely eroded banks three ft or higher must be sloped back or terraced to provide minimum bank stability and where permissible based on any local or state buffer requirements.
- 15. Riprap Use with Bulkheads**—A layer of riprap (Class B or larger) extending six feet lakeward from the Normal Full Pond Elevation contour 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 (see Section 11, Figure 24).
- 16. Seawalls**—Seawalls are not allowed in areas with an average eroded bank height of less than three feet.

17. **Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.
18. **Stabilization of Banks Three Feet or Higher**—Stabilization of eroded banks three ft in height or higher, or not associated with water willow beds, using riprap as the primary method of stabilization must include Class B or larger size riprap with filter cloth and/or significant live staking, planting, or other forms of bioengineering within the riprap.
19. **Timeframe for Stabilization**—No stabilization is allowed from March 1 through June 30 in areas identified as Impact Minimization Zones on the Shoreline Classification Maps.
20. **Water Willow Beds**—Applicants are encouraged to avoid activities (including shoreline stabilization) that could adversely impact 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). Riprap 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.

8.3 Caution

1. **Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.

2. **Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.
3. **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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
4. **Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user may not claim or charge any damage against Duke Energy it may suffer as a result of flooding or drawdowns.
5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.

7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements as contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.
8. **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 on the Shoreline Classification Maps.

8.4 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
 - Loss of any consideration for future reservoir use applications
2. **Examples of Violations and Penalties**—Examples of specific violations and applicable penalties include but are not limited to the following.
 - The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
 - The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the

pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.

- The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
- The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
- The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

9.0 Permitting Program 6—Miscellaneous Reservoir Uses

9.1 General

The following section addresses less frequent types of requests received by DELS for uses within the Project Boundary. Applicants for many of these activities and other activities that may affect Duke Energy property must first contact DELS and obtain written authorization prior to beginning any activity/construction inside the Project Boundary. 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. DELS may require the applicant to enter into a lease or other form of conveyance and/or sign a users' agreement to ensure that long-term operation of the facility or use of Project lands and waters does not conflict with Duke Energy's objectives. Since every possible scenario cannot be anticipated, DELS reserves the right to make special rulings in cases not specifically covered by these guidelines. (NOTE FOR ALL NON-PROJECT USE APPLICANTS: DELS is neither the advocate nor the adversary for non-Project use applications. The applicant, not DELS nor any designated contractor of DELS, is responsible for negotiating the application process with other permitting and regulatory authorities.)

9.2 Uses Controlled by DELS

1. **Advertising Signs**—Advertising signs within the Project Boundary will not be authorized, except for inconspicuous manufacturer's labels on permitted structures or temporary "For Sale" signs on boats docked at DELS-approved structures.
2. **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), and temporary staging areas for public infrastructure construction and maintenance. 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 users' 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 fees. Areas used for a period greater than two years will be required to complete a Conveyance Application including filing a notification with FERC.

3. **Compliance with Regulations**—All facilities and construction activities 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 DELS must be obtained by the applicant prior to beginning any activity/construction within the Project Boundary.
4. **Dry Hydrants**—All new applications for 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 or below the CRE required on the specific lake. 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 two ft by three ft in dimension with the wording "Danger Stay Clear, Underwater Fire Intake," will be provided by DELS 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 from the dry hydrant line intake structure.

- 5. Exceptions and Waivers for Facility Modification or Expansion to Reach Deeper Water**—Owners of docks permitted under the Miscellaneous Reservoir Uses Program may be eligible for approval to modify or expand existing docks that were previously approved by DELS prior to December 1, 2013, if the modification or expansion is justified to reach deeper water. Certain limitations apply. DELS will accept applications over a 365-day period of time for eligible facility modifications or expansions, with the application window opening after completion of the prerequisite events outlined in the Relicensing Agreement for the Keowee-Toxaway Hydroelectric Project. DELS will provide broad public notification at least 30 days prior to this application window of opportunity becoming available. Eligible applicants may qualify for an exception to Maximum Size Limits for dock surface areas, an exception to the normal build-out period limit, and waivers of certain fees. Facility owners who wish to modify or expand their existing docks to reach deeper water either before or after the application window stated above may do so with the proper approvals including written approval from DELS, but the applicant is not eligible for the Maximum Size Limit or build-out period exceptions or fee waivers specified in the Relicensing Agreement.
- 6. 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 local, state, and federal regulations. The use of explosives within the Project Boundary to support 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. DELS must be provided with 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 Boundary will not be authorized.
- 7. Fish Attractors**—DELS does not object to the placement 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, provided the fish attractors: 1) remain at a depth greater than the HSOL on the specific lake; 2) are covered by an approved boat docking facility; or 3) are located 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 environmentally unacceptable materials (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 Boundary, provided the attractors are placed either (i) under the structure or (ii) in shallow water areas associated with a pier, but not directly underneath the structure. If the attractor is not placed directly under the structure, then the attractor: (1) must be within 20 ft of the structure; (2) cannot extend lakeward any further than the farthest portion of the structure; (3) cannot cross the lot lines of the adjoining property, projected lakeward perpendicular to the shoreline; and (4) cannot block navigation. (Note: These requirements are not intended to conflict with trees that fall into the Project Boundary and provide fish and wildlife habitat and are not a hazard to navigation.) Applications should be made by letter to DELS from the applicant.

8. **Heat Exchange Coils for Heat Pumps (Geo-thermal Systems)**—DELS 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 HSOL specific to the applicable lake, 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 should be made by letter to DELS from the applicant.
9. **Inflatable Recreation Equipment**—DELS 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 Boundary. Existing items considered within the definition of water-based recreational equipment

are not authorized and must be removed from within the Project Boundary and Duke Energy property.

- 10. Minor Water Withdrawals**—DELS may authorize a single irrigation pump for private home use, provided the pump has a rated horsepower of two horsepower or less and is used exclusively for the adjoining Project-front lot. Applications should be made by letter to DELS from the applicant. DELS may also authorize small water intakes that do not exceed a maximum instantaneous withdrawal rate of one million gallons per day (MGD) within the Conveyance Program (filing with FERC is 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 feet per second or less. 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 one MGD maximum instantaneous withdrawal capacity. These larger withdrawals must be approved under the Conveyance Program and require FERC approval. Anyone withdrawing three million gallons or more in any one month from surface waters of South Carolina must obtain a surface water withdrawal permit or, for agricultural withdrawals, register their withdrawal with the SCDHEC, unless exempt under the South Carolina Surface Water Withdrawal, Permitting, Use and Reporting Act. Additionally, in North Carolina, withdrawals greater than or equal to 100 thousand gallons per day require registration with the NCDENR-Division of Water Resources.)
- 11. Private Swimming Areas**—DELS will not authorize private individuals to “rope off” or exclude the public from a portion of the Project Reservoirs for the purpose of creating a private swimming area.
- 12. Project Operation and Public Service Facilities**—This category includes new and existing facilities needed to directly support comprehensive management of the Project Reservoirs. Such facilities are 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, firefighting, and emergency management 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.

- 13. Review of Associated Applications**—In a residential subdivision proposed to provide Residential Marina access, the developer must submit one of the following before DELS will review applications for lake use activities under the Private Facilities, Excavation, Miscellaneous Reservoir Uses, and Shoreline Stabilization programs:

 - a. A complete Residential Marina application. A developer must receive written confirmation from DELS that the application has been submitted to Duke Energy’s Law Department for preparation in filing with FERC (if applicable)
 - b. A copy of the homeowners’ covenants and the final recorded subdivision plat approved by the local government planning and zoning office acknowledging the location of the planned facilities
- 14. Satellite Dishes**—DELS will not authorize these facilities to be located within the Project Boundary.
- 15. Ski Ramps/Slalom Courses**—DELS may authorize ski ramps, slalom courses, and other similar structures, provided: (1) the state wildlife resources agency approves the activity; (2) the facility and its use will not impact areas identified as Environmental on the Shoreline Classification Maps; (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 “Users’ Agreement”. Applications should be made by letter to DELS from the applicant.
- 16. Special Rulings**—Since not every possible scenario can be anticipated, DELS 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.

17. **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, agencies for monitoring piers, and temporary sales piers for large developments, 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 user fees.
18. **Wildlife Enhancement Activities**—DELS may authorize wildlife enhancement activities such as installation of wood duck boxes and other similar structures/activities, 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 for construction activities is obtained from SCDHEC. Applications should be made by letter to DELS from the applicant.

9.3 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
4. **Net Pens and Aquaculture Operations**—These uses are not authorized.
5. **No-Wake Buoys**—Under the control of applicable state wildlife agency
6. **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

7. Vending Operations on Water—Under the control of the county Health Department

9.4 Caution

- 1. Authorization Required from Licensee**—Adjoining property owners should be aware that conducting activities within the Project Boundary is a privilege that can only be granted with authorization from the FERC 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 FERC license and protects and enhances the Project's scenic, recreational, cultural, and environmental values.
- 2. Erosion and Sedimentation**—Duke Energy shall not be responsible for any sedimentation, erosion, impacts of sedimentation or impacts of erosion caused by Project operations or otherwise. Any damage a permittee or lake user may suffer as a result of such sedimentation, erosion or their impacts shall not be claimed or charged against Duke Energy.
- 3. 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 Normal Full Pond Elevation contour at the Project Reservoirs to accommodate high water and allow for operational flexibility in severe weather events. Although these deeded flood easements typically do not prohibit construction of dwellings and other permanent structures, Duke Energy strongly recommends adjoining property owners avoid building such permanent structures within flood easement areas.
- 4. Lake Level Fluctuations, Water Depth and Quality Variations and Existence of the Project**—Lake levels will rise and fall over time in response to weather events, Project operations and other factors. Sedimentation will also continue to occur within the Project. Duke Energy does not guarantee an approved facility will always have sufficient water depth to be accessible by boat or for other water depth-related activities. Duke Energy provides no guarantee of any specific quantities or quality of water in the Project Reservoirs and Duke Energy also makes no guarantee of the continued existence of the Project or the Project Reservoirs. A permittee or lake user

may not claim or charge any damage against Duke Energy it may suffer as a result of flooding or drawdowns.

5. **Minimization of Impacts**—The permittee must make every reasonable effort to minimize adverse impacts on fish, wildlife, and other important resources.
6. **Non-Authorized Uses**—There are some types of lake uses that cannot be authorized. Refer to Section 2.2 for a listing of commonly requested uses Duke Energy will not authorize.
7. **Non-Conforming Structures**—There are existing structures and improvements permitted by DELS prior to initiating this SMG which are not compatible with the requirements as contained herein. These structures may be maintained even though their use does not conform to the SMG. When it becomes necessary to rebuild a previously approved, non-conforming structure, the rebuilt structure must comply with the SMG in effect at the time of replacement to the maximum practicable extent.
8. **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 on the Shoreline Classification Maps.

9.5 Consequences for Violations

1. **Penalties**—DELS will issue Stop-Work Directives for any ongoing violations detected within the Project Boundary. 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
 - Loss of any consideration for future reservoir use applications

2. Examples of Violations and Penalties—Examples of specific violations and applicable penalties include but are not limited to the following.

- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (no existing pier/dock) may include restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized major cutting of the vegetated area (see Section 3) within the Project Boundary (existing pier/dock) may include removal of the pier/dock from Project property, restoration with approved native vegetation, and loss of consideration for lake use permitting activities for up to five years depending on the severity of the violation and subject to successful plant restoration.
- The penalty for unauthorized minor cutting of trees within the vegetated area (see Section 3) within the Project Boundary may include restoration as required in the Vegetation Management Requirements for approved tree removal.
- The penalty for refusal to remove an unapproved, dilapidated, or unsafe structure may include removal of the structure from the Project property by Duke Energy, loss of consideration for lake use permitting activities until the cost of removal is paid, which includes all removal costs including DELS or contractor expenses, landfill fees, legal expenses and a set administrative fee of \$1,000.
- The penalty for unauthorized structures built within the Project Boundary may include an after-the-fact application, which DELS may accept if the structure conforms to the specific requirements. The application filing 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.

10.0 Glossary

Activity—Any occupancy or use of lands and waters within the Project Boundary

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

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. A Historic Property is any site, building, or structure included in or eligible for inclusion in the National Register of Historic Places.

Bioengineering—A method of shoreline stabilization using natural and living material. Bioengineering is typically characterized by the exclusive use of live vegetation. However, some techniques may include use of other natural materials in conjunction with vegetation (e.g., rock-filled gabions, live-staked crib walls, biologs, etc.) Although it is an acceptable stabilization method in certain situations, enhanced riprap is not bioengineering.

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, boat houses 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 boat lift/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 DELS and ends with the last date of any approved time extensions.

Business/Industrial Access—Lake access directly supporting 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.

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 and box culverts 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 users' agreements/permits, or fee title transfers to grant these rights.

Cove Width—Horizontal length of the shortest imaginary line extending from the Normal Full Pond Elevation contour on one side of a cove and connecting to the Normal Full Pond Elevation contour on the opposite side of the cove

Critical Reservoir Elevation (CRE)—The highest level of water in a reservoir (measured in feet above Mean Sea Level (AMSL) or feet relative to the Normal Full Pond Elevation 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 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 Minimum Elevation 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 Boundary before final removal

Earthfill—The placement of unauthorized fill material (soil or rock) within the Project Boundary

Easement—The granting or definition of certain rights in real property within the Project Boundary 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

Enhanced Riprap—A method of shoreline stabilization mainly consisting of riprap with live plants interspersed throughout the structure. Enhanced riprap typically consists of stones sized to the site, shoreline characteristics, and other mitigation requirements of the SMP. Exposed soil above, between, and below the rocks on the shoreline can accommodate live stakes or vegetative planting to produce a natural looking, protected shoreline. Enhanced riprap is not considered bioengineering.

Environmental Assessment (EA)—The process of examining proposed lake uses and their reasonable alternatives for potential environmental impacts prior to making decisions on implementation. The Environmental Assessment document is prepared by FERC staff and/or a DELS-approved contractor (i.e., Draft Applicant Prepared Environmental Assessment (DAPEA)) and evaluates the merits of the proposed lake use and no-action alternatives to determine a conclusion and make appropriate recommendations to FERC and/or Duke Energy concerning project approval, disapproval, or modification.

Environmental Offset—An area measured laterally along the shoreline and extending 50 ft from an Environmental classification. This area along the shoreline within the Project Boundary 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 Boundary providing 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 Boundary

Facility—A structure or combination of structures placed within the Project Boundary 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 DELS 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 not done immediately must go through required permitting channels.)*

Facility Expansion—The modification of an existing facility resulting in an increase of its lakeward extension, increase in calculated square footage, an increase in the number of boats it can accommodate, increase 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 boat lift/hoist within a previously approved boat 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 percent 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 percent 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., boat house, 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 DELS prior to initiation.)*

If a primary component or any combination of primary components (with each individual component at or less than 25 percent) becomes in such a state of disrepair that more than 25 percent 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 percent 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 Boundary. *(Note: The reduction must be approved in writing by DELS 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. A Habitat Enhancement Program fee may also be required for some applications.

FERC—Federal Energy Regulatory Commission, the agency responsible for licensing and ensuring regulatory compliance for non-federal hydropower projects.

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 the Normal Full Pond Elevation) 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.

Historic Property—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)

Hydro Station Operational Limit (HSOL)—70 ft local datum / 1080 ft above Mean Sea Level for Lake Jocassee and 75 ft local datum / 775 ft above Mean Sea Level for Lake Keowee

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 2.1)

Individual Private Facility—A facility providing 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, boat houses, 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 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 Boundary. Uses include, but are not limited to, piers, existing boat ramps and marine railways, mooring buoys, boat houses, boat shelters, boat lifts, marinas, utility line, roadway and other infrastructure rights-of-way, excavation areas, shoreline stabilization devices, beaches, water intakes, wastewater discharges, boating access areas, bank fishing areas, public parks, trails, and sand mining operations.

Lake Facility Safety Plan—A plan and schedule for installation, maintenance, and inspection of warning/safety devices needed for lake user safety with responsibilities listed and verified by confirmation letters from the responsible entity(s)

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 Project Boundary

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 Project

Licensee—The entity holding a hydroelectric project's operating license from FERC at any given time. The Licensee for the Keowee-Toxaway Hydroelectric Project (FERC No. 2503) is Duke Energy Carolinas, LLC.

Low Inflow Protocol (LIP)—The written 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

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 boat house 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 lands including the minimum area necessary for boating access. This maneuvering area consists of two times the boat slip length at the point of boat 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 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 Full Pond Elevation—The level of a reservoir corresponding to the point at which water would first begin to spill from the reservoir's dam(s) or exceed the safety margin for a reservoir's dam(s) if the Licensee took no action; the level corresponds to the lowest point along the top of the floodgates for both Lake Jocassee and Lake Keowee. This elevation may also be referred to herein as the *full pond elevation*, the *full pond contour* or simply as *full pond*.

Normal Maximum Elevation—The level of a reservoir (measured in ft AMSL or feet relative to the Normal Full Pond Elevation 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.

Normal Minimum Elevation—The level of a reservoir (measured in ft AMSL or feet relative to the Normal Full Pond Elevation 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

Normal Operating Range—The band of reservoir levels, between the Normal Maximum and Normal Minimum Elevations, within which the Licensee normally attempts to maintain a given reservoir on a given day

Off-water Lot—A tract of land defined by a registered survey plat that does not have a common boundary with the Project Boundary

Peripheral Strip—Also referred to as the *shoreline strip*, it is the strip of Project land adjoining and lying above the Normal Full Pond Elevation. In certain areas there may be little to no peripheral strip, whereas in others, such as portions of Lakes Keowee and Jocassee, the peripheral strip may extend up to a contour 10 vertical feet above the Normal 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 required prior to beginning any construction, excavation, shoreline stabilization, vegetation removal, or activating a conveyance within the Normal Full Pond Elevation contour, Project Boundary, 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 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, boat slips in Residential Marina Facilities, boat slips in marinas developed for clubs, recreation areas for employees of a specific company, boat 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 does not meet the requirements of a public roadway

Project Access Areas—Lake access providing 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

Project Boundary—The area surrounding hydroelectric project facilities and features necessary to operate the Project as delineated in Exhibit G or K of the FERC license

Project-front Lot—A tract of land defined by a registered survey plat that has a common boundary with the Project Boundary

Project Reservoirs—Lake Keowee and Lake Jocassee

Project Uses—A term used in conjunction with FERC-licensed projects to include those uses of FERC Project land and water 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 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. charged with providing services and/or maintaining basic facilities for the general public

Public Infrastructure Access—Non-recreational lake access directly supporting 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 providing for the operation and management of recreational opportunities for the general public that are not restricted to selected individuals. Examples include, but are not limited to, Project Access Areas, federal, state, and local parks and recreation areas and True Public Marinas.

Public Recreation Facilities—Facilities providing Public Recreational Access as defined above

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 Project for the public (i.e., not private) 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 involving 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.

Riprap—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 Boundary 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 one part of the Shoreline Management Plan and provide permitting criteria that are applied on a site-specific basis. The Shoreline Management Guidelines are Appendix C of the SMP.

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 Boundary. 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, riprap, 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 percent 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 percent 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 riprap 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 DELS prior to initiation.*)

If a primary component or any combination of primary components (with each individual component at or less than 25 percent) becomes in such a state of disrepair that more than 25 percent 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 percent 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 violating the intent of the permitting programs

Stop-Work Directive—Verbal or written statement from DELS directing an immediate halt to an activity within the Project Boundary. Such directives are issued when any violation of the

SMG is detected. Violations will have negative consequences for the applicant and additional written authorization from DELS 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 the Project that significantly exceeds the value of facilities an applicant desires to place within the Project Boundary. *(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 boat 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 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 wet boat slips and dry storage bays dedicated for Residential Marina-type access is less than or equal to 10 percent of the total number of wet boat slips and dry storage bays within the marina facility and any considerations are approved by DELS. This exception only applies to the very limited number of existing marina facilities that meet the less than or equal to 10 percent requirement as of January 1, 2006 and Gap Hill Marina on Lake Keowee.)*

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 Project Boundary 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 SMP Goals and Objectives.)

Violation—Any activity within the Project Boundary that does not comply with the requirements established by the SMP

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 Boundary 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 Boundary 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 towables for three or fewer persons.)*

11.0 Figures

The following figures present detailed information regarding the application of the policies and guidelines presented in this document.

Figure 1. Duke Energy Evaluation Process for Non-Project-Use Requests

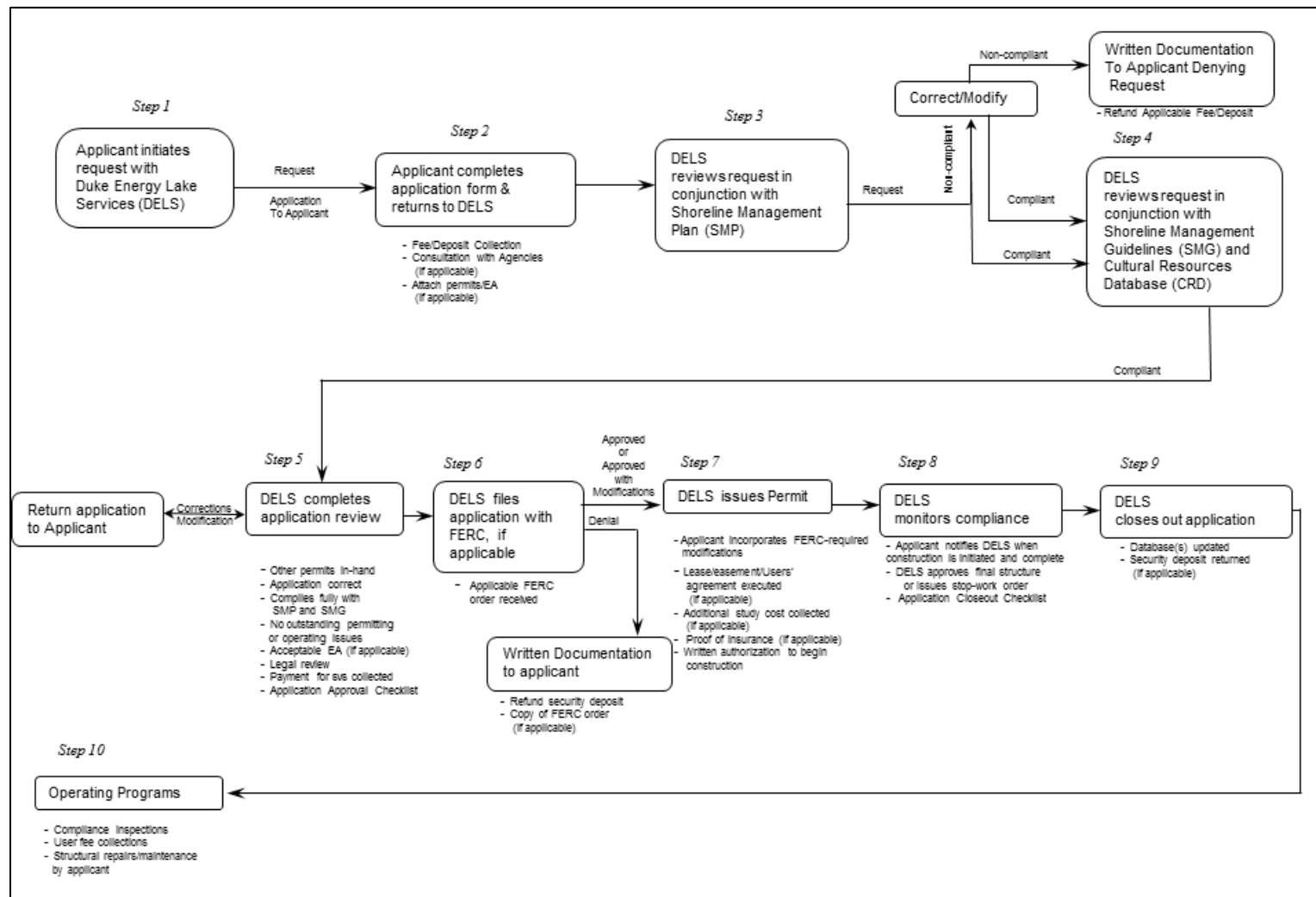


Figure 2. Keowee-Toxaway Viewshed Guidelines

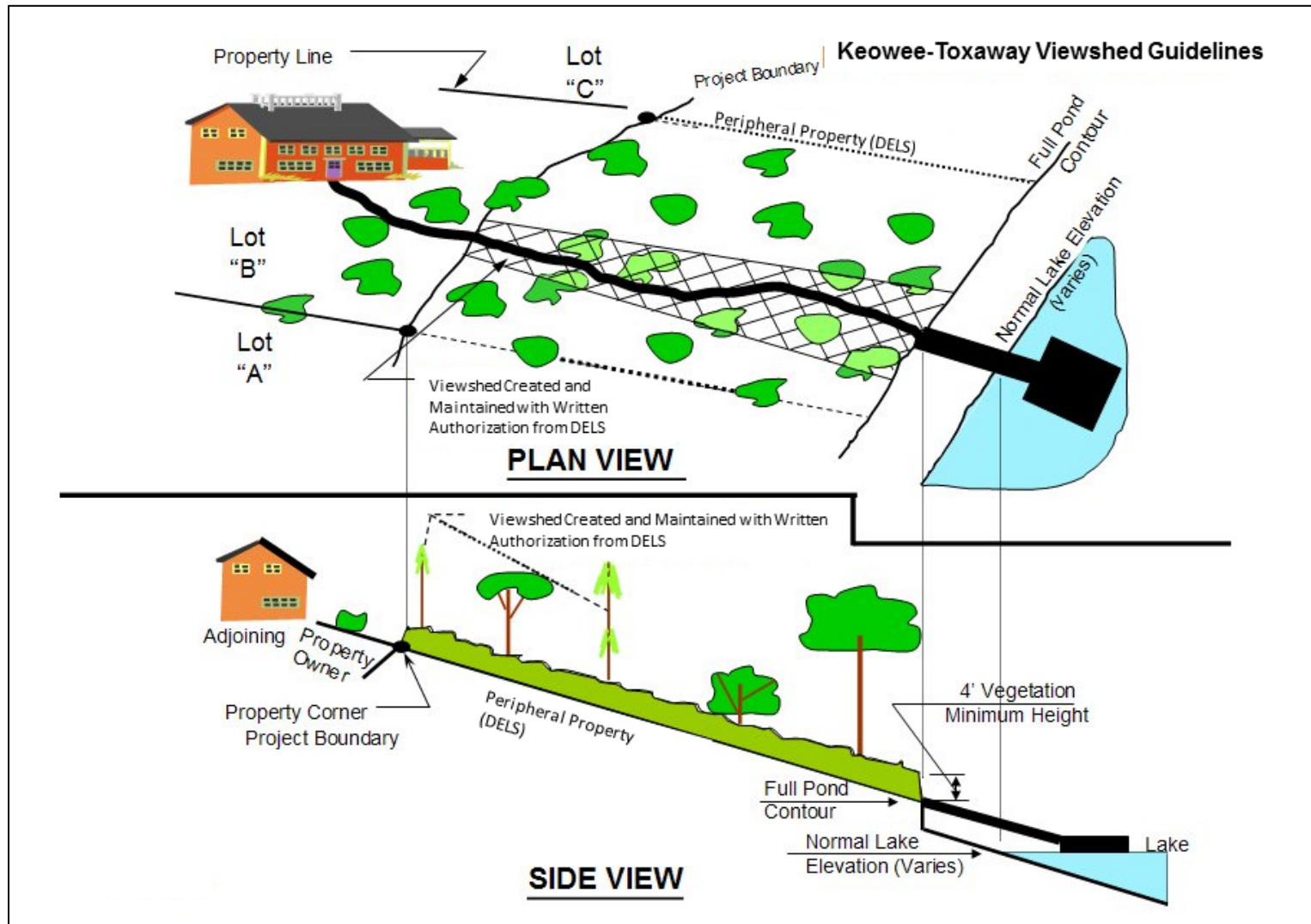


Figure 3. Viewshed Examples



Acceptable



Unacceptable

Figure 4. No New or Expanded Facilities within 50-Foot Environmental Offset

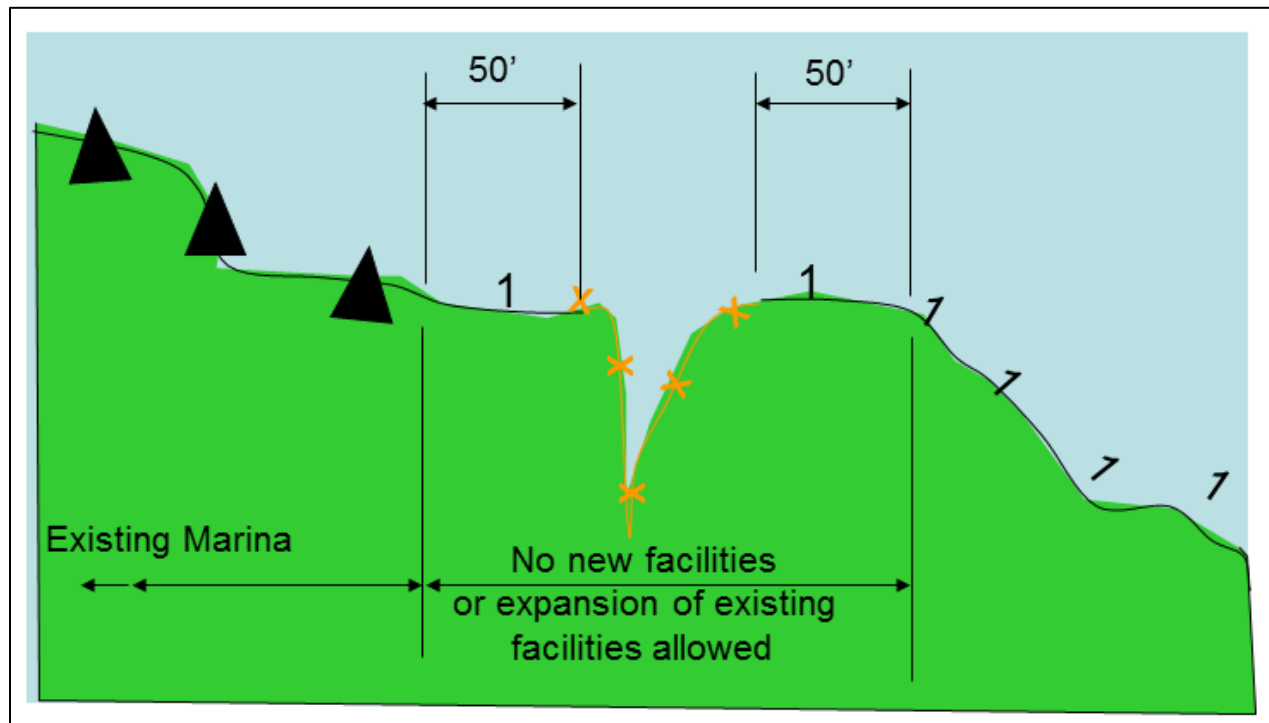


Figure 5. Minimum Guidance for Metes and Bounds Description of Project Area Leases/Users' Agreements for Marina Facilities

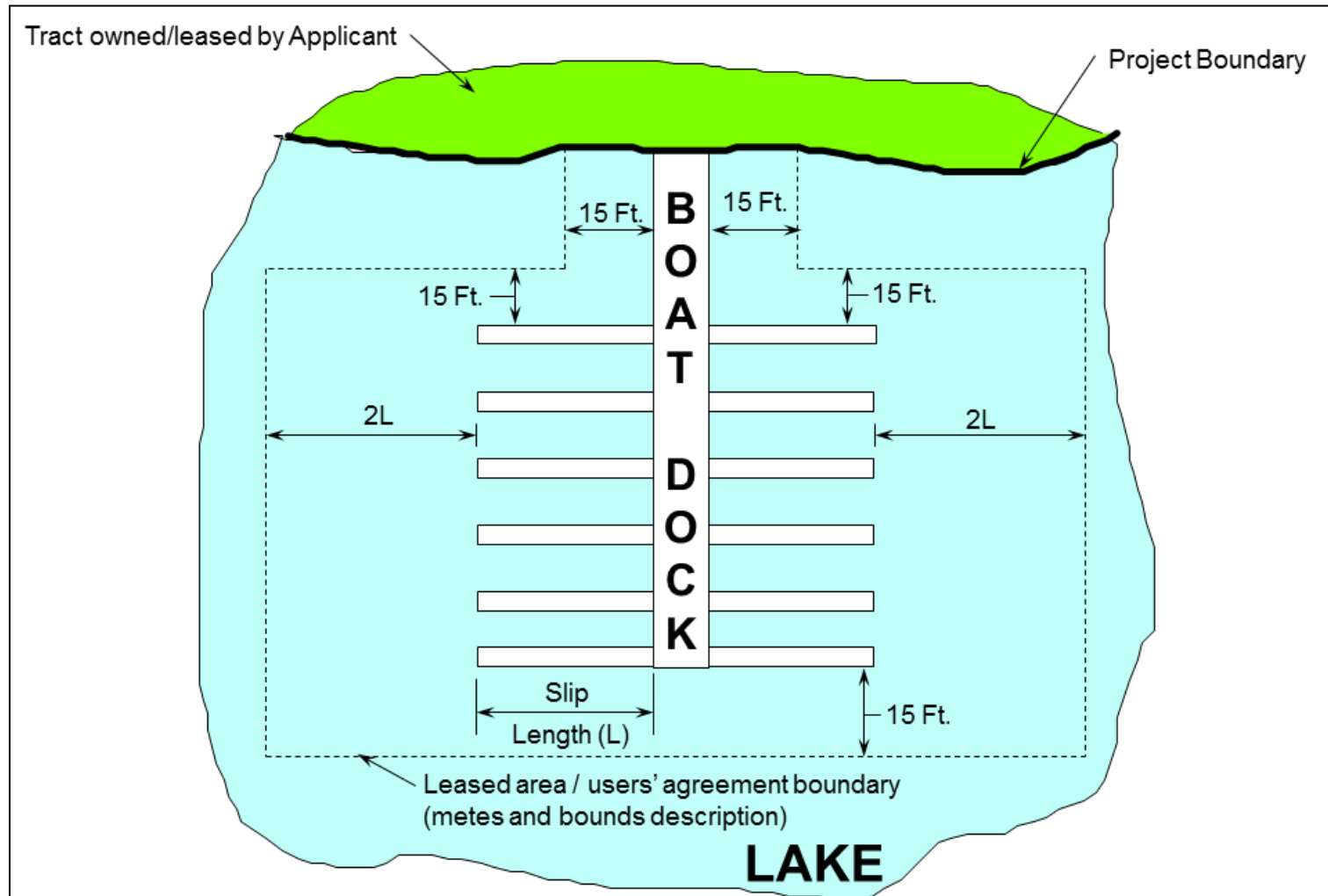


Figure 6. Open Channel Requirements for New/Expanded Marina Facility

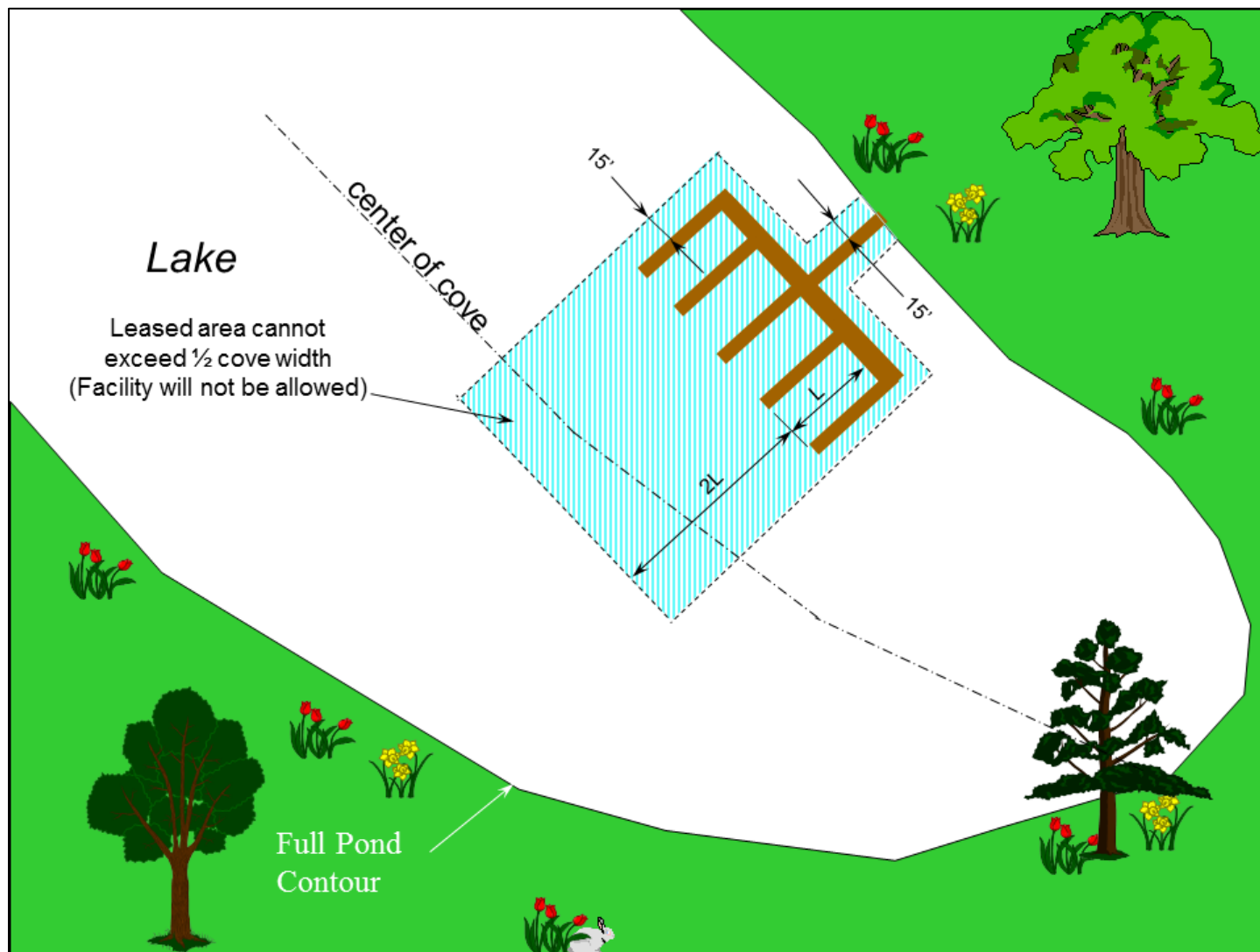


Figure 7. Open Channel Requirements

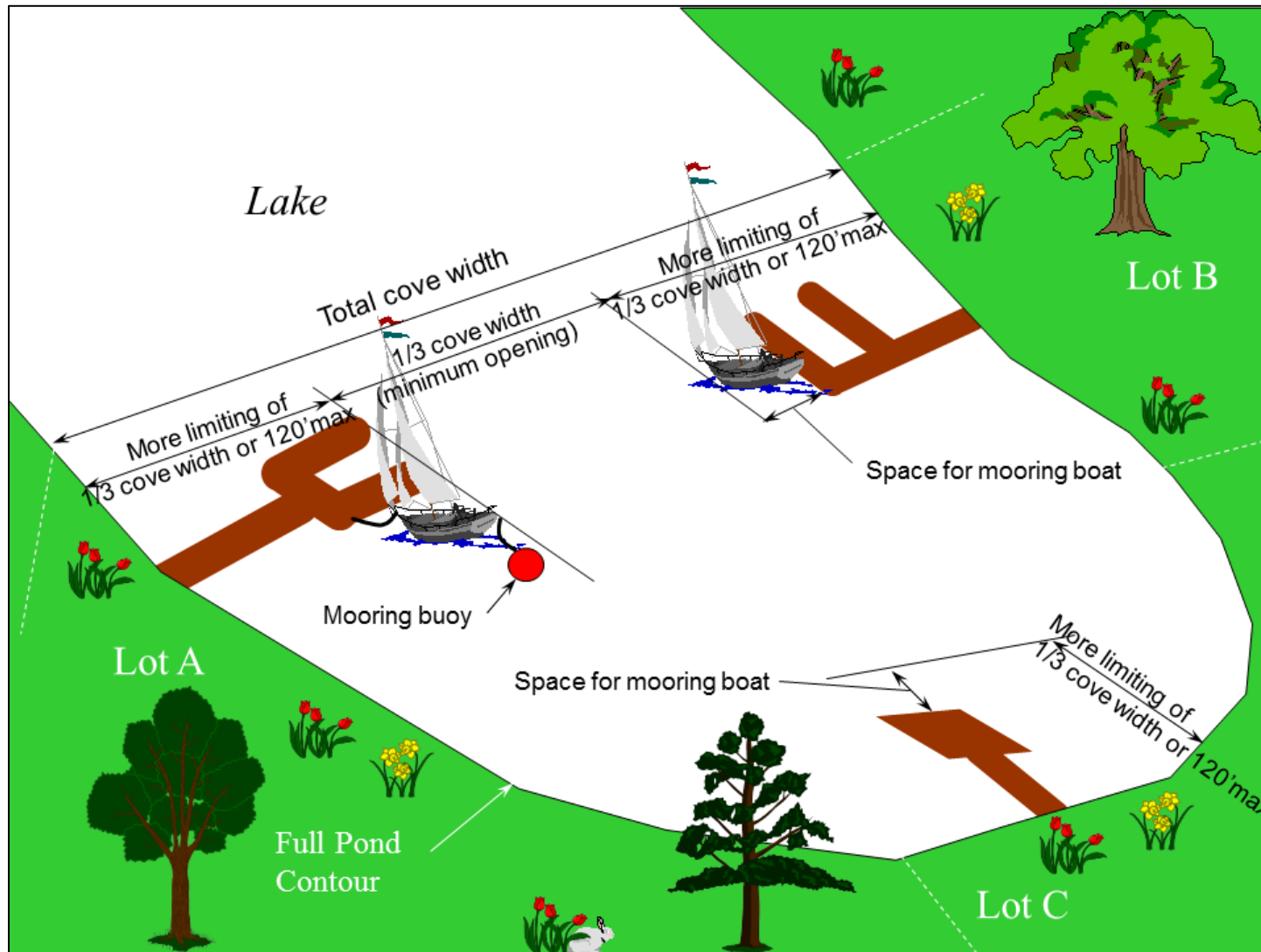


Figure 8. No New or Expanded Marina Facilities in Narrow Coves

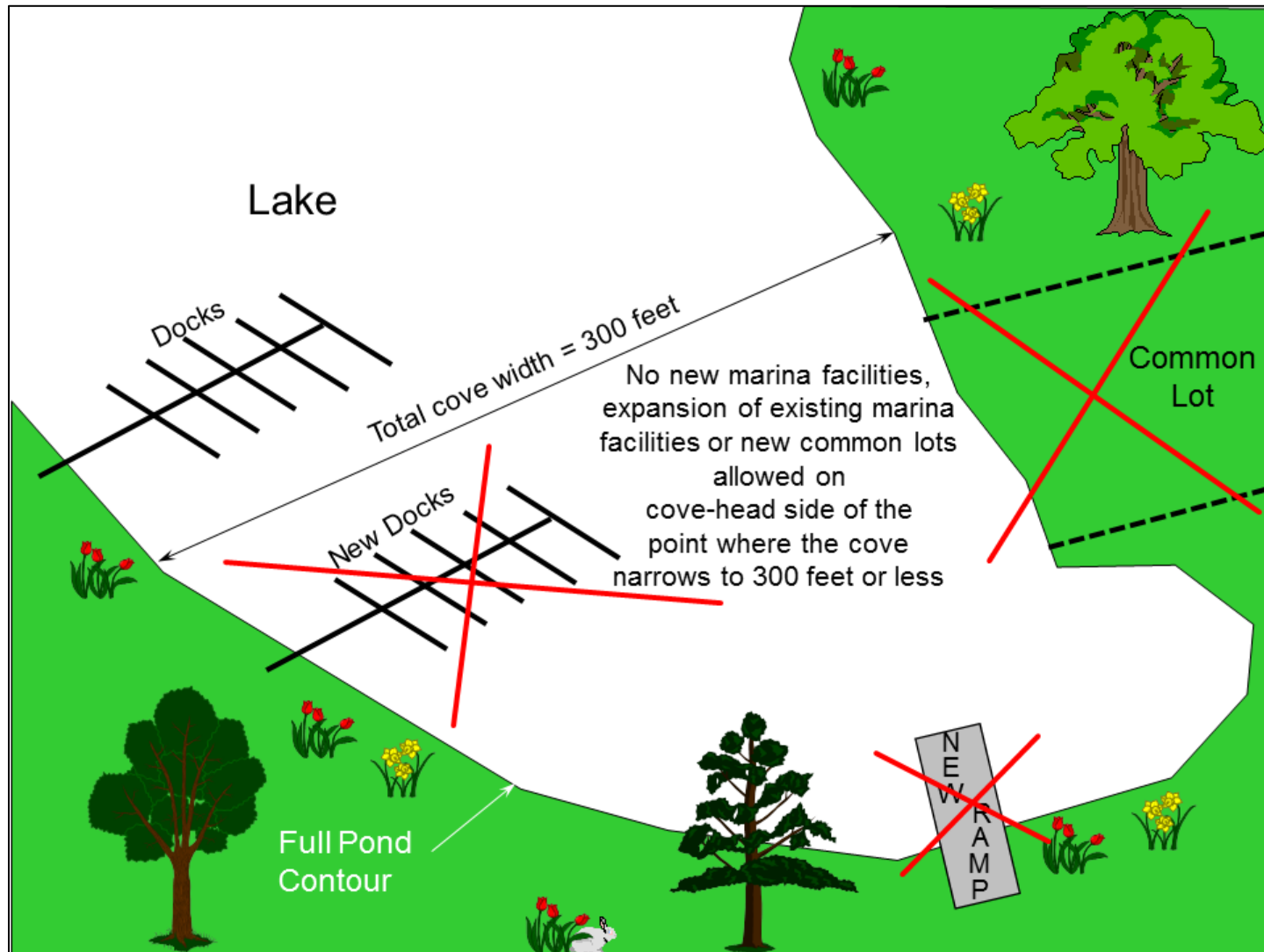


Figure 9. Maximum Potential Buildable Area for Marina Facility

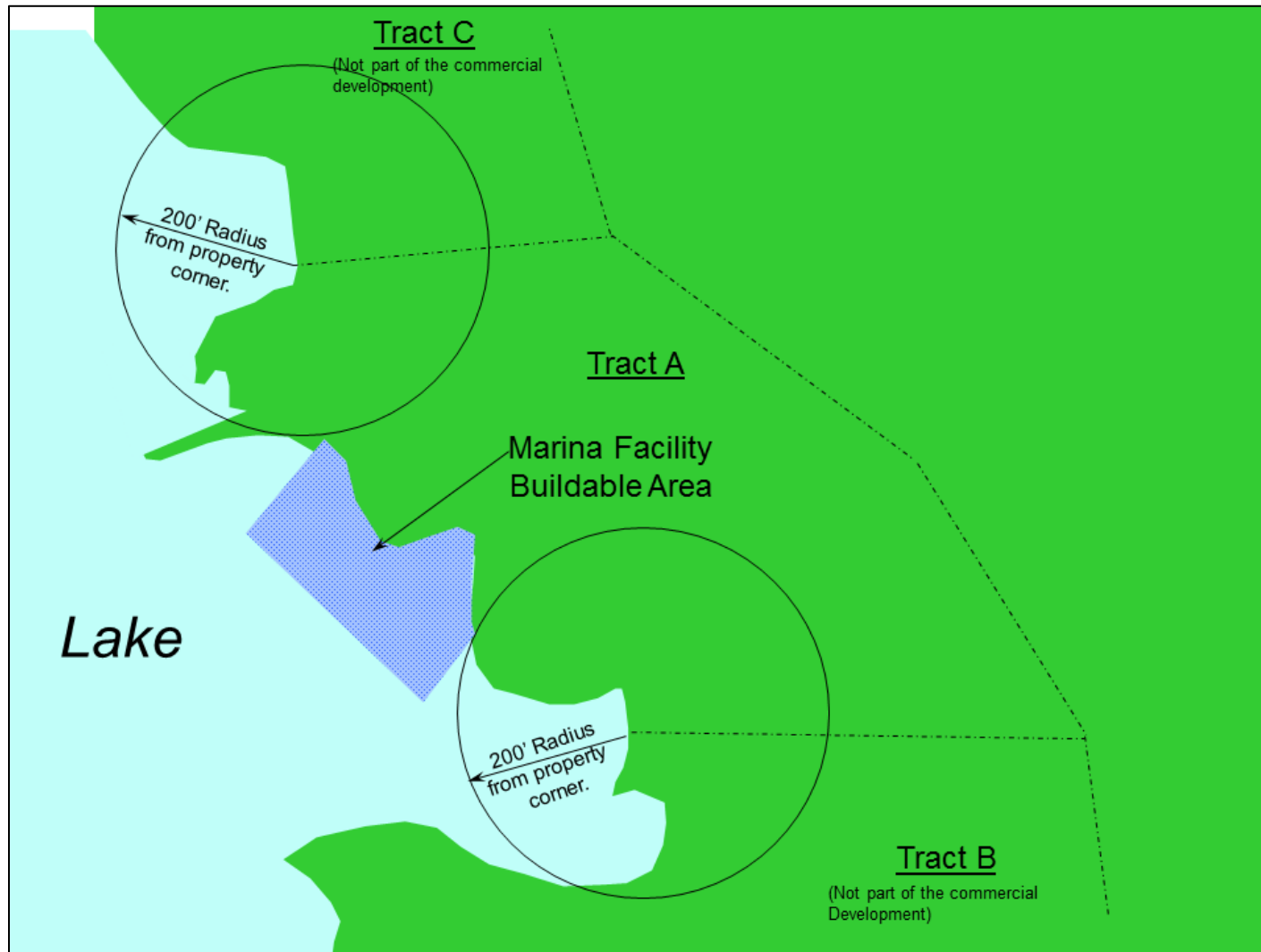


Figure 10. No New or Expanded Conveyance Activities with 50-Foot Environmental Offset

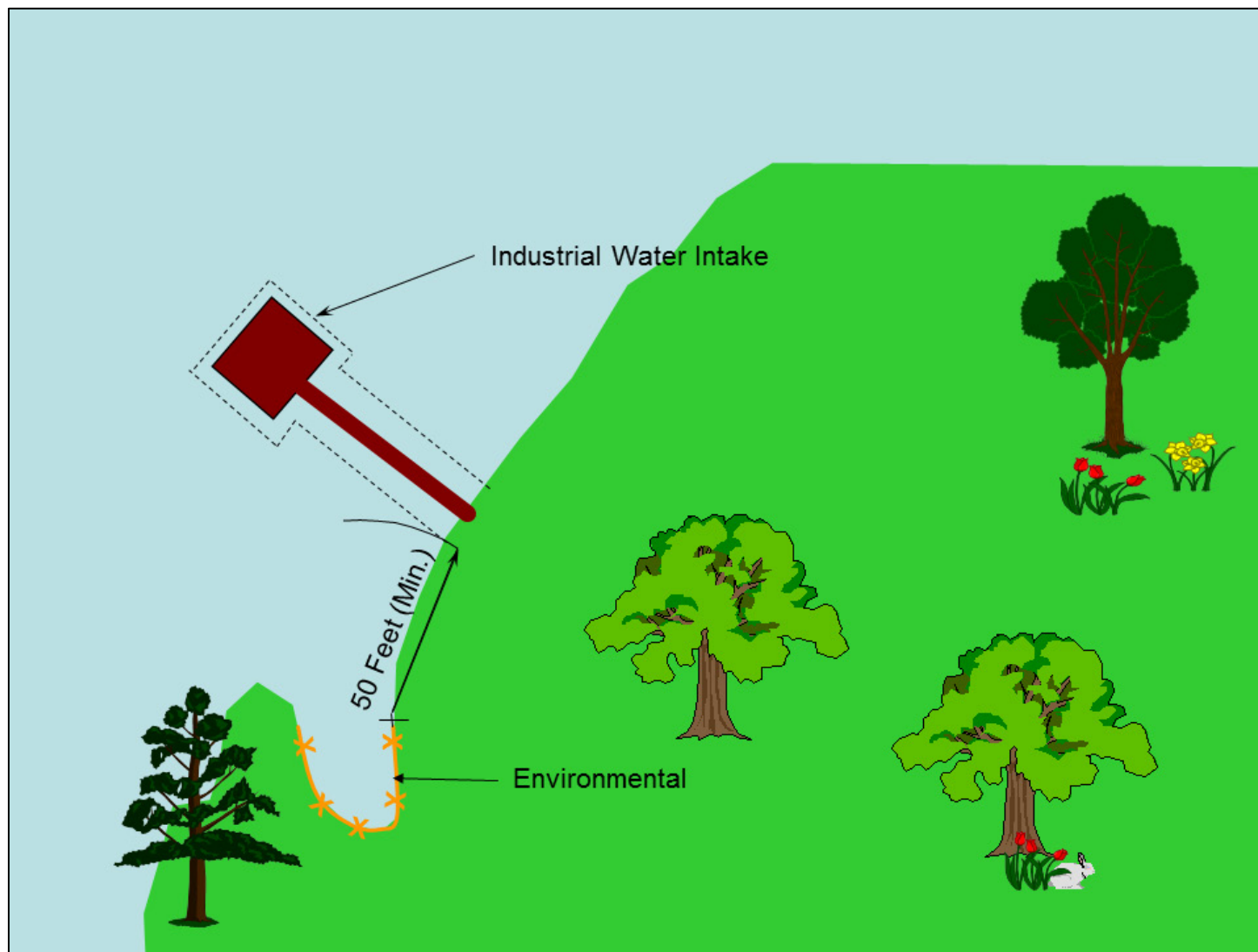


Figure 11. New Non-Public Construction within the FERC Project Boundary or on Duke Energy-Owned Peripheral Strip

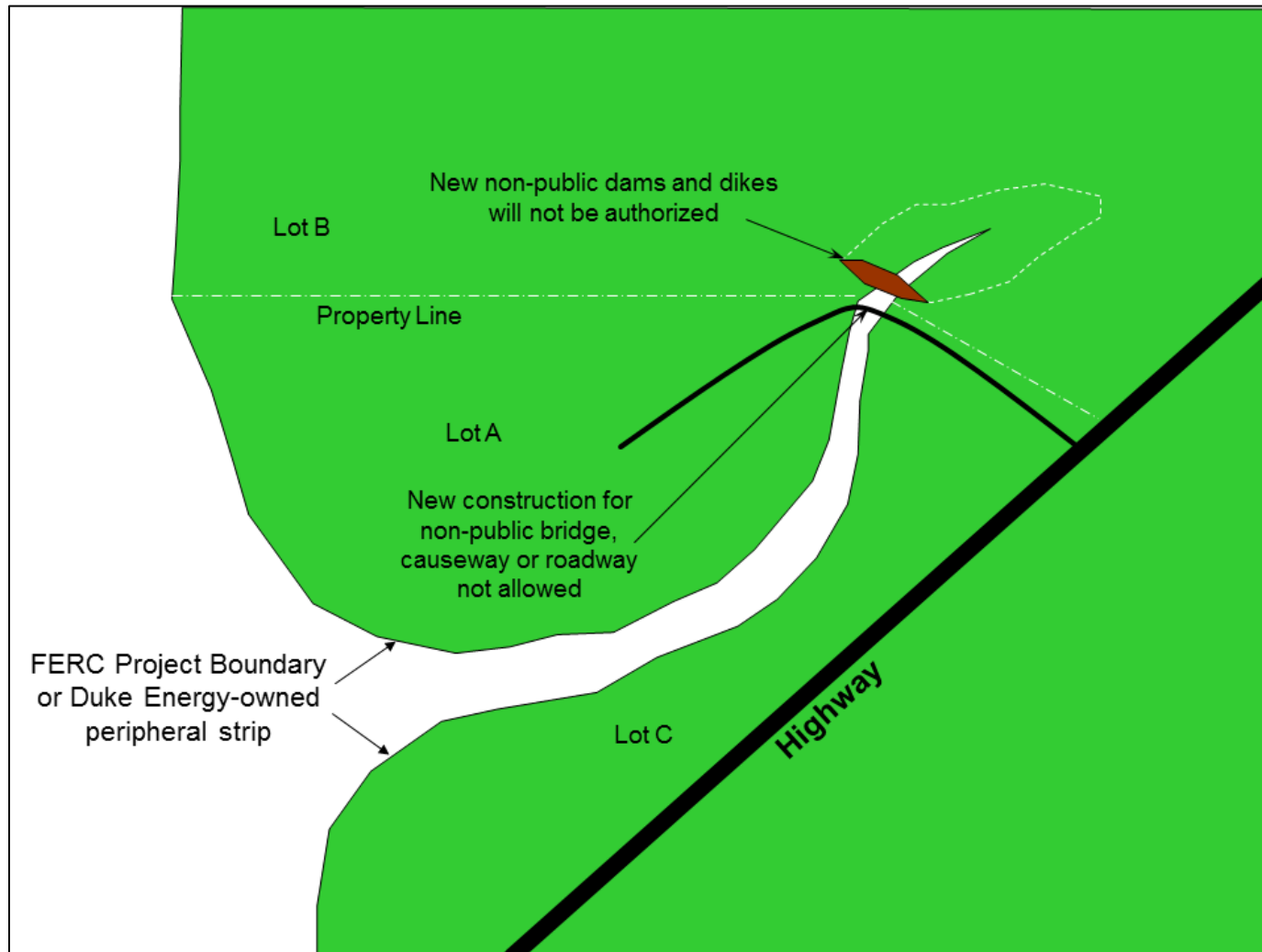


Figure 12. Submarine Utility Line and Intake/Outfall Requirements

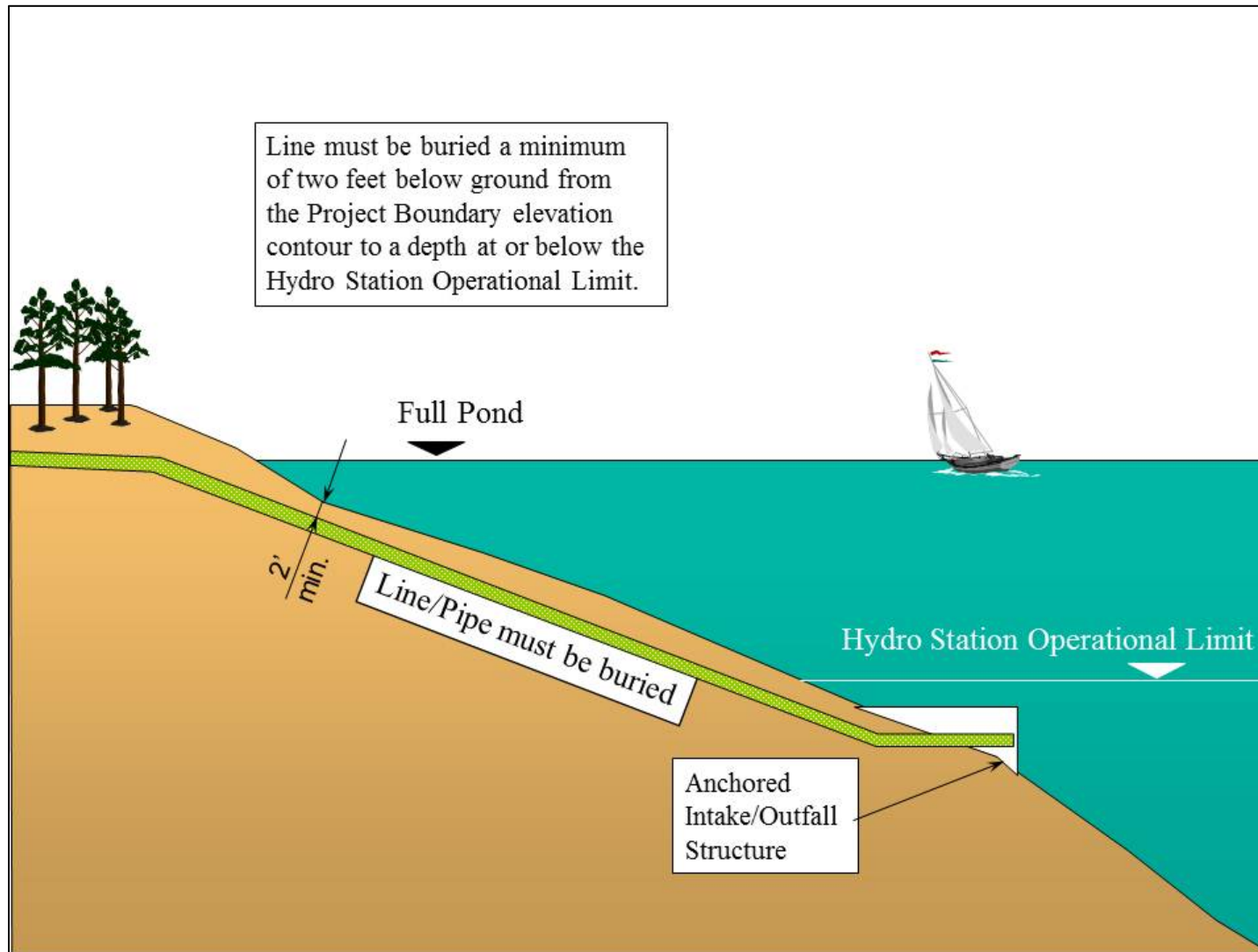


Figure 13. No New Excavation Activities

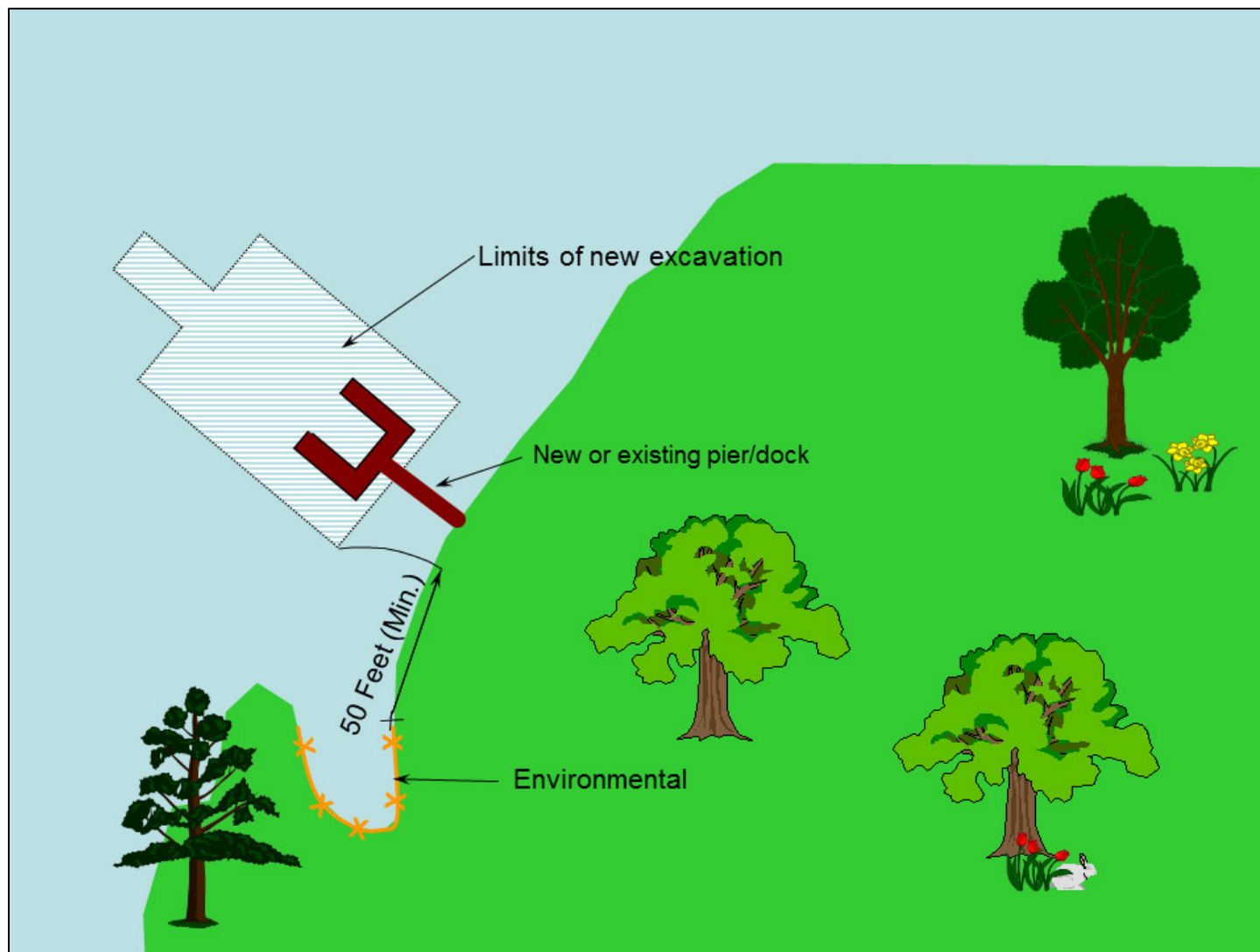


Figure 14. Excavation Activities within 50-Foot Environmental Offset for Existing Permitted Facilities Only

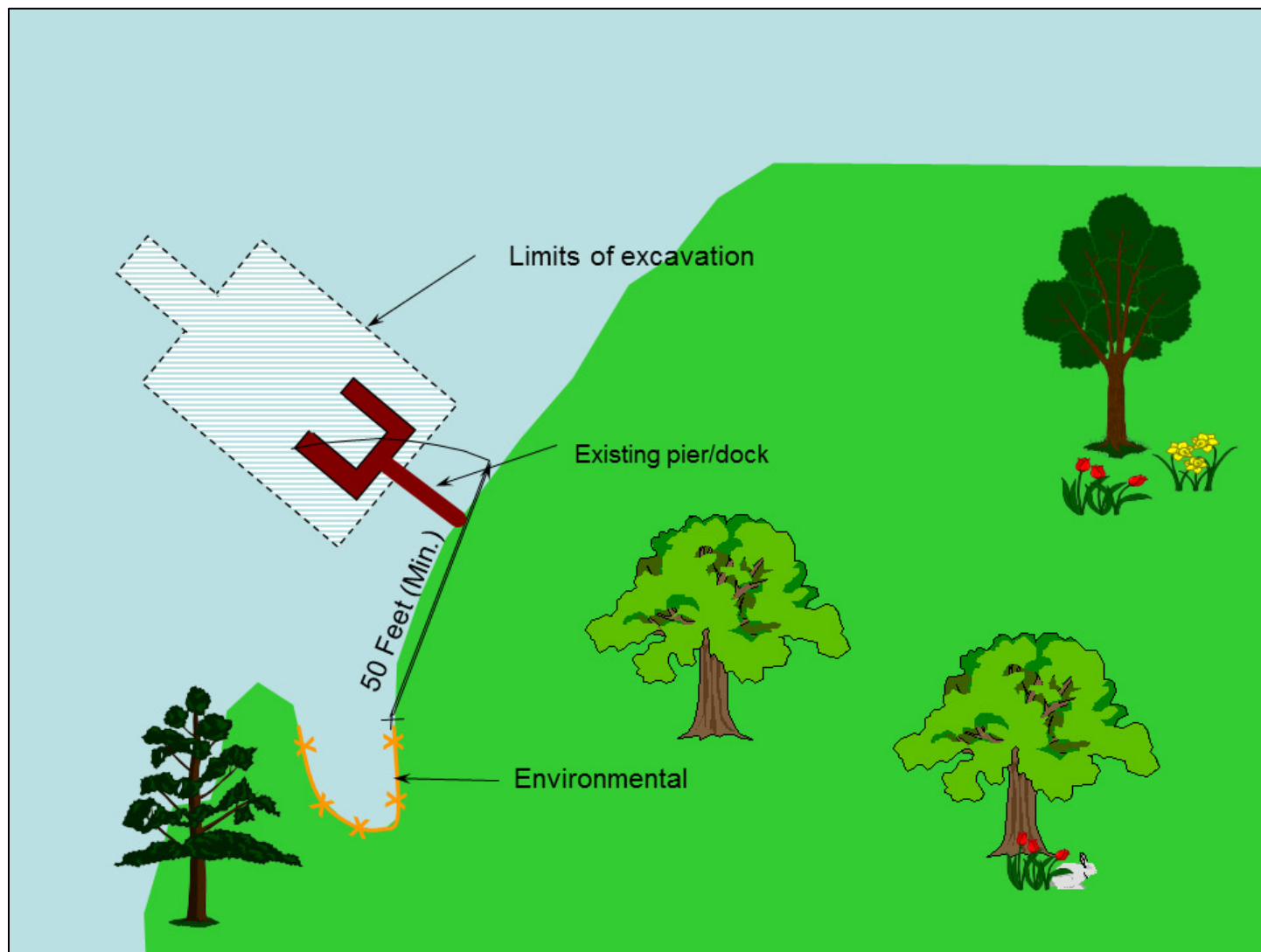


Figure 15. Guidance for Minimizing Excavations Needed for a “T” Configuration and an “I” Configuration Facility

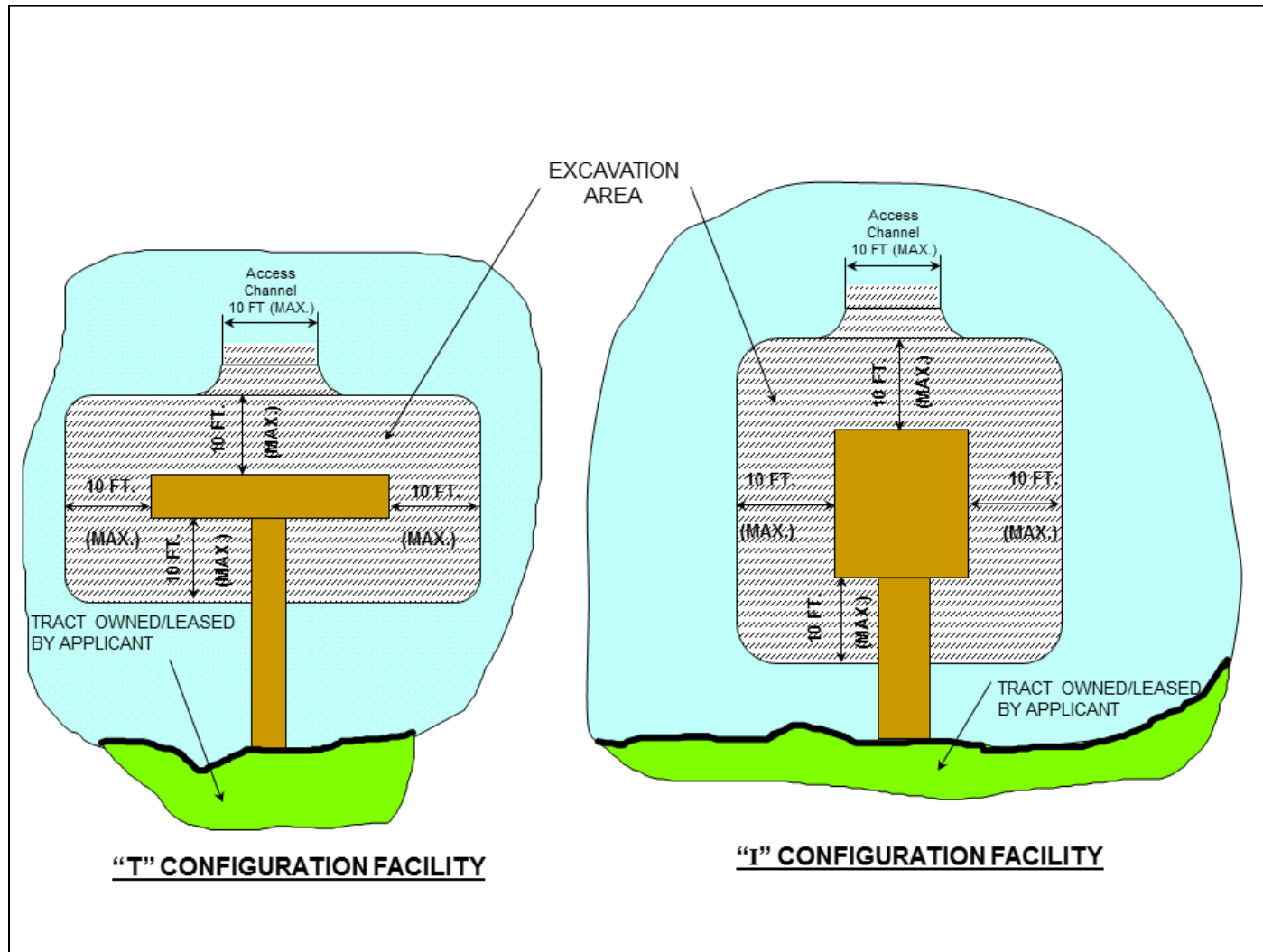


Figure 16. Guidance for Minimizing Excavations Needed for Single-Slip and Multi-Slip Facilities

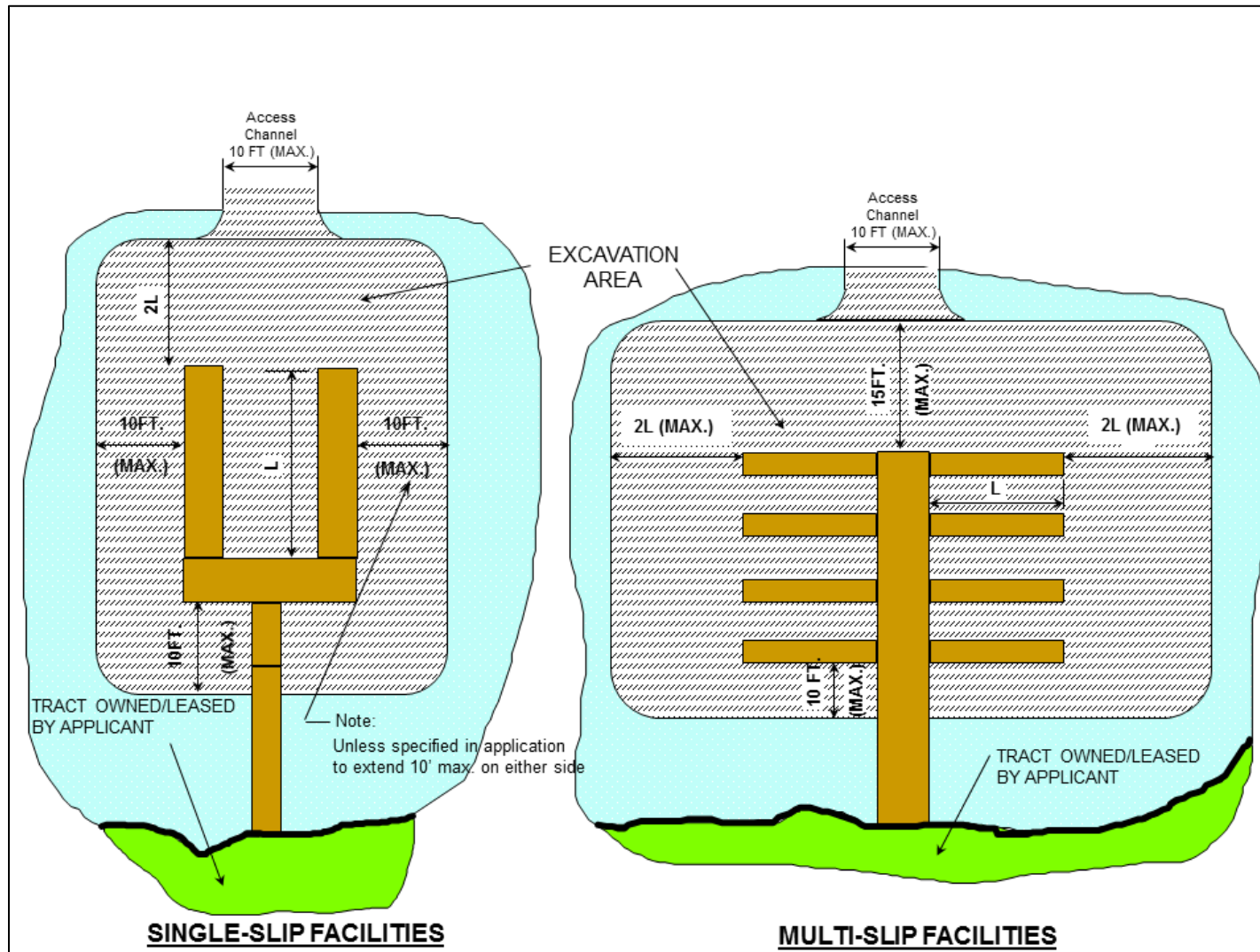


Figure 17. Guidance for Minimizing Excavations Needed for Maintenance of Single Lane Boat Ramp

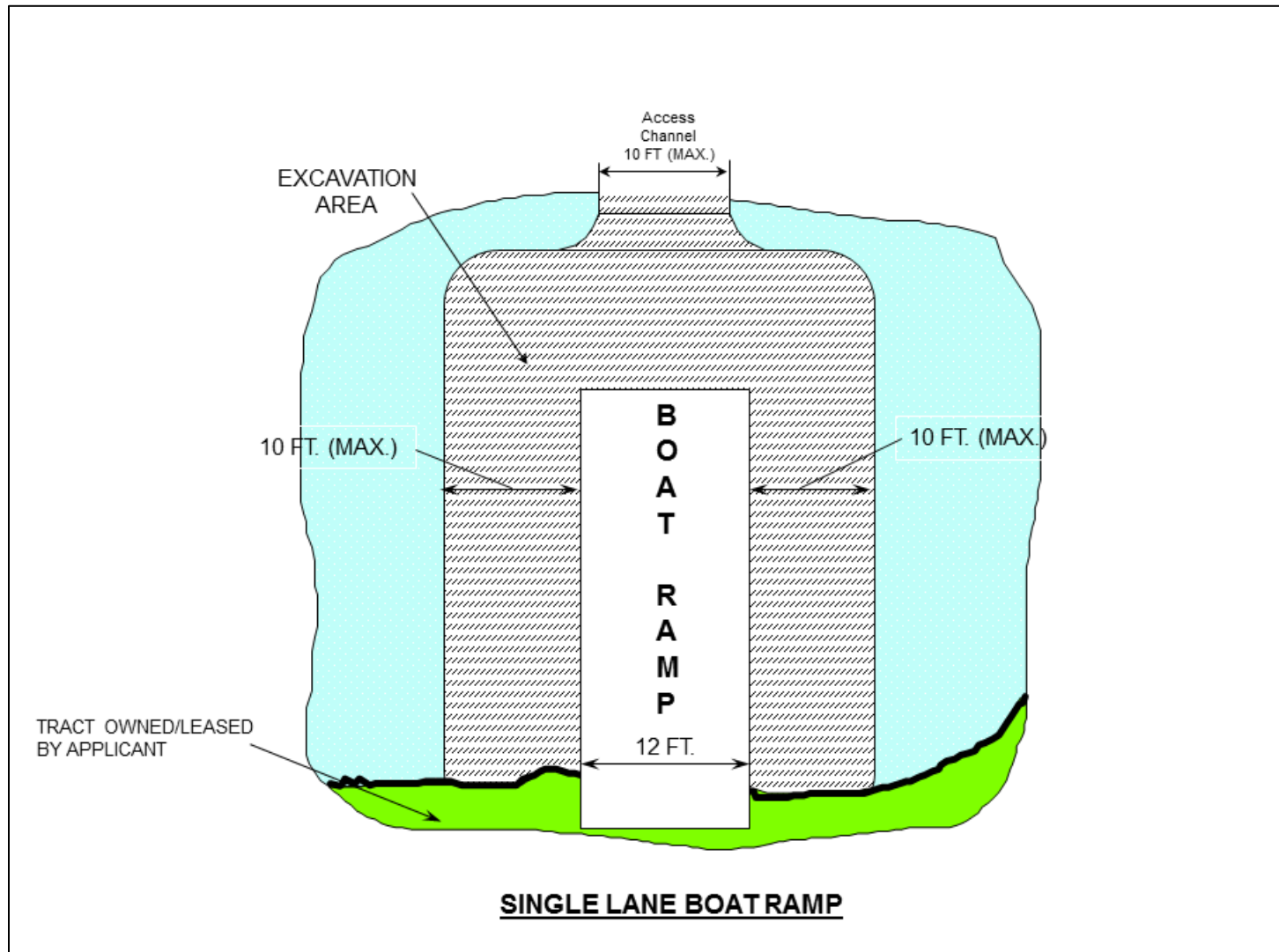


Figure 18. No New or Expanded Private Facilities within 50-Foot Environmental Offset

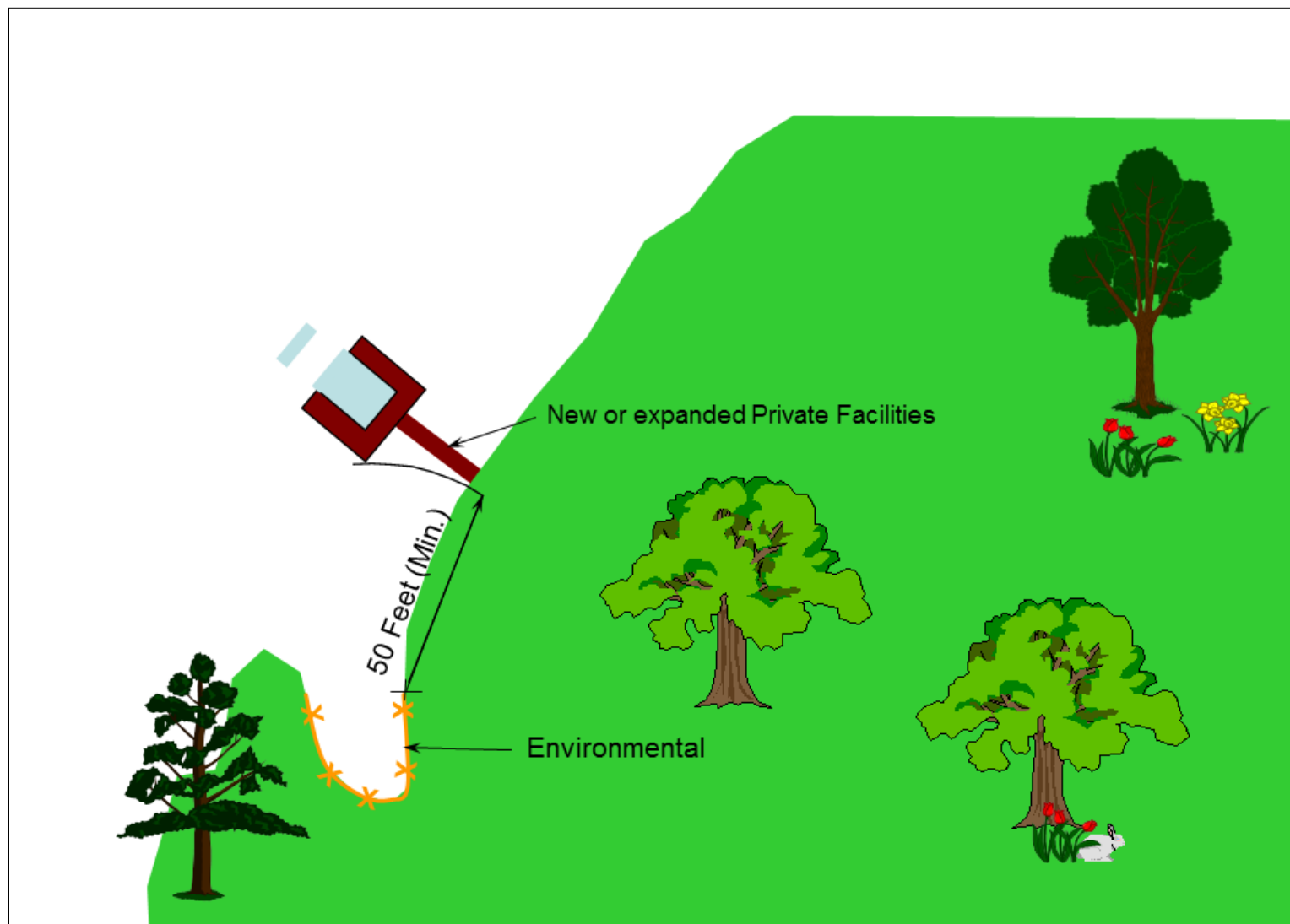


Figure 19. Clear Maneuvering Area for Navigation in Narrow Coves

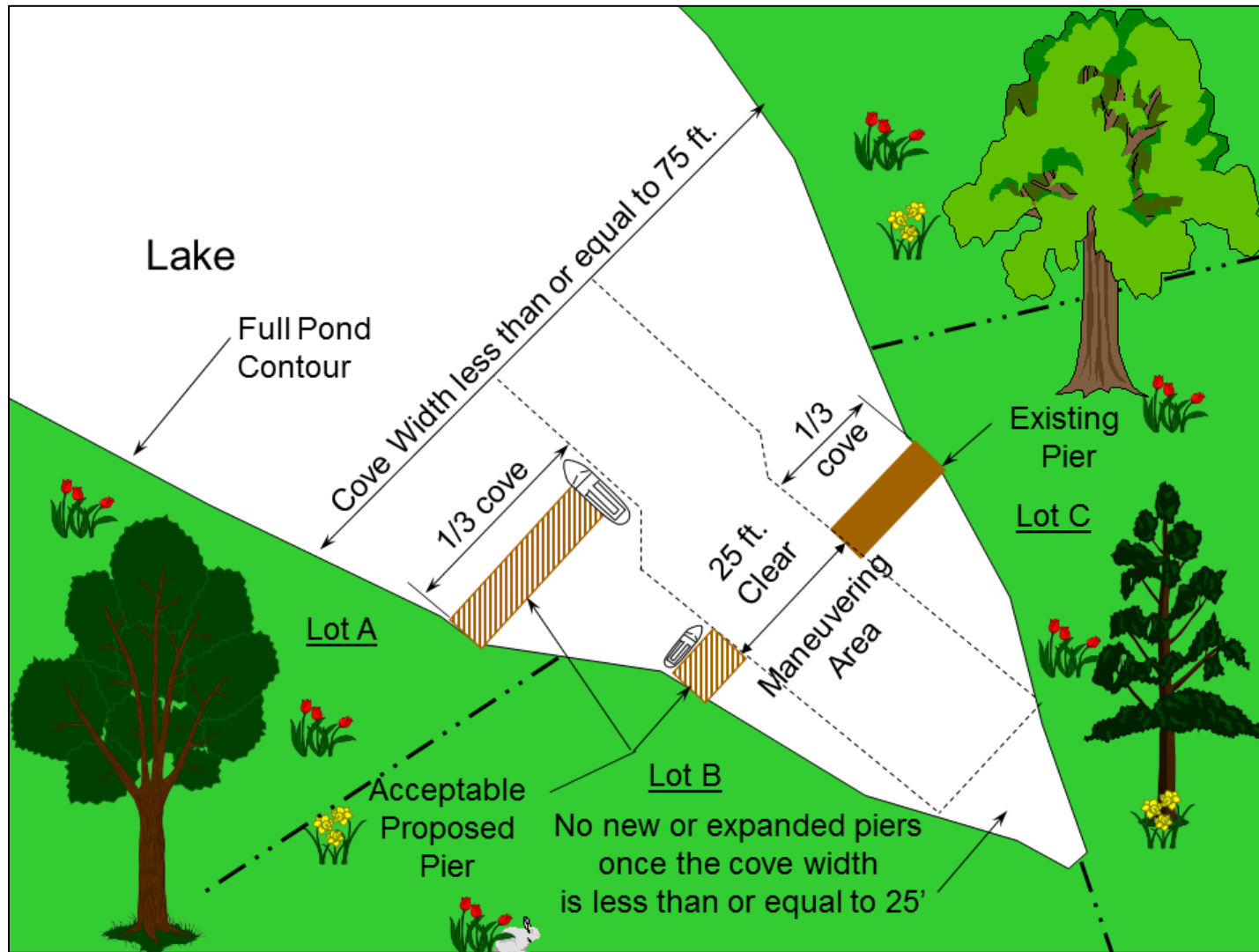


Figure 20. Typical Duke Energy Lake Services Property Line Projection

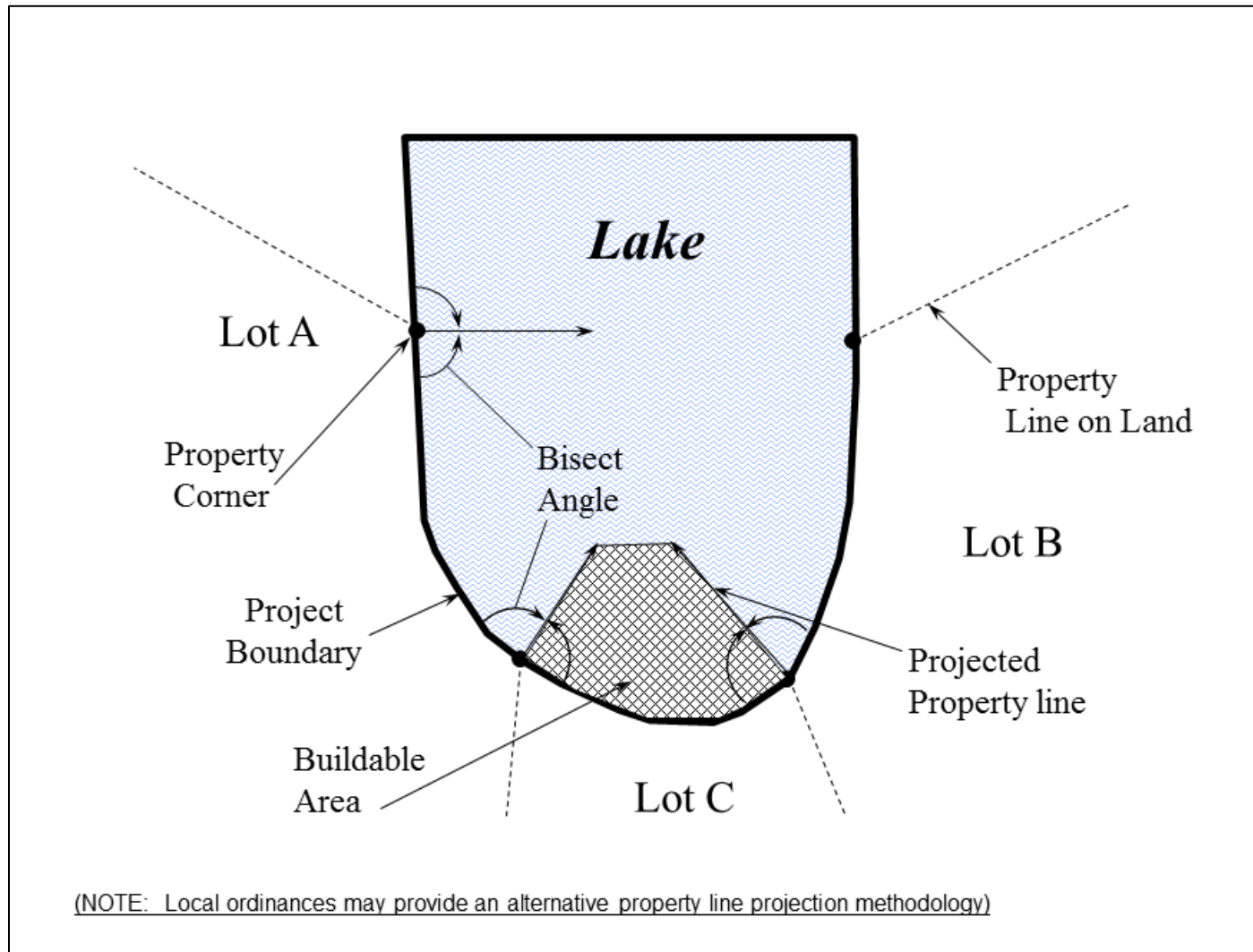


Figure 21. Shoreline Stabilization Technique Selection Process

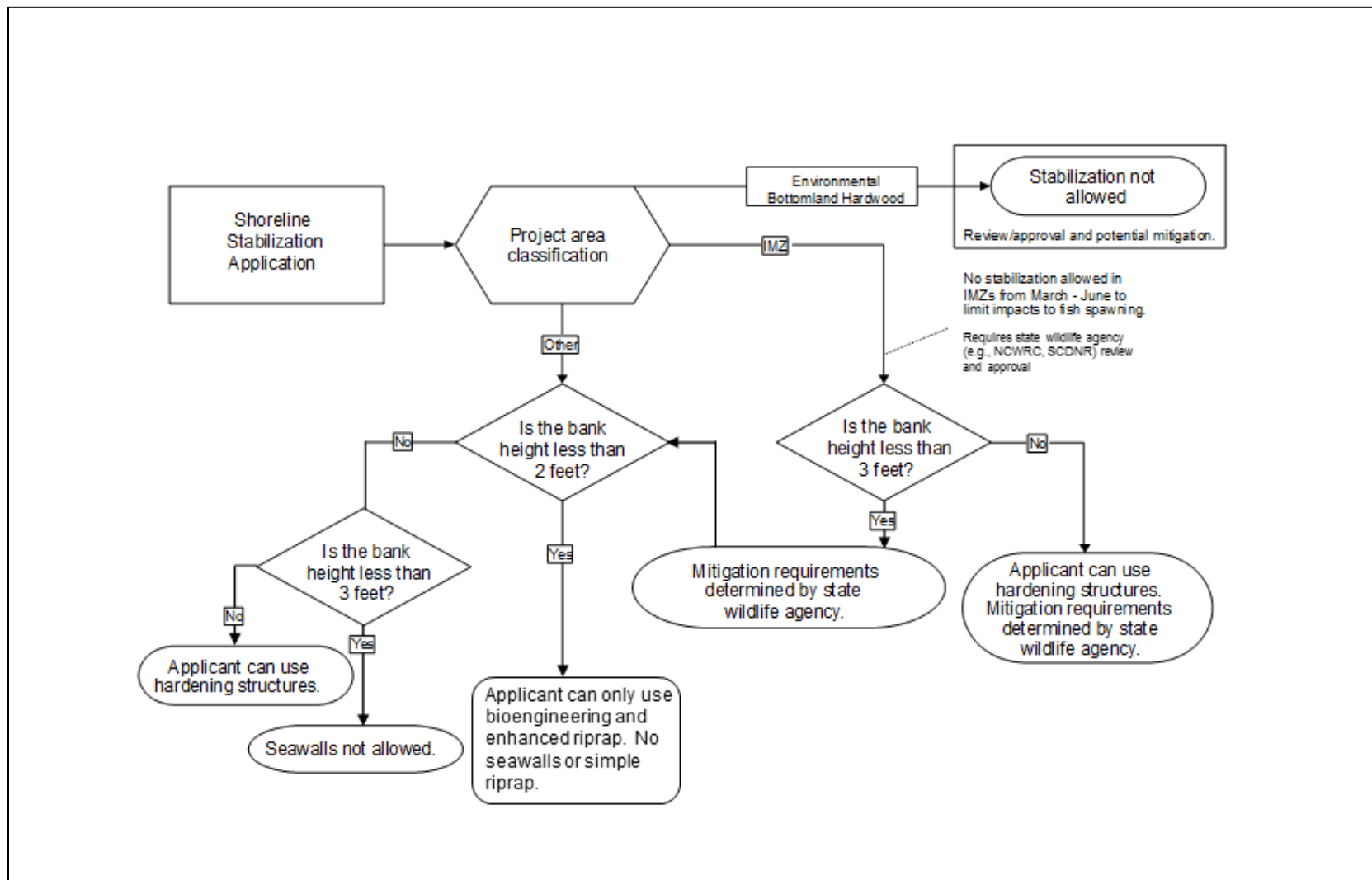


Figure 22. No New or Expanded Stabilization Activities within 50-Foot Environmental Offset

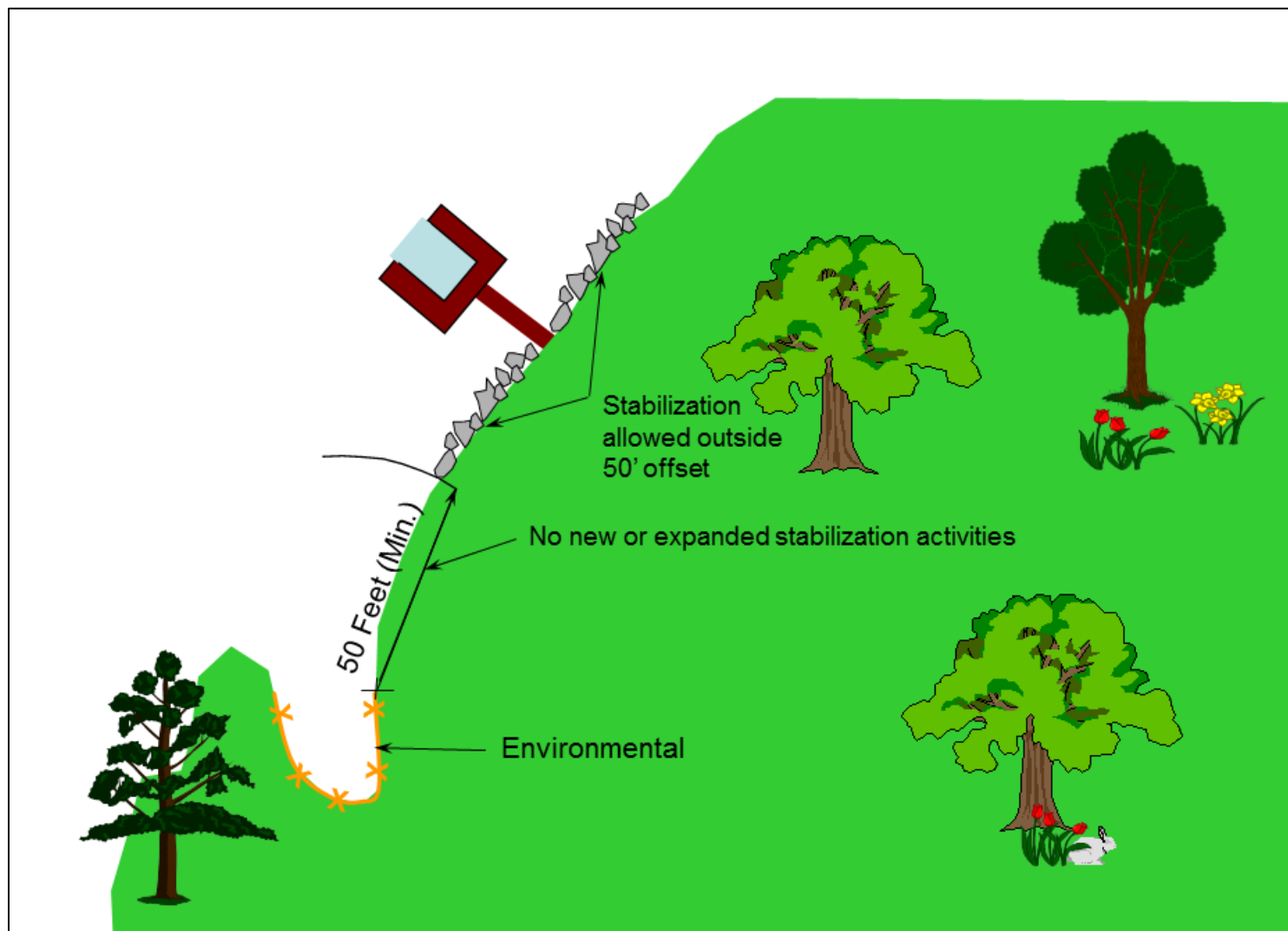
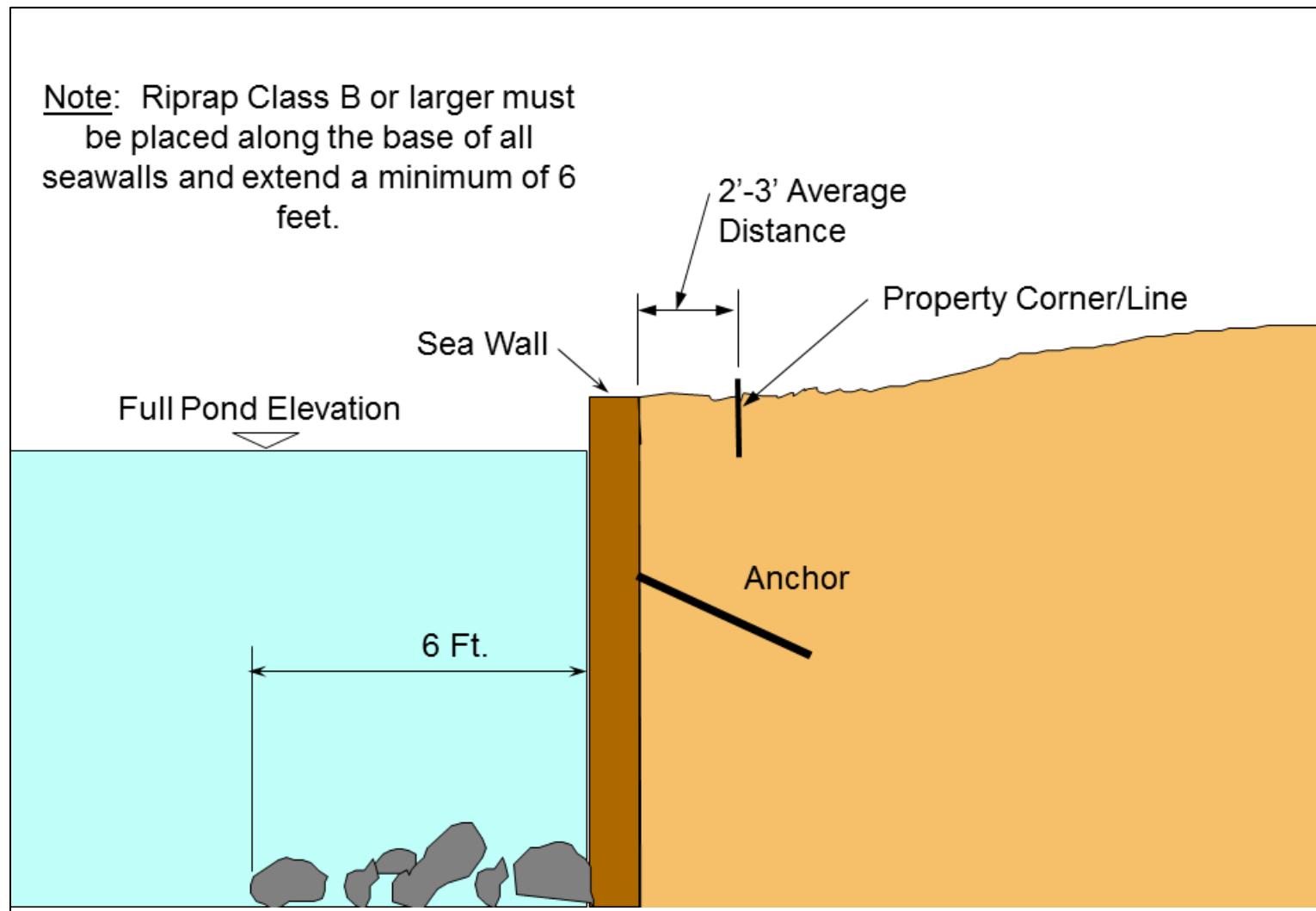


Figure 23. Enhanced Riprap (with Boulders and Plantings)



Figure 24. Typical Seawall for Shoreline Stabilization



Attachment A—True Public Marina Requirements

The following information will be used to determine the classification of marinas at the Project. To be classified as a ***True Public Marina***, the facility must meet all of the requirements in items 1 through 3 below.

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 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 wet boat slips and dry storage bays dedicated for Residential Marina-type access is less than or equal to 10 percent of the total number of wet boat slips and dry storage bays within the marina facility and any considerations are approved by DELS. This exception only applies to the very limited number of existing marina facilities that meet the less than or equal to 10 percent requirement as of January 1, 2006 and Gap Hill Marina on Lake Keowee.
 - 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 not be required.

- 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 percent 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., the application fee and security deposit will not be required.

Attachment B—Shoreline Stabilization Technique Selection Process

1. All seawalls must have Class B or larger riprap extending six feet lakeward from the base.
2. Considering current lake level variability and the desire to prevent unnecessary impacts, riprap must be confined to the area between six feet below the Normal Full Pond Elevation and no more than one foot above the Normal Full Pond Elevation to the maximum practicable extent. Potential exceptions include areas where entire placement is above the Project Boundary, where banks are already eroded above the Normal 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 three feet.
4. Proposals for stabilization where bank height is less than two feet can use approved bioengineering techniques and enhanced riprap techniques only.
5. The bank height is the average height of the eroded shoreline (measured from the original lakebed to the top of the eroded bank) in the area to be stabilized.
6. Bioengineering is a stabilization approach typically characterized by the exclusive use of live vegetation, but may include the use of other natural materials.
7. Bioengineering techniques may include use of live stakes, rock-filled gabions, live-staked crib walls, biologs, and numerous other approaches.
8. Applicants can use bioengineering, riprap, seawalls or any combination of stabilization techniques where use of hardening structures are allowed.
9. Stabilization in an Impact Minimization Zone (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 on the Shoreline Classification Maps.
12. Stabilization of eroded banks three 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 riprap (not installed any higher than one foot above the Normal Full Pond Elevation) and bioengineering techniques
 - b. The cut or filled area, above the height of the riprap, 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 riprap is vegetated if the lower limit of the rock provides a stable beach-shelf at an elevation two to four feet below the Normal Full Pond Elevation
 - d. The work can be conducted in accordance with all applicable buffer regulations
 - e. The amount of cut or fill does not substantially alter the Normal Full Pond Elevation contour, is strictly limited to only that necessary to provide a stable angle for riprap and revegetation, and is specifically quantified in the written authorization from DELS 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. Riprap associated with water willow beds must be limited to one layer deep to allow spaces between the stone for water willow recruitment.