WATER EDGE ENHANCEMENTS

What are Water Edge Enhancements?

Edge enhancements are plantings and landscape management practices that reduce erosion, improve water quality, and add wildlife habitat around bodies of water, such as stormwater retention ponds or lakes.

Benefits of Edge Enhancements:

Permanent vegetation provides a solution to numerous shoreline problems, including:

- Prevents erosion, leaving water clearer and shores intact
- Absorbs nutrient runoff, reducing algae growth
- Reduces waterfowl problems by limiting their movement from the water to shore
- Adds aesthetic value with blooming wildflowers and swaying grasses
- Attracts an array of desirable wildlife
- Provides a nursery for young fish
- Reduces mowing and maintenance requirements

Photo courtesy of: USDA NRCS

What to Plant:

4-18" Below Water	0-4" Below Water	0-4" Above Water	4-18" Above Water
• Sweet Flag	• Sweet Flag	• Swamp Milkweed	• Big Bluestem
• Buttonbush	• Swamp Milkweed	• New England Aster	• Wild Columbine
• Spotted Joe-Pye Weed	• Marsh Marigold	• Common Tussock Sedge	• Common Milkweed
• Swamp Rose Mallow	• Blue Flag Iris	• Tall Coreopsis	• Smooth Blue Aster
• Rice Cut Grass	• Dark Green Rush	• Virginia Wild Rye	• Partridge Pea
• Broad-Leaf Arrowhead	• Wild Senna	• Great Blue Lobelia	• Wild Bergamot
• Great Bulrush	• Cardinal Flower	• Fowl Manna Grass	• Compass Plant
• Swamp Loosestrife	• Water Willow	• Cup Plant	• Rice Cut Grass

(This is not a complete list.)

Installation:

- Before beginning any project, check homeowner association covenants, as well as local and county ordinances. Do not work in a drainage, utility, or other easement without the proper permits.
- Identify your pond or lake's normal water level and use as a reference for planting
- For best results, plant shoreline vegetation between April 1st and July 1st

Emergent Plants (roots are in the water):

- Use plants grown in pots approximately 2.5 inches square and 3.75 inches deep
- Plants adapted to water depths of 1 foot should be planted approximately 3 feet apart; Plants suited to 2-6 inches of water should be planted 12 inches apart
- For all species, install by creating a hole with a spade or dibble, placing the plant in the hole, and firmly packing the soil around it
- Construct a waterfowl exclusion fence between the plantings and the rest of the pond to prevent geese from eating new plants

Plants Above Waterline:

- Fourteen (14) days prior to planting, kill existing vegetation with an herbicide approved for use around water
- Once existing vegetation is killed, till the area to a depth of 3 inches as close to the water as possible
- Mix desired seed with coarse sand (2 parts sand to 1 part seed) and hand broadcast mixture over tilled soil
- Lightly firm seedbed with a roller and cover with an erosion control blanket

Maintenance Requirements:

- The recommended emergent plant species are native aquatic and shoreline species, so they are well adapted to the sites on which they will be planted. As long as water levels are normal, the plants will require minimal maintenance.
- The seeded areas may need to be mowed or trimmed during the first 2-3 years to maintain weeds. Do not cut lower than 4 inches.
- Remove the waterfowl exclusion fence after 1 year.
- Do not remove the erosion control blanket—it will decompose on its own.

Cattails and Other Unwanted Vegetation:

Cattails are not recommended for water edge enhancement. They grow and spread quickly and out-compete other native, beneficial species. Many methods may be used to control cattails or other unwanted vegetation. The method used will depend on the site and potential effects on other aquatic vegetation. Here are a few common strategies for removing unwanted vegetation along a shoreline:

- **Water level modification:** Temporarily flooding or draining a pond or reservoir can kill existing vegetation. The seeds will often remain viable, however, and re-establish the species once the water level returns to normal. Other plants may be able to float up and continue growing above water or withstand a temporary drought. This method may be of limited use depending on the size of the water system.
- **Chemical control:** Herbicides applied to existing vegetation may be successful in killing the plants. Cutting or mowing the area and then applying chemicals may be even more effective. This method should not be used in protected or delicate water systems.
- **Physical Control:** Cutting aquatic vegetation and then submerging it may be effective in killing some plants.
- **Shading:** Using shade cloths or tarps over shade-intolerant species may effectively kill the species. This may take a long period of time to be successful.