SHORELINE HABITAT RESTORATION OPERATION & MAINTENANCE PLAN

The most ideal maintenance for areas which already contain desirable vegetative cover is to simply leave the site alone. Do not fertilize, do not mow, do not rake, do not "clean up" fallen limbs or trees. Allow native vegetation to regrow.

In accelerated recovery areas, such as shoreline restorations, some initial maintenance may be required. Pulling invasive weeds around native shrubs, trees, and groundcovers the first year or two eliminates competition and will help to give them a good start. Maintenance over the long-term must be in accordance with the Polk County Shoreland Ordinance requirements. The duff layer, made up of fallen leaves and pine needles, should be left intact. This layer covers the soil, thereby conserving moisture, preventing erosion, and allowing water to infiltrate into the soil.

YEAR ONE

Watering ... Regular watering in the first two months of a spring or summer planting is one of the most important factors for success. Without supplemental watering, roots may not reach the soil moisture they need. Watering at least 30 minutes each day allows vigorous root growth for plants to become quickly established. Timers to turn water on and off automatically are available from hardware and garden supply stores. Where drainage is poor, water only in the morning, not at night when evaporation is reduced. Fungal diseases that start with excess moisture can kill young seedlings. Use lake water if feasible, since this water often is warmer and more nutrient-rich than well water. Pumping water from the lake is allowed in Wisconsin as long as no type of structure is left in the lake.

Weeding Planted Areas ... Pull weeds out as early as possible being careful to not disturb the native plants. Be especially diligent in areas where non-native invasive species like purple loosestrife, mullein, lamb's quarter, quack grass, reed canary grass or bluegrass are known to be present.

Weeding Seeded Areas ... It can be difficult to tell weeds from the native plants in a seeded area. Sprouting a small sample of the native seeds in a plant tray will assist with their identification. Cut off flowering heads of weeds before they go to seed. Perennial natives will eventually out-compete annual weeds that sprout from seed. Another alternative is to repeatedly trim weedy vegetation to 6 to 8 inches with a weed-whacker. Remove clippings immediately if they cover the native seedlings. This will discourage weed growth, remove shade, and allow native seedlings to grow.

Fertilizing and Applying Insecticides ... Fertilizers and insecticides should be avoided. Applying fertilizers may encourage weed growth. If native plants are selected appropriately, supplemental fertilization should not be required. Also avoid applying insecticides since so many are non-specific and can harm or even kill non-target species.

Vegetative Cover ... At the end of the growing season, allow all dead vegetation to remain in place. It becomes a valuable seed source for next year's growth, provides food and cover for wildlife, and will help to cover the soil and slow spring runoff. The grass seed and dried flower heads add another level of appeal to the native landscape in the winter months.

YEAR TWO

Watering ... Water only during periods of drought.

Weeding ... Thoroughly weed early in the summer. After this initial weeding, check for and remove weeds at least once a month.

YEAR THREE AND BEYOND

No watering or weeding should be necessary except for extreme drought conditions or stubborn invasive weed problems. Leave vegetation in place in the fall and through the winter months. Approval from the zoning or land conservation office is required for extensive weed removal in the shoreland zone. Prairie and savanna areas may be trimmed or burned only under an approved management plan from an appropriate agency.

Landowner Signature	Landowner Signature	
Date:	Date:	