Sept/Oct 2014

Obtain GIS boundary files to determine properties for reed canary grass and narrow-leaf cattail versus phragmites. Work to be completed below, as weather permits.

Group 1 (Shoreline):

Treat all phragmites on entire shoreline using phragmites ordinance.

Treat phragmites on all inland lakes, including, but not limited to, Barney's Lake, and check for native/invasive at Miller's Marsh.

Treat narrow-leaf cattail, marsh thistle and reed canary grass on properties where permission is given (Little Sand Bay, Conns Cove, Egg Lake, Barney's Lake).

Group 2 (Little Sand Bay):

Conduct fall survey, marking points that are treated (species where treatment is appropriate in fall) and marking points for future treatment or monitoring. Not recommended to treat spotted knapweed, bladder campion, or sweet clover on the shoreline at this time. Seeds will be formed and ready to drop if disturbed.

Treat reed canary grass, marsh and bull thistle, phragmites and narrow-leaf cattail.

Treatment of oriental bittersweet on Little Sand Bay and Font Lake.

Group 3 (Harbor lighthouse area):

Treat oriental bittersweet at Harbor Lighthouse, Indian Point, Conn's property, and Protar's property. Treat Japanese knotweed at Conn's property.

Treat Jerusalem artichoke and reed canary grass at Egg Lake and reed canary grass at Miller's Marsh. Treat multiflora rose on Darkey Town Road.

Group 4 (Kings Highway):

Conduct fall survey on Conn's Cove, marking points that are treated (species where treatment is appropriate) and marking points for future treatment or monitoring.

Treat bush honeysuckle on King's Highway and autumn olive and honeysuckle on Little Sand Bay. Treat narrow-leaf cattail at Harbor Beach and Church property and reed canary grass on Barney's Lake and Barney's Lake Fen.

Treat coltsfoot on Little Iron Ore Bay.

<u>Group 5 (Hannigan Rd State Land):</u> WWS was able to secure permission from Charlevoix County Road Commission, but they noted that all properties are still owned by the private property owner and permission would be required from property owners also. Therefore, none of this treatment was conducted in 2014.

Conduct treatment on autumn olive on Hannigan's Rd, corner of McCauleys and East Side, Darkey and Kings Hwy intersection, and area near Little Sand Bay.

Treat autumn olive and multiflora rose off French Bay Rd.

November 2014 – May 2015

Report results of treatments from 2014, GIS tracking, points, and results from survey with recommendations for 2015 treatment.

Formulate private property owner letter and permission form to allow private land treatment of all invasive species on shoreline (or other parts of their property?). Determine the duration of the permission to be included in land owner permission form.

Distribute mailing to private property owners and log responses to track the treatment for 2015. Create GIS files to upload to GPS for shoreline treatment.

May/June 2015

Group 1:

Complete shoreline treatment, where permission given, for all species of invasive thistles, reed canary grass, spotted knapweed, bladder campion, sweet clover, and any other species where treatment is appropriate.

Group 2:

Conduct spring survey at Little Sand Bay, treating European swamp thistle, marsh thistle, bull thistle, spotted knapweed, bladder campion, and sweet clover, retreat reed canary grass and other species where treatment is appropriate.

Mark points of treatment and marking points for continued fall treatment.

Recommend treating the trail through the field for all invasive species at least 30 feet on either side to limit transfer of seed to the shoreline.

Group 3:

Retreat reed canary grass at Egg Lake and Miller's Marsh, retreat Jerusalem artichoke, retreat Japanese Knotweed with Milestone, if appropriate (determined on site)

Group 4:

Conduct spring survey of Conn's Cove, marking and treating species as appropriate and marking points for future follow up treatment.

Treat invasive thistles at Barney's Lake.

Retreat reed canary grass at Barney's Lake and on Barney's Lake Fen.

Group 5:

Possible treatment of wild parsnip, determined on site based on growth and effectiveness of potential treatment

July/Aug 2015

Group 1:

Treat narrow-leaf cattail, plus retreat thistles and knapweed, bladder campion and sweet clover, if necessary, in areas where permission is given.

Group 2:

None planned, determined by survey and appropriateness of treatment at this time of year.

Group 3:

Treatment of purple loosestrife on Kings Highway

Group 4:

Retreatment of narrow-leaf cattail on Harbor Beach and Church property.

Treatment, as necessary, determined by spring/fall survey of Conn's Cove.

Group 5:

Treatment of wild parsnip, if not treated in May/June, as noted above.

Sept/Oct 2015

Group 1:

Treatment of phragmites on entire shoreline.

Retreatment of narrow-leaf cattail and reed canary grass on State, GLEC, and Little Traverse Conservancy property and where private permission given and as necessary based on previous retreatment.

Retreat autumn olive, if necessary.

Group 2:

Check and retreat all woody species as necessary.

Other treatment, as needed, based on spring and/or fall survey.

Group 3:

Check and retreat all woody species as necessary.

Retreat reed canary grass at Egg's Lake and Miller's Marsh.

Treat multiflora rose on Darkey Town Road

Group 4:

Check and retreat all woody species as necessary.

Treat phragmites at Barney's Lake and Barney's Lake Fen.

Retreat reed canary grass at Barney Lake and fen.

Other treatment of Conn's Cove as determined by spring/fall survey.

Treat bush honeysuckle on King's Highway

Treat coltsfoot on Little Iron Ore Bay

Group 5:

Conduct treatment on autumn olive on Hannigan's Rd, corner of McCauleys and East Side, Darkey and Kings Hwy intersection, and area near Little Sand Bay.

Treat autumn olive and multiflora rose off French Bay Rd.