Community Based Solutions to Urban Forestry Challenges
Goals

• To manage city forests (15,000 acres) that are resilient to climate change, through a sustainable community forest approach that strives to produce healthy natural Acadian forests (native species).
• To support the existing school curriculum - Hands On approach to learning through a teaching/working forest concept.
• Showcase sustainable forest management practices over time – Managed verses Unmanaged Forests (25 year history).
• To manage at the tree, stand and landscape level linking water, forests, nature and society through trees.
• To work with Community Partners in the Forest 2020 site.
• Biomass Pilot Project showcases the first community green energy project for NB, heating and lighting schools in PEI with NB biomass products.
• Working on our own biomass boiler in Moncton, NB.
Guiding Principals

• Manage all natural resources including forest, water, soil, animals and plants with ongoing continued outside partnerships and funding through FMF, FBR, CFS, Wood Marketing Boards.

• Sustain the Acadian Forest species and develop new and innovative ways to manage cities forests in the next 25 years.

• New Agroforestry Project in Forest 2020 site at McLaughlin Reservoir in partnership with MAGMA – growing your own food in Moncton’s Community Forest (Food Forest)

• Forest management in watershed areas is for the long term and new alternatives to the traditional ways of managing forests are being explored - new biomass options are being applied in Community Forests in Moncton.
McLaughlin Reservoir
Site of First Community Green Energy Project for NB
Urban Biomass Heat
Wood to Energy
Biomass Delivery
Biomass Storage
Biomass Chipping
Biomass Stocking
Sustainable Forest Management

Selection Harvest - Turtle Creek
Step by Step: How the Project Works

Step 1: Forest Growth (Captures CO2 Emissions)
Step 2: Forest Needs Thinning
Step 3: Low-Impact Harvesting Using Ponsse Machines
Step 4: Biomass Stocking (logs left to dry)
Step 5: Transforming Logs into Wood Chips Using Morbark Chipper
Step 6: Storage of Wood chips
Step 7: Delivery of Wood chips to Boilers
Step 8: Fuel delivered into Bunker
Step 9: Automatic Feeding of wood chips into boiler (as
Step 10: Efficient Burning, Biomass Heat with Minimal CO2 Emissions
Urban Forest
Best Management Practices

• Develop long term forest management plans for all forest land over 100 acres in size. Keeping watershed protection as the priority when carrying out any type of forestry activity – drinking water quality is the priority.

• Continue with forest renewal, tree planting, street tree care and maintenance, finalize tree inventory.

• Continue to advance the Forest Legacy program, community forestry project, non timber values projects (sugar bush, ginseng, hardwood grain project, agroforestry – bees, food forests).

• *Lead in* Community Stewardship and Partnership Programs.

• Continue to work with developers on saving trees during construction and stressing the economic value trees bring to a property for sale.
Outdoor Educational Classroom – Teaching Forest at McLaughlin Reservoir

Environmental education classes are taught upon request to Envirothon NB teams studying environmental issues related to forests, water quality, soils, aquatics and biodiversity within the community forest. This same forest is used for demonstration field days showcasing sustainable forest management treatments over time – 25 year history.
25 years of forest management planning has gone into the cities strategic plan for environmental protection.

Enhanced outdoor education programs highlighting NB Forests are an important component of our community forestry program.

Ecosystem based teaching strategies specific to science curriculum outcomes were designed for K-12 and University level, a hands on approach to learning.
• Completion of an Intergraded **Community Sustainability Plan (ICSP)** for managing municipal forests linked to a Plan Moncton Strategy – Urban Forest Component New in 2013.

• **Tree Planting Program** – Annually 5-10,000 native trees are planted in the Forest 2020 site and others – over 300 street trees planted annually.

• **Agroforestry** – planting of food crops, bee – honey production, food forest in Forest 2020 site.
Tree Plan Canada Planting 2011
Community Green Energy Site