**Leave Your Leaves Campaign**

Ecosystem of Deciduous forests – the cycle of life is to recycle life through leaves.- How do leaves fit into the ecosystem:

Environmental Benefits of Leaving the Leaves:

* Provide organic matter and build up healthy soil – reduces need for fertilizers
* Provides nutrients for trees and shrubs as well as ground cover
* Majority of butterflies, moths and other insects overwinter in the leaf litter -helps promote and protect biodiversity
* Firefly larvae overwinter in leaves
* Leaf litter provides nutrients via insects for birds, chipmunks, turtles and amphibians supporting the web of life
* Depresses weeds
* Leaves promote soil moisture retention and reduce water runoff

Additional Benefits of Not Collecting Leaves:

* Reduced Flooding – Leaves blocking drainage during high rain events causes excess water and flooding on some roadways
* Masses of leaves going into gutters causes large nutrient loads to streams and waterways –creating algal blooms – hurts water quality
* Promotes composting and less lawn waste for City to dispose of
* Less air and noise pollution from leaf blowers many of which are highly polluting 2-stroke engines

Financial Benefits:

* Homeowner save money and time by not removing valuable nutrients from property and paying to replace with mulch which actually removes nitrogen from the soil
* Consider making this initiative an addition to the Climate Action Plan
	+ Reduction in air pollution via reduced use of landscaping equipment
	+ Methane from leaves stored in landfills:
		- According to EPA data, yard trimmings, which include leaves, created about 34.7 million tons of waste in 2015, which is about 13% of all waste generation.
		- The majority of that – 21.3 million tons – was composted or mulched in state programs, the EPA says, yet still, 10.8 million tons went to landfills, accounting for just under 8% of all waste in landfills.
* Reduce the noise - According to the Center for Disease Control and Prevention:
	+ Using a conventional, commercial leaf blower for 2 hours can impact hearing (80-85 decibels)
	+ Cheap or mid-range leaf blowers can expose users up to 112 decibels (a plane taking off generates 105 decibels). This can cause instant “pain and ear injury,” with hearing loss possible in less than 5 minutes.
* Reduce the air pollution
	+ The 2-stroke engines in gas leaf blowers (GLBs) releases 300 times the levels of hydrocarbons as vehicles on the road. Running one for 1 hour is equivalent to the pollutants released by driving a car 1100 miles(LA to Denver)
	+ Compared to an average large car, one hour of operation of a leaf blower emits 498 times as much hydrocarbons, 49 times as much particulate matter and 26 times as much carbon monoxide.
* Reduce the Dust
	+ Leaf blowers (both gas and electric) can send dust & other small particles for considerable distances. The particulate matter stirred up by blowers can include such nasties as animal feces, pesticides, chemicals, trace quantities of heavy metals such as lead, as well as allergens such as pollen and mold.
	+ Asthmatics and those suffering from allergies, as well as the elderly & children, are most susceptible to problems caused by airborne dust and particles.