**Borough of Caldwell Sustainable Jersey Community Forestry Plan and Canopy Goal**

The Borough of Caldwell recognizes that trees are important to urban and suburban areas. Planting and maintaining trees in strategic locations can reduce energy demand on buildings. Trees are beneficial for stormwater management, for controlling erosion, and for masking urban noise. Trees can mitigate the adverse impacts of the urban heat island effect. When planted in parking lots and streets, trees are effective in cooling and beautifying the urban and suburban environment.

Trees protect water and air quality, control flooding, and reduce stormwater runoff and erosion. They absorb carbon dioxide and release oxygen into the atmosphere. They reduce greenhouse gas emissions, especially carbon dioxide, and they help control global warming.

Trees provide clean air, shade, wildlife habitat, beauty and enhance property values. With these things in mind, the Borough of Caldwell has developed the following Tree Canopy Goal:

**Requirement #1 – Community Forestry Plan** The Borough of Caldwell has an approved Community Forestry Management Plan for 2013 -2017. This is Caldwell’s Third Community Forestry Management Plan. The plan covers **Tree Planting** on Page 12, **Tree Maintenance** on Pages 12 & 13, **Tree Hazard** **and Health Assessment Inventory Projects** on pages 11 & 12, and **Computerized Assessment of Municipal Trees** on Page 11.

Goals for these categories are summarized on Pages 13 & 14 of the plan. Items 1 through 3 are actually being implemented. Item 4 (computerized Assessment of Municipal Trees) would be addressed to update the 2000 Street Tree Inventory upon receipt of a Community Stewardship Incentive Program Grant. During the interim period annual windshield tree surveys of municipal right-of-way are conducted to help identify hazards and prioritize tree maintenance.

**Requirement #2 – Core Training** The Borough of Caldwell has (4) individuals that are Core Trained: Jeanine Archibald, Doris Halprin, Paul Carelli and Mario BiFalco.

**Requirement #3 – Continuing Education Units** The Borough of Caldwell is current with its (8) Annual Continuing Education Unit requirement to meet Approved Status by the New Jersey Forest Service. In 2013, Caldwell accrued (18) CEU’s by (5) individuals.

**Requirement #4 – Annual Accomplishment Report** The Borough of Caldwell has met this requirement by filing an Annual Accomplishment Report each year by February 15th.

**Requirement #5 – Canopy Goal**  The 1990 “Connecting People with Ecosystems in the 21st Century: An Assessment of Our Nation’s Urban Forests” study lists the Borough of Caldwell Tree Canopy Coverage at 38%.

American Forests recommends an overall tree canopy goal of 40% with 50% for suburban residential zones, 25% for urban residential zones and 15% for Central Business Districts.

Budget constraints normally only allow the planting of approximately 24 trees per year while 44 is the average number of street trees removed each year.

Future Road Reconstruction Projects will budget for tree replacement with capital budget funding. It will be necessary to increase the Public Works Line Item budget for tree planting to an appropriate level to reach Caldwell’s tree canopy goal.

Our first municipal tree canopy goal will be to increase tree canopy coverage by 2% over a 10 year period to 40%. This will be accomplished by identifying the respective areas of suburban residential zone, urban residential zone and central business district within the Borough and get a handle on where specific heat islands exist. Once these are identified, a strategy will be developed to distribute replacement trees within these areas.

An additional strategy for increasing our tree canopy coverage will be to examine and change our zoning ordinance to specifically require increasing tree planting within the identified heat islands which we suspect are large parking areas or dense housing areas.

The idea being that applicants appearing before our Zoning and Planning Boards would be required to bring tree canopy coverage on their respective sites to an acceptable level. The Borough would also like to receive heat island dissipation credit for the Caldwell College Campus which encompasses (35) acres.

The following is an action plan for implementing Caldwell’s Tree Canopy goal of 2% over a 10 year period:

*Year One*

* Create a Tree Canopy Coverage Committee, Shade Tree Committee or work with an existing environmental or Open Space Committee
* Work with the Borough Planner to define areas covered by suburban residential zones, urban residential zones and central business zone.
* Identify specific heat islands within the borough.
* Request a $12,000 annual tree planting budget to achieve a net note tree loss status.

*Year Two*

* Concentrate replanting efforts within identified heat island areas.
* Make recommendations to Planning and Zoning Boards to strengthen existing land use coded to favor trees planting within heat islands.
* Examine Master and Open Space Plans to corroborate actual Tree Canopy. Coverage.

*Year Three*

* Explore GIS techniques to better estimate actual tree canopy coverage.
* Increase annual tree planting operational budget to a level where 10% more street and public property trees are replaced than removed each year.
* Implement stronger tree planting requirements in Township Zoning Ordinance.
* Pursue tree planting grant monies.

*Year Four through Ten*

* Maintain momentum gained in above outlined goals.
* Pursue unfulfilled goals.
* Scrutinize each suburban residential zone, urban residential zone and central business district zone for potential planting areas and report findings to Borough Council on an annual basis.
* Request the tree planting operational budget to be increased commensurate with the 10 year, 2% Tree Canopy Goal.