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Inter-Neighborhood Cooperation

October 20, 2015

Honorable Mayor Michael Hancock
Honorable Denver City Council Members
Happy Haynes, Executive Director, Denver Parks & Recreation
Members of the Parks & Recreation Advisory Board

Re: Resolution: Recycled Water Effect on Trees in Denver Parks

Dear Mayor Hancock, Distinguished Members of City Council, Director Haynes and Members of the Park & Recreation Advisory Board:

Inter-Neighborhood Cooperation, Denver's association of Registered Neighborhood Organizations from neighborhoods throughout Denver, is celebrating its 40th Anniversary this year.. Founded in 1975, INC's mission is to advocate for Denver citizens by bringing together, informing and empowering Denver neighborhood organizations to actively engage in addressing city issues.

At the monthly Inter-Neighborhood Cooperation Delegate meeting on Saturday, October 10, 2015, the following Resolution was passed by a vote of 31 in favor, 0 opposed and 1 abstention.

Resolution: Recycled Water Effect on Trees in Denver Parks

WHEREAS Denver's trees form an integral part of its neighborhoods and especially its parks, and are worth many millions of dollars because of their aesthetic value, pollution-reduction, storm water mitigation, wildlife sheltering, climate tempering and other benefits;

WHEREAS recycled irrigation water furnished by Denver Water began to be utilized in some Denver parks beginning in 2004 and use of said water continues to be expanded to other parks in the system;

WHEREAS four technical consultant studies commissioned by Denver Water in 2004 and 2009 indicated that the lower quality of the recycled water could seriously damage and eventually cause the death of trees irrigated with it, and that the health of some trees was already observably in decline by 2009;

WHEREAS said technical consultant studies identified the principal factor leading to tree decline as sodium levels many times higher in recycled water than in potable water;

WHEREAS said technical consultant studies proposed a number of remediation measures—chief among them using potable water to periodically flush the sodium from the soil around trees exposed to recycled water—to counteract the adverse effects of recycled irrigation water if park trees continued to show signs of decline;

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WHEREAS in addition to the remediation measures Denver Water has recommended to address tree health in areas irrigated with recycled water, its technical consultants have also stated that the ideal method to preserve tree health is to treat the recycled water to a higher level of purity, which specifically would involve removing more of the sodium it presently contains;

WHEREAS an unprecedented decline and removal of conifer trees of all ages, and especially of large legacy conifers that could ordinarily be expected to live many additional decades or even centuries, has continued unabated in the Denver parks subjected to recycled irrigation water at the same time as such trees in adjacent residential neighborhoods and in parks not yet placed on recycled irrigation water have experienced much lower losses that are consistent with historic averages;

WHEREAS to date Denver Parks and Recreation appears to have undertaken little meaningful remediation to address the problem of declining park tree health despite Denver Water having begun six years ago to warn of potential tree problems and having specified a range of remediation measures at that time; despite the easily observable decline and removal of many highly visible legacy conifers in Denver parks; and despite Denver Parks and Recreation having reaped great savings since 2004 by using the much less expensive recycled irrigation water;

WHEREAS Denver Parks and Recreation and Denver Water have expressed an intent to form a study committee in 2016 to further evaluate the park tree health problem and the various remediation measures that have been proposed, but without endorsing any meaningful or widespread interim program of remediation, which signifies that tree damage will continue to accrue indefinitely;

THEREFORE BE IT RESOLVED that in parks exposed to recycled water irrigation, Denver Parks and Recreation immediately implement a program of potable water flushing of conifer root zones monthly during the cooler non-irrigation months and bi-weekly during the warmer irrigation season as outlined in the Denver Water report prepared by Day and Associates, said flushing being the most demonstrably effective and easily accomplished remediation measure with the fewest likely adverse side effects, and BE IT RESOLVED that in addition to an examination of the usefulness of remediation measures to deal with high sodium recycled water used in irrigation, any study committee formed should also examine the costs and benefits of adding further treatment processes at the Denver Water recycling plant to decrease the sodium content of the water it produces; and

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BE IT RESOLVED that any study committee formed to examine tree health problems occasioned by the use of recycled water should include a) independent representatives of neighborhood and park advisory groups, and b) technical advisers with expertise in relevant fields such as arboriculture, geochemistry, horticulture, water quality, etc., all of whom shall be unaffiliated presently or prospectively with either Denver Water or the City and County of Denver.

We would greatly appreciate your urgent consideration of the issues and suggestions described above.

Respectfully,



Larry Ambrose
President, Inter-Neighborhood Cooperation

Cc: INC Executive Committee