**Case Study Title: Grow Zones: streamside restoration in Austin, Texas**

**Case Study Category: Organizational Wellness**

**Jurisdiction Name: Austin, TX**

**Population: 820,611(2011)**

**City/County Manager Name: Marc Ott**

**Would you like the application to be considered for an Innovation Award? Yes.**

**Would you like the application to be considered for our Rapid Fire Session? Yes.**

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**Intent of Project/Program/Service**

In tune with the Watershed Protection Department mission to improve water quality, control erosion and reduce the impacts of flooding and through a partnership between the Parks and Recreation Department, we have developed a framework for restoration of urban riparian forests (land adjacent to the creek). This adaptive step-by-step approach attempts to manage natural succession (plant regeneration) in order to enhance the functionality and sustainability of Austin’s urban forests, with minimal management inputs. In addition to improving stream water quality and reducing erosion, this program will reduce greenhouse gas emissions, increases carbon sequestration, and reduce staff maintenance (allowing them to provide other services to park users).

**Innovation Characteristics**

Our team of ecologists, engineers and outreach specialists are actively engaging the community, building public and private partnerships, and collecting long-term monitoring data that will allow us to shift the traditional reactive management paradigm towards one that favors sustainable solution based strategies. The Grow Zone program is adaptively managing the city’s riparian resources towards a native dominated forest that maximizes ecological function with minimal resource inputs. Managing for healthy, sustainable urban forest systems is a goal that benefits all concerned stakeholders.

This program is based on the cutting edge of restoration ecology, which has increasingly recognized that passive or managed succession restoration is the most effective and efficient way to improve ecosystem function. Our work is also innovative in that the methods are affordable and reduce staff and capital costs over the long term. The approach achieves multiple environmental and economic benefits with very little labor or cost.

**Applicable Results and Real World Practicality**

To date, we have effectively established Grow Zones in 21 locations in creeks all over Austin, about 18,000 linear feet of restored riparian buffer. The water quality, erosion and environmental benefits of this program are difficult to quantify, but substantial. In addition to the direct and indirect savings, healthy riparian areas perform a wide variety of ecosystem services, including increasing stream baseflow, shading to reduce temperatures, removing pollutants, processing nutrients, and providing habitat and food for a wide variety of wildlife. These environmental benefits do not take into account the decrease in our carbon footprint by not running mowers or the even more dramatic increase in carbon sequestration as these riparian areas move from mowed turf to mature woodlands. The City of Austin has a goal of carbon neutrality by the year 2040, and this is a significant step towards that goal. And finally, it is our hope that these Grow Zones will eventually provide a healthy and calming natural space that our citizens will cherish more and more as they transition over the decades into forest corridors.

This program integrates the current state of science into more simple, cost-effective and ecologically beneficial land management measures that could be applied anywhere in the nation with similar enhancements in water quality with reduced parkland maintenance costs.

The approach is elegant, in that nature does most of the work. We are removing a very destructive disturbance (mowing) and then minimally managing the natural succession of these highly productive and hard-working riparian ecosystems.