

# URBAN ARBORICULTURE WASTE REDUCTION AND RECYCLING

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**Abstract.** The introduction of any new or unique programs within a municipal government in financial restraint requires excellent planning. Understanding the concepts of change and the development of a strong opportunity analysis are critical to the success of the new program. This article reveals the pre-planning process, change management, a generic strategic planning process and a theoretic implementation program for a civic Christmas tree recycling project.

Managing change is critical to the success of any project, lest the change manage you. Our assumptions, beliefs and reflex reactions about change impact directly on our ability to lead, perceive and facilitate a change effectively. A myopic perspective of the work place, the programs, and the process of change is not entirely negative, it may, however, limit your future advancements. Knowing and more importantly, understanding that change is a constant factor at work and at home is vital to the well being of yourself and the approach you utilize at work. Developing effective change management skills and attitude are essential to dealing with today's complex work environment.

If you believe that any new program, the change, is based on accurate information and is for the benefit of the corporation, it will be easier to lead your staff through the process of change and convince the appropriate levels of its value.

Organizational change is slow. The "system" takes considerable time to react or accomplish a task. The frustration of slow process has been the demise of many a good project and an equal number of managers. Trying to speed up or push a change through is a guarantee for failure, or at minimum for increased time to implementation. Deal with all levels in the appropriate order. Lobbying is beneficial, if approached properly and sincerely. Jumping administrative heads and neglecting involvement at any level can be a disas-

trous combination.

Communication skills are an obvious advantage in the process of change. I feel that superior communication skills are necessary to accomplish the established goal. Understand what strengths you have in this area, and utilize them to the maximum. It is critical that the information you are trying to relay is accurate and reasonable. If you have difficulty with the concept in principle, your target will as well.

Attempt to develop a strategic plan for the next new project you work on. Try utilizing the following categories to streamline the process. I have met with success time and time again when I have applied the following actions:

- *Statement of Opportunity.* A key section to build the excitement, enthusiasm and interest in the proposed program. Highlights the main aspects that make this proposal a winner.
- *Approach/Theme.* The name of the project, something that wraps up the entire package and makes it mentally portable.
- *Scope/Scale/Size.* Express the extent of the program in both abstract and concrete terms.
- *Goals/Objectives/Aims.* Consideration should be given to the ease of completion, the budget implications, goodwill and image of the politician and the administration.
- *Limitations/Constraints.* This portion usually generates a list of why nots.
- *Precedents/References.* The recording of other projects in other cities that bear resemblance to the project you are proposing, or public commitments that support the proposal.
- *Issues.* These emerge through discussion internally. Anticipate what the issues might be, and prepare your responses.
- *Factors Critical to Success.* Develop a list of

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milestones that must be accomplished.

- *Stakeholder Analysis.* Identify the key groups/people, their current position on the proposal and their desired position on it. Identify the 'critical mass' of people needed for the endorsement of the project.
- *Cost/Benefit Summary.* To some, the most important category. Includes the budget and the financial information.

**Christmas Tree Recycling Project**

The city of Regina's urban forestry section has implemented a program of recycling. The planning process implemented was as described, and the results were very well received. The Christmas Tree Recycling Project received national media coverage on New Year's Day. Locally the program was very well accepted both politically and by the public.

The concept of city-wide Christmas tree recycling was born in 1988. We asked citizens to take their trees to a designated site, not too far from the center of the city. It just did not work out. It was too much work for the most of us. How could we make it simple for everyone, yet keep the lid on expenses. Why not use the system that already exists?

Routing for the waste disposal program in Regina is remarkably structured. They are around every week for a regular pick up. Maybe they could make a special pick up for the Christmas trees. That seemed very simple. Each person in the city would just have to haul out their tree to the curb on the appropriate pick up day. The trucks would be there, as scheduled, and off it goes. In Regina, we found that it was necessary to provide a second or duplicate pick up over the period of one week. This was the preferable mode for the engineers, as there was no disruption of service, the established routes translated into expediency of service. The costs were also reduced due to pre-established logistics.

The city of Regina has 175,000 people, (60,000+ households), most of whom are strong willed and from backgrounds that may not appreciate this new found science of recycling, but they accepted the program. Total number of Christmas trees collected and mulched 18,426.

**Costs.** Ten thousand dollars may seem to be a lot of money for the program, but this amount was placed in the garbage collection budget. Once factored into the entire project, it worked out to be relatively reasonable. The garbage detail agreed that this would be a worthy and profitable cause for them.

To recover the money, each and every Christmas tree that is sold within our municipality is tagged. The tag is a simple, recycled piece of paper that states in brief format, what the recycling project is all about. On the reverse side, it indicates by map where the designated drop off site is and the collection day schedule for pick up. This way the customer has the choice of either delivering the tree to the site, or waiting for the appropriate pick up day.

The task was accomplished in 195.5 man hours	\$2,800
Municipal engineers charge	10,000
Extra tipping charges (plastic bags etc.)	200
Total cost for chipping rees into mulch	\$13,000

Assuming that a 1 cubic yard of mulch weighs 250 pounds, and the current price is \$7.50 per cubic yard, the cost to purchase the 250 tons of collected material would have been \$15,000. In the years to come, we expect to lower the cost of the service as well as increase the number of trees that are mulched.

**Future Plans**

The obvious progression from this program is to next provide a private tree and shrub pruning collection project targeted to landscape waste. The plans for Regina in the next few months is to establish pruning classes that would instruct on why and how to prune. With cooperation from the various departments, specified collections for landscape waste could be established much like the Christmas tree project. Yard waste could be municipally mulched and then sold back to the public. The estimate that we have made for the 1991 budget includes such a project. The projected revenue is in excess of \$20,000 if the product is sold for 25 cents a pound.

Hopefully, the change to landscape waste recycling will be accomplished in the same manner as the change to Christmas tree recycling.

**Résumé.** L'introduction de tout programme, nouveau ou unique, au sein d'un gouvernement municipal en restrictions financière exige une excellente planification. La compréhension des concepts de changements et le développement d'une analyse d'opportunité solide sont critiques envers le succès du nouveau programme. Cet article révèle le processus de pré-planification, le changement de gestion, un processus de planification générique stratégique et une théorie d'implantation de programme pour un projet communautaire de recyclage d'arbres de Noël.

**Zusammenfassung:** Die Einführung von irgendwelchen neuen oder einzigartigen Programmen in eine Stadtregierung, die unter finanziellen Druck steht, bedingt hervorragendes Planen. Das Verstehen von Änderungskonzepten und die Entwicklung von einer starken Möglichkeitsanalyse sind sehr wichtig zum Gelingen eines neuen Programms. Dieser Artikel berichtet über den Vorgang der Vorarbeit, die Vermittlung der Änderungen, einen generischen, strategischen Planenprozeß und einen Programm zur Ausführung eines städtischen Weihnachtsbaum-Recyclingprojekt.

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## **ABSTRACT**

PELLETT, H. 1990. **In search of super plants.** Am. Nurseryman 172(4): 47-50, 52, 54, 56.

Many trees die or perform poorly because they cannot tolerate the stresses they encounter in the landscape. We need cultivars that tolerate the stresses of urban environments, such as soil compaction, cold winters, hot summers, drought, air pollution, salt and insect and disease infestations. Tremendous genetic potential exists for developing superior plants. The Center for Development of Hardy Plants, Chanhassen, Minnesota, was organized to explore such possibilities. To achieve our goal, we support two major types of coordinated research: 1) applied breeding and selection, including exploration and germplasm preservation, and 2) research into the genetic and physiological bases of stress tolerance, producing screening tools that evaluators can use to rapidly select adapted plants.