

Appendix H
Findings and Recommendations Regarding Landscape
Ordinances

TMWA TECHNICAL ADVISORY COMMITTEE LANDSCAPE SUBCOMMITTEE
Findings and Recommendations
5/11/05

INTRODUCTION

The following document presents the findings and recommendations for potential local government action concluded by the Truckee Meadows Water Authority (“TMWA”) Technical Advisory Committee (“TAC”) Landscape Subcommittee. This subcommittee was appointed by the TAC at the August 31, 2004 public meeting to address the following issues which were raised by TMWA staff:

1. Increasing customer complaints regarding standards of landscaping approved by the local governments.
2. Lack of consistency in enforcement of the water conservation elements of the ordinances.

The subcommittee first convened September 21, and held an additional 4 meetings with the final meeting taking place December 7, 2004. The subcommittee voting members were:

Jim Smitherman, Washoe County
Fred Turnier, City of Reno
Neil Krutz, City of Sparks

The following staff members and their consultants provided valuable input during the course of these meetings:

Terri Svetich, City of Reno
Donald Naquin, City of Reno
Chris Conway, Kennedy-Jenks
Trevor Lloyd, Washoe County
Gregg Finkler, Washoe County

FINDINGS

- The greatest impact for water efficiency is to concentrate on the landscape/irrigation design plan. Landscape design issues that influence water efficiency such as buffering and drainage (runoff management) are best coordinated with the regional stormwater quality management program.
- Only a cursory review is performed for landscape/irrigation design plans when they are submitted to the local governments. Local governments rely on the professionals in the private sector to accurately design irrigation systems.
- There is no thorough checklist of water-efficient landscape/irrigation design principles followed during irrigation plan review.
- The term 'encouraged' in the codes is not enforceable. Many of the water-efficient principles are only 'encouraged'.
- Local governments trust that the letter of completion certified by the plan preparer satisfies the code requirements.
- Water users will be more favorably inclined to make water efficient changes if there is economic incentive to make changes.
- Facilities that are dedicated to local governments, such as parks, do have to conform to rigorous design standards as set by the agency, typically the parks department.
- Typically, maintenance sections of the codes are enforced when a complaint is filed. Due to resource constraints, these sections are not routinely pursued.
- Ordinances are directed at new development and place few, if any, efficiency or maintenance requirements on existing customers.
- Enforcement is not sufficient to ensure that irrigation equipment is adequate to efficiently irrigate small areas of turf.
- Many existing water users have inefficient irrigation systems. There are limited resources to improve efficiency (such as enforced maintenance requirements or retrofit assistance).

RECOMMENDATIONS and ROLE OF RESPONSIBILITY

- New development requirements to be handled by local government ordinances. Items that require ongoing management to be defined as either handled by local government or the water purveyor in their rules.
- Funding mechanisms needed. For new development new fees can be collected through additional inspection or other plan/permit fees. For water purveyor additional work, the most likely source of new funds would be customer rates.

New Landscaping

- Local governments need dedicated staff for irrigation plan check and water efficiency requirements per code. To conduct job effectively, remove term 'encouraged' in current ordinances. Alternatively, hire professional firms to perform work.
- For landscaping with separate irrigation meters, require an annual outdoor water budget by watering zone as part of the submitted Irrigation Plan.
- Require an irrigation efficiency standard that is agreed upon by local experts (such as Cooperative Extension). Addition of an irrigation efficiency requirement and water budget to each of the agency codes would provide consistency of work among landscape architects and across jurisdictions. Calculations for irrigation efficiency and water budget to be submitted by Landscape Architect.
- Require buffer areas at the base of slopes next to impervious materials (for example next to sidewalks, asphalt areas etc) to allow runoff to drain into the soils.
- Inspection of irrigation system to be performed by a Certified Landscape Irrigation Auditor to ensure that the system is performing as designed with the required irrigation efficiency standard set forth in the code. This certification would be submitted by the Landscape Irrigation Auditor as part of the final checklist along with the documentation submitted by the preparer of the plans that the final landscaping meets landscaping code requirements.
- Small turf areas should be limited to a minimum width of 8 feet; 10 feet is preferred.

- **Established Landscaping**

- Ongoing maintenance should be required for existing customers with regular irrigation audits, education, and a tracking procedure. For new development, follow-up audits should be required periodically (perhaps every 5 years) as accountability for long-term maintenance of irrigation system or landscaping (by property owner) is inconsistently enforced.
- Coordinate rigorous irrigation checks for large water-using sites (commercial sites with separate metered irrigation).
- Information to customers, including new developments, on responsibility of areas to be maintained and bill payment.

Applicable to both new and established landscaping is the need for more professional education in the green industry, including landscape architects. In particular, public outreach must accompany any change in standards with revisions to the landscape ordinances.

