APPENDIX F

CAMPUS GROUNDWATER CONSERVATION PLANNING

PROTOCOL SUMMARY

1—CAMPUS SELECTION
Considerations: water source must be groundwater, motivated partner, capacity to implement recommendations, data availability (e.g. meters and sub-meters), total water use, campus size, campus complexity, ownership (i.e. public or private), campus visibility, and future scheduled renovation or expansion

2—DESKTOP REVIEW
Review should include: campus layout and acreage, building footprint areas, land uses, soils, stormwater infrastructure, and topography

3—KICK-OFF MEETING
Talking points with campus staff should include: emphasize potential for energy, water, and cost savings, participation is voluntary, address the importance of groundwater, review the CGCP process, identify campus-specific water conservation goals, complete the DOE FEMP worksheet, estimate campus staff time investment, and conduct a campus tour

4—INITIAL DATA REQUEST
General information to request: inventory of all water-using fixtures and equipment, 24 months of utility billing (i.e. water, gas, and electricity), 24 months of water meter and sub-meter data, staff and visitor information, irrigation system layout, mechanical blueprints or as-built plan sets for water-using systems

5—ON-SITE DATA COLLECTION
Detailed data for campus and water using systems including: point person contact information, general building information, occupancy information, water consumption history, water use summary, meter and sub-meter data, leak detection, utility bills and daily use, faucets, showerheads, toilets, urinals, residential-grade appliances, commercial-grade appliances, commercial-grade appliances, commercial-grade fixtures, cooling tower, boiler, pool, irrigation system, land-scaping, onsite alternative water use opportunities, groundwater recharge opportunities, and complete facility water balance

6—PROCESS DATA
Data collected in Step 5 should be entered into existing water use and potential conservation spreadsheets. If data gaps remain, an additional request should be made to the campus facilities manager.

7—IDENTIFY POTENTIAL PROJECTS AND DEVELOP COST ESTIMATES
The spreadsheets used to process the data will provide potential reductions in water use if water efficient upgrades or maintenance are implemented. Cost estimates should be developed for the upgrades and maintenance.

8—ANALYZE RECOMMENDATIONS FOR COST-EFFECTIVENESS
Calculate cost-effectiveness based on ranking criteria (e.g. simple payback period) desired by campus staff.

9—GENERATE FIINAL REPORT
Compile data into report for campus staff. Report should provide a straightforward summary of potential water conservation projects.

10—FOLLOW-UP SUPPORT
Approximately 6-12 months following delivery of the report, a check-in with campus staff is recommended to gauge implementation and provide potential trou-bleshooting support.

Metro Conservation Districts

CLEAN WATER LAND & LEGACY AMENDMENT