802 - TEXAS PARKS AND WILDLIFE DEPARTMENT – ENERGY CONSERVATION PLAN QUARTERLY REPORT
Period: December 1, 2005 – February 28, 2006

ELECTRICITY MEASURES (GOAL: .5% ANNUALLY)
Headquarters - Austin

Measure	Electricity Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
KwH	913,942	1,016,629				2,527,576	1,930,571	-597,005	-23.61	Y
Cost	64,338.89	58,769.08				162,205.00	123,107.97	-39,097.03	-24.10	Y

NATURAL GAS MEASURES (GOAL: .5% ANNUALLY)
Headquarters – Austin

Measure	Natural Gas Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
CCF	3,995	7,292				19,694	11,287	-8,407	-42.68	Y
Cost	4,605.36	11,599.56				16,952.93	16,204.92	-748.01	-4.41	Y

WATER MEASURES (GOAL: .5% ANNUALLY)
Headquarters – Austin

Measure	Water Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
Gallons	1,350,750	693300				1,710,400	1,350,750	-359,650	-24.02	Y
Cost	4,701.00	2,402.08				12,128.99	7,103.08	-5,025.91	-41.43	Y

FUEL MEASURES (GOAL: .5% ANNUALLY)
Statewide

Measure	Fuel Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
# Gallons	471,883.60	400,110.30				961,655.50	871,993.90	-89,661.60	-9.32	Y
Cost	587,766.43	934,735.26				1,803,233.50	1,522,501.69	-280,731.81	-15.56	Y

UTILITY EXPENDITURE MEASURES (GOAL: .5% ANNUALLY)
Statewide

Measure	Statewide Utility Cost Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
Electric Cost	1,320,995.59	1,280,792.69				2,322,380.00	2,601,788.28	279,408.28	10.73	N
Natural Gas Cost	43,998.45	137,704.57				167,611.26	181,703.02	14,091.76	7.75	N
Water Cost	158,512.30	93,995.72				240,611.04	252,508.02	11,896.98	10.73	N

OTHER MEASURES (FACILITIES AUDITED GOAL: .5% ANNUALLY)(NO OTHER GOALS SET AT THIS TIME)
Statewide

Measure	Design Measure									
Period	9/1/05-11/30/05	12/1/05-2/28/06	3/1/06-5/31/06	6/1/06-8/31/06		FY '05 9/04-2/05	FY '06 9/05-2/06	Delta	% Change	Goal Met (Y/N)
# Facilities Audited	1	0				0	1	1	1	N
# Alt. Fuel Vehicles Procured	0	0				0	0	0	0	NA
# LEM Vehicles Procured	NA	NA	NA	NA		NA	NA	NA	NA	NA

NARRATIVE
Statewide

TPWD's Resource Efficiency Plan serves as the agency's strategic plan for achieving energy conservation. This program provides a framework and governance to ensure energy and resource conservation throughout TPWD. The TPWD Infrastructure division's role in designing and enhancing the agency's structures is a crucial piece of the plan, but the plan includes initiatives for reducing utility consumption through facility audits, goals for use of alternative fuels and reducing fuel consumption, improving recycling, providing employee awareness, public education, resource and financial benefits to involve all personnel in the agency.

As of 4/01/06, TPWD continues to implement its Resource Efficiency Plan.

In February, 2006 the Austin Headquarters Energy Conservation performance contract project was completed and so far the results of the energy efficient measures very nearly achieve the projected savings of approximately $120,000 annually in HQ utility cost. The HQ project included retrofitting of all lighting, installation of window tint and solar screens, replacement of old HVAC package units, boilers, cooling towers, hot water heaters, installation of flash hot water heater, installation of a step-down chiller, retrofitting cooling tower, air handler fans, chill and hot water pumps to variable speed drives, installation of Variable Air Volume dampers, hot and cold loop coil cleaning, above-ceiling plenum hepa vacuuming, significant upgrade to our computerized building operating system, reduction in operating hours, replacement of toilets, urinals and installation of water saving measures, and more.

One of this year's TPWD Natural Leaders' Team Program projects relates to the fulfillment of TPWD's Resource Efficiency Plan. The Team's project deliverables include defining sites suitable for DEAs, performance contracts and producing an implementation schedule for them, defining sites suitable for PEAs and producing an implementation schedule for them, developing a "cookbook" a site manager may use to perform a self audit and use for ideas to implement energy savings measures, develop a tool for reporting audits and energy savings measures implemented. This project and high profile program designed to promote leaders in the agency culminate in a presentation to senior management this summer. After the presentation, the product of the Team will be enacted and TPWD's Resource Efficiency Plan will be updated to reflect the new initiatives.

In addition to the accomplishments and REP enhancements described above, TPWD's Infrastructure division continues to implement resource efficiency measures in planning and design of capital improvement, repair and construction projects statewide. The details of this are reflected in the agency's REP, but it includes a grant for alternative energy source at Sheldon Lake State Park, first LEED project and anticipated receipt of Silver Star rating at Somerville State Park, installation of many

waterless, vault toilets and much more. Attention to, emphasis on and awareness of resource efficiency have increased through TPWD's REP employee awareness program known as the "Green Team" which continues to conduct awareness events and distribute information. The Green Team was nominated for a TPWD employee recognition award in this year's "Team" category.

The agency works hard to ensure its replacement vehicles are low emission rated. TPWD has committed to replacing two of its HQ Motor Pool Vehicles with hybrid vehicles in April, 2006.

The following is a summary of current TPWD energy efficiency measures and projects. In addition to its formal Resource Efficiency Plan, for most of its existence TPWD has maintained as part of its mission an ideal to conserve natural resources, which includes a strong commitment of practicing resource efficiency. As an example, in 1991, TPWD utilized the Texas LoanSTAR program to conduct a comprehensive energy cost reduction analysis of all of its facilities statewide. The report was extremely in-depth and the agency adopted and implemented many of the study's recommendations.

Since its inception, TPWD has been fortunate to staff and perform construction, repair and improvement project planning, design and management for its facilities statewide. A long standing goal of this function has always been energy, resource efficiency, sustainable design and operating with a strong green building philosophy, sometimes by pure necessity, given a site's remoteness and unavailability of commercial construction materials and site utilities.

Consequently, TPWD has a considerable history of implementing resource efficiency measures. The following list was compiled from capital construction project lists, polling our divisions, sites, project managers. Unfortunately, this information is somewhat outdated and may not include some of the most current initiatives.

a) Current Projects

i) Austin Headquarters Energy Conservation Performance Contract Project – This project is TPWD's first official energy efficiency project to begin achieving compliance with HB 2278 and implementing its Resource Efficiency Plan. This is also the first project ever in which TPWD is pursuing a performance contract to fund an improvement project. The project is complete as February, 2006 and nearing fulfillment of its goal of saving Austin HQ $120,000/yr. in utility cost.

ii) Buescher State Park Screened Shelters – Several screen shelters were constructed to incorporate salvaged oil field pipe framing and reused lumber. This project completed November 2003.

iii) Engling Learning Center – This project incorporated restored prairies, constructed wetlands, rainwater collection, photovoltaic and wind power electrical generation in its construction. Phase 1 was complete spring of 2005.

iv) Lake Somerville State Park - Park HQ building expansion reduced energy consumption by approximately 40% from building orientation and placement, efficient building envelope, energy efficient windows (5% of total budget), efficient roofing material (low heat gain due to corrugations), day-lighting (required minimal mechanical light for operation.) This was TPWD's first LEED project which we anticipate receiving a Silver rating.

v) Sheldon Lake State Park – Environmental Learning Center – The site was removed from MUD utilities and replaced with constructed wetlands wastewater treatment, rainwater collection for irrigation, water well for potable water, and Photovoltaic augmented power generation. Phase 1 of construction was designed using sustainable, salvaged and recycled materials (e.g. FSC wood, busted concrete for landscape edging, salvaged brick, & recycled oil field pipe) The entire site (2,700 acres) is being restored to its natural state through an on going removal of invasive foreign species (primarily Chinese tallow & privet), and re-institution of natural coastal prairie grasses, woodlands, and geology (mima mounds). Phase 2 Visitor Center; Observation Tower, & camping area are designed to meet a

Platinum LEED rating. We have received a $100,000 grant from the State Energy Conservation Office (SECO) and over $100,000 in grants for wetland habitat restoration, in addition to the $2.56 million in Prop. 8 funds already in the project. Construction on phase 1 was completed in summer of '04. Phase 2 is privately funded and is tentatively scheduled to be completed in summer of '06, pending fund raising.

vi) Richland Creek Wildlife Management Area - The Richland Creek Wildlife Management Area and the Tarrant Regional Water District dedicated a new wetland project in May 2003. This new project pumps treated wastewater from the Trinity River and circulates it through wetland cells, where it is treated and cleaned or "finished" by natural vegetation in wetland cells. The water is then returned to the Richland Chambers Reservoir for public use. The field scale phase of the wetlands water reuse project was constructed between 2000-2002 and covers about 250 acres. This wetland project is considered a national model to help further develop strategies for providing public water supplies without the construction of additional flat-water reservoirs. Slowing the construction of new reservoirs will help stop the destruction of bottomland hardwoods and the subsequent loss of important wildlife habitat. Although wetlands in Texas comprise less than 5 percent of the state's total land area, Texas is one of 19 states that have exhibited the most significant losses of wetland ecosystems. Wetlands are important from an economic standpoint. It is estimated that the bottomland hardwood and cypress swamps of the Southeastern part of the United States are worth over $8 billion and climbing. Waterfowl hunters spend over $600 million annually in pursuit of wetland-dependent birds, with a large percentage of this money going directly to wetland habitat protection. Fifty million people spend an estimated $10 billion each year observing and photographing wetland-dependent wildlife.

vii) Other – Over the past several years over 20 Vault toilets have been installed at various TPWD Wildlife Management areas and State Parks. Vault toilets use no water and are commonly known as "composting toilets." Water collection systems, known as "guzzlers" have been installed on Wildlife Management Areas in the Trans Pecos Ecological Region. These systems use creative designs and terrain to collect, store and distribute rainwater for wildlife.