

Status Report—DBEDT's Energy Program

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Clean Energy Must Remain a Priority for the State

- Energy Security
- Energy Costs at \$100/bbl oil
- Implications of Carbon Regulation
- Continue Investment in Energy Efficiency
- Achieving Full Potential of Renewable Energy
- Sending Right Signals to Markets

Strong, Robust Energy Program Needed

- **State Policies Require Proper Execution**
- Need Appropriate Organizational Structure
- Need Reliable Source of Funding
- Necessary Authority for Success
- Ability to Attract and Retain Qualified Personnel

Expectations are Increasing

- Execution of Energy for Tomorrow
- Lead by Example
- Interagency Wheeling Docket/PUC intervention
- Senior Staff on NGA Task Force
- Consultations with Renewable Energy Developers
- Biofuels Program Coordination
- Greenhouse Gas Policies

Success Story: Lead by Example

- Energy Star Bldgs—5 certified
- LEED Bldgs—3 completed, many under design, architect/engr trained
- DAGS developing statewide performance contract RFP using DBEDT info
- DOT/FTZ issued a RFP for solar PV, as much as 34 MW
- State Capitol assessment
- Institutional Commitment by agencies

Status Report: Biofuels

- Act 240, 2006—Biofuels Assessment Proj.
 - Contractor: Black and Veatch, UH, Stillwater Assoc.
 - Feedstock assessment by Jan 2008
 - Technology and crop assessment by Jul 2008
 - Stakeholder engagement, integration, overall completion through Jul 2009
- Act 253, 2007—Bioenergy Master Plan
 - Funding released
 - RFP drafted, to be issued early 2008
- Act 130, 2007—Non-Ethanol Gasoline
 - Formal Report Submitted to Legislature
 - Non-blended gasoline available on all islands except Maui

Status Report: GHG Task Force

- Task Force Appointed (Act 234)
- Staffed jointly by DBEDT and DOH
- 3 Meetings of the TF to date
- Assessment Stage—Testimony of Experts
- Seeking Release of Funds
- Preliminary work plan developed
- Will seek contract support for inventory, policy analysis, and program management

Current Challenges for DBEDT's Energy Program

- Personnel
- Finances
- Keeping Up with Expectations
- Institutionalizing and Sustaining Program

Personnel Issues

- Level of existing staffing inadequate to address workload, assignments and expectations—see Table 1 staff analysis, new starts
- Expect staffing issues to be exacerbated by staff retirements
- Historically energy staff have been cutback, with positions recently frozen and reallocated to other functions within DBEDT

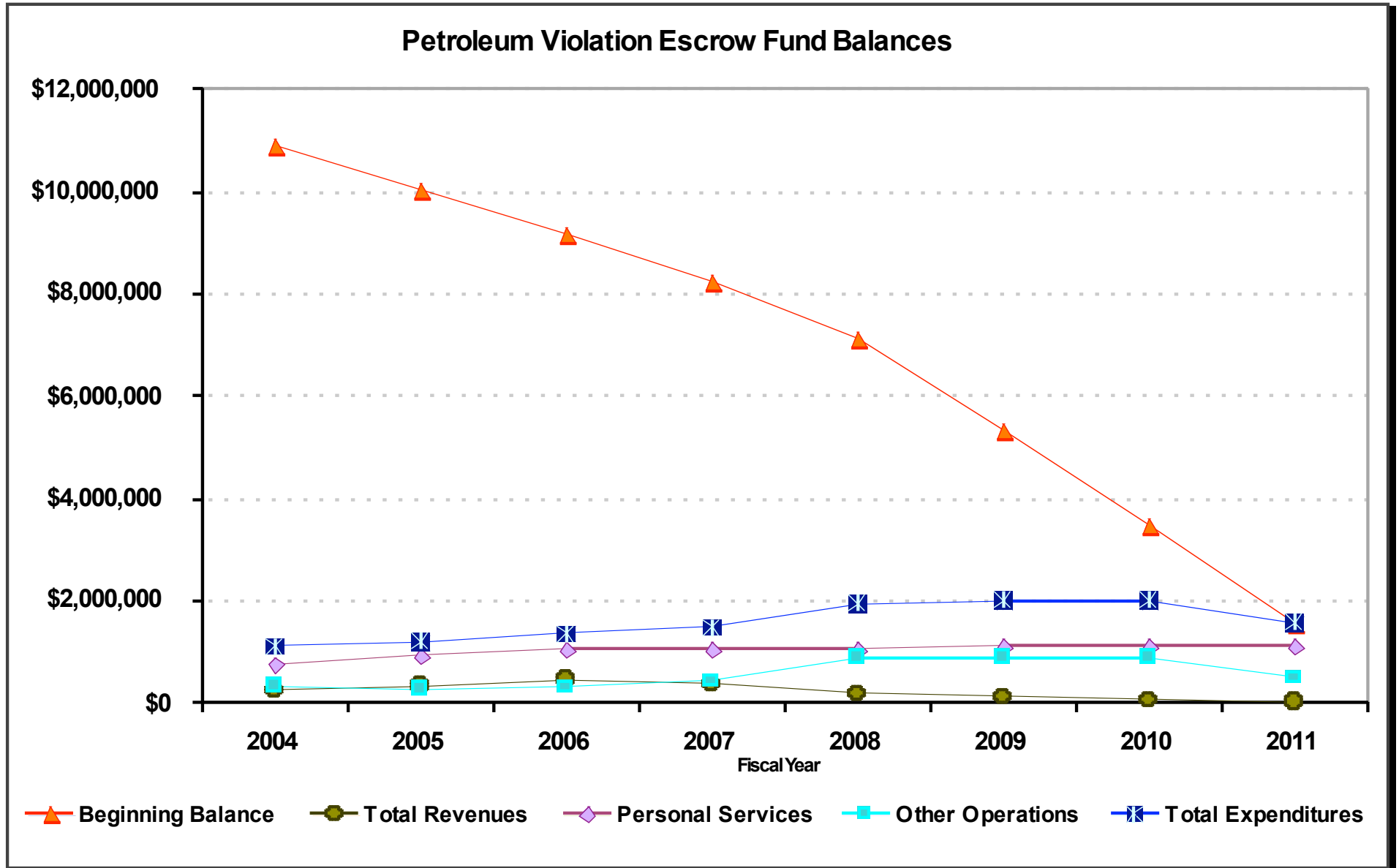
Table 1 Staff Analysis—New Starts

Legis Session	Fiscal Year	Fiscal Year - New Requirement	FTE Estimate/Request	FTE Authorized	Additional FTE Needed
2006	2007	Biofuels Study	0	0	0.3
		Renewable Hydrogen	3	0	2
		LBE Efficiency	2	2	0
		FY 2007 Total FTEs	5	2	2.3
2007	2008	Greenhouse Gas Reduction Limits	2	0	2
		Biofuels Master Plan	1	0	1
		One-Stop Renewables Permitting	0	0	0.2
		Certify Sustainable Palm Oils	0	0	0.2
		Report No Ethanol Gas	0	0	0.1
		FY 2008 Total FTEs	3	0	3.5
		FY 2007, and FY 2008 TOTAL FTEs	8	2	5.8

Finances

- Rapidly diminishing PVE (“oil overcharge”) funds—see Figure 1
 - 4 years remaining at current expenditure rate
 - Of SID’s FY08 budget, **66.6%** and **14 filled Energy Program positions out of 20 total** are supported by PVE funds.
- Just to maintain current services would require converting \$1.94mm of MOF to general funds within 4 years
- Impacts besides \$--e.g. state ethanol/biofuels, energy emergency preparedness, utility policy, renewable hydrogen programs implemented using PVE funded staff

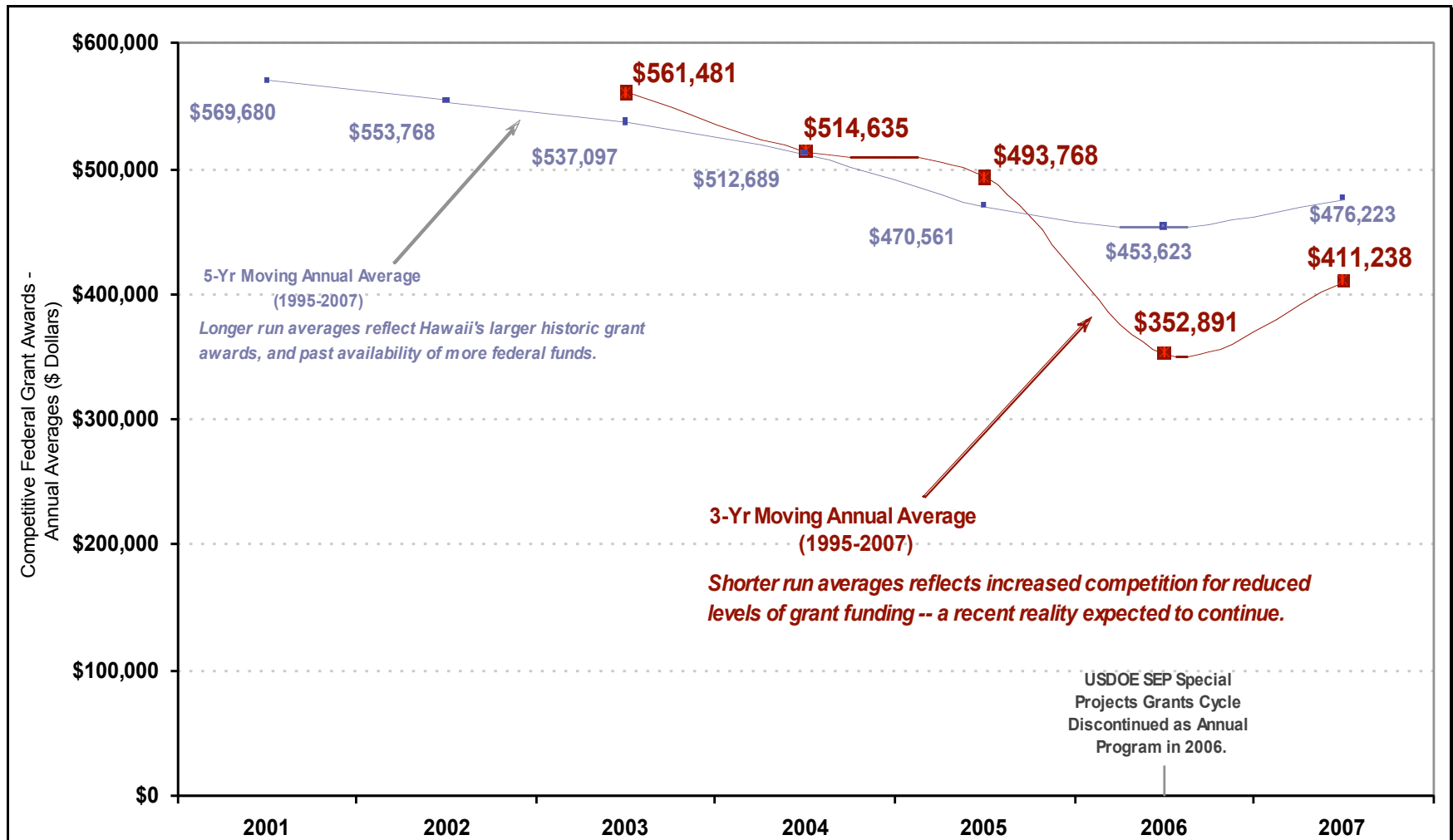
Figure 1 Federal PVE Depletion Chart



SID Strategic Objective—Supplemental Funding through Grants

- “Stretch” PVE dollars
- Leverage appropriated federal funds from formula grants
- High early success rate of competitive awards
- Support from Congressional delegation
- Federal special project award now gone
- Increased competition among states

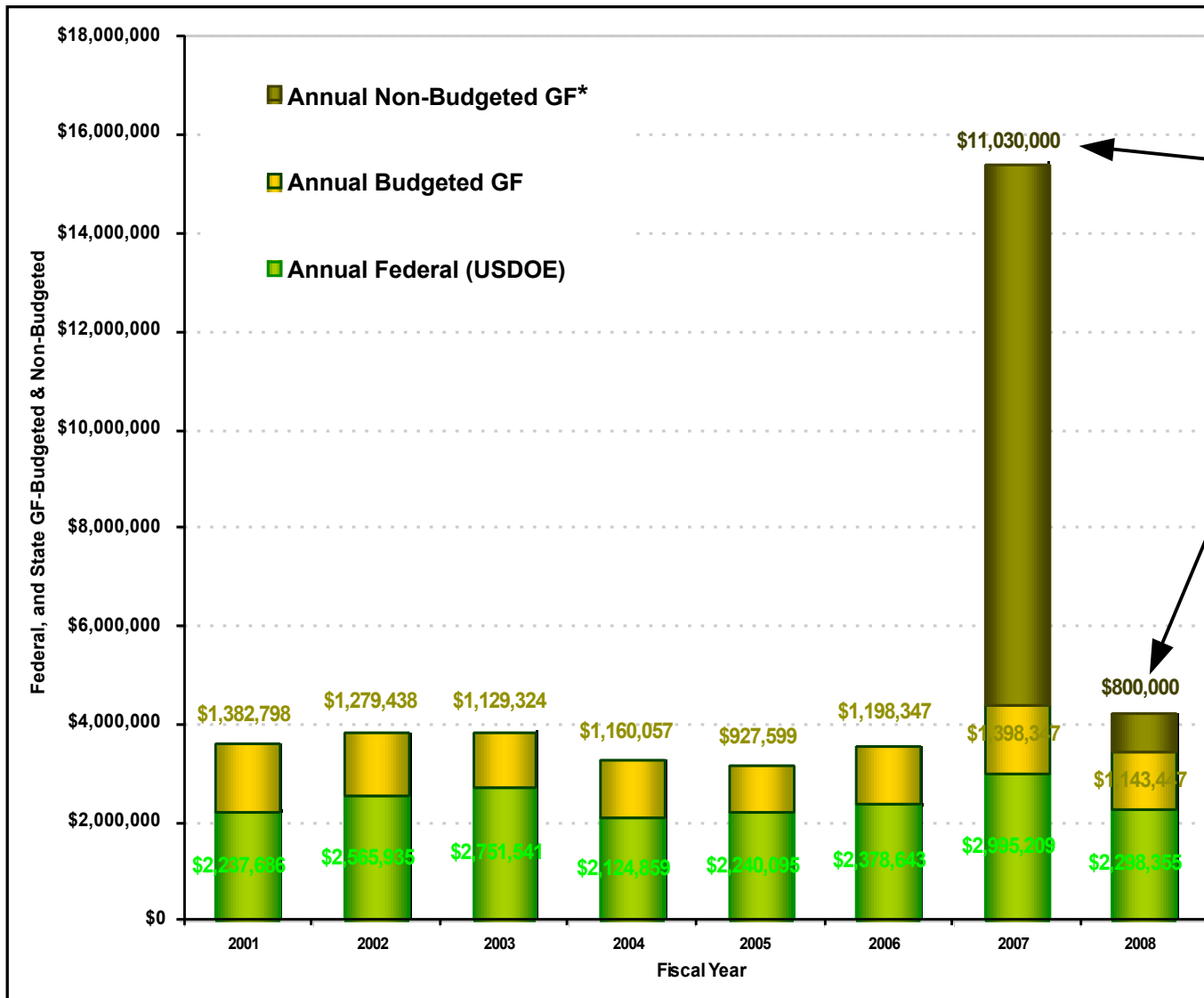
Trend Comparisons of Annual (FY) Funding Levels from Awards of Competitive Federal Grant Funds to Hawaii State Energy Program



Note: Both five-year and three-year moving averages are based on the grant funding awards over the 13 fiscal years, 1995 through 2007.

DBEDT SID Annual Operating Budget – Federal (USDOE), and State GF Funds – Budgeted, and "Non-Budgeted"* Appropriations

Fiscal Years 2001 through 2008



New Requirements New Funding

2007 – *Energy for Tomorrow*

- Biofuels Study
- Renewable Hydrogen
- LBE Efficiency

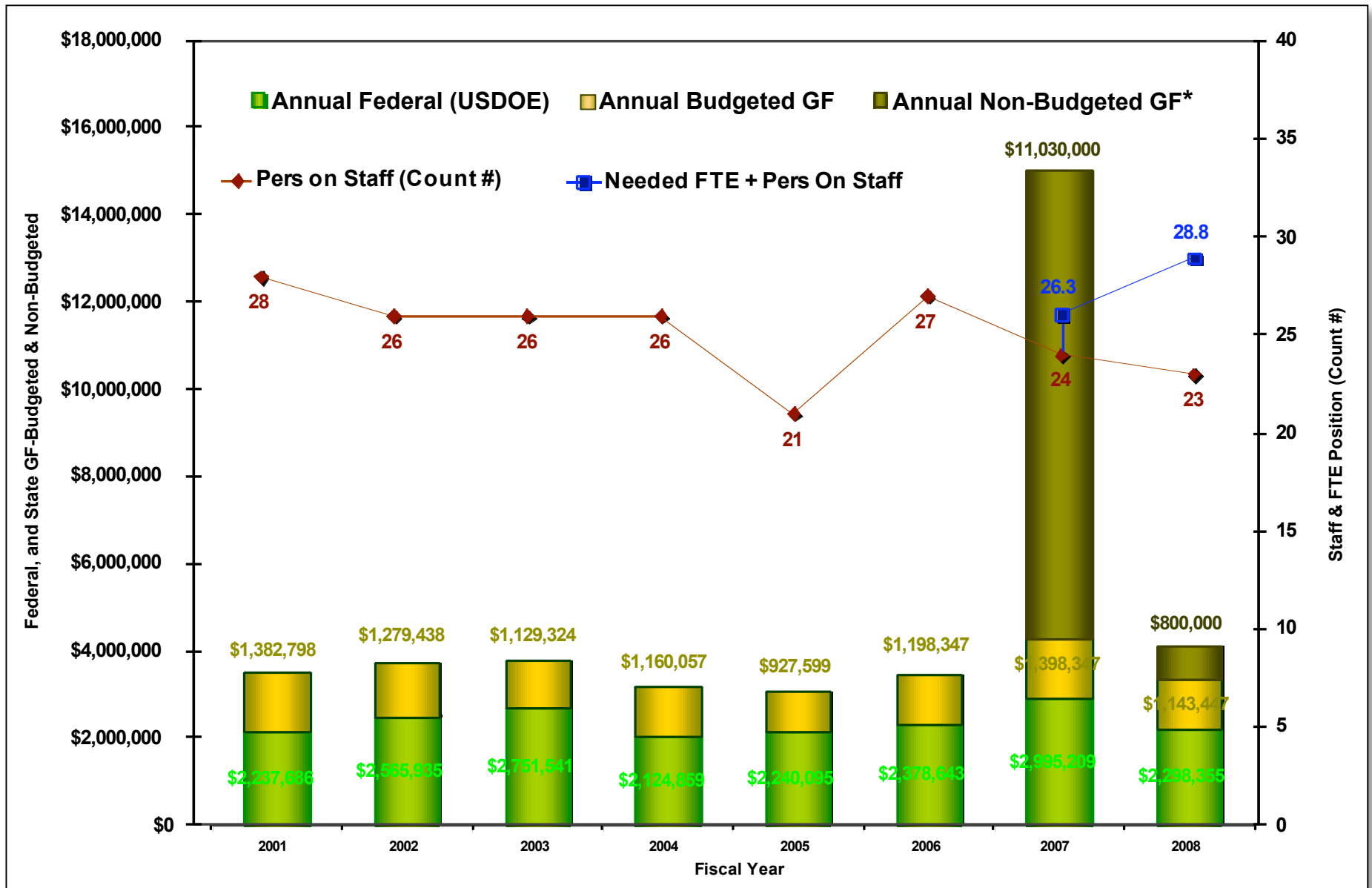
2008

- Greenhouse Gas Limits
- Biofuels Master Plan
- 1-Stop Renewables Permitting (\$0 - Unfunded Mandate)
- Certify Sustainable Palm Oils (\$0 - Unfunded Mandate)
- Report No Ethanol Gas (\$0 - Unfunded Mandate)

Staff Resources:
Net **loss** 1 position...

*Non-Budgeted GF; i.e., Legislative appropriations via separate bills; e.g., Act 234, SLH 2007 – Greenhouse Gas Reduction Bill, etc.

Additional FTE Are Essential To Implement Priority Energy Initiatives -- Restoration of Previously Authorized Levels Minimum to Meet New Requirements



* Non-Budgeted GF; i.e., Legislative appropriations via separate bills; e.g., Act 234, SLH 2007 – Greenhouse Gas Reduction Bill, etc.

What Do We Need?

- Personnel—6 additional FTEs
 - Biofuels Program Manager
 - Renewable Hydrogen Prog. Mgr.
 - Energy Economist/PUC lead
 - Energy Research Statistician
 - Greenhouse Gas TF Program Manager
 - Project Assistant/Researcher

What is in DBEDT's Budget Request (MOF)

- Biofuels Program Manager (U)
- Renewable Hydrogen Prog Mgr (B)
- Energy Economist/PUC Lead (U)
- Energy Research Statistician (U)

- Energy Permit Facilitator (U)
 - Ref: Report on SCR 164, Streamlining Permitting

What Do We Need?

- Funding
 - \$1.2 MM to complete Biofuels Master Plan
 - \$ 0.7 MM to complete GHG program effort
 - \$ 0.3 MM for contract support, PUC dockets
 - \$ 0.3 MM for technical contractor for LBE—Perf. Contracts, Commissioning, LEED studies
 - \$0.1 MM for technical support for sustainable bio-oils

Funds in DBEDT Budget Request

- \$0.7 MM for Bioenergy (U)
- \$0.3 MM for PUC Docket support (U)
- \$0.2 MM for LBE (U)

Note: (1)U funds represent transfer from Environmental Response Revolving Fund.
(2) Positions and funding for GHG not in admin budget.

Conclusions

- SID energy staff has been “stretched” for several years
- Need to address staffing, or
 - Division performance expectations will not be met
 - Quality and timeliness of outputs will deteriorate
- Must address near-term depletion of PVE funds
- Timely to address appropriate organizational questions as well
- Transition being given the support and attention it needs