

RPO and PPR



U.S. AIR FORCE

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AFRPA/EV



Definition of RPO and It's Goals

- ✦ **RPO is a systematic approach for evaluating and improving site remediation processes and an assessment of the decision logic to reach site cleanup goals.**

- ✦ **The Goals are to:**
 - **Reduce risk & enhance system performance**
 - **Assess protectiveness**
 - **Evaluate exit strategy**
 - **Accelerate response complete and closure**
 - **Minimize both short and long term cost**
 - **Facilitate property transfer**
 - **Incorporate Optimization Principles into Business Process**
 - **Meet DERP optimization guidance**



Status of RPO Efforts

✈ FY02

- **Conducted 6 Phase I visits at California bases and more extensive Phase II evaluations at McClellan & Mather**

✈ FY03

- **Conducted Phase I visits at Kelly and Wurtsmith**
- **Continued Phase II efforts at McClellan & Mather**

✈ FY04

- **Phase I visits conducted at KI Sawyer and Pease**
- **2 to 3 more Phase I visits planned**

✈ Goal is to complete all 30 BRAC Bases in 5 years



Representative Findings

- * Suggested improvements to groundwater extraction systems & groundwater monitoring strategies**
- * Provided alternative surface treatment for both extracted groundwater and soil vapor**
- * Updated fate and transport modeling strategies to potentially cutoff the long tail of treatment O&M**
- * Revised exit strategies & enhanced periodic regulatory review of systems and/or demonstrating OPS**



The Results from AFRPA Site Visits

- ✈ **Recommended termination of 6-10 treatment systems**
- ✈ **Accelerated submission of OPS documentation**
- ✈ **Minimize long-term costs**
 - **Modeling to optimize P&T at McClellan may save 10's of years at \$2 to 3 million per year by reaching goals faster**
- ✈ **5-year cost avoidance of up to \$8 million by FY08**

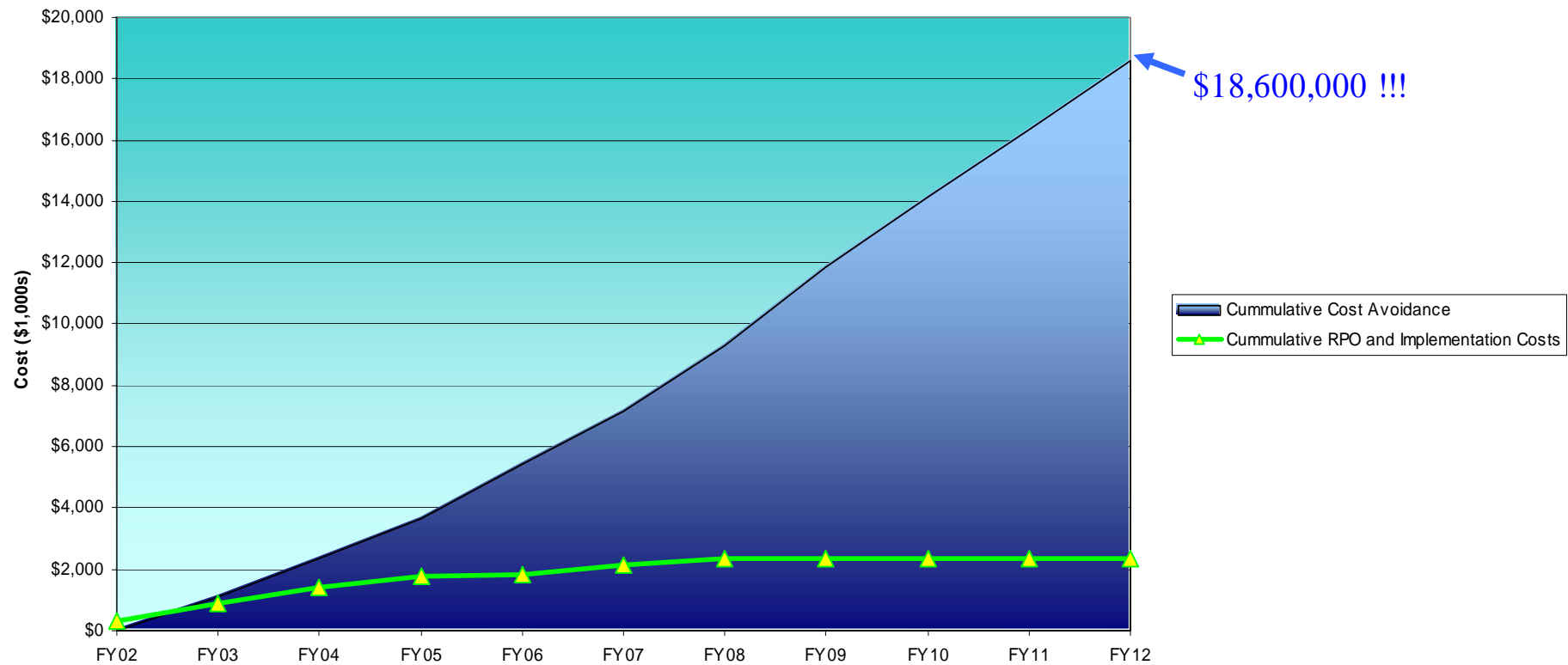
Examples:

 - **Eliminate duplicate MWs saving \$500K/5 years**
 - **Shutdown OU-1 GWTP saving \$1.65M/5 years**
 - **SVE system optimizations saving \$250K/5 years**
 - **Discontinue UV/OX at GWTP saving \$1M+/5 years**
- ✈ **Improved property transfer strategies**



AFRPA RPO Cost Avoidance – 10 Year

AFRPA RPO Cost Avoidance and Implementation Costs



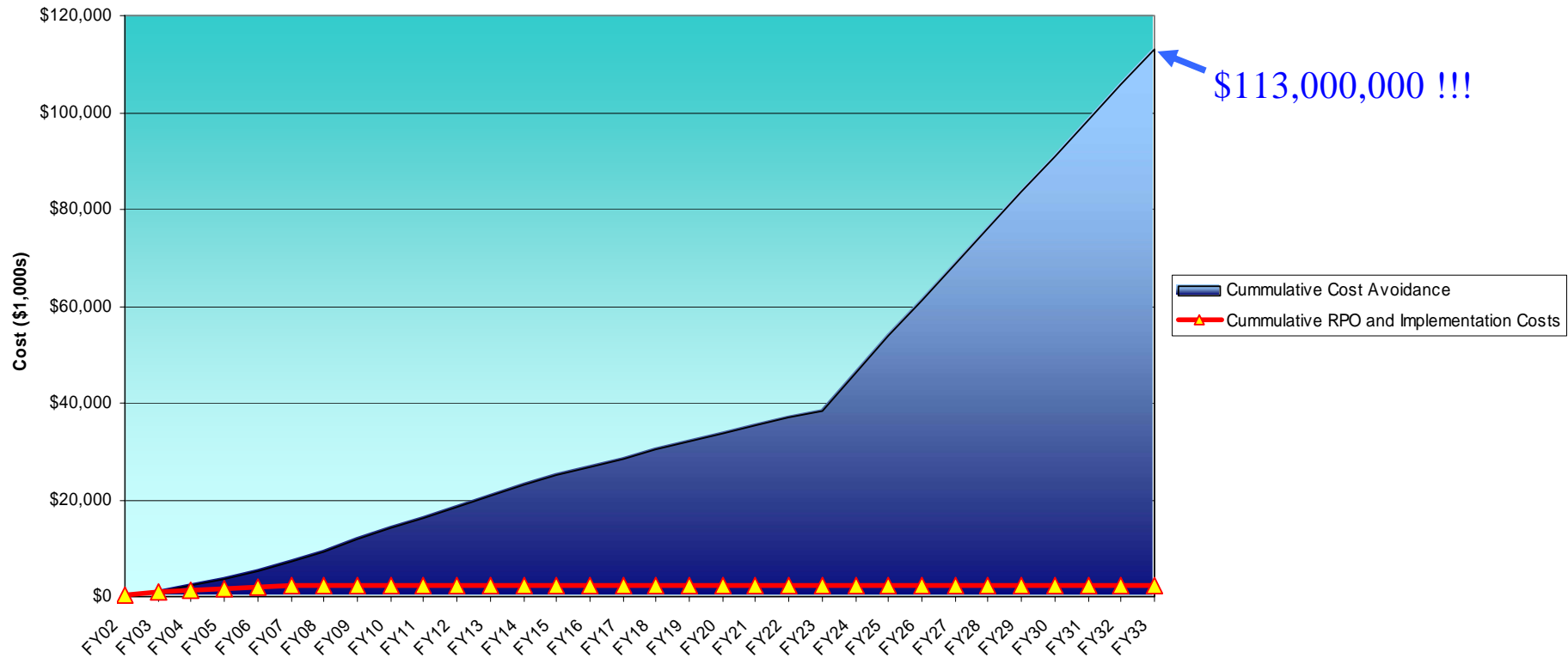
\$18,600,000 !!!

■ Cumulative Cost Avoidance
▲ Cumulative RPO and Implementation Costs



AFRPA RPO Cost Avoidance – 30 Year

AFRPA RPO Cost Avoidance and Implementation Costs





Integrated Site Visit Teams

✈ Team Membership—multi-discipline

- **Engineers-chemical, mechanical, environmental**
- **Chemists and quality assurance experts**
- **Toxicologists and risk assessors**
- **Geologists and hydrogeologists**
- **Regulatory and Database specialists**

✈ Team Membership—multi-agency

- **Federal - COE, Navy, DOE, AFRPA, AFCEE**
- **State - NJ, CA, GA, ME**
- **Contractors - Mitretek Systems, Parsons**



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Support of ITRC RPO Team

- ✈ **AFRPA supports ITRC with funding and contractual support for the RPO Team**
- ✈ **ITRC State members have been trained on RPO through participation in AFRPA RPOs**
- ✈ **AFRPA assisted in writing ITRC's RPO Technical Regulatory Guidance and internet training materials to be released in June 2004**
- ✈ **Supports ITRC participation in this conference**



RPO Summary

- ✦ **RPOs will continue and become integral to AFRPA's remediation efforts**
- ✦ **Status of recommendations will be monitored and reported up-channel**
- ✦ **Cost Avoidances are real in short-term and predictable in long-term but there can be a multiple year lag in between**
- ✦ **Goals remain clear**
 - **Maintain protectiveness of remedial systems**
 - **Enhance system performance**
 - **Minimize cost**
 - **Facilitate property transfer**
 - **Meet DERP guidance**

Questions?



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