

*Office of River Protection FY2010 Budget Formulation*

FY 2010 Budget Briefing  
Environmental Management



**Office of River Protection**  
**Public Presentation**  
March 26, 2008



**EM** *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

Slide 1

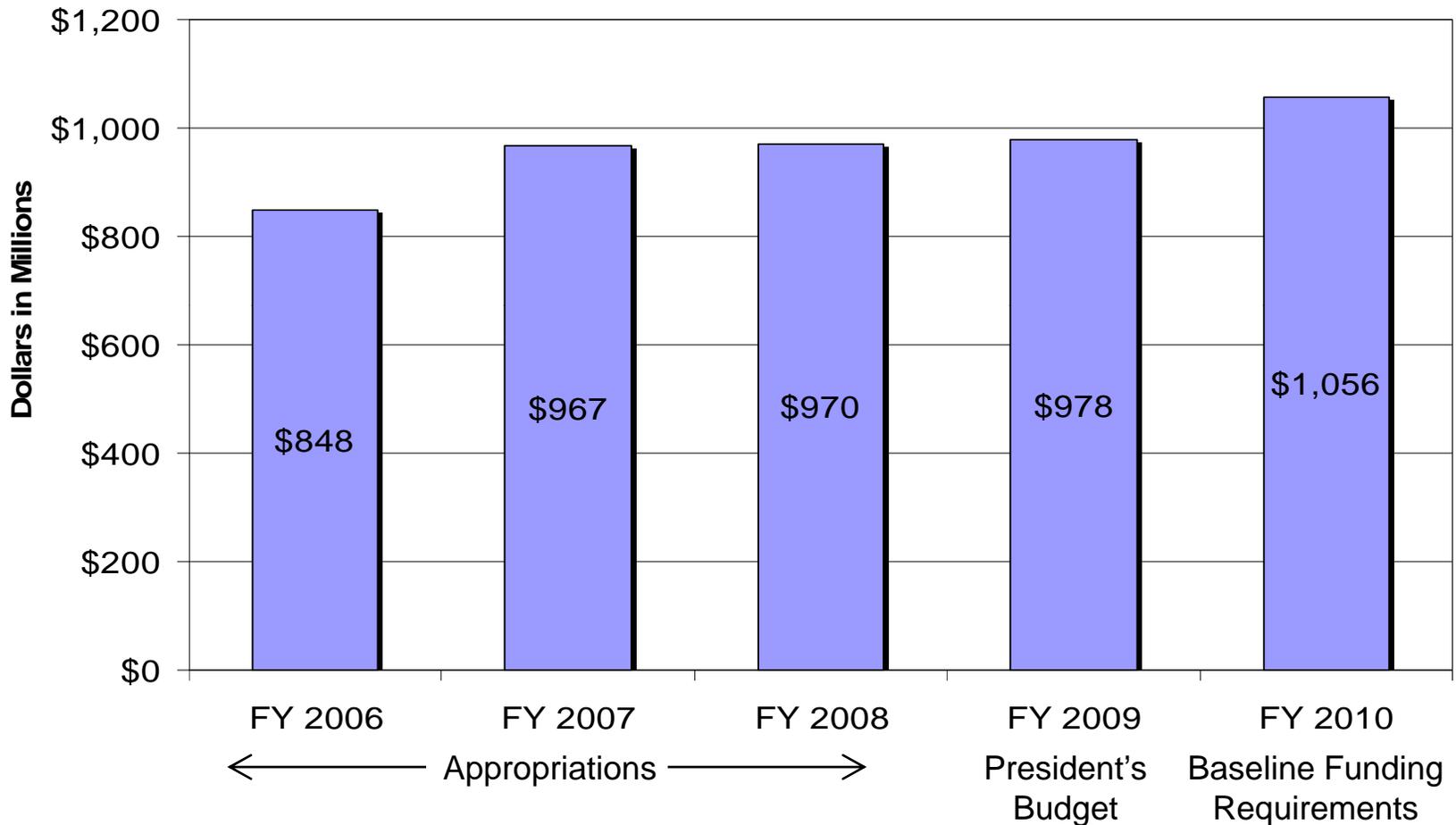
## **Priorities for Cleanup**

- Maintain safe Tank Farm Operations
- Complete full Waste Treatment Plant construction and start operations by 2019
- Enhance Single-Shell Tank (SST) Integrity Program
- Ensure infrastructure needs to feed WTP
- Continue to develop retrieval technology and retrieve approximately 1 tank per year
- Continue to develop supplemental treatment capacity to ensure HLW vitrification throughput is maintained at full capacity
- Continue conceptual planning and technology development for pretreatment system



# Office of River Protection FY2010 Budget Formulation

## Funding (Dollars in Millions)



Note: These numbers exclude Program Direction funding



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

*Office of River Protection FY2010 Budget Formulation*

**FY 2009 – 2014**

**Environmental Management  
(Dollars in Thousands)**

ORP Baseline Profile								
PBS	PBS Title	FY 2009 Pres Budget	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
ORP - 0014	Radioactive Liquid Tank Waste Stabilization and Disposition	288,443	390,165	366,099	438,753	575,309	834,247	924,145
ORP - 0060	Major Construction - Waste Treatment Plant	690,000	690,000	690,000	690,000	690,000	690,000	690,000
<b>Total - ORP</b>								
		<b>978,443</b>	<b>1,080,165</b>	<b>1,056,099</b>	<b>1,128,753</b>	<b>1,265,309</b>	<b>1,524,247</b>	<b>1,614,145</b>



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

Slide 4

# Office of River Protection FY2010 Budget Formulation

## FY 2010

### Approved Baseline Planned Scope and Accomplishments Tank Farms (PBS ORP-0014) - \$366M

- **Safe and Compliant Tank Farm Operations - \$250M**
  - DST/SST Operations, Surveillance, and Maintenance - \$59.2M
  - Safety, Quality, and Radiation Protection Programs - \$20.2M
  - 222-S Laboratory - \$27.6M
  - Tank Sampling - \$11.3M
  - DST Space Management - \$12.5M
  - Waste Management - \$9.6M
  - Environmental Compliance and Vadose Zone - \$15.4M
  - DST Integrity - \$3.6M
  - DST Compliance Projects - \$4.4M
  - Training, Procedures, and Standards Compliance - \$7.1M
  - Engineering and Technical Support - \$9.3M
  - WTP Electricity - \$2.1M
  - Business Services - \$23.0M
  - Site-Wide and Shared Services - \$26.5M
  - ORP/TOC Management/Admin. - \$18.2M
  - \*HIHTL
  - \*SST Integrity
- **SST Retrievals – \$37M**
  - C Farm Waste Retrieval – \$22M
  - S Farm Retrieval – \$15M
- **Demonstration Bulk Vitrification - \$29M**
- **Supplemental LAW Treatment 200 West Area - \$3.6M**
- **Pretreatment 200 West Area - \$16.0M**
- **Tank Farm Upgrades - \$6.0M**
- **ILAW-Integrated Disposal Facility - \$3.0M**
- **IHLW - CSB Outfitting, Storage & Shipping - \$2.0M**
- **Waste Feed Delivery - \$1.5M**
- **CH-TRU Packaging – \$1.0M**
- **Contractor Fee – \$16.5M**

\*Baseline Change Requests in process



**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

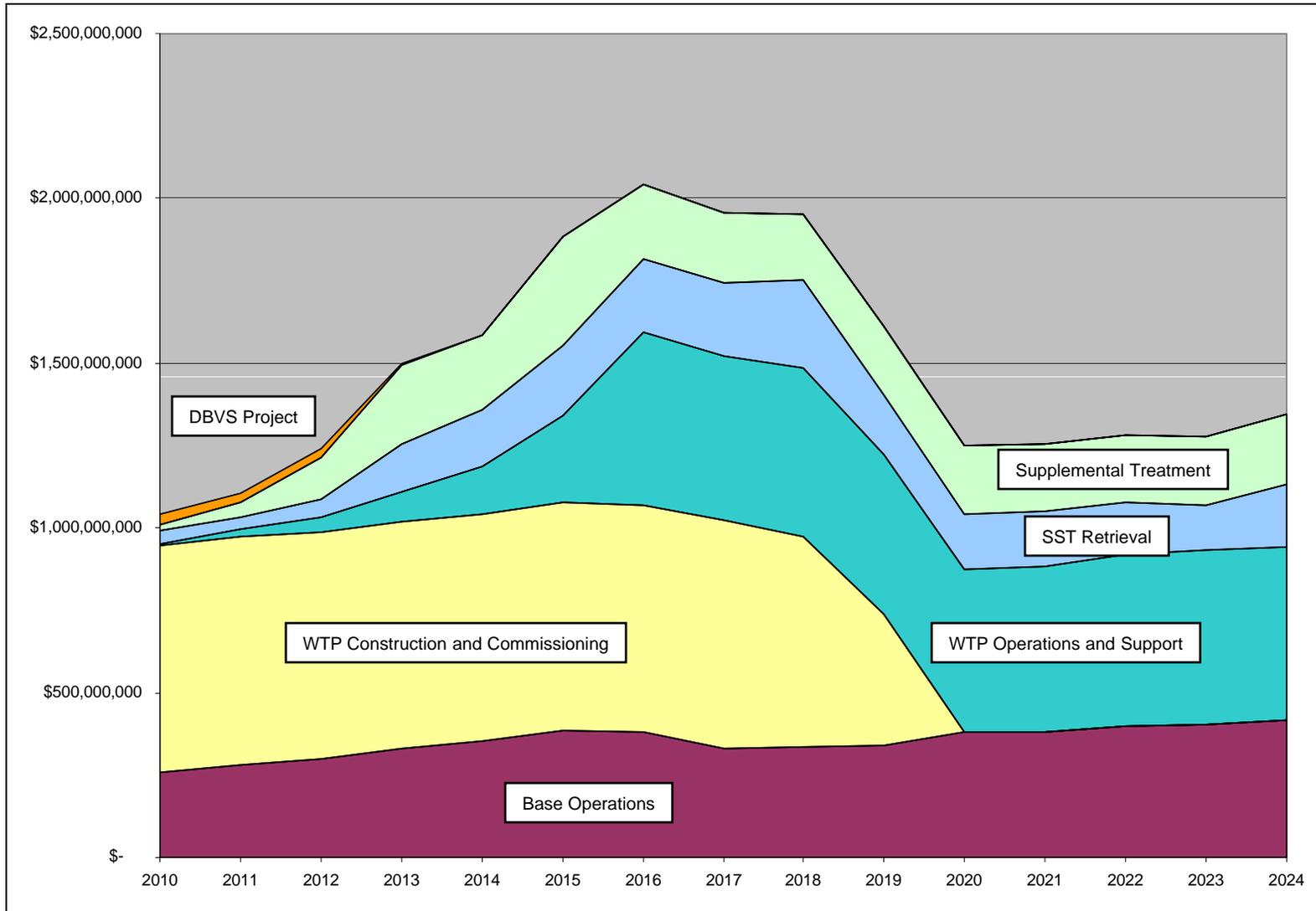
Slide 5

*Office of River Protection FY2010 Budget Formulation*  
**FY 2010**

**Baseline Planned Scope and Accomplishments**  
**WTP (PBS ORP-0060) - \$690M**

- **Pretreatment – 54% complete**
  - Place 2,736 CY of concrete, 735,000 pounds of structural steel, 55,000 feet of piping, and 204,000 pounds of HVAC ducting.
  - Place concrete for 1 wall and 12 slabs
  - Engineering - 95% complete
  - Construction - 39% complete
- **LAW - 95% complete,**
  - Construction 99% complete
- **HLW – 57% complete**
  - Place 6,000 CY of concrete for walls and slabs, 742,000 pounds of structural steel, 12,000 feet of piping and 99,000 pounds of HVAC ducting.
  - Place concrete for 31 walls and 6 slabs
  - Engineering – 98% complete
  - Construction - 40% complete
- **BOF – 67% complete**
  - Install 141,000 feet of cables and wire
  - Place concrete for the ammonia facility walls
  - Engineering - 99% complete
  - Construction - 84% complete
- **LAB – 68% complete**
  - Install 2900 feet of piping and 106,000 feet of cable and wire
  - Engineering - 100% complete
  - Construction - 100% complete





# Office of River Protection FY2010 Budget Formulation

## Selected FY 2010 Milestone Summary

### TPA Milestone

### TPA

### Baseline

M-45-02O Submit 2 year SST Retrieval Sequence

03/01/10

03/01/10

M-47-06 Negotiate Additional Requirements to Support WTP Phase 1

06/30/10

06/27/10

M-90-11 Complete W-464 Construction (including startup)

08/31/10

10/29/15



**EM** Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

[www.em.doe.gov](http://www.em.doe.gov)

Slide 8

*Office of River Protection FY2010 Budget Formulation  
Perspective for SST Retrieval by 2018*

*Not Physically Achievable*

Near Term Impacts (through 2018)

- Design and construct 42 new DSTs
- Retrieve 40 tanks per year in 2016 – 2018
- Design and construct a new evaporator
  - 100 evaporator campaigns needed during peak retrieval operations
- Not physically achievable
  - More intense effort than WTP construction
  - Programmatic risks will be magnified
    - Resources and skills availability
    - Funding availability
    - Potential to delay other projects like WTP to realign funds
  - Not possible to execute on schedule
    - Initiate engineering in 2009
    - Complete construction in 2015
    - Bulk of SST retrieval and space management operations over a 3-year period

Long-Term Impacts

- Maintain and operate new DSTs through the end of the mission
- Each new DST must be retrieved
- Each new DST must be closed



## **Priorities for Cleanup**

- Maintain safe Tank Farm Operations
- Complete full Waste Treatment Plant construction and start operations by 2019
- Enhance Single-Shell Tank (SST) Integrity Program
- Ensure infrastructure needs to feed WTP
- Continue to develop retrieval technology and retrieve approximately 1 tank per year
- Continue to develop supplemental treatment capacity to ensure HLW vitrification throughput is maintained at full capacity
- Continue conceptual planning and technology development for pretreatment system

