

DoD's Corporate Environmental Technology Programs



- **Basic and Applied Research**
- **Demonstration / Validation**

Environmental Drivers

Reduction of Future Liability

Contamination from Past Practices

Pollution Prevention to Control Life Cycle Costs

- Chlorinated Solvents Remain Intractable
- Large Potential UXO Liability
- New Contaminants Emerging (Perchlorate)
- Elimination of Hazardous Materials Reduces Cost of Operation, Repair & Demil
- Goal is to achieve Compliance Through Pollution Prevention


SERDP
 Strategic Environmental Research and Development Program



Environmental Drivers

Sustainability of Ranges and Range Operations




**Maritime Sustainability
Threatened and Endangered Species**




Toxic Air Emissions and Dust



Unexploded Ordnance



Noise



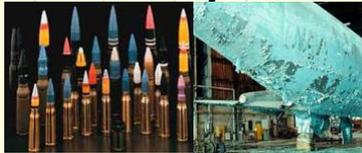
Urban Growth & Encroachment


SERDP
 Strategic Environmental Research and Development Program



Environmental Quality Taxonomy

**Weapons Systems
& Platforms**



Munitions Management



Environmental Restoration



Sustainable Infrastructure



DoD Lands



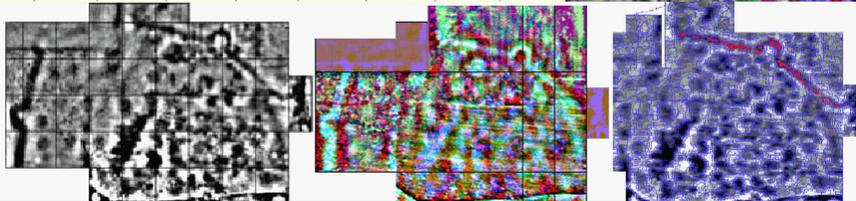
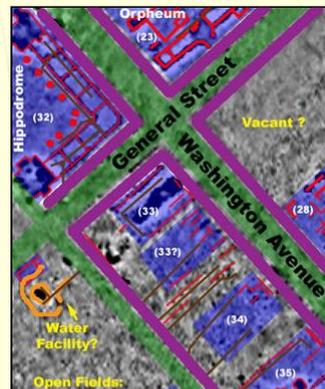
29 Million Acres
Broad Diversity
Of Cultural Resources
Types

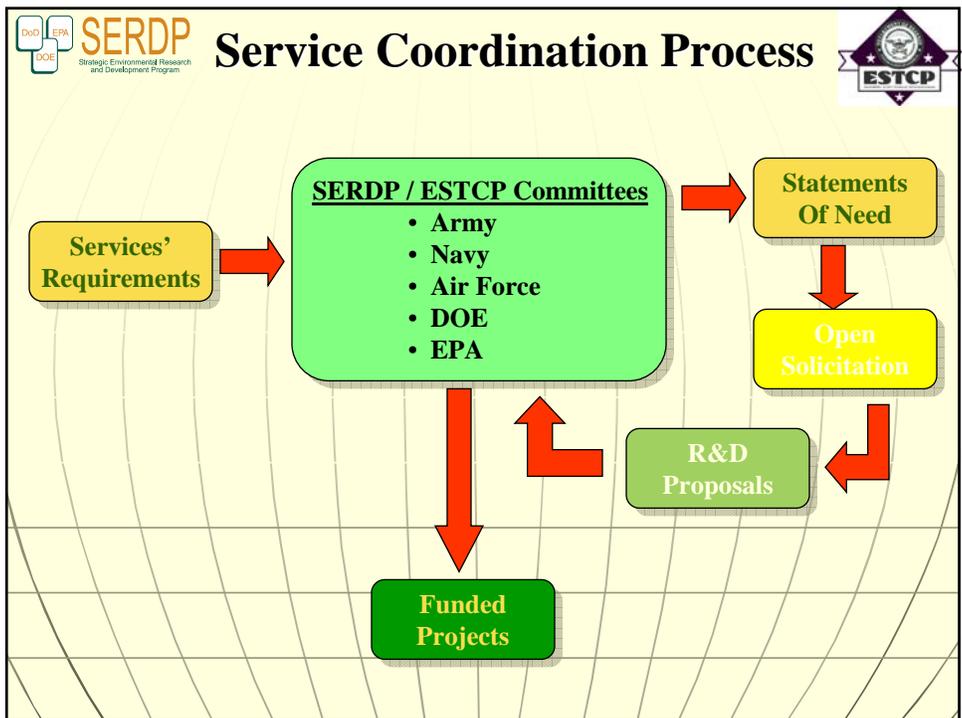
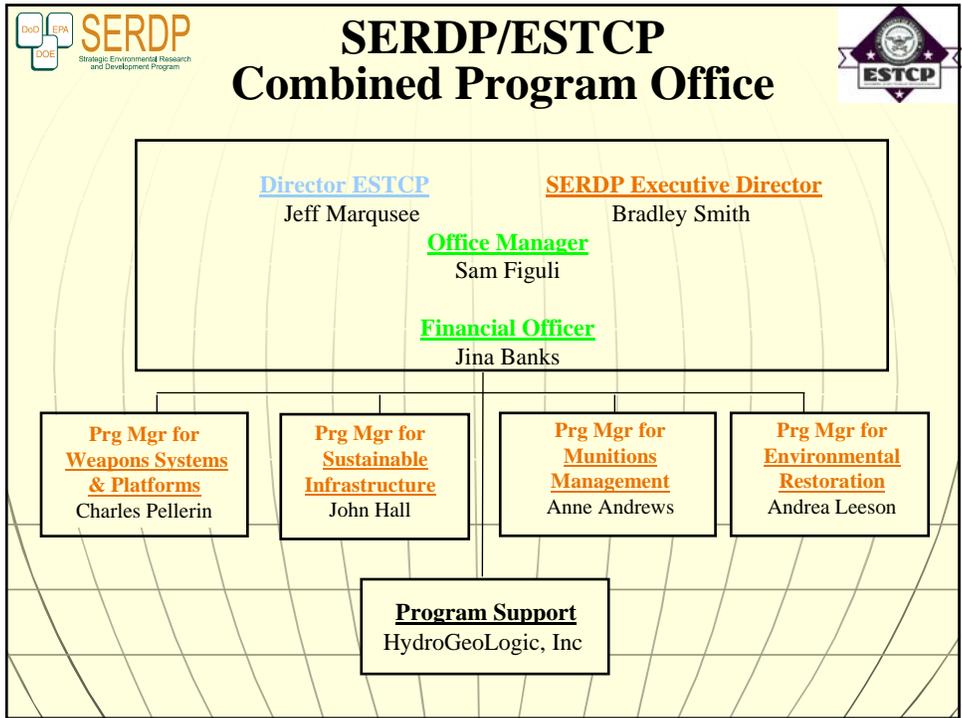


Cultural Resources

Principal Research Issues

Detection of sites via remote sensing







Strategic Environmental Research and Development Program

- Established by FY 1991 Defense Authorization Act
 - DoD, DOE and U.S. EPA partnership
- **Purposes**
 - Address DoD and DOE environmental concerns through R&D
 - Share data collection and analysis capabilities
 - Identify and share DoD research technology
 - Identify private sector technologies useful to DoD



Environmental Security Technology Certification Program

PROGRAM GOALS

- **Demonstrate innovative cost-effective environmental technologies**
 - Capitalize on past investments
 - Transition technology out of the lab
- **Promote implementation**
 - Direct technology insertion
 - Gain regulatory acceptance

Priority: needs of the DoD user community



SERDP Method

- **Annual Solicitations to Meet DoD Needs**
 - **Two Solicitations**
 - **Open to All: Government, Academia, Industry**

- **Competitive Award**
 - **External Peer Review**
 - **Internal and Scientific Advisory Board Review**

- **Transition to Demonstration/Validation**



ESTCP Method

- **Partner with stakeholders and test at DoD facilities**
 - **Developer, regulators, end-user**
 - **Direct transition**

- **Validate operational cost and performance**
 - **Independent test and evaluation**
 - **Satisfy regulatory and user communities**

- **Identify DoD market opportunities**
 - **Technology transfer across federal and private sector**

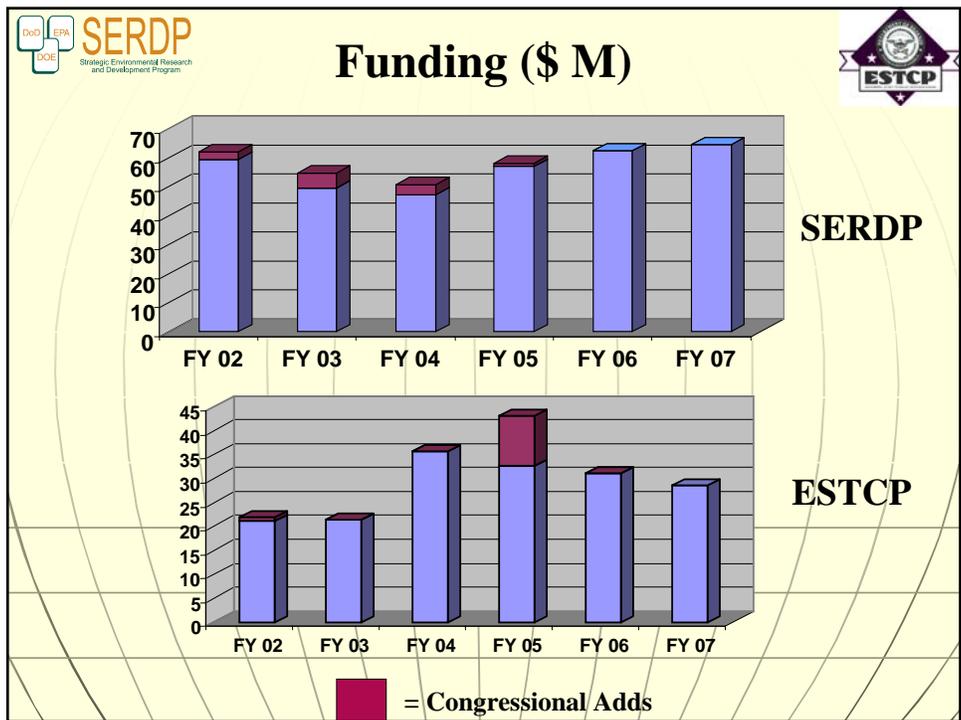

SERDP
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Demonstration/Validation



- **Demonstration scale and scope**
 - 3 years or less
 - Limited development
 - Assess full scale cost and performance

- **Validation**
 - Technical performance
 - Operational costs and logistics
 - Regulatory and/or end user acceptance





SERDP/ESTCP Projects



- SI-1260: Detection and Identification of Archaeological Sites and Features Using Radar Data (Dr. Ronald Blom)
- SI-1261: Developing an Efficient and Cost Effective Ground-Penetrating Radar Field Methodology for Subsurface Exploration and Mapping of Cultural Resources on Public Lands (Dr. Lawrence Conyers)
- SI-1263: New Approaches to the Use and Integration of Multi-Sensor Remote Sensing for Historic Resources Identification and Evaluation (Dr. Frederick Limp)
- SI-0611: Streamlined Archaeo-Geophysical Data Processing and Integration for DoD Field Use (Dr. Michael Hargrave)



Solicitation Timelines



SERDP

- Annual Solicitation - November
- “SEED” Solicitation - November
- Selection in July
- SAB Reviews in August/September

ESTCP

- Annual Solicitation - January
- Selection in September





**Sponsored by
SERDP and ESTCP**

Partners in Environmental Technology

Technical Symposium and Workshop

November 28-30, 2006

**Marriott Wardman Park Hotel
Washington, D.C.**




Home Pages




<http://www.serdp.org>

<http://www.estcp.org>