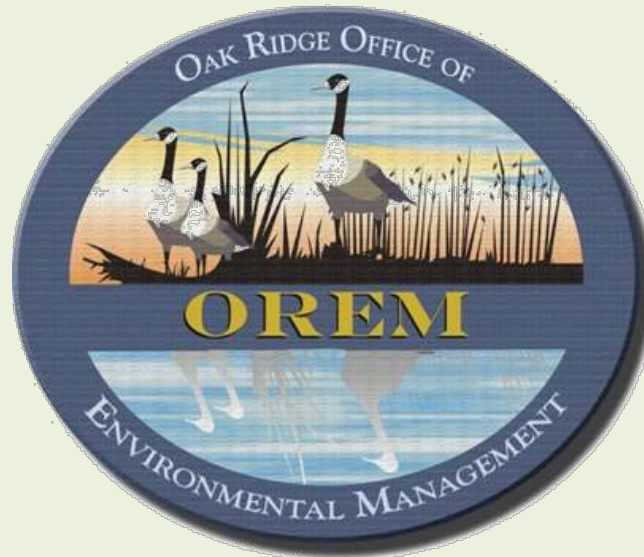




Welcome to the Oak Ridge Office of Environmental Management's 2015 Community Budget Workshop





Workshop Agenda

**Wednesday, April 29, 2015
2:00 – 5:00 p.m.**

- Welcome and Opening Remarks/ Feedback From 2014 Community Budget Workshop Sue Cange
- DOE-OREM Near-Term Cleanup Priorities Jay Mullis
- Break
- Community Cleanup Priorities
 - SSAB David Hemelright
 - ORRCA TBD
 - Oak Ridge Partnership Sarah Roberts
- Break
- Federal Budget Formulation Process Alan Stokes
- Open Discussion
- Next Steps Sue Cange

2014 Community Budget Workshop Summary of Outcomes and Actions

Sue Cange

Manager

Oak Ridge Office of Environmental Management

April 29, 2015

Balancing Priorities, Maintaining Momentum

- *Purpose:* Develop ideas to work on together to help maintain momentum in the Oak Ridge environmental cleanup program
- Three separate groups developed outcomes areas where Oak Ridge EM and the community could partner



1. Alternative Contracting Strategies for New Projects

Outcomes

- Structure contracts to provide ample opportunities for small businesses
- Use contract types that reward companies for excellent performance, and reduces profits for poor performance

Actions

- ETEBA, as a member of the Oak Ridge Partnership, led an effort to develop ideas for productive contracting strategies and authored a white paper on how to improve federal contracting policies and practices
- DOE-EM uses draft RFPs to solicit industry input into contract types and terms
- OREM identified small business opportunities for support services, waste processing, and characterization

2. Balancing Competing Priorities with Available Budget

Outcomes

- Cleanup priorities should be established based on reduction of risk and cost
- Continue to engage the community on cleanup priorities through public outreach

Actions

- Cleanup priorities are intended to address and balance the different risks at each of the sites in Oak Ridge -- Environmental, Radiological, and Life-cycle cost
- Cleanup priorities is the Focus area for OREM 2015 Community Budget Workshop
 - Additionally, OREM has been working to improve interactions with SSAB, ORRCA, and other community stakeholders and discuss priorities

- **Planning for Beyond DOE – including Reindustrialization, Historic Preservation, etc.**

Outcomes

- Eliminate risks first, and give consideration to sequencing subsequent cleanup activities at ETTP to support end-states
- Strengthen partnerships needed to sustain end-states

Actions

- OREM filled the gap between K-25 and K-27 demolition that supports property transfers that can be used for potential anchor tenants
- OREM continues to strengthen partnerships with local organizations to build consensus
- DOE has progressed on historic preservation commitments

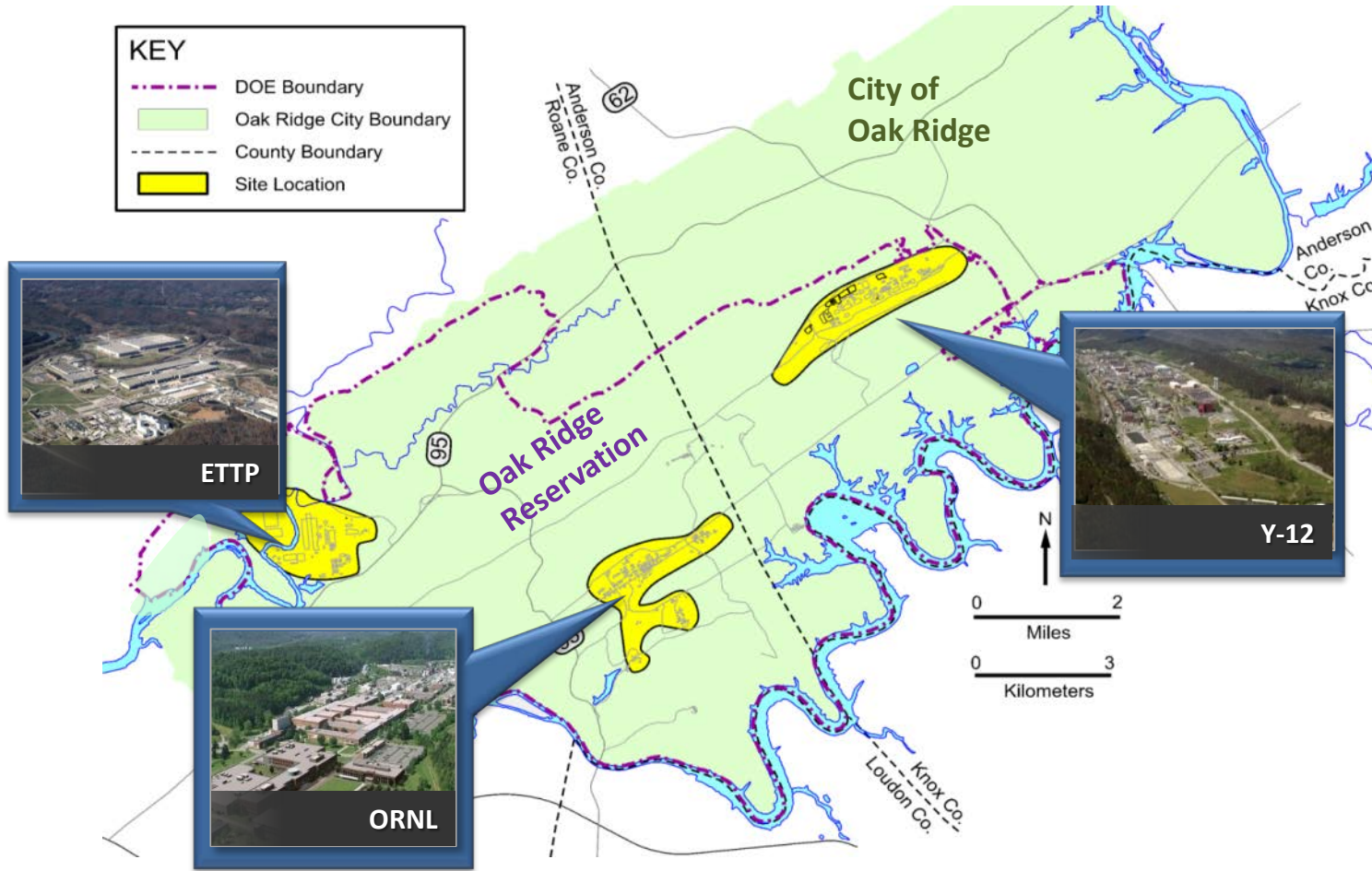


Near-Term OREM Priorities (FY15-FY19)

April 29, 2015

Jay Mullis
Deputy Manager
Oak Ridge Office of Environmental Management

The Oak Ridge Reservation is a Diverse and Complex Site





Our Mission/Vision

Complete the cleanup of the Oak Ridge Reservation to:

- Protect the region's health and environment
- Make clean land available for future use
- Ensure the Department of Energy's ongoing vital missions



Our Vision is that the Oak Ridge Reservation is Remediated, Modernized, and Reindustrialized



Program Considerations

- **East Tennessee Technology Park**
 - *Lifecycle Cost Risk* – Nearly \$60M is spent on base operations at ETTP, and as facilities continue to degrade, the cost for cleanup continues to increase
- **Y-12 National Security Complex**
 - *Environmental Risk* – Nearly 20 million lbs of mercury was used at Y-12 and ~ 10% is unaccounted for; roughly 700,000 lbs may have been released into the environment
- **Oak Ridge National Laboratory**
 - *Nuclear/Radiological Risk* – Over 26 million curies are currently stored at ORNL alongside billions of dollars of investment



Mercury removed from storm sewers at Y-12



TRU Waste Processing



Inside of Building K-27 at ETTP



Near-Term Priorities

- 1. Complete demolition of Gaseous Diffusion Plants and support facilities at the East Tennessee Technology Park**
- 2. Complete direct disposition of the U-233 material and plan processing campaign**
- 3. Complete contact and remote handled transuranic debris processing**
- 4. Construct and operate the TRU sludge mock test facility**
- 5. Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12**
- 6. Complete design of the new Environmental Management Disposal Facility**



Near-Term Priorities

1. Complete demolition of Gaseous Diffusion Plants and support facilities at the East Tennessee Technology Park

• Status/Accomplishments

- Demolished K-29 Building (2006), K-33 Building (2011), and K-25 Building (2014)
- K-31 Building demolition 80% complete
- K-27 Building deactivation 70% complete, preparing for demolition
- Nearly 400 of more than 500 support facilities demolished



• Challenges

- Safely deactivating deteriorating facilities in preparation for demolition
- Balancing uncertainties with maintaining an efficient utilization of the trained and qualified workforce



Near-Term Priorities

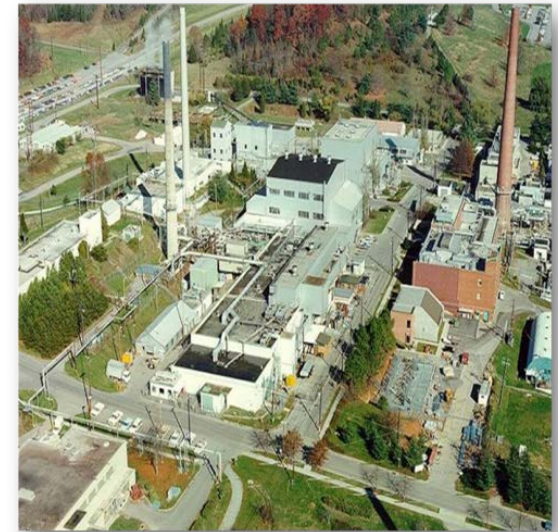
2. Complete direct disposition of the U-233 material and plan processing campaign

• Status/Accomplishments

- Project remains prepared for shipment of Consolidated Edison Uranium Solidification Project (CEUSP) material for disposal
- Project is developing the conceptual planning documents for processing non-CEUSP material
- Project is supporting maintenance activities in Building 2026, to enable its use for the processing campaign

• Challenges

- Safe transportation and disposal of CEUSP material
- Maintain momentum for preparation of direct disposition, while planning the processing campaign





3. Complete contact- and remote-handled transuranic debris processing

• Status/Accomplishments

- Contact-handled waste processing and disposal status
 - 98% processed
 - 69% shipped to permanent disposal
- Remote-handled (RH) waste processing and disposal status
 - 84% processed
 - 29% shipped to permanent disposal
- Continuing to process and certify waste
- Completed overpack design to enable RH storage
- Follow-on contract award estimated within the next few months

• Challenges

- Waste Isolation Pilot Plant suspension
- Difficult to process remaining waste





Near-Term Priorities

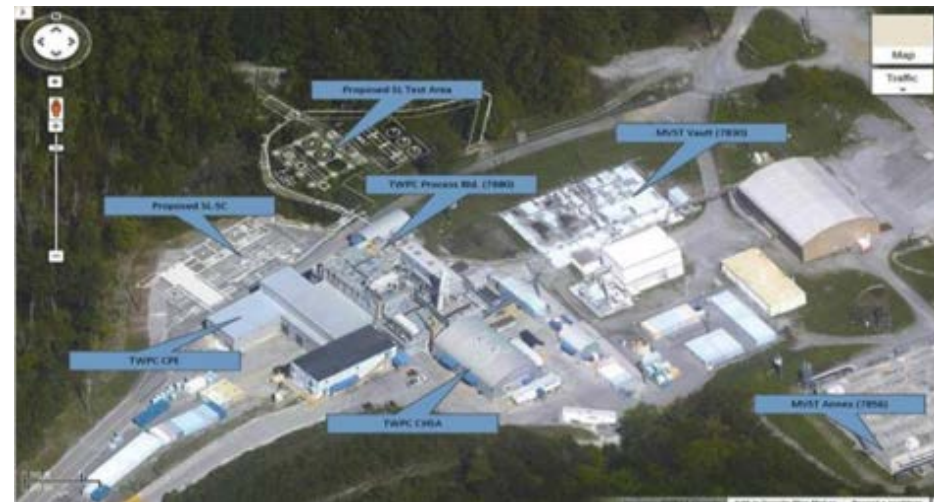
4. Construct and operate the TRU sludge mock test facility

• Status/Accomplishments

- Awarded Architect and Engineering Services Contract to CH2M Hill Constructors, Inc.
- Plan to complete mock design by December 2015
- Start mock construction in 2016

• Challenges

- Successful completion of mock-up testing phase to support the Sludge Processing Facility design





Near-Term Priorities

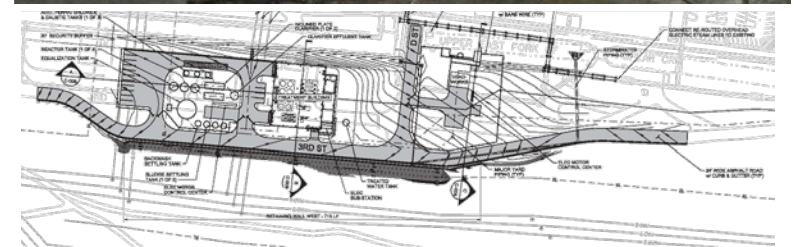
5. Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12

- **Status/Accomplishments**

- Nearing resolution of dispute with the Environmental Protection Agency and state
- Awaiting approval to begin Preliminary Design Phase
- Construction start planned for FY18

- **Challenges**

- Successful project delivery





6. Complete design of the new Environmental Management Disposal Facility

• Status/Accomplishments

- CERCLA Alternatives Analyses submitted to the regulators on April 2
 - Preferred site is immediately east of current facility in existing waste management area
- Phase I Characterization of preferred site completed
- UCOR under contract to complete design

• Challenges

- Obtaining regulatory and community agreement on remedy
- Ensure first two cells are constructed 18-24 months in advance of EMWMF closure





In Summary

- **Keep momentum moving forward on OREM cleanup mission**
 - **Planning today for tomorrow's projects**
 - **Importance of three Capital Asset Projects for OREM**
- **GDP cleanup on track for successful completion in the next 5-7 years**
- **OREM's near-term priorities reflect our commitments to the state and the community to continue our cleanup mission as the focus shifts from ETTP to Y-12 and ORNL**



??????

Questions/Comments?





Oak Ridge Site Specific Advisory Board

ORSSAB is a federally chartered citizens' panel that provides recommendations to the DOE Oak Ridge Environmental Management Program, which is responsible for the cleanup of the Oak Ridge Reservation.



Oak Ridge Site Specific Advisory Board

ORSSAB is composed of up to 22 members who are appointed by DOE and reflect a diversity of occupations, interests, gender, and race of persons living near the Oak Ridge Reservation.

Technical expertise is not a requirement for membership; DOE strives to have a good mix of technical and non-technical representatives on the board to reflect the surrounding community.



Oak Ridge Site Specific Advisory Board

FY 2015 ORSSAB



Representatives from Anderson, Knox, Loudon, Blount, and Roane Counties.

Two non-voting student representatives from Oak Ridge High School and Hardin Valley Academy.



Oak Ridge Site Specific Advisory Board

Since its establishment in 1995 ORSSAB has made 227 recommendations to DOE.

Recent actions include recommendations on Additional Off-Site Groundwater Studies, Additional Waste Disposal Capacity on the ORR, and Automating the Stewardship Verification System.



Oak Ridge Site Specific Advisory Board Recommendation 222: Recommendations on Additional Off-site Groundwater Migration Studies

Background
A series of groundwater strategy workshops was held during 2013 to develop and prioritize groundwater remediation for the Department of Energy's (DOE) Oak Ridge Reservation (ORR). In addition to representatives from the Environmental Protection Agency, Tennessee Department of Environment and Conservation, and DOE, the ORR Groundwater Strategy Team included contractor representatives and a representative from the U.S. Geological Survey who acted as independent technical support and interface and liaison between the ORR Groundwater Strategy Team and the Oak Ridge Site Specific Advisory Board. The workshops resulted in the development of a Groundwater Strategy document (DOE/OR-01-2628/V1&V2/D1).

Discussion
The groundwater pathways and flows are complex on the DOE ORR. The potential for releases (chemical species and radioisotopes) from waste burial sites, storage areas, and past operations due to groundwater penetration over time is possible.
It is reasonable to extrapolate that off-site migration of contaminants is possible and merits further evaluation. Current data may not adequately reflect the future presence of contamination in off-site groundwater; therefore this potential condition warrants investigation. The protection of public health must be considered a priority; therefore potential health exposures to hazardous/radioactive species should be investigated.

Recommendations
The Oak Ridge Site Specific Advisory Board recommends additional groundwater studies to address potential offsite migration of chemical species and radioisotopes. This recommendation is focused toward the development of information that will allow a better understanding of the potential impact of groundwater contaminants for the purpose of risk mitigation, groundwater remediation, and long-term stewardship.

Specifically, we recommend that:
...DOE proceed with the Off-site Groundwater Quality Assessment project, including: review of the well network (to include review of horizontal and vertical placement of wells for determination of appropriate locations and/or are of depth.



Oak Ridge Site Specific Advisory Board Recommendation 223: Recommendations on Additional Waste Disposal Capacity on the Oak Ridge Reservation

Background and Discussion
In formal presentations made to the Oak Ridge Site Specific Advisory Board (ORSSAB) in January and February of 2014, the Department of Energy (DOE) identified the need for additional contaminated waste disposal capacity on the Oak Ridge Reservation (ORR). Disposal capacity in the existing Environmental Management Waste Management Facility (EMWMF) will be exhausted by the year 2023, primarily due to:

1. availability of American Recovery and Reinvestment Act funds that allowed the acceleration of Cold War clean-up projects, and
2. expansion of the Oak Ridge Environmental Management Program to include the removal of outdated facilities at the Oak Ridge National Laboratory and the Y-12 National Security Complex. In addition to 2.2 million cubic yards of waste to be disposed in EMWMF by year 2023, capacity for approximately 2.5 million cubic yards more will be needed through year 2046.

Development of a new disposal area, named the Environmental Management Disposal Facility (EMDF), has been proposed to the Tennessee Department of Environment and Conservation (TDEC) and the Environmental Protection Agency (EPA). The initial remedial investigation/feasibility study (RIFS) report has been completed to "develop, screen, and evaluate alternatives for waste disposal criteria ... CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) criteria ... including off-site disposal options. This report was submitted to TDEC and EPA for review and comment in September 2012 and revised in June 2013 to incorporate the many comments received. Comments on the revised version currently are pending resolution.

The ORSSAB understands that no decision has been made regarding whether, when, or where to develop another on-site disposal facility, and that ORSSAB and public input will be solicited and incorporated as appropriate prior to any decision being made.

Recommendations
Based on information provided by the DOE that identified the need for additional contaminated waste disposal capacity on the ORR and the preliminary facility design criteria, the ORSSAB makes the following recommendations to the DOE:
...on-site disposal capacity for low-level radioactive and ... on-going efforts to minimize the need



Oak Ridge Site Specific Advisory Board Recommendation 207: Recommendation to Automate the Stewardship Verification Process for the Remediation Effectiveness Report

Background
Each year the Department of Energy's Oak Ridge Water Resources Restoration Program (WRRP) prepares the Remediation Effectiveness Report (RER) for the Oak Ridge Reservation (ORR). The RER is a document required by the Oak Ridge Federal Facility Agreement to assess the progress of remedial actions toward goals stated in CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) decision documents and compares pre- and post-remedial conditions at cleaned up sites.

The RER reports on compliance with long-term stewardship requirements for areas remediated under CERCLA where contaminants or hazardous materials remain in place. It also reports on any actions taken during the reporting year and makes recommendations for future actions.

Every five years, the WRRP prepares a Five-year Review, which is required by CERCLA. The Five-year Review determines if a remedy is still appropriate under current conditions.

Discussion
At the June 21, 2011 meeting of the Stewardship Committee of the Oak Ridge Site Specific Advisory Board, representatives of WRRP explained the steps involved in documenting the stewardship requirements for remediated areas with residual contamination. The process is a time-consuming, labor intensive endeavor that requires input from multiple companies and organizations.

Currently about 180 check sheets must be completed by facility managers across the ORR and compiled for the annual RER. As more sites on the reservation are remediated and incorporate stewardship requirements, the amount of documentation will increase significantly.

Recommendation
Because of the amount of documentation required to track CERCLA-required stewardship activities, Oak Ridge Site Specific Advisory Board recommends that the Department of Energy Oak Ridge Office WRRP explore ways to automate the stewardship tracking process.
... of Energy pursue an established solution for managing the process could become



Oak Ridge Site Specific Advisory Board

ORSSAB is a consulting party on the Memorandum of Agreement for Historic Preservation of K-25

&

Has a seat on the Center for Oak Ridge Oral History, in which it had a role in establishing.



Oak Ridge Site Specific Advisory Board

DOE asked ORSSAB to rank six projects:

- Complete demolition of the Gaseous Diffusion Buildings and support facilities at the East Tennessee Technology Park.
- Complete direct disposition of the Uranium-233 material and initiate processing campaign.
- Complete contact and remote handled transuranic (TRU) debris processing.
- Construct and operate the TRU sludge mock test facility.
- Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12.
- Complete design of the new Environmental Management Disposal Facility.



Oak Ridge Site Specific Advisory Board

ORSSAB's Ranking for the Six Projects

Projects	Priority ranking
Complete demolition of the Gaseous Diffusion Buildings and Support Facilities at East Tennessee Technology Park	1
Complete the direct disposition of the Uranium-233 material and initiate processing campaign	2
Complete design of the new Environmental Management Disposal Facility	3
Begin construction of the Outfall 200 Mercury Treatment Facility at Y-12	4
Complete contact and remote handled transuranic (TRU) debris processing	5
Construct and operate the TRU sludge mock test facility	6



Oak Ridge Site Specific Advisory Board

Other Suggestions

Long-term groundwater and off-site contaminant migration.

Ensure groundwater modeling work continues and continued funding for groundwater strategy.

Other EM facilities (especially Alpha 5) that are viewed as deteriorating and a continuing source contamination.

Focus on completing some projects prior to starting any new ones.



- Facilitate the redevelopment of the former K-25 site through the on-going reindustrialization effort by
 - ✓ Demolishing tall structures such as the centrifuge building so that other projects such as the general aviation airport at ETPP can be built, and
 - ✓ Stabilizing and transitioning utility and roadway infrastructure to appropriate public entities
- Ensure the cleanup of Poplar Creek where contaminated and dilapidated facilities remain
- Work towards the clean up of DOE excess facilities not currently in the EM scope
- Strengthen the local subcontracting supply chain
 - ✓ To ensure the continued availability of qualified companies to perform OREM work
 - ✓ To expand the number of opportunities for small businesses to perform meaningful scopes of work in the OREM program
 - ✓ To utilize contract vehicles that support the ability of small businesses to build their experience and grow.

The Federal Budget Process

Alan Stokes

*Planning & Baseline Management Division Director
DOE Oak Ridge Office of Environmental Management*

April 29, 2015

The Federal Budget Process

YEAR ONE

YEAR TWO

Department Prepares Budget



OMB Consolidates and President Submits Budget

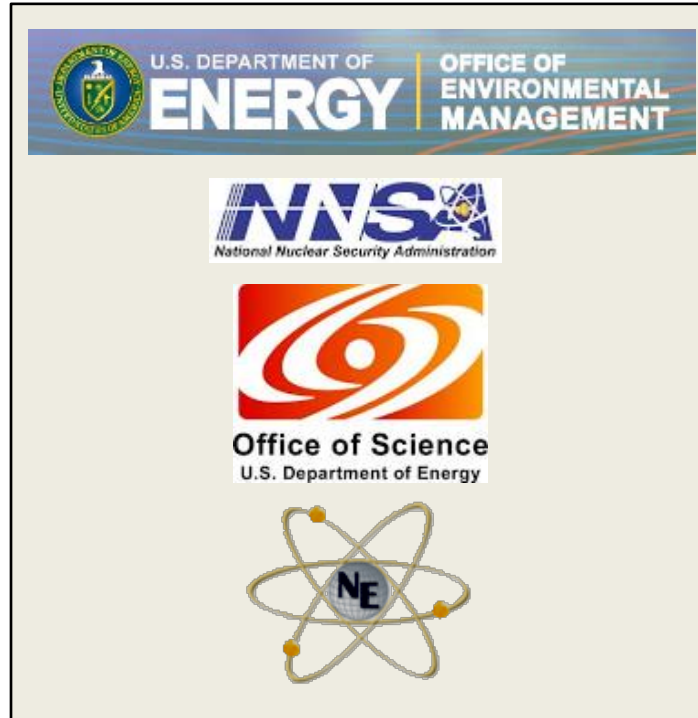


Congress Approves Budget





- Oak Ridge
- Hanford
- Savannah River
- Paducah / Portsmouth
- Others



Submits to Office of Management and Budget →

Office of Management and Budget

Each Agency Submits Their Budget to OMB

Office of Management and Budget Consolidates All Department Budgets

President Approves the Budget



U.S. DEPARTMENT OF ENERGY



Submit



Pass-back



Appeal



Submits to Congress

Congressional Approval

Sub-Committees Develop Bills

Appropriation Committee Approves Bills and Sends for Vote

President Signs Budget into Law



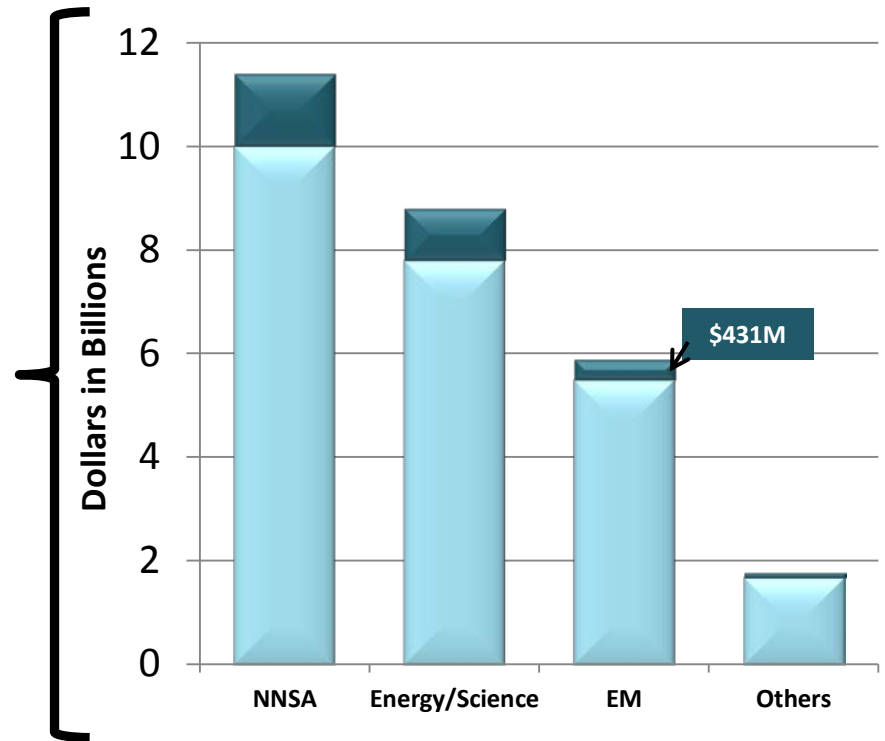
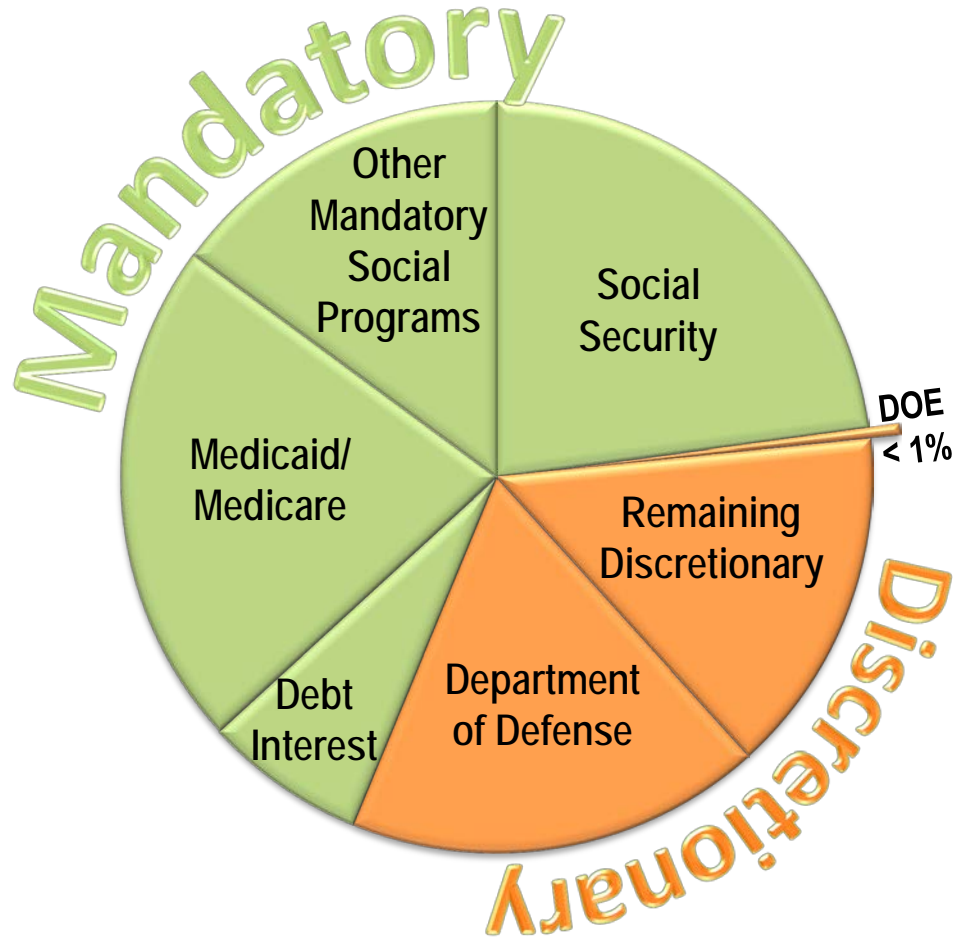
Conference

- Resolves Differences
- Sends Back for Final Vote



Federal Budget (\$ 3.9 Trillion)

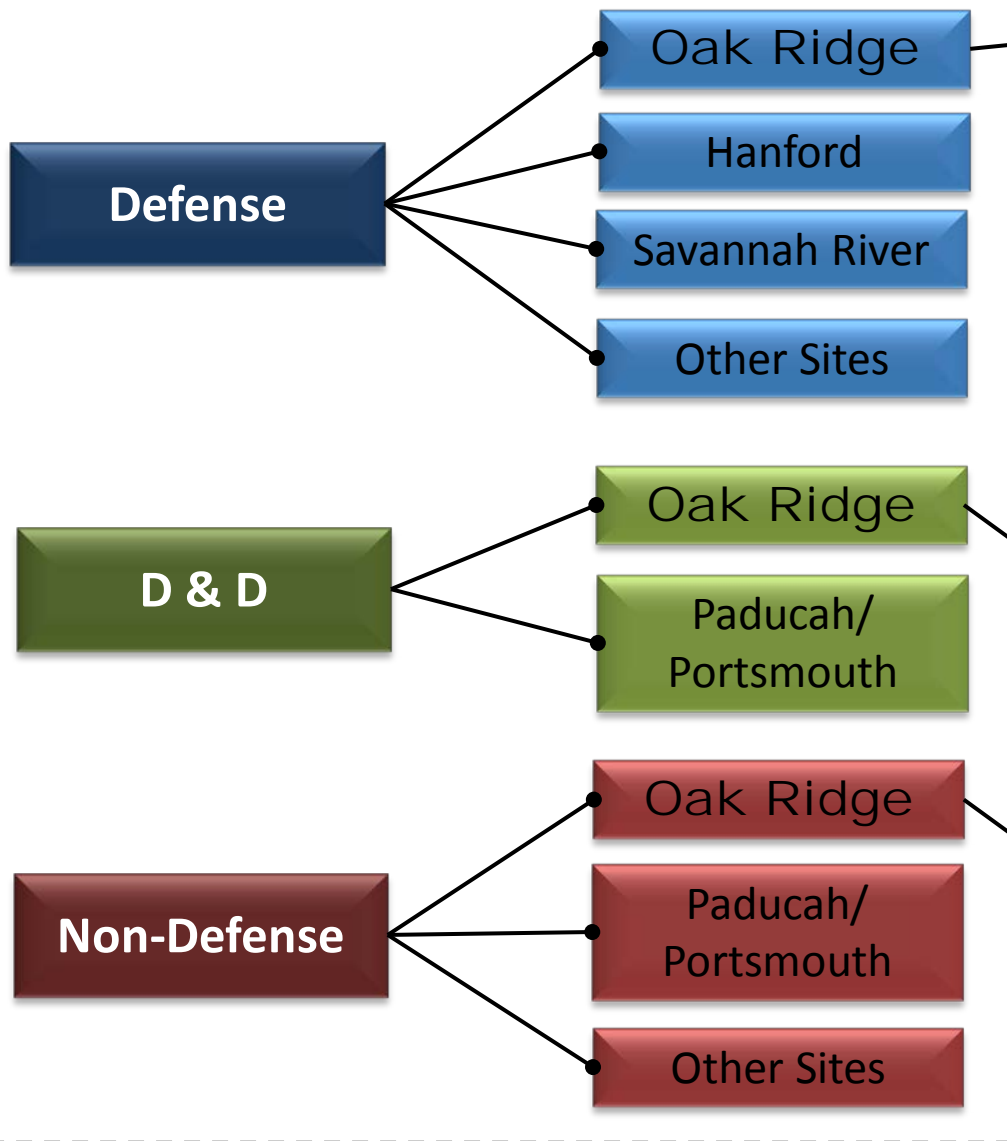
Department of Energy (\$28 Billion)



 = DOE Oak Ridge (\$3 Billion)

---Transfers Require Congressional Approval---

---Transfers up to \$5M Allowed---



PBS	Project	\$M
11D	U-233 Disposition	26.9
13B	TRU Waste Operations	60.5
20	Safeguards & Security	17.2
41	Y-12 Cleanup	41.8
42	ORNL Cleanup	40.9
43	Centrifuge S&M	0.1
100	Community and Regulatory Support	4.4
TD	Tech Development	2.8
Defense Subtotal		194.6

PBS	Project	\$M
40	ETTP Cleanup	154.2
102	Post Retirement Life and Medical	16.9
D&D Subtotal		171.1

PBS	Project	\$M
104	Historic Preservation	0
Non-Defense Subtotal		0

Oak Ridge Total = \$366M

During any one year, we are working three budgets:

FY 2015
Executing
Enacted
Budget

OREM Budget
\$431M

FY 2016
Congress
Reviewing
President's
Request

OREM Budget
\$366M

FY 2017
Sites
Developing
Budget

OREM Budget
Under Development



OREM uses stakeholder input obtained during the Community Budget Workshop to develop our site budget request