

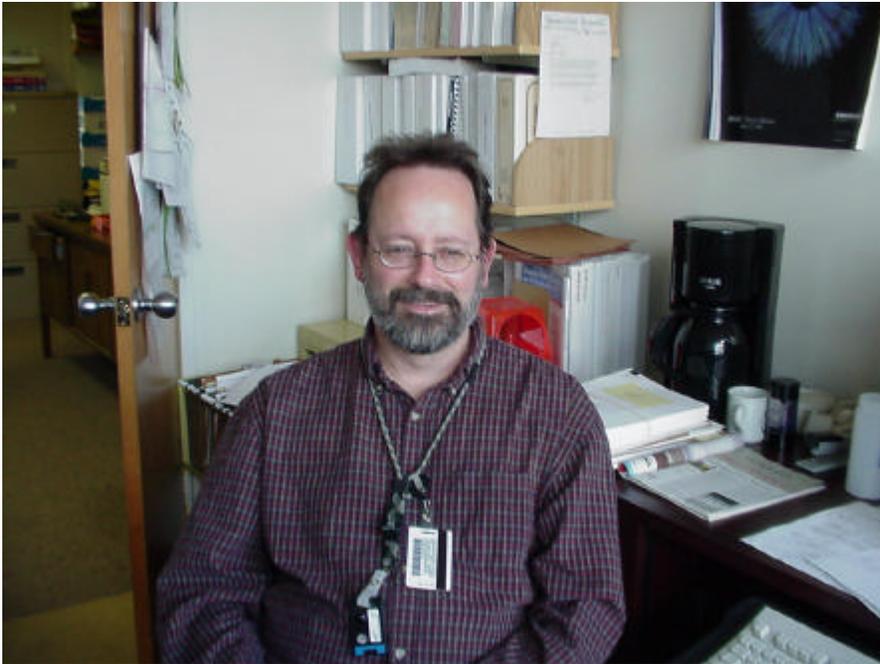


Brookhaven National Laboratory Overview FY 2001 Start of Year Review

Gail Penny
EM Team Leader
DOE Brookhaven Area Office



EM Hero's at Ground Zero



Mark "Pentium" Parsons

Lloyd "Half" Nelson





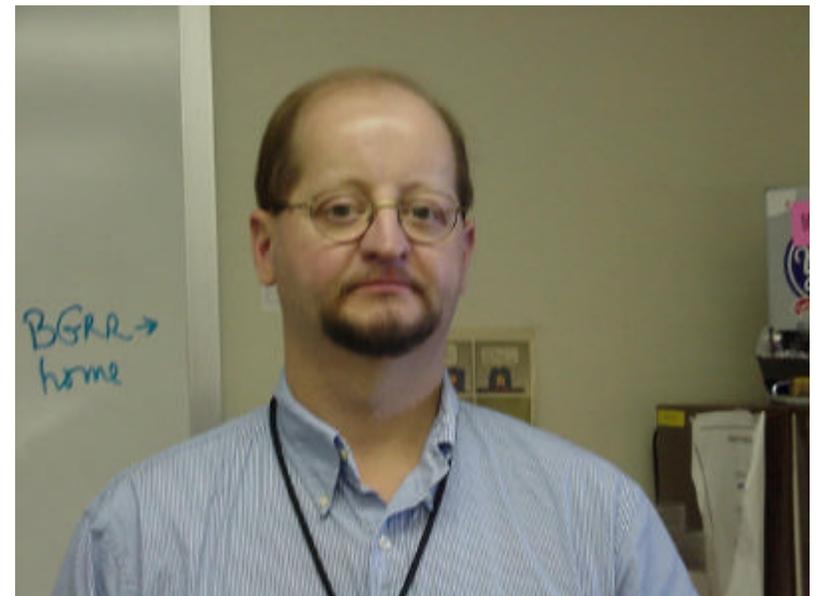
Our Hero's at Ground Zero

Paul "Buttless" Jones

Steve "The King of RAP" Centore



Pete "Don't Mess with Me" Kelley







BNL FY01 Start of Year (FY02 Look Ahead) Review

Today's Agenda:

Progress in FY 2001

Plans for FY 2002

Key DOE and BNL Management Systems

BGRR – Mark Parsons

Peconic River Path Forward – Lloyd

Nelson



BNL FY01 Start of Year EM Uncosted Summary

Category	FY 00 Carryover	FY01 Obligations	Total Funds Available	FY01 Costs (thru 9/30)	Uncosted Obligations	FY01 Uncosted Obligations		
						Contractor Encumb.	Approved Work Scope	Unencumb
Program Management	-198	5,167	4,968	4,367	601	0	601	0
BGRR	(130)	8,512	8,308	6,880	1,500	291	1,209	0
BGRR - SC	0	200	200	200	0	0	0	0
HFBR	400	15,265	15,663	14,413	1,251	0	1,251	0
Boneyard	210	10,491	10,701	7,161	3,541	486	3,055	0
Remedial Action	306	17,803	18,109	13,089	5,020	2,163	2,857	0
RA-SC	0	3,000	3,000	3,000	0	0	0	0
ASTD	1,100	0	1,100	820	280	0	280	0
Total	1,688	60,438	62,049	49,930	12,193	2,940	9,253	0



BNL FY01 Start of Year Major Accomplishments

◆ DOE/BSA Workshop Held in February

– Recommendations:

- ▼ Hold BSA accountable
- ▼ Dis-integrate BNI
- ▼ New Baseline needed
- ▼ 30-60-90 day improvements plan developed and implemented

– Status:

- ▼ New EM Director Hired and Management Team in Place
- ▼ Baseline Updated and Approved
- ▼ BNI gone as of 6/30
- ▼ New EM Critical Outcome established



BNL FY01 Start of Year Major Accomplishments

◆ **Rad Soils (OU I)**

- Completed Landscape Soils Project
- Finalized Design
- Prepared Building 811 and 650 Remedial Action Work Plans
- Terminated IT Corp. contract for 811/650 project

◆ **Peconic River (OU V)**

- Reached agreement on Sewage Treatment Plant ROD with regulators
- Developed new approach for Peconic River



OU I – Chemical Holes Soil Sorting



(October 2001)

Mechanical screening of stockpile 6B was performed to remove items greater than 1/2 inch in response to vials of mercury found last year. Some hand raking is still required.

This process is more efficient and cost than the hand raking performed this past spring and is incorporated into BNL FY02 ASTD Proposal.



BNL FY01 Start of Year Major Accomplishments

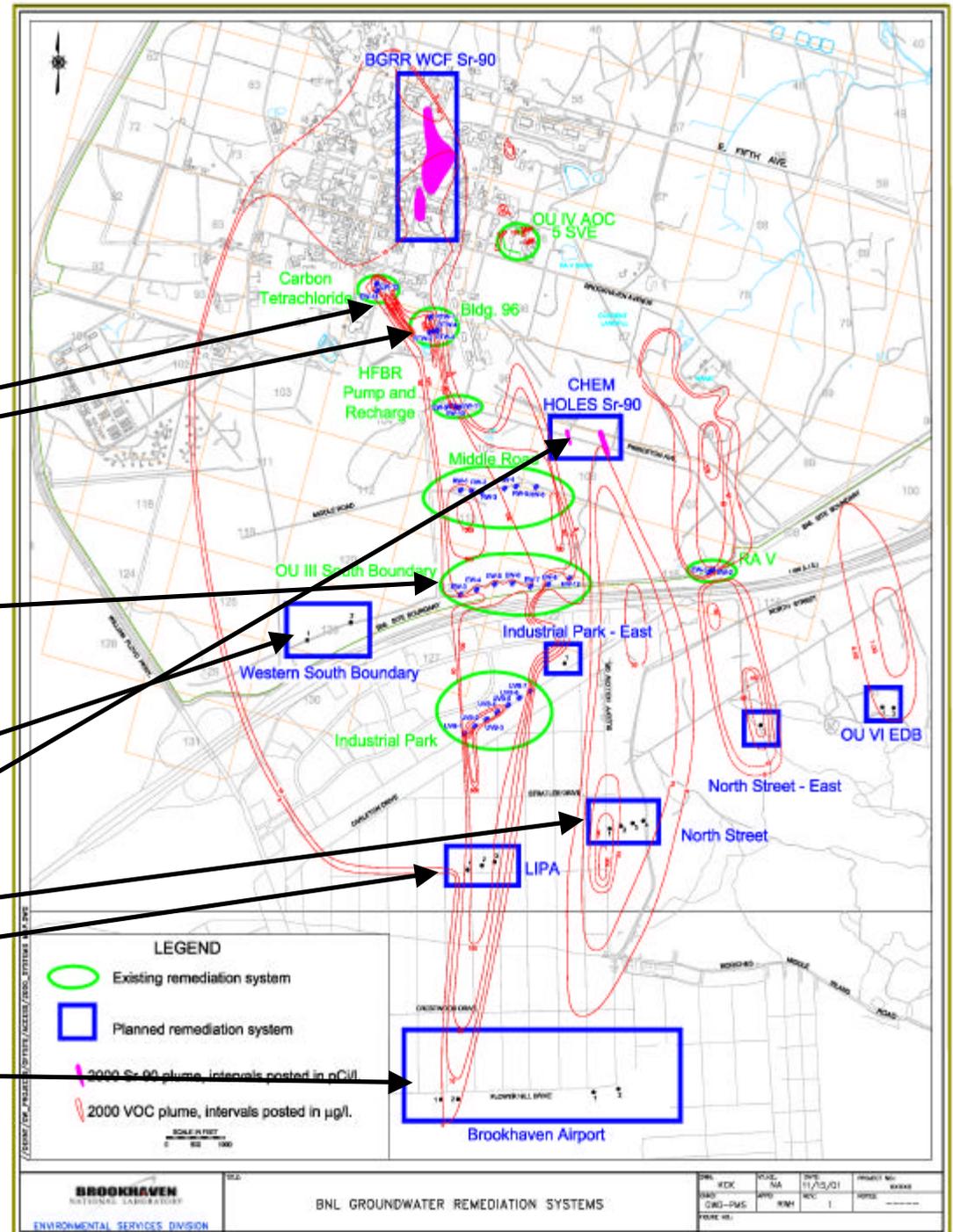
◆ Groundwater:

- OU VI ROD signed March 9th
- Treated 1 billion gallons of groundwater and removed 600 lbs of VOCs
- Completed Design for Western South Boundary System, submitted draft RA Work Plan and issued Notice to Proceed
- Completed Construction of Middle Road System & startup testing is underway
- Completed Low Flow Pumping of Tritium Plume and submitted one-year evaluation report
- Obtained off-site access for characterization and design activities



PROGRESS IN FY 2001

- ◆ Active Remediation Complete
 - Tritium Hot Spot
 - OU IV
- ◆ Construction Complete:
 - Middle Road
- ◆ Construction Started:
 - Western South Boundary
- ◆ Design Underway:
 - Sr-90 Chem Holes
 - North Street
 - LIPA
 - Airport





OU III – Western South Boundary



Installation of extraction wells – September 2001.



BNL FY01 Start of Year Major Accomplishments

- ◆ **Boneyard:**
 - Much waste shipped
 - Sources, some debris & DAW remain
- ◆ **Brookhaven Graphite Research Reactor**
 - Removed Above Grade Ducts
 - ▼ Shipment to Envirocare underway
 - Started characterization of Below Grade Ducts
 - ▼ Smart 3D
 - Removed Canal/Water Treatment House
 - ▼ Remediation of soils, piping, sumps and canal underway



Boneyard Waste Project



Volume reduction of the “tritium ball”.



Boneyard Waste Project





BNL FY01 Start of Year Major Accomplishments

- **High Flux Beam Reactor:**
 - Prepared Baseline & Early D&D Planning
 - Characterized Building 750
 - Performed PA/SI on Balance of Plant
 - Stabilized for S&M in FY 2002
 - ▼ Transferred equipment to other research facilities
 - ▼ Cooling Tower Removed
 - ▼ FA 310 tank and soil removed
 - ▼ Canal Liner completed
 - Transitioned from 91 to 2 FTEs
 - Services and utilities minimized



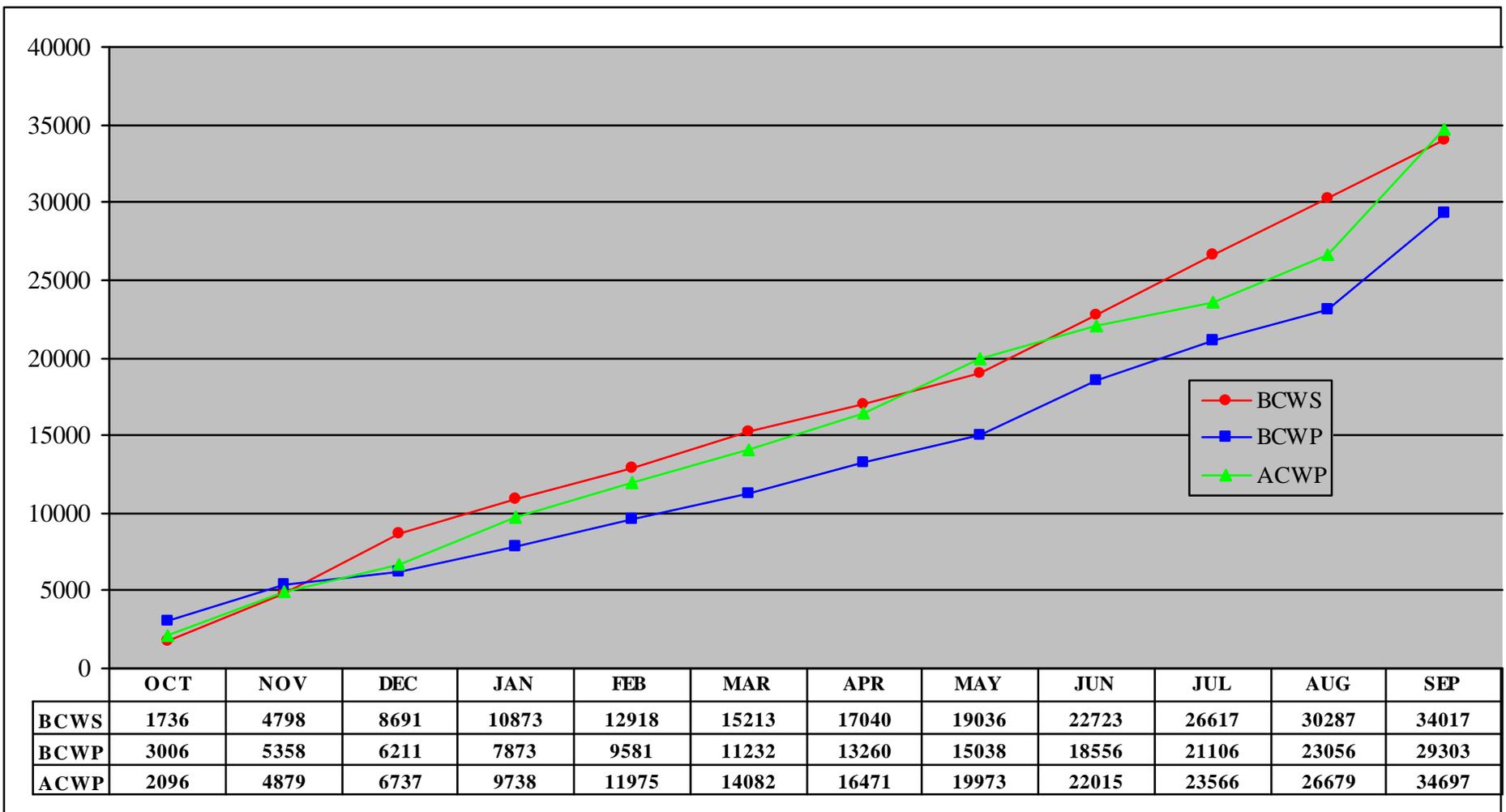
BNL FY01 Start of Year EM Stakeholder Involvement

◆ Highlights:

- Community Advisory Council and elected officials obtained additional funding to accelerate the BNL cleanup program
 - ▼ Markup in FY 2001
 - ▼ \$10M supplemental in late FY 2001
- Established “Bill Richardson” Ecological Reserve
- Restructured Peconic River approach with stakeholders



BNL FY01 Start of Year EM Cost Performance (000s)*



* Does not include HFBR.



BNL FY01 Start of Year Cost Variance Analysis

BCWP \$29,303K ACWP \$34,697K CV \$-5,394K

- ◆ **Variance Explanation:** Additional costs on OUI (\$1.1M); BGRR (\$2.9M) and Boneyard (\$1.1M).
- ◆ **Impacts:** FY 02 Work is being prioritized.
- ◆ **Corrective Measures:** BCPs are being processed for additional scope items such as waste volumes at Boneyard and additional characterization at BGRR on Below Grade Ducts. BCP process needs improvement. BGRR approach being closely examined.



BNL FY01 Start of Year Schedule Variance Analysis

BCWP \$29,303K BCWS \$34,017K SV \$-4,714K

◆ **Variance Explanation:**

- Delays in BGRR (\$2.2M)
- OU I (\$1.4M) due to termination of IT Corp. on Bld 811/650 project
- OU III (\$0.7M) due to delays in off-site access & tritium well installation.

◆ **Impacts:** IAG extension required for BGRR.

◆ **Corrective Measures:** Level 3 schedules developed for on-going projects. Bld 811 project will be rescheduled. BGRR schedule to be reviewed in light of level 3 schedule development and overall budget picture.



BNL FY01 Start of Year Cost Avoidances/Savings

- ◆ Received 2nd ASTD for BGRR Characterization (Smart 3D)
- ◆ More Efficient Groundwater Sampling
 - Completed DQO effort to reduce sampling
 - Conducted as part of overall BNL review required by ESH Critical Outcome
 - This effort will save \$350K per year





BNL FY01 Start of Year Cost Avoidances/Savings (cont.)

- ◆ Cost Effective Waste Management
 - Continued use of DOE Direct Contracts (e.g. Ohio) for Treatment and Disposal
 - Continued Rail Shipment
 - Combined debris and soil shipments to Envirocare saved \$242K in FY01
 - Lead recycled (MIT)



BNL FY 2002

Planned Accomplishments

- ◆ Complete Western South Boundary & Sr-90 Chemical Holes Treatment Systems
- ◆ Conduct pre-design characterization and design of off-site systems (LIPA, North St. East, OU VI, etc.)
- ◆ Excavate Bld 650 Sump and Outfall
- ◆ Sort Chemical Holes Soil to remove non conforming items
- ◆ Complete removal of Boneyard Waste
- ◆ Complete shutdown activities at HFBR for minimal S&M in FY02
- ◆ Complete HFBR PA/SI



Key DOE and BNL Management Systems

- ◆ **Contract Performance and Evaluation**
 - Appendix B Critical Outcome
 - Independent DOE Assessments
 - Incorporates Self Assessment

- ◆ **EM Program Planning, Reporting, Evaluation**
 - EM Baseline & Change Control Procedures
 - Annual Work Authorizations
 - Program Reviews, Formal Monthly Meeting
 - Monthly Reports, IPABS
 - BAO Quarterly Feedback Report & Senior Manager's Meeting



Key DOE and BNL Management Systems (cont.)

◆ Safety Systems

- CH and BAO FRAMs
- BAO Procedures
- BAO Facility Rep Program
 - ▼ Maria Dikeakos & Harold Taylor
- BNL Standards Based Management System (SBMS)
- ISM System Verified
- ISO 14000 Registered

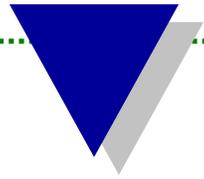


BNL Challenges

- ◆ Boneyard: Sources and ATG
- ◆ Peconic River
 - To dig or not to dig
- ◆ BGRR End State
- ◆ Final Access for construction of groundwater treatment systems
- ◆ FY 2002/03 Budget
 - Does not meet regulatory commitments
- ◆ HFBR D&D?
- ◆ New Scope in FY 03 Pipeline - Bld. 650 & BMRR



Chicago Operations Office



Brookhaven National Laboratory Background Slides



Map of BNL Site and Operable Units

