

Richland Operations Office EM Project(s)
Baseline Summary
June 2008

BACKGROUND

The Richland Operations Office (RL) manages cleanup of the Hanford Site, with the exception of the reprocessing waste tank farms (managed by the Office of River Protection), and the Pacific Northwest National Laboratory (managed by the Office of Science, Pacific Northwest Site Office). Located in southeastern Washington State, the 1,533 square kilometer (586 square mile) site contains the Central Plateau, the River Corridor, and the Fast Flux Test Facility and a large area of natural-habitat buffer zone.

For more than 40 years, plutonium for the nation's nuclear defense program was produced at the Hanford Site. As a result, areas within the site's boundaries are contaminated by chemical or radioactive waste making the Hanford Site the largest environmental restoration effort in the nation. Peak production years were reached in the 1960s when nine production reactors were in operation along the Columbia River. The last reactor to be shutdown was the N-Reactor and its spent fuel (originally stored in the K-Basins) has been relocated to dry storage on the Central Plateau. Soil and groundwater contamination from past operations resulted in placement of the site on the National Priorities (Superfund) List.

The Central Plateau contains the following areas:

- The 200 East Area covers approximately 9.1 square kilometers (3.5 square miles). The area has two processing plants: B Plant and Plutonium Uranium Extraction Plant. B Plant was deactivated in 1998 and Plutonium Uranium Extraction Plant was shut down in 1997. Buildings, in this area, that are used in waste activities include the Effluent Treatment Facility, Treated Effluent Disposal Facility, Waste Encapsulation and Storage Facility, and the Container Storage Building. Offices and infrastructure support facilities are also located in the 200 East Area.
- The 200 West Area covers just under 13 square kilometers (5 square miles) and is located about 13 kilometers (8 miles) from the Columbia River and 40 kilometers (25 miles) from Richland. The 200 West Area includes Central Waste Complex, Waste Receiving and Processing, Environmental Restoration and Disposal Facility and three processing plants: T Plant, U Plant and S Plant. T Plant and U Plant were nearly identical in function at the time of construction in 1943 and 1944. The S Plant was a second-generation processing plant that began operation in 1952. The duplication of facilities was done for safety as well as security. U Plant and S Plant are shut down. The T Plant has not conducted plutonium processing since 1956 but currently operates to treat and repackage low level and transuranic wastes. The Plutonium Finishing Plant complex consists of multiple buildings that were used for production of plutonium nitrates, oxides and metal from 1950 through early 1989.

The River Corridor contains the following areas located along the Columbia River:

- 100 B & C Areas: B Reactor, the first full-size nuclear reactor in the world, was the first reactor built on the Hanford Site. It has received several national awards as a nuclear and engineering landmark, and has the distinction of being listed on the National Register of Historic Places. When the reactor operated, water pumped from the Columbia River circulated around the radioactive fuel to cool it while it was in the reactor. This water was then sent through underground pipes to pond sites. The water was temporarily kept there to allow it to both cool off in temperature and to let some of the short-lived radioactivity decay. The water was then discharged to the river. Near B Reactor, in an area between the Columbia River and the reactor, is a site where contaminated soil is being remediated.

C Reactor has been placed in interim safe storage that will last for up to 75 years. This has involved removing the fuel storage basin, the fuel examination facility, the surrounding support buildings, and portions of the C Reactor building structure. This reduced the size of the original footprint by 81 percent. A new weatherproof roof and a remote monitoring system were then put in place. Putting the reactor into a safe condition not only will shield the reactor core for up to 75 years, but it will also reduce the time and money needed for regular surveillance and maintenance.

- 100 K West & K East Areas: K-West and K-East Reactors were built in 1955 and were shut down in 1970 and 1971. Even though the reactors were shut down, their fuel storage basins remained in operation, providing storage for up to 2,300 tons of spent nuclear fuel. The fuel came from N Reactor operations during the 1970s and 1980s. The highly radioactive spent nuclear fuel from the K Basins has now been retrieved, cleaned, packaged and safely stored away from the Columbia River in the 200 Area.
- 100 N Area: N Reactor operated from 1963 to 1987 when it was shut down for maintenance, refueling, and safety upgrades. In April 1986, the Chernobyl nuclear plant accident in the Soviet Union drew public attention to N Reactor due to its similar graphite block design. Although the Energy Department ordered safety enhancements be made to the facility, by early 1988 DOE had decided to place N Reactor on standby. With the end of the Cold War, the need for Hanford's plutonium production capacity reduced resulting in N Reactor's permanent shutdown. The N Reactor Area facilities have been deactivated and 23 of the slightly more than 100 buildings have been demolished. It also contains numerous waste sites in the process of remediation.
- 100 D & DR Areas: Contains both D Reactor, one of the original three reactors built in World War II, and the D Replacement Reactor (DR) built next to it in 1949/50. The two reactors operated side-by-side until the mid-1960s. The D and DR Reactors have been placed into interim safe storage.
- 100 H Area: Construction of H Reactor started in March 1948 and operations began in 1949. The H Reactor was built as part of Hanford's first Cold War expansion, in response to some of the earliest events of the Cold War. It was shut down in 1965 and

placed into interim safe storage in October 2005. Remediation of H Area waste sites begins in July 2008.

- 100 F Area: F Reactor went into production in February 1945 during World War II and was shut down in 1965. Upon completion, 100-F Area contained 29 permanent buildings and 24 facilities. F Reactor was placed into interim safe storage in January 2004. Remediation of F Area waste sites will be completed by December 2008.
- 300 Area: The 300 Area's two main functions were production (or fabrication) of fuel for the Hanford site reactors (performed in the north end of the area) and chemical research to improve the entire production process. Some of the buildings in the 300 Area were constructed during World War II. During the Cold War, many of the 300 Area laboratories performed research to expand and improve the efficiency of weapons production. Now, many of them are undergoing cleanout and deactivation. Several buildings remain active including laboratories, technical shops, engineering offices, support facilities, the Treated Effluent Disposal Facility, and the 340 Facility. Approximately 100 facilities have been demolished in the 300 Area.
- 400 Area external to the protected area contains warehouses, repair facilities and miscellaneous office spaces that are to be demolished.

The Fast Flux Test Facility is located within the property protection fence in the 400 Area. This facility's planning began in 1965, during the heyday of commercial nuclear power building and experimentation. Construction was completed in 1980 and full critical operations began in early 1982. Built to be the prototype for America's breeder reactor program, the reactor was designed to bridge the Hanford Site to a new non-defense role. It was designed primarily to test fuels and materials for the nation's advanced reactor program. Final shut down of the facility was initiated in January 2001.

The remaining lands of the Hanford site covered under RL's oversight are included in the 600 Area. The Eberhart/Fitzner Arid Lands Ecology Reserve and the Hanford Reach National Monument/Saddle Mountain National Wildlife Refuge, managed by the U.S. Fish and Wildlife, serve as a security buffer for the activities conducted in the 100 and 200 Areas. In this area is Energy Northwest Power which operates a nuclear power plant on leased land. Also, located in the 600 area are utility corridors and remediation sites, such as the 618-10 and 618-11 Burial Grounds.

SCOPE DESCRIPTION

The Federal government is expected to maintain ownership of most of the site once cleanup is complete. To date, about 50 percent of Hanford Site lands have been cleaned to land-use standards and made ready for alternate uses. The North Slope has been put under the management of other Federal and Washington State agencies, but remains under DOE ownership to maintain a safety buffer zone and pristine habitat. In 1999, DOE completed an environmental impact statement for the Final Comprehensive Land Use Plan. Final decisions on the level of cleanup to be performed on individual waste sites continue to be made through the

Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) decision processes.

The Central Plateau has ongoing waste management activities, which include storage of spent nuclear fuel at the Canister Storage Building, Cesium and Strontium capsules in the Waste Encapsulation and Storage Facility, and transuranic waste, mixed low-level waste and low-level waste at the Central Waste Complex. The Waste Receiving and Processing Facility certifies and ships transuranic waste for disposal at the Waste Isolation Pilot Plant. The non-transuranic waste is permanently disposed either at the ERDF or mixed low-level waste trenches. Other Central Plateau activities include operations of mixed low-level waste trenches, treatment of mixed low-level waste to meet regulatory requirements, disposition of defueled naval reactor compartments, and storage and treatment of liquid wastes at the Effluent Treatment Facility, Liquid Effluent Retention Facility, and Treated Effluent Disposal Facility.

Much of the Hanford Site's existing infrastructure has its roots in the Manhattan Project. Railroads, utilities, roads and buildings were constructed during the 1940's as part of the wartime effort. The infrastructure supports the various projects at Hanford with a majority of the centralized system existing in the 200 Area. Sufficient infrastructure will be maintained as the cleanup mission progresses. As the need for the infrastructure diminishes, these systems and components will be demolished, removed or placed in long term stewardship.

The River Corridor has ongoing remediation and demolition activities. The River Corridor includes the remediation of over 800 contaminated waste sites; deactivation, decontamination, decommission and demolition of over 500 facilities; interim safe storage actions of eight reactors (assumes retention of B Reactor as a Museum); and disposal of over 10.4 million tons of contaminated waste.

The specifics, priorities, and milestones associated with the cleanup program are addressed in a 1989 Hanford Federal Facilities Agreement and Consent Order known as the Tri-Party Agreement (TPA). Parties to the agreement are the DOE, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology.

PROJECT MANAGEMENT

Based on the direction from EM Headquarters, the Richland Operations Office developed the near-term baseline for each of its projects. These project baselines have undergone an independent review to verify the reasonableness of the scope, cost, and schedule for each project. An approved near-term baseline reflects the identified scope that can reasonably be accomplished for the identified cost in the identified time period if near-term baselines are funded as profiled and contingency funds are provided as required during project execution. It also establishes the baseline as an acceptable point from which to track and control future change. The review and approval process accommodates the likely changes in the EM complex, site priorities and funding plans. These changes could affect both near-term (within the next five years) and life-cycle cost, schedule and scope. Such future changes may be necessary to comply with applicable environmental legal obligations while maintaining essential functions necessary to protect human health, the environment and national security; reflect funding different from the baseline assumptions; incorporate technological advances; realize specific programmatic risks;

or implement programmatic business cases. Because the cleanup extends beyond the near-term, out-year planning estimates (ranges) have also been developed and independently reviewed.

LIST OF PROJECTS

The Richland Operations Office EM program consists of seven projects as shown below:

Project	Date Approved	
	Near Term Baseline (NTB)	Out Year Planning Estimate Range (OPER)
RL-0011, NM Stabilization and Disposition - PFP	January 18, 2008	January 18, 2008
RL-0012, SNF Stabilization and Disposition	January 18, 2008	January 18, 2008
RL-0013, Solid Waste Stabilization and Disposition – 200 Area	January 18, 2008	January 18, 2008
RL-0030, Soil and Water Remediation - Groundwater/Vadose Zone	January 18, 2008	January 18, 2008
RL-0040, Nuclear Facility D&D – Remainder of Hanford	January 18, 2008	January 18, 2008
RL-0041, Nuclear Facility D&D – River Corridor Closure Project	January 11, 2008	N/A
RL-0042, Nuclear Facility D&D – Fast Flux Test Facility Project	January 30, 2008	January 30, 2008

The Near-Term Baseline (NTB) for RL-0011, RL-0012, RL-0013, RL-0030 and RL-0040 is from FY 2008 through FY 2013 and the Out Year Planning Estimate Range (OPER) is from FY 2014 through FY 2019 for RL-0011, FY 2014 through FY 2030 for RL-0012, 2014 through FY 2058 for RL-0013, FY 2014 through FY 2059 for RL-0030 and FY 2014 through FY 2062 for RL-0040. The Near-Term Baseline (NTB) for RL-0041 is from FY 2006 through FY 2019. The Near-Term Baseline (NTB) for RL-0042 is from FY 2007 through FY 2014 and the Out Year Planning Estimate Range (OPER) is from FY 2015 through FY 2030.

PROJECT SCOPE

RL-0011 – NM Stabilization and Disposition – PFP

The Plutonium Finishing Plant (PFP) consisted of over 60 facilities that were used for production of plutonium from 1950 to 1989. The PFP Closure Project mission is to deactivate, decontaminate, decommission, and demolish the PFP Complex to slab-on-grade. This includes shipment of the PFP inventory of plutonium bearing materials, nuclear fuel, and other nuclear material to other locations for reuse, long-term storage, and/or final disposition. The objectives for the project are:

- Removal of plutonium-bearing material and waste, unirradiated fuel, slightly irradiated fuel, and other nuclear materials from PFP facilities.
- Eliminate the Protected Area at PFP.
- Complete cleanout and demolition of facilities in the PFP complex.

- Transfer complex to RL-0040 for final remediation.

RL-0012 – SNF Stabilization and Disposition

The K Basins Closure project, which includes the K Basins, is the highest risk reducing project because of its proximity to the Columbia River. Significant risk reduction has been achieved through removal of 2,300 tons of spent nuclear fuel from K Basins, representing over 55 million curies of radioactivity reduction (95 percent of the radioactivity in Hanford's River Corridor) from near the Columbia River. Additional risk reduction will be achieved by treating sludge and placing it in a form suitable for disposal. The following activities are being implemented to transition the K Basins complex into a low risk, low cost surveillance and maintenance condition pending final remediation:

- Removed approximately 2,100 metric tons of degrading spent nuclear fuel from wet storage in the K Basins and then repackage, dry and transport it for interim on-site storage at the CSB in the 200 Area (Complete October 2004).
- Remove, treat, and package approximately 30 cubic meters of radioactive sludge from the K Basins.
- Permanently dispose of the debris from the K Basins in the 200 Area.
- Transport the K Basins water to the 200 Area Effluent Treatment Facility for treatment and disposal.
- Remove and dispose of the basin superstructures.

RL-0013 – Solid Waste Stabilization and Disposition – 200 Area

The Solid and Liquid Waste Treatment and Disposal Project provides solid and liquid waste storage, treatment, and disposal services in support of Hanford Cleanup, treats and disposes of legacy and newly generated low-level waste (LLW), mixed low-level waste (MLLW), and transuranic (TRU), retrieve suspect TRU waste from the Low-Level Burial Grounds, certifies TRU waste for disposal at the Waste Isolation Pilot Plant (WIPP) in New Mexico, and provides interim storage of spent nuclear fuel and cesium and strontium capsules until dispositioned to an offsite repository. Additionally, the Project provides for waste disposal for LLW/MLLW generated at various sites throughout the DOE Complex.

To accomplish its mission, the Project has established the following objectives:

- Perform operations in accordance with Integrated Safety Management System (ISMS) principles, regulatory permits, and safety requirements.
- Dispose waste as generated and eliminate the backlog of waste in storage awaiting treatment.
- Ship TRU waste to WIPP for disposal.
- Develop alternative methods for treatment and disposal of orphan wastes.
- Minimize use of the mixed waste trenches for disposal of waste by sending waste to the Environmental Restoration Disposal Facility (ERDF).
- Store and treat K Basins sludge as required.

- Expand operations at the T Plant to include repackaging of large and remote-handled containers in support of TRU waste processing and certification, MLLW treatment, and TPA milestones.
- Transition the 310 Treated Effluent Disposal Facility and 340 Facility to the River Corridor Contractor for operation or D&D.
- Work proactively with waste generators to ensure an appropriate management and disposition strategy exists before the waste is generated.
- Store spent nuclear fuel and cesium and strontium capsules prior to transfer to an offsite repository.

RL-0030 – Soil and Water Remediation - Groundwater/Vadose Zone

The groundwater and soil under the Hanford Site has been contaminated from past Hanford operations through discharge of radioactive and hazardous liquid waste to cribs, ditches, trenches, ponds, and from waste tank leaks. Currently, approximately 80 square miles of groundwater exceed drinking water standards and portions of this groundwater contamination have reached the Columbia River. This Project provides for groundwater characterization, monitoring and remediation to address groundwater contamination and long-term monitoring post remediation. The primary contaminants of concern at the Hanford Site are carbon tetrachloride, chromium, technetium 99, strontium, and uranium. The Project implements AEA, CERCLA, RCRA, and other environmental laws to remediate and protect the groundwater. The Project includes monitoring the groundwater by sampling approximately 1,500 wells. This Project also includes the decommissioning of approximately 2,000 excess wells.

To accomplish this scope, the Project has established the following clean-up objectives:

- Remediate high-risk waste sites. The Project supports the identification of high-risk waste sites so that they can be remediated on a priority basis during cleanup. The Project also assists in establishing the remedial action objectives for cleanup.
- Reduce natural and artificial recharge. The Project installs berms to control natural recharge, and re-routes, eliminates and refurbishes waterlines to control artificial recharge.
- Implement groundwater remedies. The Project implements actions to provide for the final remediation of the groundwater/vadose zone.
- Integrate groundwater, vadose zone and source area investigations and clean-up decisions. The Project implements actions to integrate groundwater, vadose zone and source area activities between RL and the Office of River Protection (ORP) and between the Project Hanford Management Contractor (PHMC) and River Corridor contractors. All RL groundwater work is consolidated under the PHMC contractor. A Memorandum of Agreement (MOA) has been established between RL and ORP on the integration of source area, deep vadose zone and groundwater investigations and remediation decisions. An MOA has established between the Assistant Manager for Central Plateau (AMCP) and the Assistant Manager for River Corridor on the integration of source area, deep vadose zone and groundwater investigations and remediation decisions.

RL-0040 – Nuclear Facility D&D – Remainder of Hanford

One legacy of Hanford operations is a significant waste inventory of radioactive and regulated chemical materials. Past releases of these materials have contaminated Hanford's facilities, groundwater, soils, and environment. Over 625,000 cubic meters of solid waste were buried in Hanford site soils, while more than 1.7 trillion liters of liquid waste containing radioactive and chemical contamination have been discharged to the ground. DOE will clean up radioactivity and chemical contamination in about 800 waste sites that have the potential to impact groundwater, and demolish approximately 900 facilities on the Central Plateau and South Hanford Industrial Area.

The mission of the Project is to ensure appropriate protectiveness has been provided for all assigned Central Plateau waste sites and facilities. The Project will execute clean-up of the Central Plateau and establish long-term stewardship requirements of the Central Plateau.

To accomplish its mission, the Project has established the following major objectives:

- Perform all work in accordance with Integrated Safety Management System (ISMS) principles, regulatory requirements, and safety requirements.
- Perform safe surveillance and maintenance of facilities and waste sites pending remediation.
- Provide essential site-wide infrastructure.
- Implement site environmental and resources protection programs.
- Integrate planning and execution activities with other Hanford Central Plateau projects.
- Remediate waste sites.
- Disposition canyons.
- Disposition excess facilities.
- Transition Central Plateau core zone to long term stewardship.

RL-0041 – Nuclear Facility D&D – River Corridor Closure Project

The River Corridor Closure Project will remediate 878 contaminated waste sites (including 51 burial grounds); deactivate, decontaminate, decommission and demolish 503 facilities adjacent to the Columbia River; and place eight reactors into interim safe storage condition; dispose of approximately 10.4 million tons of contaminated waste at ERDF. The work entails excavating and disposing of contaminated soil, backfilling with clean soil, constructing interim safe storage for Defense Production reactors along the Columbia River, and deactivating, decontaminating, decommissioning, and demolishing the surplus facilities in the 100, 300, and 400 Areas.

The River Corridor Project's mission is to clean up the assigned areas of the Hanford Site located in the Columbia River Corridor to a condition suitable for preservation, conservation, recreational, and industrial uses, as appropriate, in an environmentally sound, safe, secure, and cost-effective manner. Final land use for the River Corridor is described in the Volume 64, Federal Register 61615, Record of Decision for the *Final Hanford Comprehensive Land Use Plan, DOE/EIS-0222F*.

To accomplish this mission, the RCCP has established the following cleanup objectives:

- Move all uranium away from the River Corridor. (This activity was completed in 2005 by the Project Hanford Management Contractor.)
- Remediate all waste sites within the scope of the project.
- Remove all excess facilities.
- Place nine plutonium production reactors into interim safe storage. One of the nine, the B-Reactor, is being considered for removal from the project for preservation as a museum.
- Operate the ERDF in a manner that effectively supports field remediation, D4, ISS and other Hanford Site waste generators.
- Complete substantive remediation to allow the 100 and 300 Areas to be deleted from the National Priorities List (NPL). Note that deletion from the NPL requires that groundwater remedies have been implemented and long-term stewardship, including groundwater monitoring, is in place. Direct responsibility for groundwater lies outside the RCCP; however, close coordination and interfaces with the Groundwater/Vadose Zone (GW/VZ) program have been established.

The overall schedule objective of the RCCP is to complete clean-up activities in the River Corridor by the end of Fiscal Year 2015 except for the reactors (which will be placed in interim safe storage) and a limited number of sites that may be specifically excluded from the scope of the RCCP. The Protected Area of FFTF as well as the land leased to Energy Northwest is excluded from the scope of this project.

The overall cost objective of the RCCP is to accomplish the technical objectives by Fiscal Year 2015 within the baseline cost estimate.

RL-0042 – Nuclear Facility D&D – Fast Flux Test Facility Project

The Fast Flux Test Facility (FFTF) Project mission is to deactivate, decommission and demolish the FFTF facilities within the double fence area to meet industrial uses, stabilize the site, and dispose of the wastes.

The project technical objective will achieve the following:

- Remove all fuel from the facility to appropriate storage.
- Remove and disposition sodium coolant and clean residual sodium.
- Fill spaces (grout) below the 550 foot elevation level (grade level) of the Reactor Containment building.
- Decommission and demolish all facilities.

DOE plans to complete major elements of deactivation and place the FFTF and ancillary facilities in long-term surveillance and maintenance. Sodium residuals and bulk sodium disposition, facilities decommissioning and demolition, and site remediation is to be deferred to the out-years. Major Deactivation activities completed include draining the bulk sodium (260,000 gallons) from plant systems, reactor vessel and fuel storage vessels and transferring to the Sodium Storage Facility; reactor defueling, fuel washing, storage of the mixed oxide fuel (367 assemblies) in storage casks; and transfer of the sodium-bonded fuel (11 shipments) to the

Idaho National Laboratory. The end-state for the Fast Flux Test Facility will be determined following the appropriate environmental analysis process. For planning purposes it is assumed the reactor containment dome will be removed, the below-grade reactor containment building will be grouted and entombed, and the support facilities and structures will be demolished. The Fast Flux Test Facility end state alternatives are being evaluated in the Tank Closure/Waste Management Environmental Impact Statement.

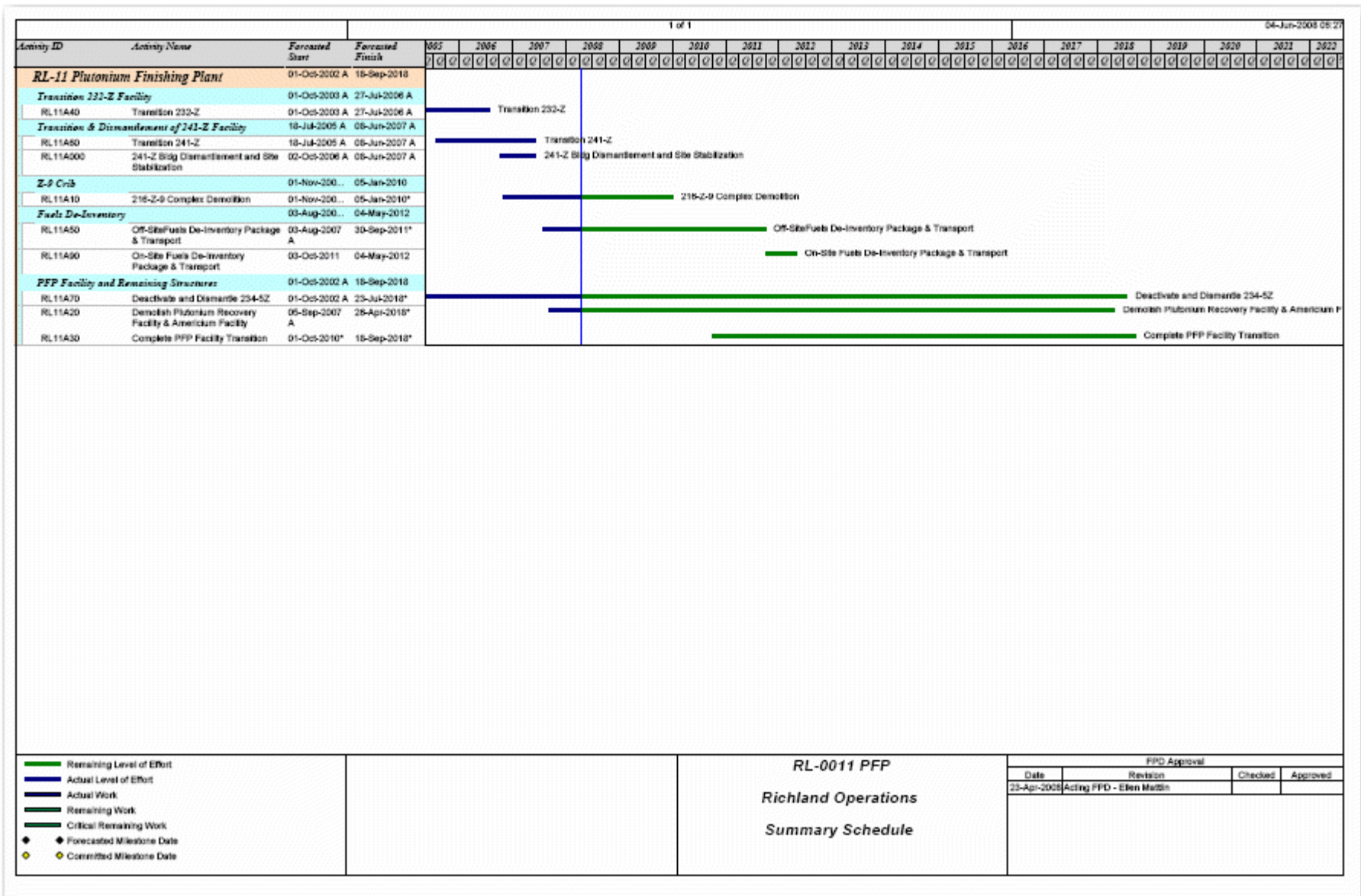
PROJECT COST

(dollars in millions)

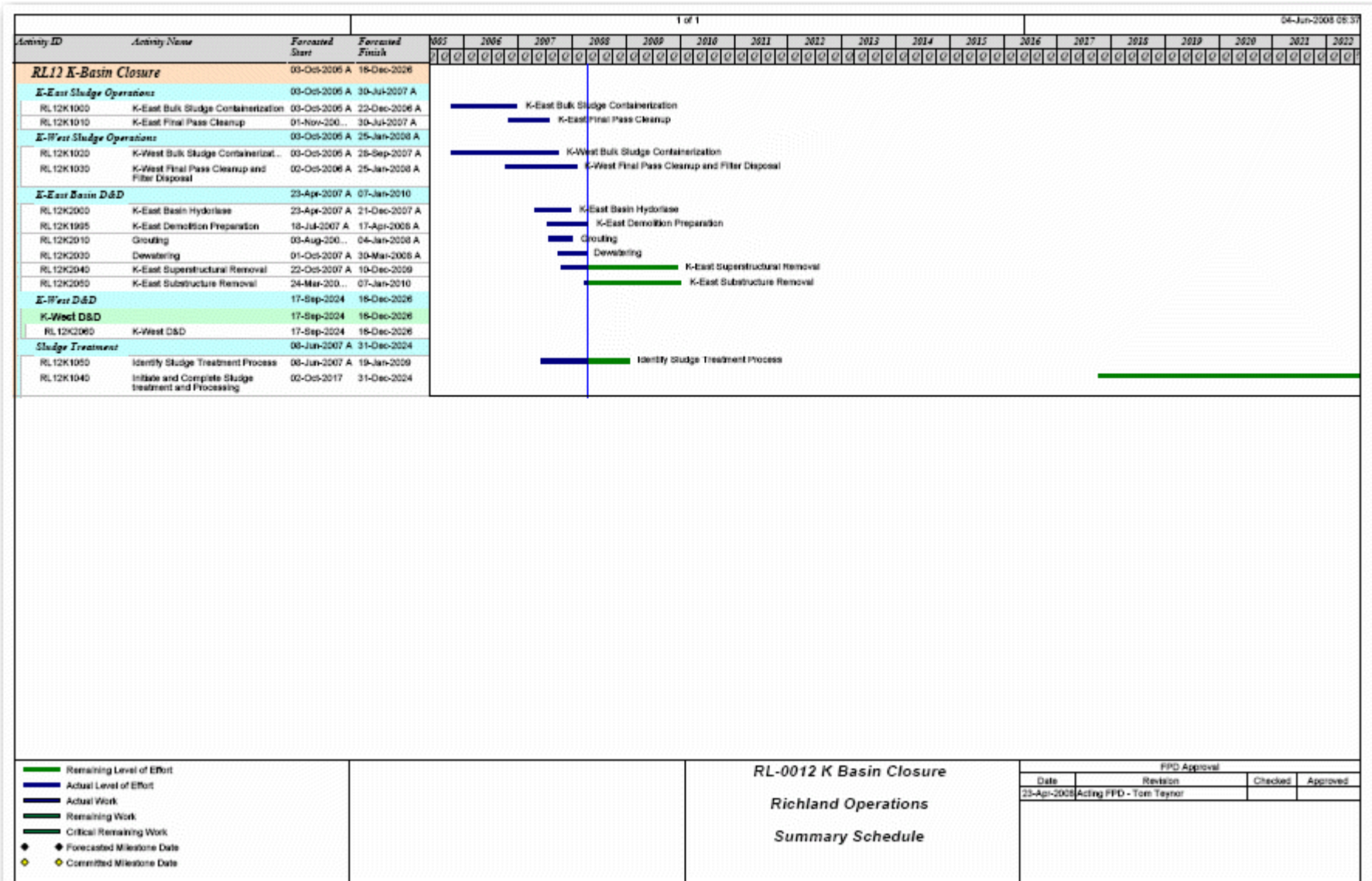
Cost Element	Project Number				
	RL-0011	RL-0012	RL-0013	RL-0030	RL-0040
1. Prior Year Costs (1997-2007)	\$1,280.6	\$2,018.4	\$1,450.4	\$531.8	\$973.2
2. Total Near-Term Baseline (50% Confidence Level)	\$1,142.8	\$198.5	\$918.4	\$1,127.6	\$560.5
3. Unfunded Contingency	\$6.6	\$0.9	\$12.9	\$16.3	\$1.8
4. Performance Baseline (80% Confidence Level)	\$1,149.4	\$199.6	\$931.2	\$1,144.0	\$562.3
5. Out Year Planning Estimate Range	\$1,030 – \$1,060	\$780 – \$820	\$11,200 – \$12,500	\$6,396 – \$6,567	\$17,100 – \$18,511
6. Total Life Cycle Cost	\$3,490	\$3,038	\$14,881	\$8,243	\$20,046

Cost Element	Project Number	Project Number
	RL-0041	RL-0042
1. Prior Year Costs (1997-2004)	\$1,000.1	\$225.8
2. Total Near-Term Baseline (50% Confidence Level)	\$3,900.1	\$110.9
3. Unfunded Contingency	\$158.6	\$6.1
4. Performance Baseline (80% Confidence Level)	\$4,059.7	\$117.2
5. Out Year Planning Estimate Range	0	\$910.4 – \$973.8
6. Total Life Cycle Cost	\$5,058.8	\$1,317

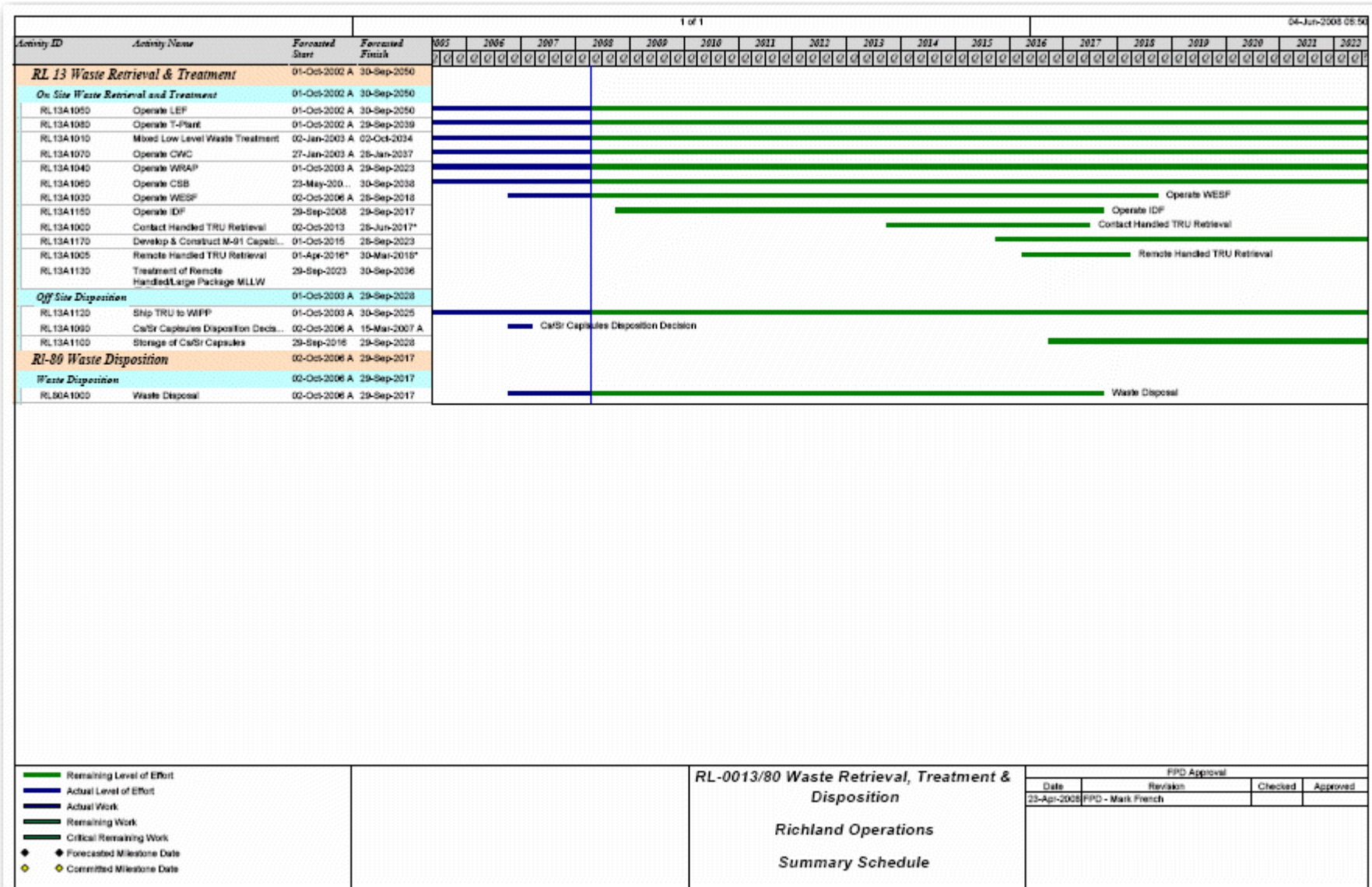
SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0011



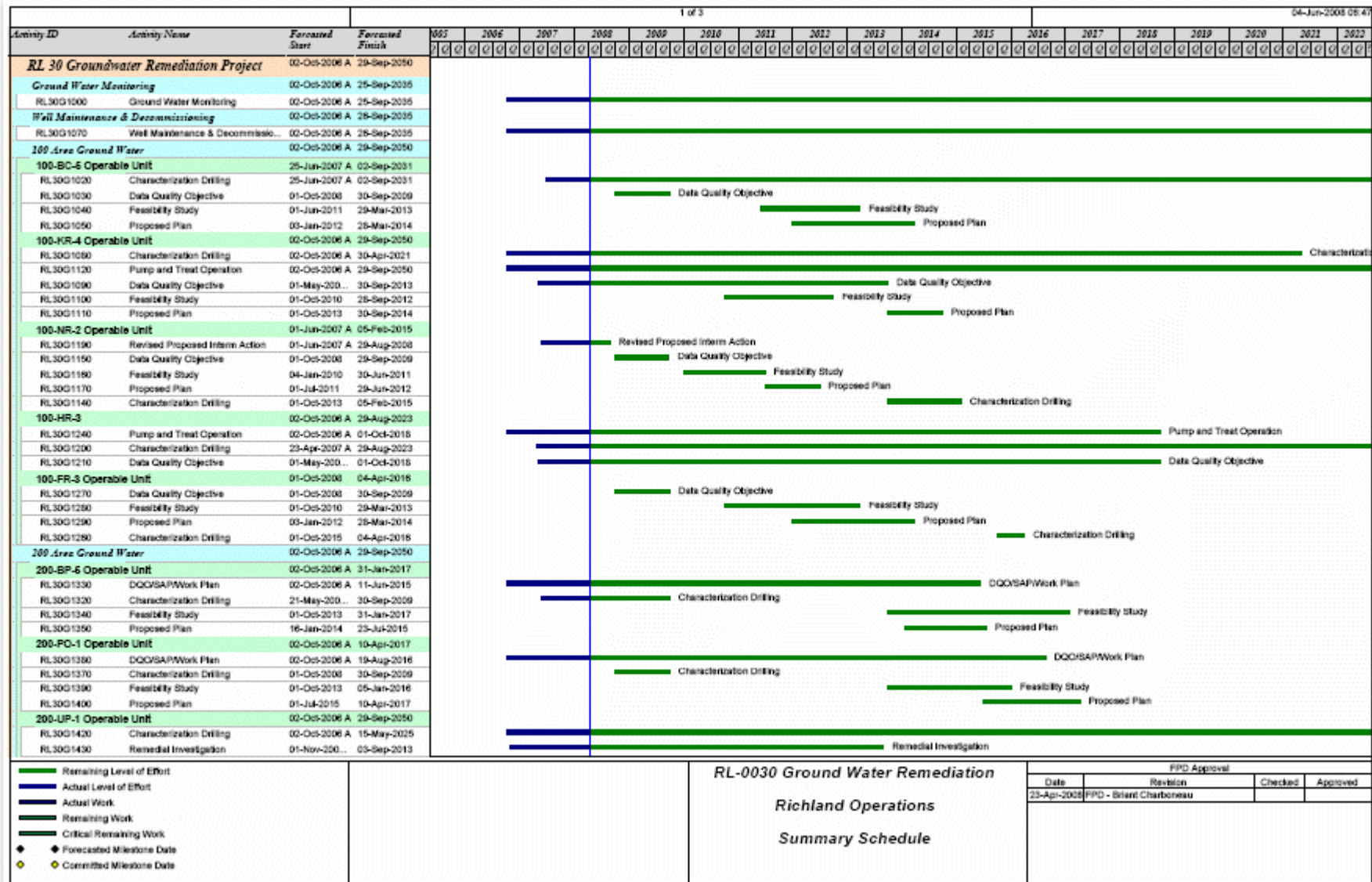
SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0012

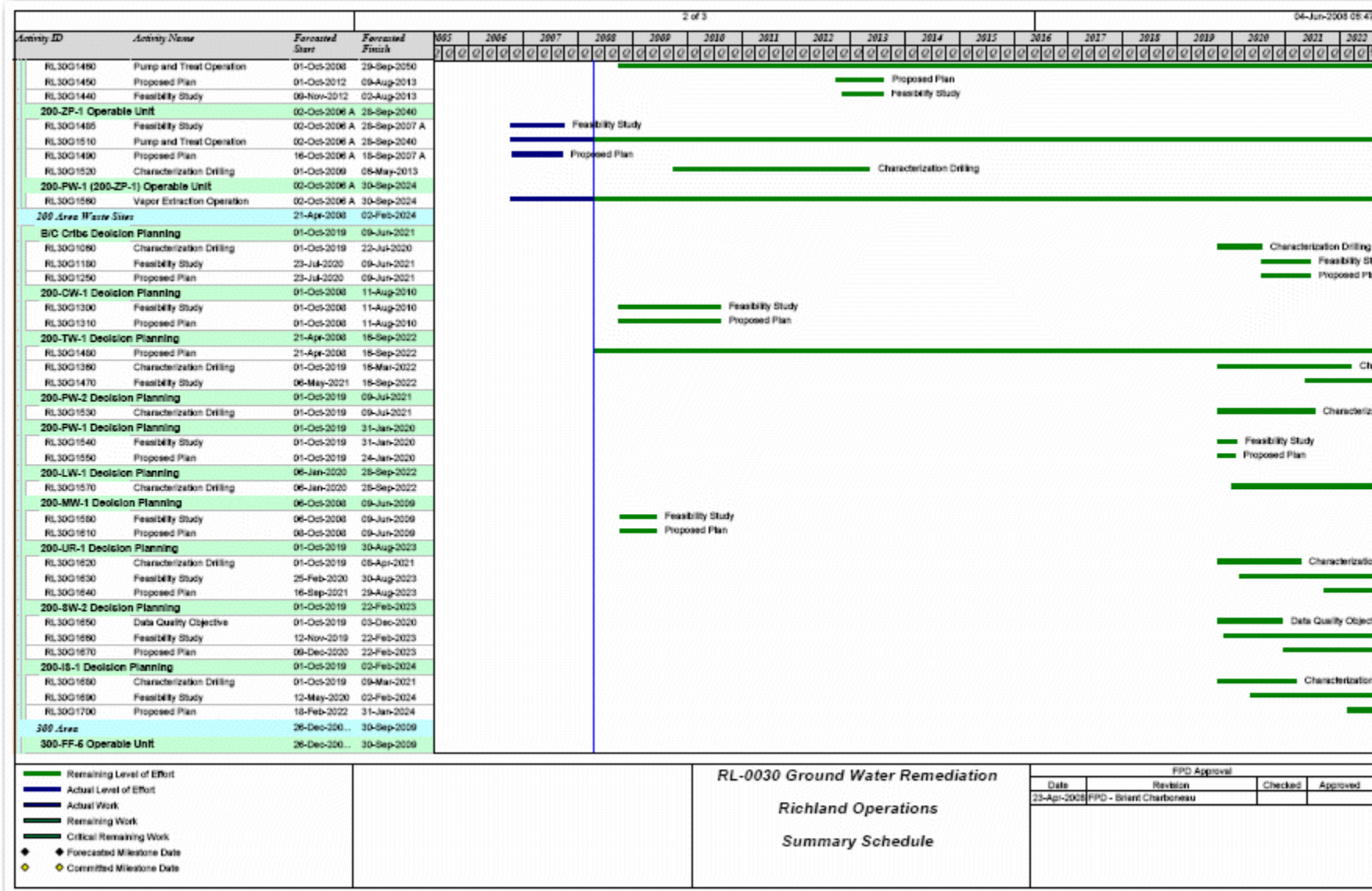


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SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0030

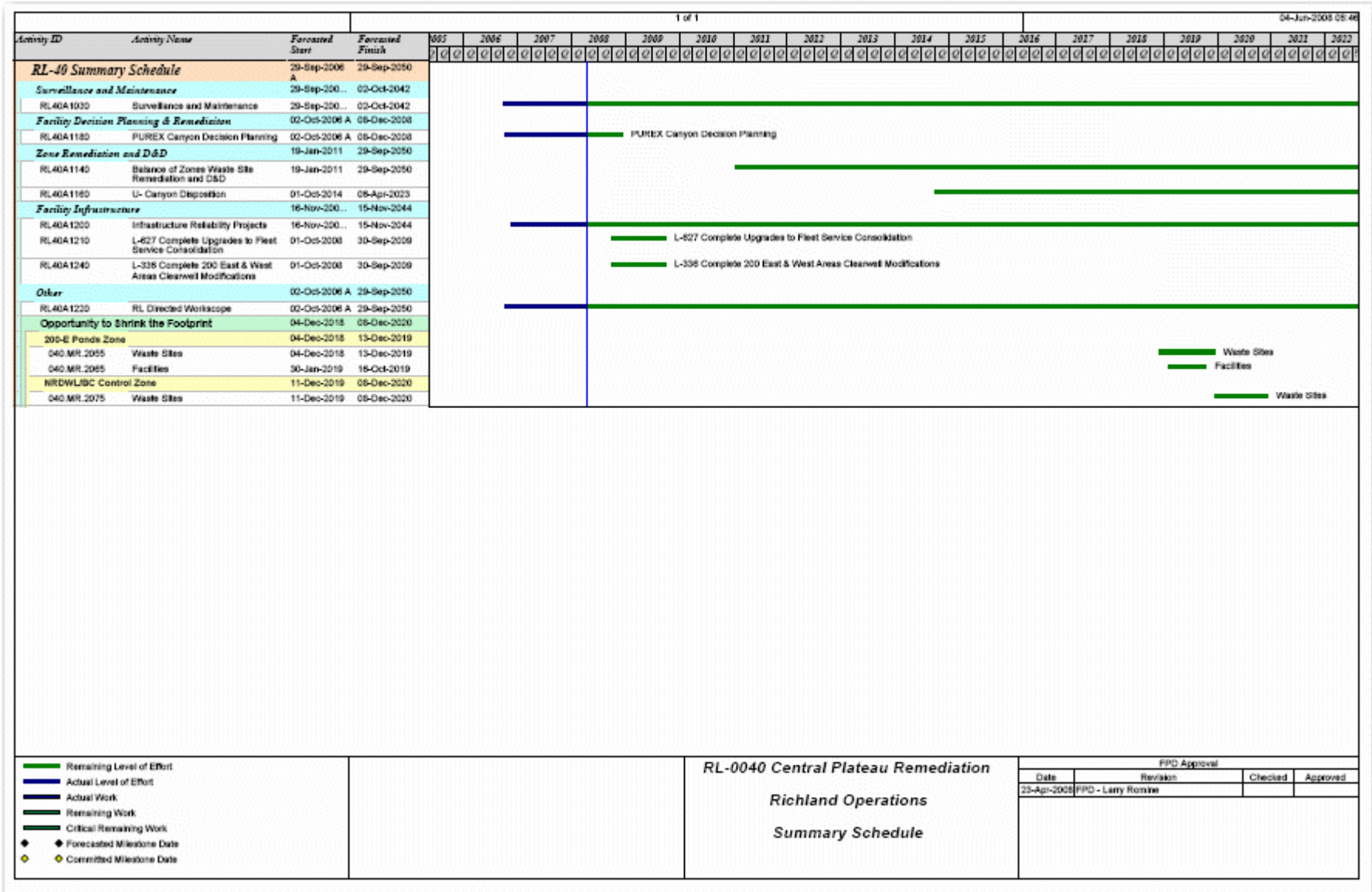




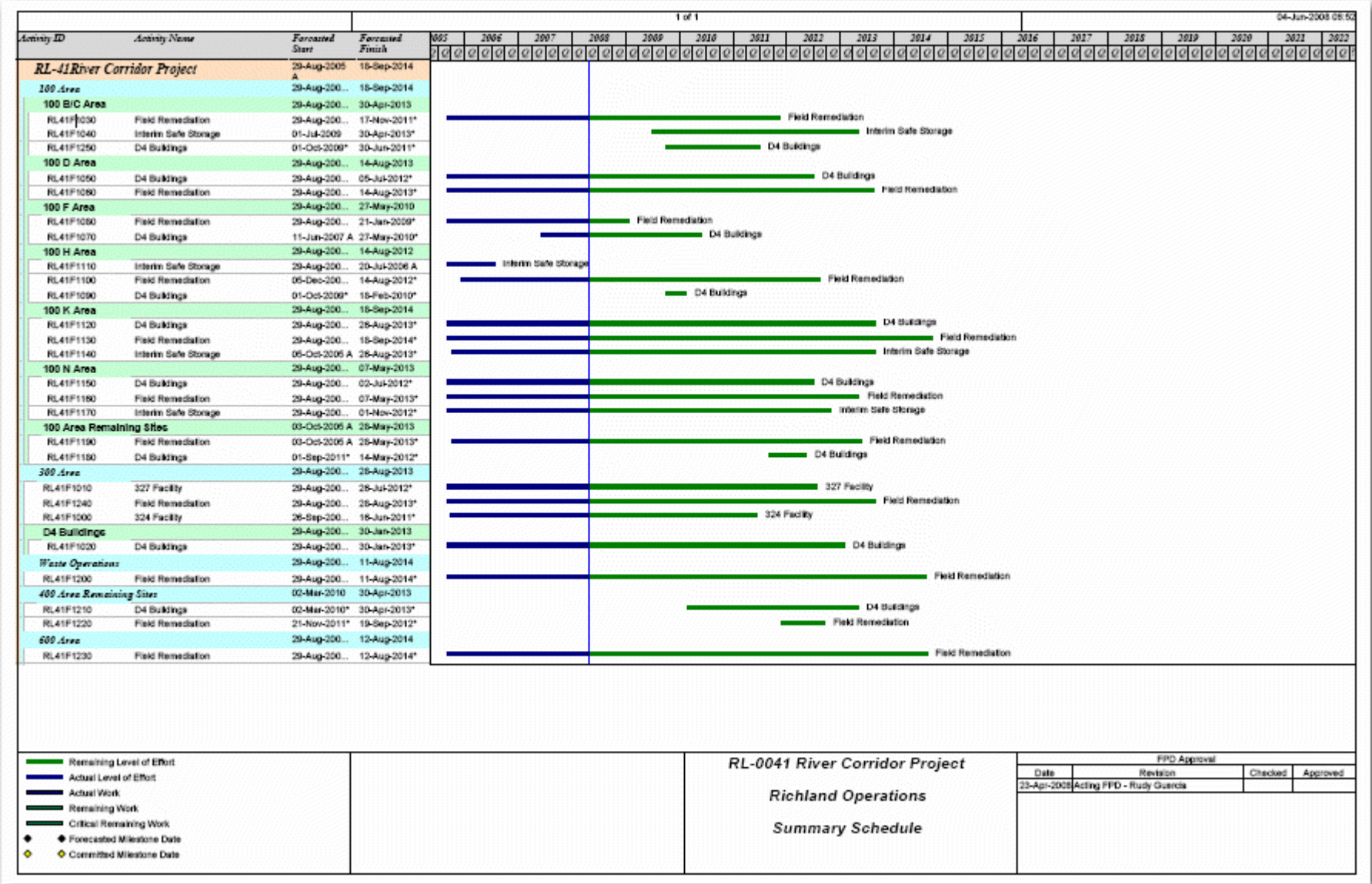
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Activity ID	Activity Name	Forecasted Start	Forecasted Finish	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
RL30G1500	Uranium Focused Feasibility Study	26-Dec-2007	30-Sep-2008																				
RL30G1600	Proposed Plan	01-May-2008	30-Sep-2009																				

<ul style="list-style-type: none"> Remaining Level of Effort Actual Level of Effort Actual Work Remaining Work Critical Remaining Work Forecasted Milestone Date Committed Milestone Date 	RL-0030 Ground Water Remediation Richland Operations Summary Schedule	<table border="1"> <thead> <tr> <th colspan="4">FPD Approval</th> </tr> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>23-Apr-2008</td> <td>FPD - Brian Charbonneau</td> <td></td> <td></td> </tr> </tbody> </table>	FPD Approval				Date	Revision	Checked	Approved	23-Apr-2008	FPD - Brian Charbonneau		
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SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0040



SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0041



SUMMARY LIFECYCLE BASELINE SCHEDULE: RL-0042

