
Overview of the Second Quarter 2014 Surveillance and Maintenance Report for the LM Rocky Flats Site

April–June 2014



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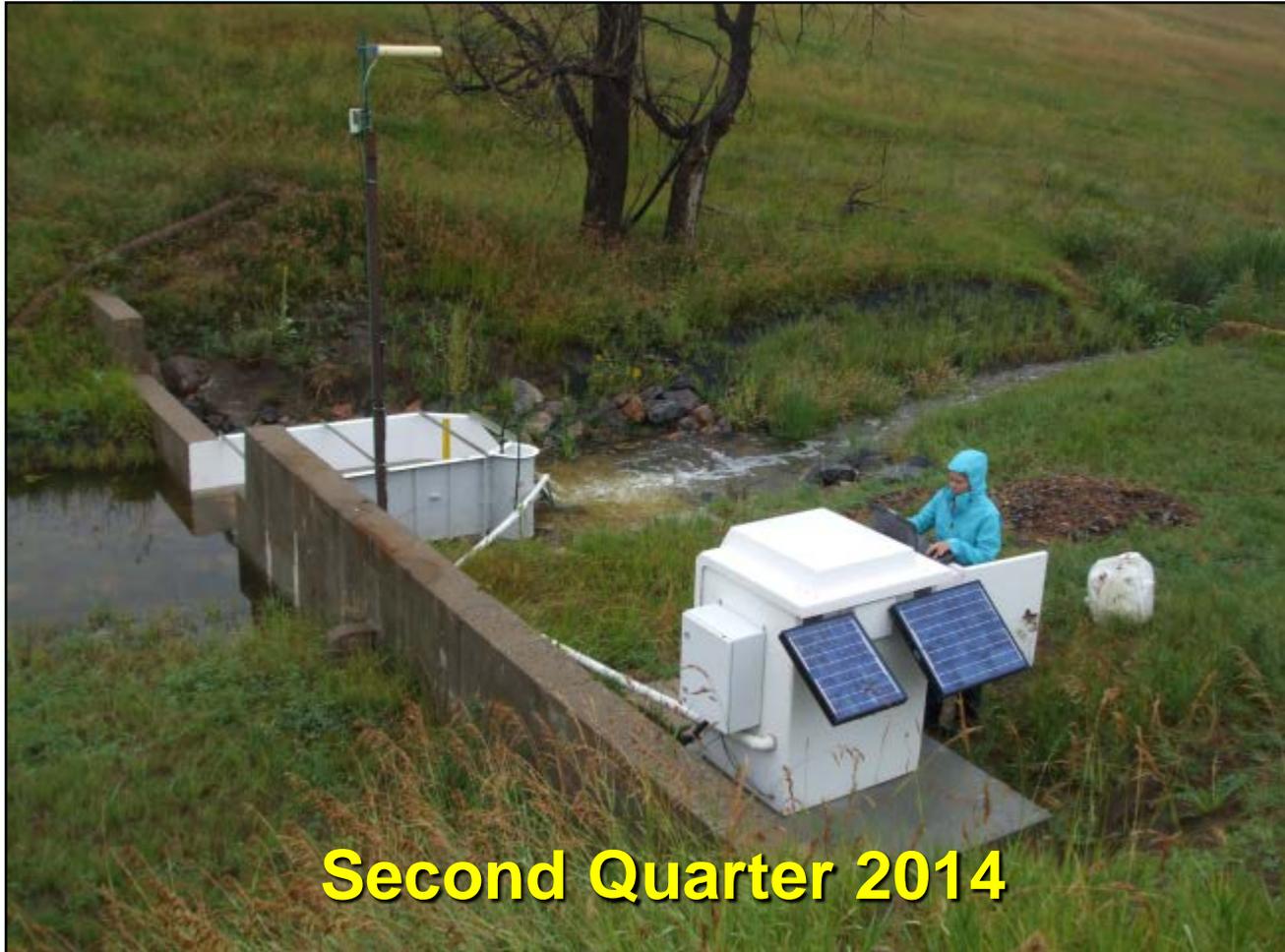
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Quarterly Monitoring and Reporting

- Quarterly reports are required under the Rocky Flats Legacy Management Agreement (RFLMA) to document that the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedy continues to be protective
 - Primary goal is protection of surface water
- Response action under the final remedy for Rocky Flats
 - Maintain two landfill covers
 - Maintain four groundwater treatment systems
 - Surface water and groundwater monitoring
 - Physical controls
 - Signage
 - Restricted access
 - Institutional controls
 - No building construction or occupation
 - Restrictions on excavation and soil disturbance
 - No consumption or agricultural use of surface water
 - No groundwater wells except for monitoring
 - Protection of landfill covers and engineered remedy components



Surface Water Monitoring



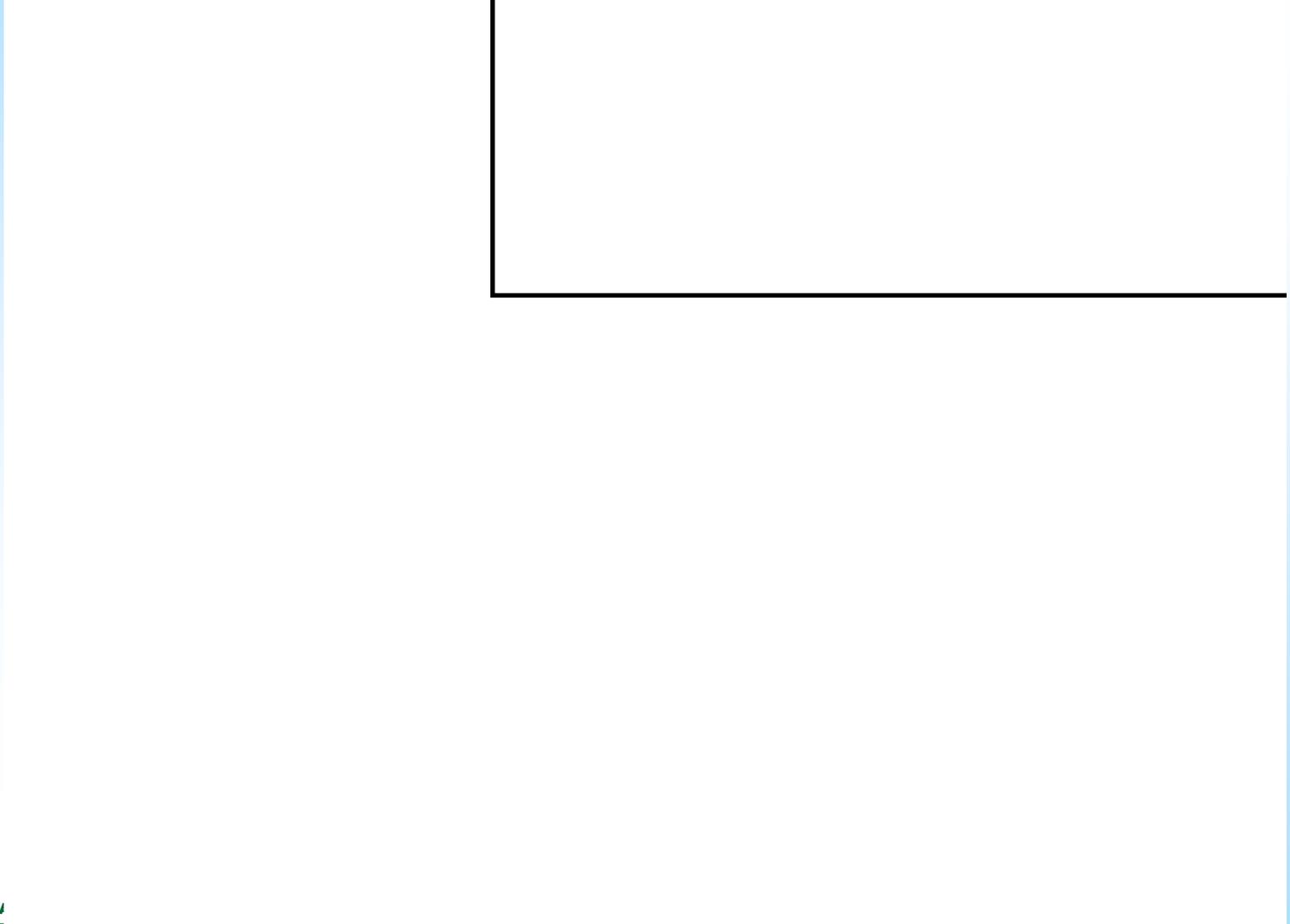
Second Quarter 2014



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Selected RFLMA Surface Water Monitoring Locations



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Performance Monitoring at OLF and PLF

- OLF (Woman Creek)
 - All sampling results met water quality standards during the quarter
- PLF (System Effluent)
 - All sampling results met water quality standards during the quarter



Point of Evaluation Monitoring – GS10

- Reportable 12-month rolling average values for americium and plutonium at GS10 continued to be observed during the quarter
- All plutonium and americium results since August 2013 have been below the 0.15 pCi/L standard
- Additional sampling continues to be conducted downstream of GS10
- As of June 30, 2014, there were no reportable conditions at GS10



Point of Compliance Monitoring – WALPOC

- Reportable, 30-day average values for uranium at WALPOC were first observed during December 2013
- As of May 18, 2014 the 30-day average for uranium was no longer reportable
- The 12-month rolling average remains below 16.8 $\mu\text{g/L}$
- Additional sampling is being conducted upstream of WALPOC



Questions?



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Groundwater Monitoring and Operations



Second Quarter 2014



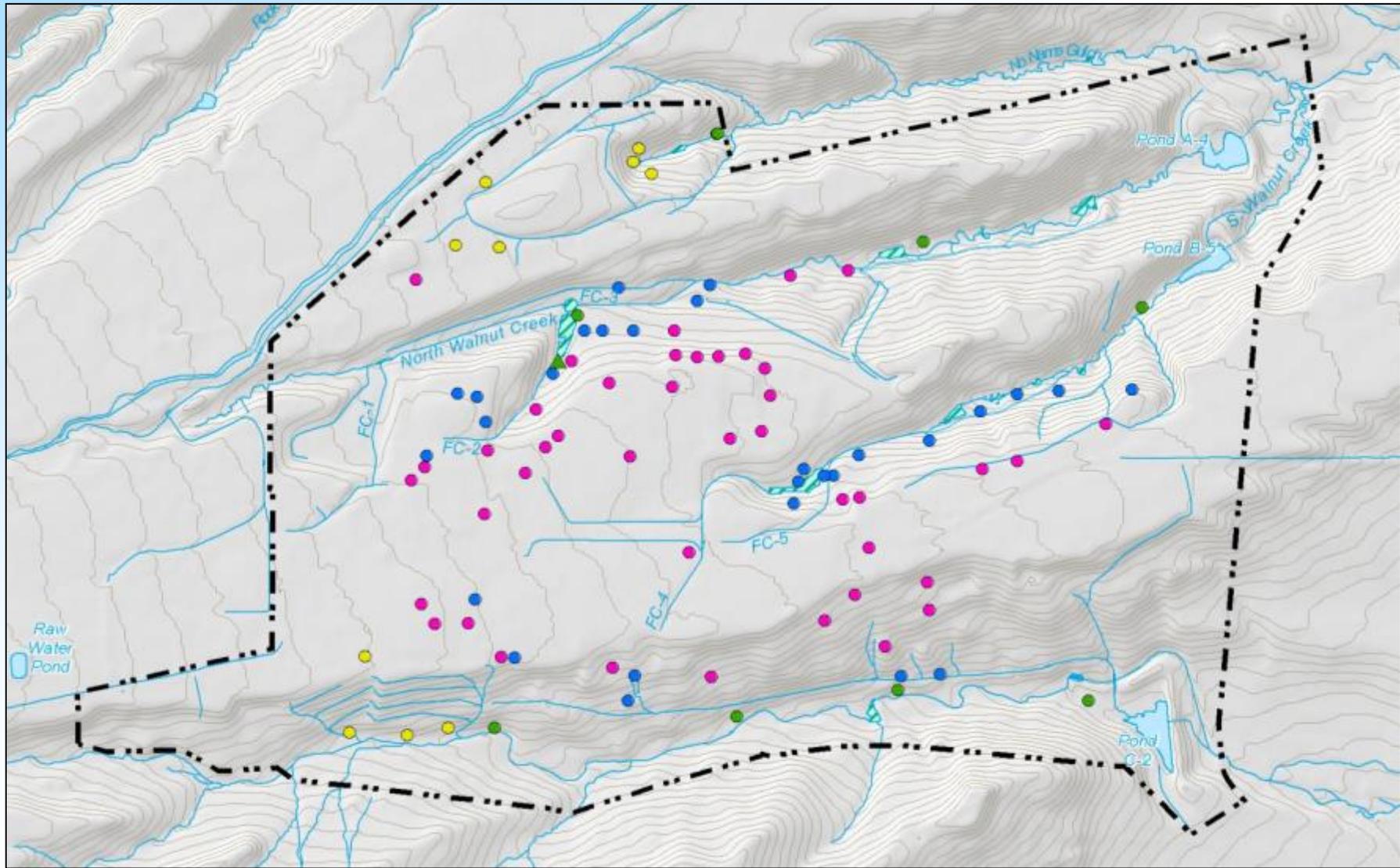
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RFLMA Monitoring

- Heavy sampling quarter
 - Second quarter of even-numbered years is heaviest
 - Includes all RFLMA groundwater monitoring locations
 - 10 RCRA wells (quarterly)
 - 9 AOC wells (semiannually, 2nd and 4th quarters)
 - 28 Sentinel wells (semiannually, 2nd and 4th quarters)
 - 42 Evaluation wells (biennially, 2nd quarter; by convention, all in even-numbered years)
 - Treatment system locations (semiannually, 2nd and 4th quarters)
 - 1 Surface Water Support location (semiannually, 2nd and 4th quarters)
 - 1 Sentinel well was dry (as expected for that location)





NOTE: Groundwater treatment system locations omitted for clarity



RFLMA Monitoring

- MSPTS: VOC above RFLMA level detected at surface water performance location GS10
 - TCE (reported at 2.8 ug/L; RFLMA level is 2.5 ug/L)
 - Re-sampled, concentrations back below RFLMA levels
 - Caused by 2013 flood-related groundwater recharge
 - More groundwater means higher flow rates
 - Higher flow rate means shorter residence time in treatment system
 - Shorter residence time limits treatment

- Statistical evaluations and discussion of 2nd quarter results will be included in annual report for 2014



Non-RFLMA Monitoring

- Treatment systems
 - MSPTS: air stripper, including data to evaluate adjacent French drain
 - ETPTS: air stripper
 - SPPTS: microcell and lagoon testing



Treatment System Activities

■ MSPTS

- Air stripper
 - Cleaned pump, nozzles, plumbing
 - Maintained ventilation fans
 - Sampled

■ ETPTS

- Air stripper
 - Cleaned
 - Sampled

■ SPPTS

- Continued microcell tests
- Continued pilot-scale lagoon tests
- Sampled



ETPTS Reconfiguration Project

- Solicited bids, issued Notice of Award June 18
- Converts system from treatment using ZVI to treatment using a commercial air stripper
- Will treat water in batches (not run continuously)
- Will use existing solar/battery power, with minor additions and revisions
- Air stripper will be housed in small enclosure next to tanks (former treatment cells)
- Scheduled to be completed late CY 2014



Questions?



Site Operations

Second Quarter 2014



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Quarterly Sign Inspections

- RFLMA physical control
- All signs are in good condition



Site Operations – OLF

- Three monthly inspections performed; weekly inspections of areas where recent slumping or cracking had been noted
- Eight settlement monuments and seven inclinometers monitored



Site Operations – OLF (continued)

- No significant cracking was noted within the landfill boundaries during the second quarter
- Cracking and slumping were noted on the east side of the East Perimeter Channel, outside of the landfill boundary
- Cracks were filled as required by the M&M Plan



Site Operations – PLF

- One quarterly inspection performed



Questions?



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2nd Quarter Ecology Activities

- Weed Mapping
- Prairie Dog Surveys
- Wetland Water-level Surveys
- Wetland Weed Surveys
- Herbicide Applications (~58 acres treated)
- Planted 130 trees/shrubs for habitat enhancement.
(Rocky Mountain Juniper [30], 4-Wing Saltbush [50], and Skunkbush [50])
- Set up irrigation system for plantings and watered weekly.
- Preparations made for revegetation, Preble's mouse, and wetland monitoring that will occur in the 3rd quarter.

