Figure 1. Location of study area
Figure 2. Bedrock geology map of the Rathdrum Prairie Aquifer and surrounding area.

Figure 3. Sample locations and identifications.
Figure 4. $\delta^2$H versus $\delta^{18}$O fields and the global meteoric water line.
CFC and $\text{SF}_6$ Atmospheric Concentration
Northern Hemisphere

Figure 5. CFCs and $\text{SF}_6$. Historic Northern Hemisphere Atmospheric Concentrations.
Figure 6. Piper plot for June 2012 sampling event.
Figure 7. Piper plot for September 2012 sampling event.
January/February 2013

Figure 8. Piper plot for January/February 2013 sampling event.
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Figure 9. Stiff diagrams for the June 2012 sampling event
Figure 10. Stiff diagrams for the September 2012 sampling event
Figure 11. Stiff diagrams for the January/February 2013 sampling event
Figure 12. June 2012 Nitrogen-Nitrate Analytical Results

June 2012
Nitrate-Nitrogen (mg/l)

- Blue: 0.12 – 0.50
- Cyan: 0.51 – 1.00
- Yellow: 1.01 – 1.50
- Red: 1.51 – 1.92
Figure 13. June 2012 Chloride Analytical Results
Figure 15. January/February 2013 Chloride Analytical Results
Figure 16. June 2012 Arsenic Analytical Results
Figure 17. September 2012 Arsenic Analytical Results

Legend

'June 2012$' Events

Arsenic

1.500 - 3.000
3.001 - 4.000
4.001 - 5.000
5.001 - 6.000
6.001 - 7.000

<3.0
3.0 – 4.0
4.1 – 5.0
5.1 – 6.0
6.1 – 7.0

Scale - Miles

0 1 2 3 4 5

N

September 2012 Arsenic (ug/l)

- <3.0
- 3.0 – 4.0
- 4.1 – 5.0
- 5.1 – 6.0
- 6.1 – 7.0
Figure 18. January/February 2013 Arsenic Analytical Results
Figure 19. June 2012 Uranium Analytical Results
Figure 20. June 2012 Radium-226 & Radium-228 Analytical Results

Legend

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<td>2.61 – 3.00</td>
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<tr>
<td>3.01 – 5.70</td>
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Scale - Miles

0 1 2 3 4 5

N

Figure 20. June 2012 Radium-226 & Radium-228 Analytical Results
Stable Isotope Data
Rathdrum Prairie Aquifer
June 2012

Figure 21. June 2012 $\delta^{2}H$ and $\delta^{18}O$ Results
Stable Isotope Data
Rathdrum Prairie Aquifer
September 2012

Figure 22. September 2012 $\delta^2$H & $\delta^{18}$O Results
Figure 23. January/February 2013 δ²H and δ¹⁸O Results
Figure 24. September 2012 CFC-11 Apparent Age Dates
Figure 25. September 2012 CFC-12 Apparent Age Dates

Legend

Sheet1$ Events

- CFC11
  - 1984.666667
  - 1984.666668 - 1986.000000
  - 1986.000001 - 2000.000000
  - 2000.000001 - 2001.500000

- CFC-11
- September 2012
- CFC-12
- Average Age Date
  - 1985 – 1990
  - 1990.1 – 1995
  - 1995.1 – 2000
  - Super-Saturated

Scale - Miles

0 1 2 3 4 5
Figure 26. September 2012 CFC-113 Apparent Age Dates
Figure 27. September 2012 SF$_6$ Apparent Age Dates
Figure 28. June 2012 Ground Water Temperature
Figure 29. September 2012 Ground Water Temperature
Figure 30. January/February 2013 Ground Water Temperature
Figure 31. June 2012 Magnesium/Calcium Ratio Results
Figure 33. January/February 2013 Magnesium/Calcium Ratio Results

- Scale - Miles

- January/February 2013 Mg/Ca meq/l Ratio
  - 0.25 – 0.40
  - 0.401 – 0.60
  - 0.601 – 0.80
  - 0.801 – 1.25
Figure 34. June 2012 Nitrate Isotope Results – Large Scale
Figure 35. June 2012 Nitrate Isotope Results - Small Scale
Figure 36. June 2012 Sodium vs. Chloride Concentration Results

Sodium vs. Chloride
Rathdrum Prairie Aquifer
June 2012

Group 1
Group 2 Elevated Chloride
Group 3 Elevated Chloride & Sodium
Figure 37. September Sodium vs. Chloride Concentrations
Figure 38. January 2013 Sodium vs. Chloride Concentrations
Nitrate-Nitrogen vs. Chloride
Rathdrum Prairie Aquifer
June 2012

Figure 39. June 2012 Nitrate-Nitrogen vs. Chloride Concentrations
Stable Isotope data
Rathdrum Prairie Aquifer
Peripheral Lakes

Figure 40. $^2$H and $^{18}$O Results for Peripheral Lakes for June and September 2012 and January/February 2013
Figure 41. $^3$H and $^{18}$O Results for Recharge Areas – June 2012
Figure 42. $^2$H and $^{18}$O Results for Recharge Areas – September 2012
Figure 43. $^2$H and $^{18}$O Results for Recharge Areas – January 2013
Figure 44. Recharge Areas as defined by $^2$H and $^{18}$O Results
Figure 45. Plot of CFC-11 versus CFC-12 equivalent atmospheric concentrations in wells sampled.
Figure 46. Plot of CFC-113 versus CFC-12 equivalent atmospheric concentrations in wells sampled
Figure 47. Equivalent atmospheric concentrations of CFC-11 in wells sampled.
Figure 48. Equivalent atmospheric concentrations of CFC-12 in wells sampled.
Figure 49. Equivalent atmospheric concentrations of CFC-113 in wells sampled.
Figure 50. CFC-11 apparent age date and potential external CFC source locations.
Figure 51 CFC-12 apparent age date and potential external CFC source locations.
Figure 52 CFC-113 apparent age date and potential external CFC source locations.