



Union Pacific Train Derailment

Mosier Watershed Council Meeting

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Groundwater testing for fire suppression chemicals

Per- and
Polyfluoroalkyl Substances
(PFAS)

USEPA Method 537, Revision 1.1



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14 compounds

Perfluorobutanesulfonic acid (PFBS)

Perfluorohexanoic acid (PFHxA)

Perfluoroheptanoic acid (PFHpA)

Perfluorohexanesulfonic acid (PFHxS)

Perfluorooctanoic acid (PFOA)

Perfluorononanoic acid (PFNA)

Perfluorooctanesulfonic acid (PFOS)

Perfluorodecanoic acid (PFDA)

N-methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)

N-ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)

Perfluoroundecanoic acid (PFUnA)

Perfluorododecanoic acid (PFDoA)

Perfluorotridecanoic acid (PFTrDA)

Perfluorotetradecanoic acid (PFTeDA)

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USEPA has established a lifetime health advisory of **70 ng/L** for two of these compounds:

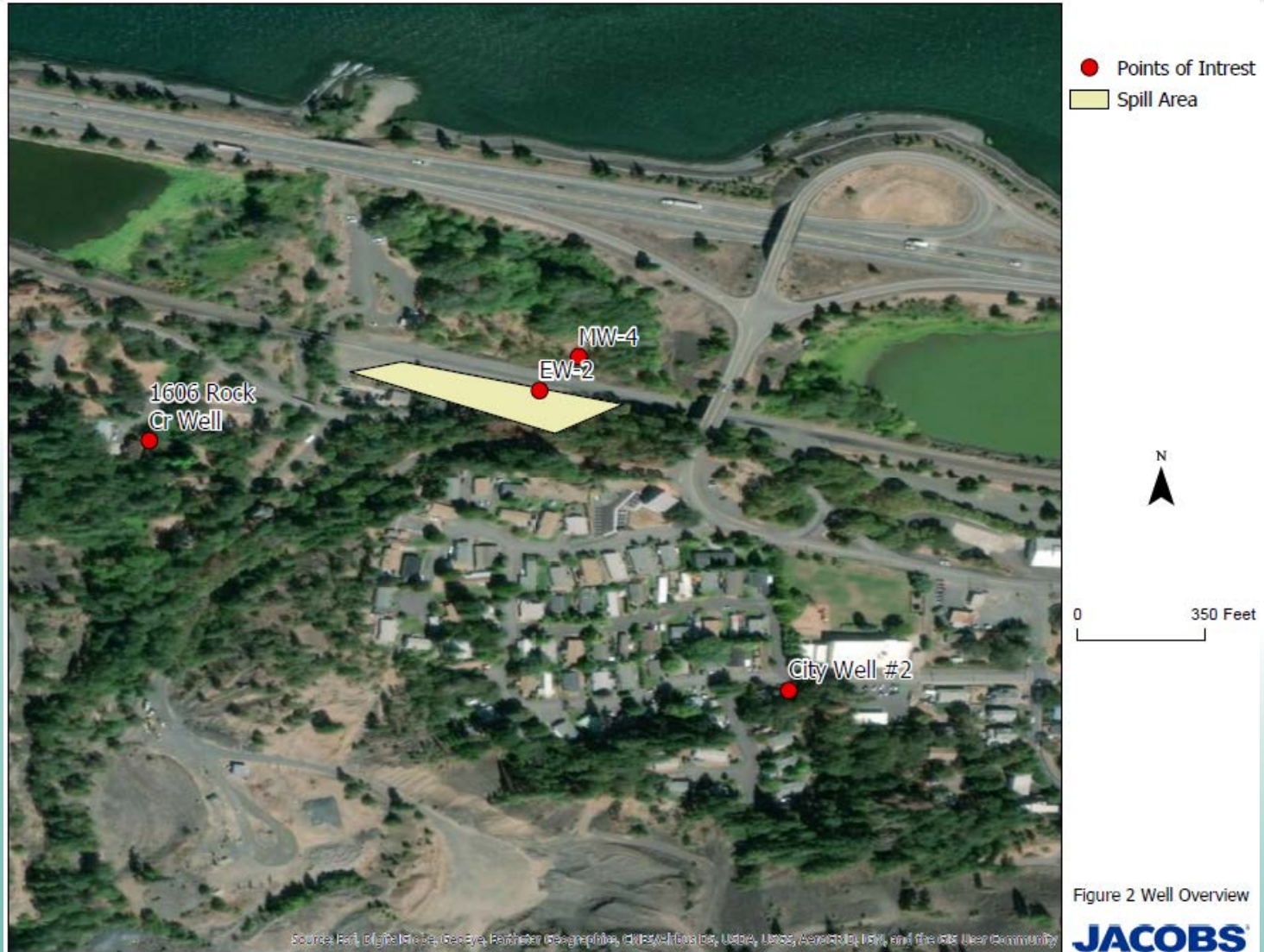
Perfluorooctanoic acid (PFOA)

Perfluorooctanesulfonic acid (PFOS)

Four test locations

- EW-2
- MW-4
- 1606 Rock Creek Road
- City Well No. 2

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PFAS concentrations at EW-2, ng/L (parts per trillion)

Analyte	Concentration
Perfluorobutanesulfonic acid (PFBS)	ND
Perfluorohexanoic acid (PFHxA)	3.66 J
Perfluoroheptanoic acid (PFHpA)	ND
Perfluorohexanesulfonic acid (PFHxS)	ND
Perfluorooctanoic acid (PFOA)	ND
Perfluorononanoic acid (PFNA)	ND
Perfluorooctanesulfonic acid (PFOS)	ND
Perfluorodecanoic acid (PFDA)	ND
N-methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)	ND
Perfluoroundecanoic acid (PFUnA)	ND
Perfluorododecanoic acid (PFDoA)	ND
Perfluorotridecanoic acid (PFTrDA)	ND
Perfluorotetradecanoic acid (PFTeDA)	ND



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PFAS concentrations at MW-4, ng/L (parts per trillion)

Analyte	Concentration
Perfluorobutanesulfonic acid (PFBS)	ND
Perfluorohexanoic acid (PFHxA)	30.5
Perfluoroheptanoic acid (PFHpA)	6.76 J
Perfluorohexanesulfonic acid (PFHxS)	ND
Perfluorooctanoic acid (PFOA)	ND
Perfluorononanoic acid (PFNA)	ND
Perfluorooctanesulfonic acid (PFOS)	ND
Perfluorodecanoic acid (PFDA)	ND
N-methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)	ND
Perfluoroundecanoic acid (PFUnA)	ND
Perfluorododecanoic acid (PFDoA)	ND
Perfluorotridecanoic acid (PFTrDA)	ND
Perfluorotetradecanoic acid (PFTeDA)	ND



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PFAS concentrations at 1606 Rock Creek Rd, ng/L (parts per trillion)

Analyte	Concentration
Perfluorobutanesulfonic acid (PFBS)	ND
Perfluorohexanoic acid (PFHxA)	ND
Perfluoroheptanoic acid (PFHpA)	ND
Perfluorohexanesulfonic acid (PFHxS)	ND
Perfluorooctanoic acid (PFOA)	ND
Perfluorononanoic acid (PFNA)	ND
Perfluorooctanesulfonic acid (PFOS)	ND
Perfluorodecanoic acid (PFDA)	ND
N-methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)	ND
Perfluoroundecanoic acid (PFUnA)	ND
Perfluorododecanoic acid (PFDoA)	ND
Perfluorotridecanoic acid (PFTrDA)	ND
Perfluorotetradecanoic acid (PFTeDA)	ND



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PFAS concentrations at City Well No. 2, ng/L (parts per trillion)

Analyte	Concentration
Perfluorobutanesulfonic acid (PFBS)	ND
Perfluorohexanoic acid (PFHxA)	ND
Perfluoroheptanoic acid (PFHpA)	ND
Perfluorohexanesulfonic acid (PFHxS)	ND
Perfluorooctanoic acid (PFOA)	ND
Perfluorononanoic acid (PFNA)	ND
Perfluorooctanesulfonic acid (PFOS)	ND
Perfluorodecanoic acid (PFDA)	ND
N-methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)	ND
Perfluoroundecanoic acid (PFUnA)	ND
Perfluorododecanoic acid (PFDoA)	ND
Perfluorotridecanoic acid (PFTrDA)	ND
Perfluorotetradecanoic acid (PFTeDA)	ND

Next steps

DEQ agrees that petroleum contaminant concentrations are sufficiently low to allow shutting off the system to check for rebound of contaminants.

We will review the latest groundwater report with these results once it is submitted.