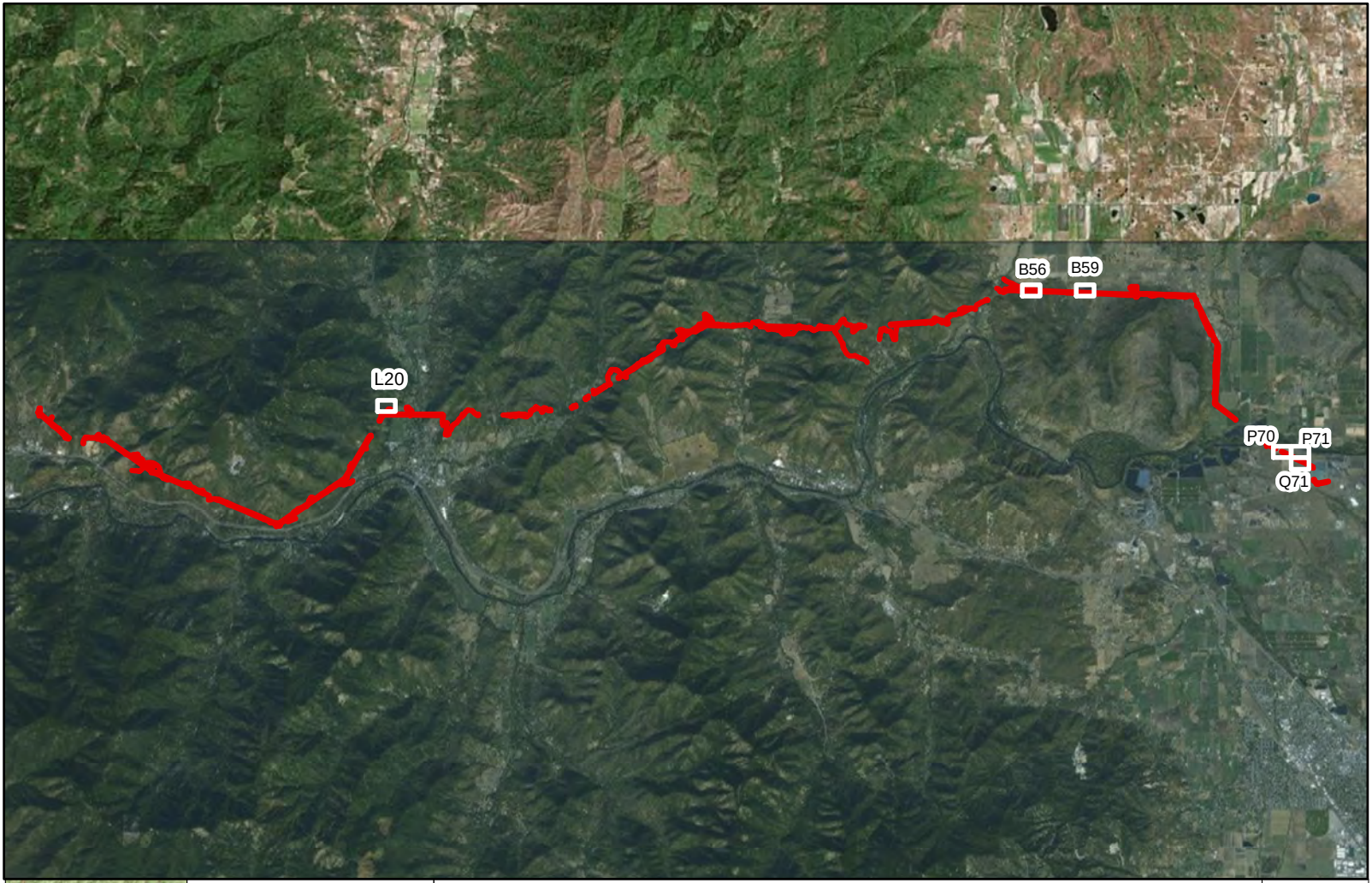
Appendix A. Figures Depicting Locations of Wetlands



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area

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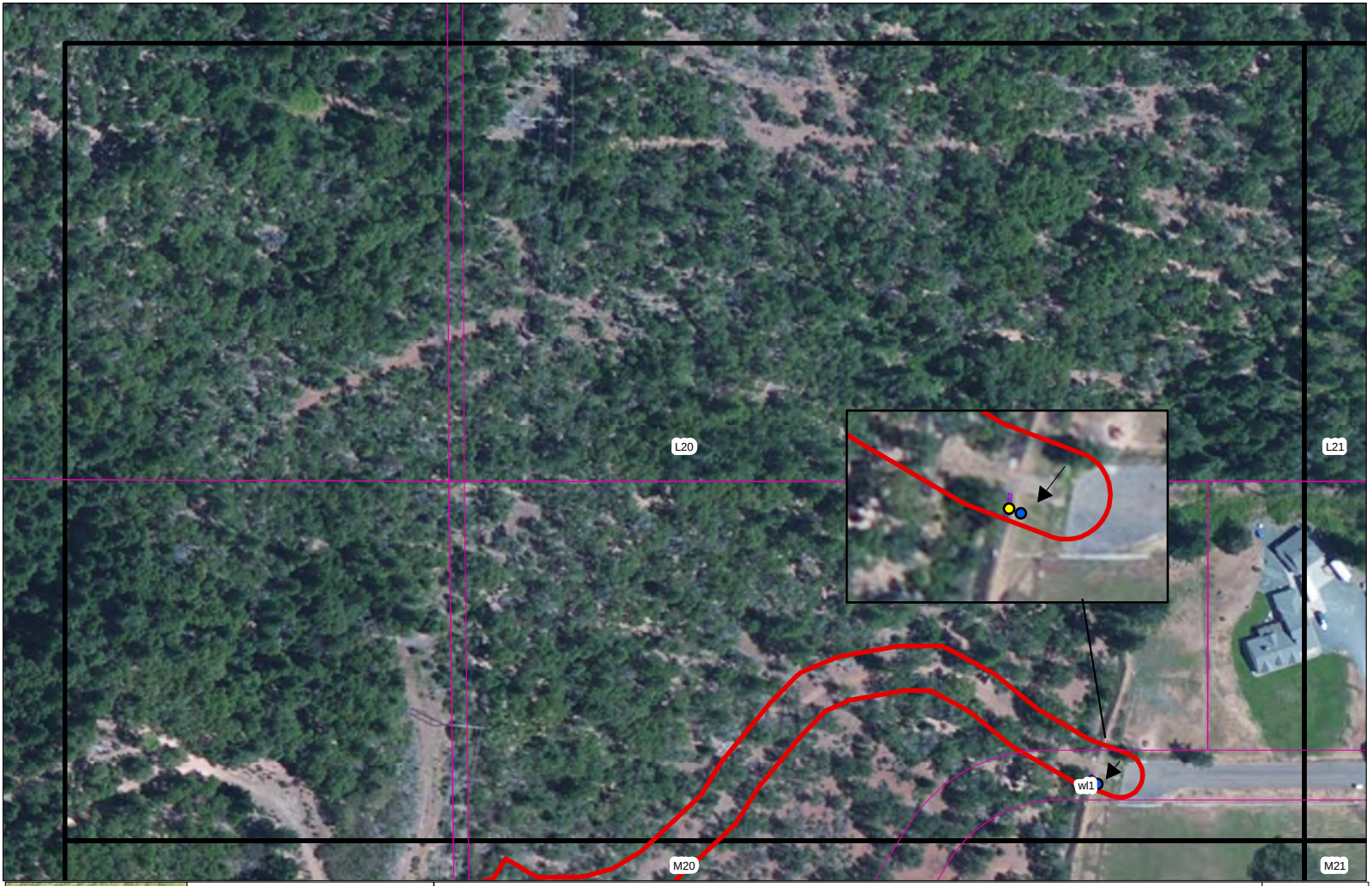

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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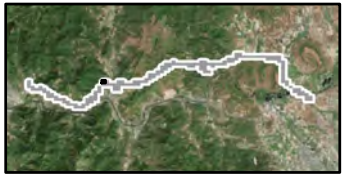
Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

L20



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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

B56

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

B59

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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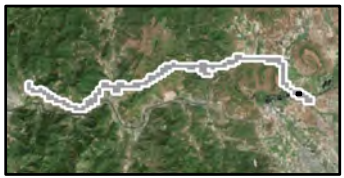
Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

P70



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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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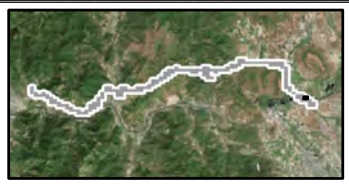
Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

P71



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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Wetland Boundary
Wetland Soil Pit
Upland Soil Pit
Photo Location/Direction
Tax Lots

Q71

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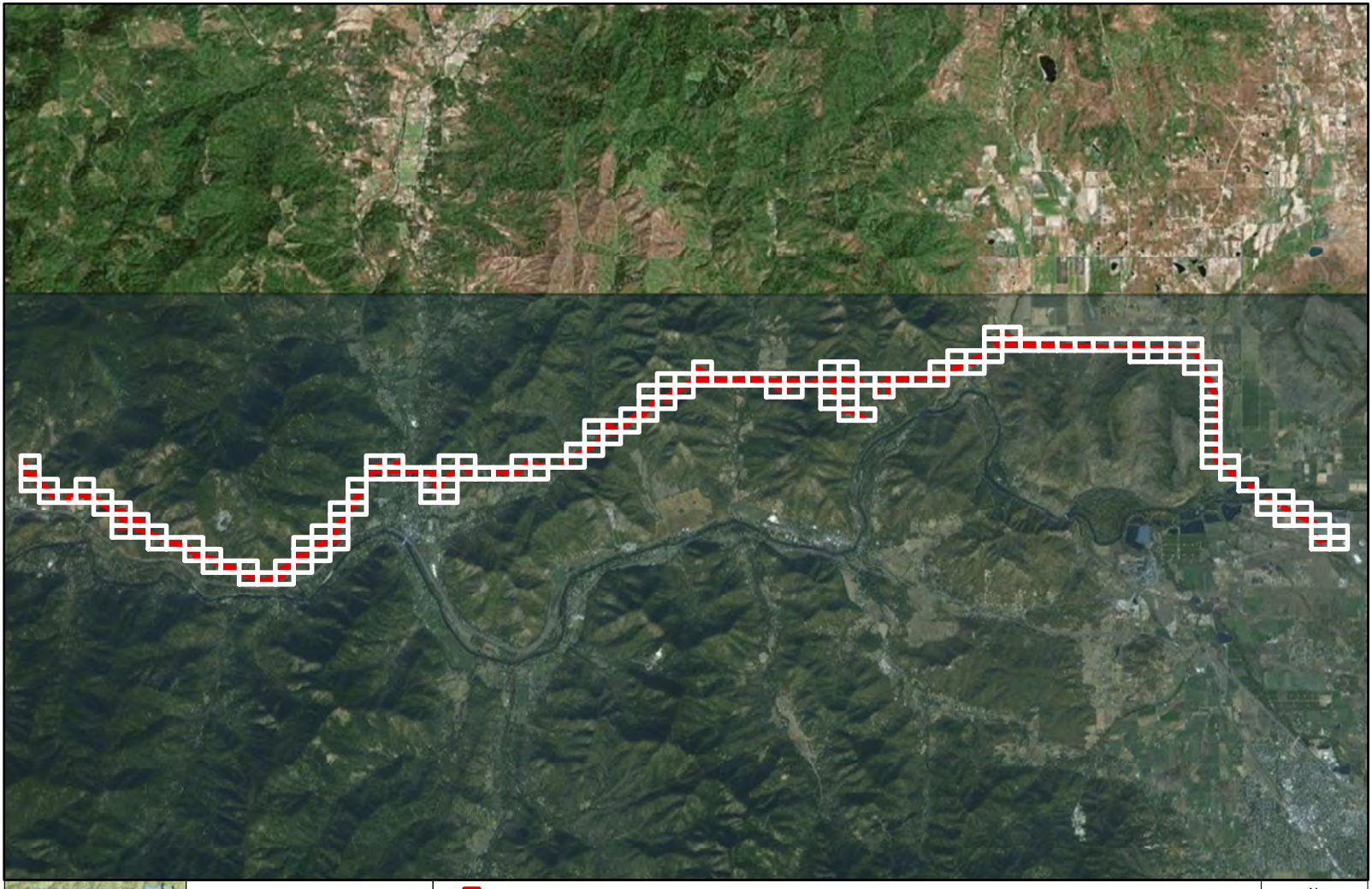
Appendix B. Figures Depicting Locations of Waterbodies



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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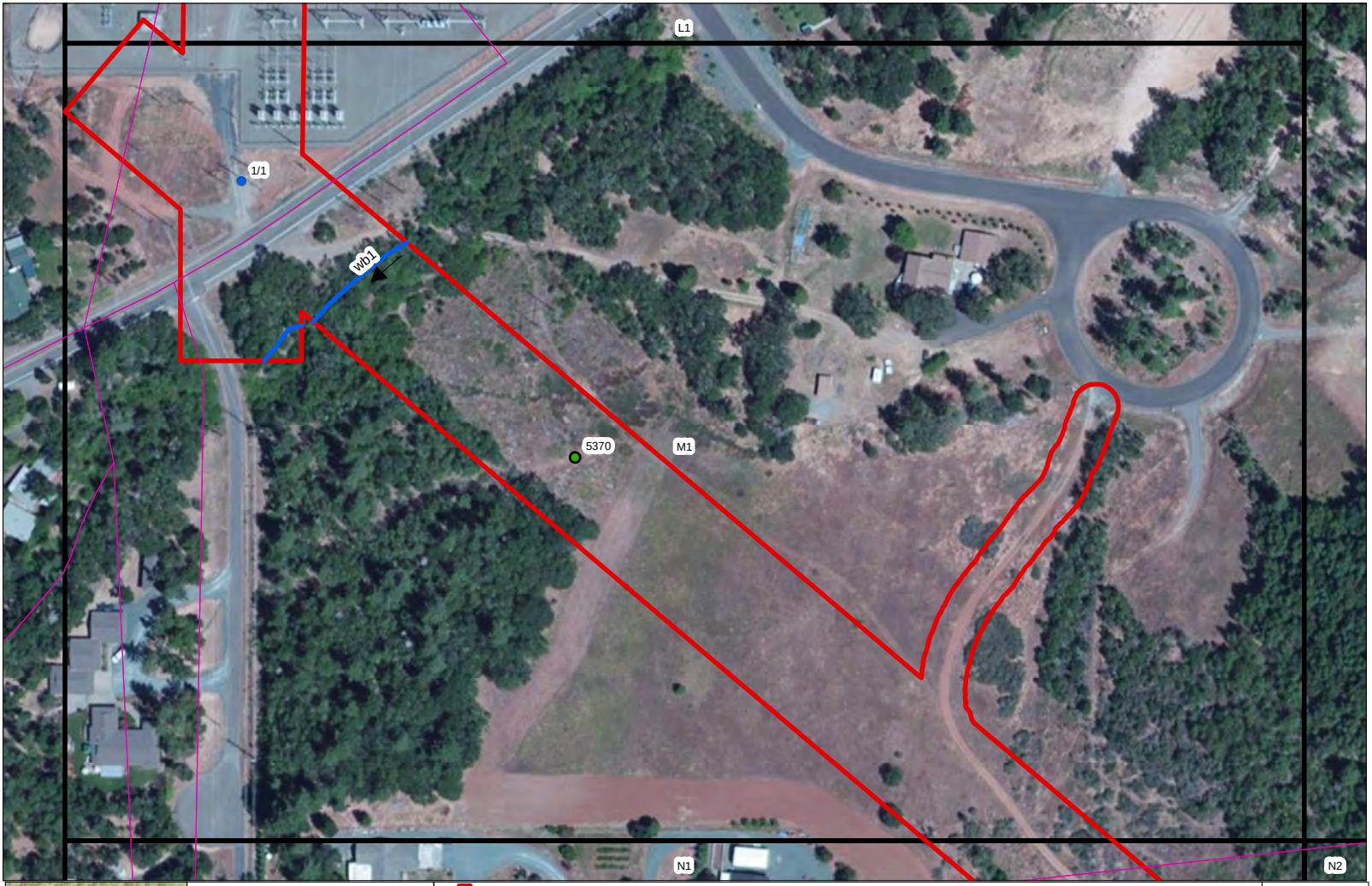

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M1

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

N1

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

N2

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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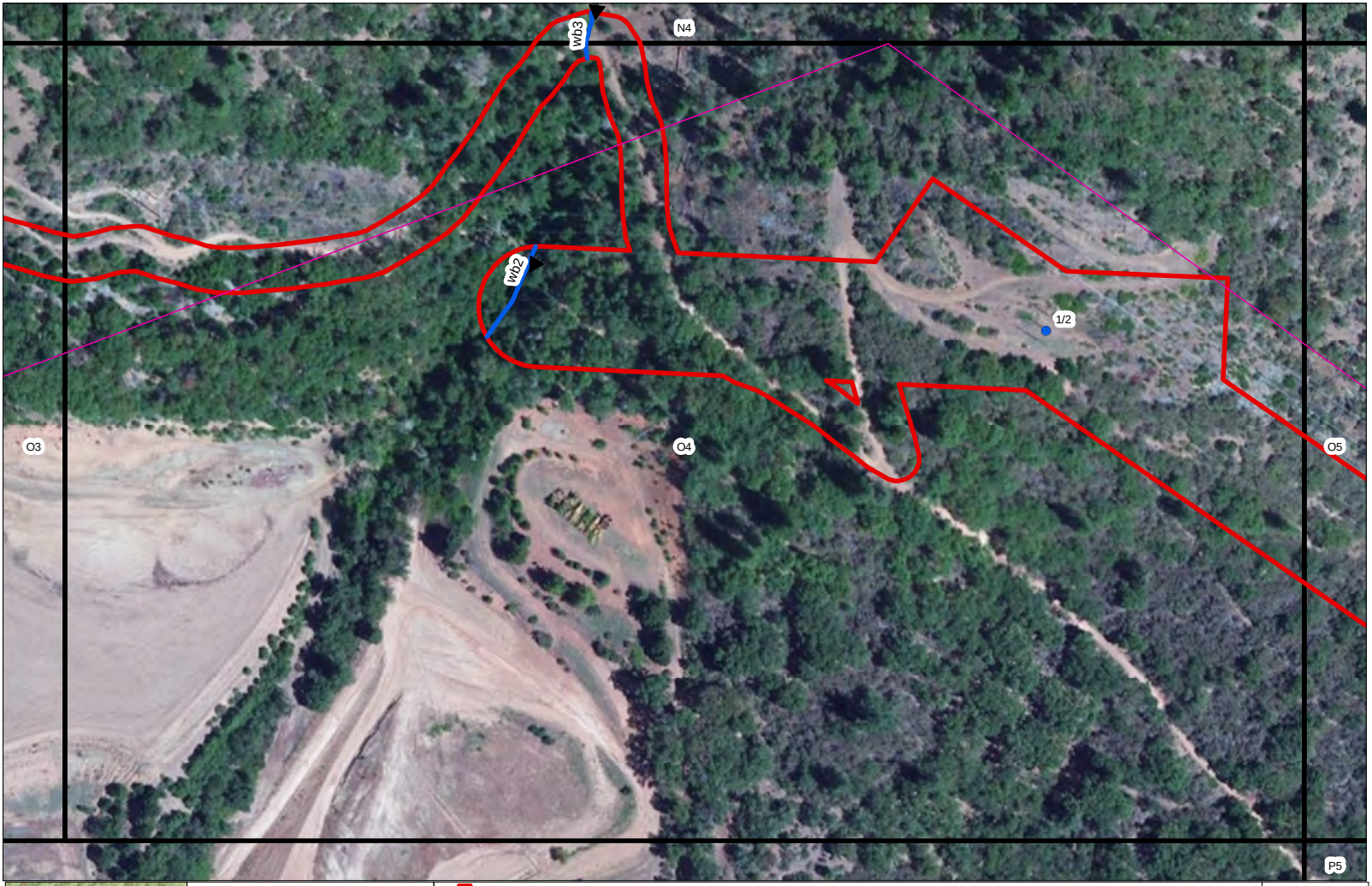

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

P5

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

Q6

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

R6

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

Q7

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

R7

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

S8

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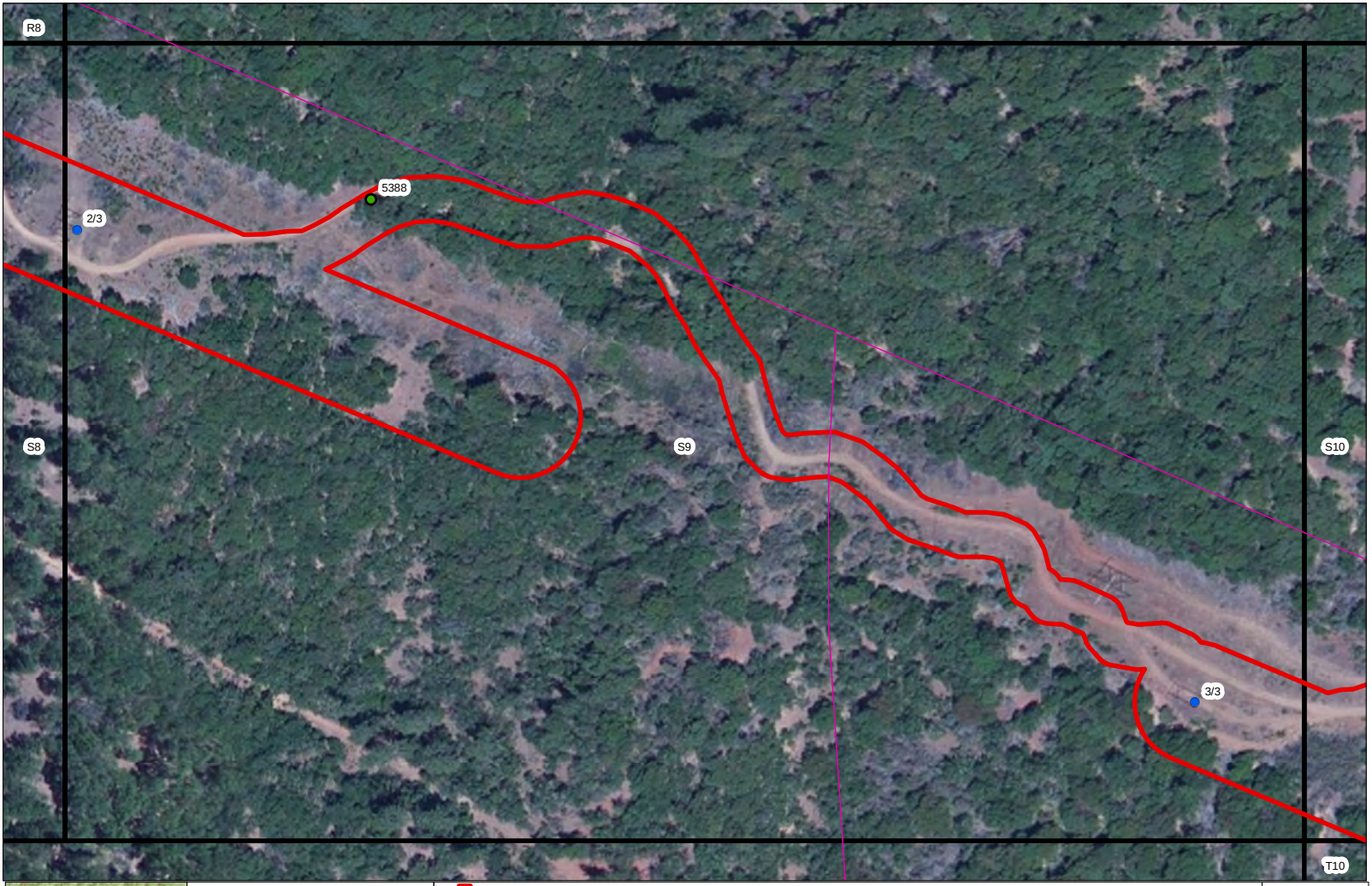

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

S10

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

T10

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

T11

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

U11

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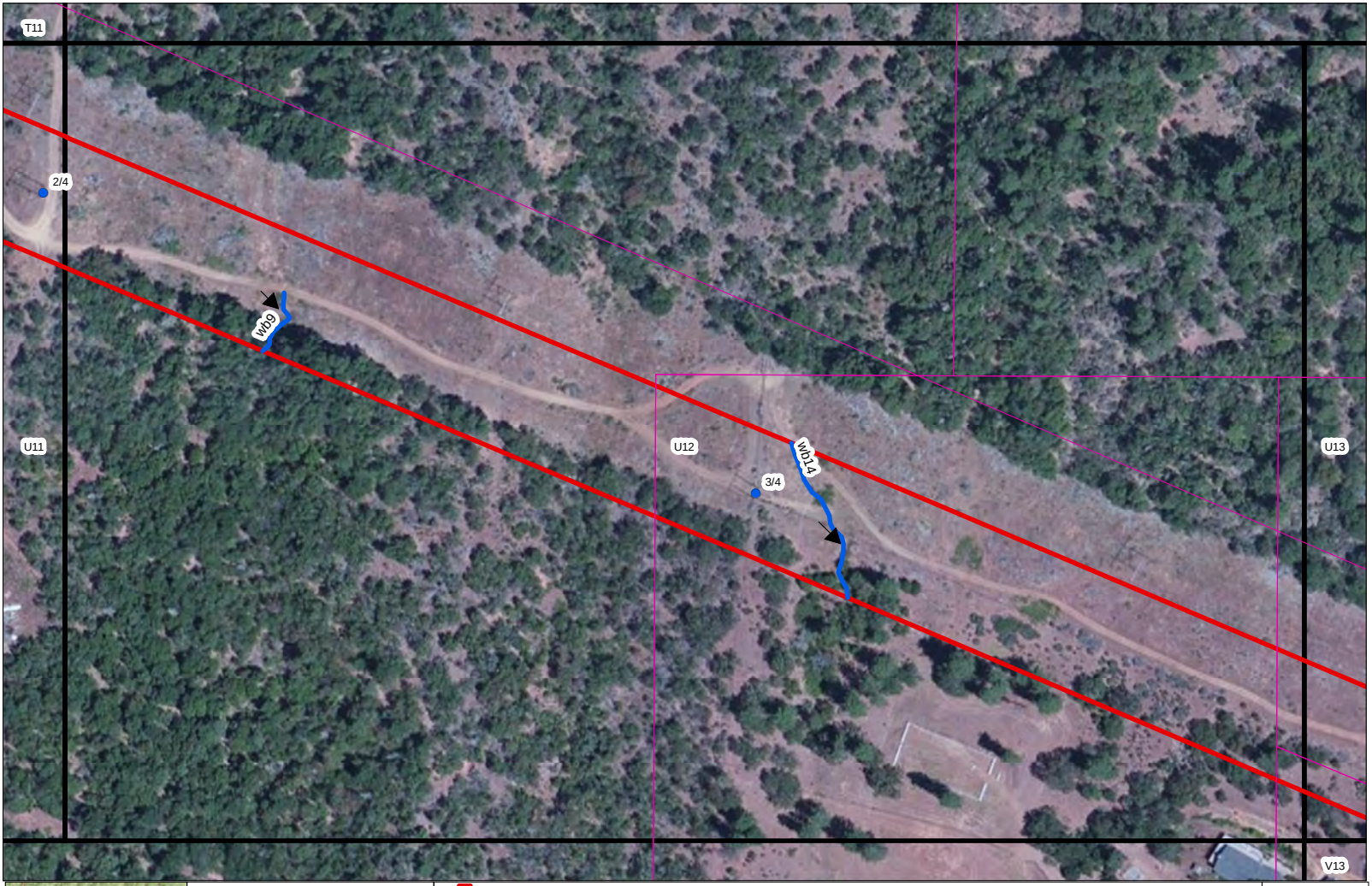

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

U12

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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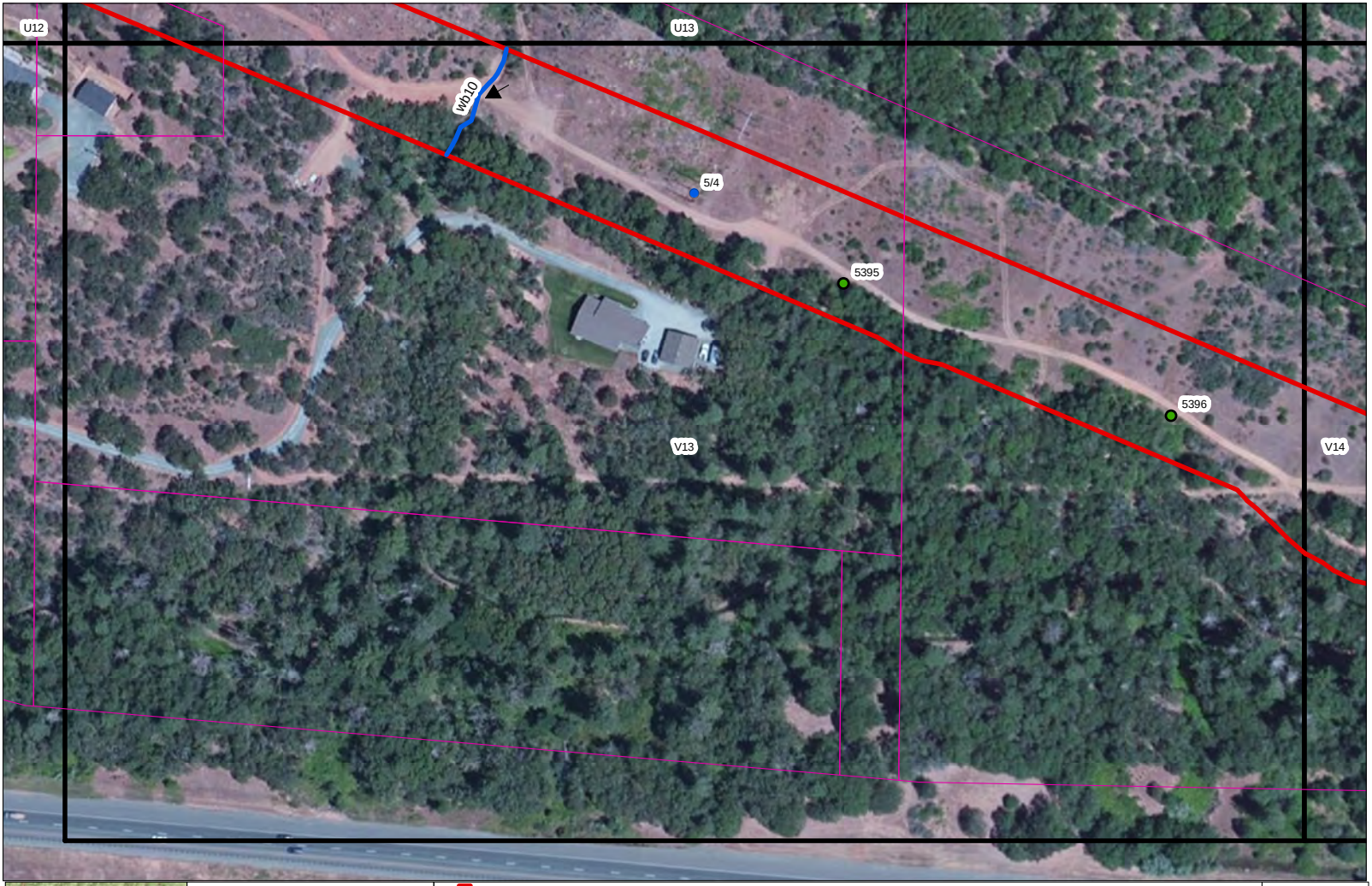

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

V13

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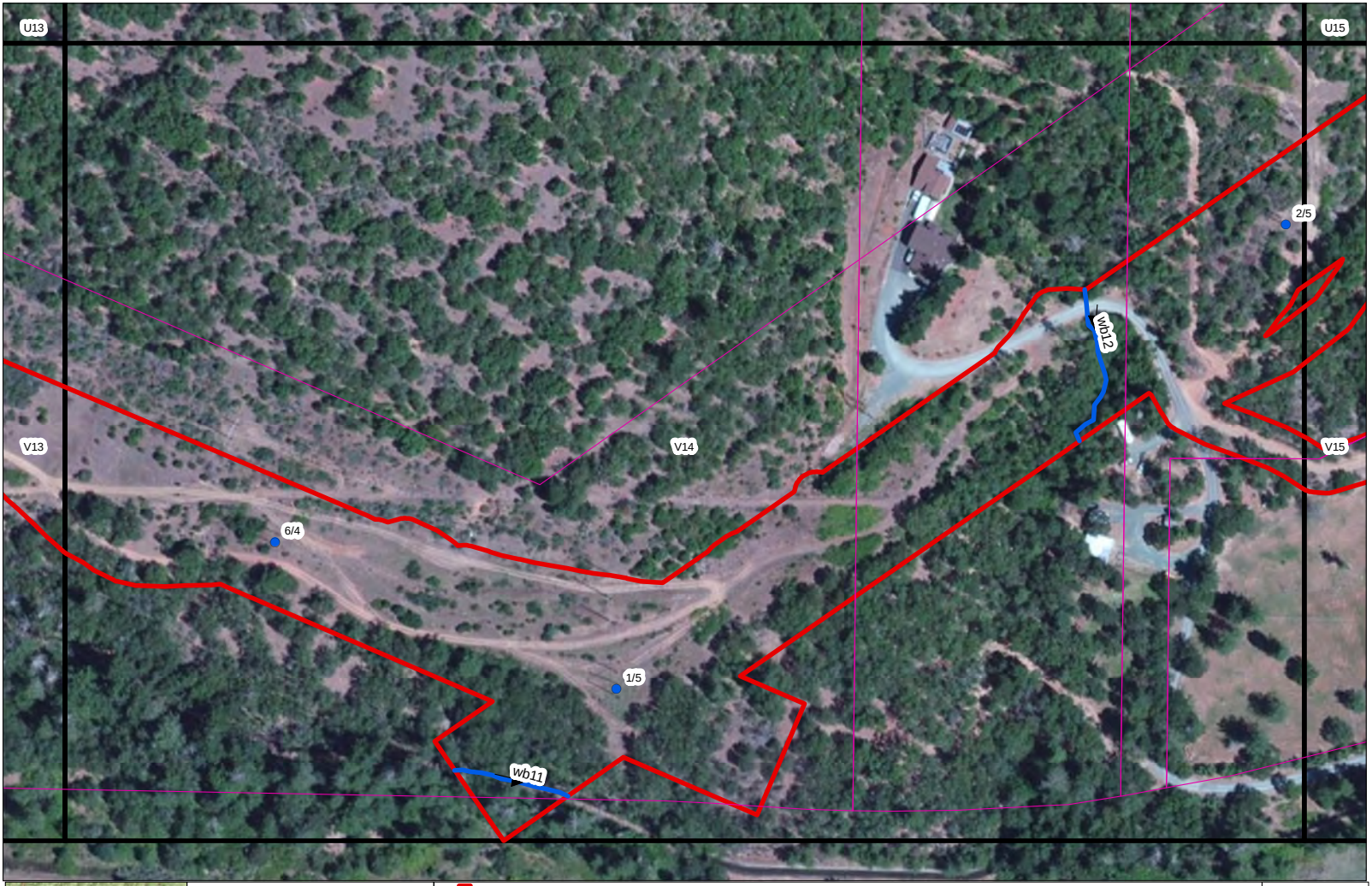

Sam's Valley Project
Jackson and Josphine, OR

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Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

V14

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

V15

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

U15

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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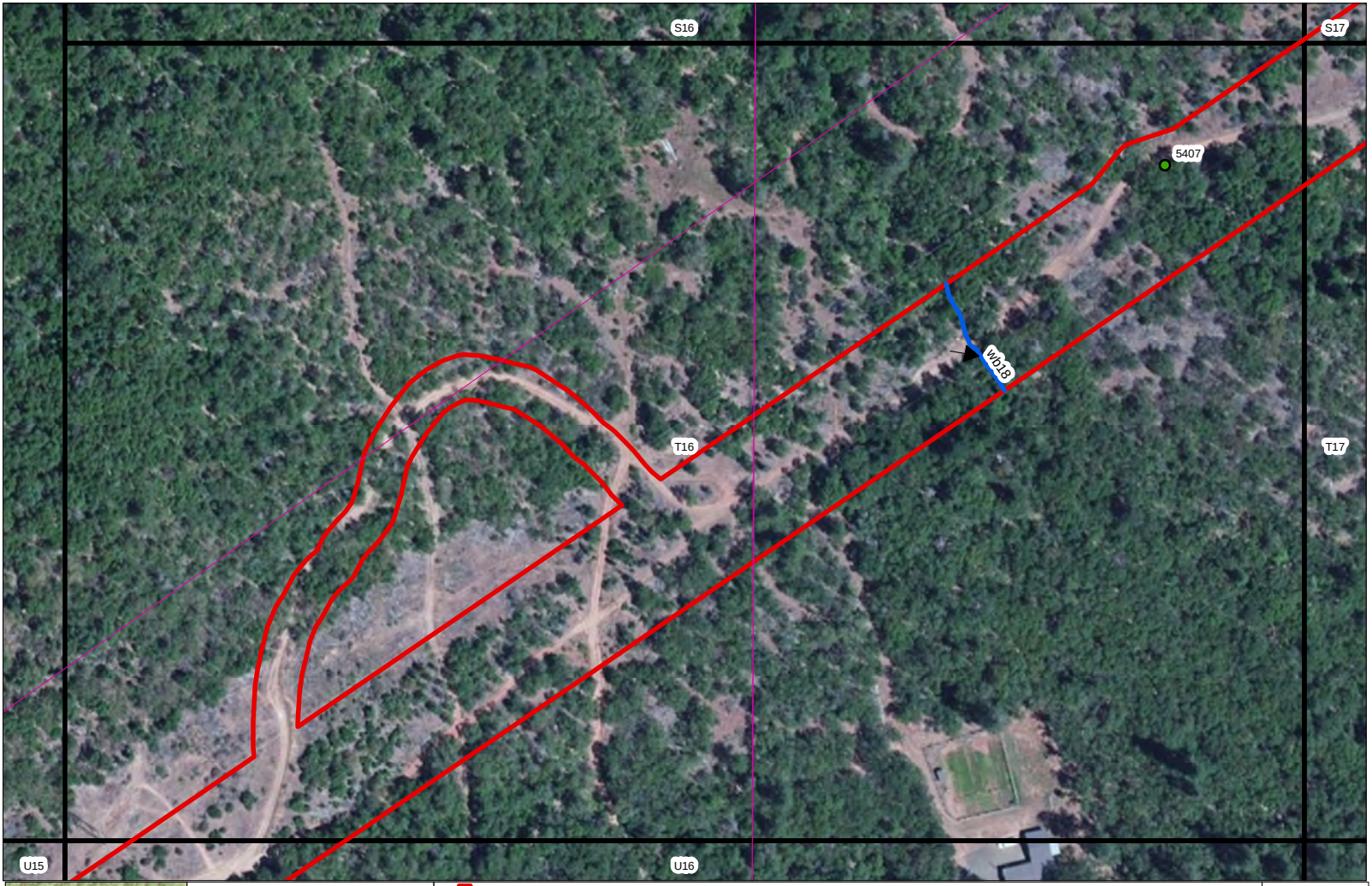

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

T16

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

S16

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

T17

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

S17

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

R17

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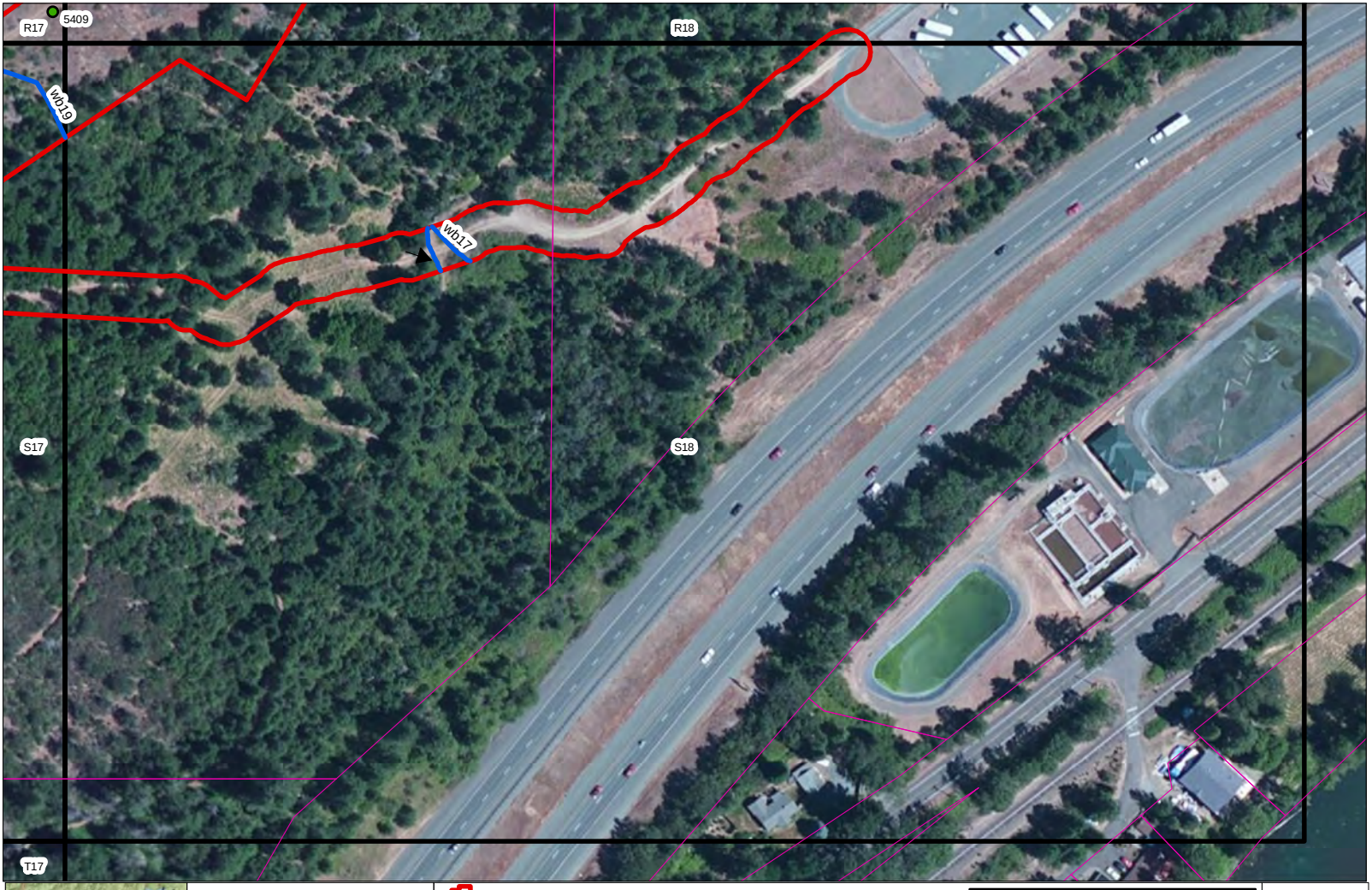

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

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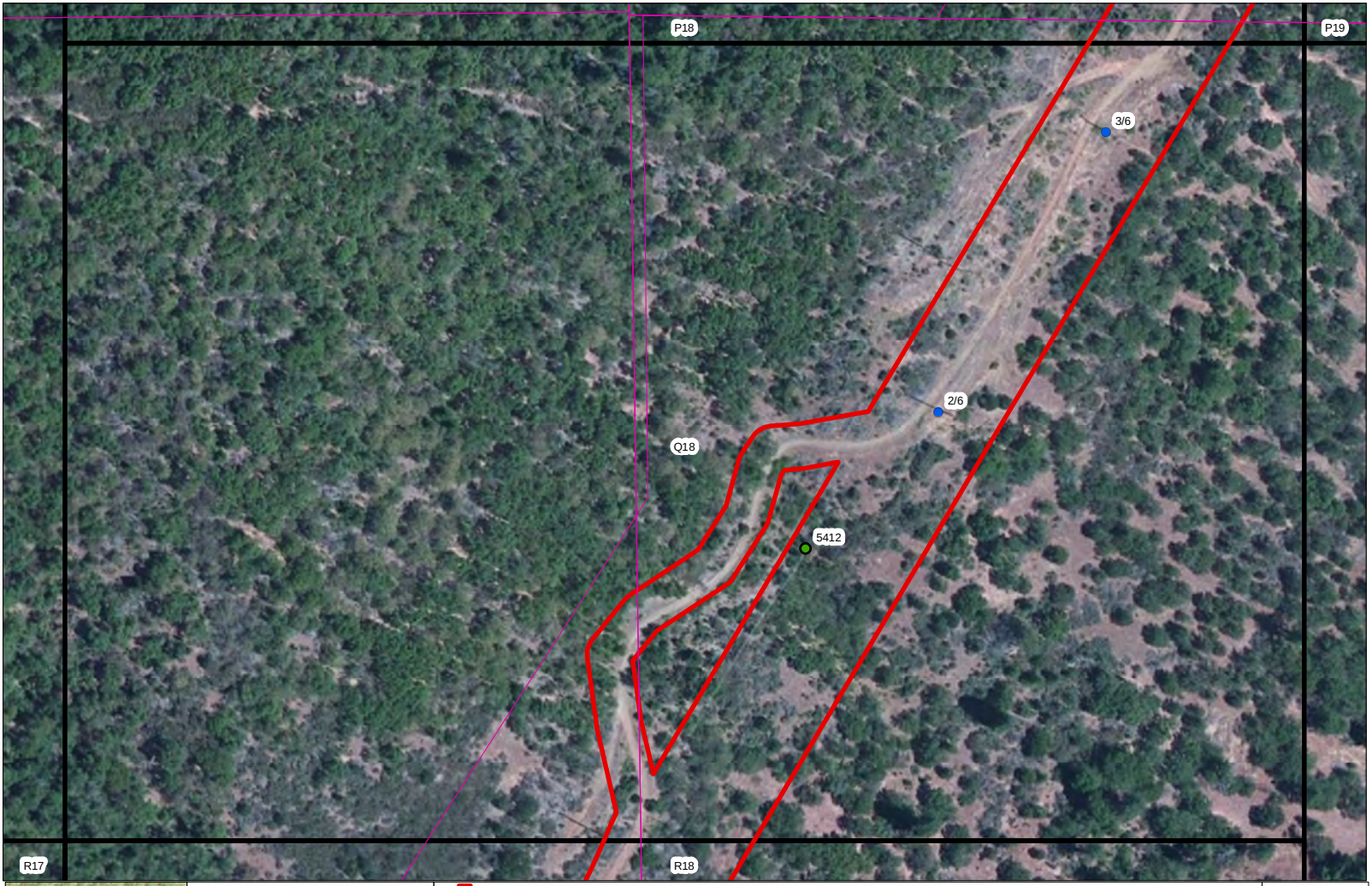

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

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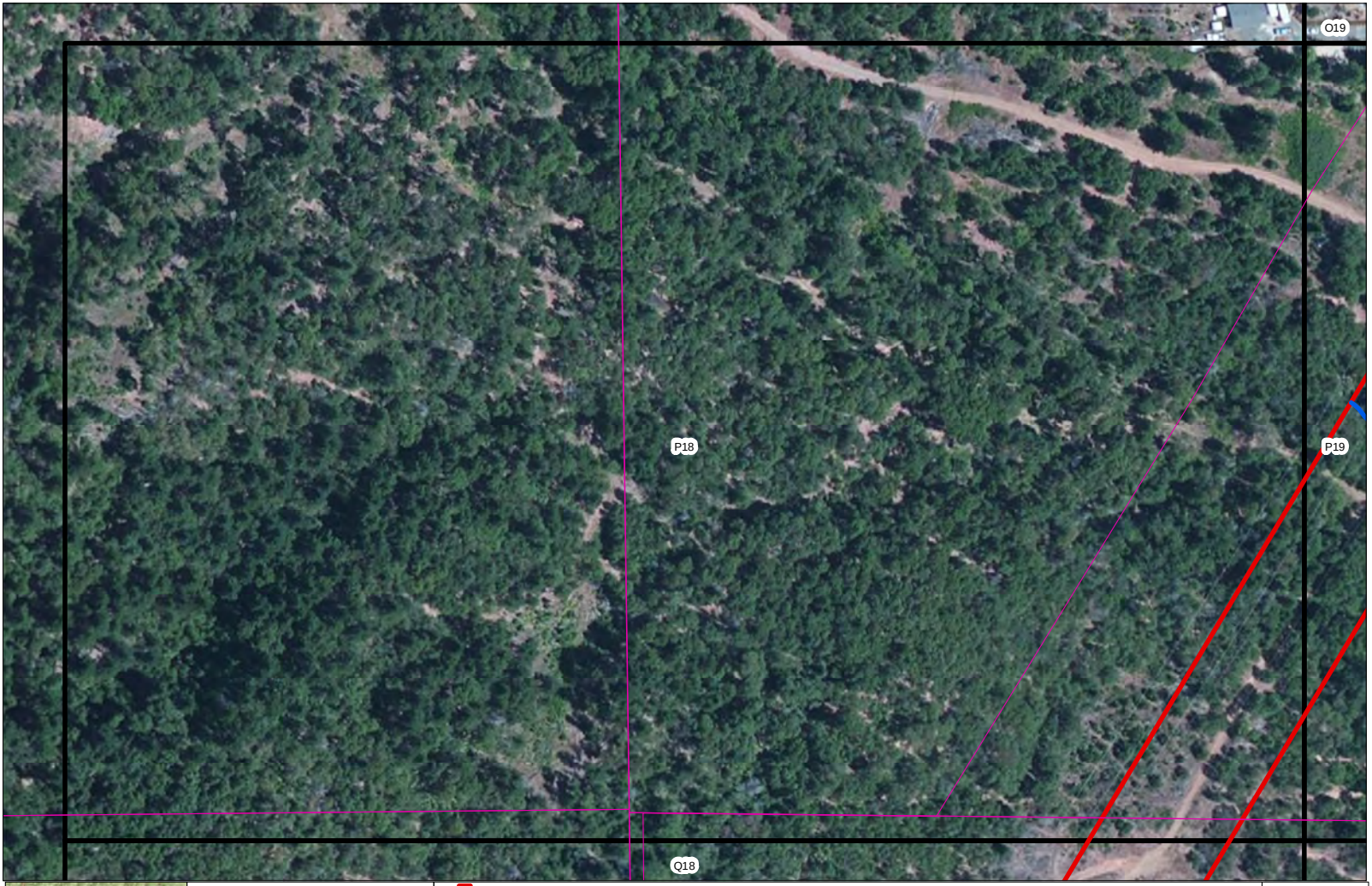

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

P18

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
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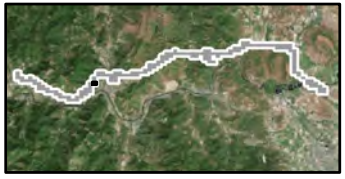
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



P19

N
W E
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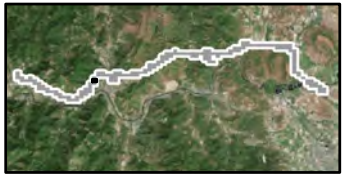
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



O19

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
mi
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0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

N19

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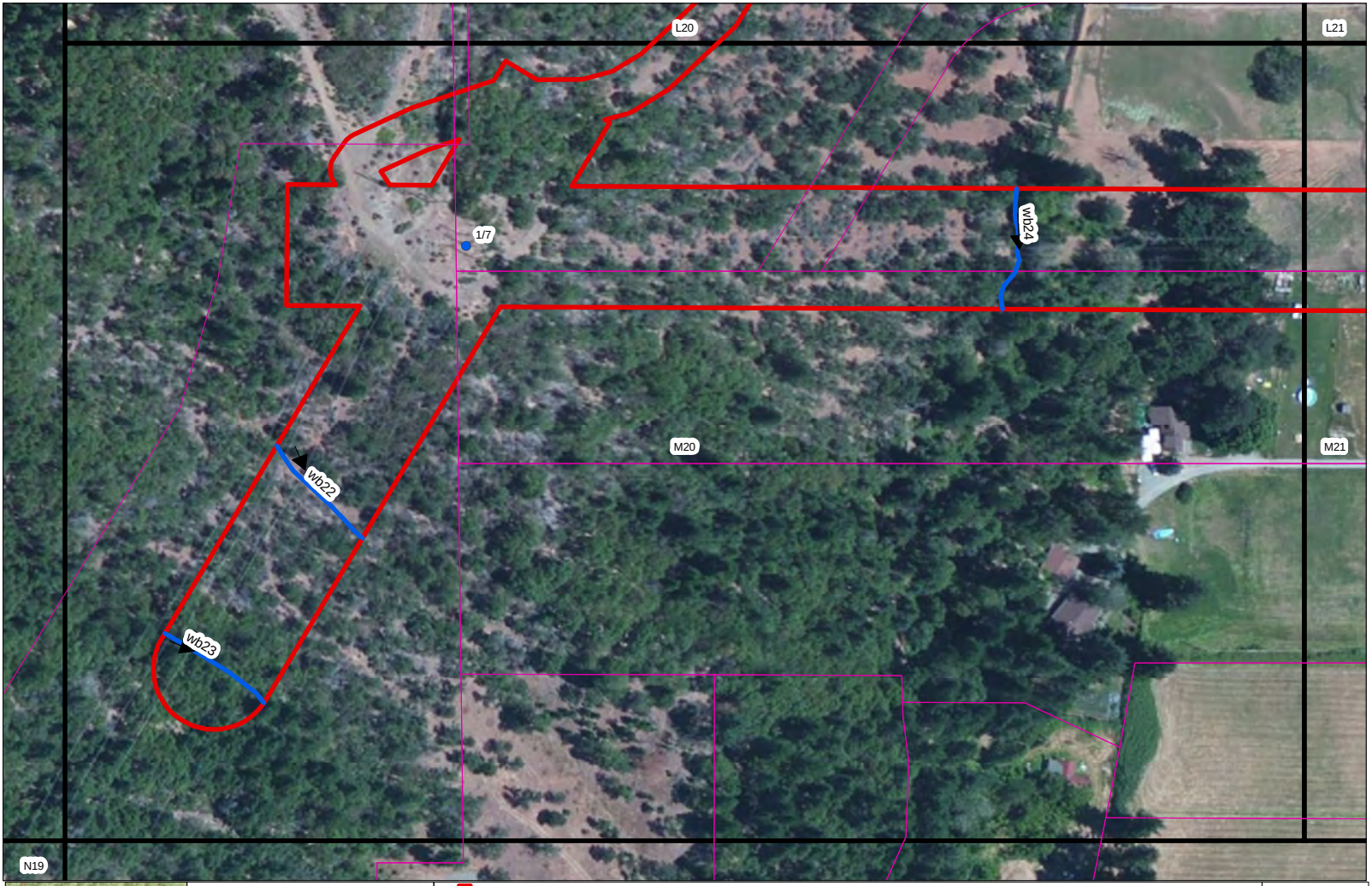

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

M20

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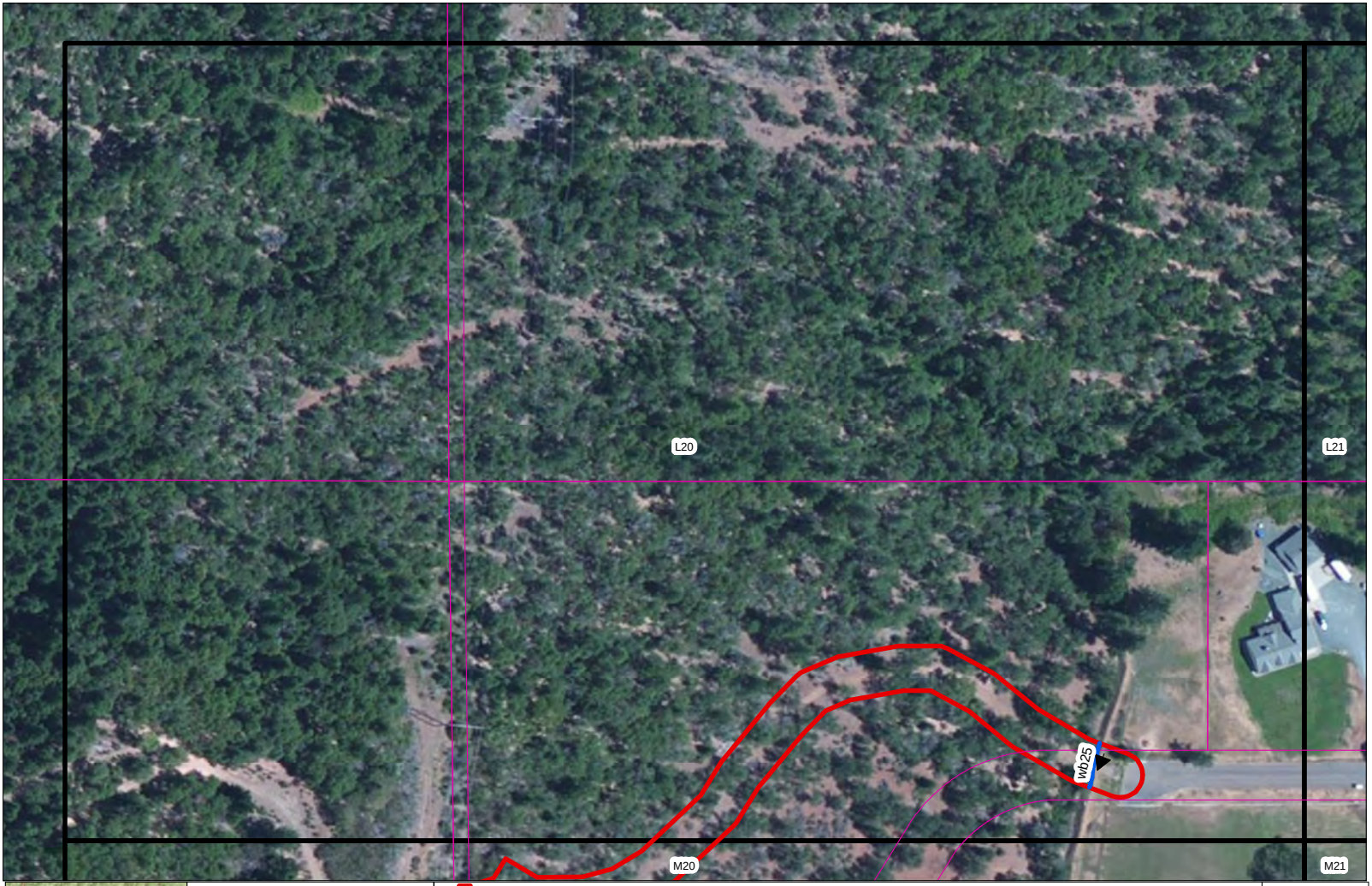
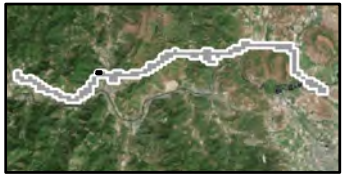


Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots



L20

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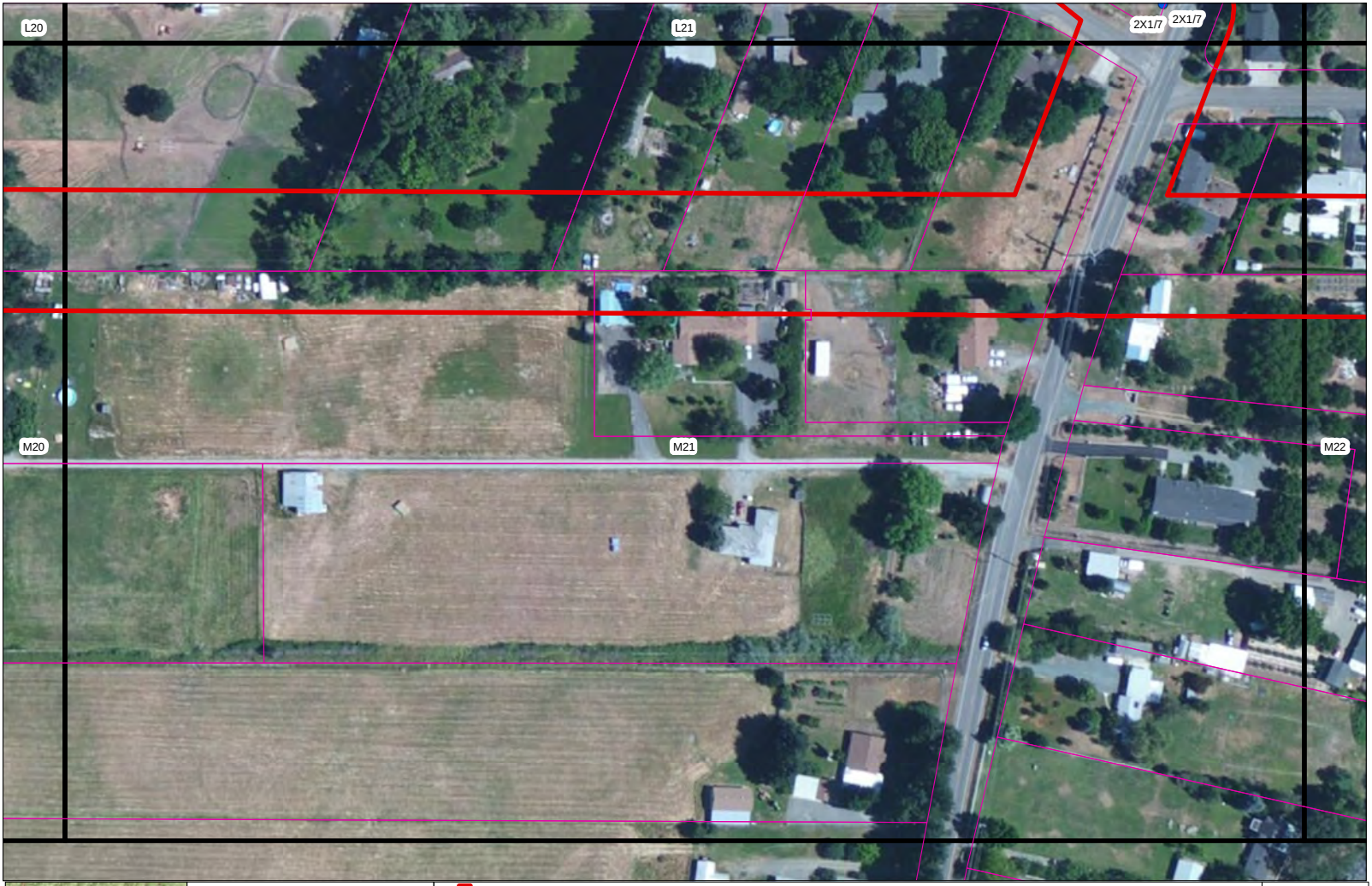

Sam's Valley Project
Jackson and Josphine, OR

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Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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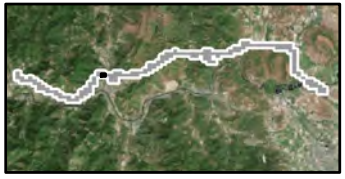
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



M21

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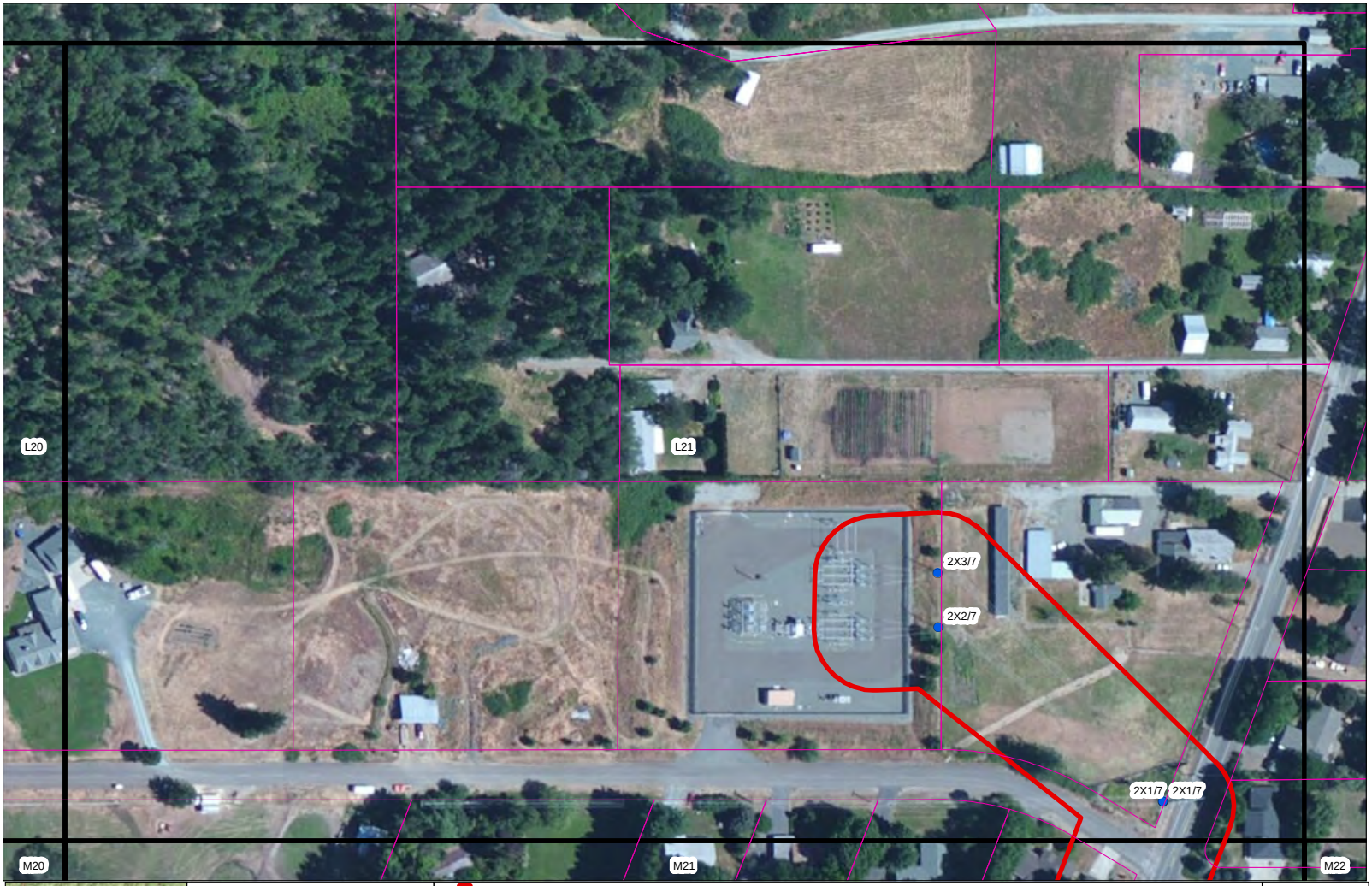
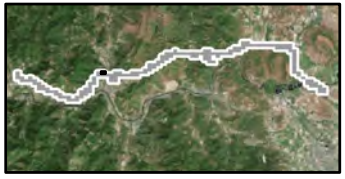


Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



L21

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M22

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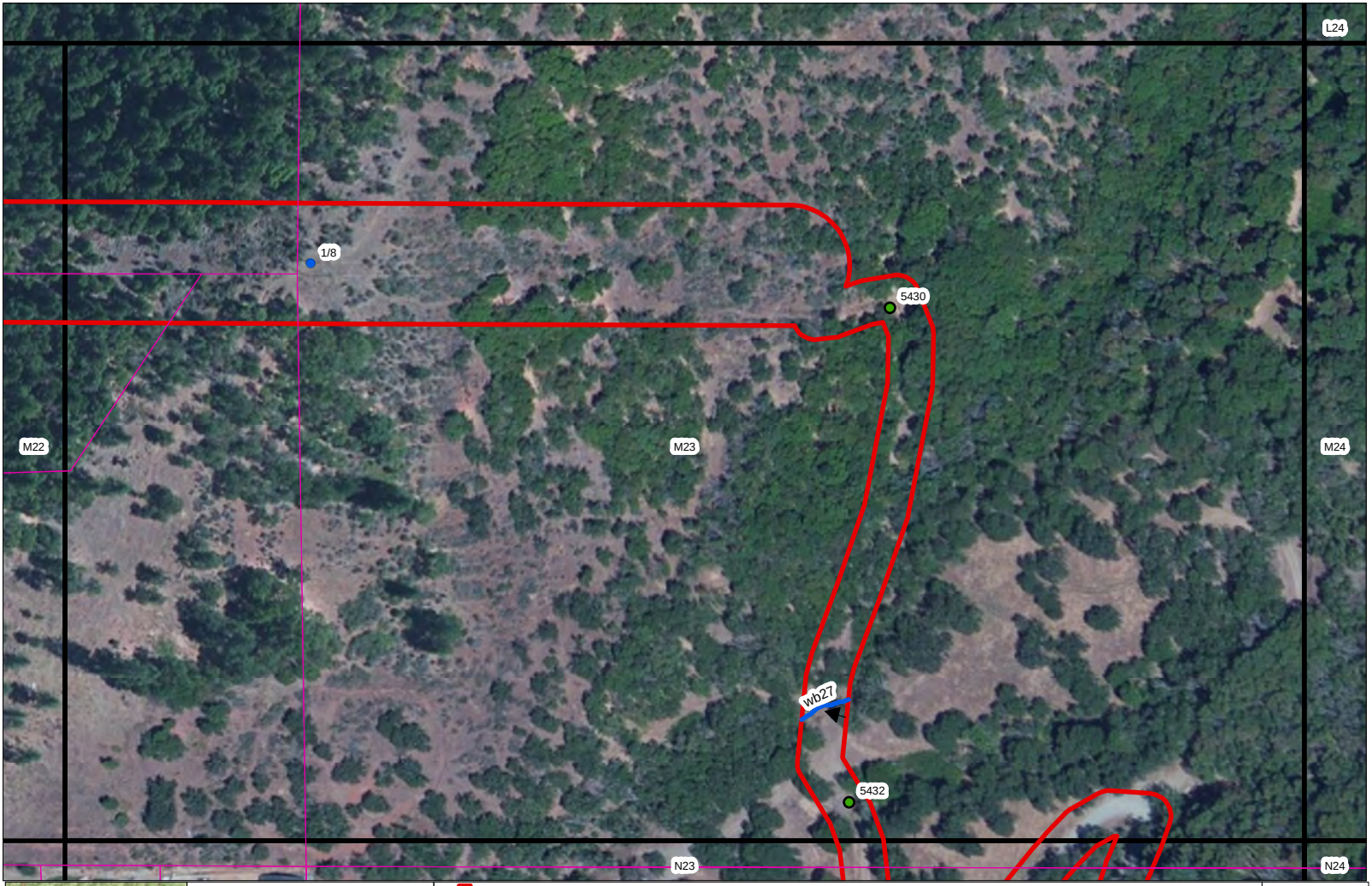

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M23

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

N23

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

O23

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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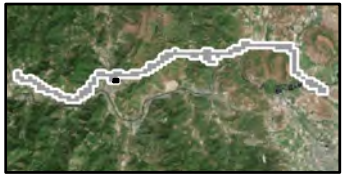
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



O24

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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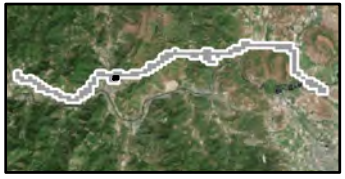
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



N24

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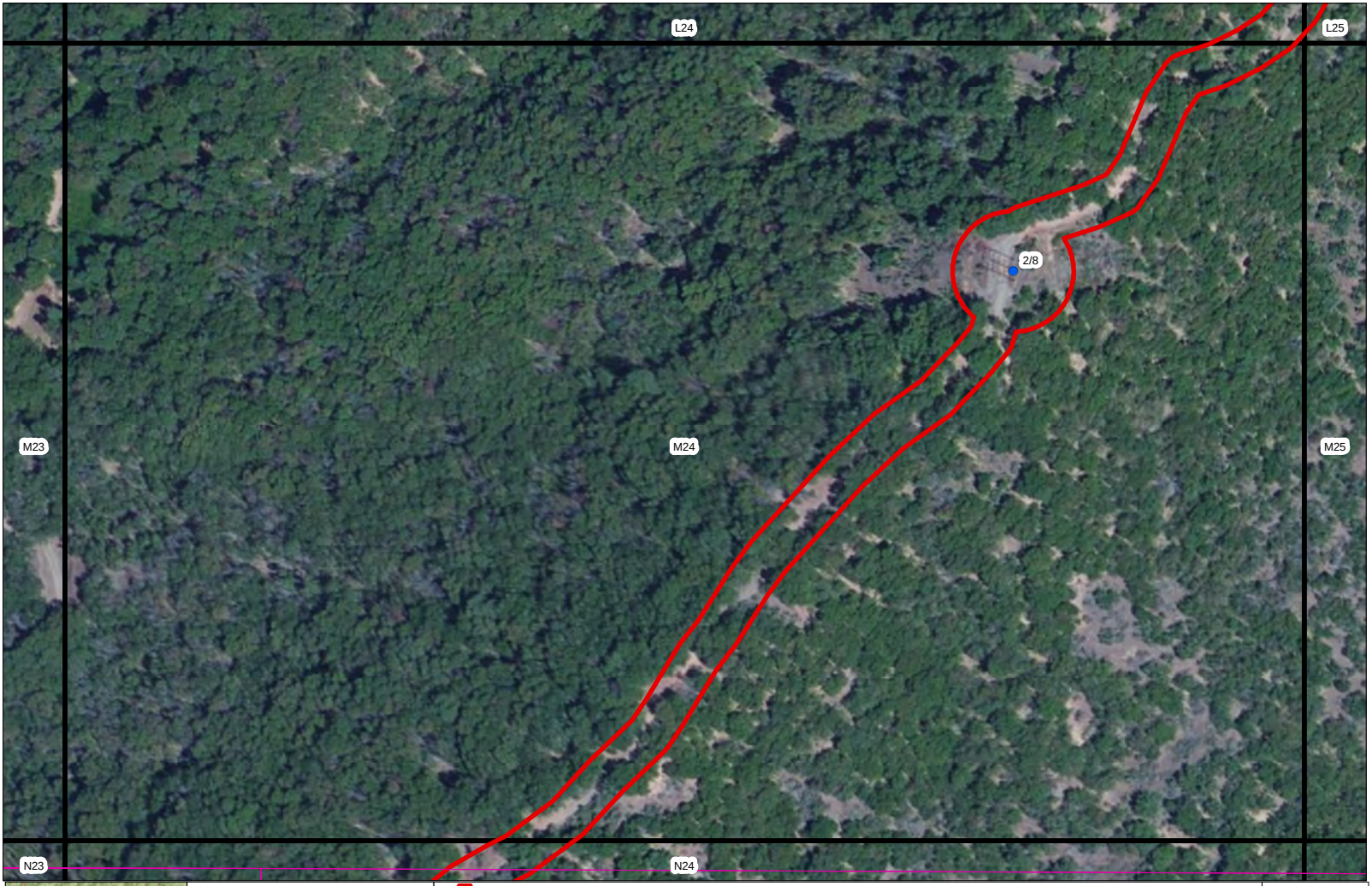

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

M24

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

L24

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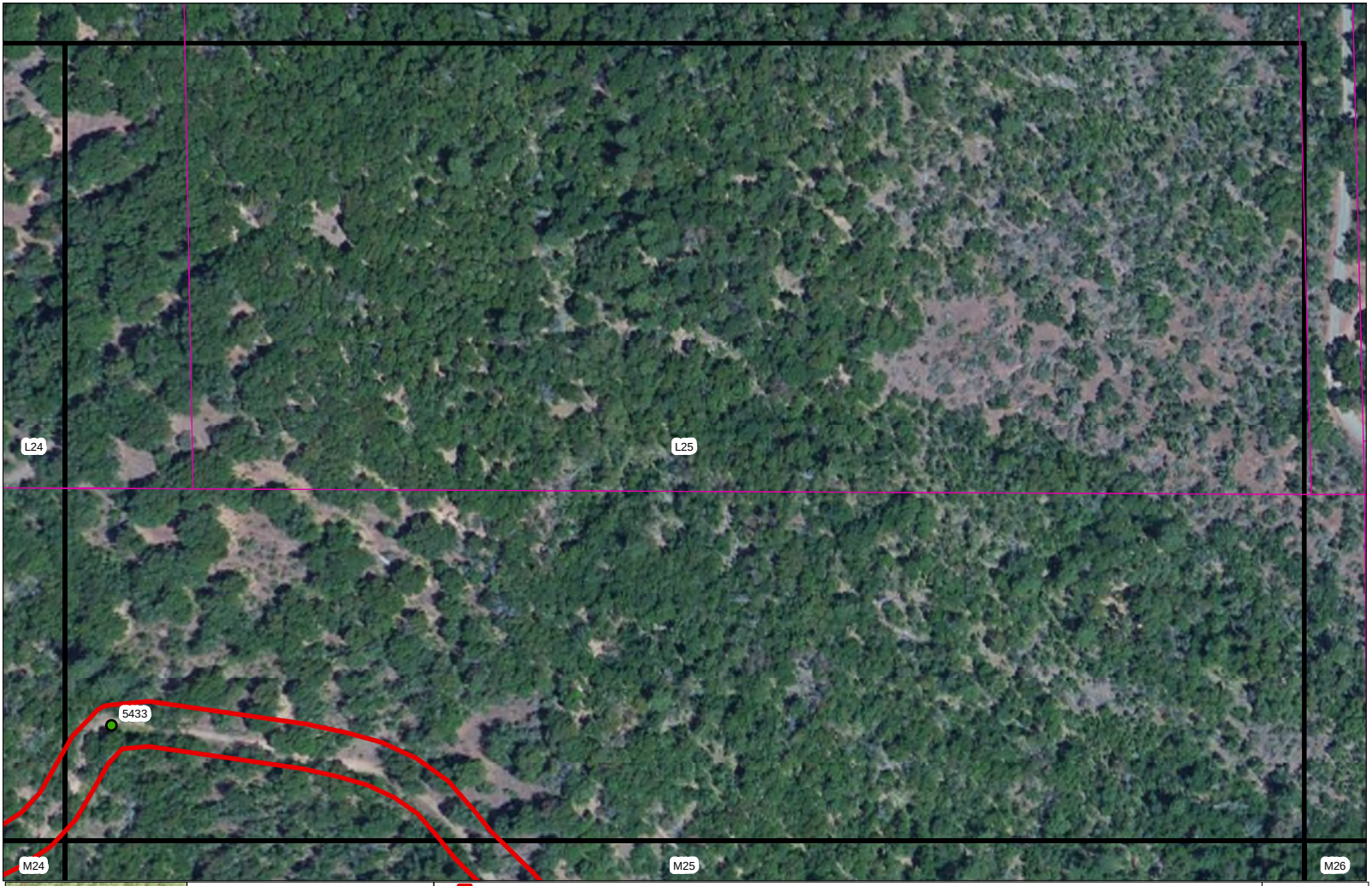
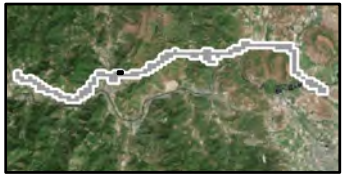


Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



L25

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M25

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W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M26

N
W E
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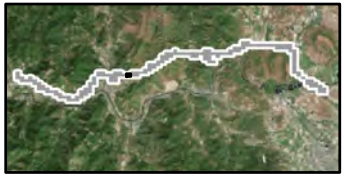
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



M27

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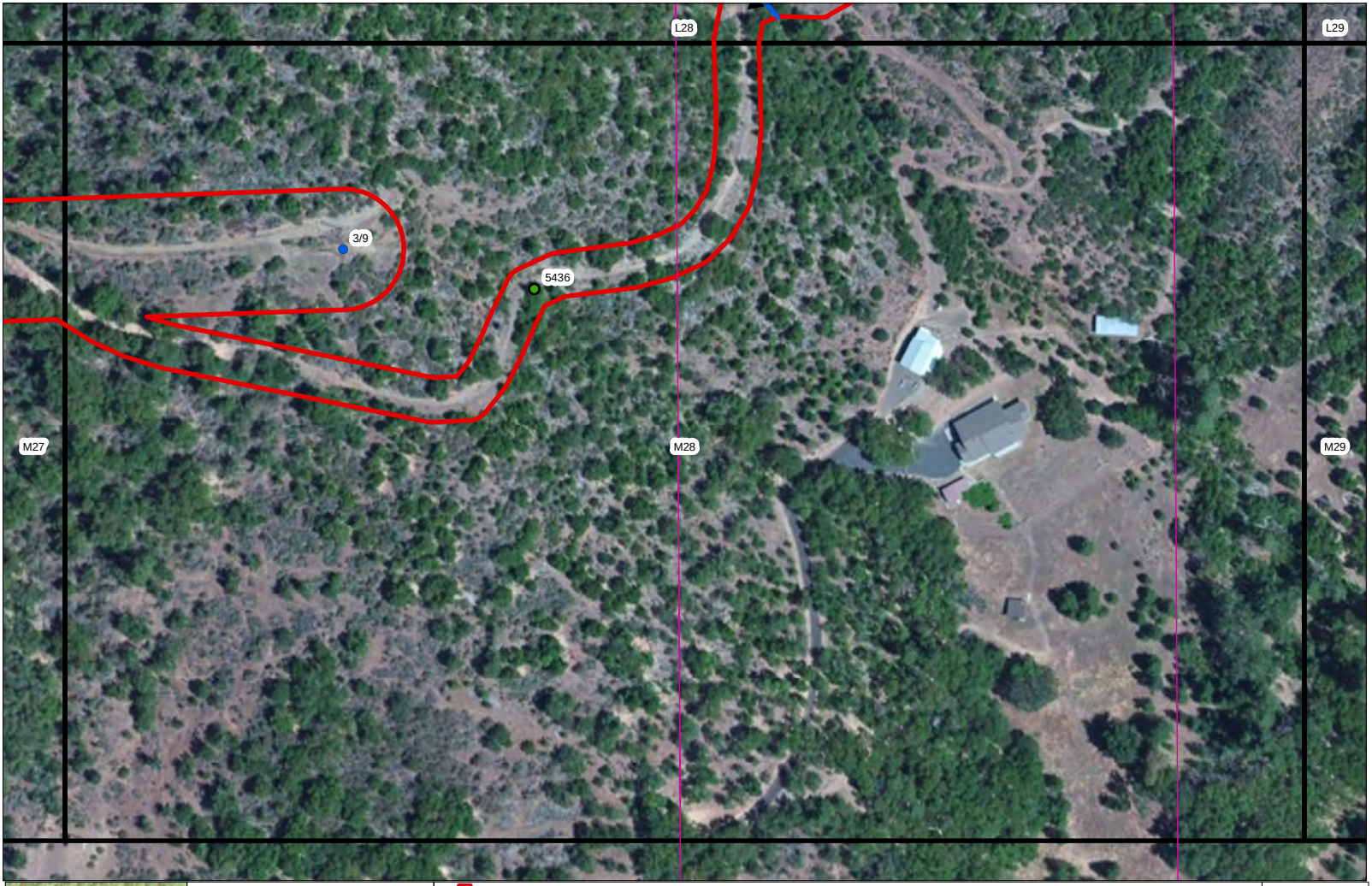

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M28

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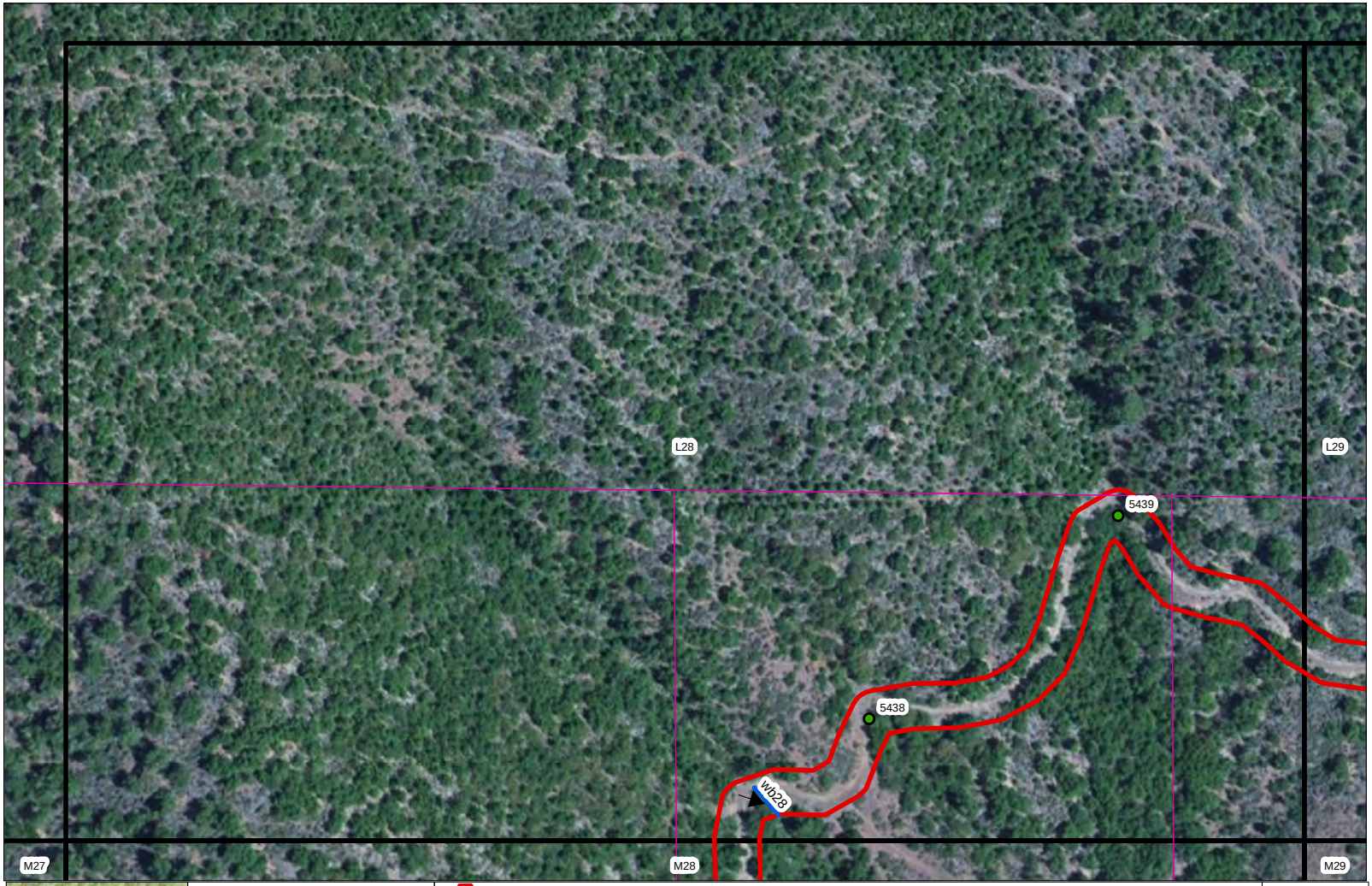
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L28

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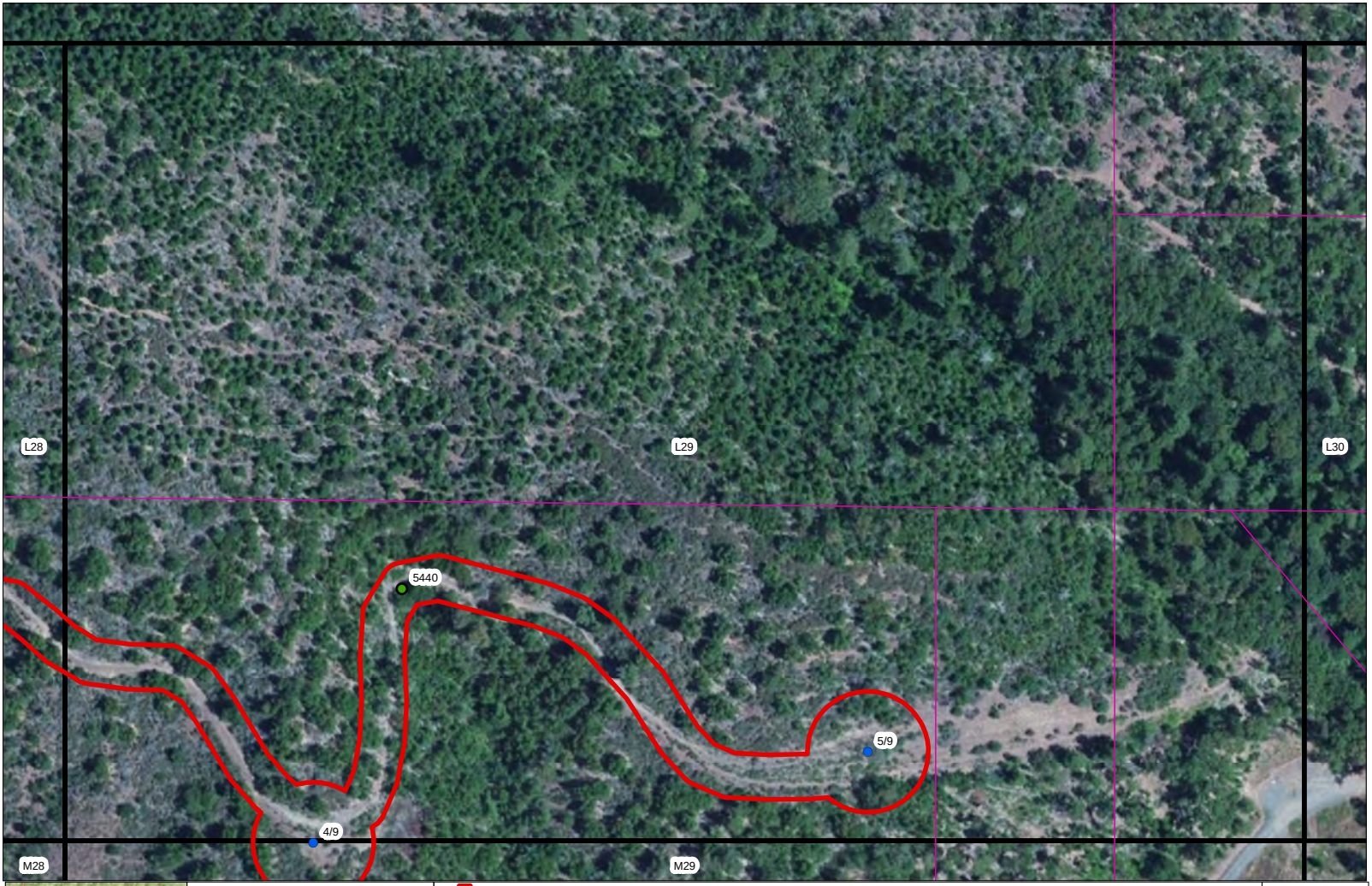
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L29

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W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M29

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L30

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L31

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

K31

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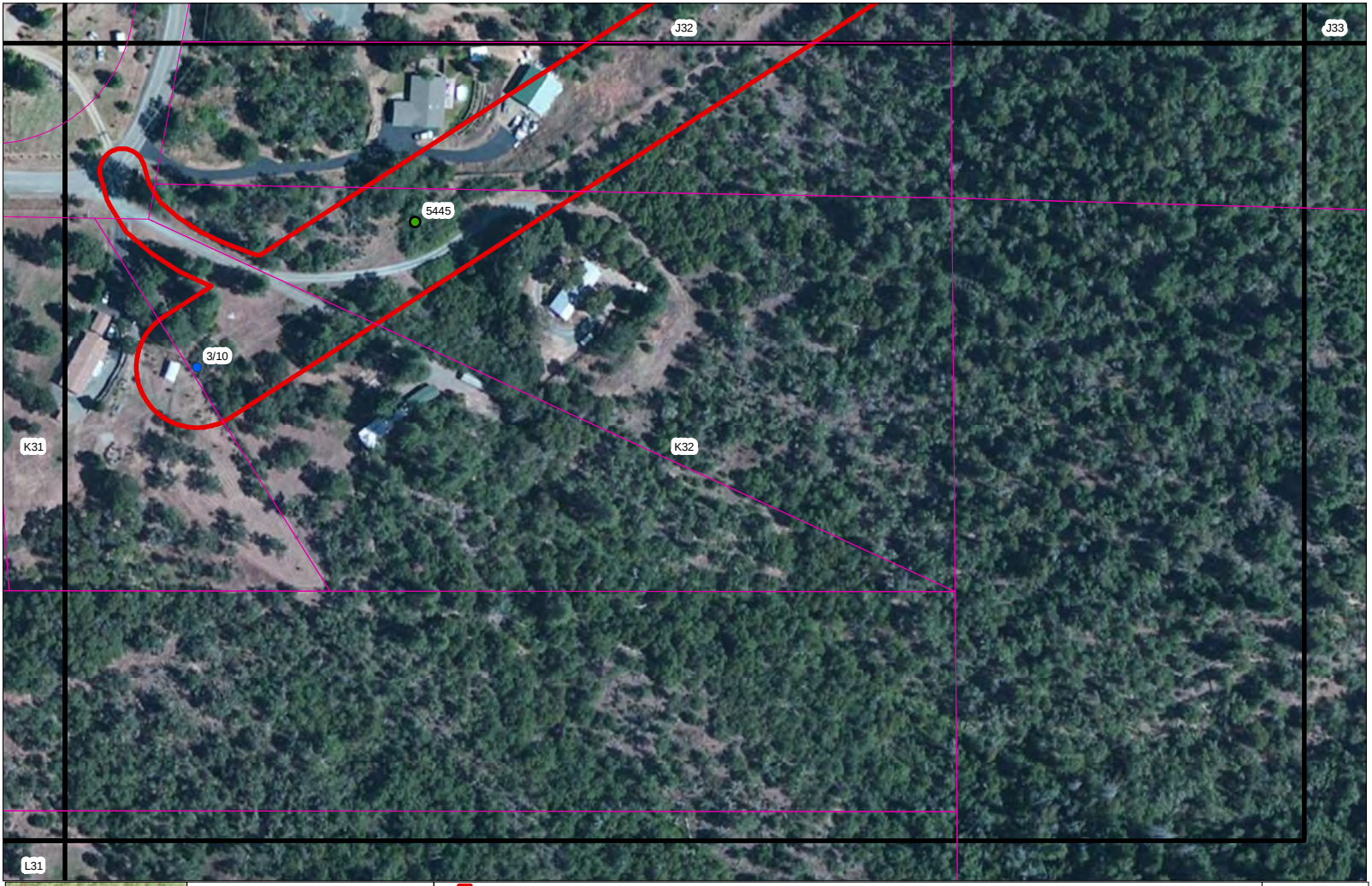
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

K32

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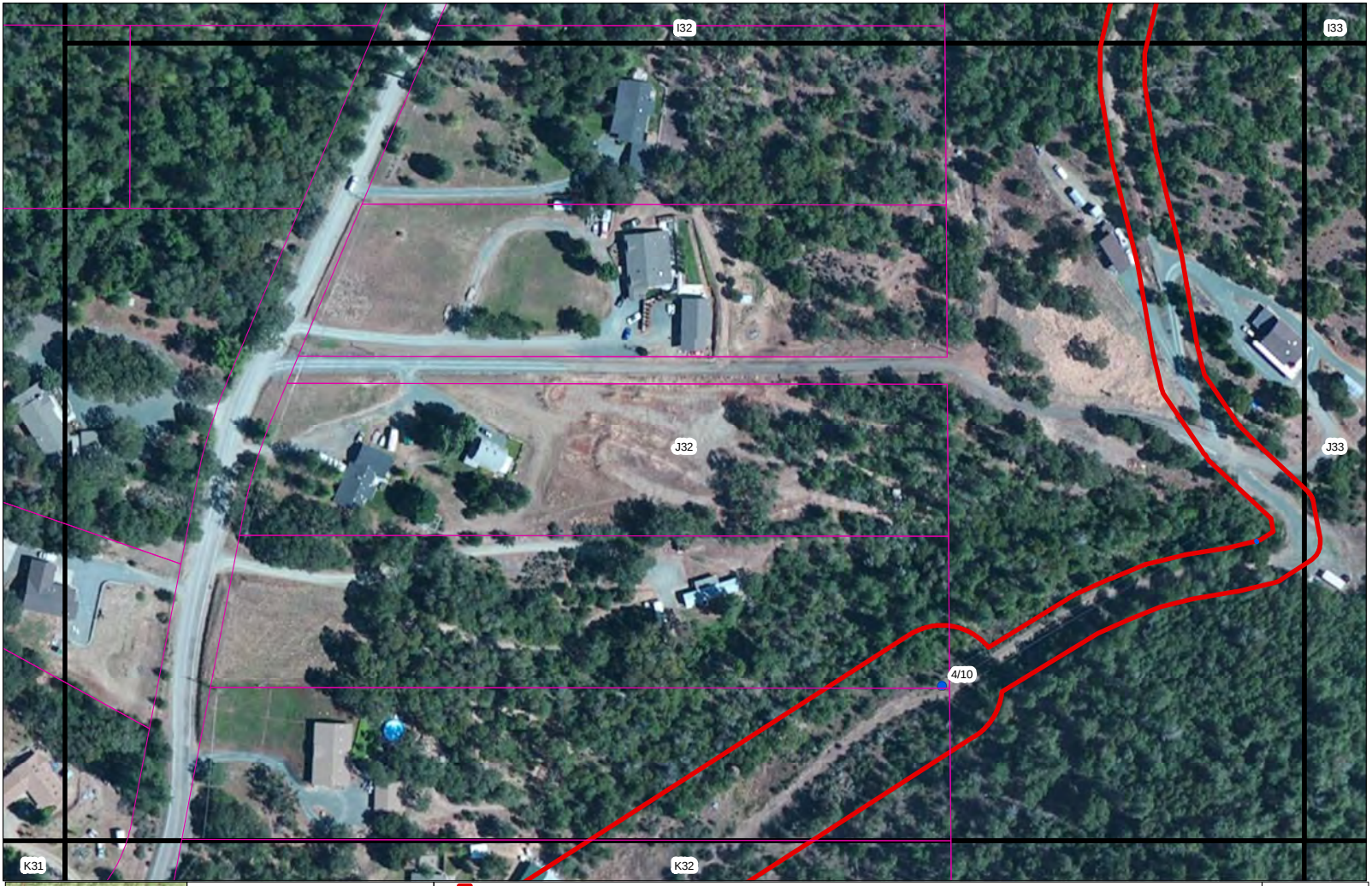
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

J32

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W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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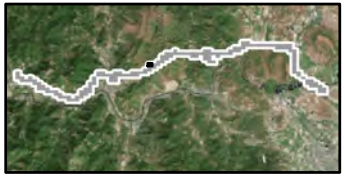
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



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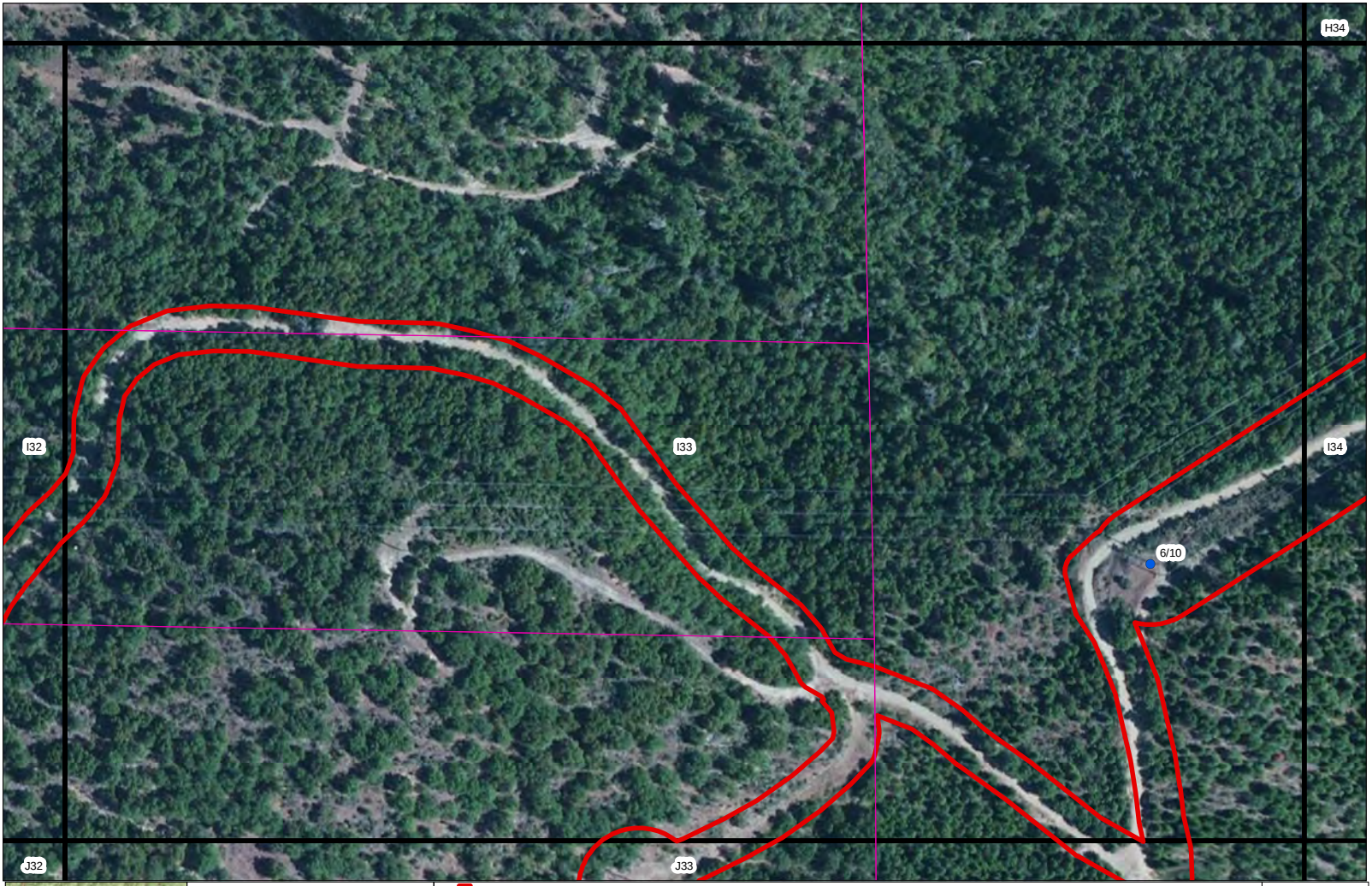

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

I33

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WEST

Sam's Valley Project
Jackson and Josphine, OR

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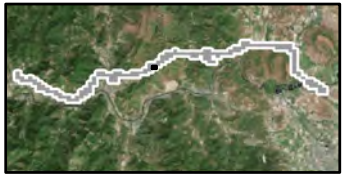
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



J33

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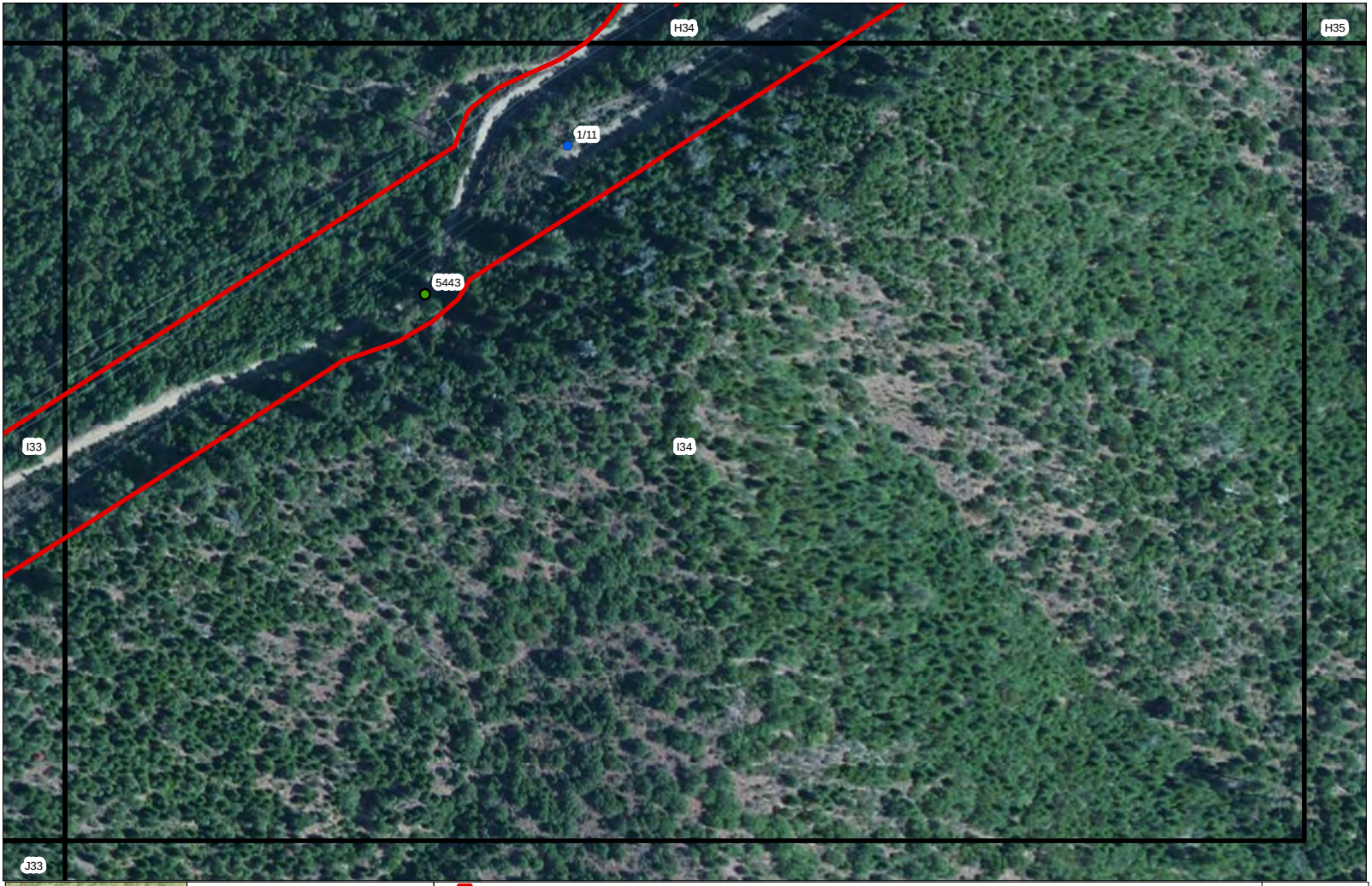

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

I34

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

H34

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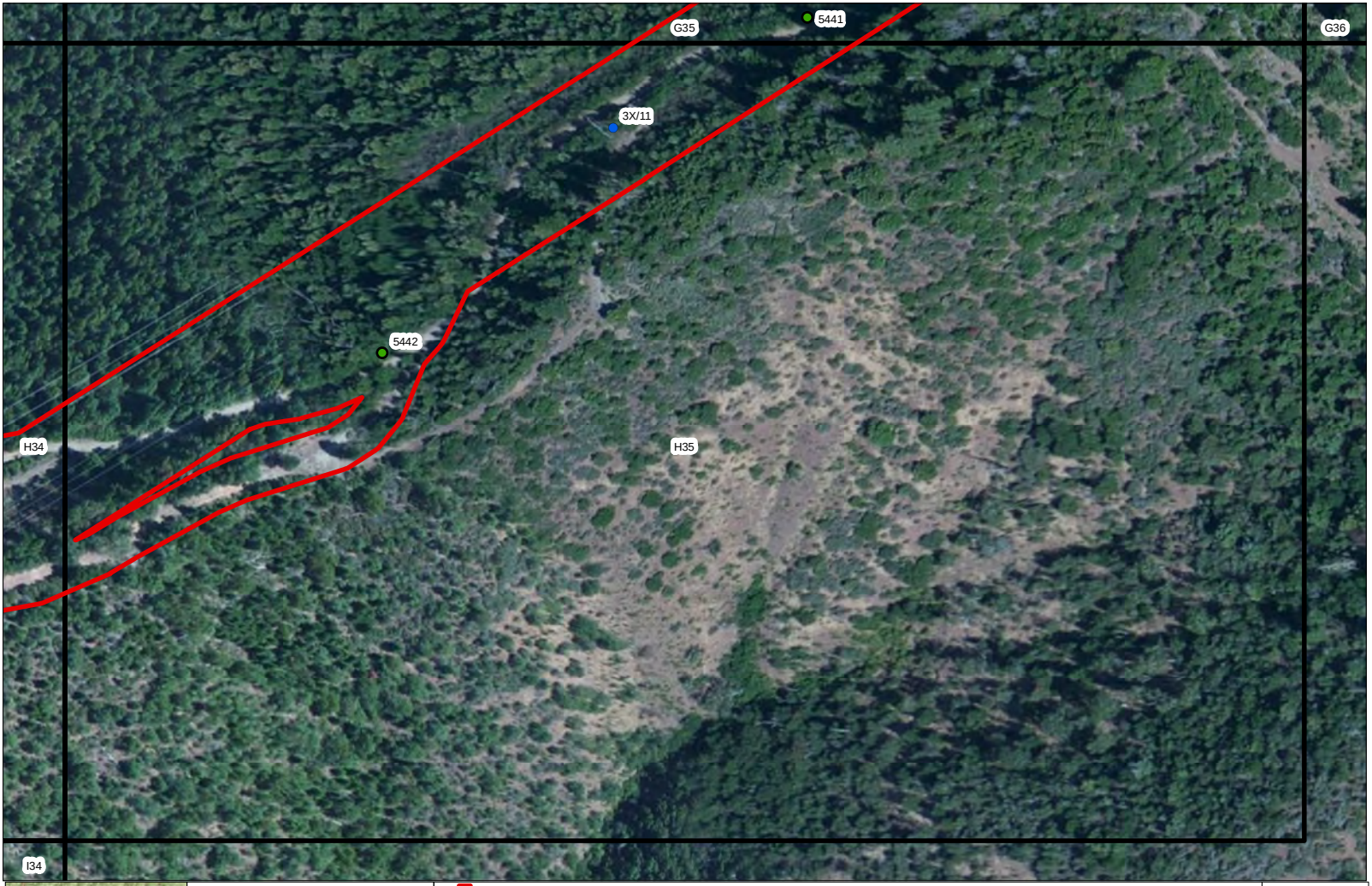
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

H35

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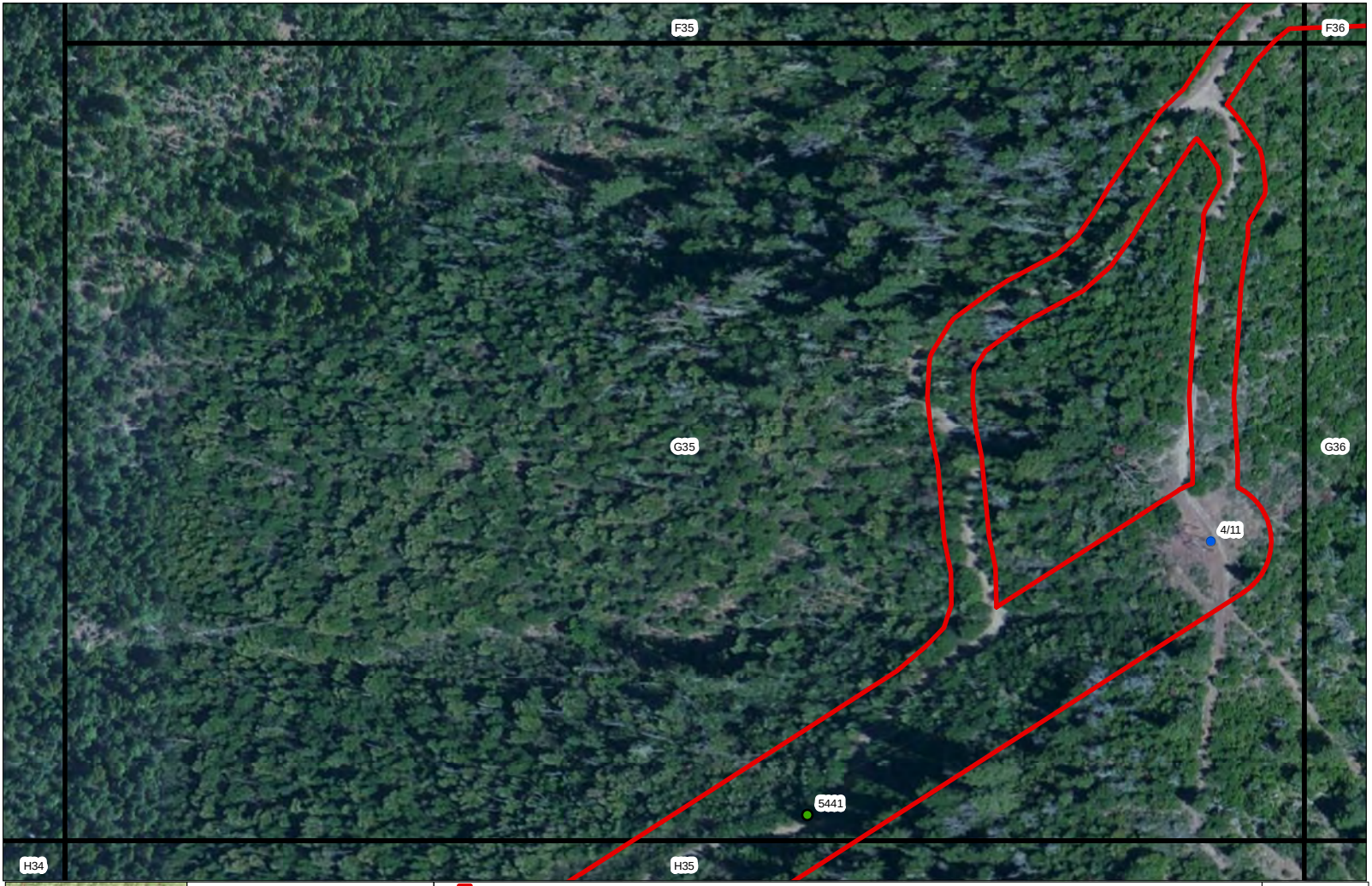
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

G35

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

F35

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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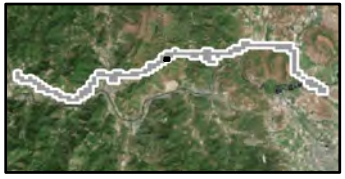
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



G36

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
mi
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0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

F36

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E36

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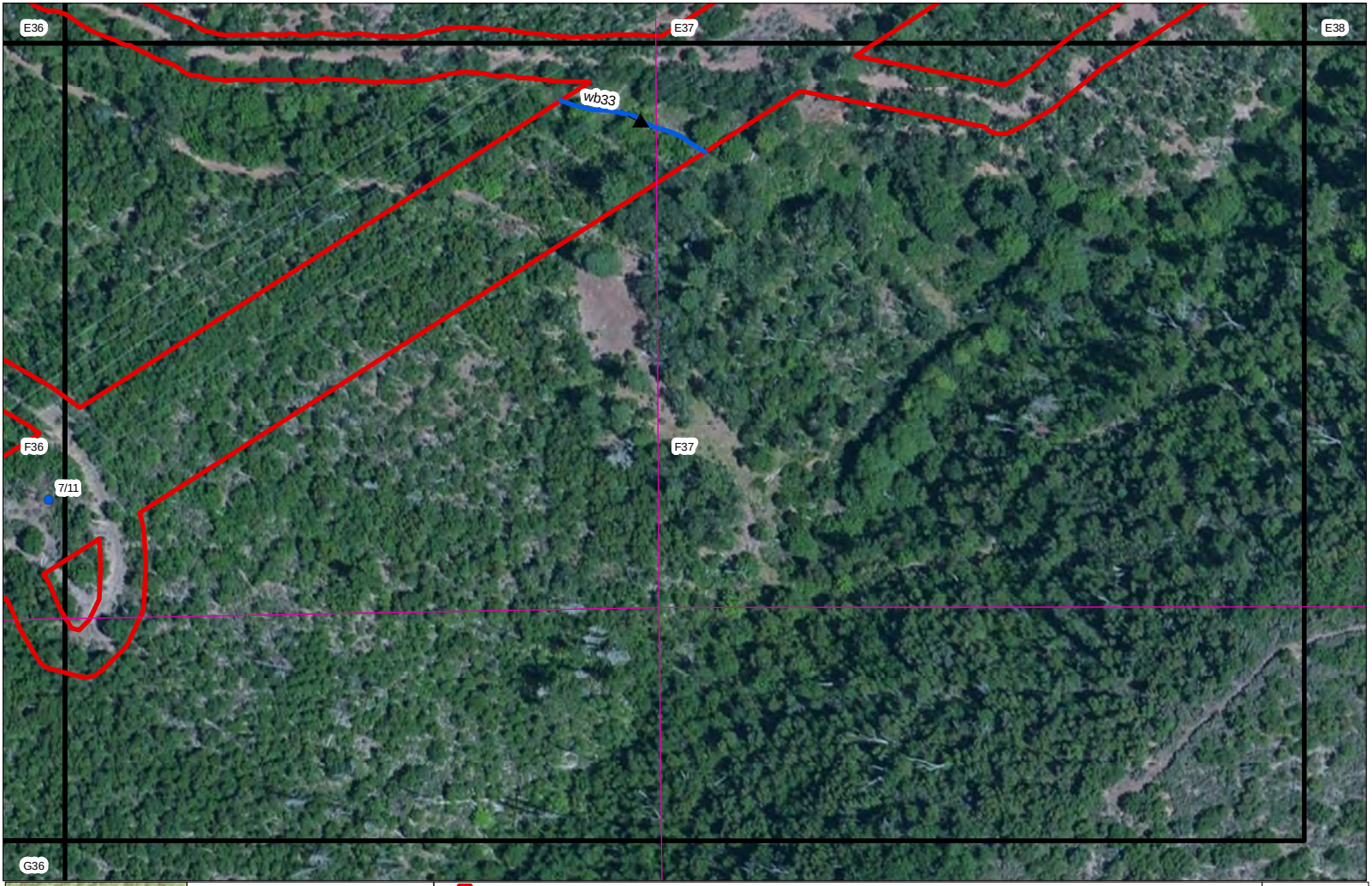
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

F37

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E37

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E38

N
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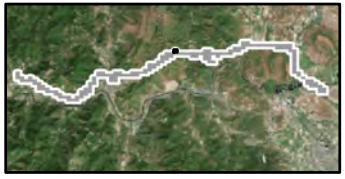
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



D38

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E39

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E40

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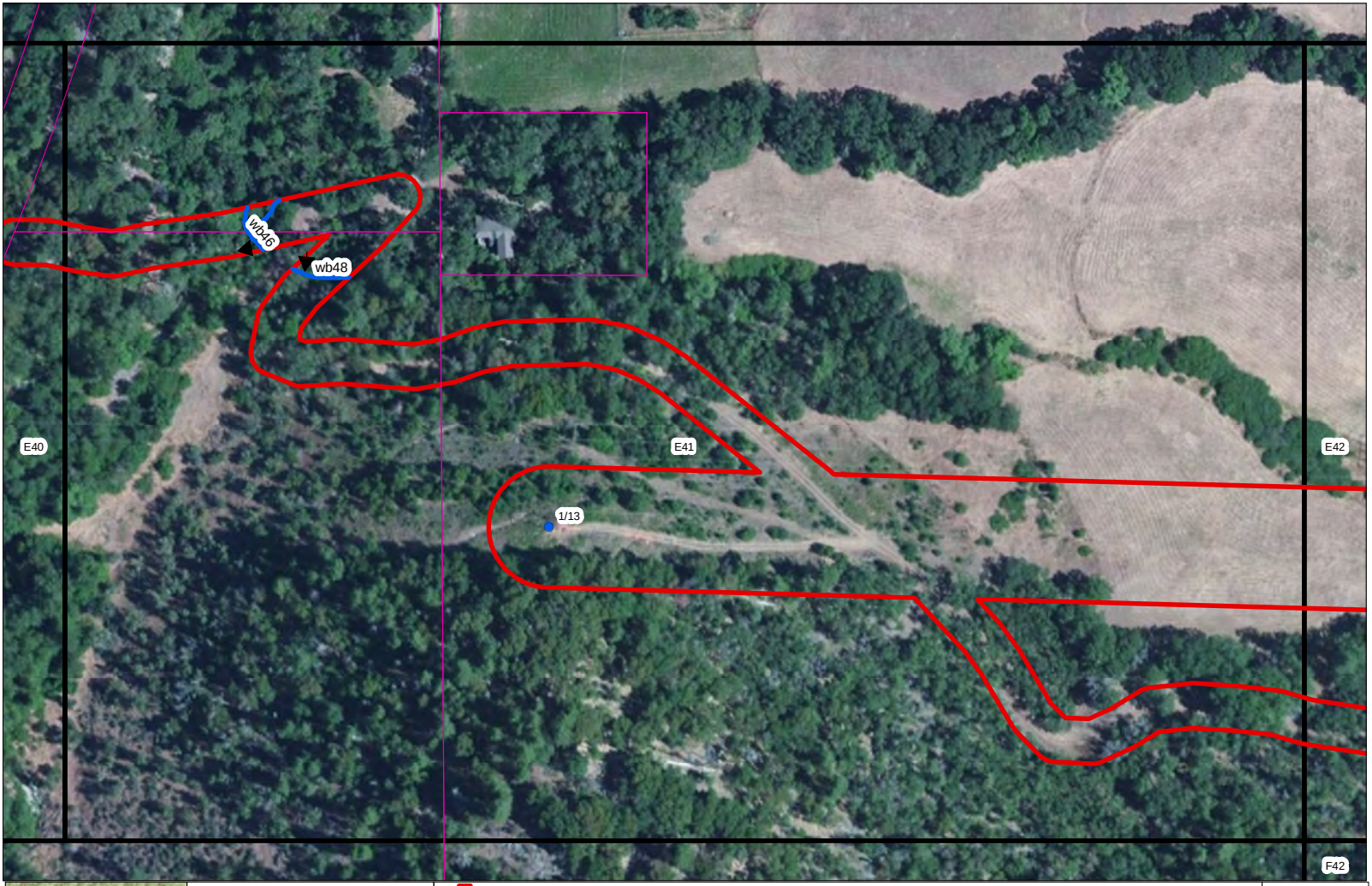
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E41

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E42

N
W E
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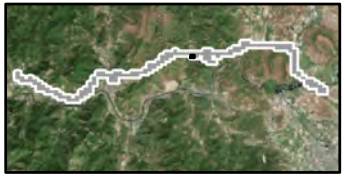
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



F42

N
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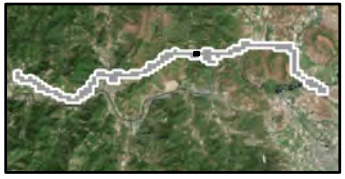
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



E43

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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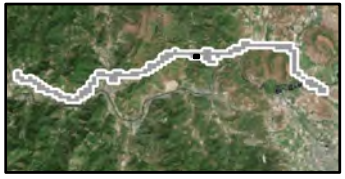
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



F43

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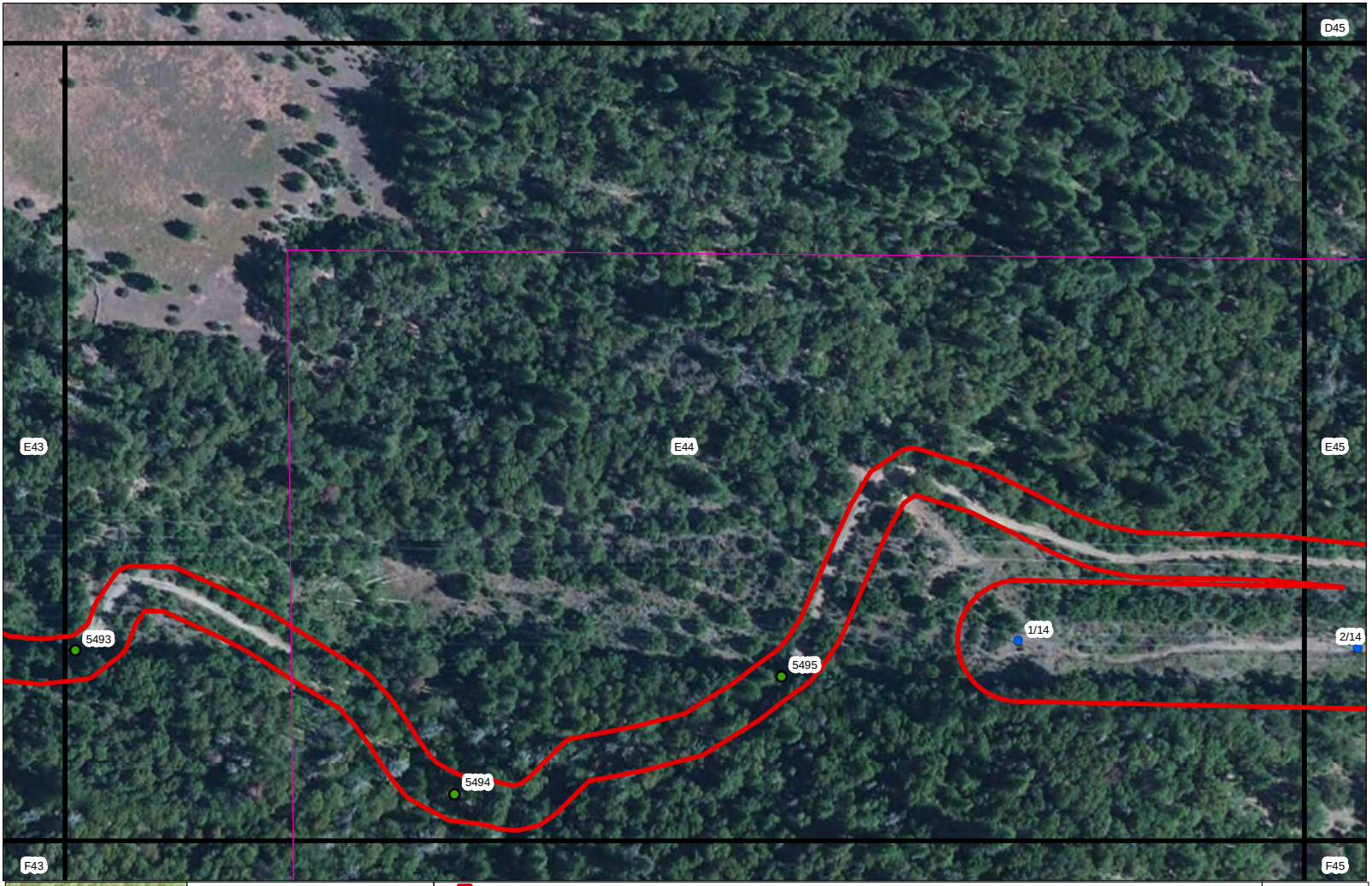
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E44

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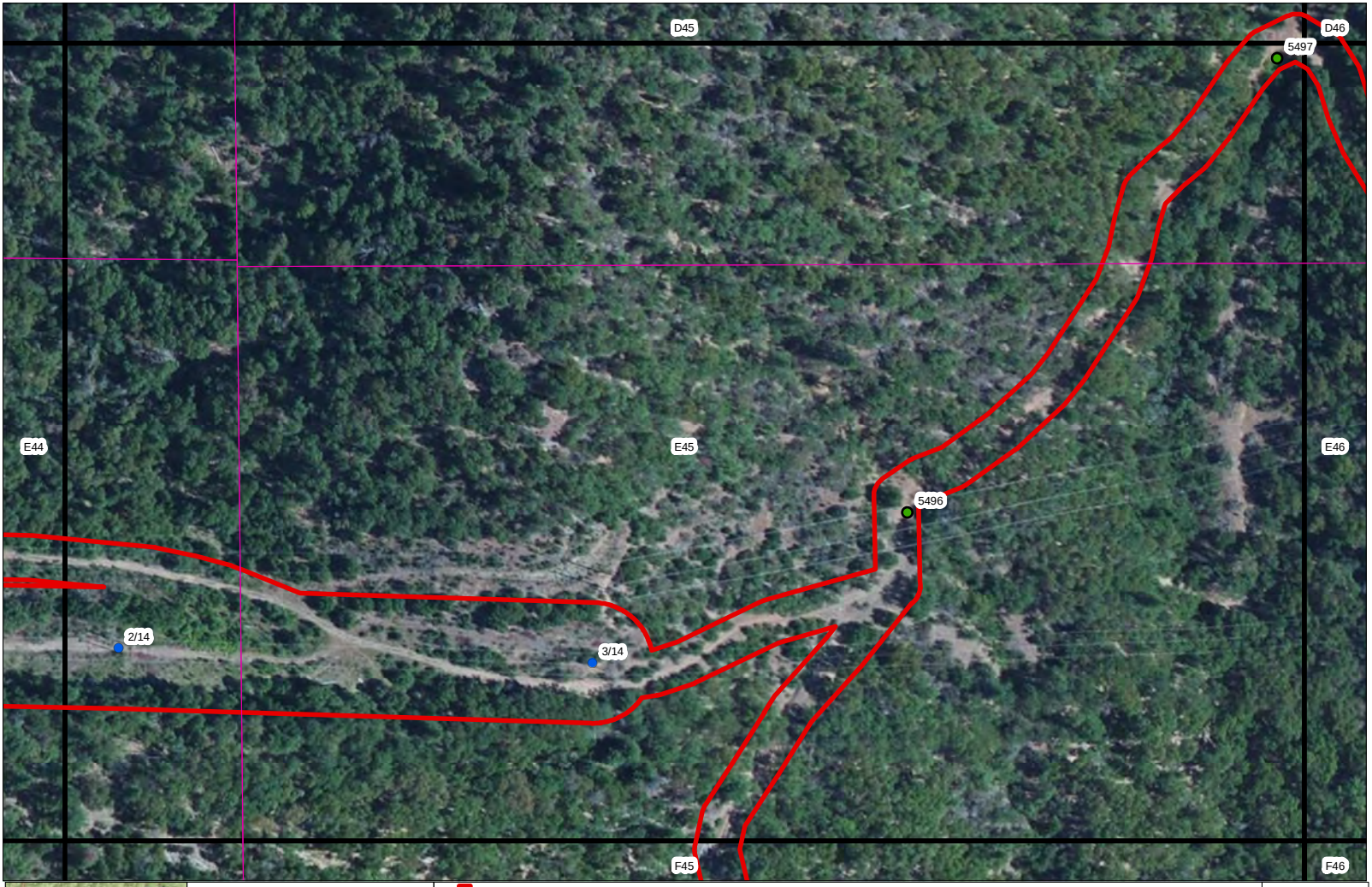
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E45

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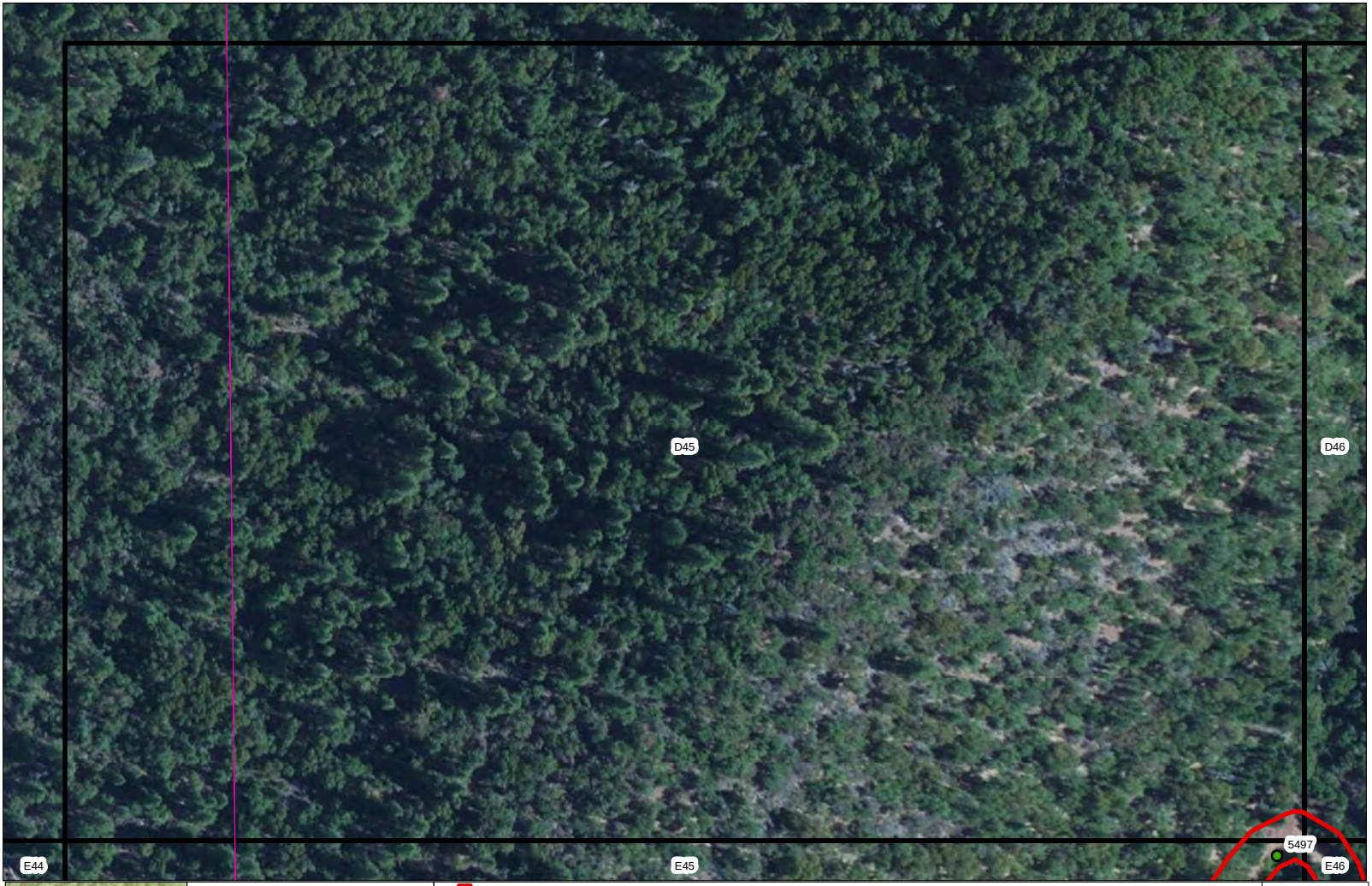
WEST

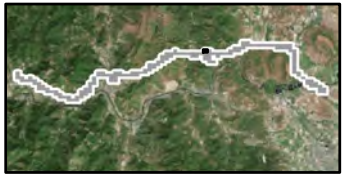


Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



D45

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

D46

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

F45

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

G45

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

G46

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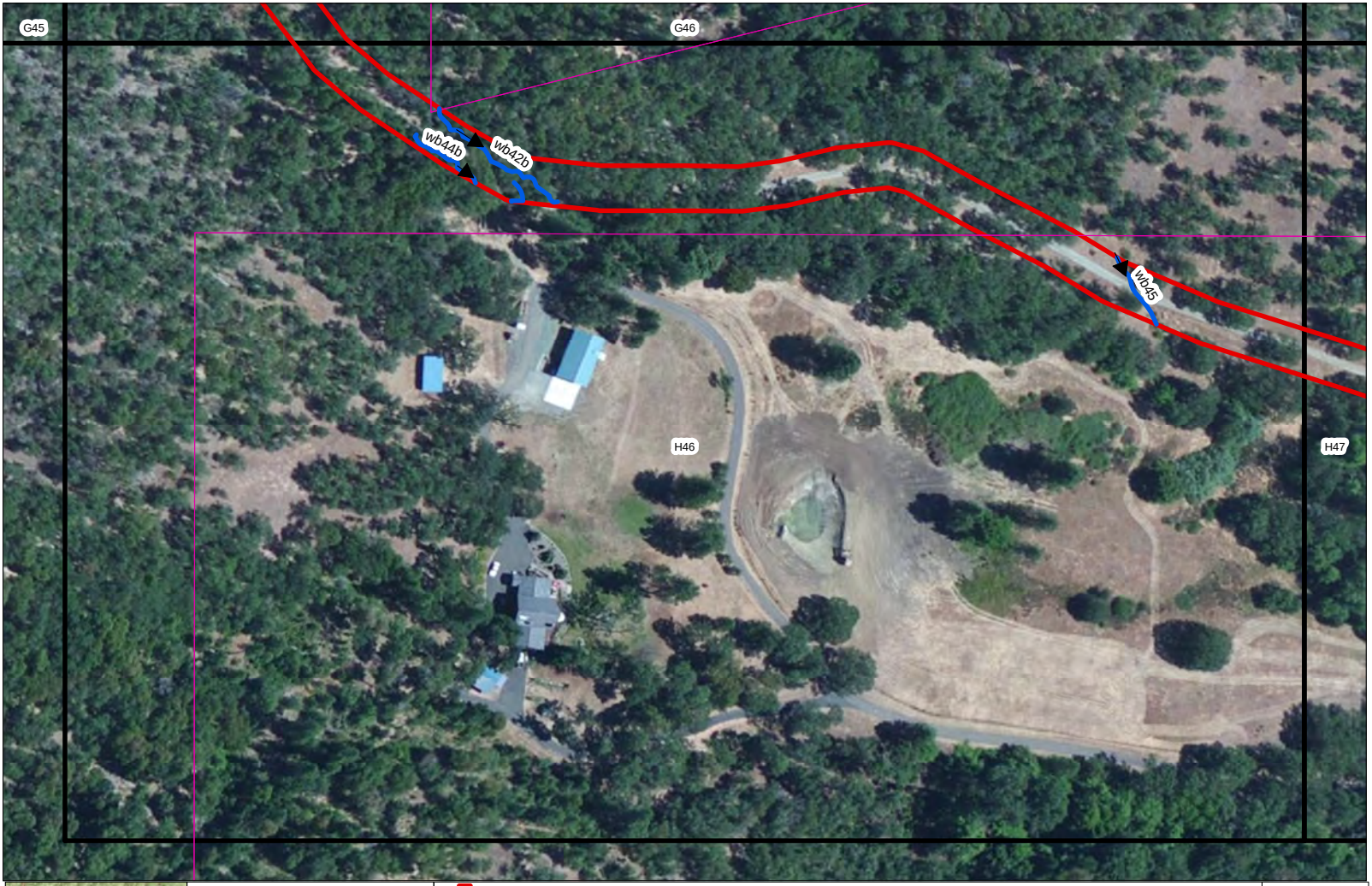
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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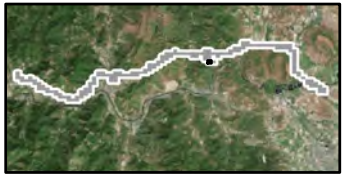
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



H46

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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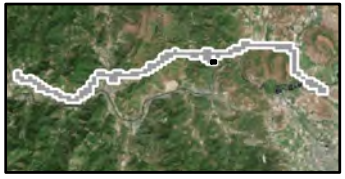
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



H47

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E46

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

F46

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E47

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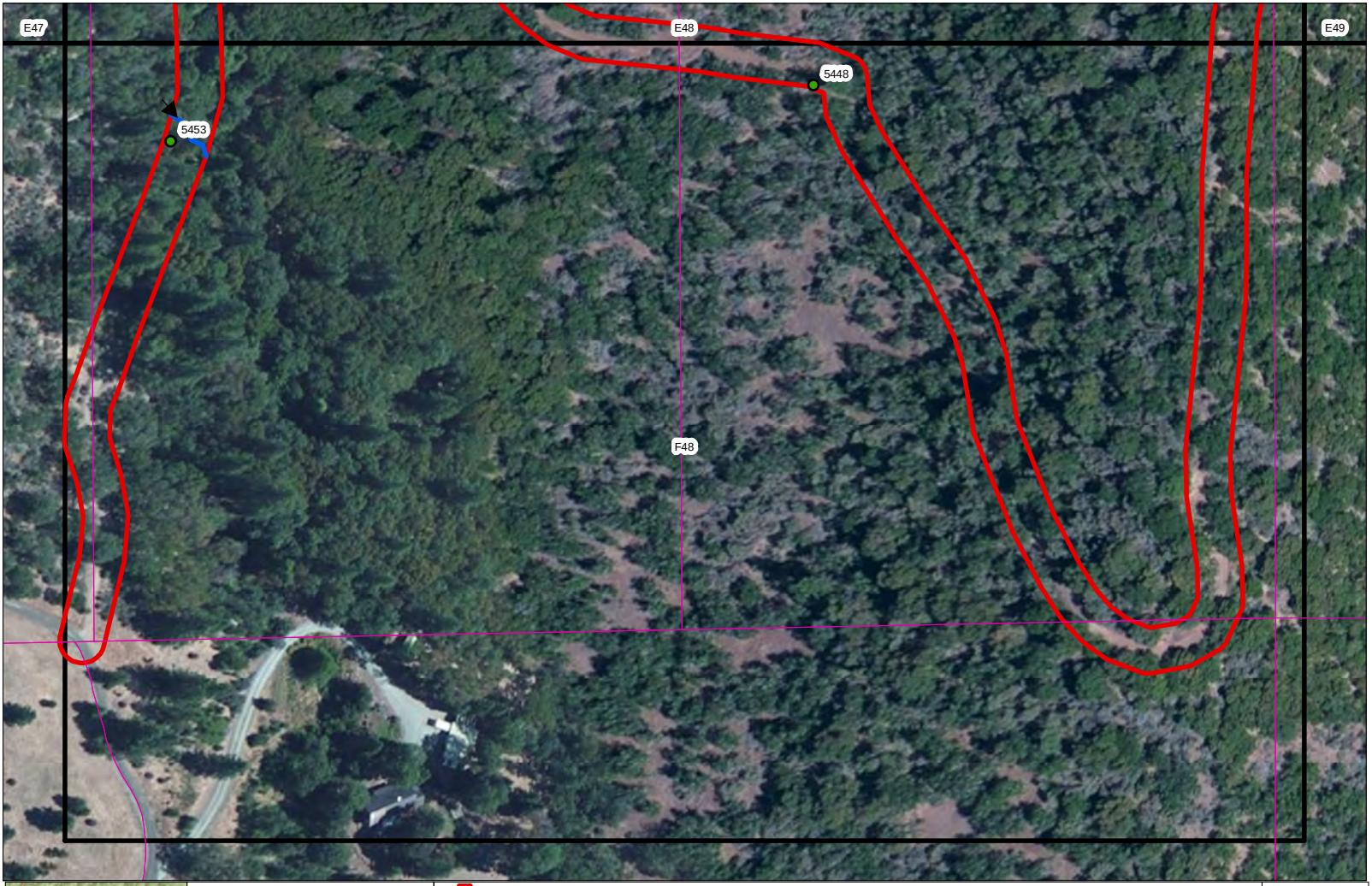
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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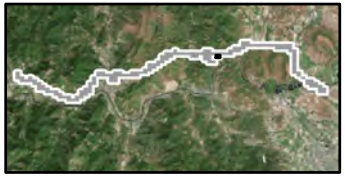
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



F48

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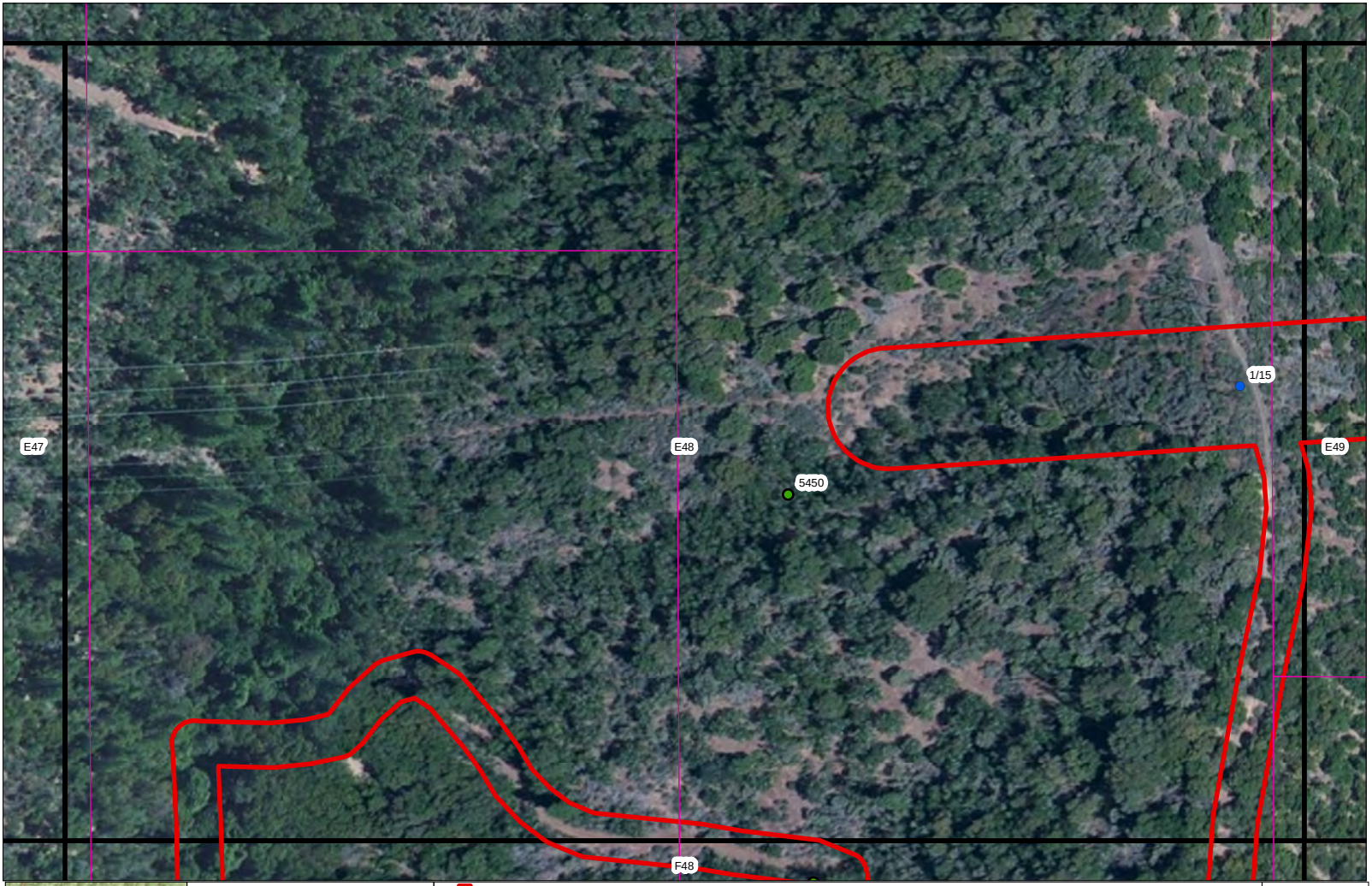

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E48

N
W E
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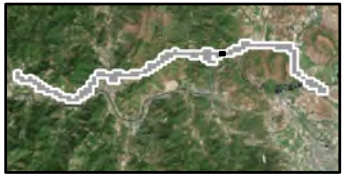
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



E49

N
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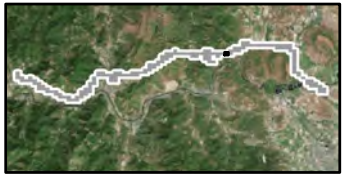
WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



E50

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E51

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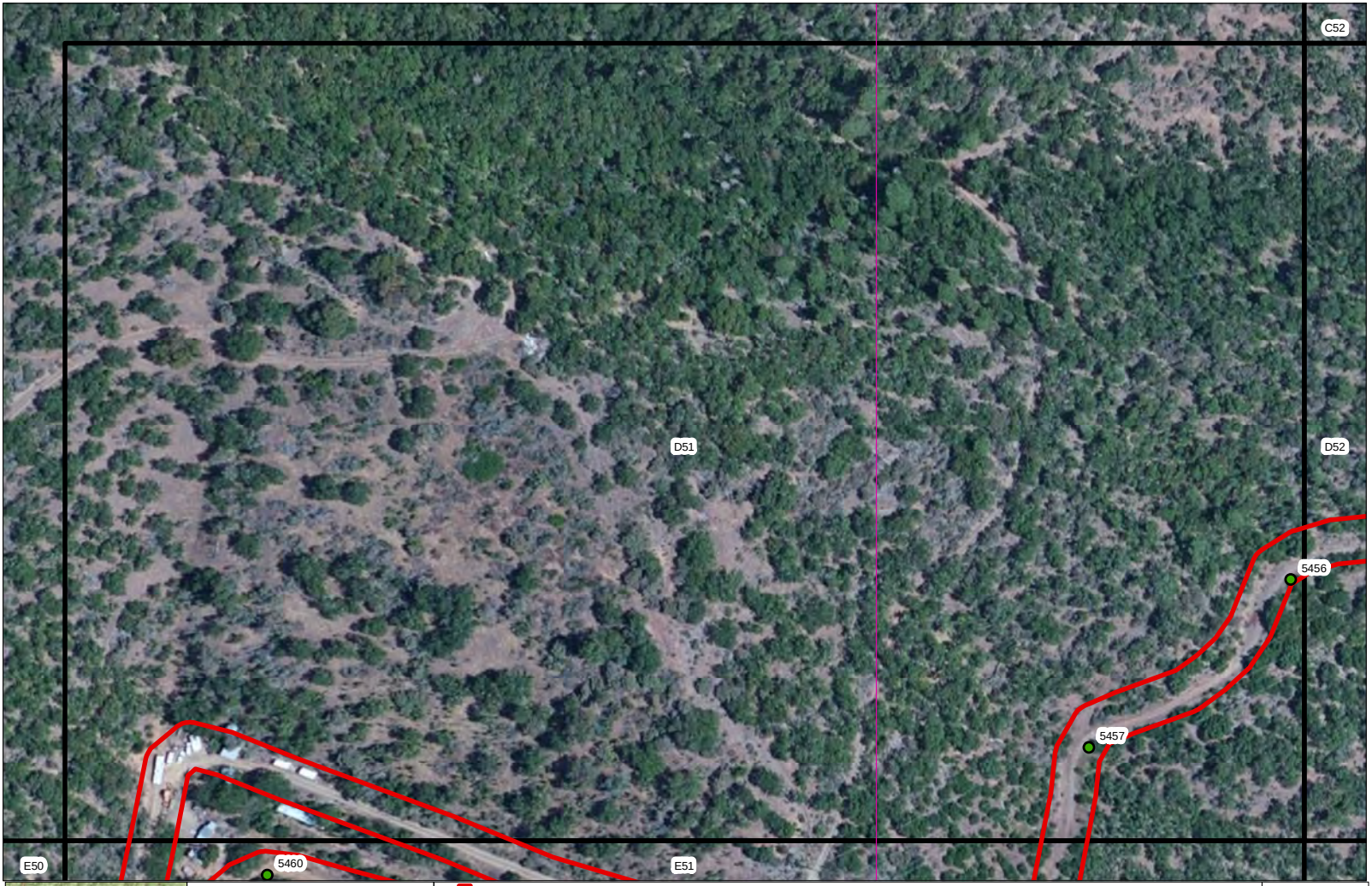
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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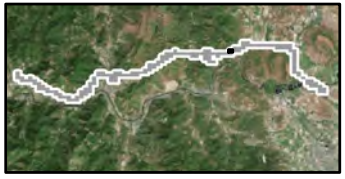
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



D51

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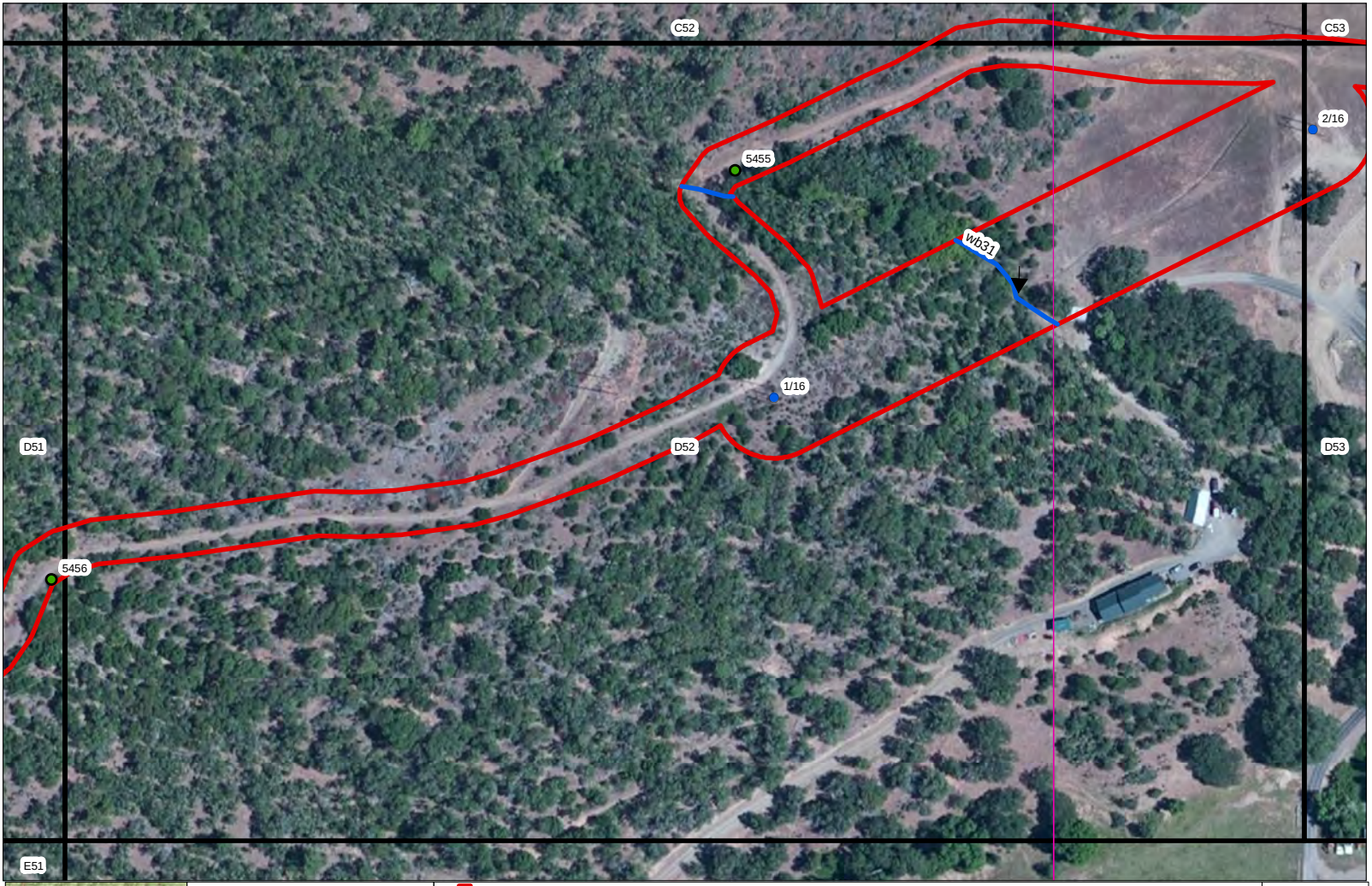
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

D52

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

C52

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

D53

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

C53

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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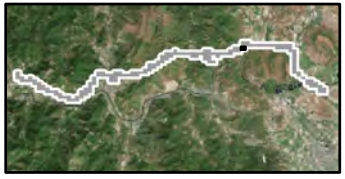
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



C54

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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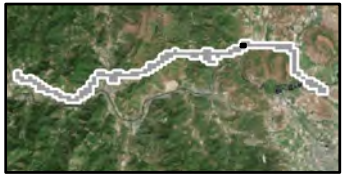
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



B54

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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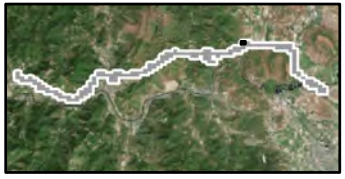
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



A54

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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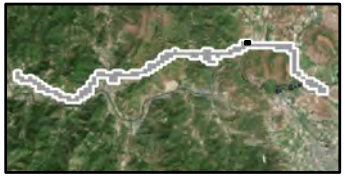
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



A55

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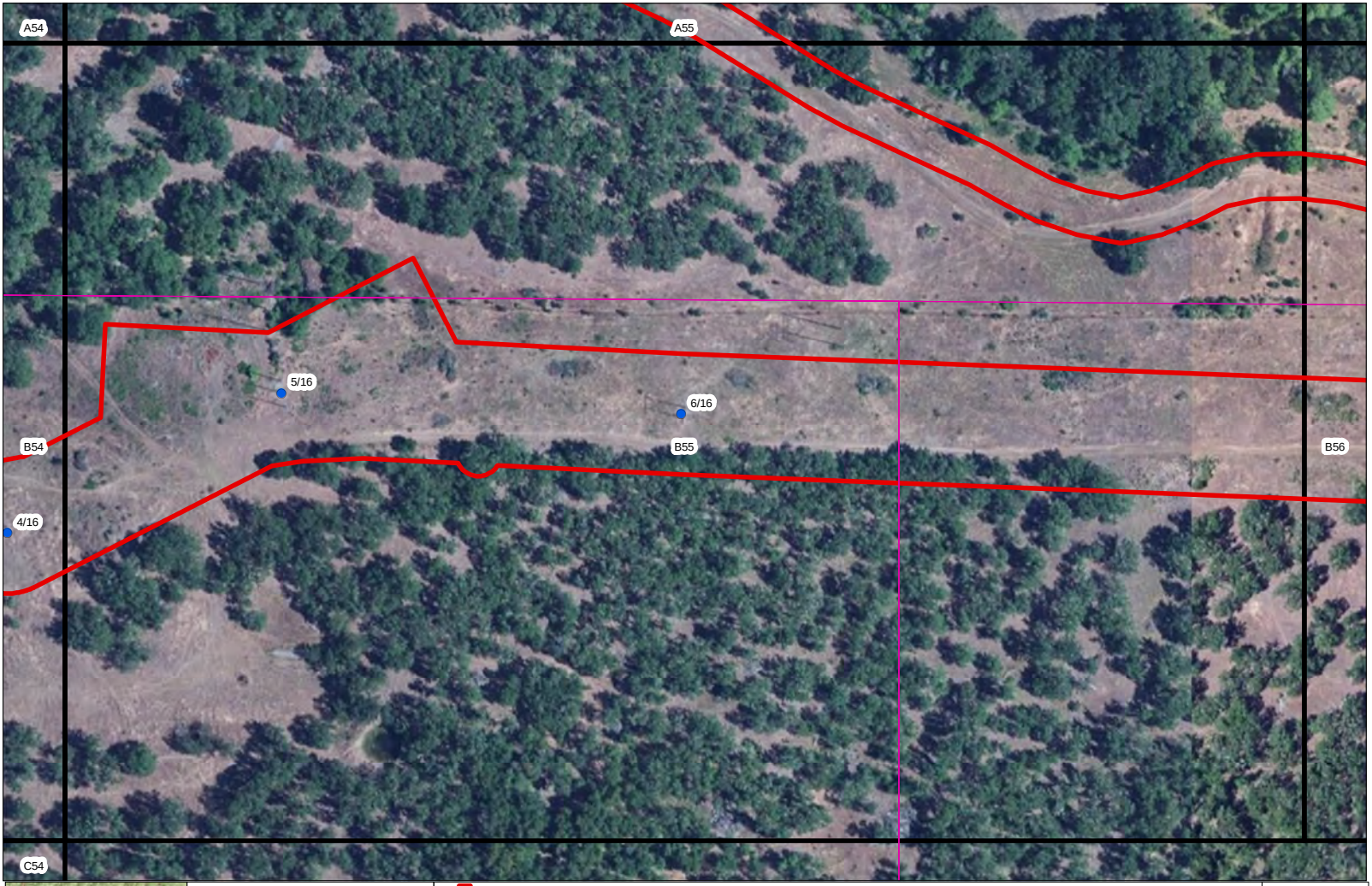

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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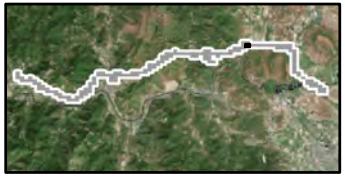
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



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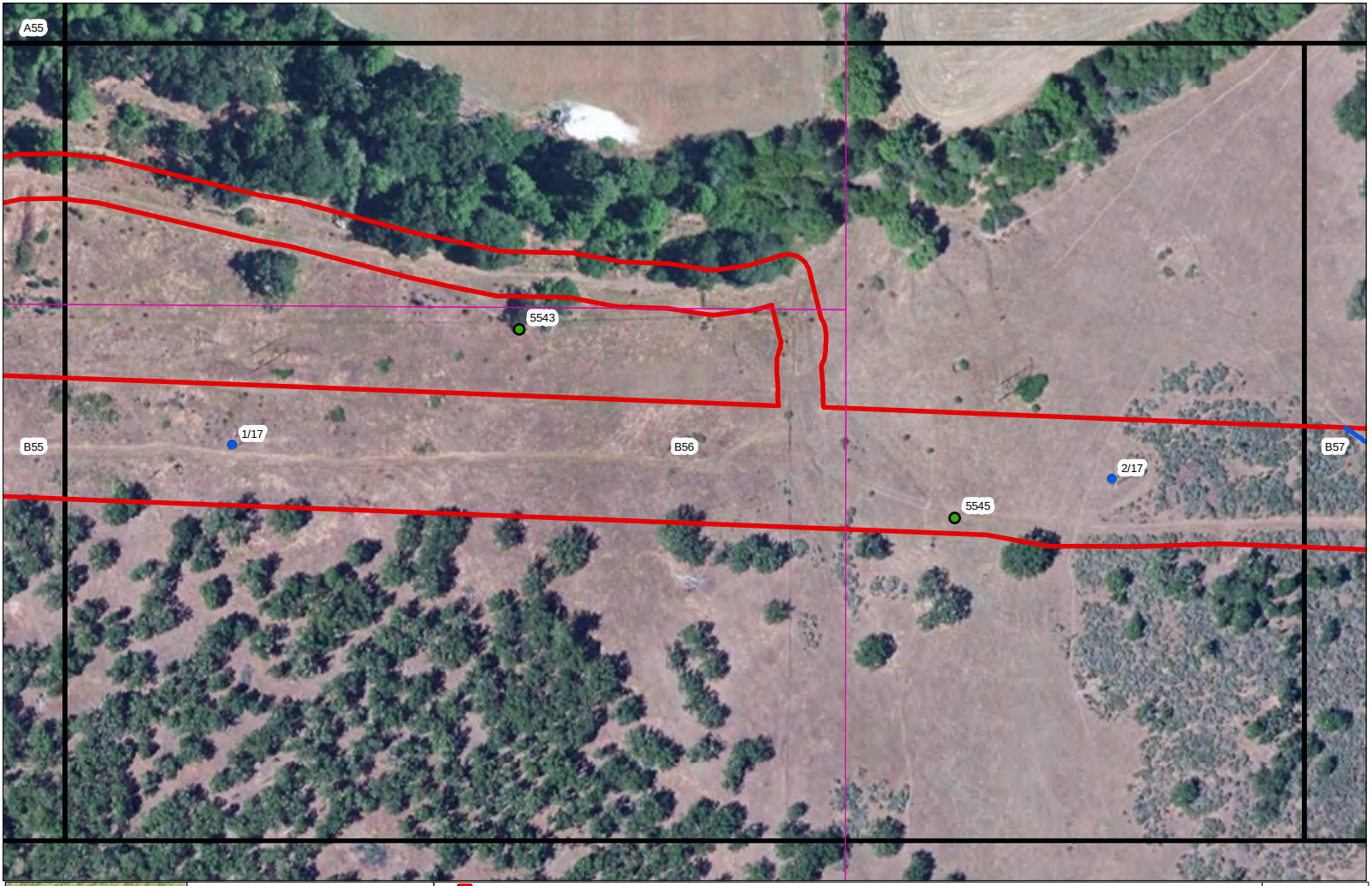

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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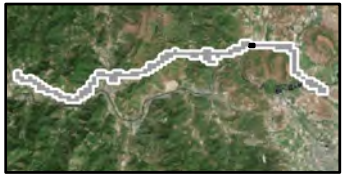
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



B56

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Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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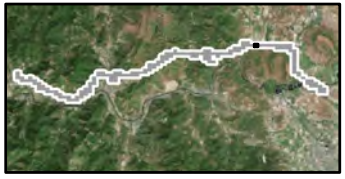
Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots



B57

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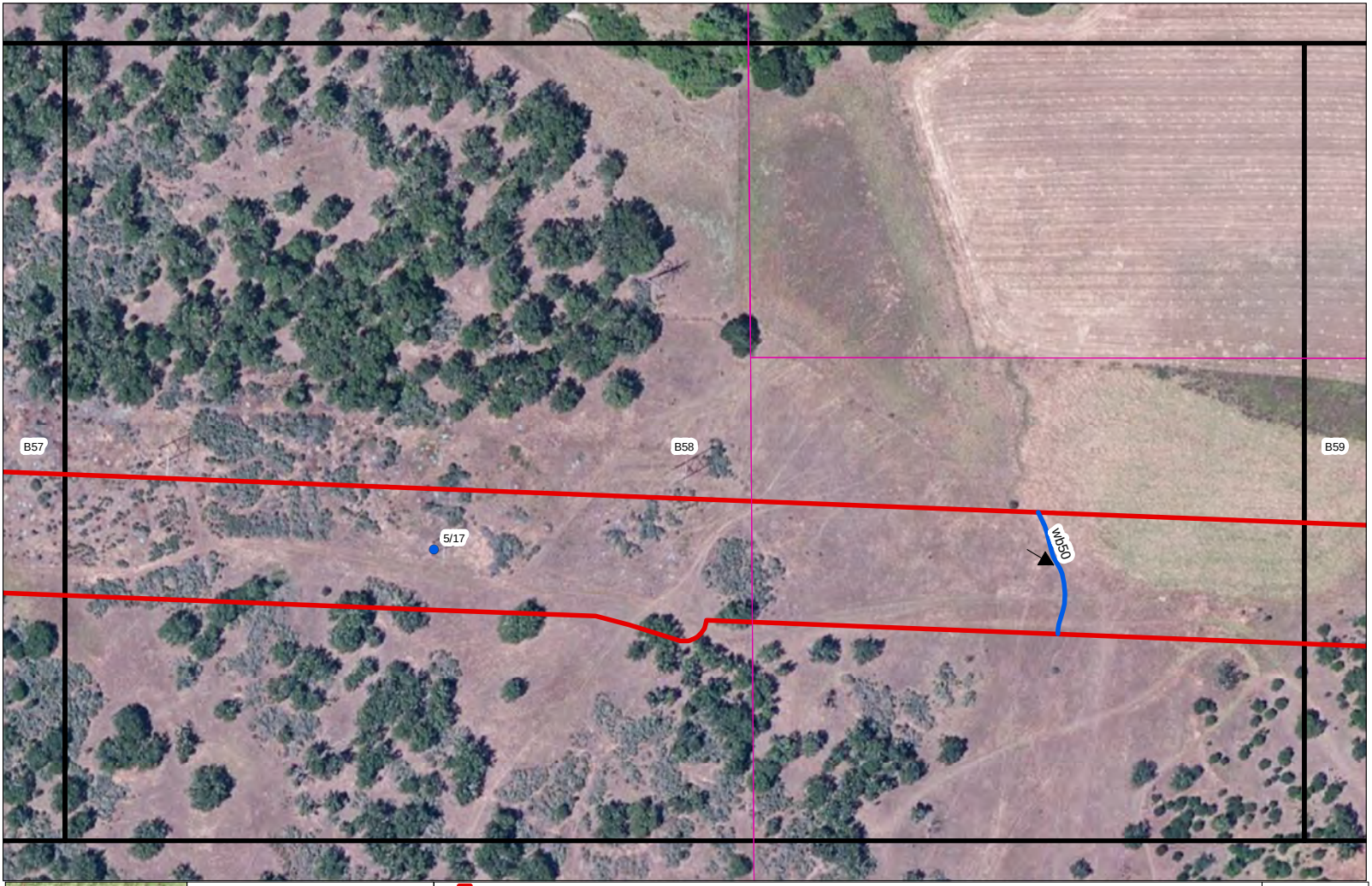

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B58

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B59

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B60

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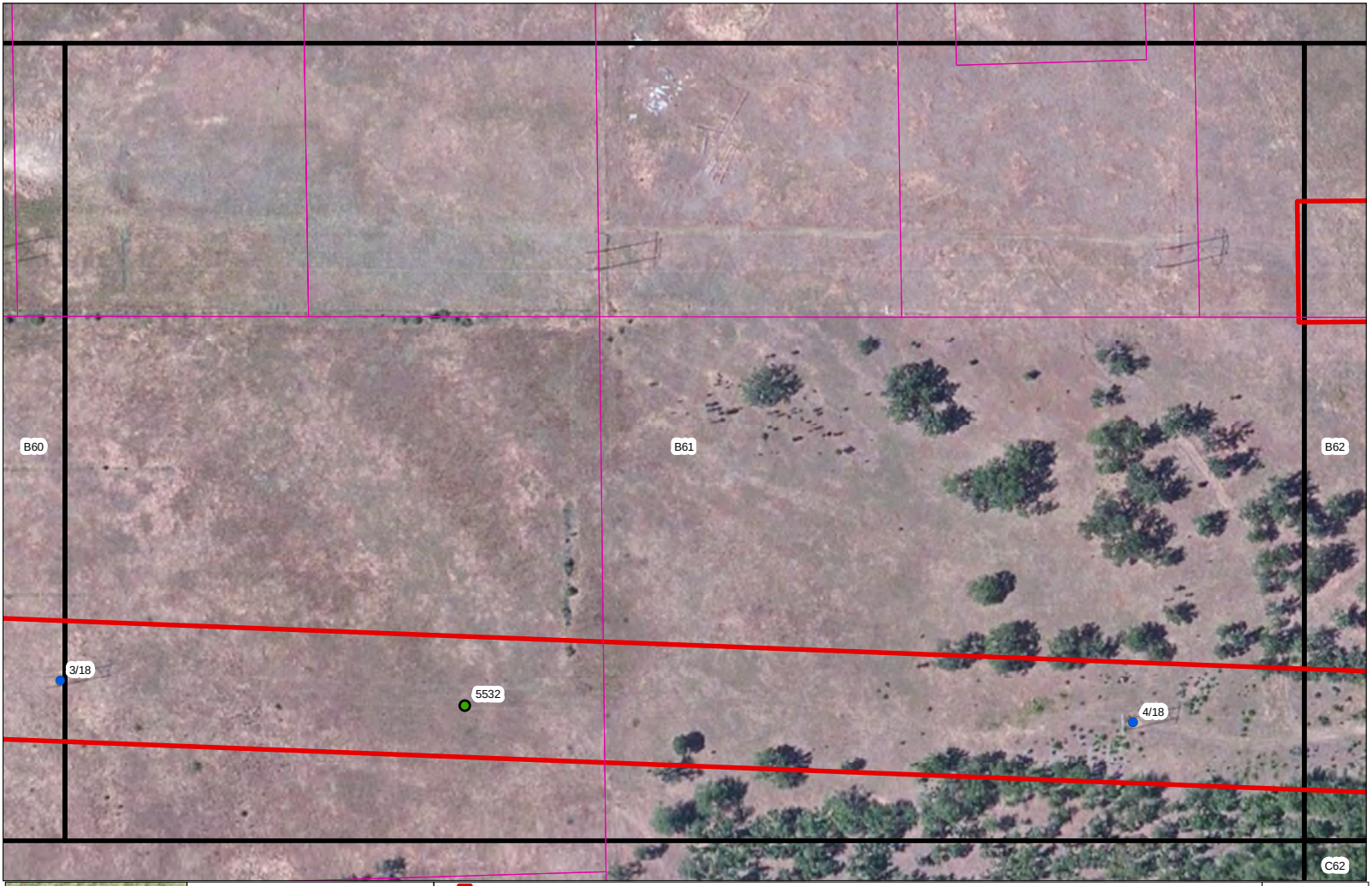
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B61

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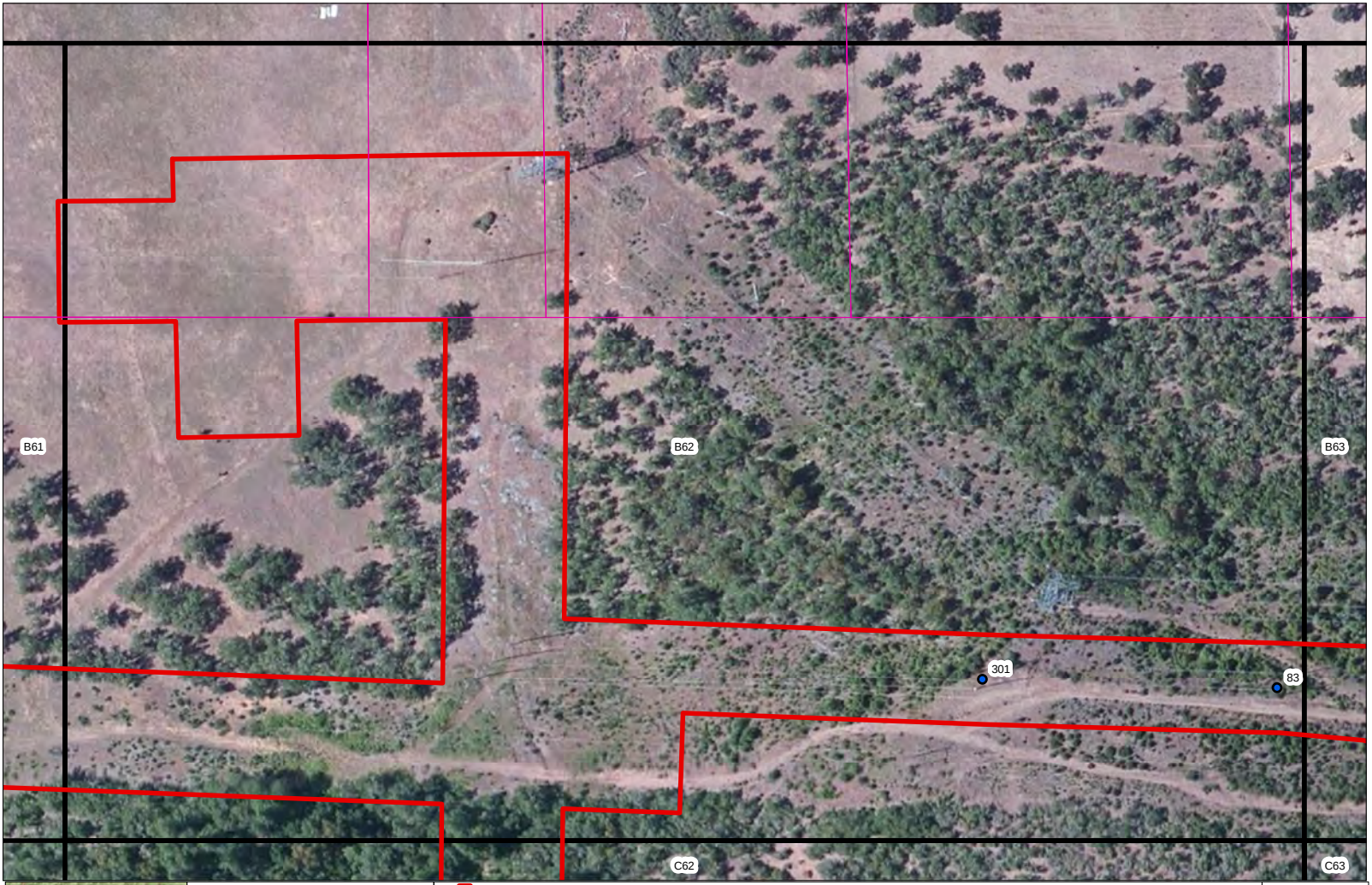

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B62

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

C62

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B63

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

C63

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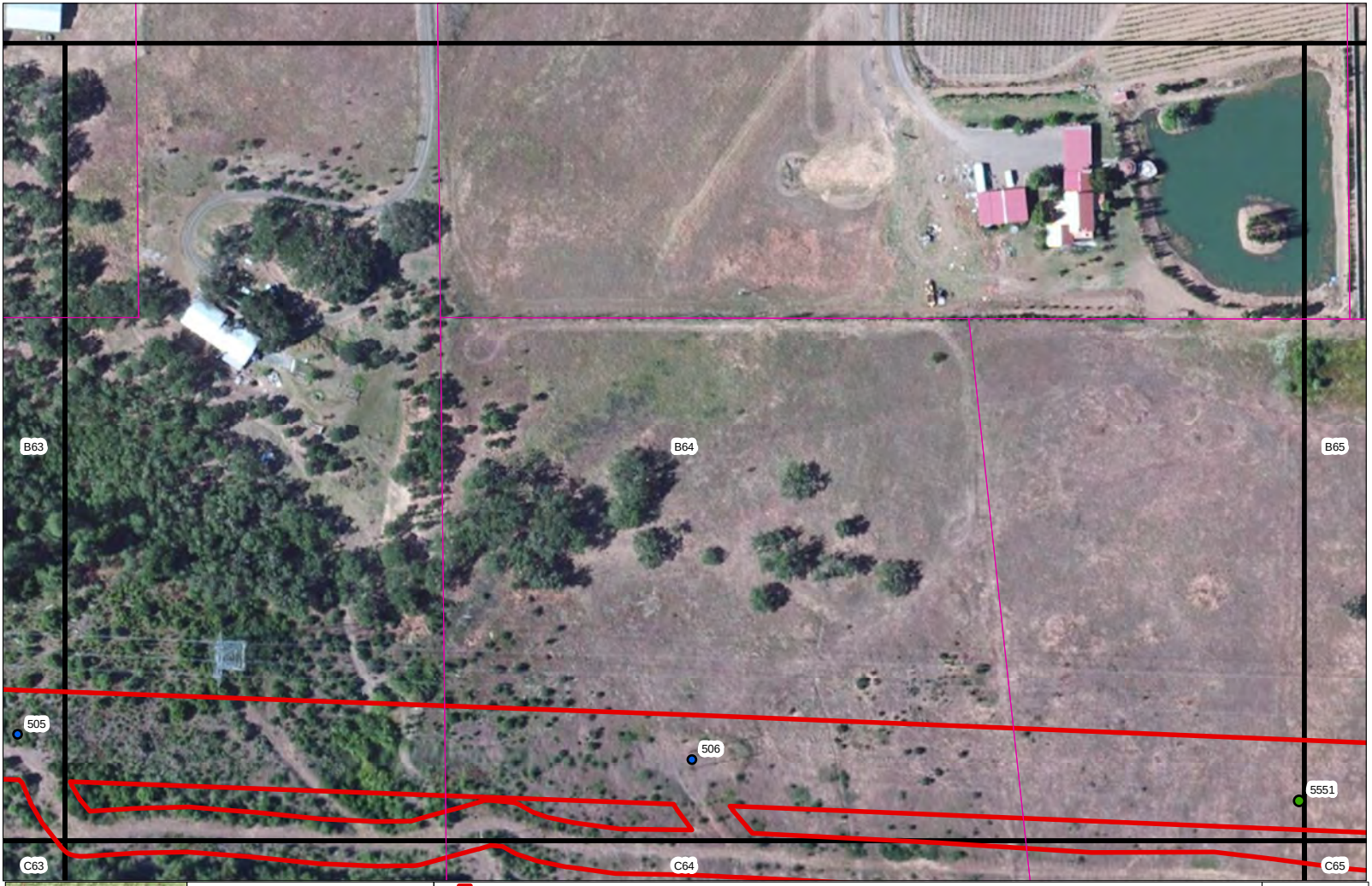

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B64

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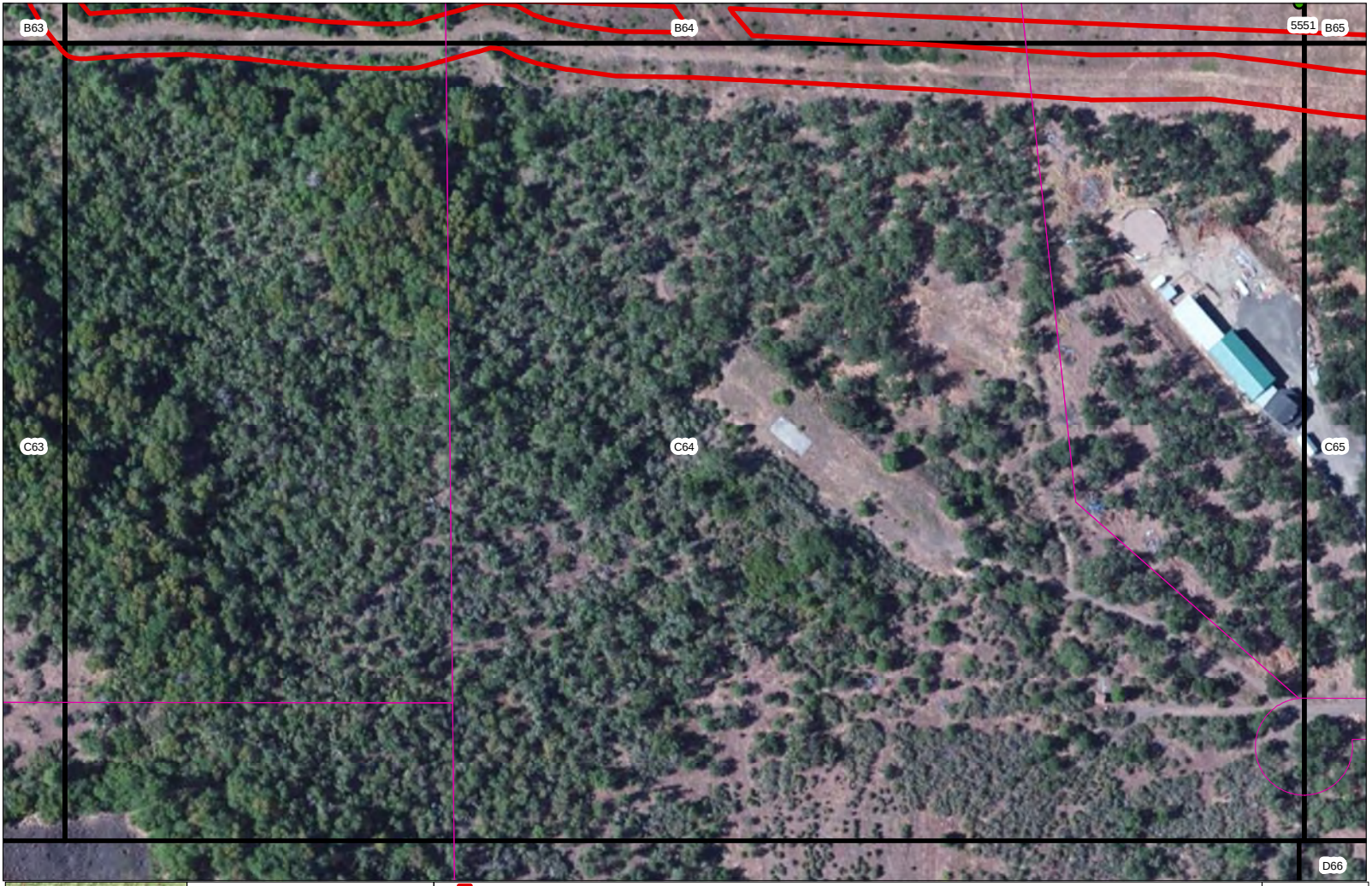

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

C64

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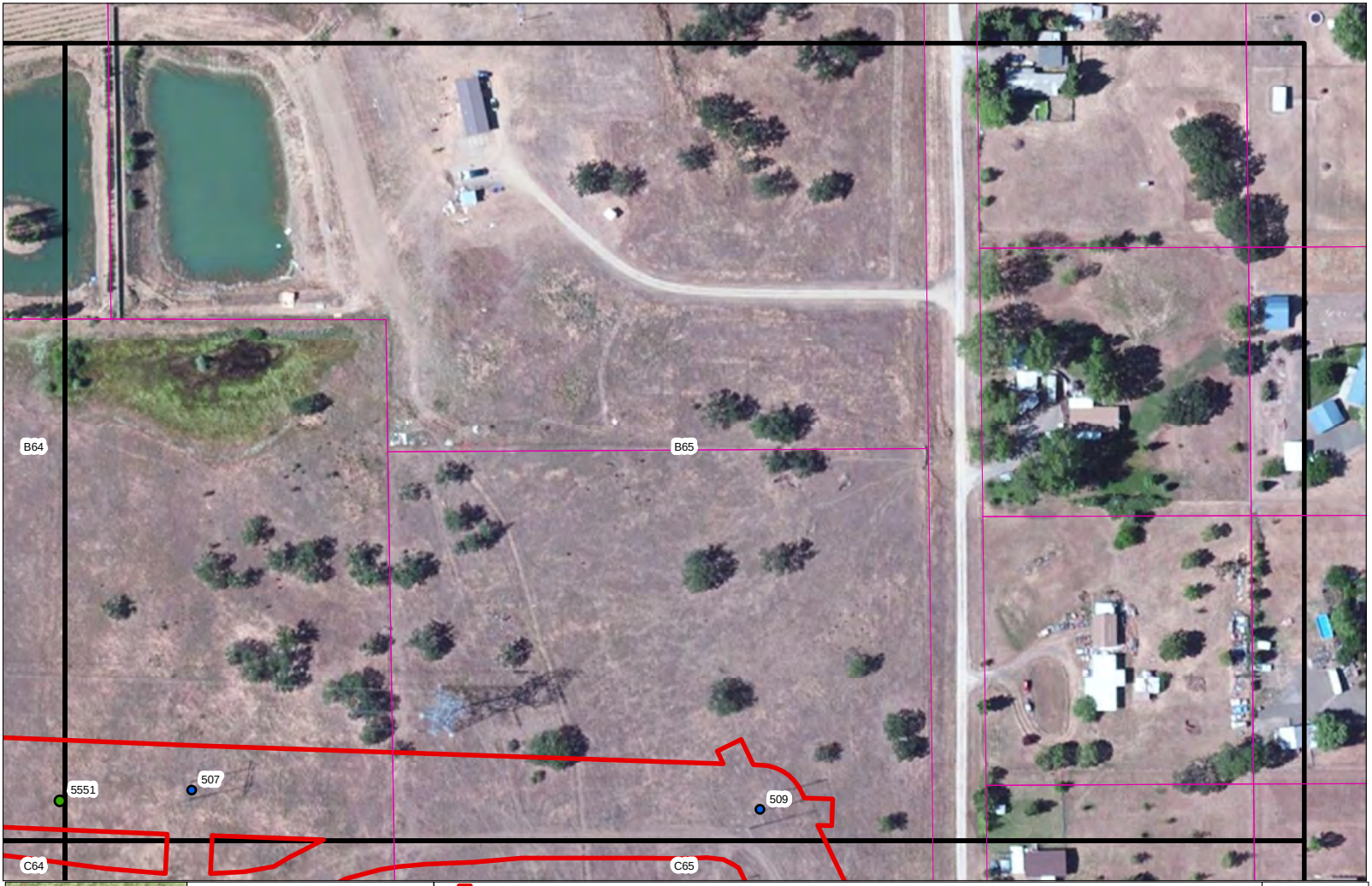

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

B65

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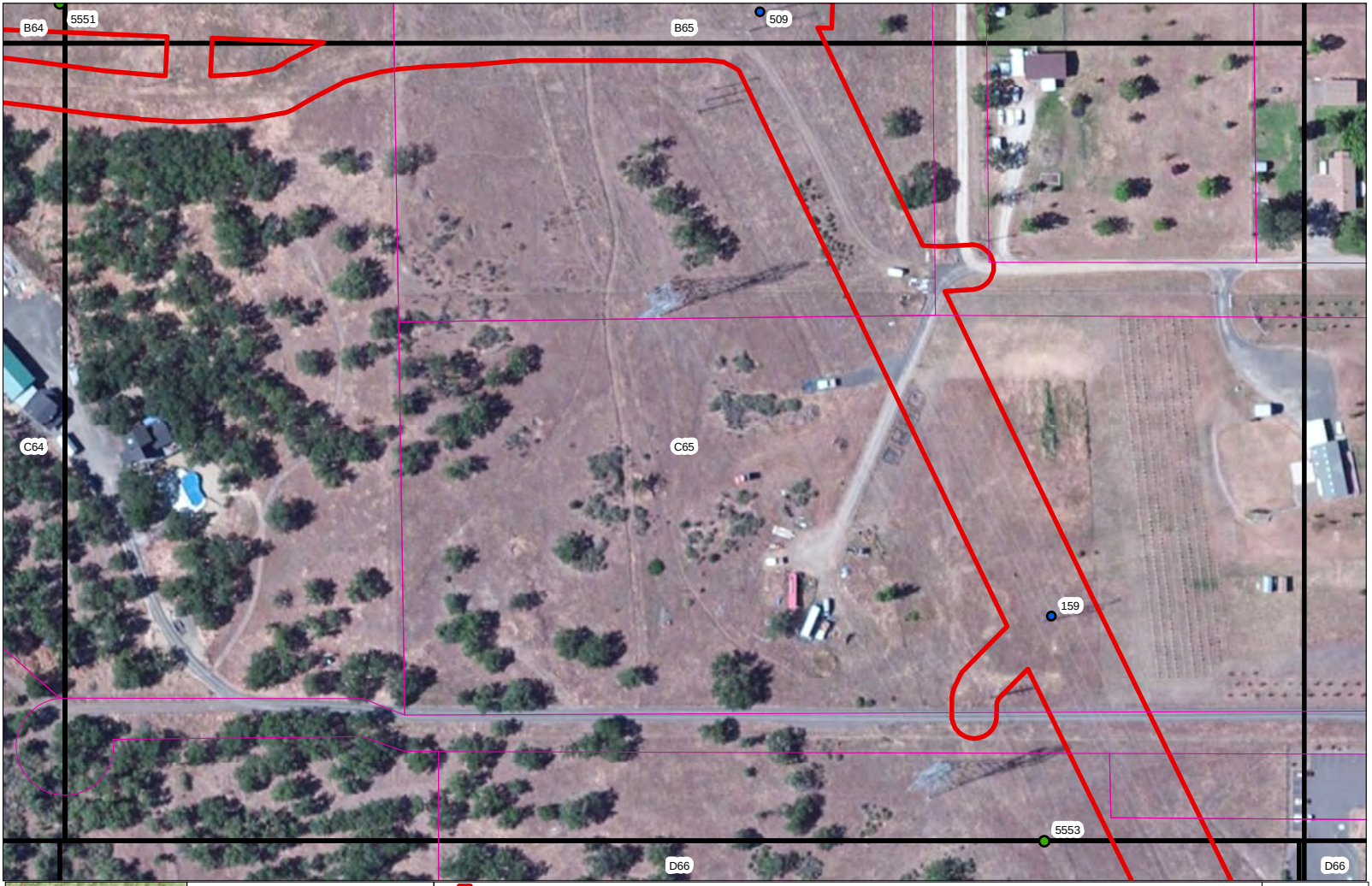

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

C65

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

D66

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

D66

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

E66

N
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

F66

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

G66

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

H66

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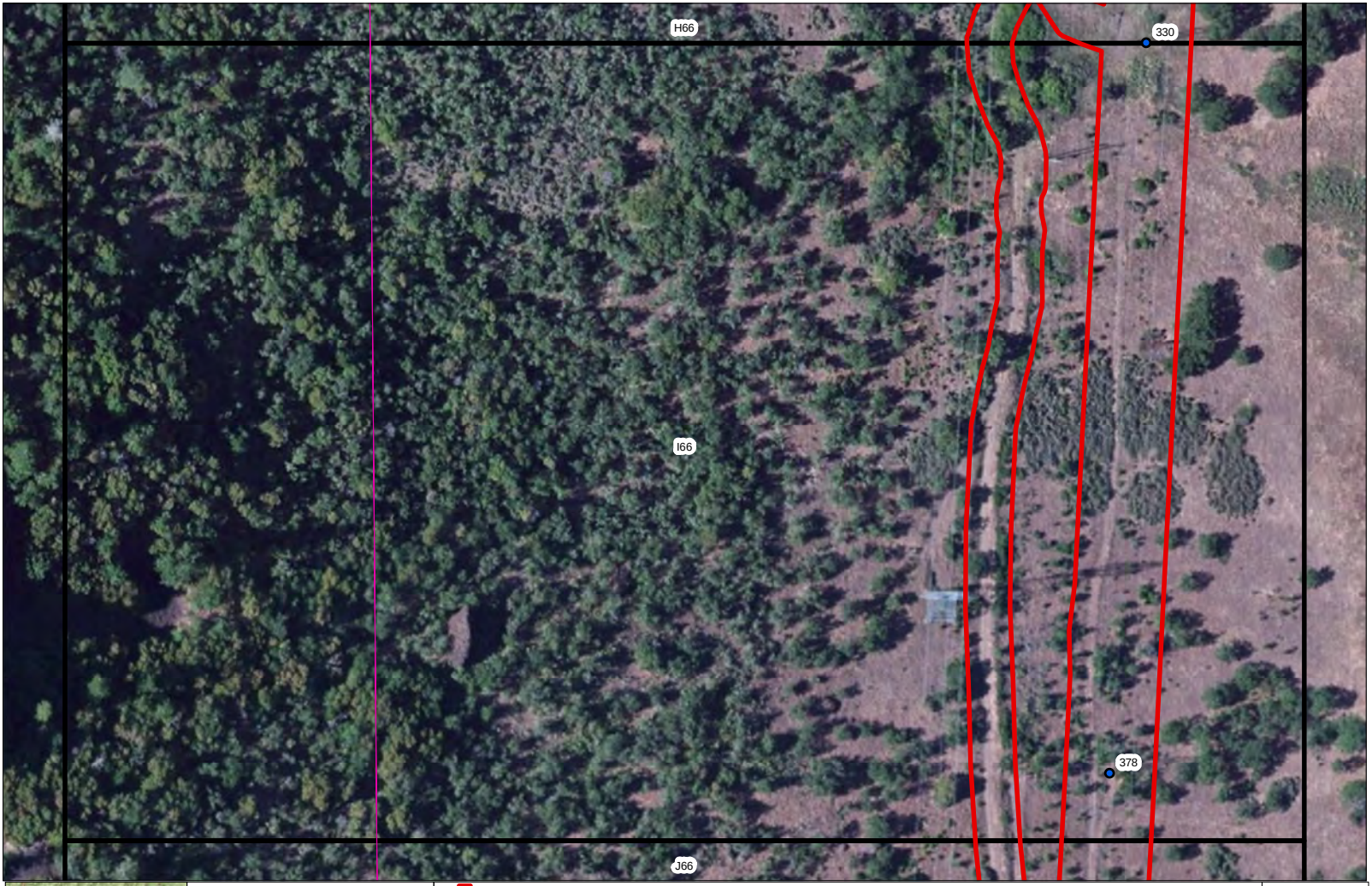

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

I66

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

J66

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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

K66

N
W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
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Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L66

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W E
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WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

L67

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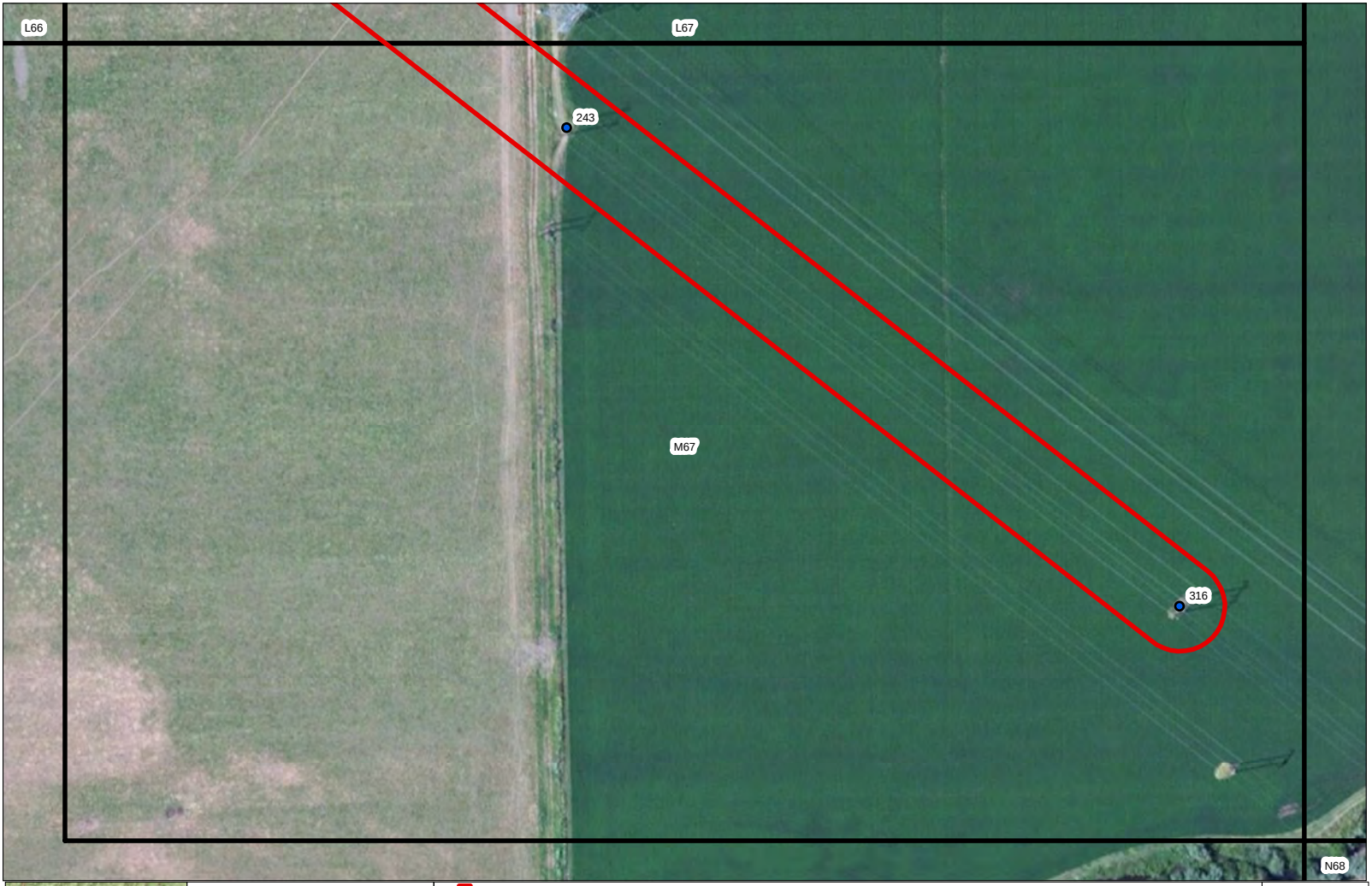
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

M67

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

N68

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

O69

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
mi
ki
0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

P69

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

O70

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

P70

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

Q70

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03
mi
ki
0 0.025 0.05

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

P71

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

Q71

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

Q72

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

R72

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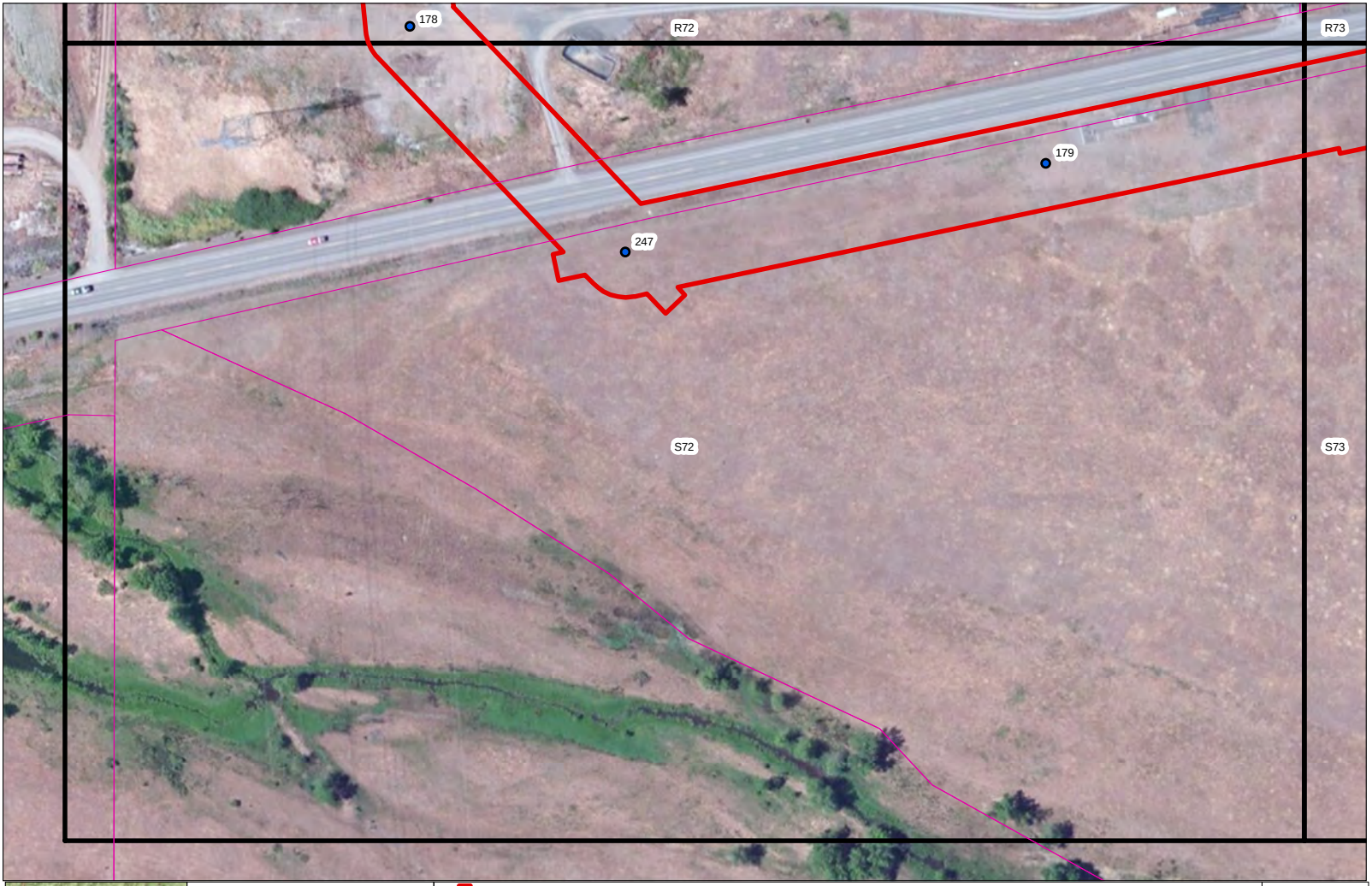
WEST



Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

- Study Area
- Transmission Structure
- Waters of the U.S.
- Non-Waters of the U.S.
- Photo Location/Direction
- Tax Lots

S72

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

S73

N
W E
S

WEST

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.015 0.03 mi
0 0.025 0.05 ki

Study Area
Transmission Structure
Waters of the U.S.
Non-Waters of the U.S.
Photo Location/Direction
Tax Lots

R73

N
W E
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WEST

Appendix C. Figures Depicting Locations of Non-Wetlands

Sam's Valley Project
Jackson and Josphine, OR

Data Source: World Imagery
Coordinate System: NAD 83 UTM Zone 10
Date: 12/27/2017
Author: Troy Rintz

0 0.04 0.08 mi
0 0.065 0.13 ki

Study Area
Transmission Structure

Deviation from NWI

Determined non-wetland

NWI Wetland Type

Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Riverine
Tax Lots

N
W E
S

WEST

Appendix D. USACE Wetland Datasheets

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission | City/County: Jackson/ | Sampling Date: 11/8/17

Applicant/Owner: HDR | State: OR | Sampling Point: wl-1

Investigator(s): Kurt Flaig, Klarissa Lawrence | Section, Township, Range: Sec 16, T36S, R2W

Landform (hillslope, terrace, etc.): ditch | Local relief (concave, convex, none): concave | Slope (%): 2

Subregion (LRR): A | Lat: | Long: | Datum: NAD 83

Soil Map Unit Name: Vannoy silt loam, 12-35 percent south slopes | NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☒ **No** ☐
Hydric Soil Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	

Remarks: wetlands occur along side slopes (fringe) of irrigation ditch on south side of road
photo 5425

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size:)			
1. *Cyperus squarrosus*	50	yes	OBL
2. *Phalaris arundinacea*	40	yes	FACW
3. *Rumex crispus*	5	no	FAC
4. *Equisetum hymale*	5	no	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: wl-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 3/2	99	7.5YR 4/6	1	C	M	clay loam	
5-16	10YR 4/1	90	7.5YR 4/6	10	C	M	clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17
Applicant/Owner: HDR State: OR Sampling Point: wl-2
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 6, T36S, R2W
Landform (hillslope, terrace, etc.): drainage Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Coker clay, 0-3 percent slopes/Carney clay, 1-5 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?**	**Yes** ☒	**No** ☐
Hydric Soil Present?	Yes	☒	No	☐			
Wetland Hydrology Present?	Yes	☒	No	☐			

Remarks: wetland spans drainage channel; hydrology likely associated with water backing into channel from artifical pond located approximately 100ft downstream photo 5536

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Typha latifolia*	50	yes	OBL
2. *Eleocharis palustris*	40	yes	OBL
3. *Mentha arvensis*	4	no	FACW
4. *Alisma gramineum*	1	no	OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	
% Bare Ground in Herb Stratum 0			

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10 YR 4/1	90	7.5YR 4/6	10	C	M	clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17
Applicant/Owner: HDR State: OR Sampling Point: wl-3
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sce 6, T36S, R2W
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Coker clay, 0-3 percent slopes/Carney clay, 1-5 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☒ **No** ☐
Hydric Soil Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	

Remarks: wetland spans shallow, pond-like depression adjacent an artifical pond
photo 5538

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Eleocharis palustris*	99	yes	OBL
2. *Mentha arvensis*	1	no	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10 YR 3/1	95	7.5YR 4/6	5	C	M/PL	clay	
5-16	10YR 3/1	100					clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☒ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	____
Water Table Present?	Yes	☐	No	☒	Depth (inches):	____
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17

Applicant/Owner: HDR State: OR Sampling Point: wl-4a,b

Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 1, T36S, R2W

Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): A Lat: Long: Datum: NAD 83

Soil Map Unit Name: Camas-Newberg-Evans complex, 0-3 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☒ **No** ☐
Hydric Soil Present?	Yes	☒	No	☐	
Wetland Hydrology Present?	Yes	☒	No	☐	

Remarks: wetlands occur in shallow depressions to either side of two-track road
photo 5541

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Juncus effusus*	40	yes	FACW
2. *Rorippa sinuata*	4	no	FACW
3. *Kickxia elatine*	4	no	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	48	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 52

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10 YR 4/1	90	7.5YR 4/6	10	C	M/PL	clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: wl-5
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sce 32, T35S, R2W
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Coker clay, 0-3 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?**	**Yes**	☒	**No** ☐
Hydric Soil Present?	Yes	☒	No	☐				
Wetland Hydrology Present?	Yes	☒	No	☐				

Remarks: wetland occurs in a depressional area within a hay meadow; depressional area abuts a paved road surface and likely receives runoff from the road
photo 5548

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Rumex crispus*	25	yes	FACW
2. *Rorippa sinuata*	25	yes	FACW
3. *Plagiobothrys scouleri*	20	yes	FACW
4. *Eleocharis palustris*	10	no	OBL
5. *Myosurus minimus*	10	no	OBL
6. *Unknown forb*	10	no	
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☐ 1 – Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0[1]
☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ 5 - Wetland Non-Vascular Plants[1]
☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10 YR 4/1	90	7.5YR 4/6	10	C	M/PL	clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☒ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: wl-6
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 15, T36S, R2W
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Agate-Winlo complex, 0-5 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?**	**Yes** ☒	**No** ☐
Hydric Soil Present?	Yes	☒	No	☐			
Wetland Hydrology Present?	Yes	☒	No	☐			

Remarks: wetland occurs in a depression on the floodplain of the Rogue River (possible vernal pool)
photo 5570

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Polygonum aviculare*	30	yes	FAC
2. *Plagiobothrys scouleri*	25	yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	55	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 45

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10 YR 3/1	80	7.5YR 4/4	20	C	M/PL	gravelly loam	
10+							clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks: clay hardpan encountered at a depth of 10 inches in the soil profile

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☒ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	____
Water Table Present?	Yes	☐	No	☒	Depth (inches):	____
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	____

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: wl-7
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 15, T36S, R2W
Landform (hillslope, terrace, etc.): drainage swale Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Agate-Winlo complex, 0-5 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?**	**Yes**	☒	**No** ☐
Hydric Soil Present?	Yes	☒	No	☐				
Wetland Hydrology Present?	Yes	☒	No	☐				

Remarks: wetland spans broad, excavated ditch; ditch appears to provide for drainage from nearby quarry ponds
photo 5577

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size: 10ft radius)			
1. *Salix laevigata*	5	yes	FACW
2.			
3.			
4.			
5.			
50% = , 20% =	5	= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Eleocharis palustris*	80	yes	OBL
2. *Mentha arvensis*	15	no	FACW
3. *Alopecurus pratensis*	5	no	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10 YR 3/2	90	7.5YR 4/6	10	C	M	clay loam	
4-16	10YR 5/2	90	7.5YR 4/6	10	C	M	clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks: clay hardpan encountered at a depth of 10 inches in the soil profile

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: wl-8a-d
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 15, T36S, R2W
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Agate-Winlo complex, 0-5 percent slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?**	**Yes** ☒	**No** ☐
Hydric Soil Present?	Yes	☒	No	☐			
Wetland Hydrology Present?	Yes	☒	No	☐			

Remarks: wetlands occur in a series of depressions (4) on the floodplain of the Rogue River
photos 5579, 5580, 5581, 5586

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10 ft radius)			
1. *Hordeum jubatum*	50	yes	FAC
2. *Eleocharis palustris*	40	yes	OBL
3. *Polygonum aviculare*	10	no	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 45

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: wl-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10 YR 3/1	95	7.5YR 4/4	5	C	M	loam	
10-16	10YR 4/1	95	7.5YR 4/4	5	C	M	clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☒ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ____

Depth (inches): ____

Hydric Soils Present? **Yes** ☒ **No** ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☒ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☒ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	____
Water Table Present?	Yes	☐	No	☒	Depth (inches):	____
Saturation Present? (includes capillary fringe)	Yes	☒	No	☐	Depth (inches):	10

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission | City/County: Jackson/ | Sampling Date: 11/8/17

Applicant/Owner: HDR | State: OR | Sampling Point: upl-1

Investigator(s): Kurt Flaig, Klarissa Lawrence | Section, Township, Range: Sec 16, T36S, R2W

Landform (hillslope, terrace, etc.): hillslope | Local relief (concave, convex, none): none | Slope (%): 2

Subregion (LRR): A | Lat: | Long: | Datum: NAD 83

Soil Map Unit Name: Vannoy silt loam, 12-35 percent south slopes | NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes** ☐	**No** ☒
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: sample point located on top of ditch bank; area had been mowed prior to survey
photo: 5426

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size: 10ft radius)			
1. *Rubus armeniacus*	10	yes	FAC
2.			
3.			
4.			
5.			
50% = , 20% =	10	= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Cynosurus echinatus*	45	yes	UPL
2. *Dactylis glomerata*	35	yes	FACU
3. *Plantago virginica*	10	no	FACU
4. *Avena sativa*	7	no	UPL
5. *Daucus carota*	3	no	FACU
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☒

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: upl-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5 YR 4/4	100					clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17
Applicant/Owner: HDR State: OR Sampling Point: upl-2
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 6, T36S, R2W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Coker clay, 0-3 percent slopes NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☐	No	☒	
Hydric Soil Present?	Yes	☐	No	☒	**Is the Sampled Area within a Wetland?** **Yes** ☐ **No** ☒
Wetland Hydrology Present?	Yes	☐	No	☒	

Remarks: sample point located in meadow adjacent drainage
photo: 5537

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Festuca subulata*	75	yes	FACU
2. *Alopecurus pratensis*	15	no	FAC
3. *Juncus confusus*	10	no	FAC
4. *Dipsacus fullonum*	5	no	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☒

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: upl-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17

Applicant/Owner: HDR State: OR Sampling Point: upl-3

Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 6, T36S, R2W

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 1

Subregion (LRR): A Lat: Long: Datum: NAD 83

Soil Map Unit Name: Coker clay, 0-3 percent slopes NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐ No ☒**
Hydric Soil Present?	Yes ☐	No ☒		
Wetland Hydrology Present?	Yes ☐	No ☒		

Remarks: sample point located in meadow adjacent wetland depression
photo: 5539

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Alopecurus pratensis*	58	yes	FAC
2. *Festuca subulata*	26	yes	FACU
3. *Dipsacus fullonum*	15	no	FAC
4. *Mentha arvensis*	1	no	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☐ No ☒**

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: upl-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	100					clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/9/17
Applicant/Owner: HDR State: OR Sampling Point: upl-4
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 1, T36S, R2W
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none Slope (%): 1
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Camas-Newberg-Evans complex, 0-3 percent slopes NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐**	**No ☒**
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: sample point located in grassland adjacent wetland depressions
photo: 5544

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Cynosurus echinatus*	50	yes	UPL
2. *Taeniatherum caput-medusae*	45	yes	UPL
3. *Plantago virginica*	5	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	0	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	0	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☐** **No ☒**

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: upl-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: upl-5
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 32, T35S, R2W
Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Coker clay, 0-3 percent slopes NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes ☐ No ☒**
Hydric Soil Present?	Yes ☐	No ☒		
Wetland Hydrology Present?	Yes ☐	No ☒		

Remarks: sample point located in meadow adjacent wetland depression
photo: 5549

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Alopecurus pratensis*	45	yes	FAC
2. *Taeniatherum caput-medusae*	45	yes	UPL
3. *Festuca pratensis*	10	no	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	2	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	50	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ☐ No ☒**

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: upl-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100	7.5YR 4/6	T	C	M	clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: T = trace of redox concentrations (< 1%)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17
Applicant/Owner: HDR State: OR Sampling Point: upl-6, upl-7
Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 15, T36S, R2W
Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): A Lat: Long: Datum: NAD 83
Soil Map Unit Name: Agate-Winlo complex, 0-5 percent slopes NWI classification: UPL
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☐	No	☒	
Hydric Soil Present?	Yes	☐	No	☒	**Is the Sampled Area within a Wetland?** **Yes** ☐ **No** ☒
Wetland Hydrology Present?	Yes	☐	No	☒	

Remarks: sample point located on floodplain of Rogue River, adjacent shallow wetland depressions and excavated ditch
photo: 5578

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Centaurea solstitialis*	40	yes	UPL
2. *Cichorium intybus*	30	yes	FACU
3. *Elymus trachycaulus*	20	yes	FACU
4. *Taeniatherum caput-medusae*	10	no	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☒

Remarks:

Project Site: Sams Valley

SOIL

Sampling Point: upl-6, upl-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	99	7.5YR 4/6	1	C	M	cobbly loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: T = trace of redox concentrations (< 1%)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Sam's Valley Transmission City/County: Jackson/ Sampling Date: 11/10/17

Applicant/Owner: HDR State: OR Sampling Point: upl-8

Investigator(s): Kurt Flaig, Klarissa Lawrence Section, Township, Range: Sec 15, T36S, R2W

Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): A Lat: Long: Datum: NAD 83

Soil Map Unit Name: Agate-Winlo complex, 0-5 percent slopes NWI classification: UPL

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	**Is the Sampled Area within a Wetland?**	**Yes** ☐	**No** ☒
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: sample point located on floodplain of Rogue River, adjacent shallow wetland depressions; area appears to have experienced surface disturbance associated with quarry operations.

photo: no photo available

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
50% = , 20% =		= Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
50% = , 20% =		= Total Cover	
Herb Stratum (Plot size: 10ft radius)			
1. *Centaurea solstitialis*	40	yes	UPL
2. *Cichorium intybus*	30	yes	FACU
3. *Elymus trachycaulus*	20	yes	FACU
4. *Taeniatherum caput-medusae*	10	no	UPL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
50% = , 20% =	100	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
50% = , 20% =		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	33	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☐ **No** ☒

Remarks:

Project Site: Sams Valley

SOIL Sampling Point: upl-8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/3	100					gravelly loam	
6-16	10YR 3/2	100					clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
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- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
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- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☐	No	☒	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

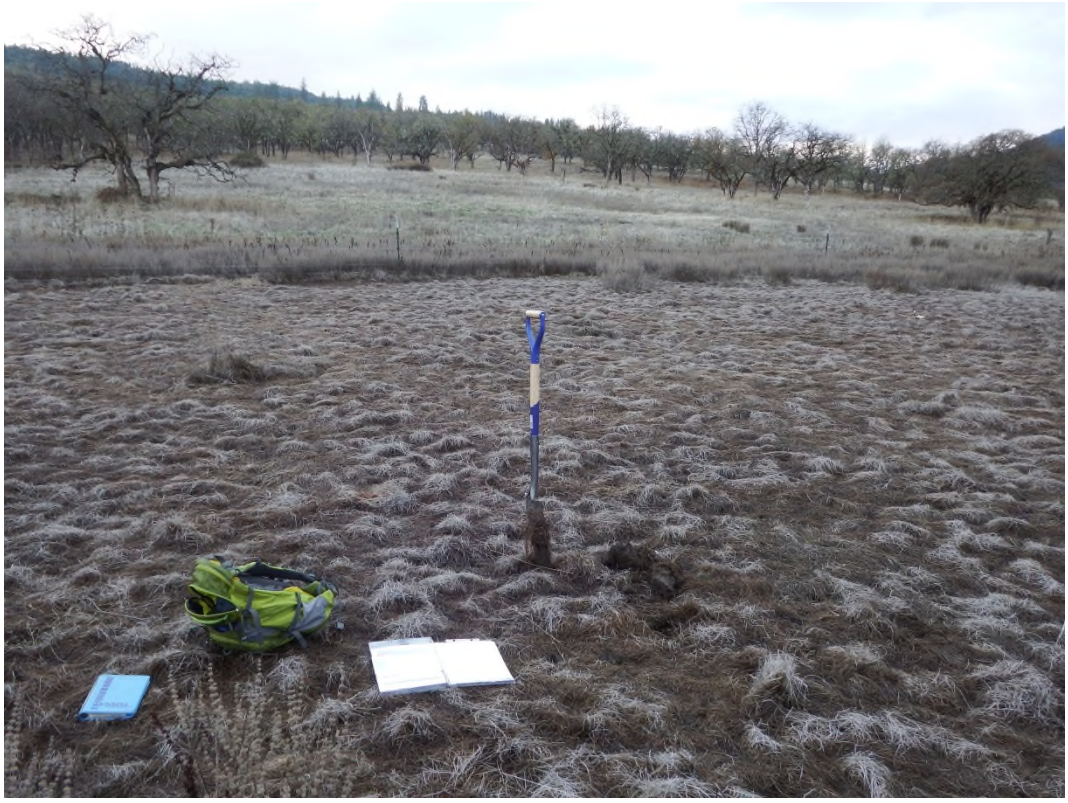
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix E. Wetland Photographs

Wetland 1: Photo direction southwest.

Wetland 2: Photo direction north.



Wetland 3: Photo direction west.

Wetland 4: Photo direction west.

Wetland 6: Photo direction northwest.

Wetland 7: Photo direction north.

Wetland 8a: Photo direction north.

Wetland 8b: Photo direction northwest.

Wetland 8c: Photo direction northwest.

Wetland 8d: Photo direction northwest.

Appendix F. Waterbody Photographs

Waterbody 1: Photo direction southwest.

Waterbody 2: Photo direction southwest.

Waterbody 3: Photo direction south.

Waterbody 4: Photo direction south.

Waterbody 5: Photo direction west.

Waterbody 6: Photo direction south.

Waterbody 7: Photo direction south.

Waterbody 8: Photo direction south.

Waterbody 9: Photo direction south.

Waterbody 10: Photo direction southwest.

Waterbody 11: Photo direction east.

Waterbody 12: Photo direction south.

Waterbody 13: Photo direction south.

Waterbody 14: Photo direction south.

Waterbody 15: Photo direction south.

Waterbody 16: Photo direction southwest.

Waterbody 17: Photo direction south.

Waterbody 18: Photo direction southeast.

Waterbody 19: Photo direction southeast.

Waterbody 20: Photo direction south.

Waterbody 21: Photo direction southeast.

Waterbody 22: Photo direction southeast.

Waterbody 23: Photo direction southeast.

Waterbody 24: Photo direction north.

Waterbody 25: Photo direction south (photo includes WL-1).

Waterbody 26: Photo direction southeast.

Waterbody 27: Photo direction southwest.

Waterbody 28: Photo direction southeast.

Waterbody 29: Photo direction south.

Waterbody 30: Photo direction southeast.

Waterbody 31: Photo direction southeast.

Waterbody 32: Photo direction south.

Waterbody 33: Photo direction southeast.

Waterbody 34: Photo direction southeast.

Waterbody 35: Photo direction south.

Waterbody 36: Photo direction south.

Waterbody 37: Photo direction southeast.

Waterbody 38: Photo direction south.

Waterbody 39: Photo direction south.

Waterbody 40: Photo direction east.

Waterbody 41: Photo direction southeast.

Waterbody 42: Photo direction south.

Waterbody 43: Photo direction south.

Waterbody 44: Photo direction south.

Waterbody 45: Photo direction south.

Waterbody 46: Photo direction northwest.

Waterbody 47: Photo direction northeast.

Waterbody 48: Photo direction east.

Waterbody 49: Photo direction northwest.

Waterbody 50: Photo direction north.

Waterbody 51: Photo direction east.

Waterbody 52: Photo direction north.