

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

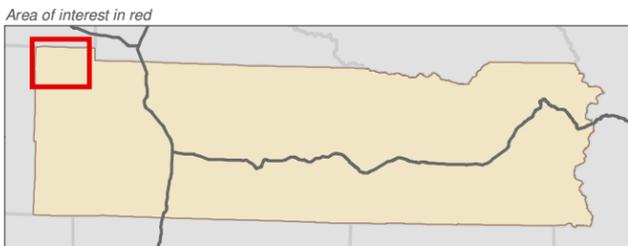
Figure 1

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Basalt flows and flow breccias, Crescent Formation
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

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Miles
1:48,000



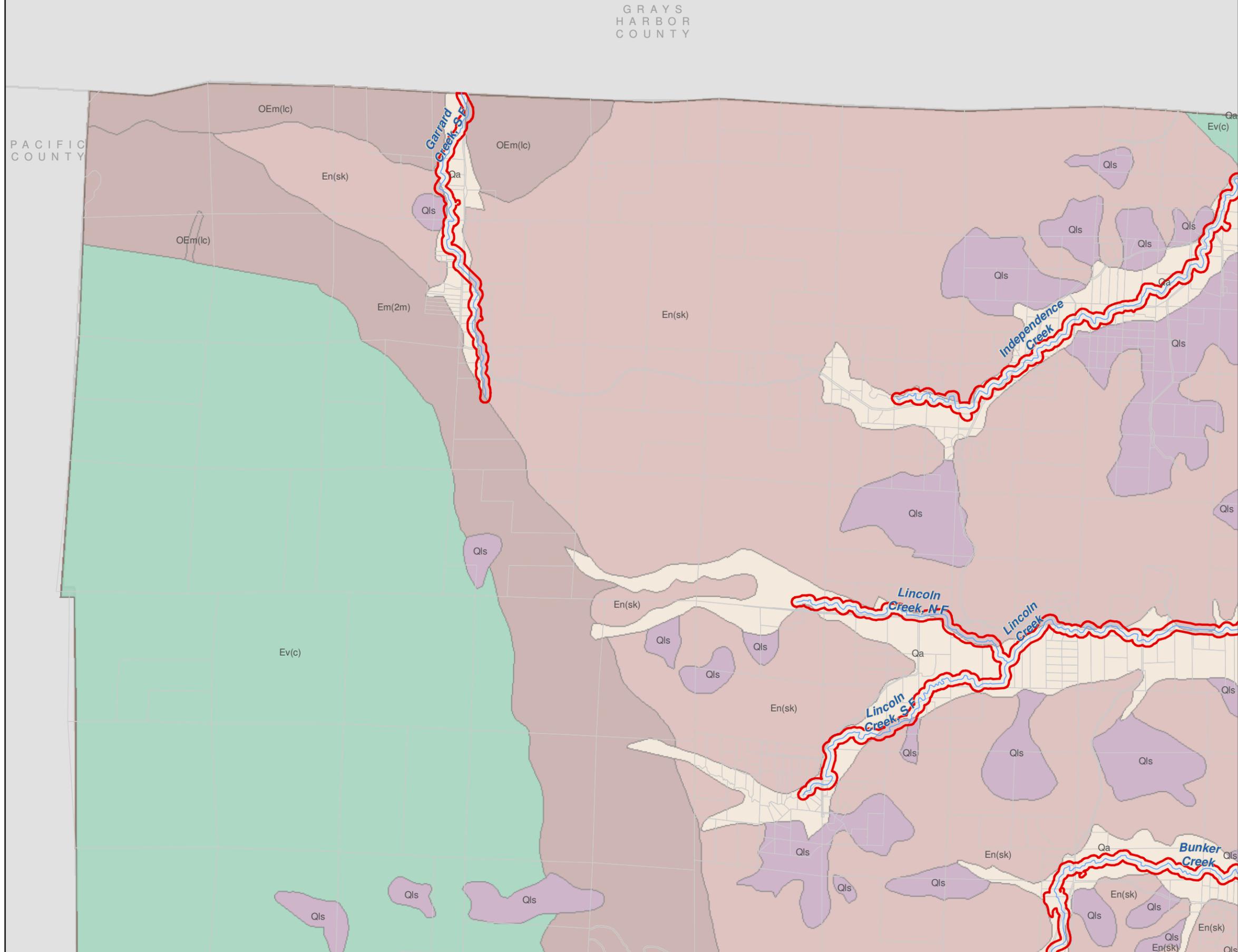
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

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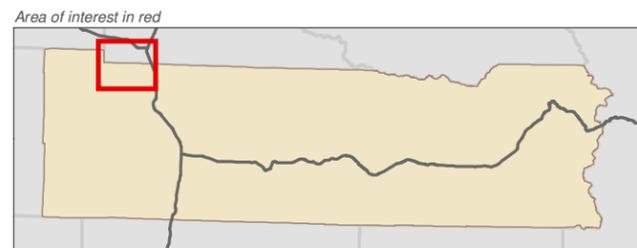
Figure 2

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, pre-Fraser
-  Basalt flows and flow breccias, Crescent Formation
-  Continental glacial outwash, Fraser-age
-  Continental glacial outwash, gravel, Fraser-age
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  Terraced deposits
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

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Miles
1:48,000



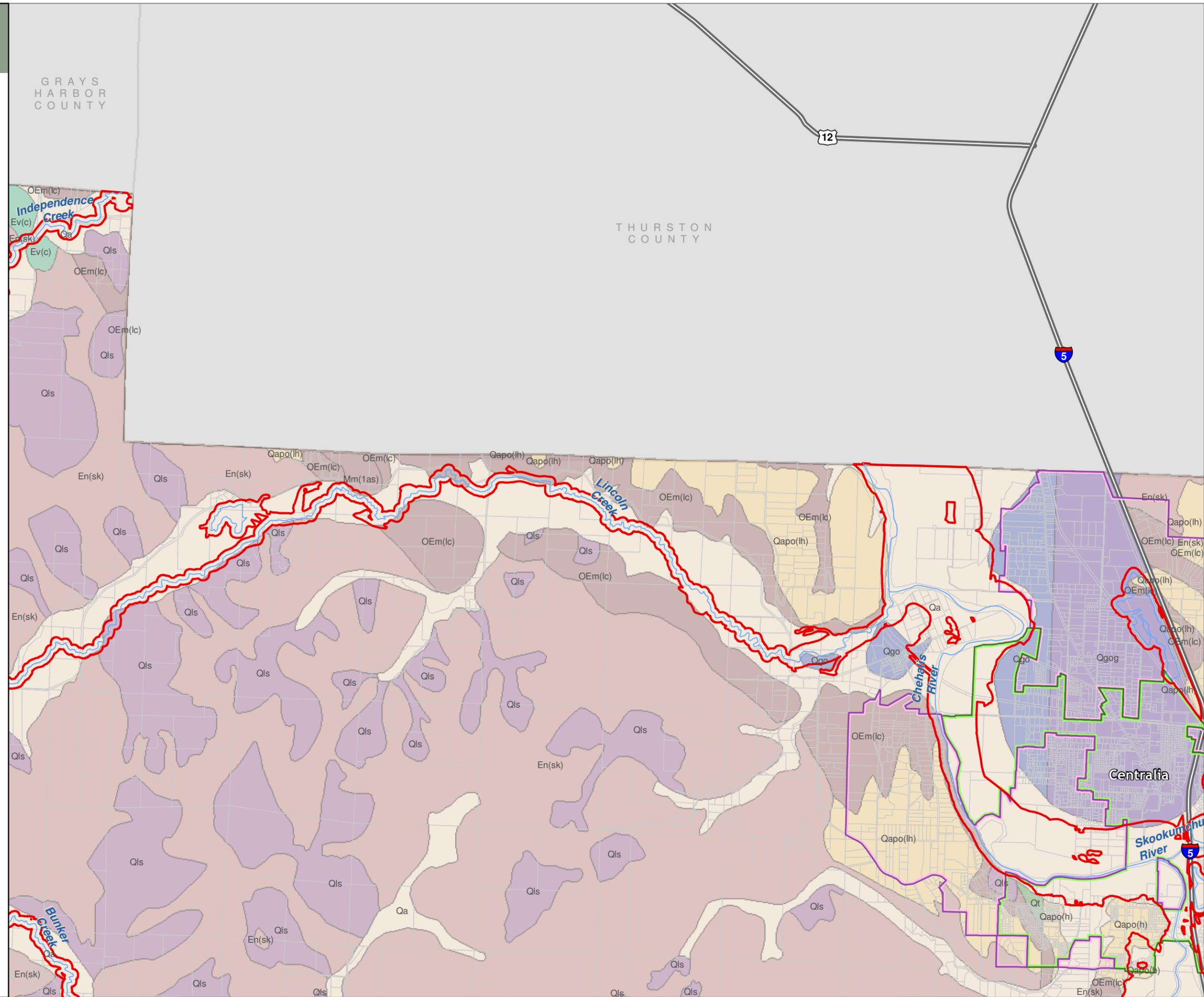
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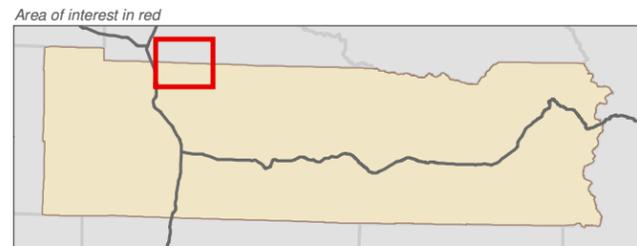
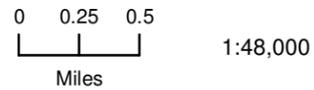
Map 10A - Surficial Geology

Figure 3

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, pre-Fraser
-  Andesite flows
-  Continental glacial outwash, gravel, Fraser-age
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



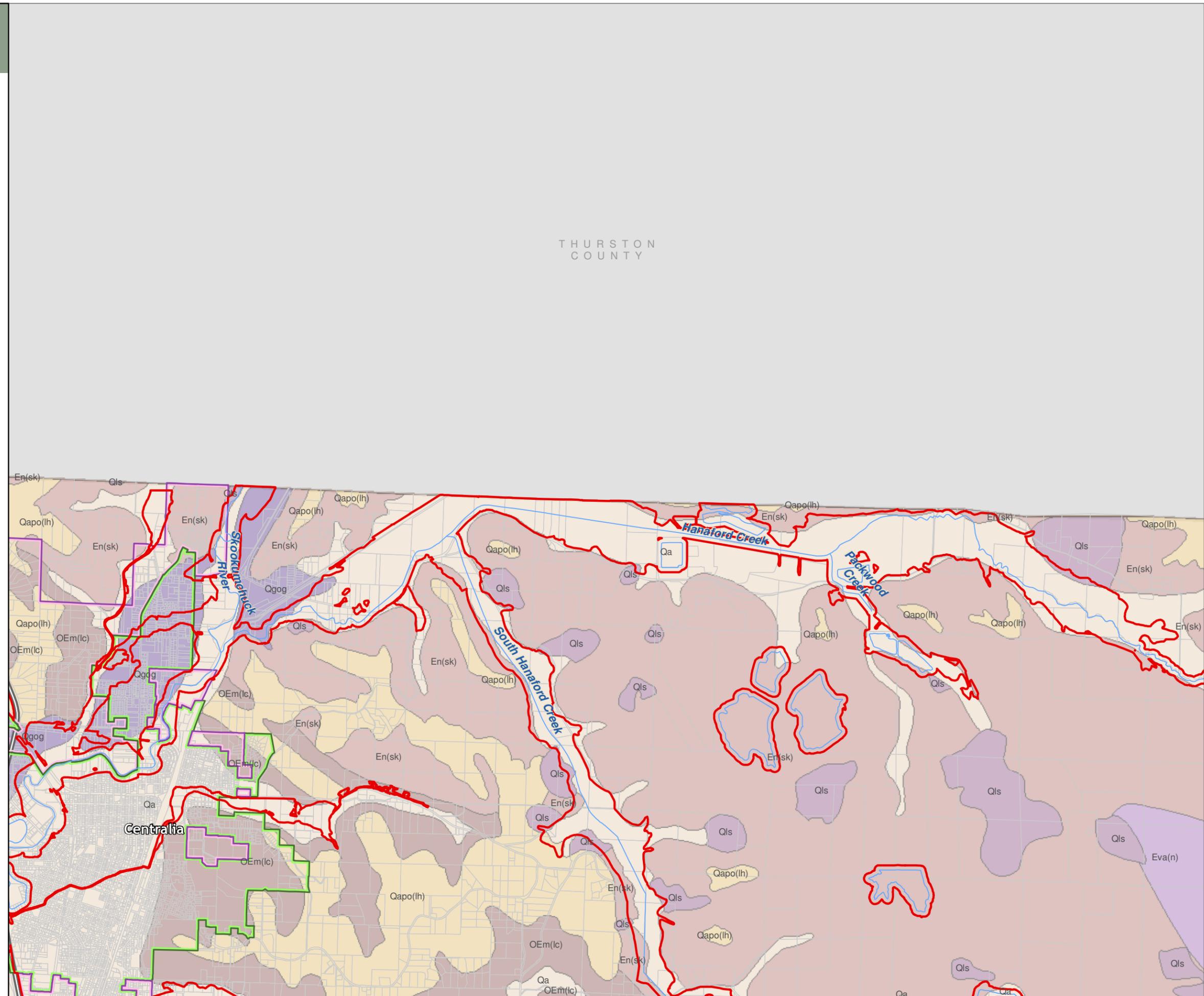
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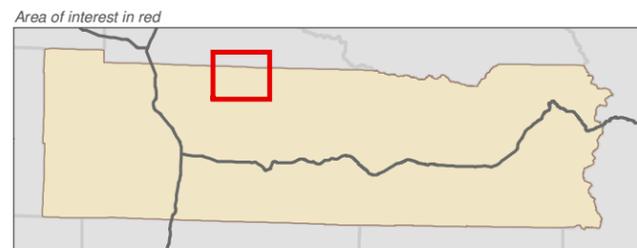
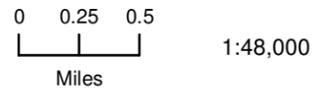
Figure 4

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, pre-Fraser
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City

 UGA



Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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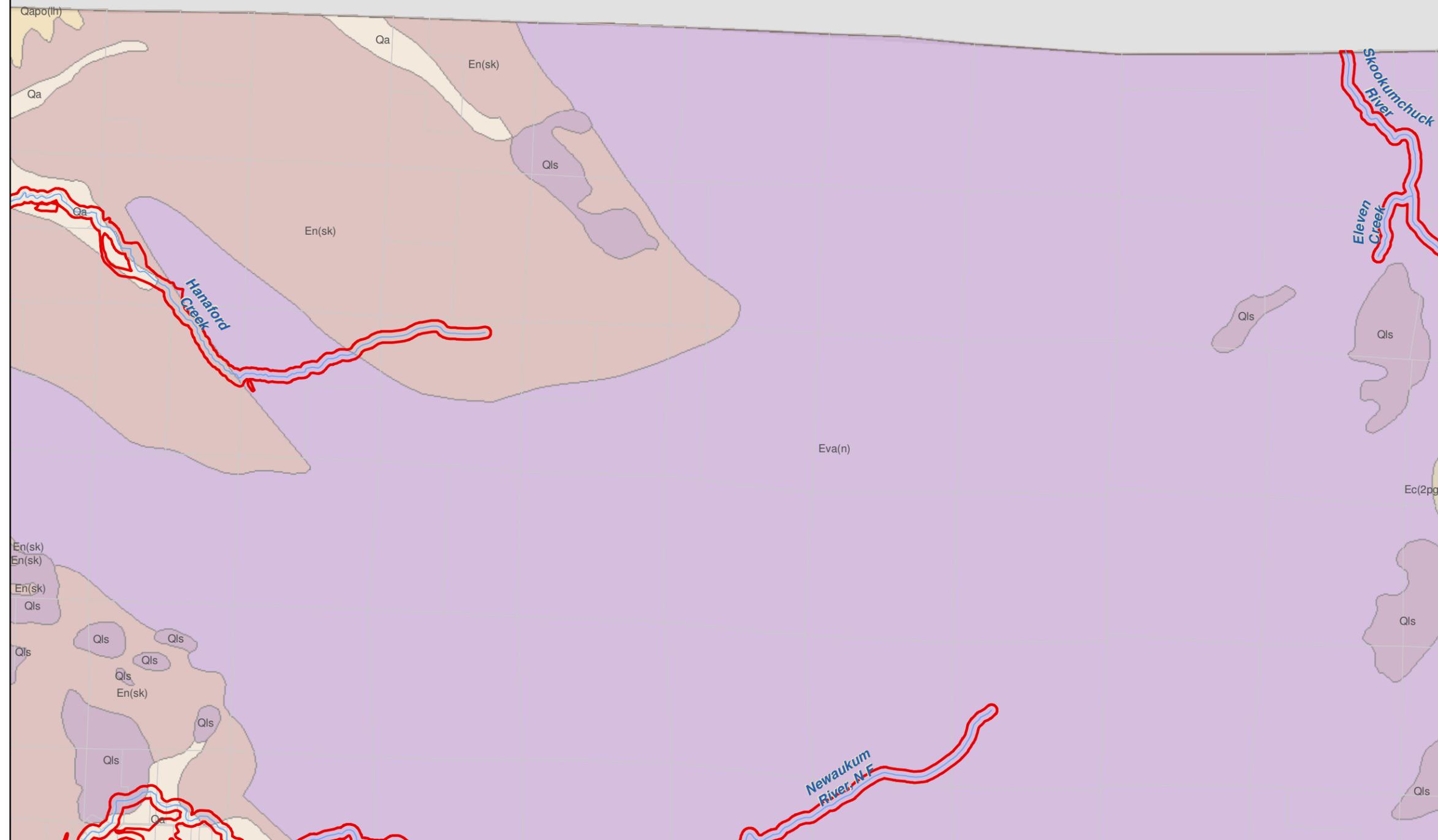
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City of Morton City of Winlock



THURSTON
COUNTY



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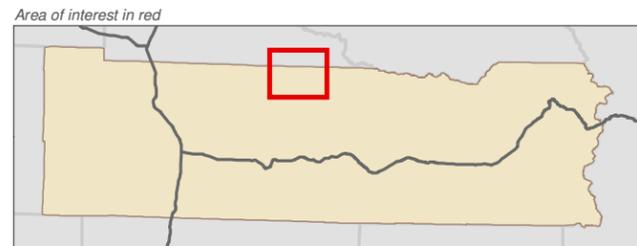
Figure 5

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



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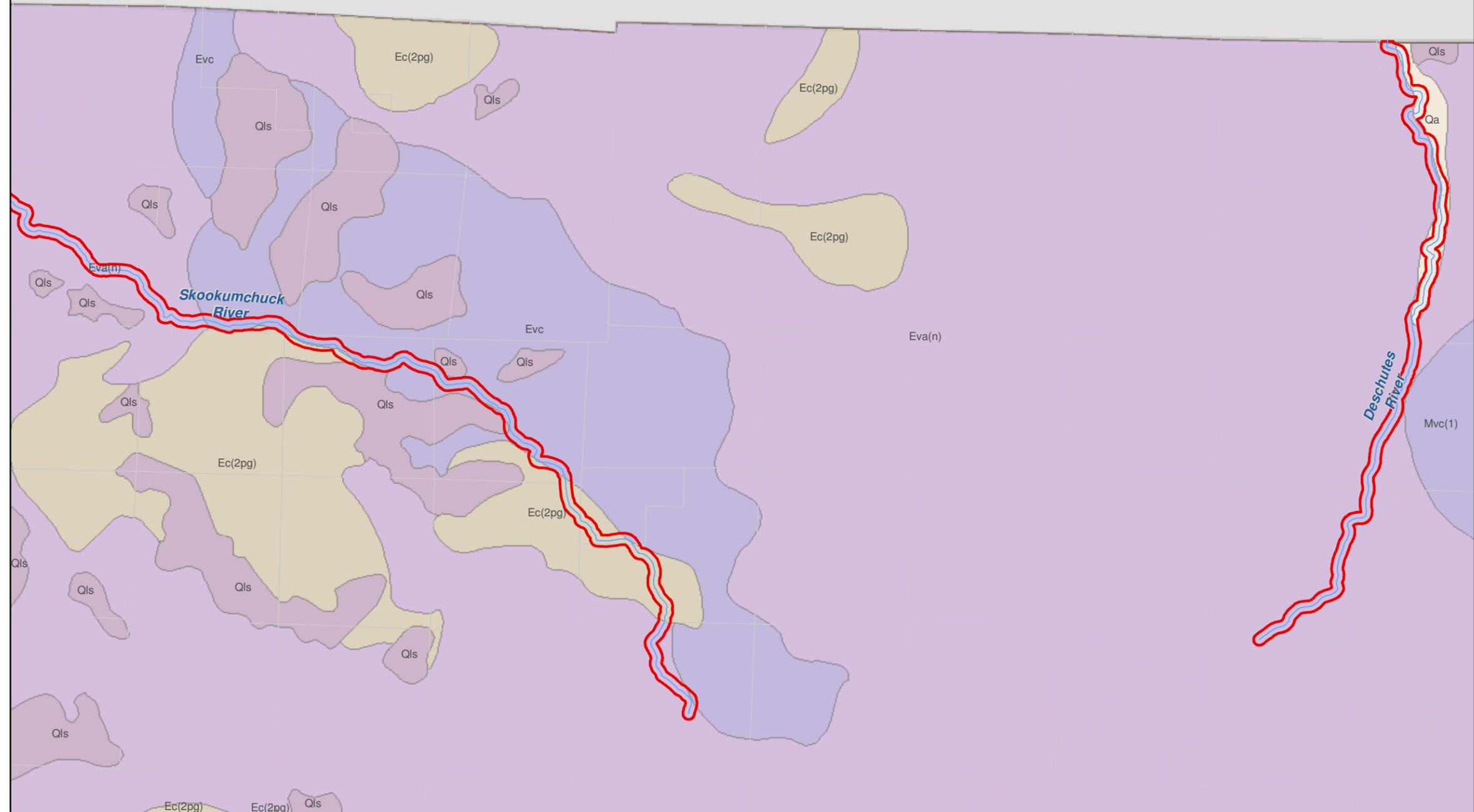
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THURSTON
COUNTY



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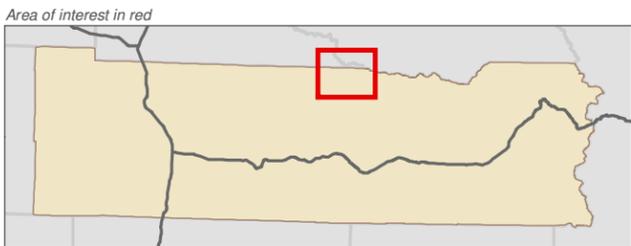
Figure 6

Date: 6/3/2014

Surficial Geology

-  Alpine glacial drift, pre-Fraser
-  Andesite flows
-  Basaltic andesite flows
-  Continental sedimentary deposits or rocks
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

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Miles
1:48,000



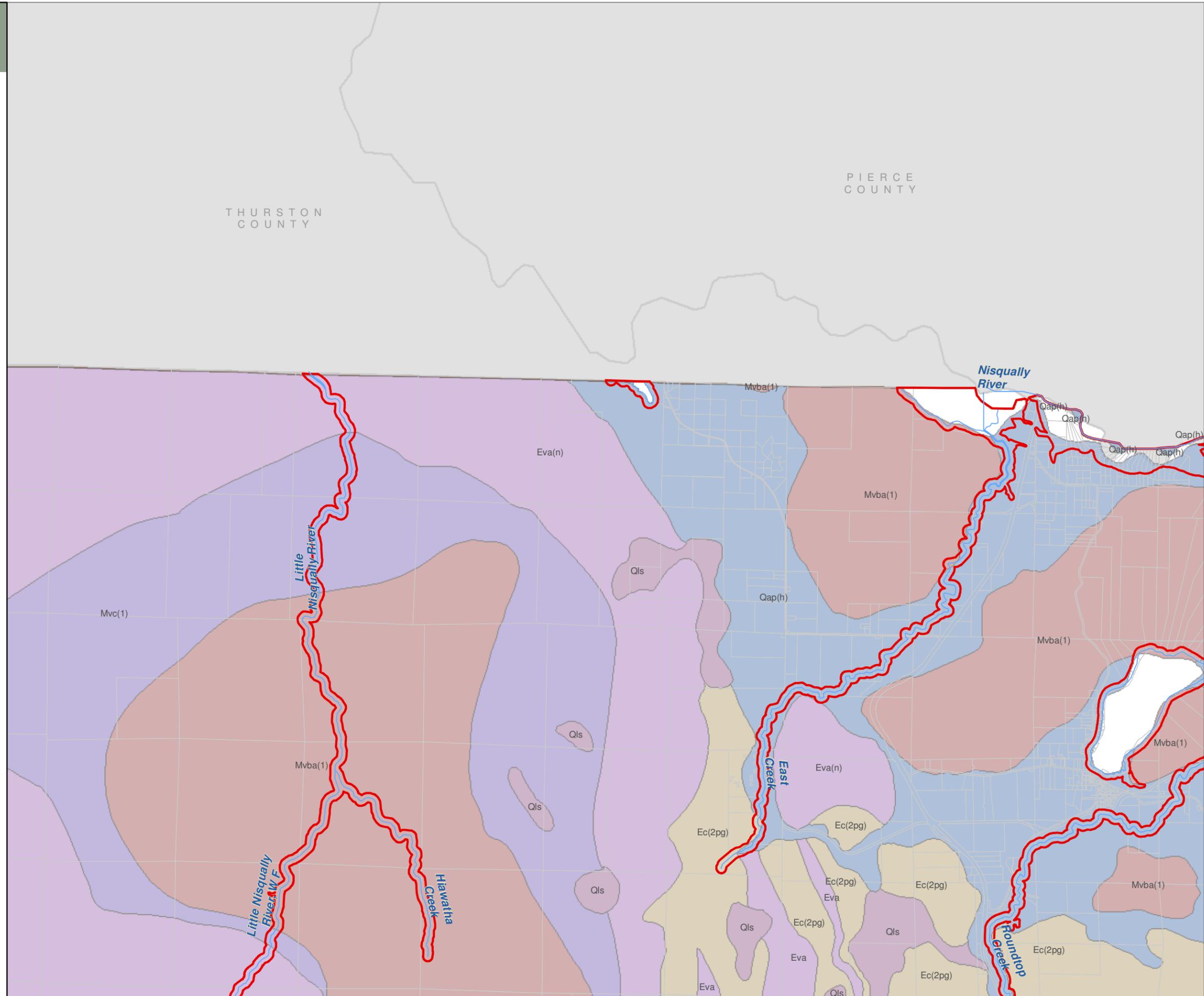
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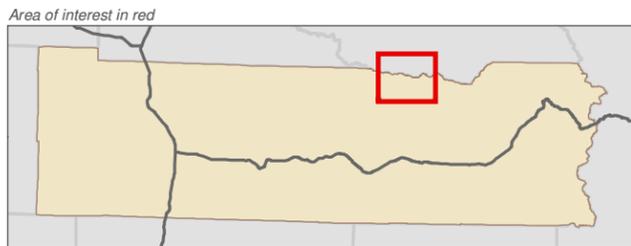
Figure 7

Date: 6/3/2014

Surficial Geology

- Alpine glacial drift, Fraser-age
- Alpine glacial drift, pre-Fraser
- Basaltic andesite flows
- Continental sedimentary deposits or rocks
- Intrusive andesite
- Mass-wasting deposits, mostly landslides
- Volcaniclastic deposits or rocks
- SMA Rivers & Streams
- SMA Lakes
- Highways
- Parcels
- SMA Jurisdiction
- City
- UGA

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Miles
1:48,000



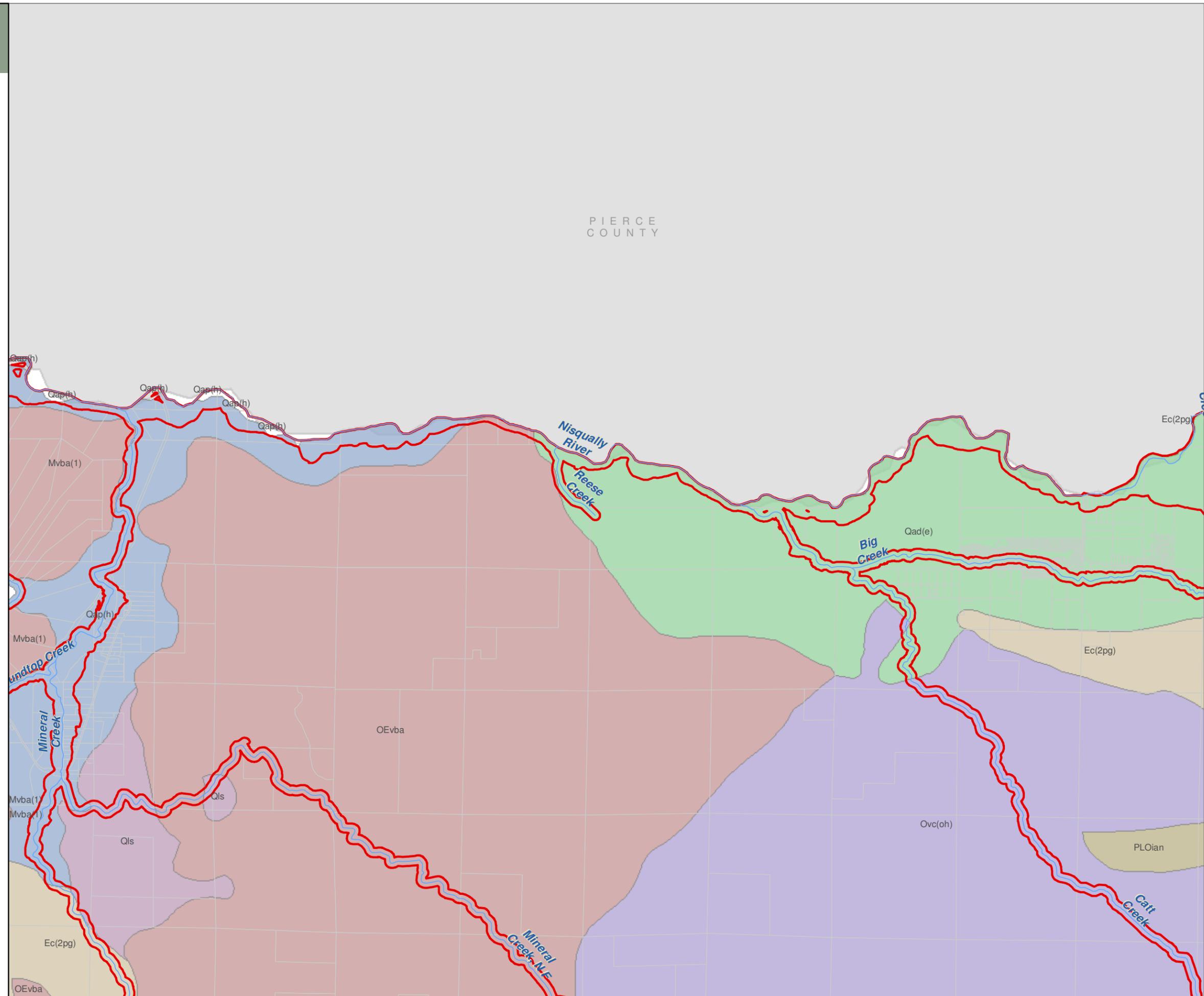
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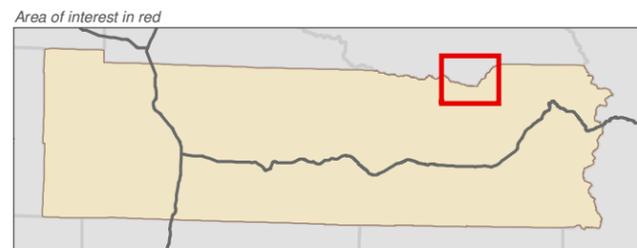
Figure 8

Date: 6/3/2014

Surficial Geology

-  Acidic intrusive rocks
-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Andesite flows
-  Basic intrusive rocks
-  Continental sedimentary deposits or rocks
-  Diorite
-  Granodiorite
-  Intrusive andesite
-  Lahars
-  Tuffs and tuff breccias
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

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Miles
1:48,000



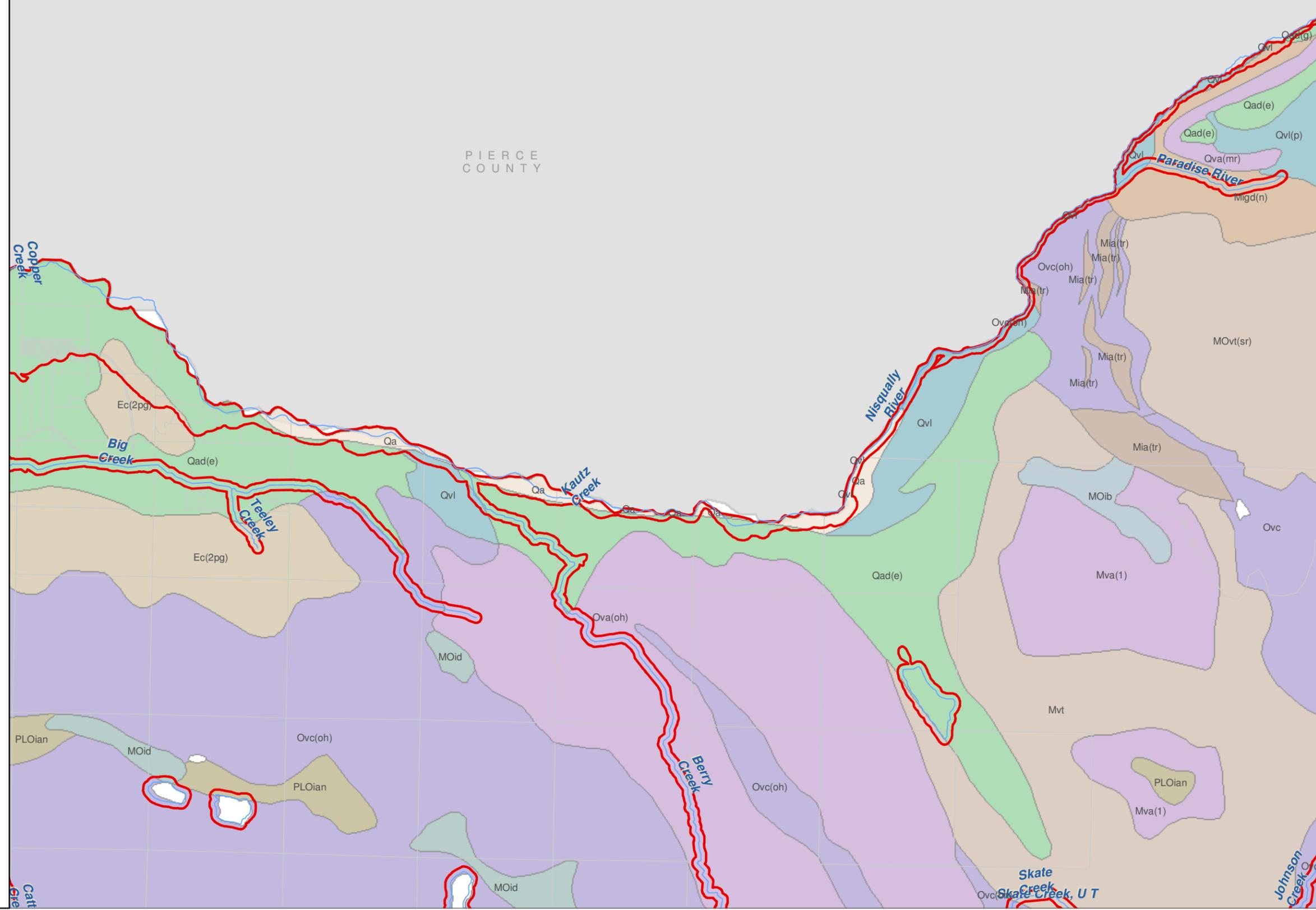
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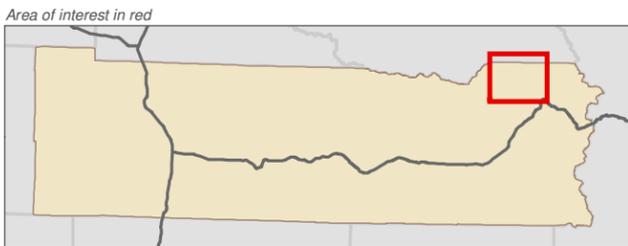
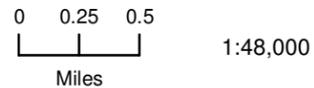
Map 10A - Surficial Geology

Figure 9

Date: 6/3/2014

Surficial Geology

-  Acidic intrusive rocks
-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Andesite flows
-  Basalt flows
-  Gabbro
-  Granodiorite
-  Intrusive andesite
-  Lahars
-  Mass-wasting deposits, mostly landslides
-  Quartz monzonite
-  Tuffs and tuff breccias
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



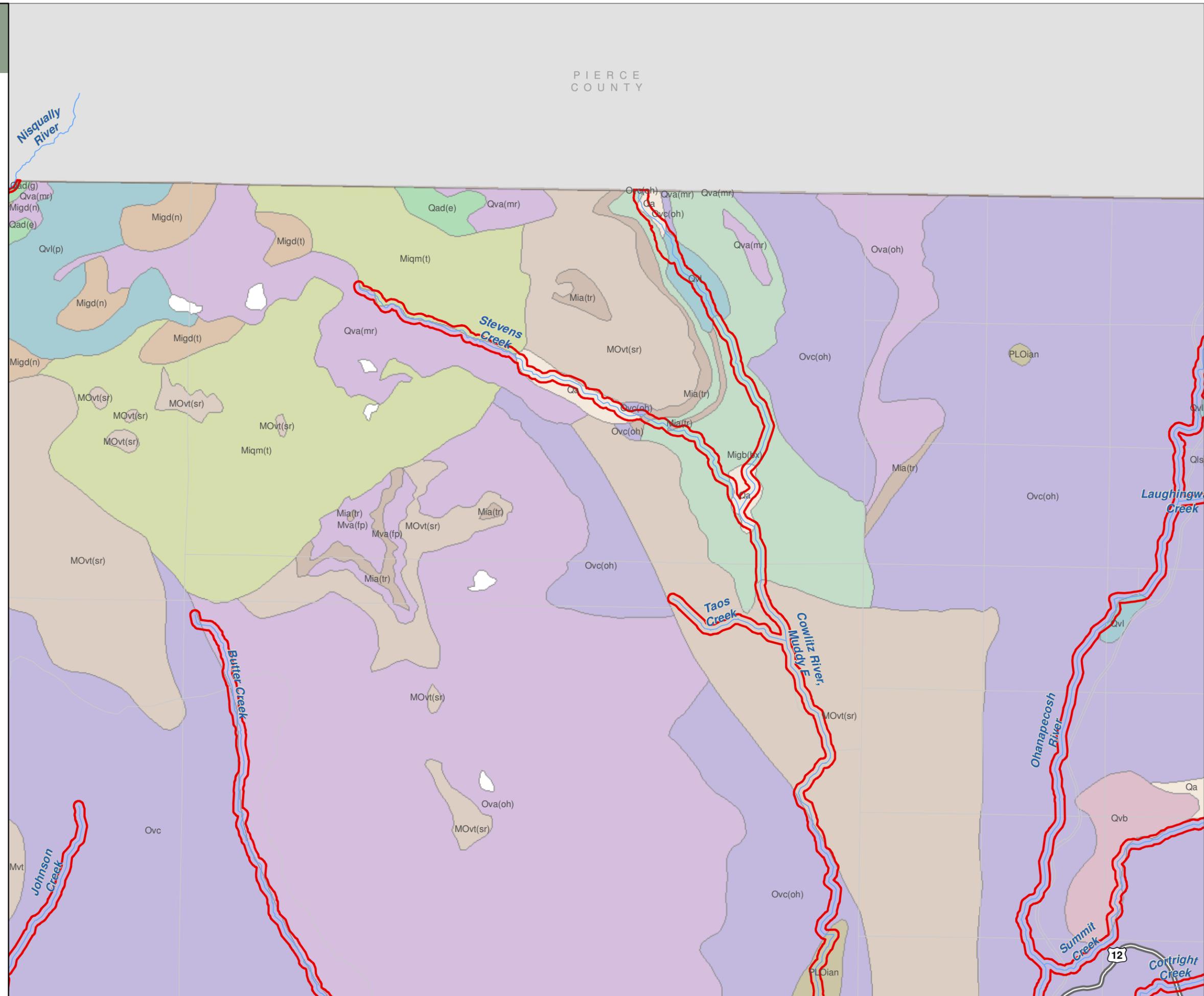
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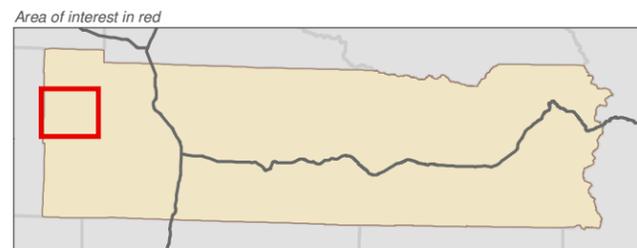
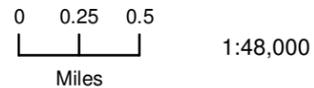
Map 10A - Surficial Geology

Figure 11

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Basalt flows (Grande Ronde Basalt, upper flows of norm.mag.pol.)
-  Basalt flows and flow breccias, Crescent Formation
-  Continental sedimentary deposits or rocks
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  Terraced deposits
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
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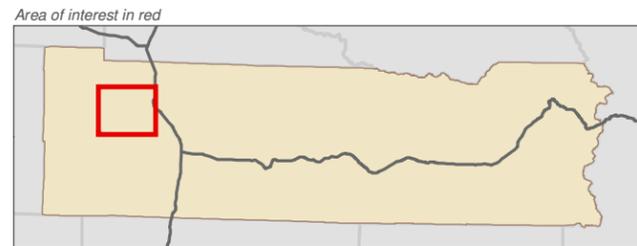
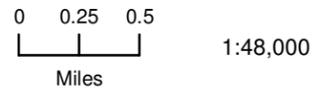
Map 10A - Surficial Geology

Figure 12

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, pre-Fraser
-  Basalt flows (Grande Ronde Basalt, undivided [CRB])
-  Basalt flows (Grande Ronde Basalt, upper flows of norm.mag.pol.)
-  Continental sedimentary deposits or rocks
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



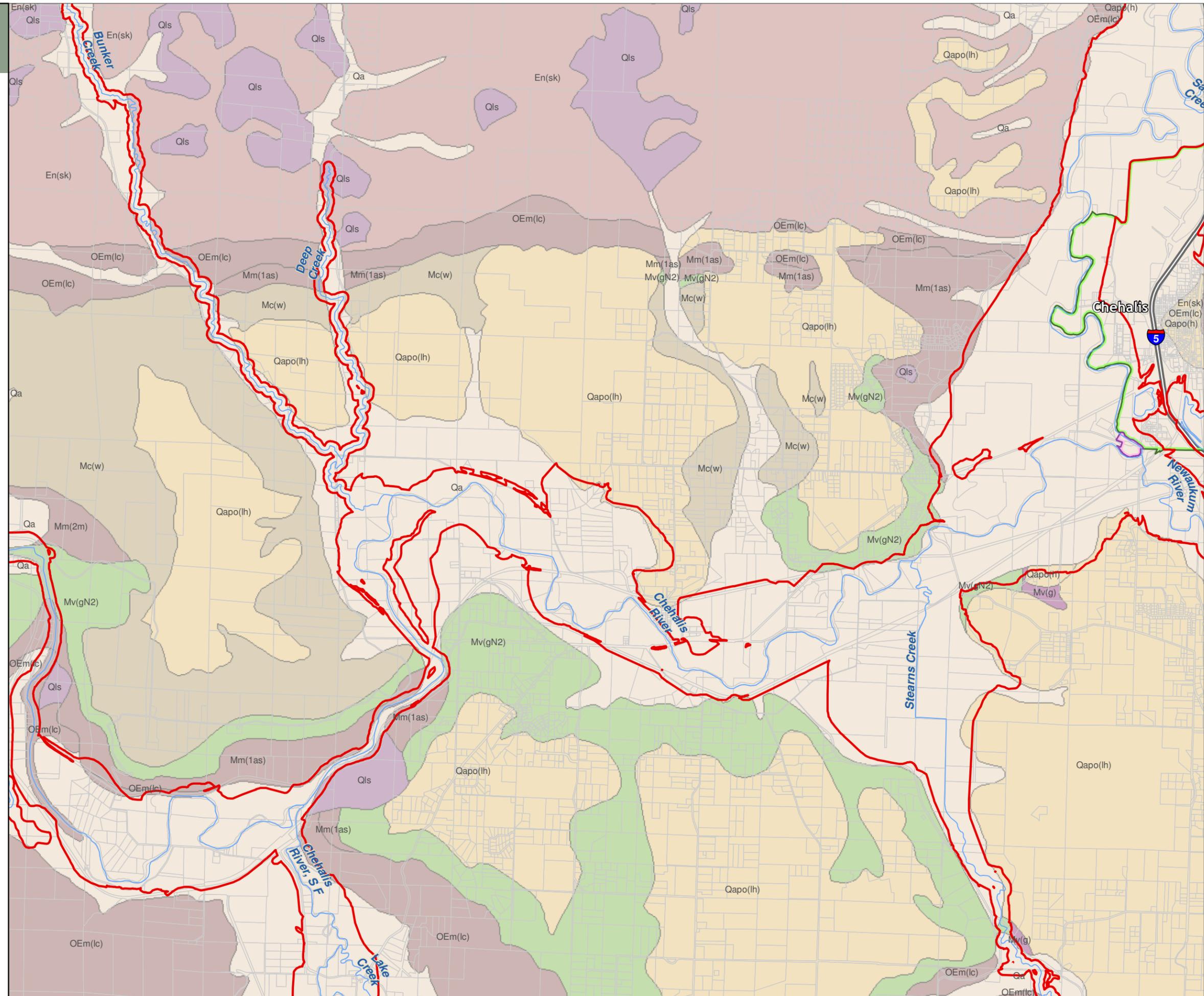
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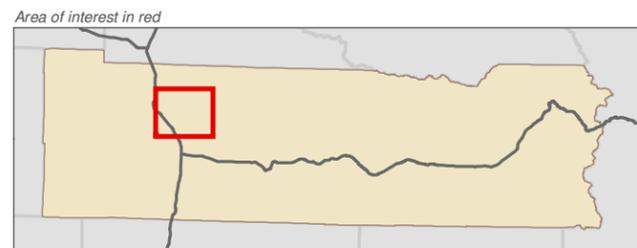
Figure 13

Date: 6/3/2014

Surficial Geology

-  Alluvium
 -  Alpine glacial outwash, pre-Fraser
 -  Continental sedimentary deposits or rocks
 -  Marine sedimentary rocks
 -  Mass-wasting deposits, mostly landslides
 -  Nearshore sedimentary rocks
 -  SMA Rivers & Streams
 -  SMA Lakes
 -  Highways
 -  Parcels
 -  SMA Jurisdiction
-  City
 -  UGA

0 0.25 0.5
Miles
1:48,000



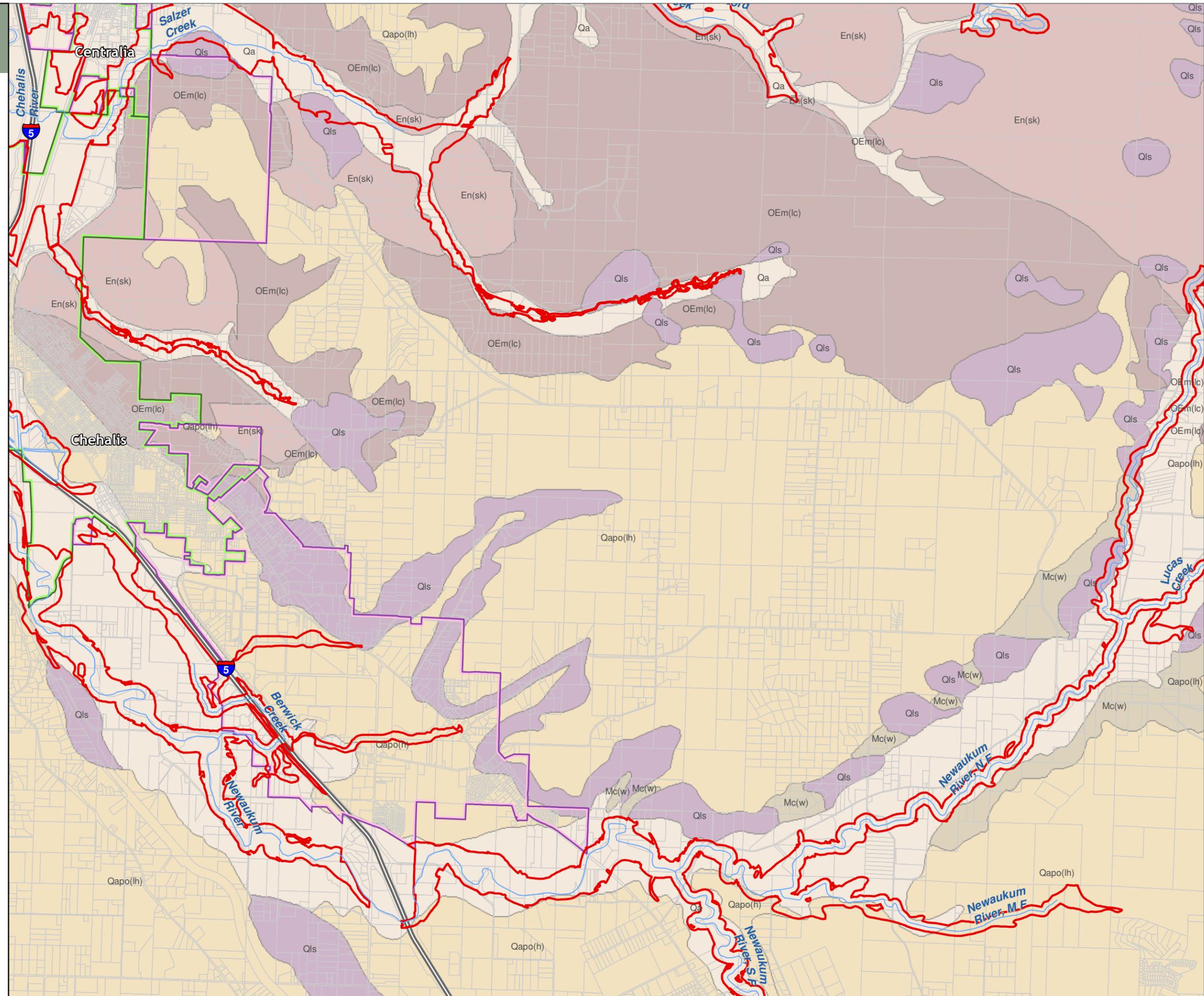
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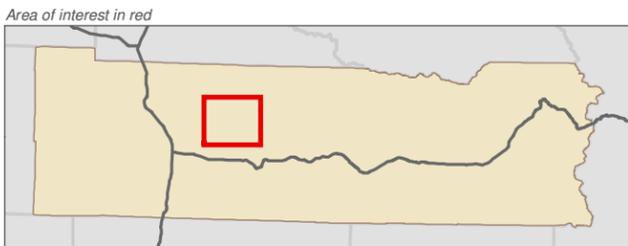
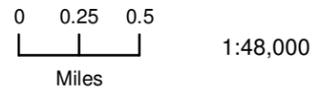
Map 10A - Surficial Geology

Figure 14

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, pre-Fraser
-  Alpine glacial till, pre-Fraser
-  Andesite flows
-  Basic intrusive rocks
-  Continental sedimentary deposits or rocks
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



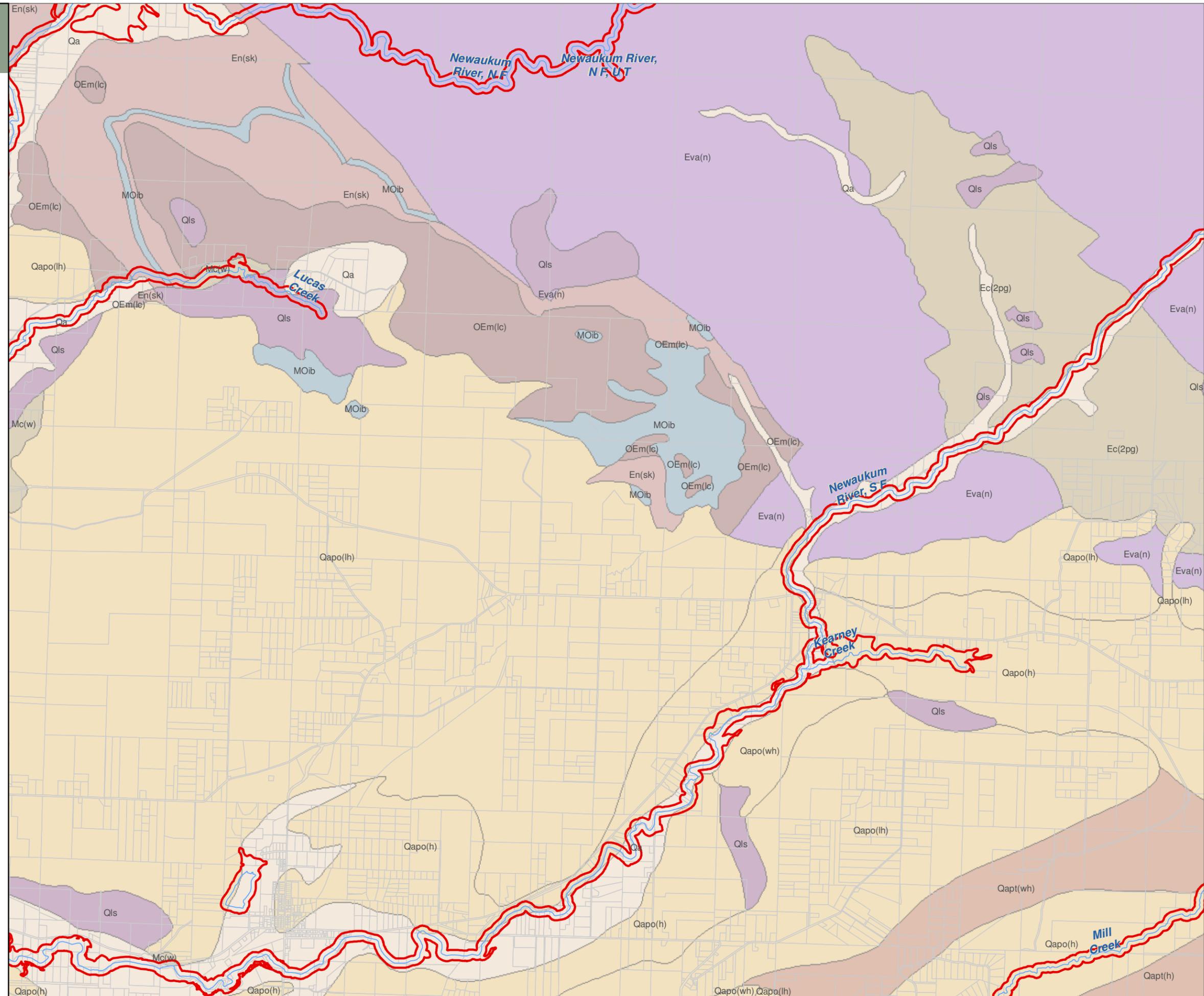
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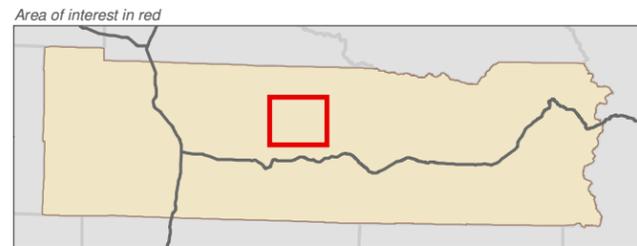
Figure 15

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial outwash, Fraser-age
-  Alpine glacial outwash, pre-Fraser
-  Alpine glacial till, pre-Fraser
-  Andesite flows
-  Basaltic andesite flows
-  Continental sedimentary deposits or rocks
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



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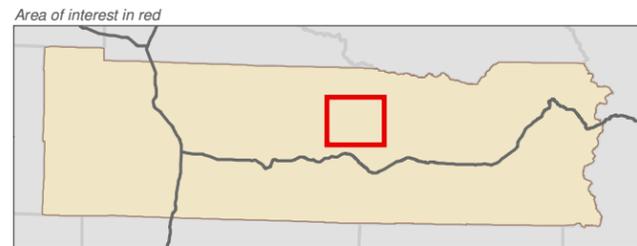
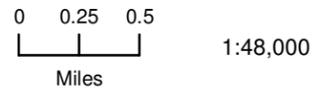
Map 10A - Surficial Geology

Figure 16

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, pre-Fraser
-  Alpine glacial till, pre-Fraser
-  Andesite flows
-  Basaltic andesite flows
-  Continental sedimentary deposits or rocks
-  Diorite
-  Intrusive andesite
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



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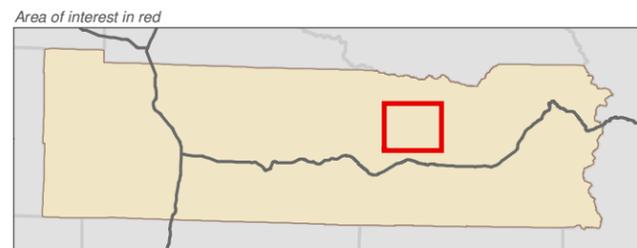
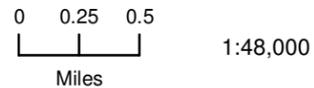
Map 10A - Surficial Geology

Figure 17

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Andesite flows
-  Basaltic andesite flows
-  Continental sedimentary deposits or rocks
-  Intrusive andesite
-  Intrusive andesite and dacite
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



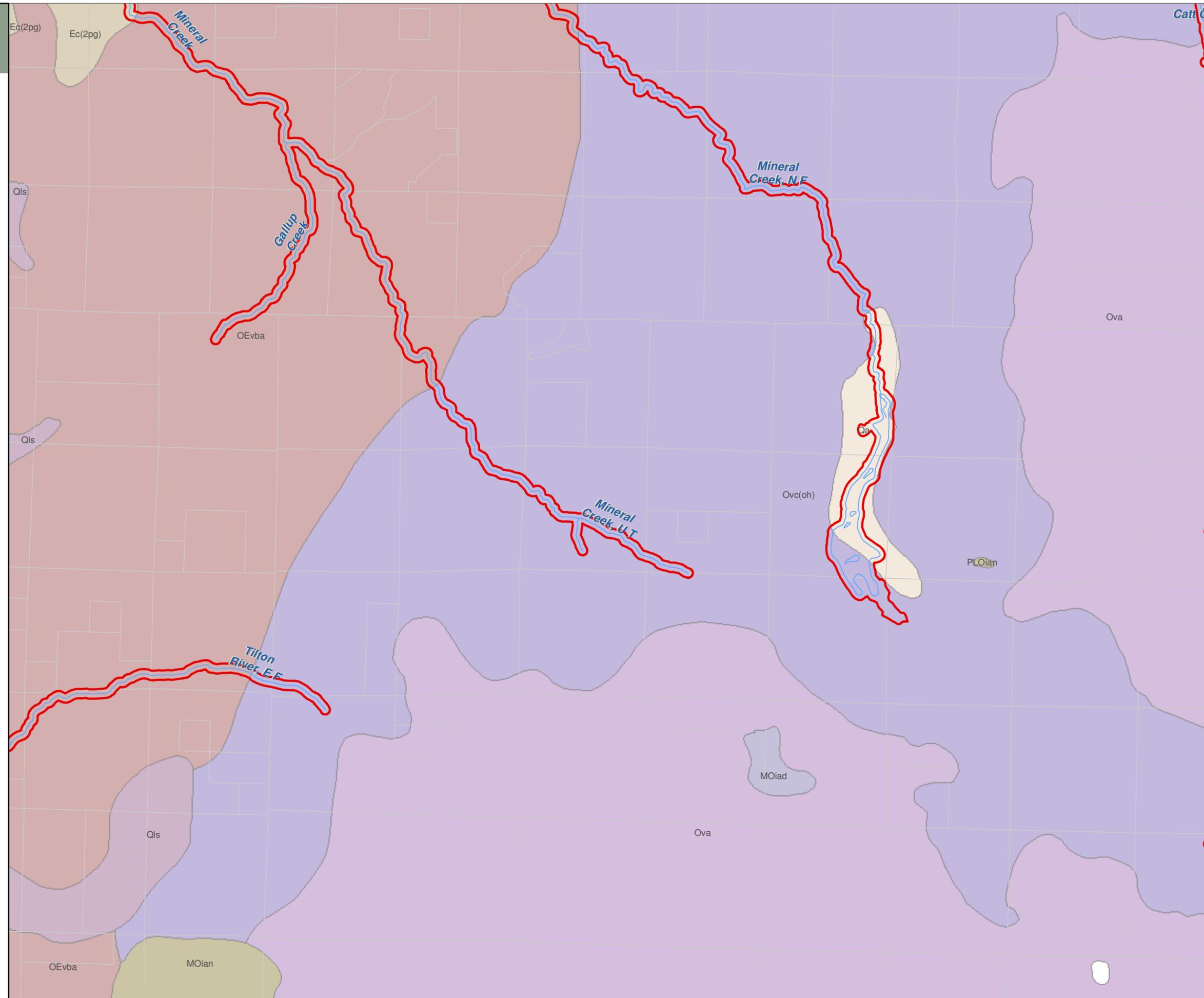
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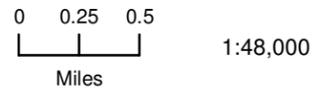
Map 10A - Surficial Geology

Figure 18

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Diorite
-  Granodiorite
-  Intrusive andesite
-  Intrusive andesite and dacite
-  Mass-wasting deposits, mostly landslides
-  Tuffs and tuff breccias
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



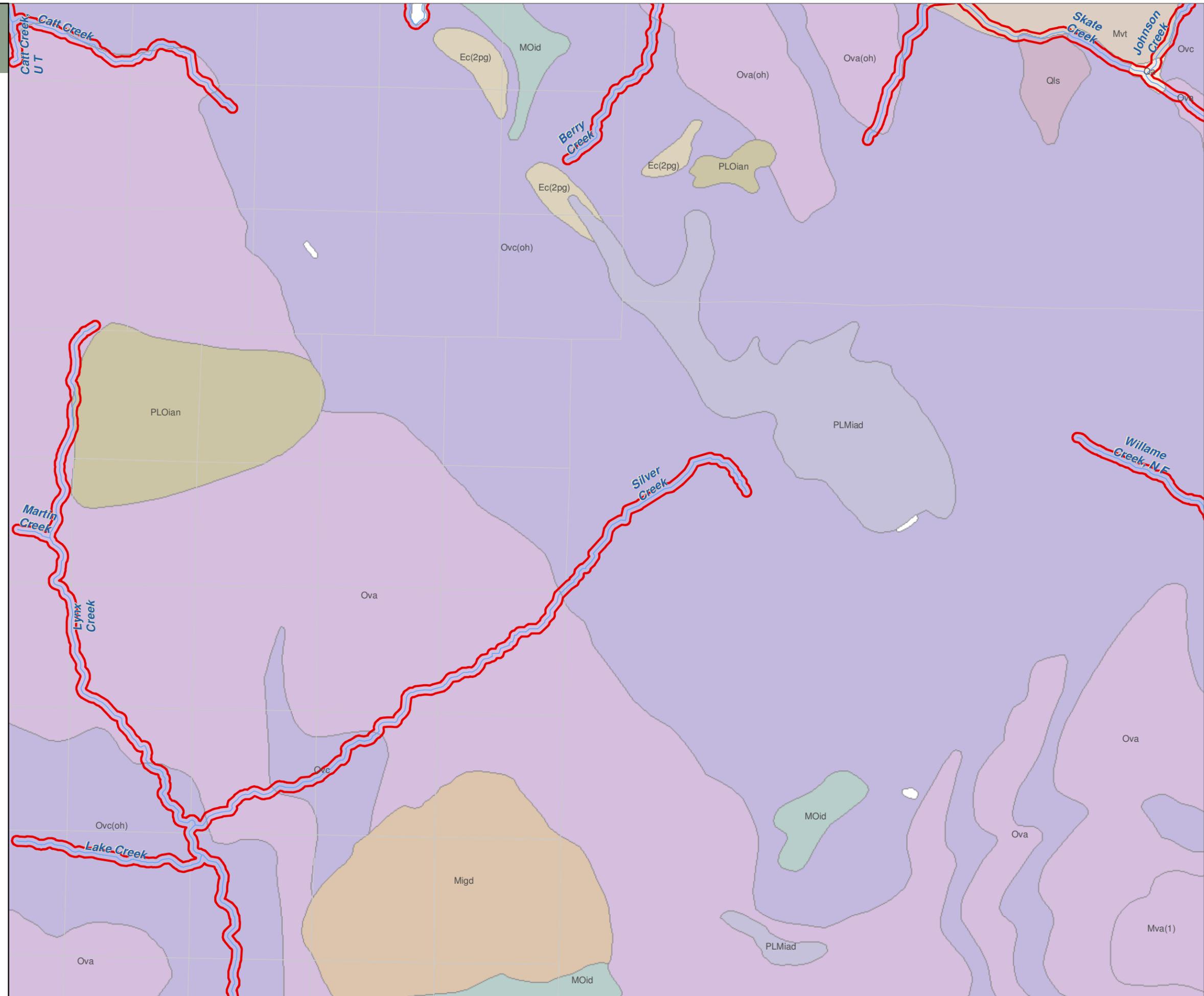
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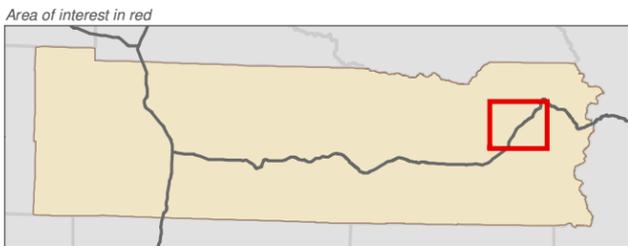
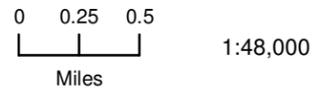
Map 10A - Surficial Geology

Figure 19

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Dacite flows
-  Intrusive andesite
-  Mass-wasting deposits, mostly landslides
-  Tuffs and tuff breccias
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



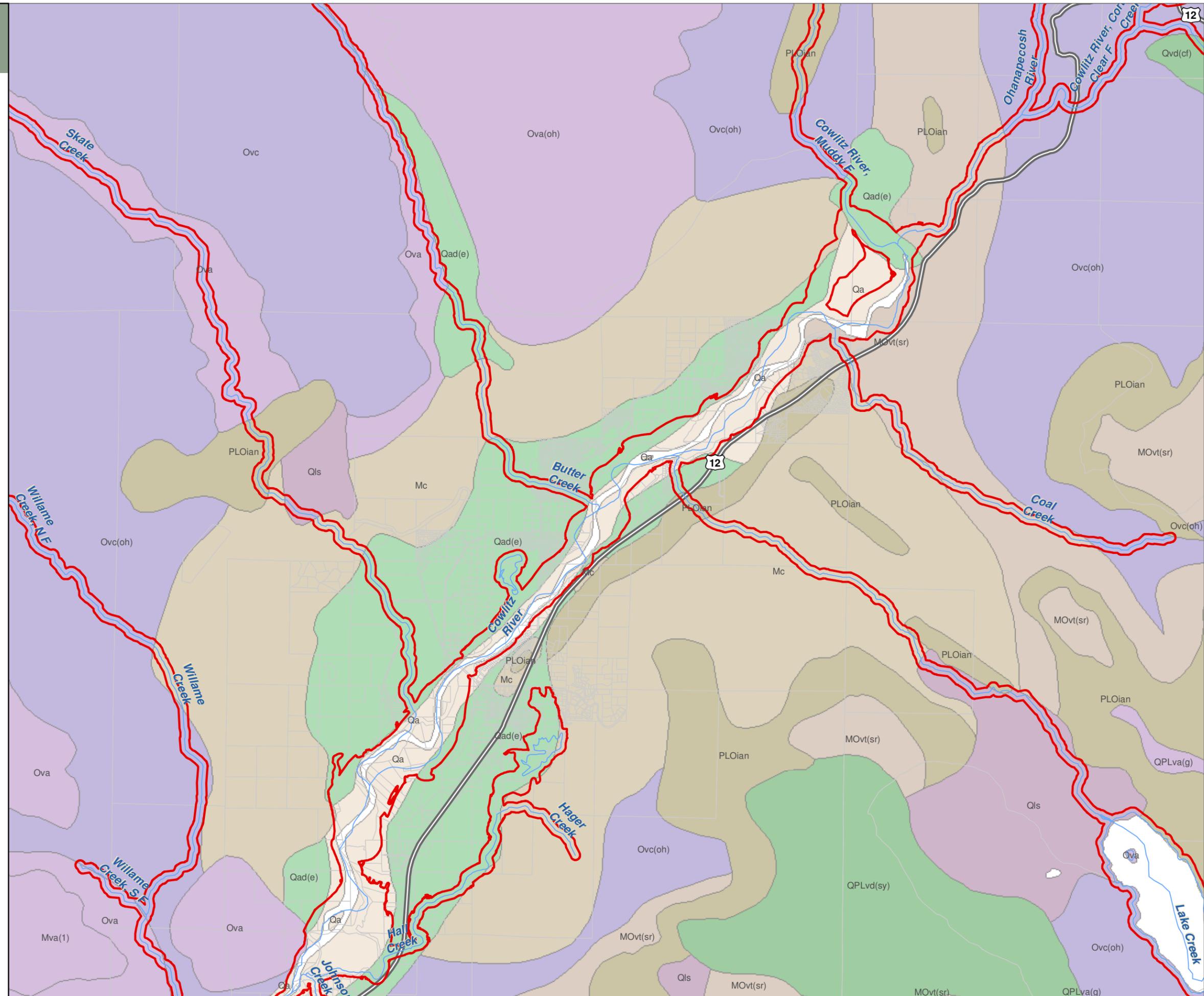
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

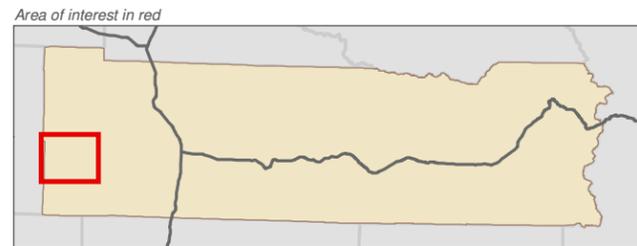
Figure 21

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Basalt flows and flow breccias, Crescent Formation
-  Basic intrusive rocks
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  Tuffs and tuff breccias
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



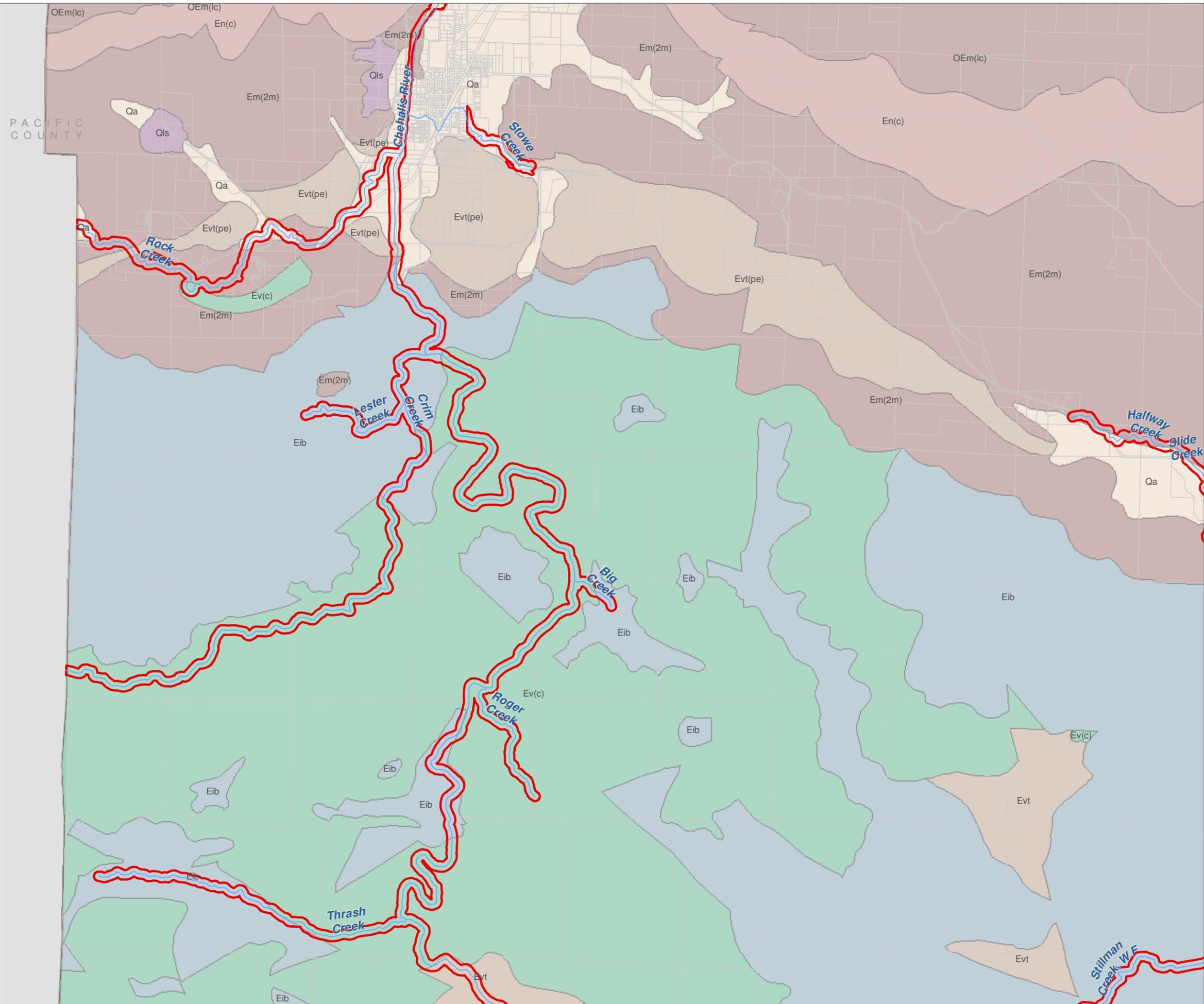
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

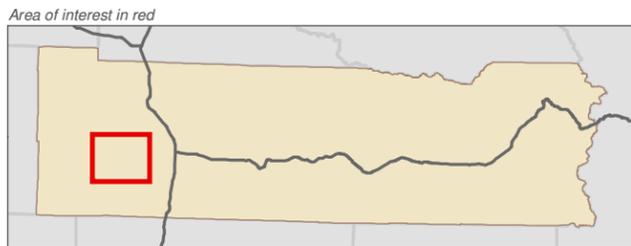
Figure 22

Date: 6/3/2014

Surficial Geology

- | | |
|--|--|
|  Alluvium |  Marine sedimentary rocks |
|  Alpine glacial drift, pre-Fraser |  Mass-wasting deposits, mostly landslides |
|  Alpine glacial outwash, pre-Fraser |  Nearshore sedimentary rocks |
|  Basalt flows (Grande Ronde Basalt, undivided [CRB]) |  SMA Rivers & Streams |
|  Basalt flows (Grande Ronde Basalt, upper flows of norm.mag.pol.) |  SMA Lakes |
|  Basalt flows and flow breccias, Crescent Formation |  Highways |
|  Basic intrusive rocks |  Parcels |
| |  SMA Jurisdiction |
| |  City |
| |  UGA |

0 0.25 0.5
Miles
1:48,000



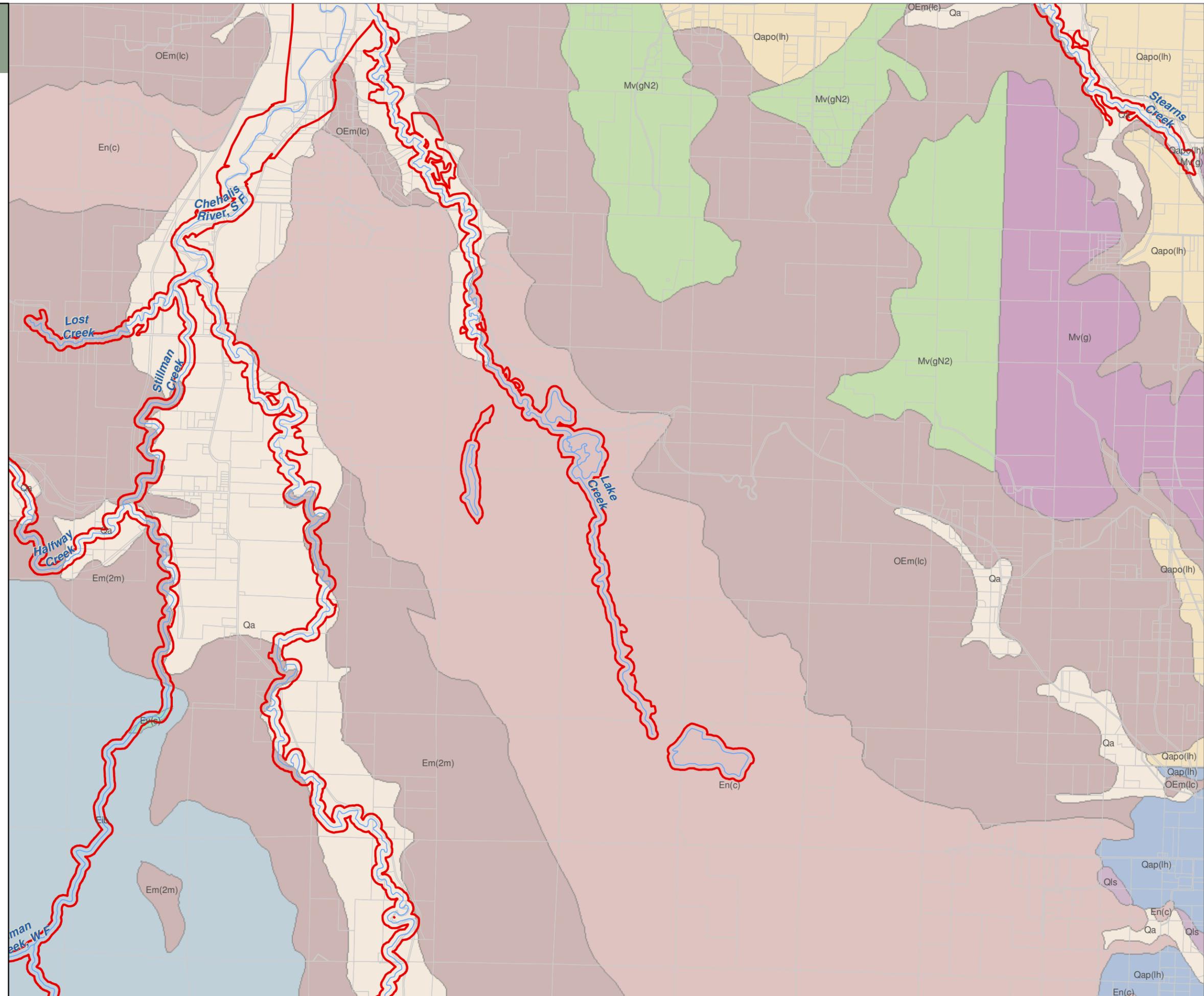
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

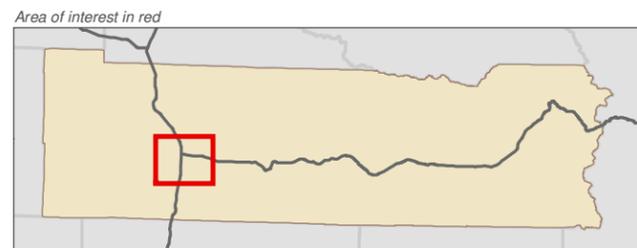
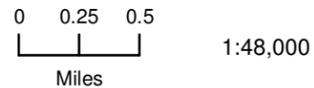
Map 10A - Surficial Geology

Figure 23

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, pre-Fraser
-  Alpine glacial outwash, Fraser-age
-  Alpine glacial outwash, pre-Fraser
-  Basalt flows (Grande Ronde Basalt, undivided [CRB])
-  Continental sedimentary deposits or rocks
-  Marine sedimentary rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



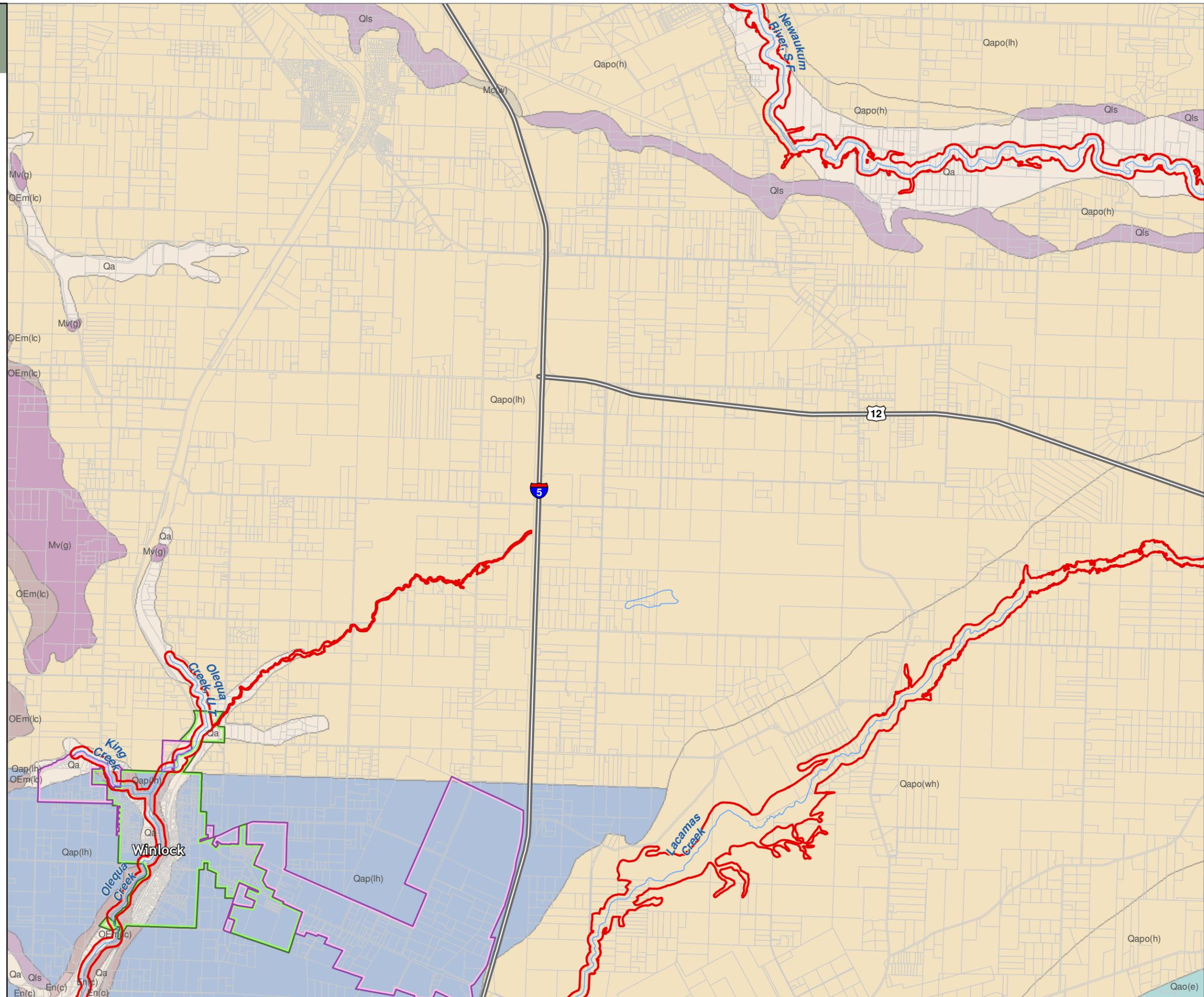
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

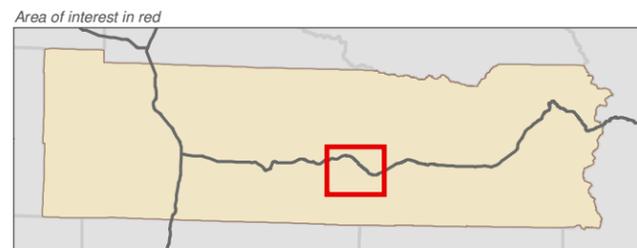
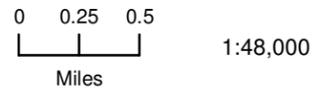
Map 10A - Surficial Geology

Figure 26

Date: 6/3/2014

Surficial Geology

-  Alluvium
 -  Alpine glacial outwash, Fraser-age
 -  Alpine glacial outwash, pre-Fraser
 -  Alpine glacial till, pre-Fraser
 -  Andesite flows
 -  Basalt flows
 -  Basaltic andesite flows
 -  Continental sedimentary deposits or rocks
 -  Dacite flows
 -  Diorite
 -  Mass-wasting deposits, mostly landslides
 -  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
 -  SMA Lakes
 -  Highways
 -  Parcels
 -  SMA Jurisdiction
 -  City
 -  UGA



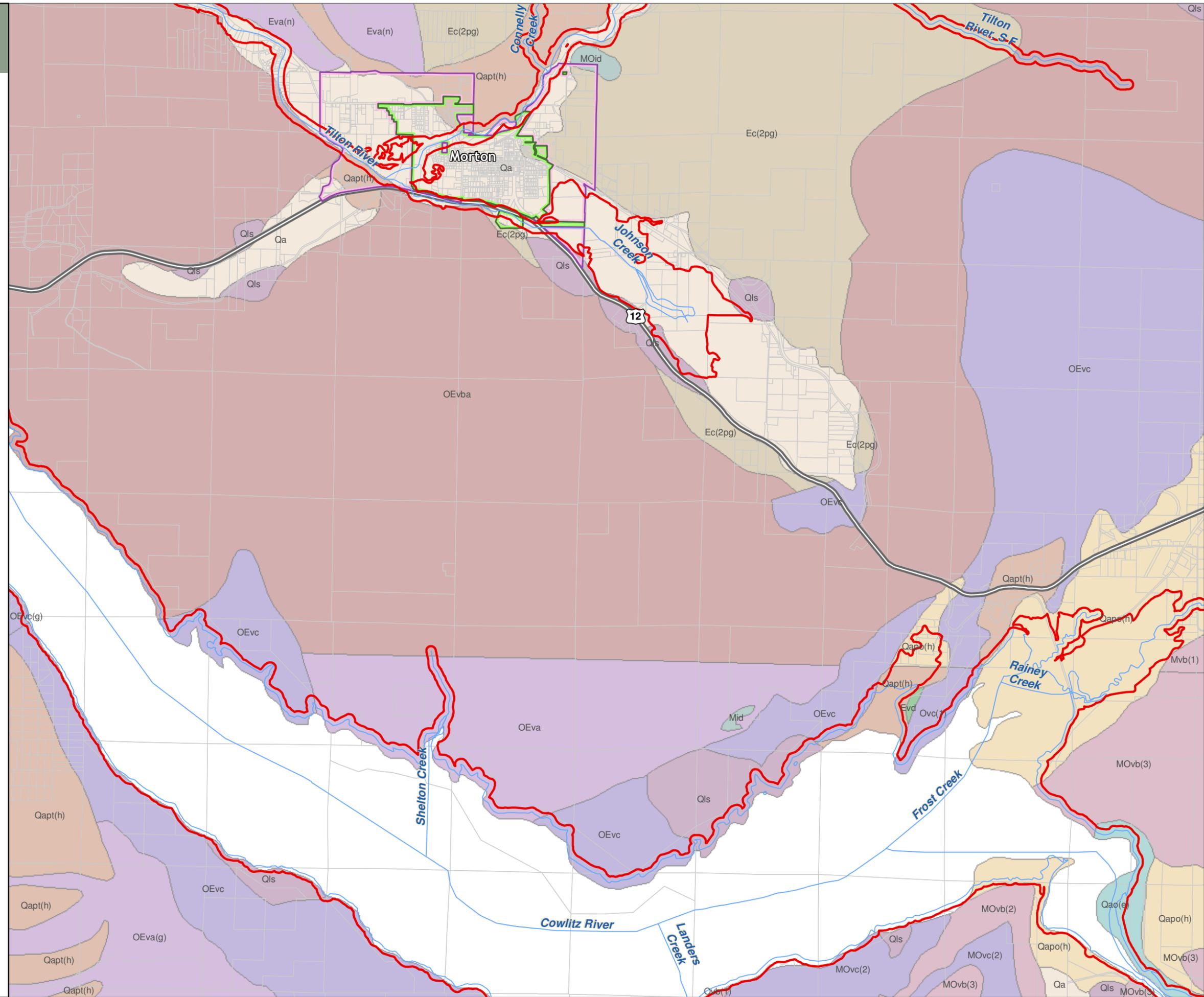
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

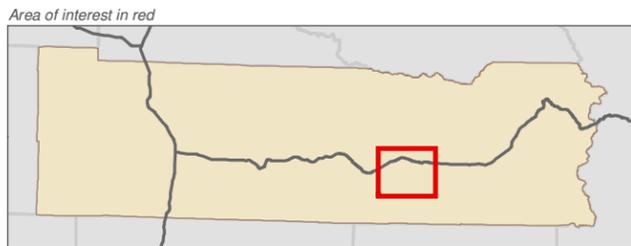
Figure 27

Date: 6/3/2014

Surficial Geology

- | | | | |
|--|------------------------------------|--|--|
| | Alluvium | | Intrusive andesite |
| | Alpine glacial drift, Fraser-age | | Intrusive rhyolite |
| | Alpine glacial outwash, Fraser-age | | Mass-wasting deposits, mostly landslides |
| | Alpine glacial outwash, pre-Fraser | | Tuffs and tuff breccias |
| | Alpine glacial till, Fraser-age | | Volcaniclastic deposits or rocks |
| | Alpine glacial till, pre-Fraser | | SMA Rivers & Streams |
| | Andesite flows | | SMA Lakes |
| | Basalt flows | | Highways |
| | Basaltic andesite flows | | Parcels |
| | Dacite flows | | SMA Jurisdiction |
| | Diorite | | City |
| | Granodiorite | | UGA |

0 0.25 0.5
Miles
1:48,000



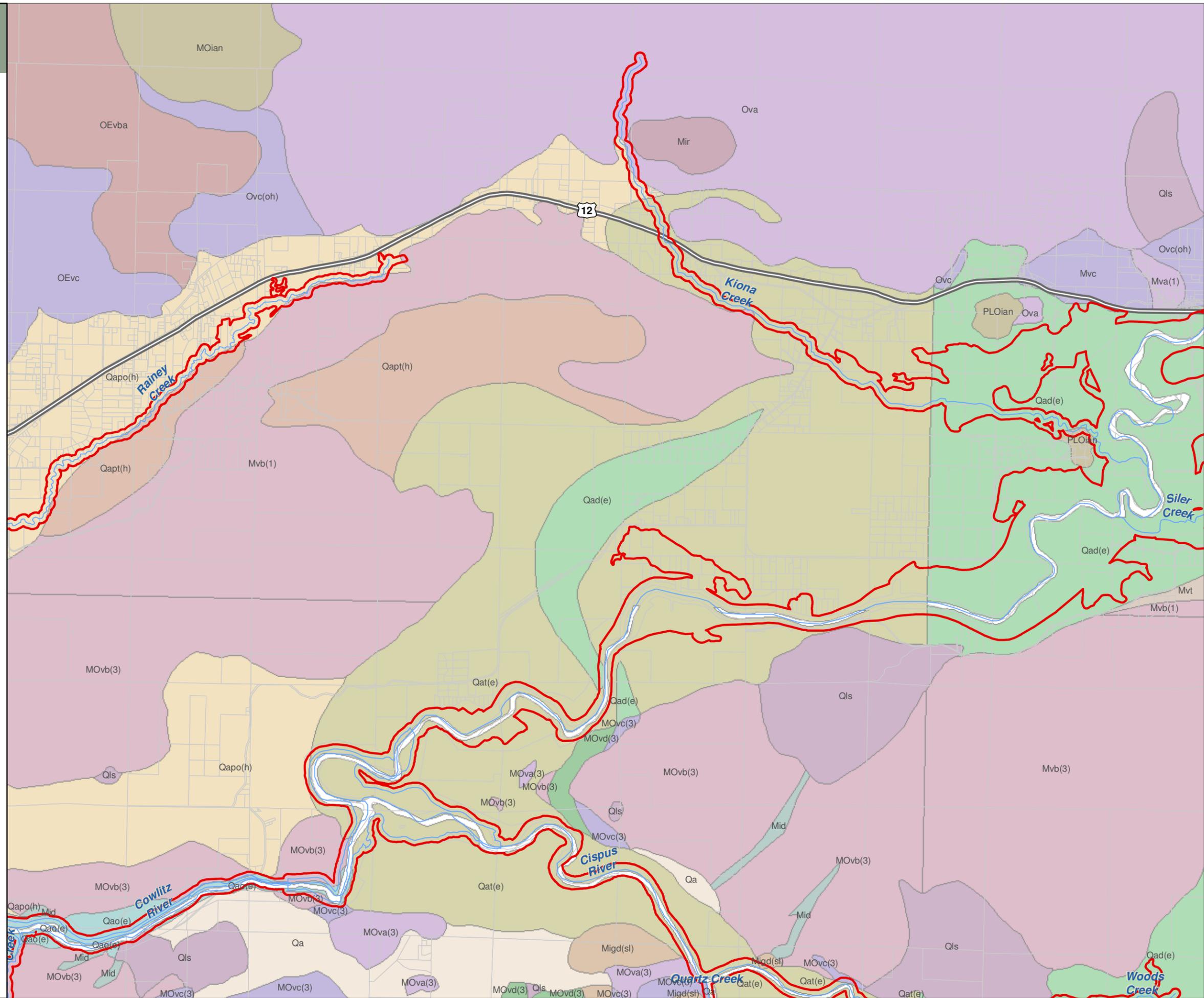
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

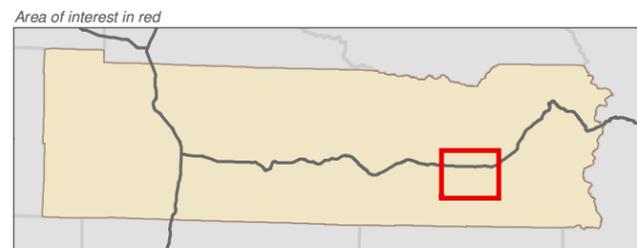
Figure 28

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Andesite flows
-  Basalt flows
-  Basaltic andesite flows
-  Basic intrusive rocks
-  Dacite flows
-  Diorite
-  Granodiorite
-  Intrusive andesite
-  Mass-wasting deposits, mostly landslides
-  Tuffs and tuff breccias
-  Volcaniclastic deposits or rocks
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA
-  SMA Rivers & Streams

0 0.25 0.5
Miles
1:48,000



Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

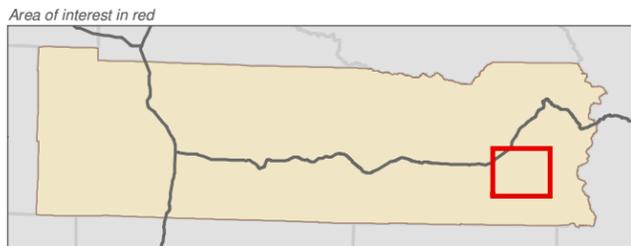
Figure 29

Date: 6/3/2014

Surficial Geology

- | | |
|---|--|
|  Alluvium |  SMA Rivers & Streams |
|  Alpine glacial drift, Fraser-age |  SMA Lakes |
|  Andesite flows |  Highways |
|  Basaltic andesite flows |  Parcels |
|  Basic intrusive rocks |  SMA Jurisdiction |
|  Continental sedimentary deposits or rocks |  City |
|  Dacite flows |  UGA |
|  Diorite | |
|  Intrusive andesite | |
|  Mass-wasting deposits, mostly landslides | |
|  Talus deposits | |
|  Tuffs and tuff breccias | |
|  Volcaniclastic deposits or rocks | |

0 0.25 0.5
Miles
1:48,000



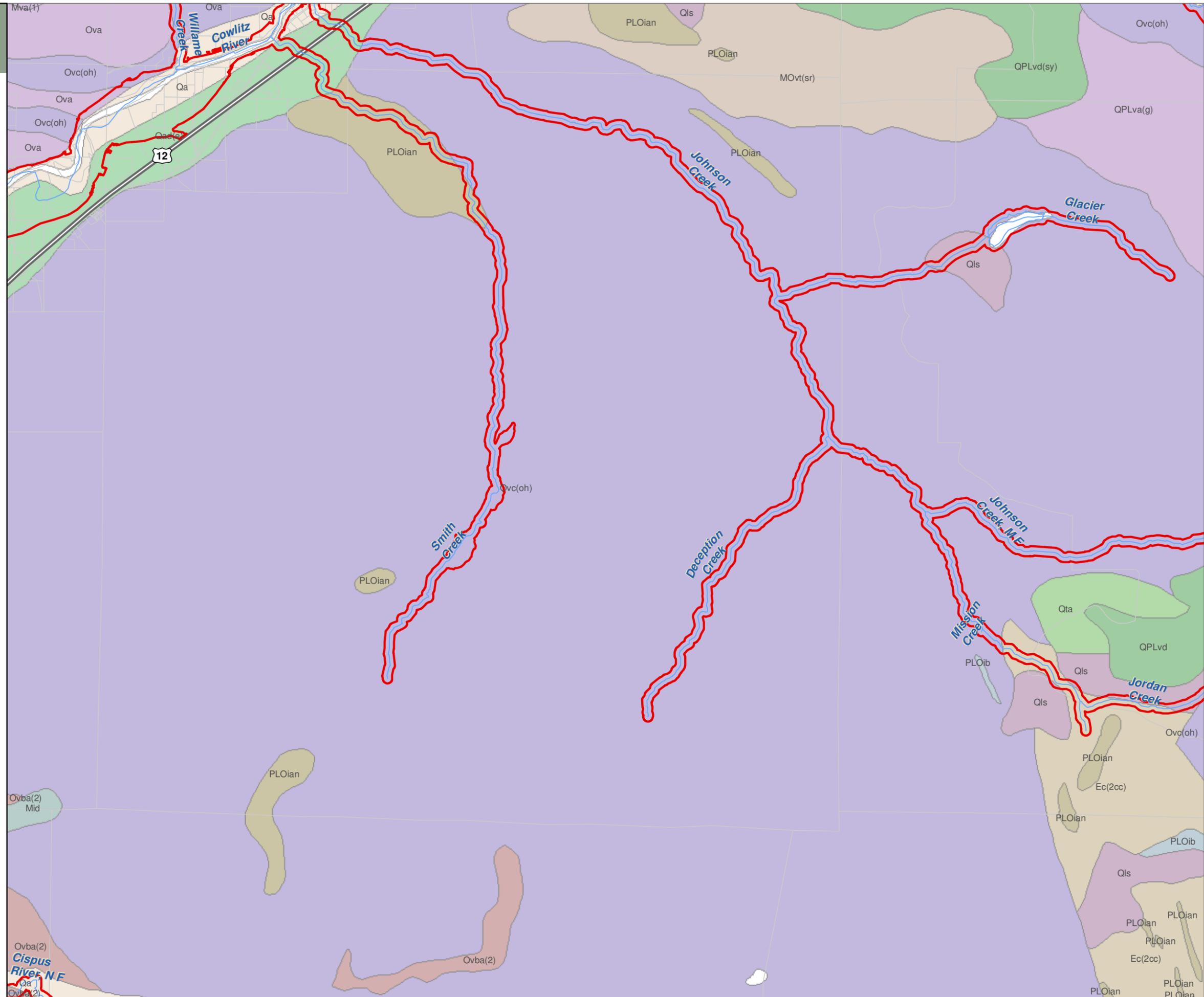
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



Lewis County, Washington Shoreline Master Program

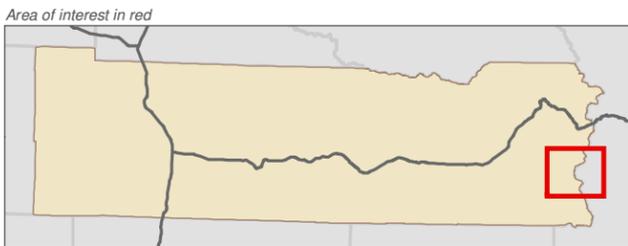
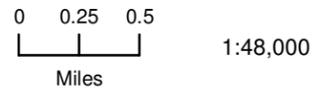
Map 10A - Surficial Geology

Figure 30

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Andesite flows
-  Basalt flows
-  Basic intrusive rocks
-  Continental sedimentary deposits or rocks
-  Dacite flows
-  Ice
-  Intrusive andesite
-  Mass-wasting deposits, mostly landslides
-  Talus deposits
-  Tuffs and tuff breccias
-  Volcanic rocks
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



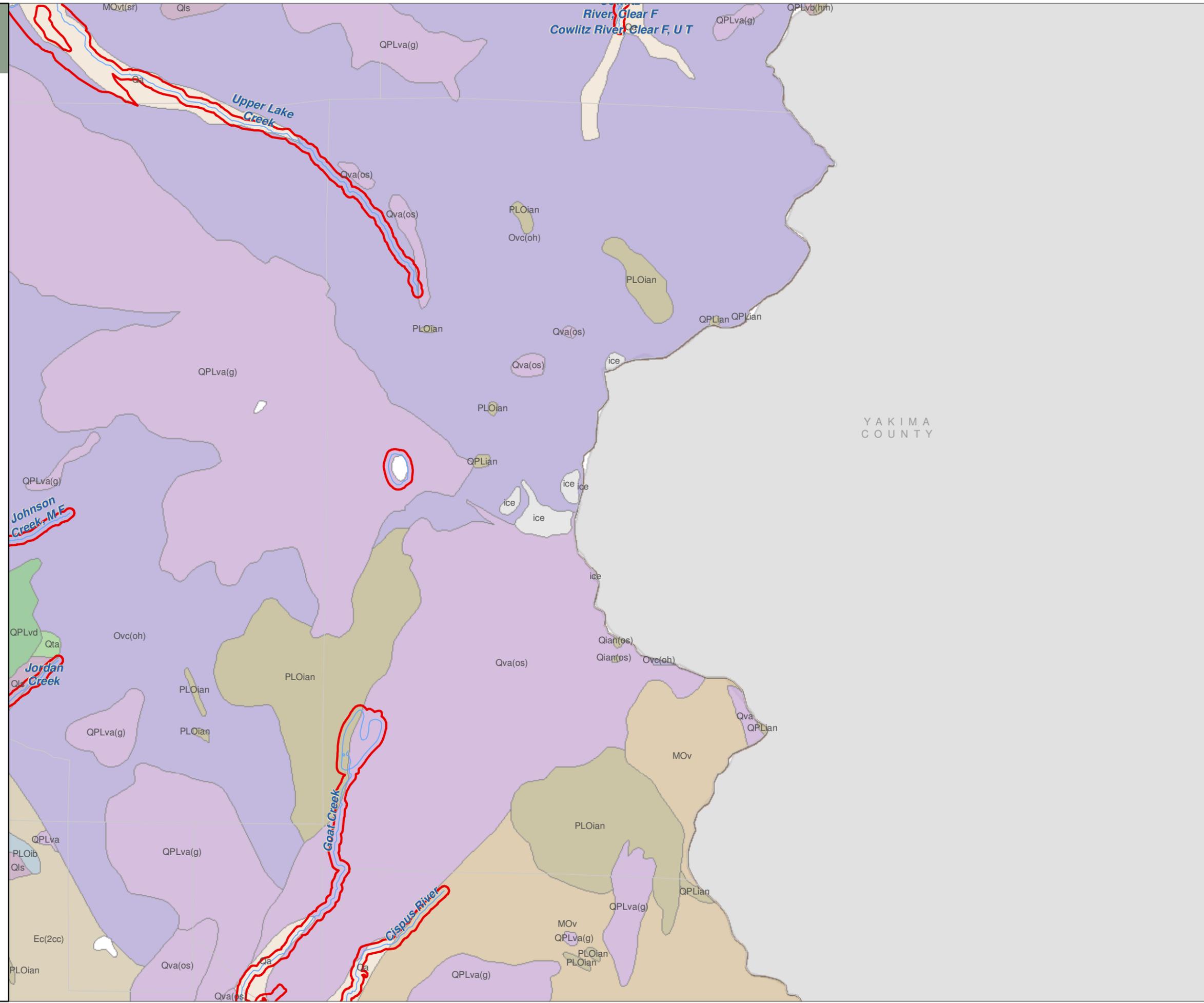
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



YAKIMA COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

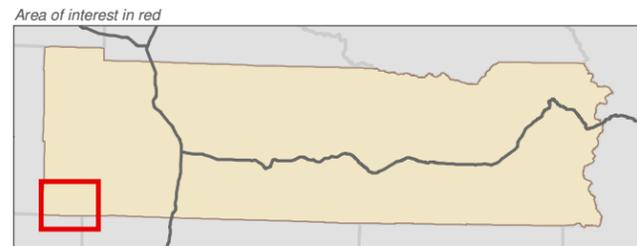
Figure 31

Date: 6/3/2014

Surficial Geology

- Basalt flows
- Basalt flows and flow breccias, Crescent Formation
- Basic intrusive rocks
- Marine sedimentary rocks
- Nearshore sedimentary rocks
- Tuffs and tuff breccias
- SMA Rivers & Streams
- SMA Lakes
- Highways
- Parcels
- SMA Jurisdiction
- City
- UGA

0 0.25 0.5
Miles
1:48,000



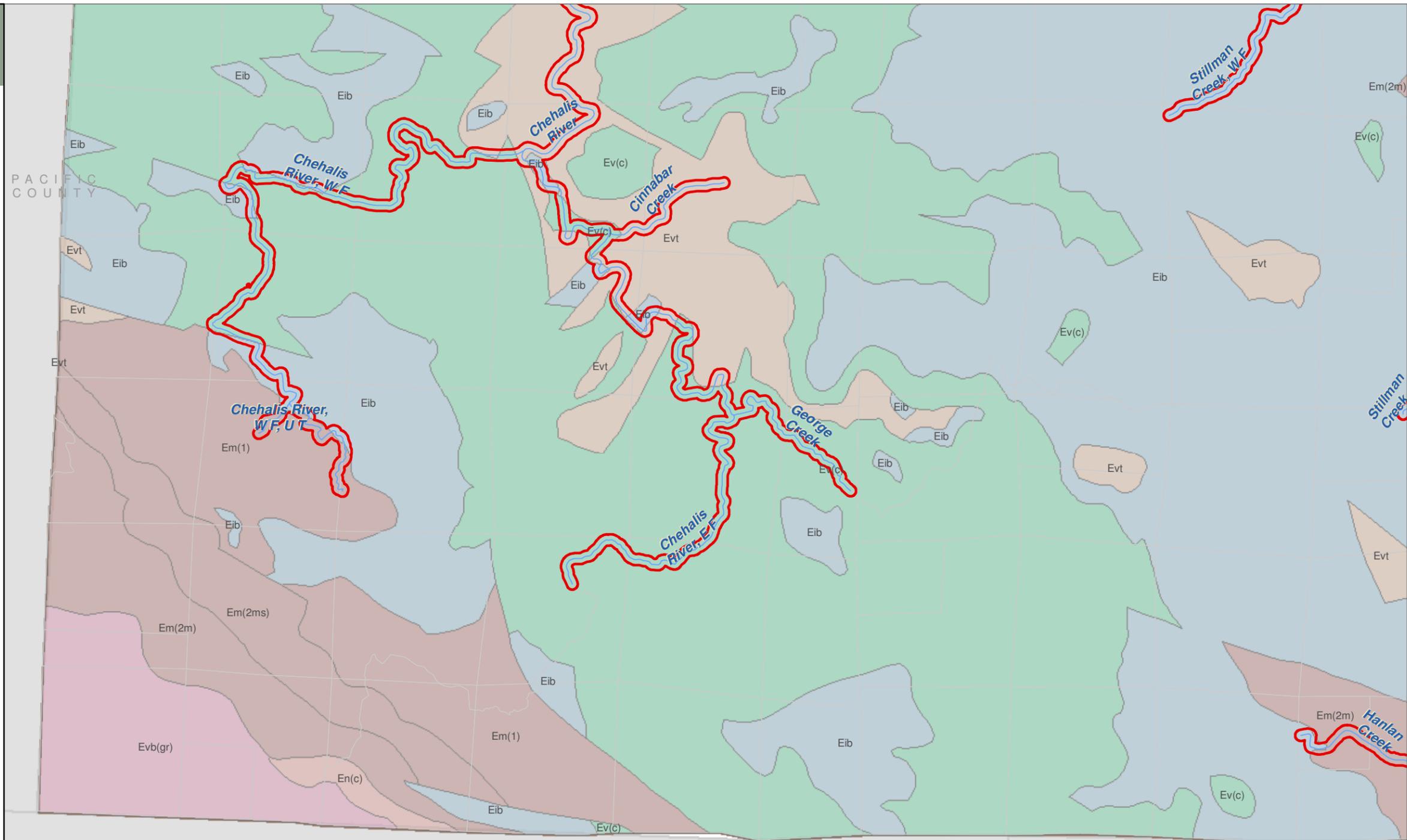
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



WAKIYAKUM COUNTY

COWLITZ COUNTY

PACIFIC COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

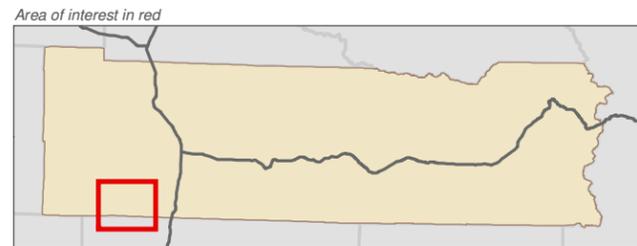
Figure 32

Date: 6/3/2014

Surficial Geology

- | | |
|---|--|
|  Alluvium |  SMA Rivers & Streams |
|  Alpine glacial drift, pre-Fraser |  SMA Lakes |
|  Basalt flows |  Highways |
|  Basalt flows (Grande Ronde Basalt, undivided [CRB]) |  Parcels |
|  Basalt flows and flow breccias, Crescent Formation |  SMA Jurisdiction |
|  Basic intrusive rocks |  City |
|  Marine sedimentary rocks |  UGA |
|  Mass-wasting deposits, mostly landslides | |
|  Nearshore sedimentary rocks | |
|  Tuffs and tuff breccias | |

0 0.25 0.5
Miles
1:48,000



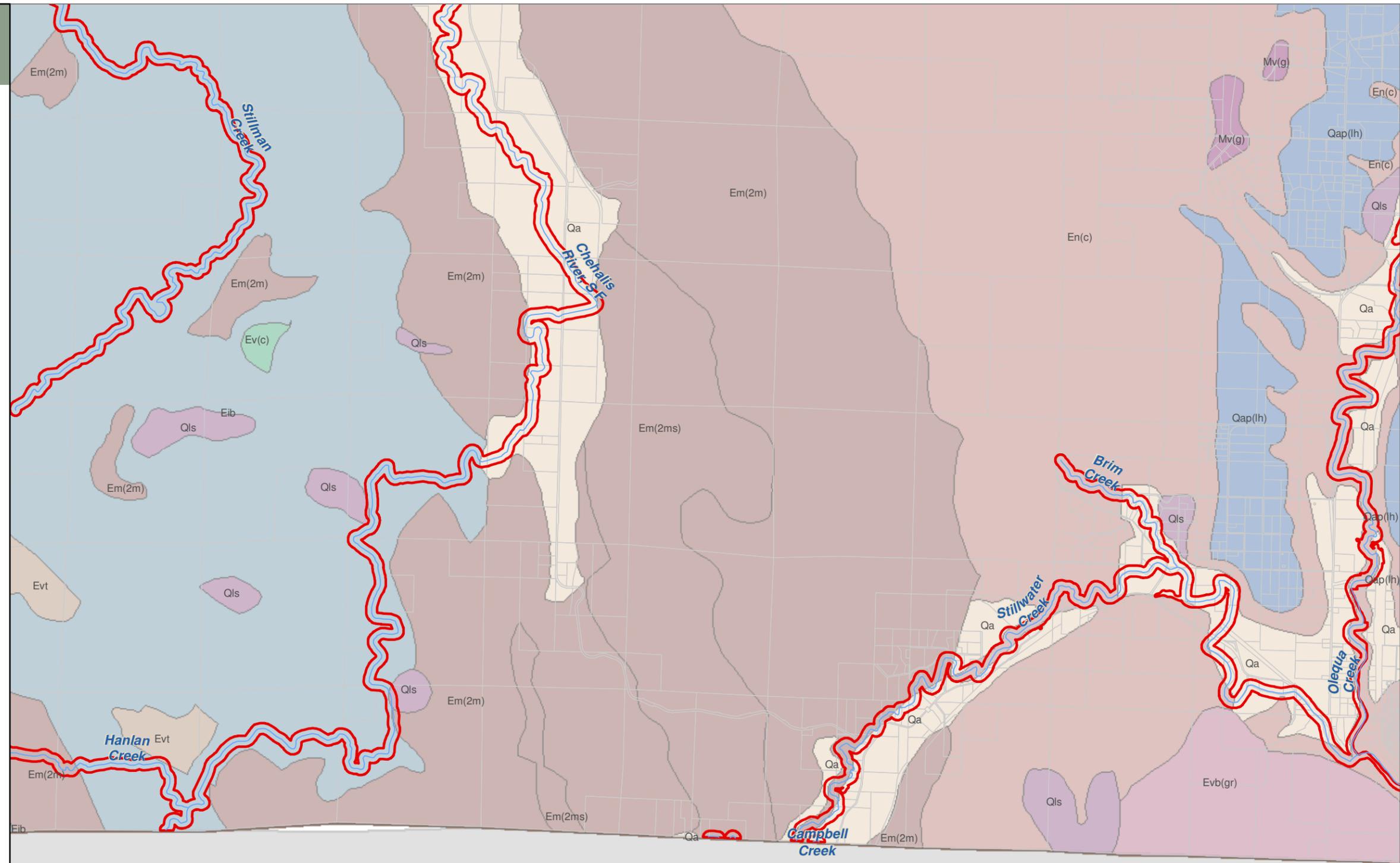
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



COWLITZ COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

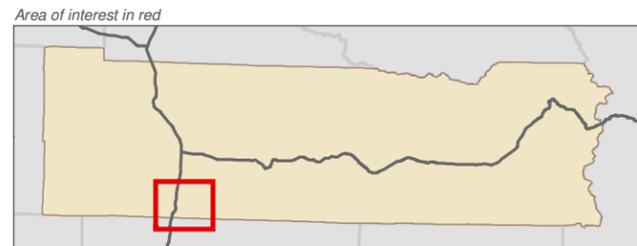
Figure 33

Date: 6/3/2014

Surficial Geology

- | | |
|---|----------------------------------|
| Alluvium | Nearshore sedimentary rocks |
| Alpine glacial drift, pre-Fraser | Terraced deposits |
| Alpine glacial outwash, Fraser-age | Volcaniclastic deposits or rocks |
| Alpine glacial outwash, pre-Fraser | SMA Rivers & Streams |
| Basalt flows | SMA Lakes |
| Continental sedimentary deposits or rocks | Highways |
| Marine sedimentary rocks | Parcels |
| Mass-wasting deposits, mostly landslides | SMA Jurisdiction |
| | City |
| | UGA |

0 0.25 0.5
Miles
1:48,000



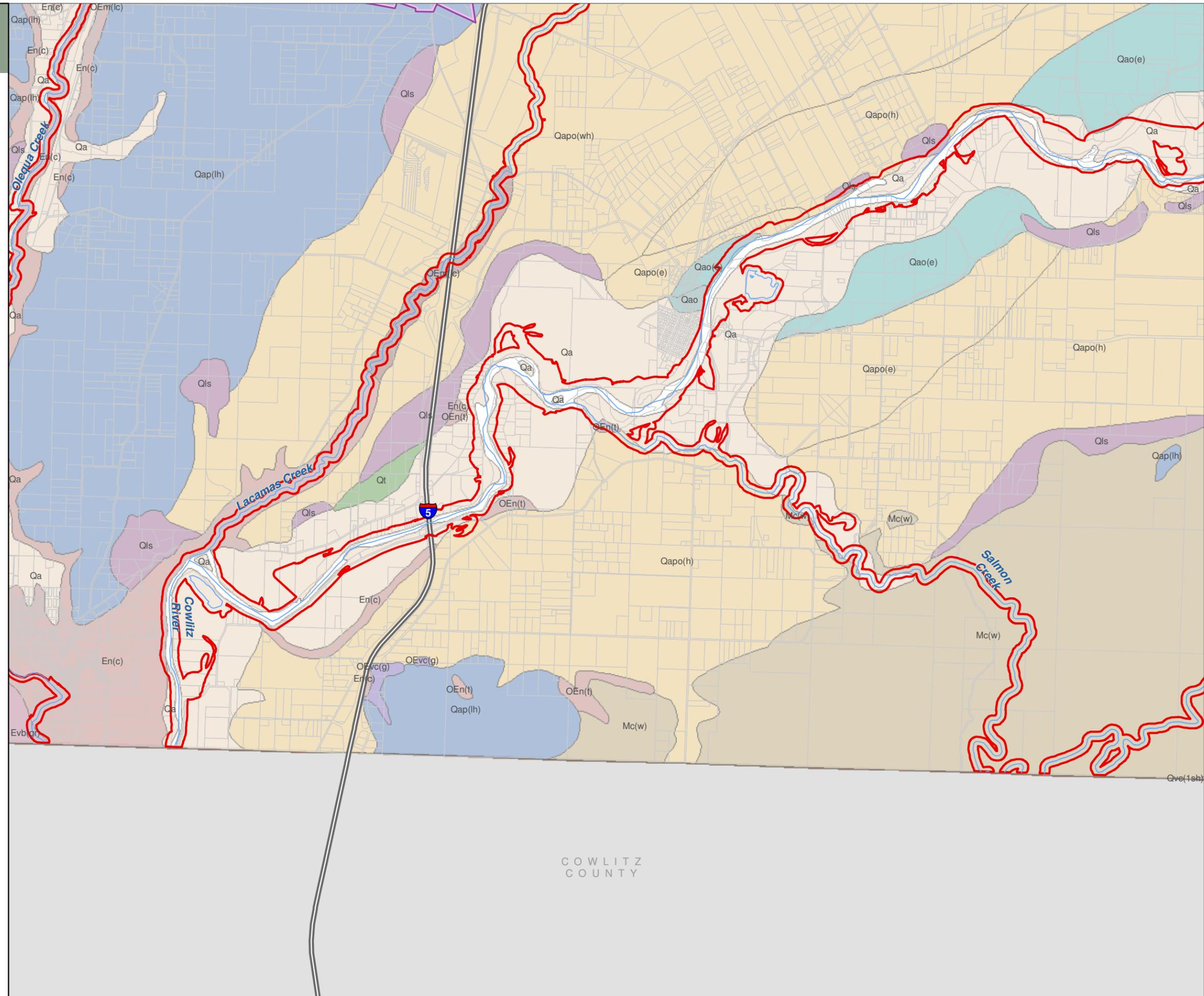
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



COWLITZ COUNTY

Lewis County, Washington Shoreline Master Program

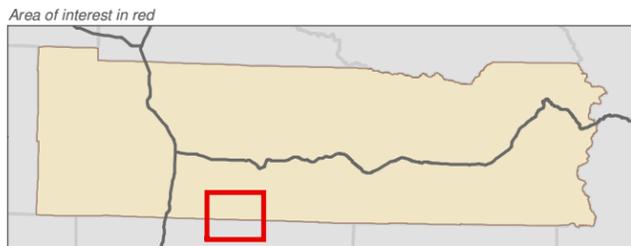
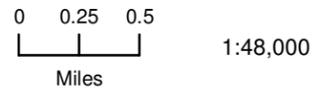
Map 10A - Surficial Geology

Figure 34

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, pre-Fraser
-  Alpine glacial outwash, pre-Fraser
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Mass-wasting deposits, mostly landslides
-  Nearshore sedimentary rocks
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



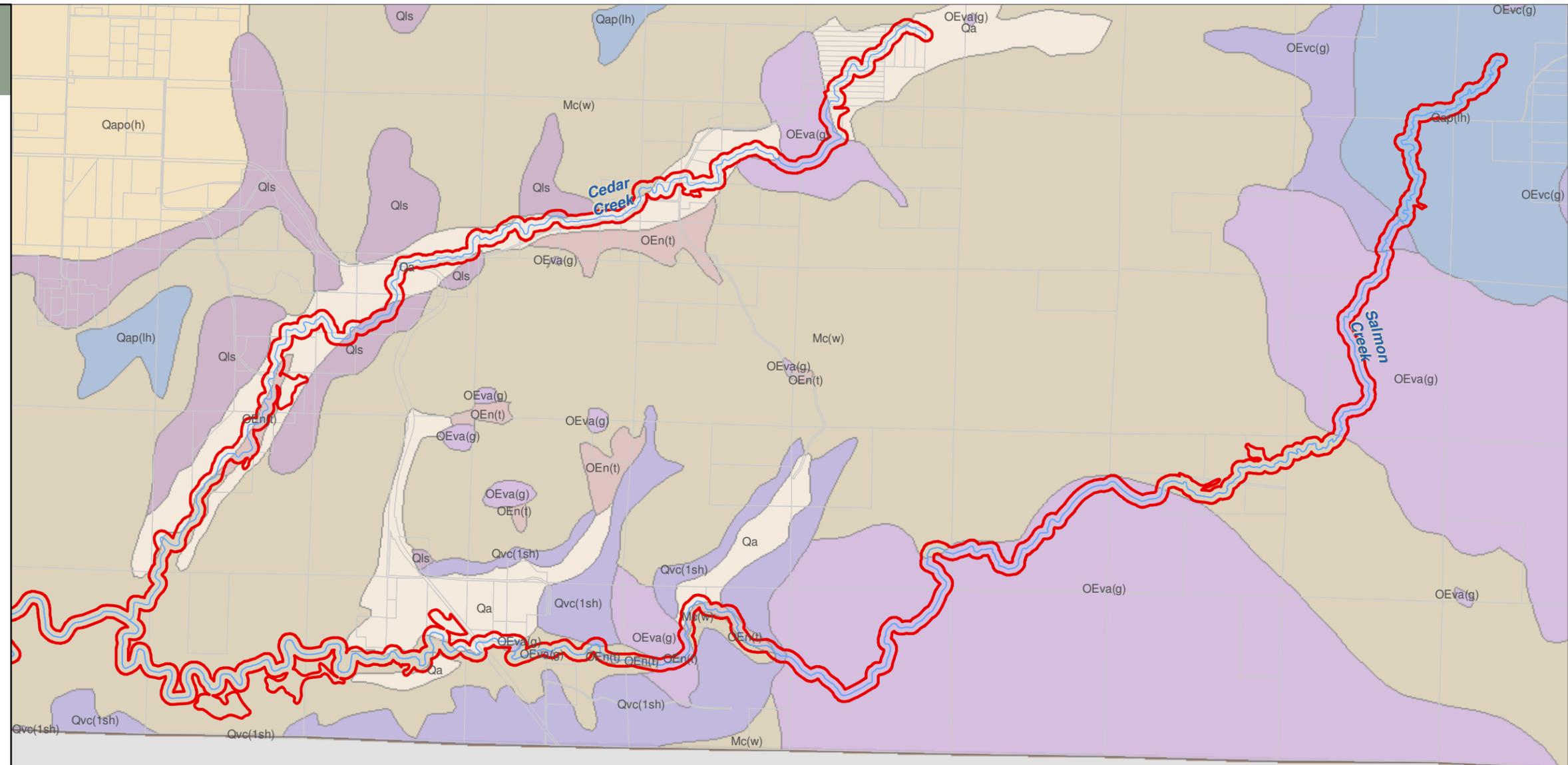
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



COWLITZ COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

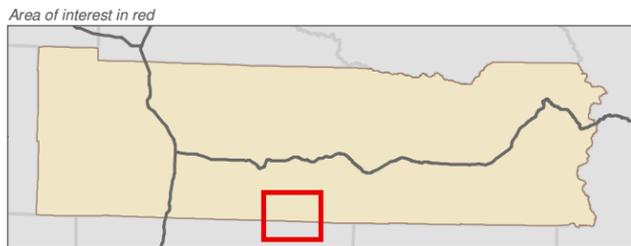
Figure 35

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, pre-Fraser
-  Alpine glacial till, pre-Fraser
-  Andesite flows
-  Continental sedimentary deposits or rocks
-  Dacite flows
-  Intrusive andesite
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



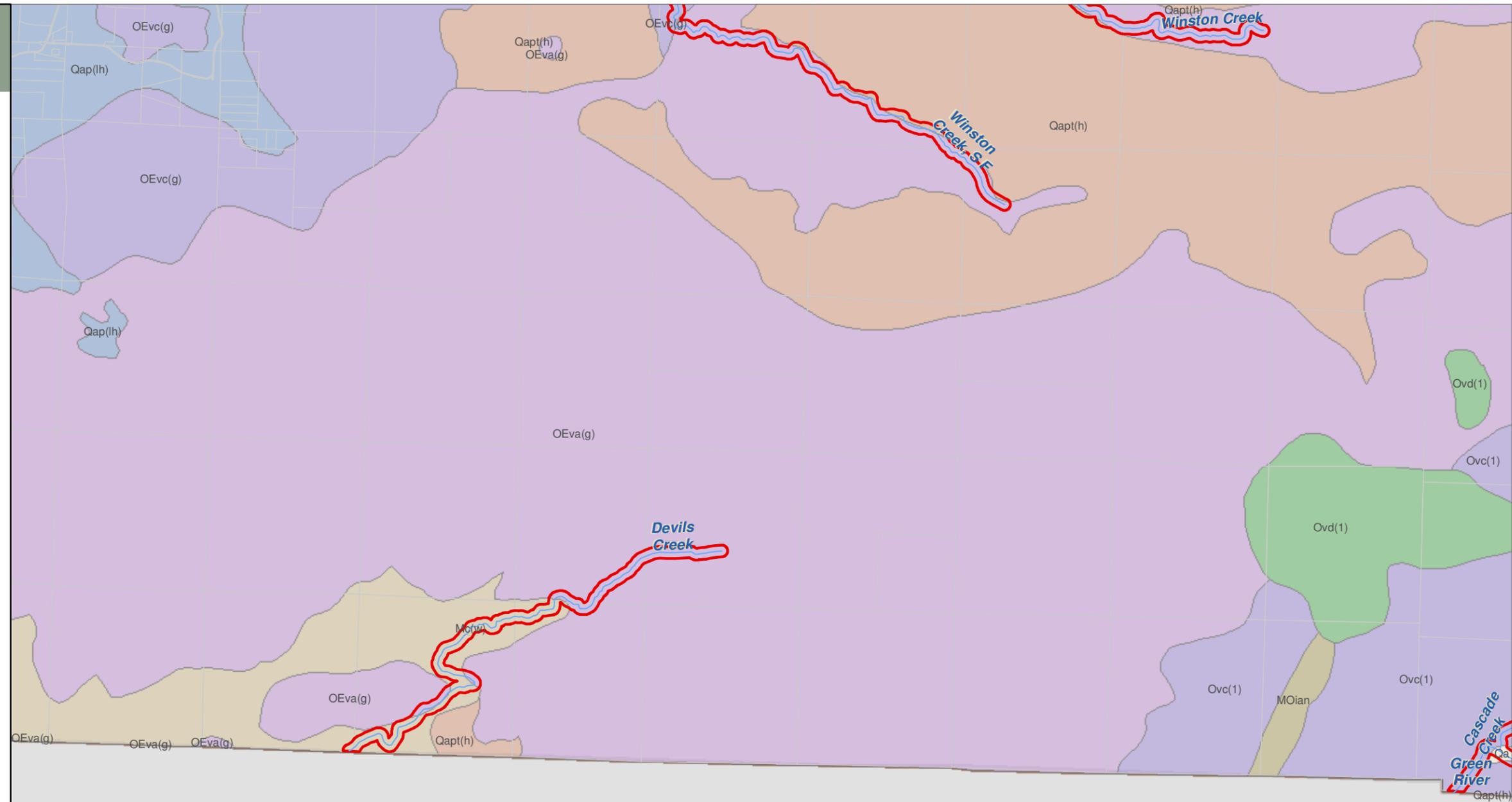
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



COWLITZ
COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

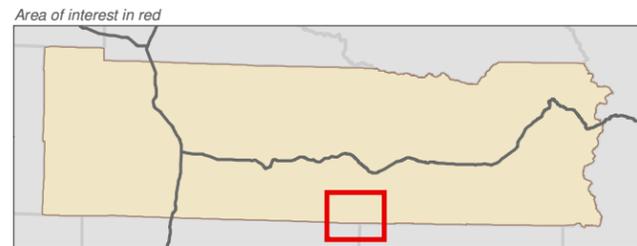
Figure 36

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Alpine glacial outwash, Fraser-age
-  Alpine glacial outwash, pre-Fraser
-  Alpine glacial till, pre-Fraser
-  Andesite flows
-  Basalt flows
-  Dacite flows
-  Intrusive andesite
-  Mass-wasting deposits, mostly landslides
-  Quartz diorite
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



COWLITZ COUNTY

SKAMANIA COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

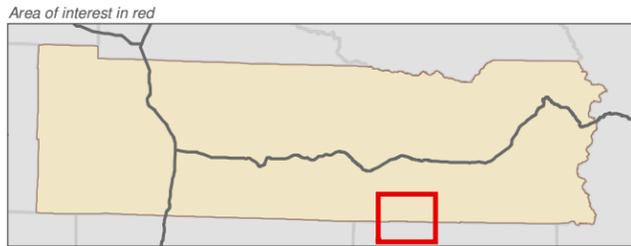
Figure 37

Date: 6/3/2014

Surficial Geology

- | | |
|----------------------------------|--|
| Alluvium | Mass-wasting deposits, mostly landslides |
| Alpine glacial drift, Fraser-age | Quartz diorite |
| Alpine glacial till, Fraser-age | Quartz monzonite |
| Alpine glacial till, pre-Fraser | Tuffs and tuff breccias |
| Andesite flows | Volcaniclastic deposits or rocks |
| Argillic alteration | SMA Rivers & Streams |
| Basalt flows | SMA Lakes |
| Basaltic andesite flows | Highways |
| Dacite flows | Parcels |
| Diorite | SMA Jurisdiction |
| Granodiorite | City |
| Intrusive andesite | UGA |

0 0.25 0.5
Miles
1:48,000



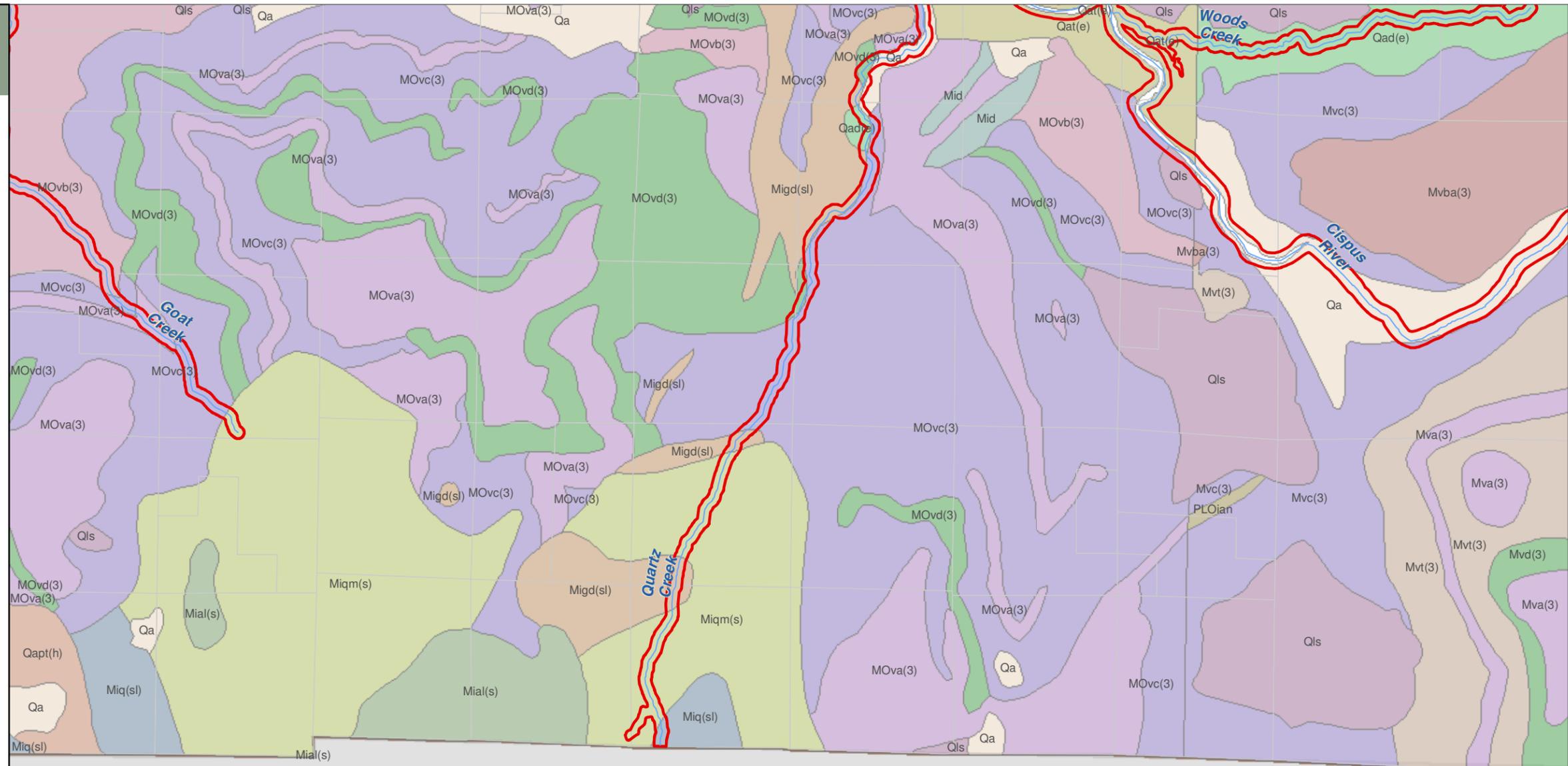
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



SKAMANIA
COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

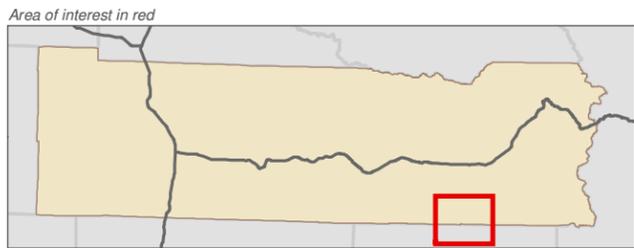
Figure 38

Date: 6/3/2014

Surficial Geology

- | | |
|--|----------------------------------|
| Alluvium | Quartz diorite |
| Alpine glacial drift, Fraser-age | Tuffs and tuff breccias |
| Andesite flows | Volcaniclastic deposits or rocks |
| Basalt flows | SMA Rivers & Streams |
| Basaltic andesite flows | SMA Lakes |
| Dacite flows | Highways |
| Diorite | Parcels |
| Gabbro | SMA Jurisdiction |
| Intrusive andesite | City |
| Intrusive basaltic andesite | UGA |
| Mass-wasting deposits, mostly landslides | |

0 0.25 0.5
Miles
1:48,000



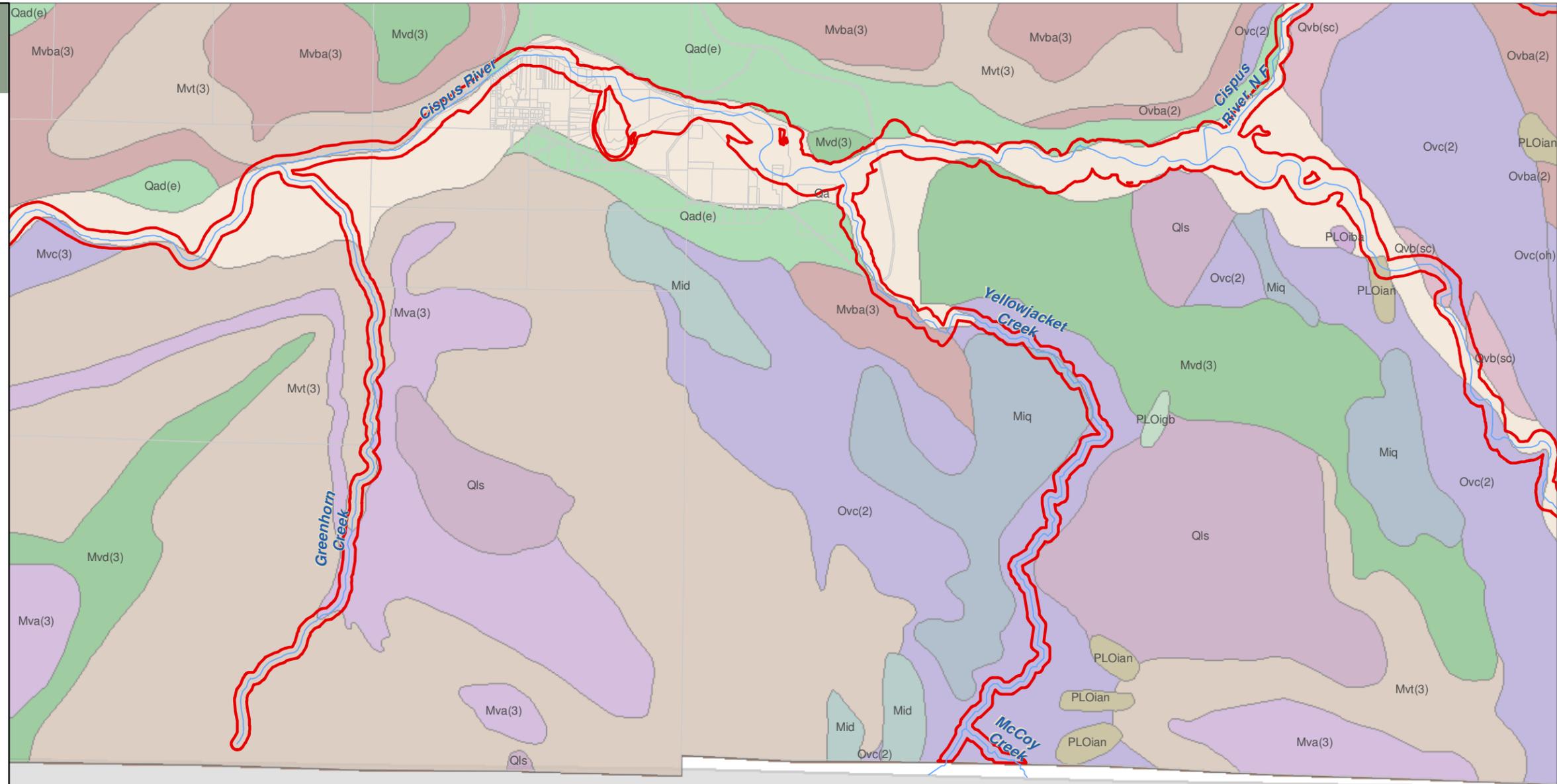
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



SKAMANIA
COUNTY

Lewis County, Washington Shoreline Master Program

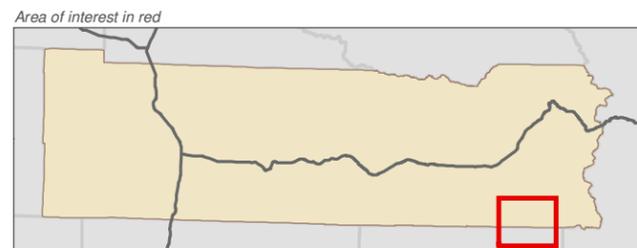
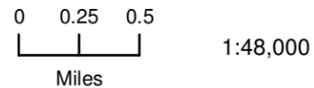
Map 10A - Surficial Geology

Figure 39

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Andesite flows
-  Basalt flows
-  Basaltic andesite flows
-  Basic intrusive rocks
-  Continental sedimentary deposits or rocks
-  Diorite
-  Gabbro
-  Intrusive andesite
-  Intrusive rocks, undivided
-  Mass-wasting deposits, mostly landslides
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA



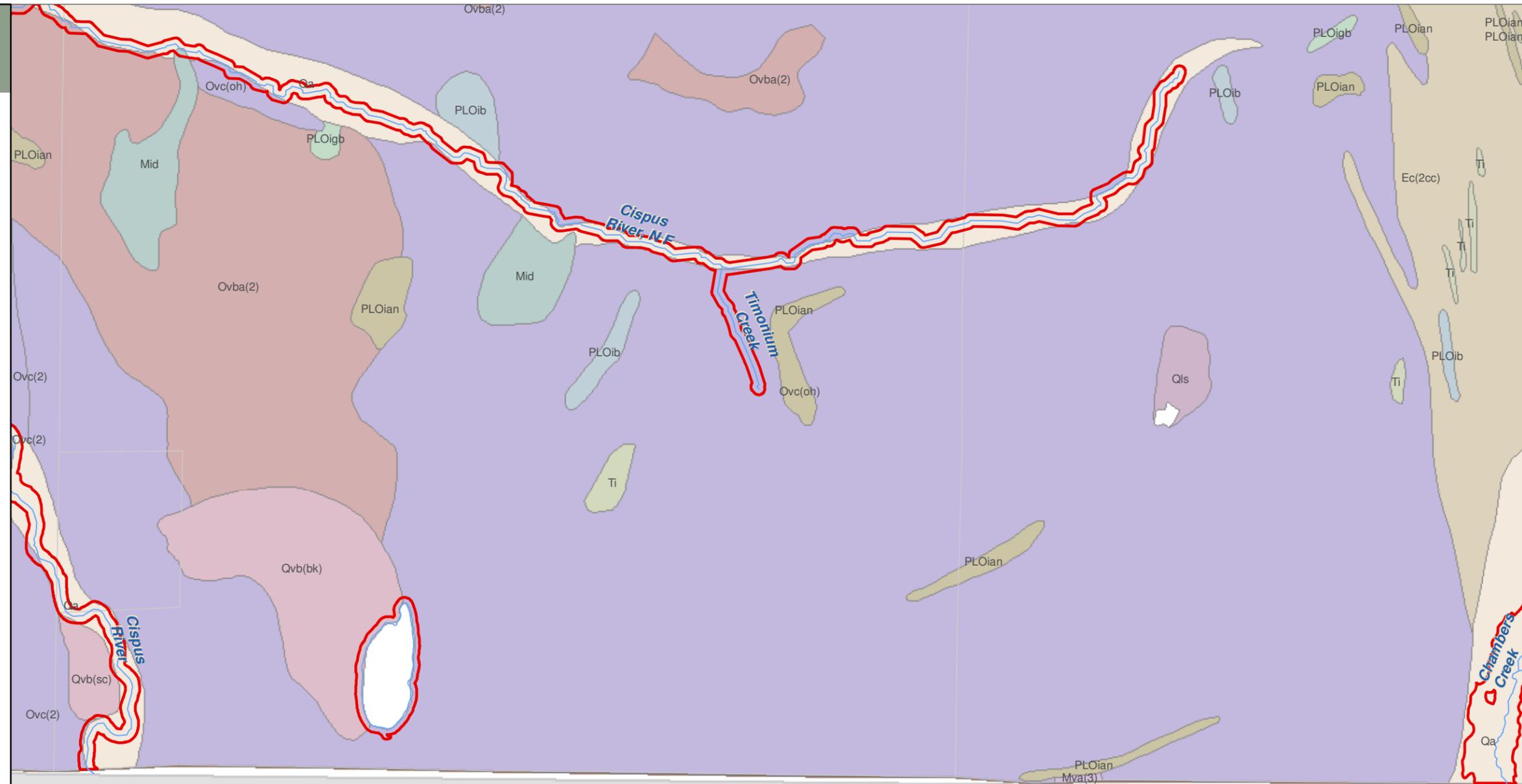
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

Shoreline jurisdiction boundaries depicted on this map are approximate. They have not been formally delineated or surveyed and are intended for planning purposes only. Additional site-specific evaluation may be needed to confirm/verify information shown on this map.

Lewis County Coalition



City of Morton City of Winlock



SKAMANIA
COUNTY

Lewis County, Washington Shoreline Master Program

Map 10A - Surficial Geology

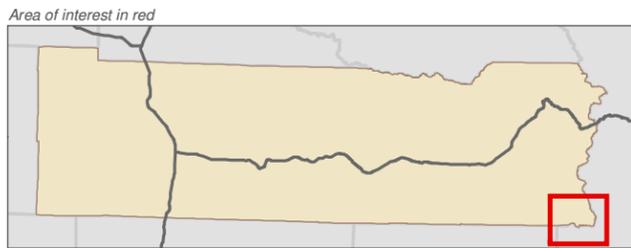
Figure 40

Date: 6/3/2014

Surficial Geology

-  Alluvium
-  Alpine glacial drift, Fraser-age
-  Andesite flows
-  Basalt flows
-  Basaltic andesite flows
-  Continental sedimentary deposits or rocks
-  Intrusive andesite
-  Volcanic rocks
-  Volcaniclastic deposits or rocks
-  SMA Rivers & Streams
-  SMA Lakes
-  Highways
-  Parcels
-  SMA Jurisdiction
-  City
-  UGA

0 0.25 0.5
Miles
1:48,000



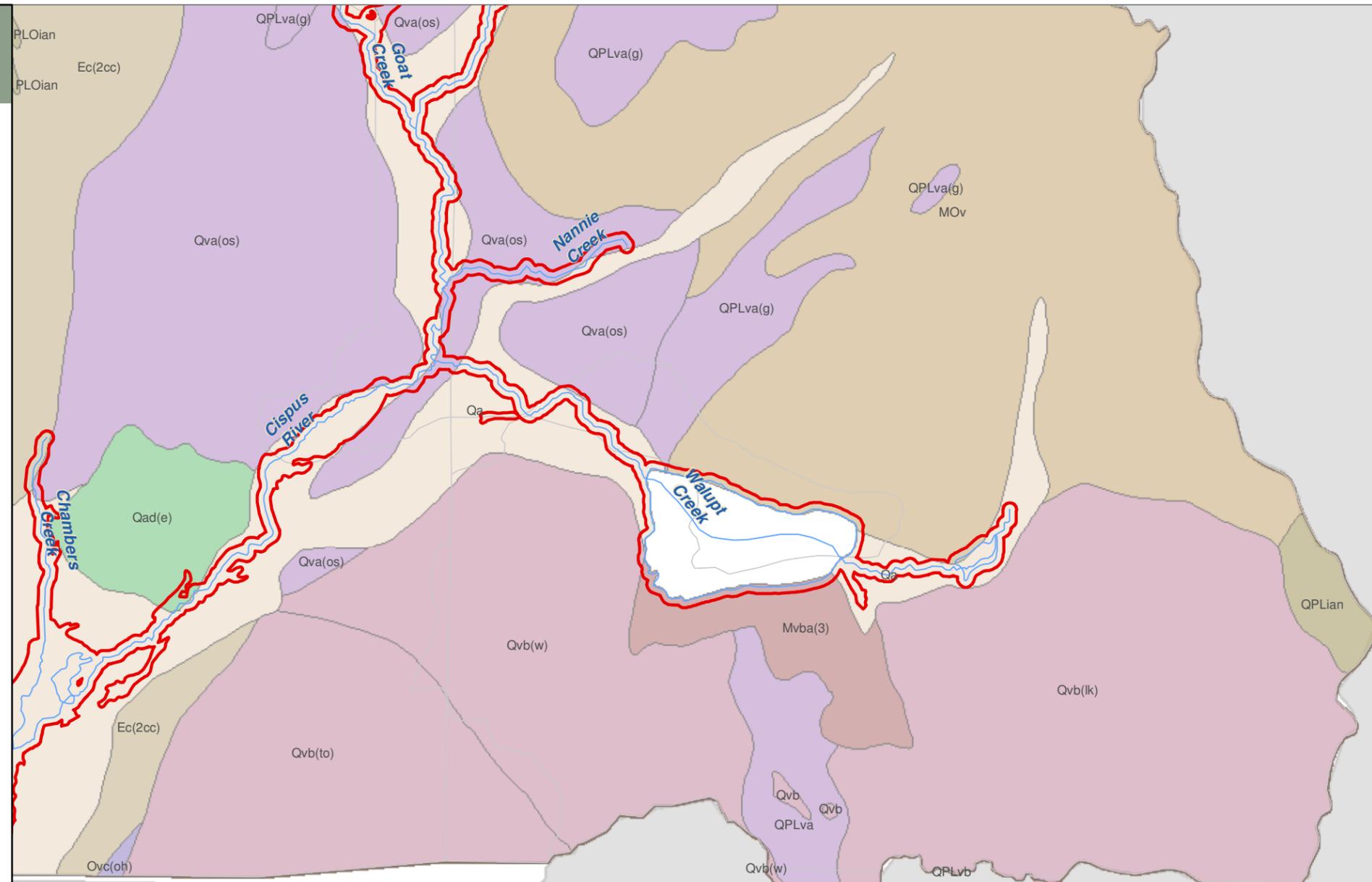
Data: Lewis County, USFWS NWI, FEMA, WA DNR, WSDOT, NRCS NAIP

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Lewis County Coalition



City of Morton City of Winlock



SKAMANIA COUNTY

YAKIMA COUNTY