

## APPENDIX H

### Bank Condition Results and Maps

#### Maps for Appendix H

[Figure H-1. Bank Conditions Assessment Reaches Blue Joint Creek.](#)

[Figure H-2. Bank Conditions Assessment Reaches Buck Creek.](#)

[Figure H-3. Bank Conditions Assessment Reaches Deer Creek.](#)

[Figure H-4. Bank Conditions Assessment Reaches Ditch Creek.](#)

[Figure H-5. Bank Conditions Assessment Reaches East Fork Bitterroot River.](#)

[Figure H-6. Bank Conditions Assessment Reaches Gilbert/Laird Creek.](#)

[Figure H-7. Bank Conditions Assessment Reaches Hughes Creek.](#)

[Figure H-8. Bank Conditions Assessment Reaches Martin Creek.](#)

[Figure H-9. Bank Conditions Assessment Reaches Meadow Creek.](#)

[Figure H-10. Bank Conditions Assessment Reaches Moose Creek.](#)

[Figure H-11. Bank Conditions Assessment Reaches Nez Perce Fork Creek.](#)

[Figure H-12. Bank Conditions Assessment Reaches Overwhich Creek.](#)

[Figure H-13. Bank Conditions Assessment Reaches Piquett Creek.](#)

[Figure H-14. Bank Conditions Assessment Reaches Reimel Creek.](#)

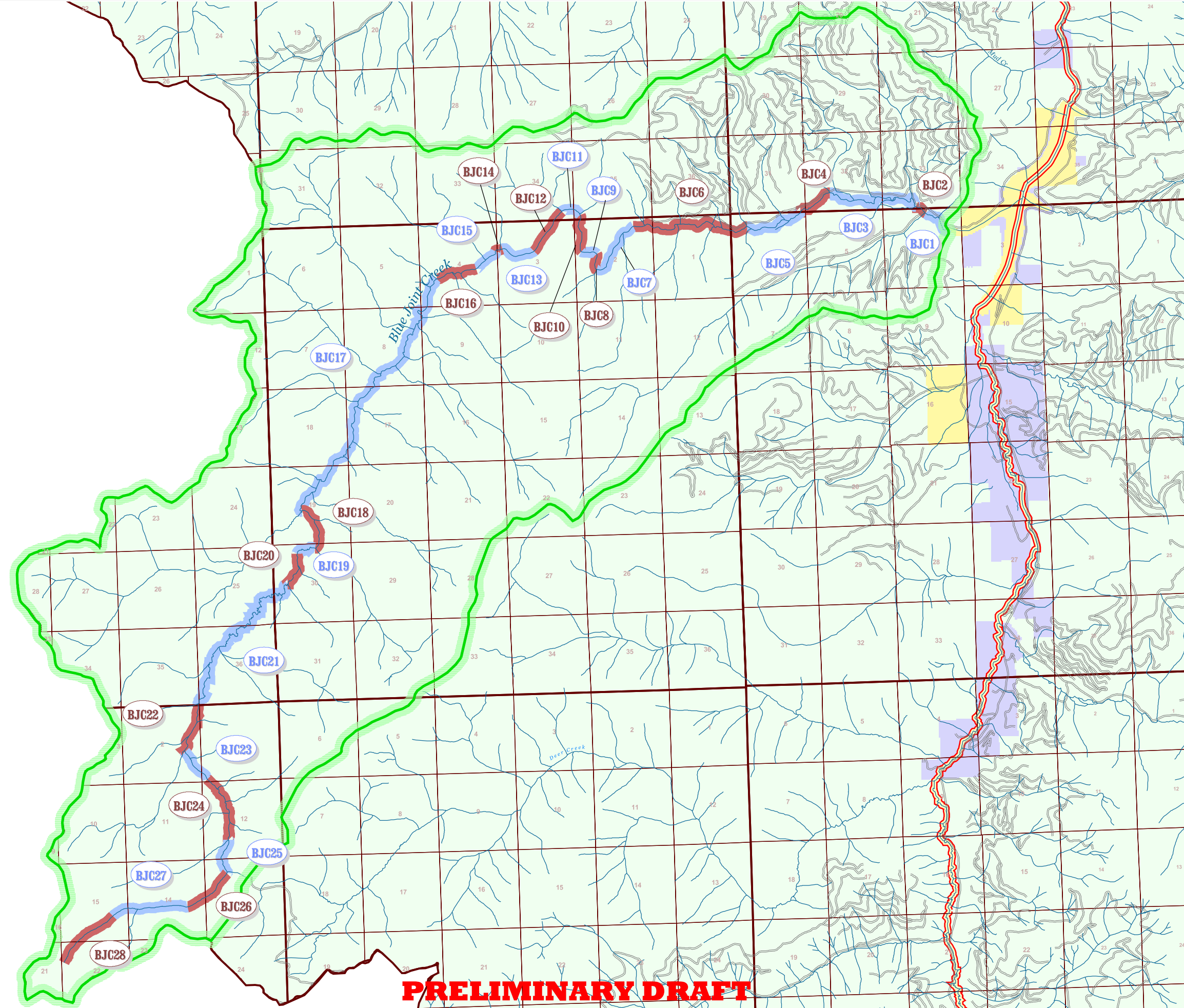
[Figure H-15. Bank Conditions Assessment Reaches Slate Creek.](#)

[Figure H-16. Bank Conditions Assessment Reaches West Fork Bitterroot River.](#)

#### Table for Appendix H

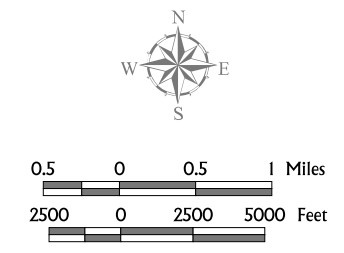
[Bank Instabilities.](#)

**Figure H-1**  
**Bank Condition**  
**Assessment Reaches**  
 Blue Joint Creek



- Blue Joint Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines

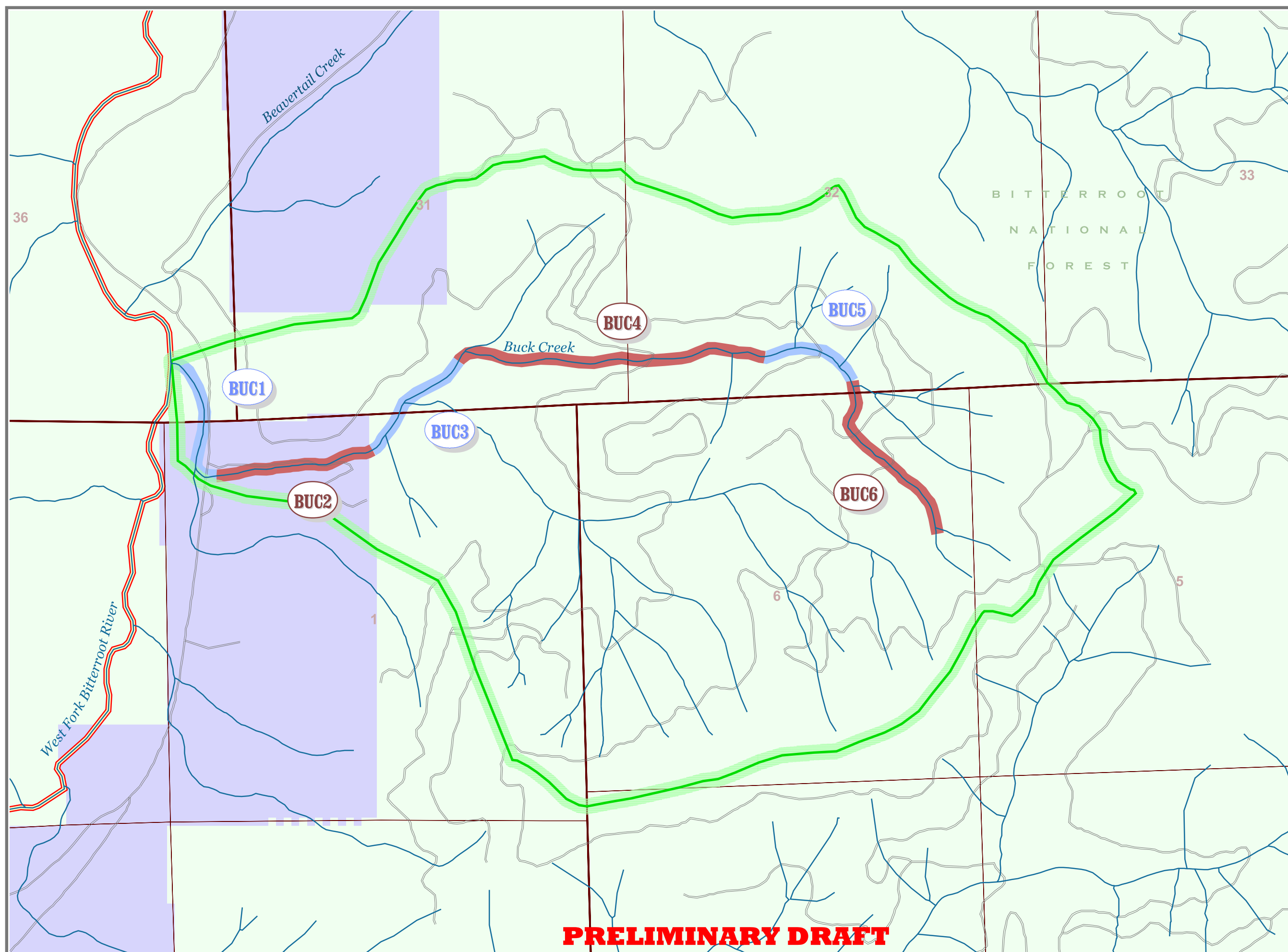
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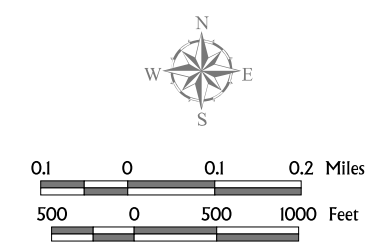
**PRELIMINARY DRAFT**

**Figure H-2**  
**Bank Condition**  
**Assessment Reaches**  
 Buck Creek



- Buck Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
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- Section Lines

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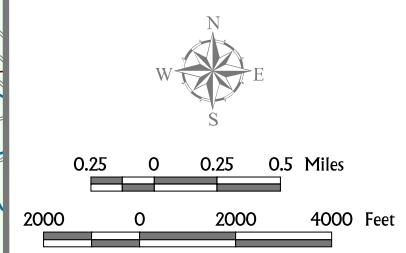
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**Figure H-3**  
**Bank Condition**  
**Assessment Reaches**  
 Deer Creek



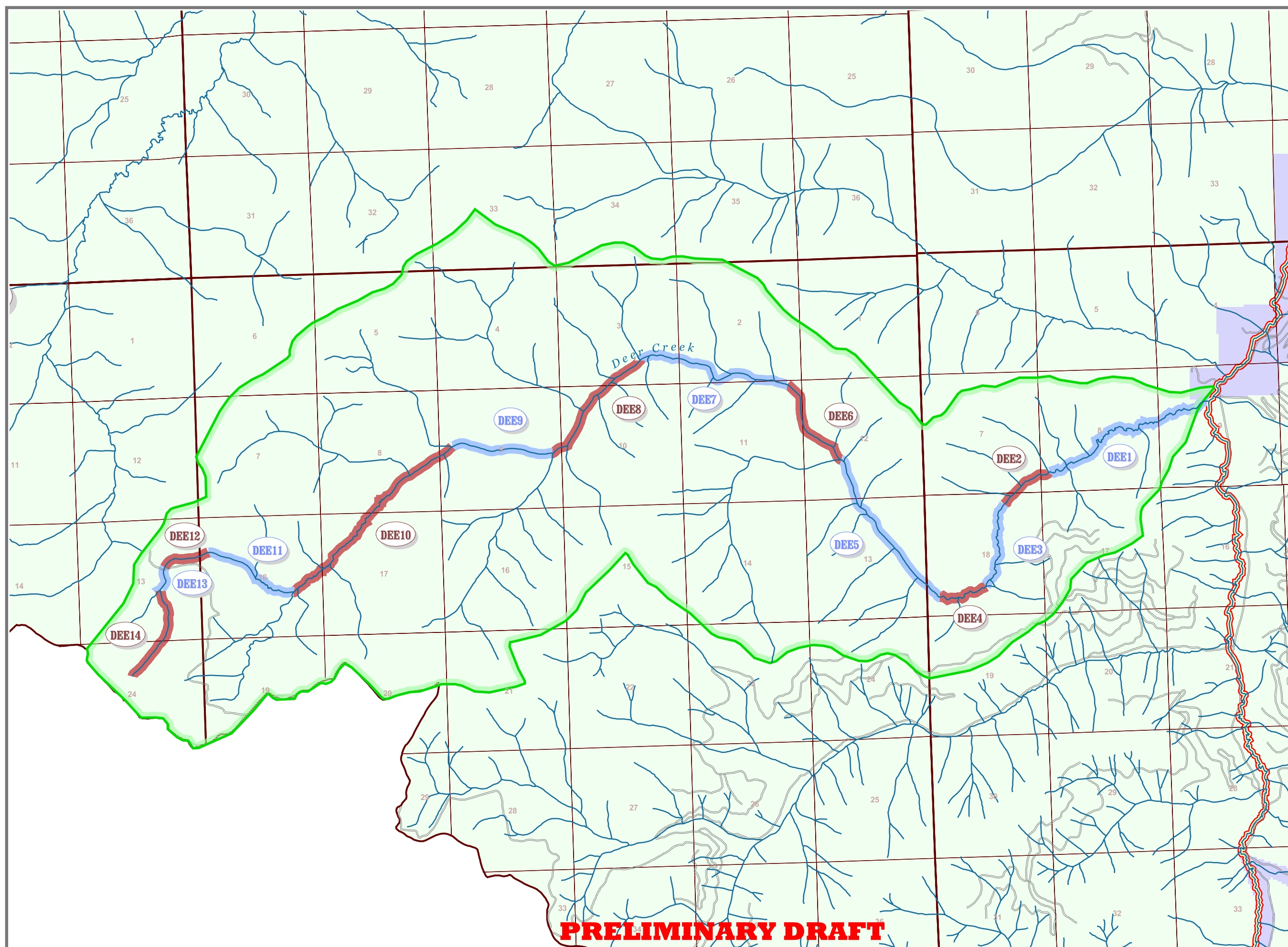
- Deer Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines

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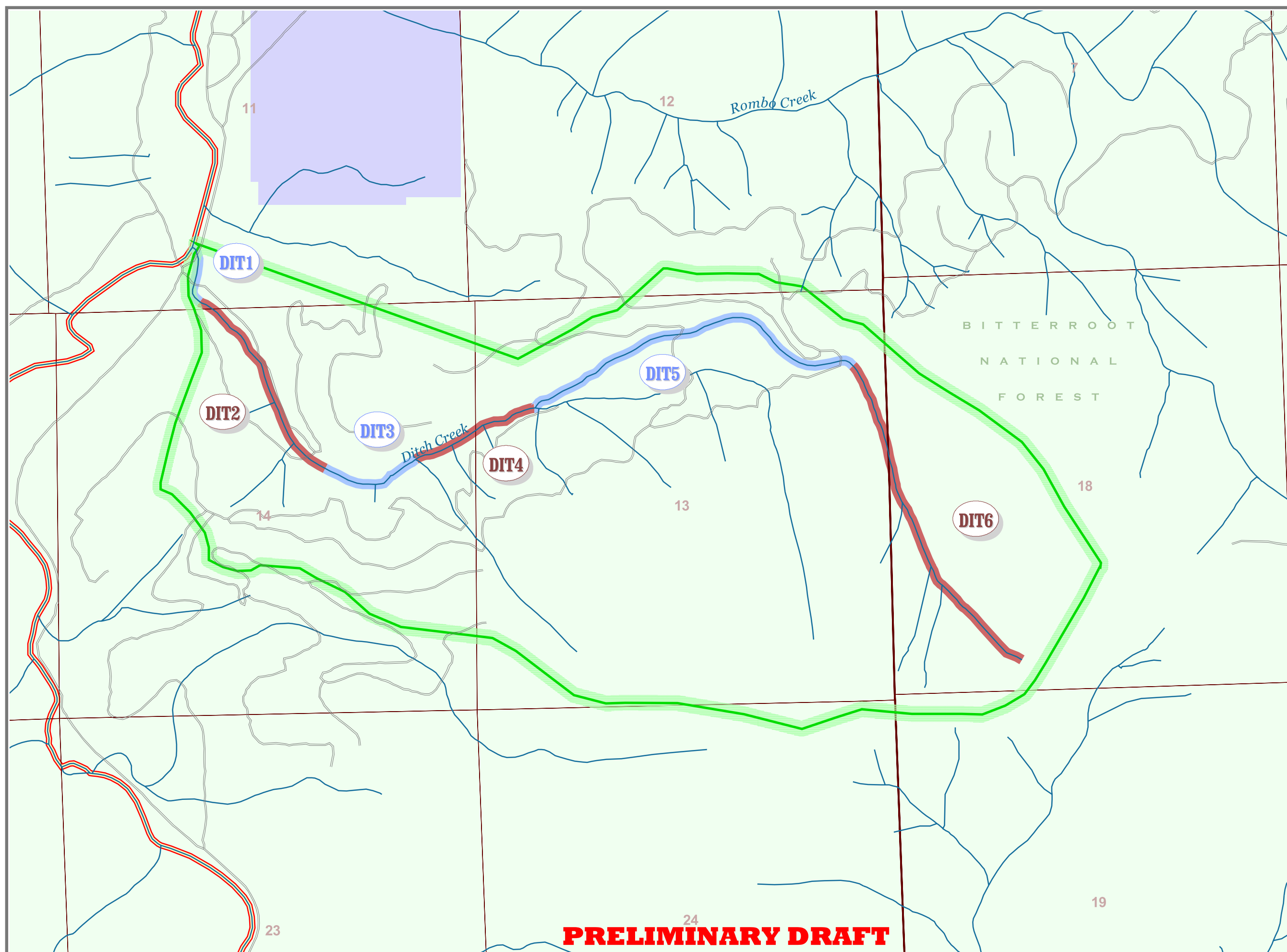


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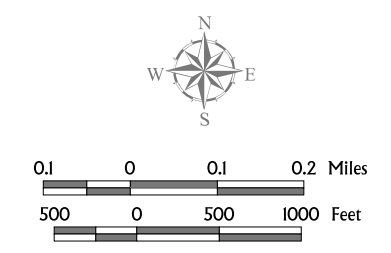


**Figure H-4**  
**Bank Condition**  
**Assessment Reaches**  
 Ditch Creek



- Ditch Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines

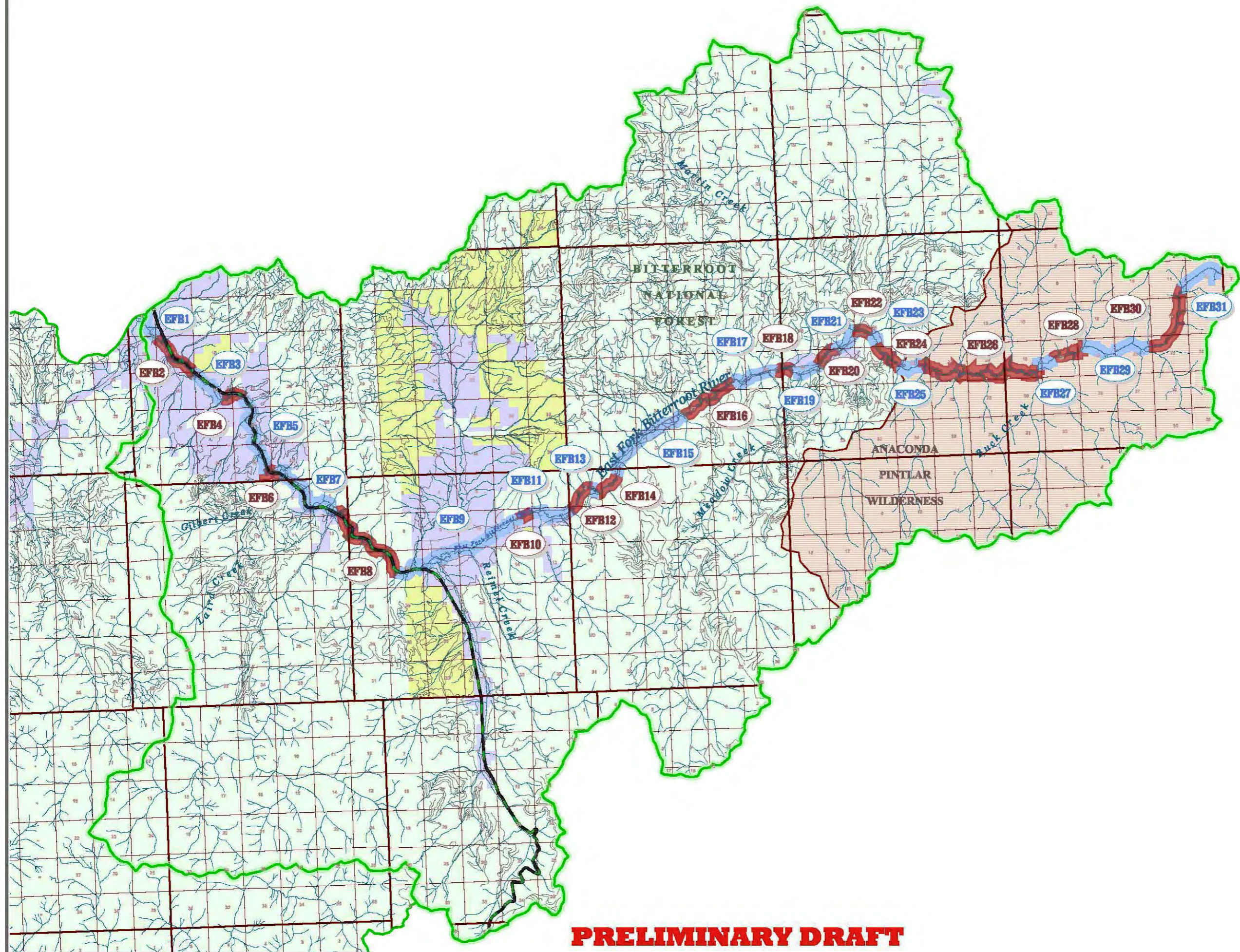
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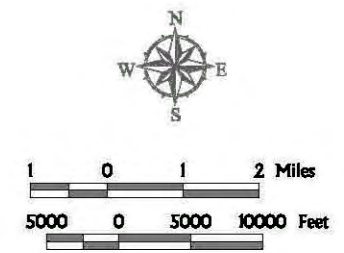
**PRELIMINARY DRAFT**

**Figure H-5  
Bank Condition  
Assessment Reaches  
East Fork  
Bitterroot River**



- East Fork Bitterroot River Reaches
- Watershed Boundary
- Other Streams
- Major Roads
- Other Roads
- Section Lines

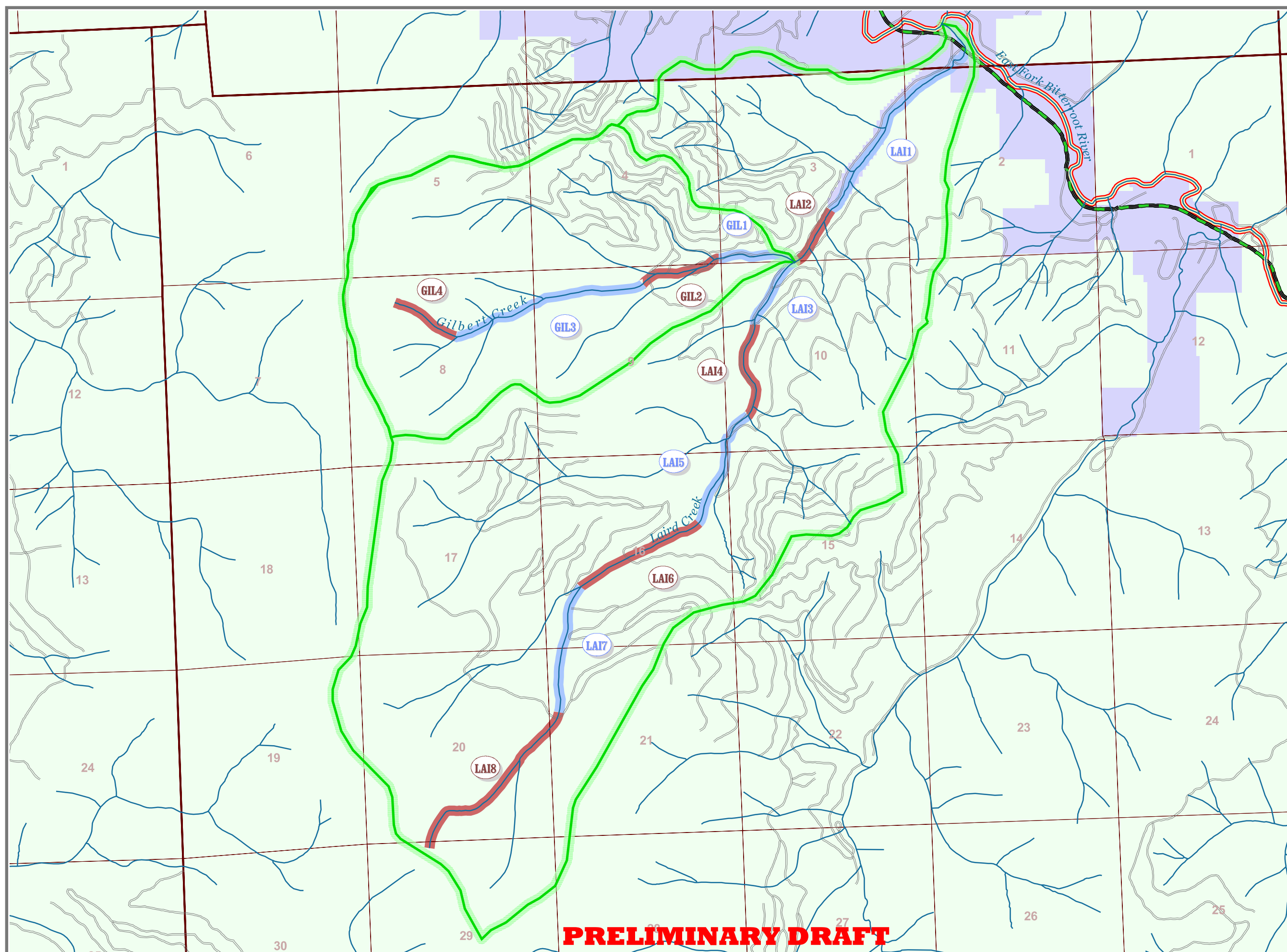
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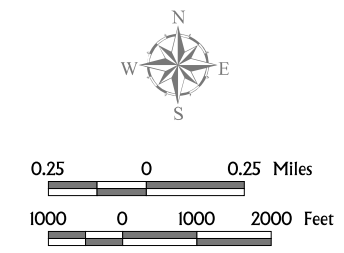
**PRELIMINARY DRAFT**

**Figure H-6**  
**Bank Condition**  
**Assessment Reaches**  
 Gilbert & Laird Creeks



- Gilbert & Laird Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines

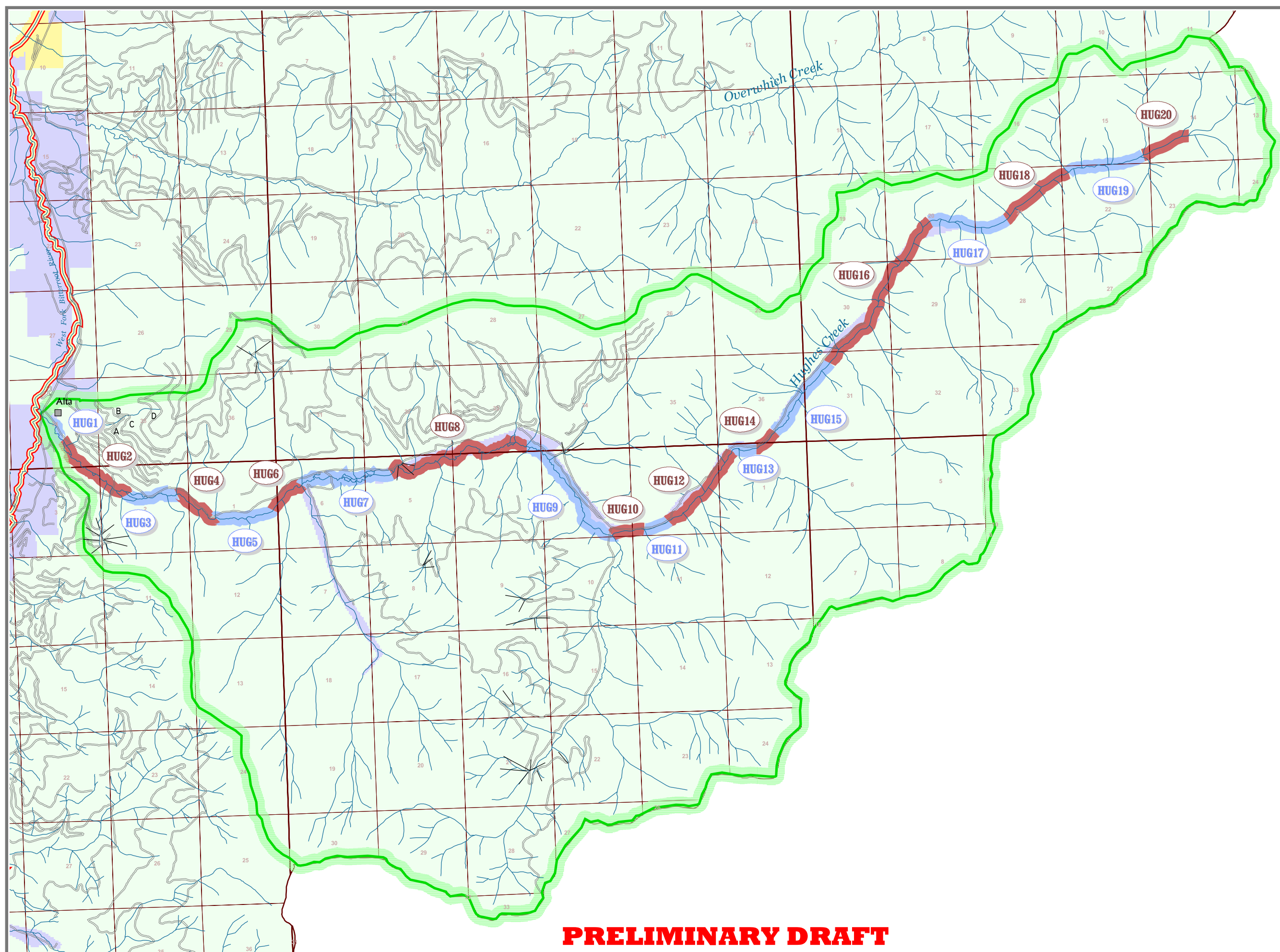
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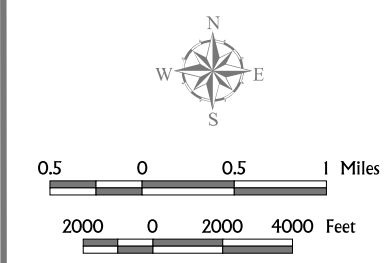
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**Figure H-7**  
**Bank Condition**  
**Assessment Reaches**  
 Hughes Creek



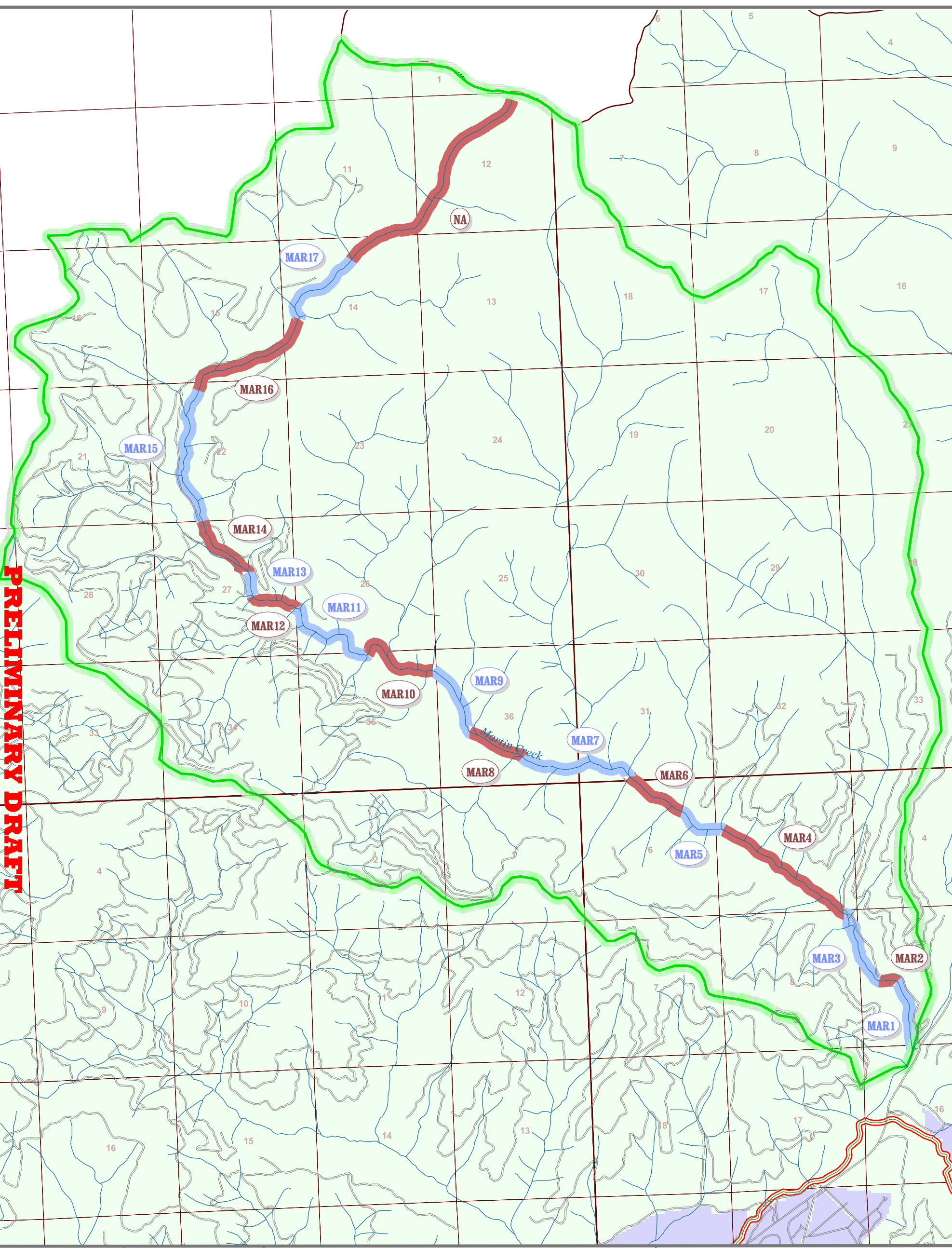
-  Hughes Creek Reaches
-  Watershed Boundary
-  East & West Forks of the Bitterroot River
-  Other Streams
-  Major Roads
-  Other Roads
-  Section Lines

- Land Ownership**
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**PRELIMINARY DRAFT**





**PRELIMINARY DRAFT**

**Figure H-8**  
**Bank Condition**  
**Assessment Reaches**  
 Martin Creek



Martin Creek Reaches

Watershed Boundary

East & West Forks of the Bitterroot River

Other Streams

Major Roads

Other Roads

Section Lines

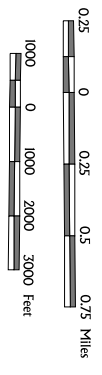
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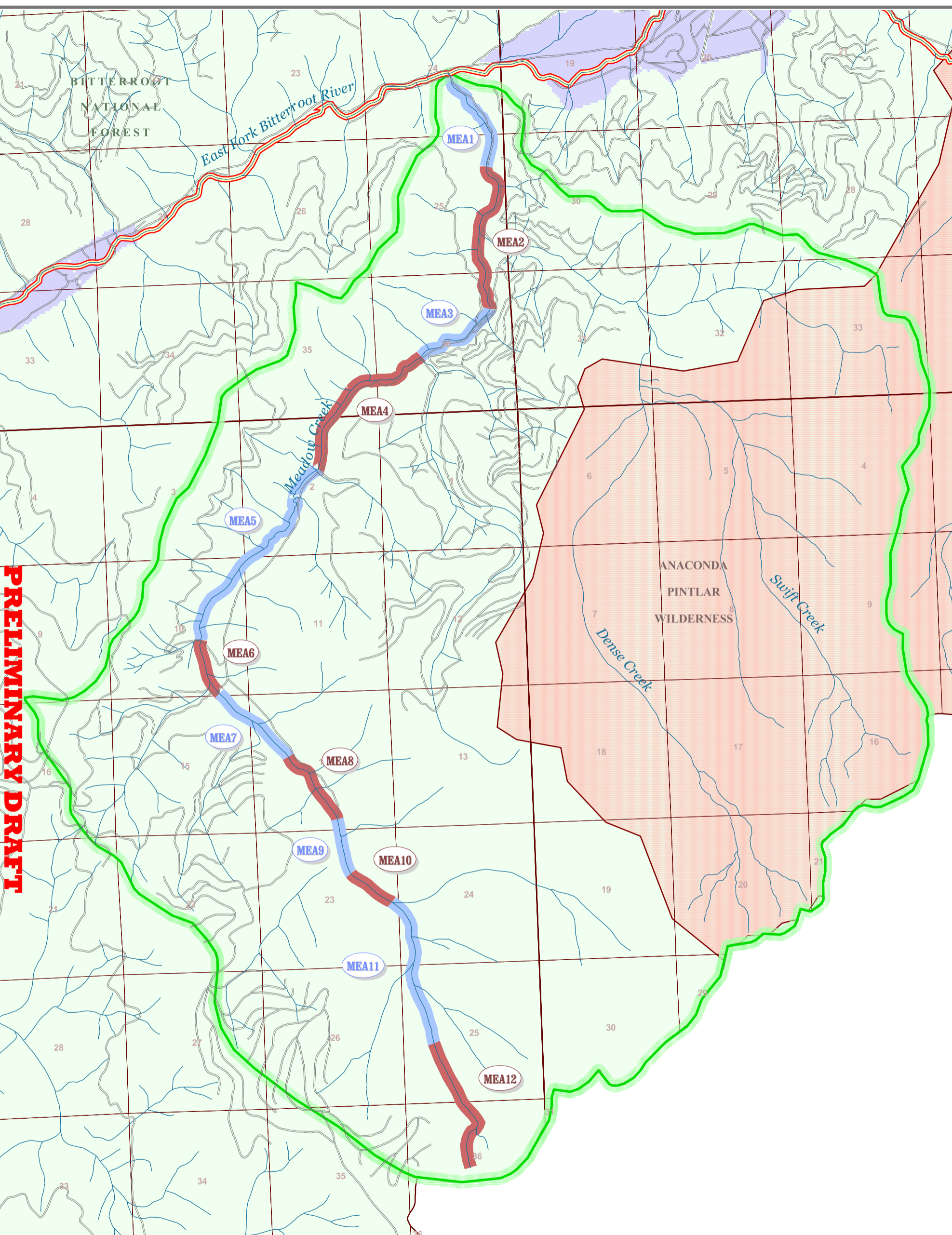
Wilderness



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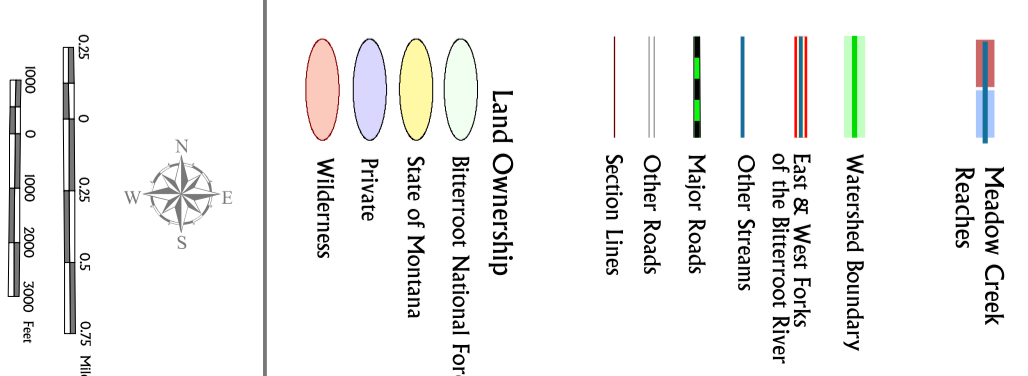
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Project#: 110426  
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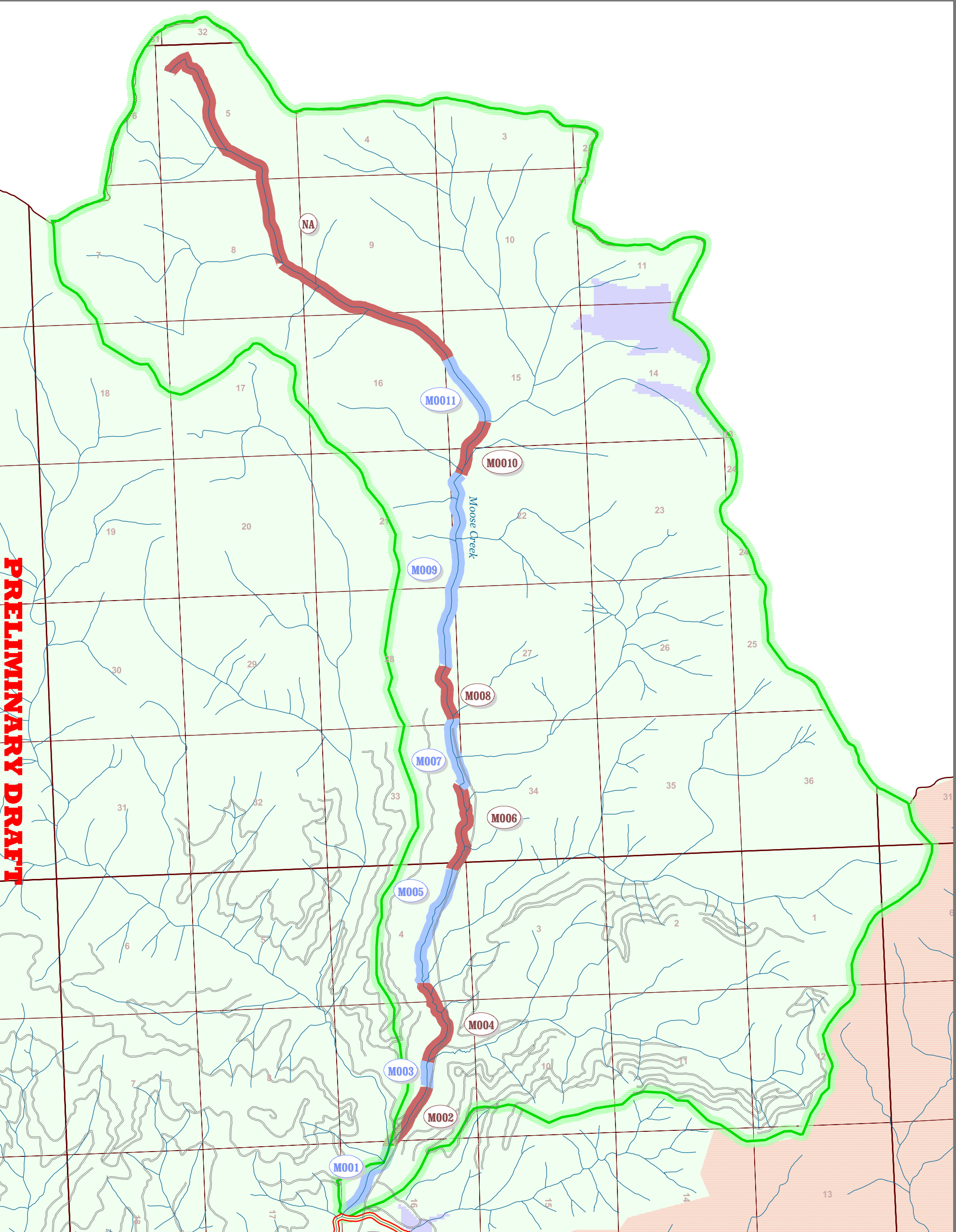
**Figure H-9**  
**Bank Condition**  
**Assessment Reaches**  
 Meadow Creek



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**Figure H-10**  
**Bank Condition**  
**Assessment Reaches**

Moose Creek



Moose Creek Reaches

Watershed Boundary

East & West Forks of the Bitterroot River

Other Streams

Major Roads

Other Roads

Section Lines

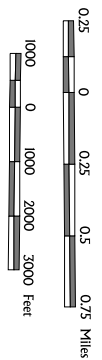
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Bitterroot National Forest

State of Montana

Private

Wilderness



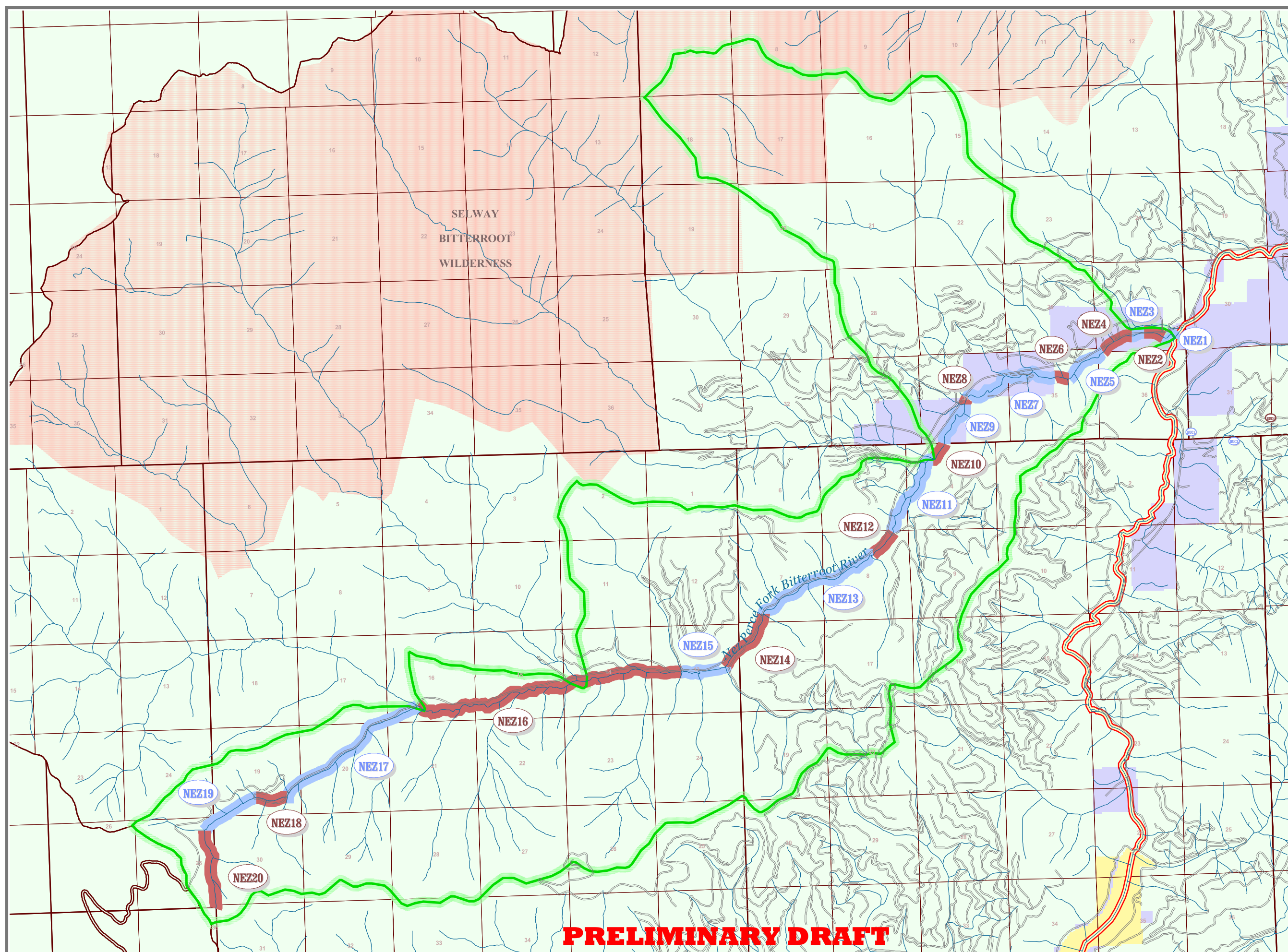
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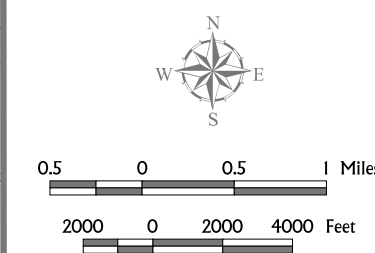
**Figure H-11  
Bank Condition  
Assessment Reaches**

Nez Perce Fork  
Bitterroot River



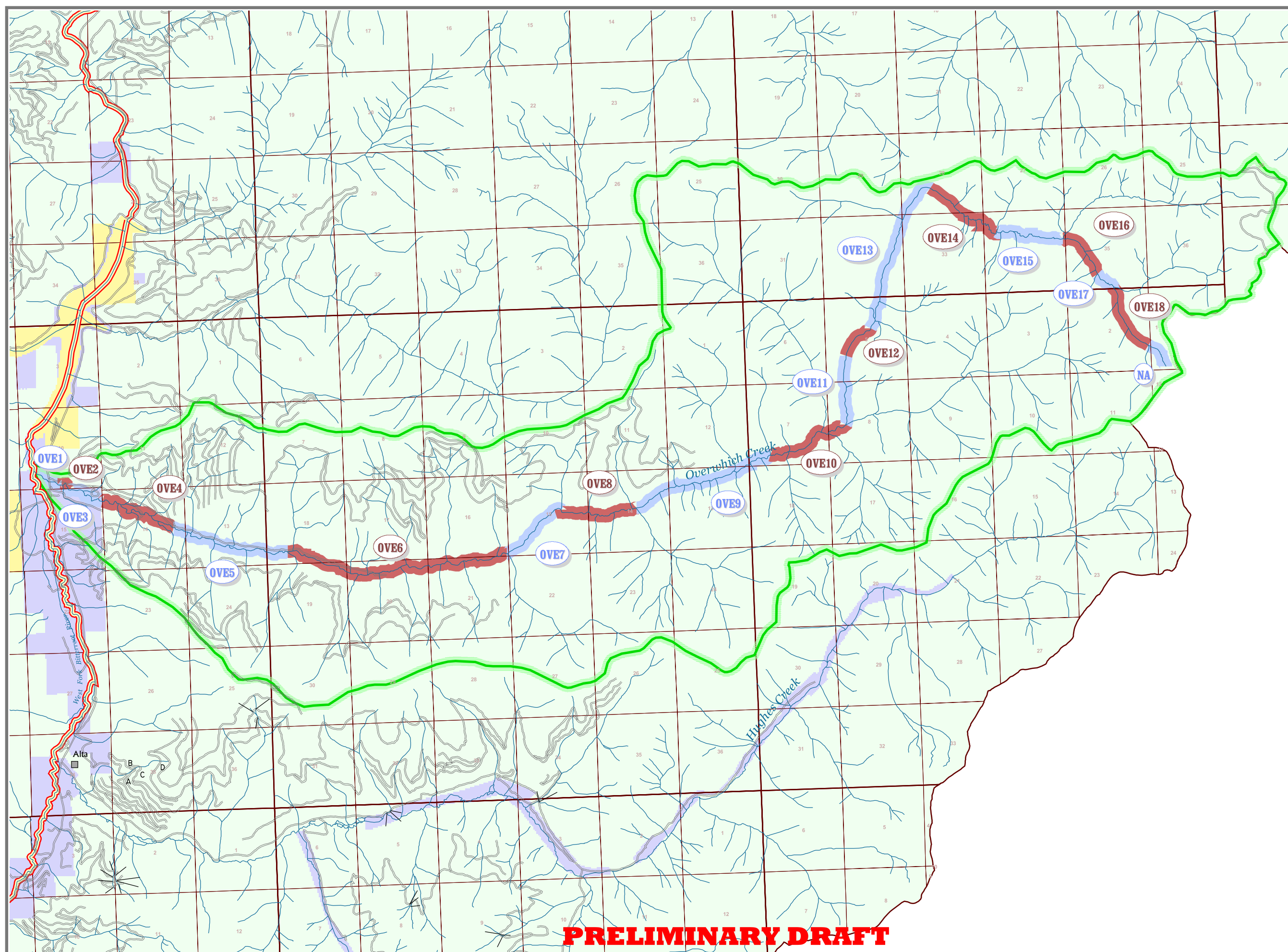
- Nez Perce Fork Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines








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  - Wilderness







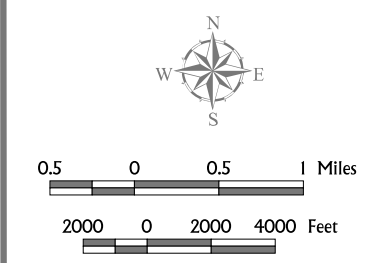
**PRELIMINARY DRAFT**

**Figure H-12**  
**Bank Condition**  
**Assessment Reaches**  
 Overwhich Creek



-  Overwhich Creek Reaches
-  Watershed Boundary
-  East & West Forks of the Bitterroot River
-  Other Streams
-  Major Roads
-  Other Roads
-  Section Lines

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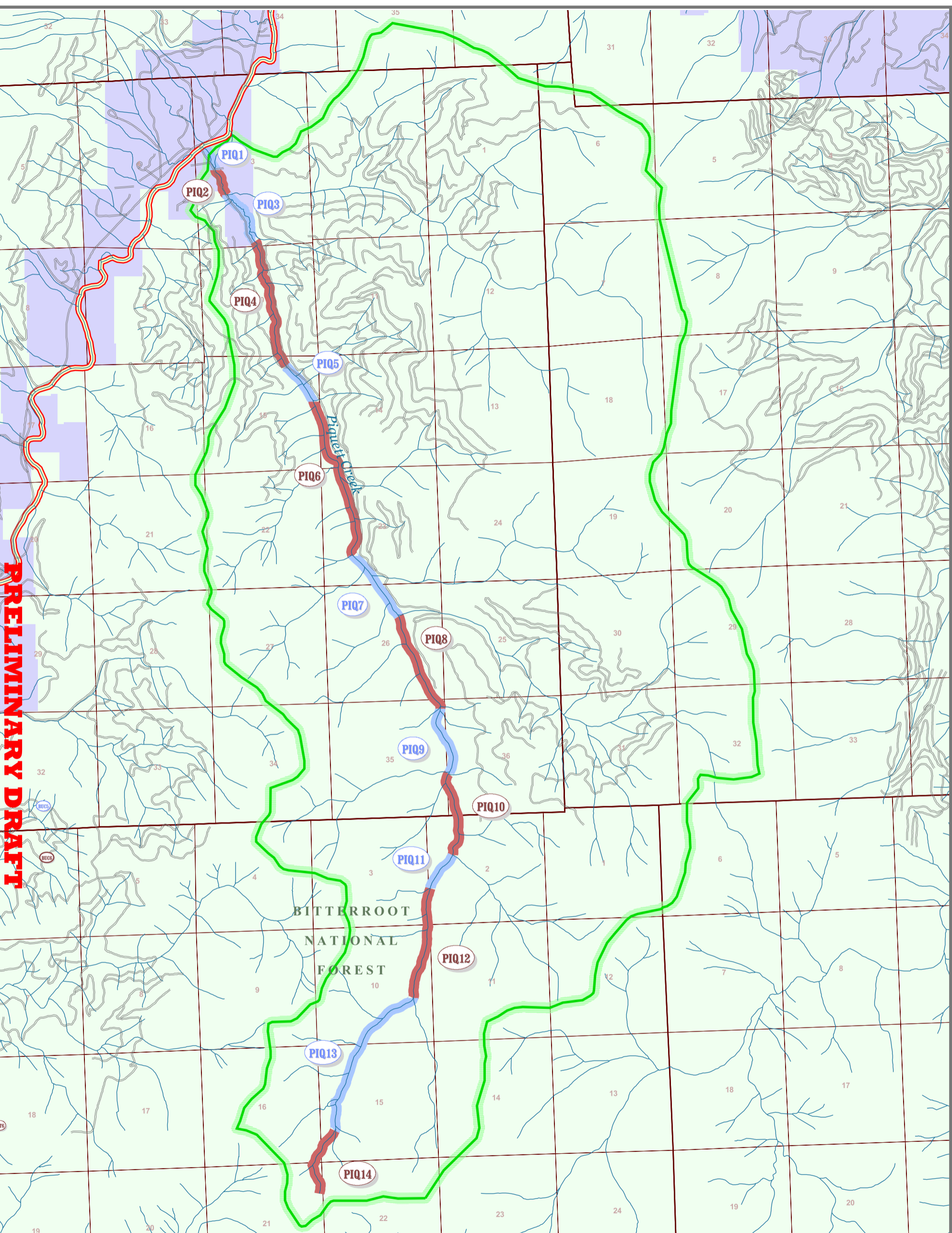
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**Figure H-13**  
**Bank Condition**  
**Assessment Reaches**

Piquett Creek



**PRELIMINARY DRAFT**

Piquett Creek Reaches

Watershed Boundary

East & West Forks of the Bitterroot River

Other Streams

Major Roads

Other Roads

Section Lines

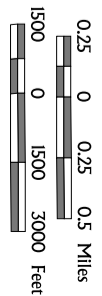
**Land Ownership**

Bitterroot National Forest

State of Montana

Private

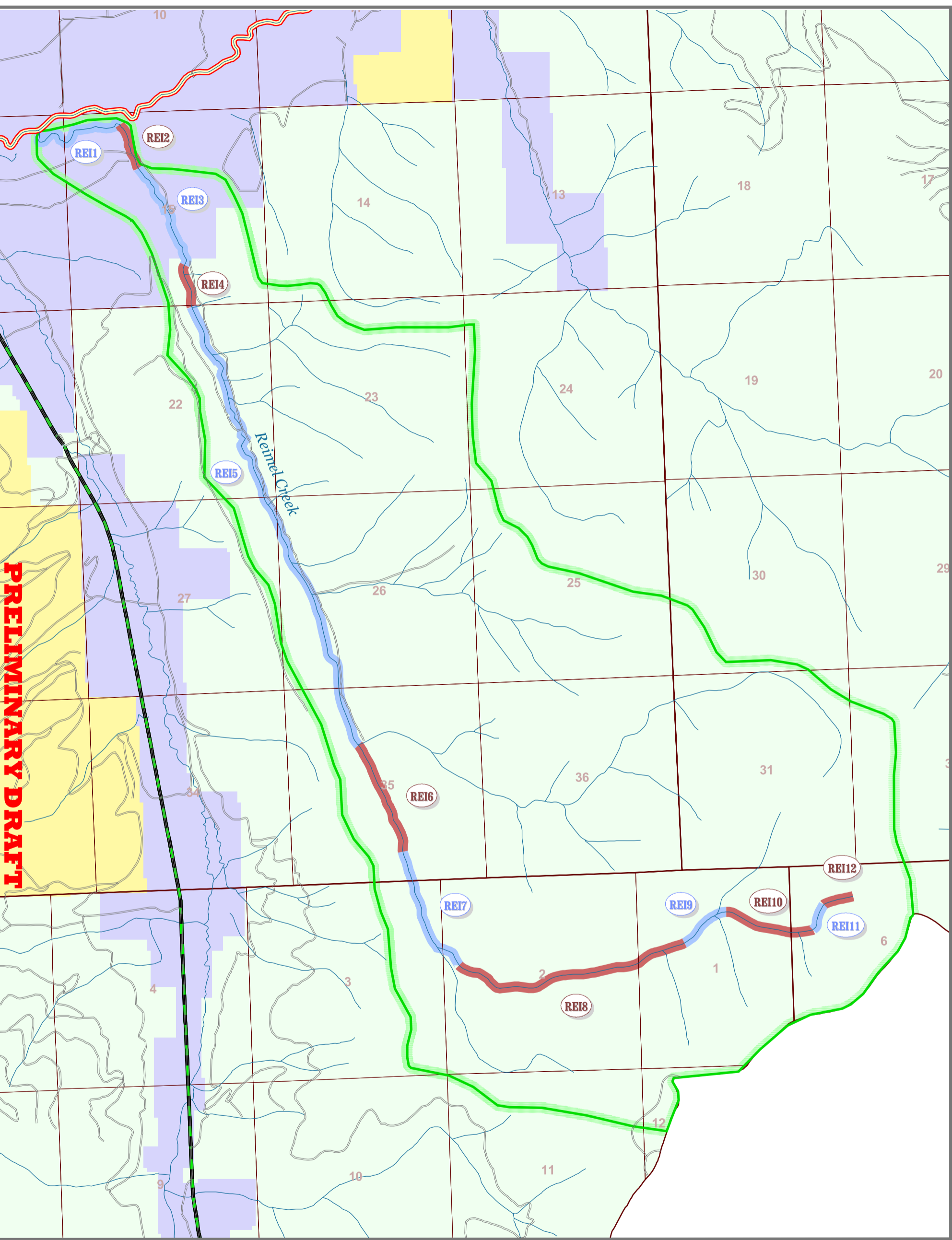
Wilderness



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Figure H-14  
Bank Condition  
Assessment Reaches  
Reimel Creek



**PRELIMINARY DRAFT**

Reimel Creek  
Reaches

Watershed Boundary

East & West Forks  
of the Bitterroot River

Other Streams

Major Roads

Other Roads

Section Lines

Land Ownership

Bitterroot National Forest

State of Montana

Private

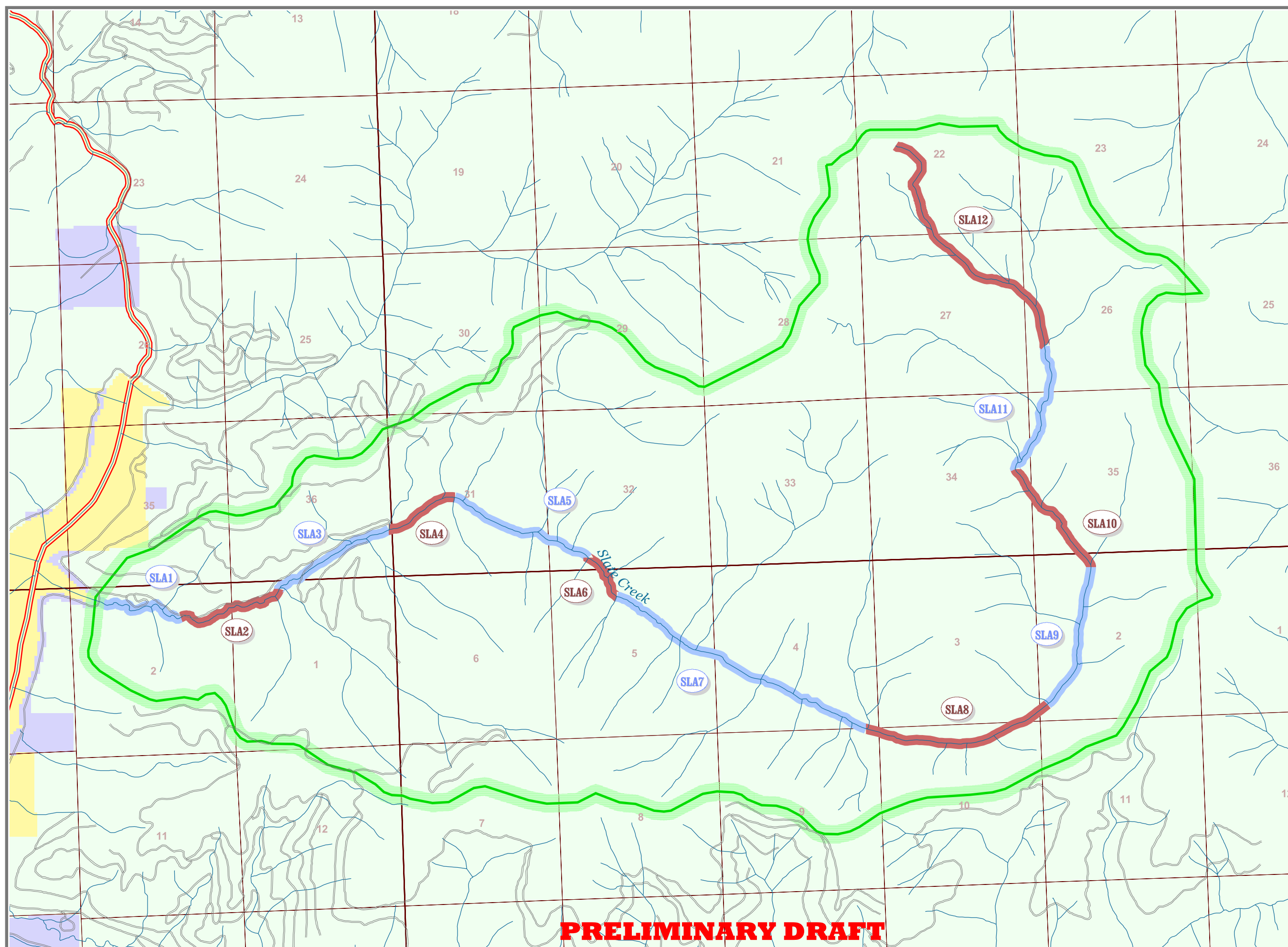
Wilderness



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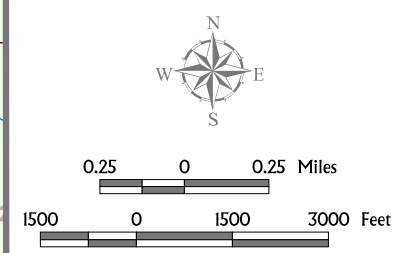
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**Figure H-15**  
**Bank Condition**  
**Assessment Reaches**  
 Slate Creek



- Slate Creek Reaches
- Watershed Boundary
- East & West Forks of the Bitterroot River
- Other Streams
- Major Roads
- Other Roads
- Section Lines

- Land Ownership**
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  - Private
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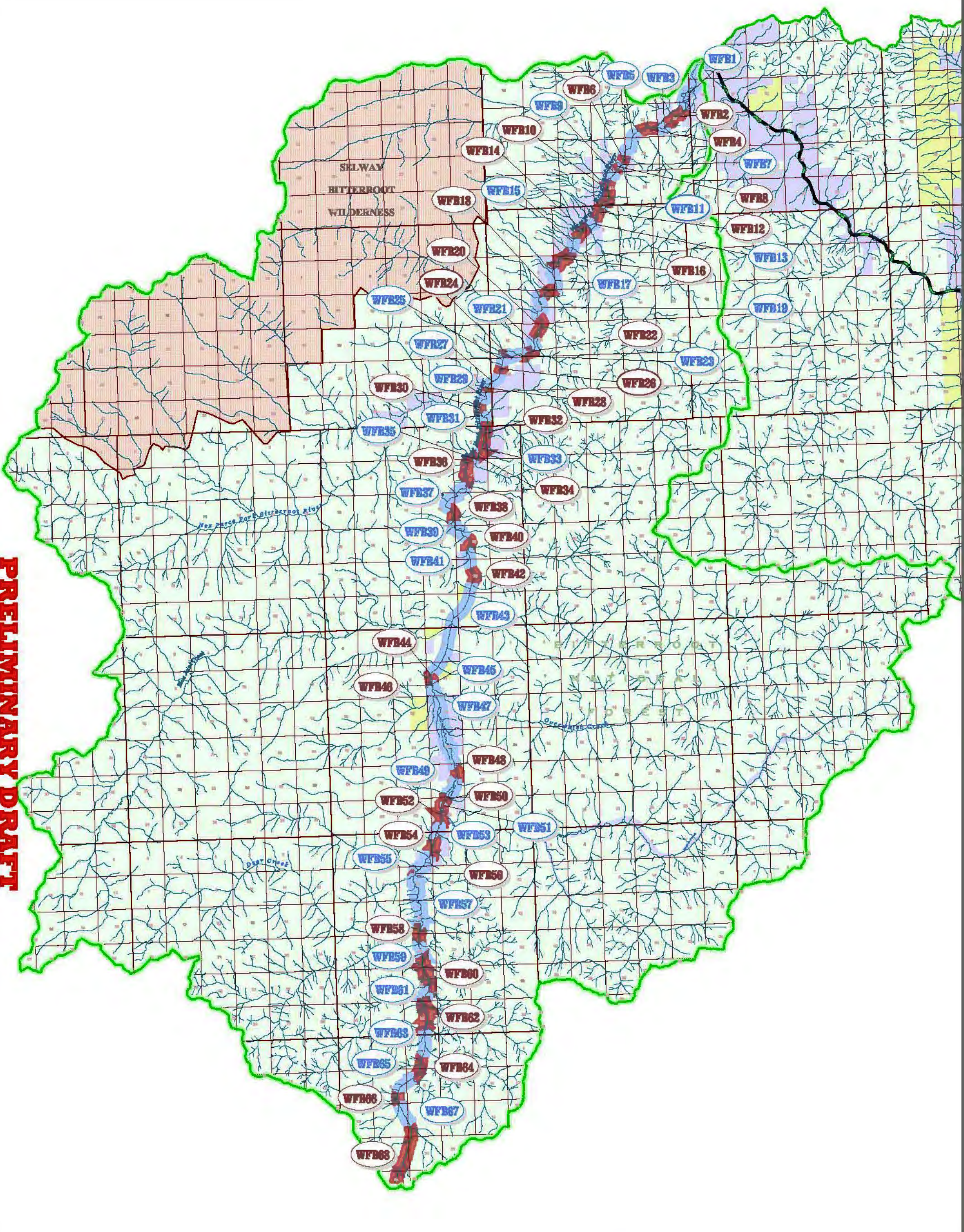


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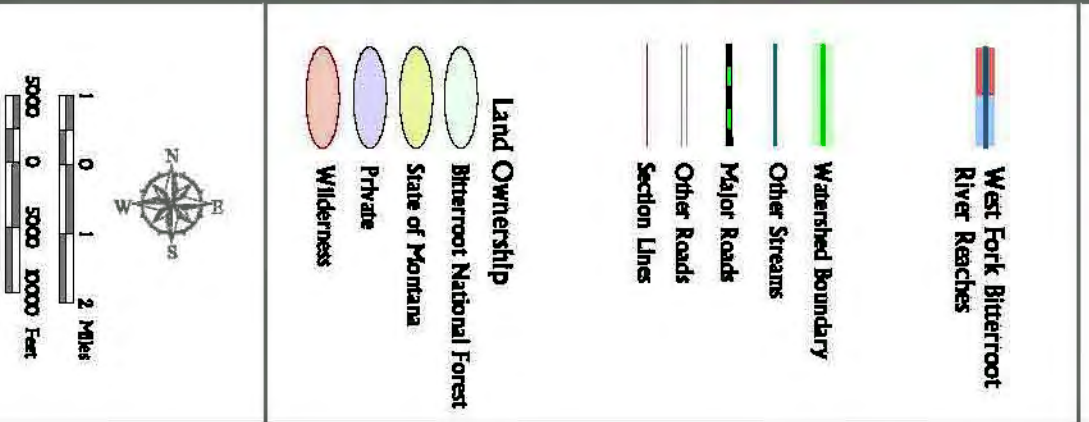

**PRELIMINARY DRAFT**



**PRELIMINARY DRAFT**



**Figure H-16**  
Bank Condition  
Assessment Reaches  
West Fork  
Bitterroot River



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Location: Bitterroot

## Bank Instability - Buck Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
BUC1	0.69	0.00	0.00	0.00	0.00	Lower reach boundary is at confluence with WFB and upper reach boundary is at highway crossing. Reach is dominated by dense shrubbery and some forest. Overhang is from trees, shrubs, and herbaceous veg. Open water cannot be seen. Buffer and shade density includes only trees, not shrubs. Land use is uncertain and may include grazing. Some animal trails appear present, but needs verification.
BUC2	0.77	0.00	0.00	0.00	50.00	Reach is dominated by dense shrubbery and some forest. Overhang is from trees, shrubs, and herbaceous veg. Open water cannot be seen. Buffer and shade density includes only trees, not shrubs. Driveway does occur within 100 feet of south streambank for extremely short distance.
BUC3	0.74	0.00	0.00	0.00	0.00	Stream is difficult to distinguish. Shrub layer appeared dense under tree layer.
BUC4	1.51	0.00	0.00	0.00	0.00	Stream is difficult to distinguish. Conifers dominate. Mtn slope to the south is of dense conifers. Mtn slope to the north is sparsely treed with talus and loosely soiled slopes. One logging road bisects stream. Upper reach boundary occurs at harvest unit.
BUC5	0.49	0.00	0.00	0.00	0.00	Lower reach boundary is at end of harvest unit. Upper reach boundary is at aspect change in stream. Logging road crosses stream. Selective harvesting occurs on north side above road crossing.
BUC6	0.92	0.00	0.00	0.00	0.00	Headwater Reach contains a regenerating clearcut that straddles stream. Logging roads cross stream. Upper reach boundary has ephemeral flow (according to topo) and is forested.
<b>TOTALS</b>	<b>5.12</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>7.52</b>	

## Bank Instability - Ditch Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
DIT1	0.29	0.00	0.00	0.00	50.00	Reach is very short. Lower reach boundary occurs at confluence with WFB. Upper reach boundary is entrance to side valley. Major road intersection appears to be channelling water through culvert(s).
DIT2	1.03	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of northeast streambank. Gravel pit located in reach with about 100 ft of treed buffer from northeast streambank. Old, regenerating clearcut occurs within 100 feet of southwest streambank.
DIT3	0.49	0.00	0.00	0.00	0.00	Reach is a "confluence" of Ditch creek and a dry drainage. Reach appears as though shrubs dominate for at least a third without tree cover.
DIT4	0.63	0.00	0.00	0.00	0.00	Reach is buffered with conifers. Old, regenerating clearcut extends within 100 ft of south streambank. On mtn slopes to the north, trees are widely spaced due to steep, loosely soiled slopes. Logging road comes within 100 feet of south streambank.
DIT5	1.74	0.00	0.00	0.00	0.00	Reach consists of widely spaced conifers. Logging road bisects stream. Uncertain if reach has been selectively logged or not.
DIT6	1.68	0.00	0.00	0.00	0.00	Headwater reach has fairly dense overstory of conifers and dense understory of shrubs. Lower reach break occurs at road. Above road there is no logging or burnt forest or other road building. Only reach in ditch where data was obtained from 1998 photos.
<b>TOTALS</b>	<b>5.86</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.51</b>	

### Bank Instability - East Fork of the Bitterroot

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
EFB1	1.68	8.71	6.68	15.39	0.00	CoFSluence with the WF Bitterroot demarks the lower reach boundary. Upper reach boundary occurs south of bridge where mountain slopes begin. Valley is wide and gentle and farming practices dominate (private property).
EFB2	2.99	6.35	18.27	24.62	0.00	Main highway occurs within 100 ft of east streambank and access road occurs within 100 ft of west streambank. Bridge crossing in upper reach. Structures occur within 100 feet of streambanks.
EFB3	2.23	0.00	5.71	5.71	0.00	Main road occurs within 100 ft of east streambank and cuts-off natural meander. Two structures within 100 ft of stream banks. Two bridge crossings adjacent to each other. Riparian vegetation burned partially in 2000 fires.
EFB4	1.37	2.04	0.00	2.04	50.00	Main road occurs within 100 feet of east streambank. Structures within 100 feet of streambanks. Fire burned, but not within riparian portion of reach.
EFB5	4.96	0.00	6.23	6.23	0.00	Main road, access roads, and structures occur within 100 feet of streambanks. Fire burned patchily in riparian because of people's efforts to save structures. Bridge crossings are present.
EFB6	0.88	0.00	10.80	10.80	0.00	Main road, access roads, and structures within 100 feet of streambanks. Riparian partially burned. Note that EFB has cut a new stream corridor; thus, Laird Creek technically joins EFB further south than shown on the USGS topo. Reach is mostly wetland type habitat, so tall shrubs dominate over trees.
EFB7	5.28	0.00	11.68	11.68	0.00	Main road, access roads, and many structures (including gravel pit/storage?) within 100 feet of streambanks. New channel cut so that Laird Creek coFSlues with EFB further south than shown on USGS topo. AG practices within riparian. Riparian burned patchily, but fairly heavy.
EFB8	5.59	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of east streambank and cuts meandors of stream. West streambank without roads/structures. Riparian burned patchily.
EFB9	8.47	9.70	5.77	15.47	0.00	Big, wide-open, gentle valley under private ownership. Appears as if it should be wetland, wet meadow, riparian habitats, but now is agriculture/ranching.
EFB10	0.92	0.00	0.00	0.00	0.00	Main road is within 100 feet of north streambank. Agriculture activities have narrowed the riparian.
EFB11	2.45	0.00	22.63	22.63	0.00	Main road is within 100 feet of north streambank and dirt road occurs within 100 feet of south streambank. One bridge crossing occurs.

### Bank Instability - East Fork of the Bitterroot

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
EFB12	1.87	0.00	0.00	0.00	0.00	Main road parallels north streambank within 100 feet of bank. Several structures and ag land within 100 feet of streambank. Man-made ponds present, but appear to have a connection to the river.
EFB13	0.47	0.00	0.00	0.00	0.00	Main road parallels north streambank within 100 feet of bank. On structure, access road, and bridge occur in upper reach and on border with upstream reach.
EFB14	1.59	0.00	0.00	0.00	0.00	Main road parallels northwest streambank within 100 feet. Road occurs within 100 feet of southeast streambank and bridge crossing occurs.
EFB15	5.54	0.00	4.40	4.40	0.00	Many structures, access roads/driveways within 100 feet of both streambanks. Main road parallels stream within 100 feet of north streambank. Some agriculture land use. Many ponds (man-made?) present.
EFB16	3.55	0.00	0.00	0.00	0.00	Reach segment appears undeveloped. Main road occurs within 100 feet of north streambank. Otherwise coniferous forested.
EFB17	2.56	0.00	0.00	0.00	0.00	Reach segment appears undeveloped. Main road occurs within 100 feet of north streambank. Otherwise coniferous forested.
EFB18	1.10	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of north stream bank. North side is AG land use with 25 foot riparian between bank and road. South side is USFS land of continuous forest for at least 300 feet horz. distance.
EFB19	1.58	0.00	0.00	0.00	0.00	Driveway (access) roads and many structures occur within 100 feet of streambank. Forest has been cleared leaving a strip of riparian.
EFB20	1.48	0.00	0.00	0.00	0.00	Bridge crossing of main road near lower reach boundary. Many structures and access roads occur within 100 feet of streambanks. Talus slope occurs on north side of streambank.
EFB21	1.50	0.00	0.00	0.00	0.00	About two structures within 100 feet of streambank. Primarily forested on both sides. Little talus on north streambank.
EFB22	1.06	0.00	0.00	0.00	0.00	Bridge crossing of main road is the only impervious surface observed. USFS compound occurs 100 feet or more from north streambank.
EFB23	0.67	0.00	0.00	0.00	0.00	East side of stream is private ownership and one structure within 100 feet of east streambank and some cleared forest. West side is USFS ownership with no observable disturbances.
EFB24	1.96	0.00	0.00	0.00	0.00	Road is within 100 feet of north streambank and ends just after crossing into the next upper reach. Both sides of stream are under USFS management. One clearcut unit occurs south of stream and with at least a 440 horz. foot buffer.

**Bank Instability - East Fork of the Bitterroot**

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
EFB25	1.46	0.00	0.00	0.00	0.00	Road terminates in a circle upstream a short distance from lower reach boundary; however, road is greater than 100 feet from north streamband. Trail takes off at this location.
EFB26	9.99	0.00	0.00	0.00	0.00	Open wet meadow with patches of conifers. Conifers are mostly burnt. Trail barely observable.
EFB27	1.05	0.00	0.00	0.00	0.00	Reach segment is mostly burned with a mosaic of green -, brown-, and no- needled conifers. Upper reach boundary occurs at boundary of burned and unburned forest. Trail not observable. Some talus slopes end at about 100 feet from streambanks.
EFB28	1.90	0.00	0.00	0.00	0.00	Reach segment is unburned. Talus slopes very minimal within 300 feet of streambanks.
EFB29	3.99	0.00	0.00	0.00	0.00	Talus slopes common on north side of stream which reduces buffer width. Reach is unburned.
EFB30	4.18	0.00	0.00	0.00	50.00	
EFB31	2.72	0.00	0.00	0.00	0.00	
<b>TOTALS</b>	<b>87.05</b>	<b>1.36</b>	<b>3.55</b>	<b>4.92</b>	<b>3.19</b>	

## Bank Instability - Hughes Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
HUG1	1.14	3.79	0.00	3.79	0.00	Main road in riparian
HUG2	2.18	0.74	0.00	0.74	0.00	
HUG3	1.23	0.00	0.00	0.00	0.00	
HUG4	1.17	0.00	0.00	0.00	0.00	Main road, 2 access roads with bridge in riparian, 2 structures less than or equal to 100 feet from creek
HUG5	1.42	0.00	0.00	0.00	0.00	At least 10 residential structures, several ponds, + several access roads.
HUG6	0.97	0.00	0.00	0.00	0.00	>10 residential structures +many access roads in riparian
HUG7	2.41	1.87	0.00	1.87	0.00	Access road + bridge at beginning and end of reach.
HUG8	3.97	0.00	0.00	0.00	50.00	Whole reach are tailings. Stream channel mostly not present - reduced to little ponds or wetland looking habitat. Whole reach devoid of vegetation. Main road less than or equal to 100 feet from bank.
HUG9	3.24	1.97	0.00	1.97	0.00	Whole reach are tailings. Vegetation is patchy + sparse -- although it is USFS ownership. Main road less than or equal to 100 feet from bank.
HUG10	0.76	0.00	0.00	0.00	0.00	Some tailings. Main road in riparian creek v. braided
HUG11	0.59	0.00	0.00	0.00	50.00	Main road in riparian. About 350 feet of talus slope.
HUG12	2.26	0.00	0.00	0.00	50.00	Some talus along channel. Main road less than or equal to 100 feet from channel. Mining disturbance in riparian.
HUG13	0.60	28.60	0.00	28.60	0.00	2000 fires burned to riparian in places. Burnt trees within riparian is very small.
HUG14	0.57	0.00	0.00	0.00	0.00	2000 fires burned to riparian in places. Burnt trees in riparian is very small. Talus slope common on north side.
HUG15	2.11	0.00	0.00	0.00	0.00	2000 fires burned to/near riparian in places. Talus slope common on northwest side. Some private ownership between lower reach boundary + Emmett Creek.
HUG16	4.14	4.56	0.00	4.56	0.00	
HUG17	1.84	1.46	0.00	1.46	0.00	Upper reach boundary is the confluence of two headwater creeks, each stream order #1.
HUG18	1.81	0.00	0.00	0.00	50.00	
HUG19	1.81	0.00	0.00	0.00	50.00	
HUG20	1.15	0.00	0.00	0.00	50.00	
<b>TOTALS</b>	<b>35.36</b>	<b>1.57</b>	<b>0.00</b>	<b>1.57</b>	<b>16.37</b>	

### Bank Instability - Laird and Gilbert Creeks

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
LAI1	2.47	0.00	38.50	38.50	0.00	Liard conflues with EFB at a new upstream location, not depicted on topo. Main highway crosses creek. Creek meanders through private property - some agric., but mostly homes with yards. Reach burned intensely leaving some green trees around homes, but most trees burned along with some structures. Main road and structures and access roads all occur within 100 feet of streambanks.
LAI2	0.68	0.00	0.00	0.00	50.00	Reach burned intensely leaving black toothpicks on slopes and in riparian. USFS roads occur on both sides of drainage, but only road on west stream side is near of less than 100 feet from bank. It appears like one structure occurs within 100 feet of west streambank, and may have been burned.
LAI3	0.81	0.00	16.42	16.42	0.00	Reach burned intensely with a patch of green trees remaining mid-way. USFS road constricts creek and occurs within 100 feet of west streambank. Road intersections occur mid-way up reach and at upper reach boundary.
LAI4	1.05	0.00	0.00	0.00	50.00	Main road occurs within 100 ft of west streambank (constricts). Logging roads on mountain slopes are greater than 220 feet horz. distance from banks. Fire intensity high- all trees burnt black.
LAI5	1.32	0.00	0.00	0.00	0.00	Reach is burnt with low intensity - some brown needled trees and many green trees occur. Main road constricts, occurring with 100 feet of streambanks. Main road crosses where Liard and Moon Creeks confluence. Regenerating clearcuts occur along east streambank. Difficult to see creek.
LAI6	1.43	0.00	0.00	0.00	0.00	Reach is moderately burned with a diversity in tree heights. Some logging roads and one road crossing occurs within 100 feet of streambank. Portion of reach appeared previously logged, but regenerating. Difficult to see creek. Loosely soiled forest openings occur on slopes north of stream.
LAI7	1.38	0.00	0.00	0.00	50.00	Reach is intensely burnt for 80% or more. Middle portion of reach is intensely burnt while green trees remain at lower and upper reach portions. Confluence marks lower reach boundary while road crossing marks upper reach boundary. Another logging road occurs within 100 feet of east streambank.



### Bank Instability - Laird and Gilbert Creeks

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
LAI8	1.28	0.00	0.00	0.00	50.00	Reach is not burnt except for maybe a small handful of trees scattered about 100 feet from streambank. Channel is barely discernable. Reach is unlogged and no roads occur within more than 100 feet of banks.
LAI9	0.85	0.00	0.00	0.00	50.00	Headwater reach ends at base of Medicine Point peak (7800 ft). Headwaters burnt intensely with a handful of green trees maybe. Many of the trees are brown-needled. Lower reach boundary occurs where fire boundary occurs.
<b>TOTALS</b>	<b>11.26</b>	<b>0.00</b>	<b>9.63</b>	<b>9.63</b>	<b>23.23</b>	
GIL1	0.84	0.00	0.00	0.00	0.00	Reach burned intensely in 2000 leaving black toothpicks. Main USFS road occurs within 100 ft of streambank. Riparian and slopes burned intensely. Upper reach boundary occurs where road switchbacks.
GIL2	0.88	0.00	0.00	0.00	0.00	Reach burned intensely in 2000 leaving black toothpicks. Logging roads occur within 100 ft of streambanks. Riparian and slopes burned intensely. Lower reach boundary ends at road switchback. Upper reach boundary ends at fire boundary where green trees occur.
GIL3	2.11	0.00	0.00	0.00	0.00	Reach burned moderately with some intense burnt riparian, but mostly green riparian. Trees are moderately dense due to talus and steep, loosely soiled slopes on the north side of drainage. No logging roads or harvesting were evident.
GIL4	0.75	0.00	0.00	0.00	50.00	Reach is the headwaters and did not burn. Mtn slopes to the southwest have fairly dense canopy while slopes to the northeast have a scattered canopy due to steep, loosely soiled ground. No roads or harvesting are observable.
<b>TOTALS</b>	<b>4.58</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8.17</b>	

## Bank Instability - Meadow Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
MEA1	1.59	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of southeast streambank. Bridge crossing and intersection with another USFS road occurs within 100 feet of streambanks. No harvest units occur within reach.
MEA2	2.30	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of southeast streambank. Two large harvest units (clearcut) and one long talus slope occur on slopes to the southwest and is buffered from the stream by a few scant trees and the road.
MEA3	1.31	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of west streambank. Upper reach boundary marked by bridge. Reach habitat is probably mostly wetland with forest encroachment common in portions.
MEA4	2.56	0.00	18.05	18.00	50.00	Bridge crossings mark upper and lower reach boundaries. Dense forest occurs on mtn slopes to the west. Narrow riparian buffer of conifers occurs on east side. Conifers are encroaching natural meadow of upland. Meadow has had past/present grazing.
MEA5	3.22	0.00	0.00	0.00	0.00	Bridge crossing marks lower reach boundary. Burnt trees mark upper reach boundary. Road parallels stream but is greater than 100 feet from streambanks. Large, regenerating clearcut comes within 110 feet from southwest streambank. Riparian overstory is conifers of many heights (previously burned or selectively harvested??).
MEA6	0.85	0.00	0.00	0.00	0.00	Reach burned patchily with high and low intensity areas. Middle portion of reach may be more wetland type habitat. Road in upper reach comes within 100 feet of east streambank and terminates into a trail at reach break.
MEA7	1.37	0.00	0.00	0.00	0.00	Reach burned patchily with high and low intensity areas. Trail parallels drainage. No previous logging is observable. Mountain slopes have some talus within 300 feet (horz.) of streambanks.
MEA8	1.19	0.00	0.00	0.00	50.00	Reach burned intensely except in center there is a patch of green trees. Upper reach break is at confluence with Balsam Crk.
MEA9	0.82	0.00	0.00	0.00	50.00	Reach contains some of the headwaters. Reach intensely burnt leaving black toothpicks. No harvesting prior to 2000 fires was apparent.
MEA10	0.73	0.00	0.00	0.00	50.00	Reach is the ephemeral portion of headwaters which burnt patchy with moderate and low intensities. Some talus slope occurs within 300 feet of streambanks. Cannot see understory to know if bank is stable or not.
MEA11	2.26	0.00	0.00	0.00	50.00	
MEA12	2.04	0.00	0.00	0.00	50.00	
<b>TOTALS</b>	<b>20.22</b>	<b>0.00</b>	<b>2.28</b>	<b>2.28</b>	<b>23.72</b>	

## Bank Instability - Moose Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
MOO1	1.28	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from east streambank. Upper reach break is at confluence with Martin Creek.
MOO2	1.03	0.00	0.00	0.00	0.00	Lower reach break conflues with Martin creek. Upper reach break occurs at ill-defined aspect change. Reach is mostly buffered by conifers. On the west side of the lower reach a campground occurs and trees appear thinned. Main road occurs within 100 feet of east streambank.
MOO3	0.37	0.00	0.00	0.00	0.00	Reach is very similar to MOO-2 below, but just a slightly different aspect (N-S) Main road occurs within 100 feet of east streambank.
MOO4	1.39	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of east streambank. Distance between trees and streambank on east side appears great and that river may be downcutting (naturally?). Vegetated to bank for most of distance although not with trees. Harvesting may have occurred.
MOO5	1.79	0.00	0.00	0.00	0.00	Main road occurs within 100 feet of east streambank. Harvesting (thinning) has occurred just over 100 feet from east streambank.
MOO6	1.34	2.24	0.00	2.20	50.00	Main road occurs within 100 feet of east streambank. Riparian has conifers, but most of the streambanks may be part of a wetland fringe (needs verification). No harvesting seen within 300 feet (horz.) of streambanks.
MOO7	1.05	0.00	0.00	0.00	50.00	Main road occurs within 100 feet of east streambank. Upper reach boundary occurs at road's termination.
MOO8	0.83	0.00	0.00	0.00	50.00	Main road terminated into a trail at the lower reach boundary. Trail not very observable on photos.
MOO9	2.91	0.00	0.00	0.00	50.00	Reach contains large talus slopes that extend to streambank or large percentage of reach. Some talus slopes occur further up on mtn slopes and are being colonized by conifers. Trail is observable in places and parallels stream very closely.
MOO10	0.87	0.00	0.00	0.00	50.00	Reach is steeply ascending. Talus slopes are not observed. Trees density is fairly high and all looks lush.
MOO11	1.08	0.00	0.00	0.00	50.00	Some talus on mtn slopes within 300 horz. feet of streambanks. From lower reach boundary to headwaters it is very difficult to discern the channel.
MOO12	2.83	0.00	0.00	0.00	50.00	Talus slopes are very minor. May be a small wet meadow/wetland within 300 feet of north streambank. Upper reach boundary is confluence of two headwater creeks coming from Faith and Shadow Lakes.
<b>TOTALS</b>	<b>16.77</b>	<b>0.18</b>	<b>0.00</b>	<b>0.20</b>	<b>32.53</b>	

## Bank Stability - Reimel Creek

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
REI1	1.13	0.00	0.00	0.00	0.00	Lower reach boundary is at confluence with EFB. Mouth of Reimel has changed location from that displayed on topo. Mouth of Reimel is about 1000 horz. feet west of topo. location.
REI2	0.50	0.00	16.00	16.00	0.00	Approximately half of reach (lower) has water which orig. comes from the EFB via an irr.diversion, emptying water from EFB into REI-1. Approximately half of reach (upper) has no water due to a reservoir collecting water in REI-3. Access road crosses over REI-1. Two ponds collect water from REI-2 in lower reach. Buffer consists of 1 tree in entire reach.
REI3	1.17	0.00	0.00	0.00	0.00	Irrigation diversion takes water from REI-3 into reservoir and may also put some water back into REI-3. Structures occur within and just over 100 feet from east streambank. Lower reach streambanks are devoid of woody veg. while upper reach streambanks have shrub and some tree cover. Access road occurs within 100 feet of east streambank.
REI4	0.45	0.00	0.00	0.00	0.00	Shrubs and widely spaced conifers hide the stream well. Conifers are large and green.
REI5	5.00	0.00	0.00	0.00	50.00	Valley is long and narrow. Logging road occurs within 100 feet of streambanks. Reach burnt with moderate intensity with sections intensely burnt and sections unburned.
REI6	1.20	0.00	0.00	0.00	50.00	Reach burned lightly in the riparian and in the 220 foot horz. buffer. Road terminates at border of reaches REI-5 and REI-6. Road becomes a trail in REI-6 to headwaters. Reach appears less impacted.
REI7	1.37	0.00	0.00	0.00	0.00	Reach burned intensely leaving black toothpicks.
REI8	2.49	0.00	0.00	0.00	0.00	Reach burned intensely in riparian and both mtn slopes. Talus slopes are common on north side of creek and come within 100 feet of streambank.
REI9	0.55	0.00	0.00	0.00	50.00	Lower reach boundary starts with green trees within the riparian. Reach did not burn in riparian or on mtn slopes. Mtn slope to SE have dense conifers while slope to NW are loosely soiled with scattered conifers.
REI10	0.94	0.00	0.00	0.00	0.00	Riparian did not burn, but some moderate burning occurred on mtn slope to the southwest in 2000. Mtn slope to the SW have dense conifers while slope to NE have widely scattered conifers, talus, and loosely soiled slope.
REI11	0.29	0.00	0.00	0.00	0.00	Mtn slopes to the east have dense conifers. Mtn slopes to the west have open grassy meadow.
REI12	0.31	0.00	0.00	0.00	0.00	Upper reach burned intensely in small spot. Assume the bank is unstable at burned spot. Otherwise, rest of reach did not burn and appears "pristine". Mtn slope to north is grassy meadow while slope to south is dense conifers. Also forest gaps occur and may contain wet meadow sites.
<b>TOTALS</b>	<b>15.39</b>	<b>0.00</b>	<b>0.52</b>	<b>0.52</b>	<b>21.92</b>	

### Bank Instability - West Fork of the Bitterroot

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
WFB1	4.29	60.27	0.00	60.27	0.00	Sediment present in each reach. Bridge crossing + several access roads less than or equal to 100 feet from stream bank. Severe down cutting along banks.
WFB2	1.59	6.31	0.00	6.31	0.00	Sediment present in each reach. Access roads on bank sides of reach + several structures. All less than or equal to 100 feet from riparian.
WFB3	0.46	0.00	0.00	0.00	0.00	Sediment present in each reach. Structure + access road within 100 feet of riparian. Most of reach is FS land with some NR land.
WFB4	1.23	8.29	12.44	20.73	0.00	Main road + structures + access roads less than or equal to 100 feet from streambank. Sediment present in each reach.
WFB5	1.76	2.89	17.35	17.35	0.00	Sediment present in each reach. Two bridge crossings + several buildings less than or equal to 100 feet from streambank.
WFB6	0.52	0.00	0.00	0.00	0.00	Sediment present in each reach. Bridge crossings, fields, + main road less than or equal to 100 feet from streambank on both sides.
WFB7	0.44	0.00	0.00	0.00	0.00	Sediment present in each reach. Main road less than or equal to 100 feet from streambank.
WFB8	0.19	0.00	0.00	0.00	0.00	Sediment present in each reach.
WFB9	0.59	0.00	0.00	0.00	0.00	Sediment present in each reach.
WFB10	1.84	0.00	0.00	0.00	50.00	Sediment present in each reach. Structures + access roads less than or equal to 100 feet from streambank.
WFB11	0.12	0.00	0.00	0.00	0.00	Sediment present in each reach. Main road less than 100 feet from streambank.
WFB12	0.96	0.00	7.38	7.38	0.00	Main road bisects river. Channelization has occurred (?)
WFB13	0.54	0.00	11.67	11.67	0.00	Main road, bridge + structures less than or equal to 100 feet from streambank.
WFB14	1.14	5.01	11.69	16.70	0.00	Several structures less than 100 feet from streambank (most on banks). Main road less than or equal to 100 feet from streambank.
WFB15	0.89	0.00	0.00	0.00	0.00	Main road less than 100 feet from NW streambank. High sediment deposits.
WFB16	1.79	3.25	0.00	3.25	0.00	Large sediment deposits.

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
WFB17	1.25	0.00	0.00	0.00	0.00	Some sediment deposits. Some streambank hitting steep, loose soiled, treeless mountain slope.
WFB18	1.20	14.14	11.15	25.29	0.00	Main road less than 100 feet from streambank.
WFB19	1.38	1.95	0.00	1.95	0.00	Main road less than or equal to 100 feet from streambank. Sediment deposit. Two structures less than 100 feet from streambank.
WFB20	1.60	0.00	0.00	0.00	50.00	Sediment deposits present. Main road less than or equal to 100 feet from streambank.
WFB21	0.69	0.00	0.00	0.00	0.00	Bridge, several access roads, several structures less than or equal to 100 feet from streambanks. Main road less than 100 feet from streambank.
WFB22	0.77	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from NW streambank side.
WFB23	1.03	5.73	12.62	12.62	0.00	Main road less than or equal to 100 feet from north streambank. Sediment deposits.
WFB24	0.28	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from NW streambank. Some sediment deposition.
WFB25	0.55	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from NW streambank. High sediment deposition.
WFB26	0.51	0.00	0.00	0.00	0.00	High sediment deposition.
WFB27	1.12	0.00	0.00	0.00	0.00	High sediment deposition. Main road less than or equal to 100 feet from west streambank.
WFB28	0.30	0.00	0.00	0.00	0.00	High sediment deposition.
WFB29	0.85	0.00	0.00	0.00	0.00	High sediment. Bridge crossing to the south.
WFB30	0.66	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from east side of streambank. Some sediment.
WFB31	0.67	0.00	0.00	0.00	0.00	Structures + access roads within less than or equal to 100 feet of each streambank. Sediment deposition.
WFB32	1.94	0.00	0.00	0.00	0.00	Several structures on one "ranch" occurs in riparian.
WFB33	0.21	0.00	0.00	0.00	0.00	Bank instability is present, but very minor in length.
WFB34	0.60	0.00	0.00	0.00	50.00	Bank instability is present, but very minor in length.
WFB35	0.22	0.00	0.00	0.00	0.00	Bank instability is present, but very minor in length.
WFB36	1.86	3.06	10.58	13.64	0.00	Main road on east streambank for upper quarter of reach; campground in riparian.
WFB37	2.34	0.00	0.00	0.00	0.00	Main road, access road, bridge crossing less than or equal to 100 feet from both streambanks, minor bank instability.
WFB38	0.98	0.00	0.00	0.00	0.00	Main road <u>on</u> east streambank.

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
WFB39	1.33	0.00	10.33	10.33	0.00	Main road <u>on</u> east streambank + bisects a bend of river.
WFB40	0.91	0.00	0.00	0.00	50.00	Main road <u>on</u> east streambank.
WFB41	1.04	0.00	0.00	0.00	50.00	Main road, structures, access roads less than or equal to 100 feet of streambank -- on both sides.
WFB42	1.10	30.33	14.57	40.35	50.00	Spillway demarks upper reach boundary. Access road less than or equal to 100 feet from east streambank.
WFB43	6.07	0.00	0.00	0.00	0.00	Painted Rocks Lake Reservoir, main road along perimeter of lake.
WFB44	0.74	0.00	0.00	0.00	0.00	Sediment deposits.
WFB45	0.14	0.00	0.00	0.00	0.00	Sediment deposition.
WFB46	0.05	0.00	0.00	0.00	0.00	Sediment deposition.
WFB47	5.95	4.76	25.22	29.52	0.00	Main road + access road less than or equal to 100 feet from streambank. Bridge crossing + several structures in riparian.
WFB48	0.84	29.81	13.18	42.99	50.00	Main road less than or equal to 100 feet from east streambank. East mtn. slope sliding onto road (+dumped into river?). High sediment deposition.
WFB49	1.26	0.00	0.00	0.00	0.00	Structures + access road + main road less than or equal to 100 feet from both streambanks.
WFB50	0.73	0.00	0.00	0.00	0.00	Campground + access road less than or equal to 100 feet from streambank (east). Some dry, steep crumbly slope along west bank.
WFB51	0.17	0.00	0.00	0.00	0.00	Sediment deposition.
WFB52	1.33	0.00	0.00	0.00	0.00	Sediment deposition. Main road less than or equal to 100 feet from east streambank. Bridge, structures, + access roads in riparian.
WFB53	0.94	9.55	0.00	9.55	0.00	Structure + access road less than or equal to 100 feet from streambank. Direct connection between barn + streambank (feeding lot?).
WFB54	1.30	0.00	0.00	0.00	0.00	Bridge, access road, structures less than or equal to 100 feet from east + west streambanks. (Several access roads + structure).
WFB55	1.55	0.00	0.00	0.00	0.00	Main road, access roads, bridge, + structures less than or equal to 100 feet from both streambanks.
WFB56	0.12	0.00	0.00	0.00	0.00	Fire burned trees on nearby mtn. Slopes. No fire in riparian.
WFB57	4.04	0.00	0.00	0.00	0.00	Sediment deposition.

Reach	Total Bank Length (mi)	% Unstable Banks (air photo)	% Unstable Banks (on ground)	Total % of Bank Unstable (overlap removed)	% of Bank in 20+ Years Late Seral Condition	Comments
WFB58	1.04	0.00	0.00	0.00	0.00	Sediment deposition. Main road crosses WFB at upper boundary + access road is less than or equal to 100 feet from west streambank.
WFB59	1.26	0.00	0.00	0.00	0.00	Main road is less than or equal to 100 feet from west streambank.
WFB60	2.57	0.00	0.00	0.00	0.00	WL veg with patches of conifers; some timber harvest within 100 feet of riparian. Access roads in riparian.
WFB61	0.86	0.00	0.00	0.00	0.00	Main road less than or equal to 100 feet from east streambank.
WFB62	2.07	0.00	0.00	0.00	0.00	Short segment or road less than or equal to 100 feet from east streambank. Reach is pastureland or an irrigated crop.
WFB63	1.63	0.00	0.00	0.00	50.00	Main road + bridge crossing less than or equal to 100 feet from streambank. Structures less than or equal to 100 feet from west streambank.
WFB64	1.41	0.00	0.00	0.00	0.00	On upper, east side of reach occurs a talus slope. Appears as though creek is exposed below talus slope; thus, does not match values for parameters.
WFB65	1.31	0.00	0.00	0.00	0.00	Some talus + area of loose, eroding soil on mtn. slopes, but streambanks appear completely vegetated.
WFB66	0.74	0.00	0.00	0.00	0.00	Talus slope along upper reach on east side.
WFB67	1.44	0.00	0.00	0.00	0.00	Shrubs dominate the immediate streambanks.
WFB68	3.59	0.00	0.00	0.00	0.00	
<b>TOTALS</b>	<b>86.90</b>	<b>4.86</b>	<b>3.56</b>	<b>8.21</b>	<b>5.50</b>	