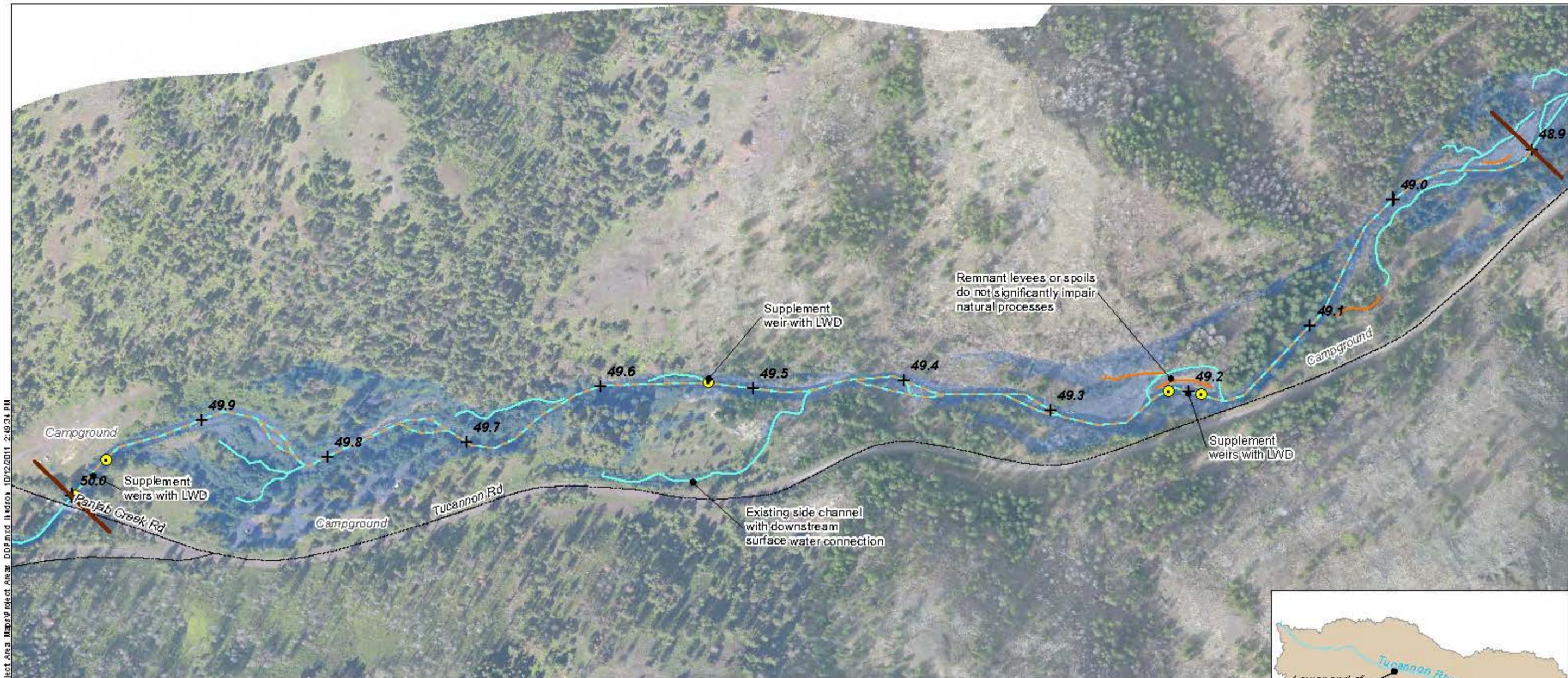
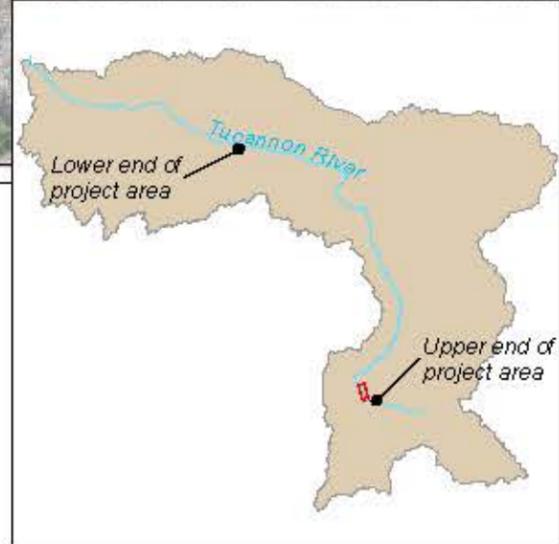
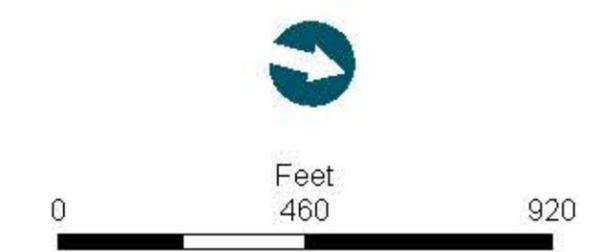


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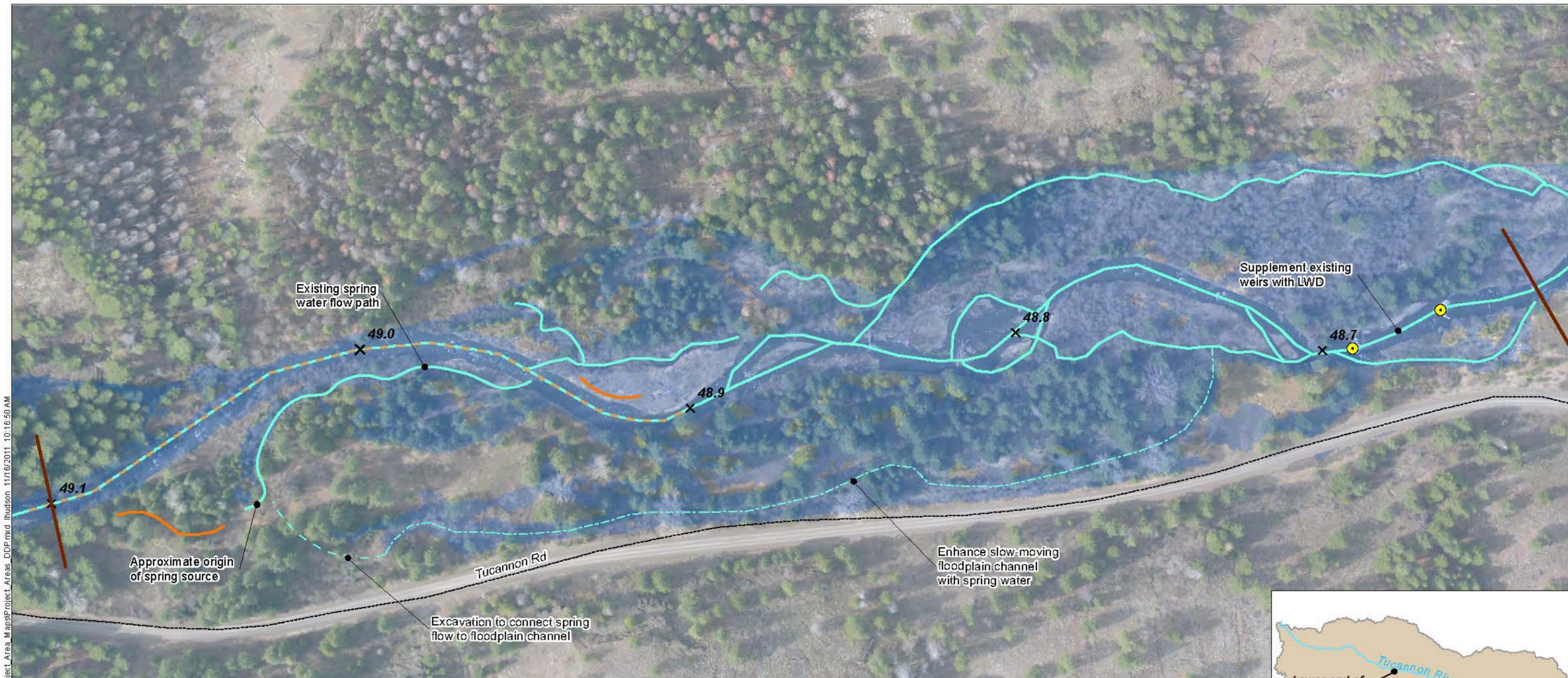
- | | | | |
|--------------------------------|-------------------|--------------------------------------|-------------------------------------|
| + River Miles | --- LWD | --- Existing Levee or Spoil Pile | ● Agricultural Feature (e.g. Pivot) |
| Wetted Channel (2011) | --- Unpaved Road | --- Remove Infrastructure | ⊙ Diversion (Intake/Return) |
| Tributaries | --- Paved Road | --- Levee Setback | ● Weir or Dam |
| New Excavated Side Channel | --- New Bridge | --- Project Area Extents | |
| Enhanced Existing Side Channel | --- Re-Align Road | □ Protection Area | |
| Reconnected Side Channel | --- Remove Road | ■ Approximate 5-Year Flood Elevation | |



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-1
 Project Area 1, River Mile 50.0 to 48.9
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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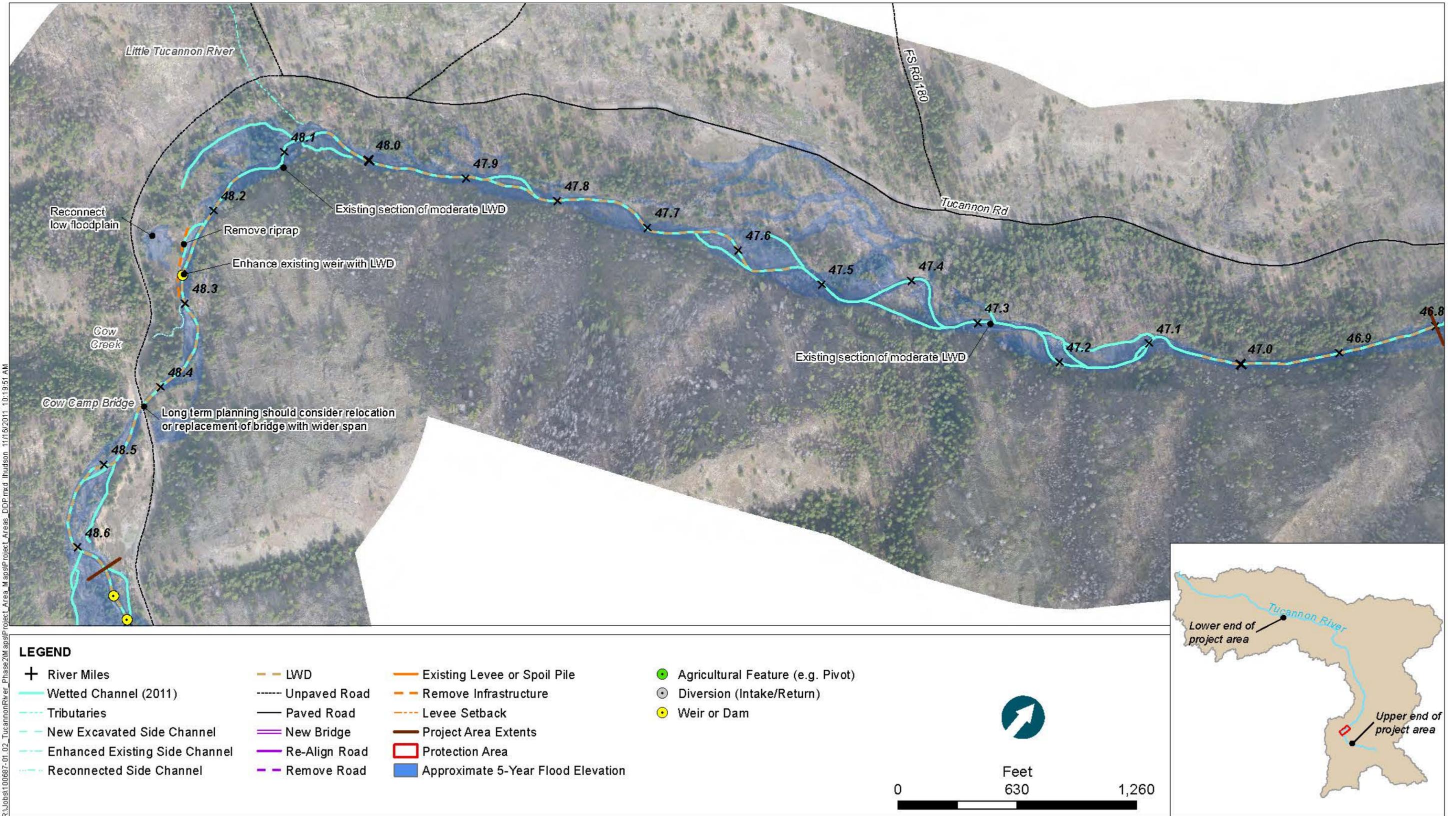
+	River Miles	---	LWD	—	Existing Levee or Spoil Pile	●	Agricultural Feature (e.g. Pivot)
—	Wetted Channel (2011)	---	Unpaved Road	—	Remove Infrastructure	⊙	Diversion (Intake/Return)
---	Tributaries	—	Paved Road	---	Levee Setback	●	Weir or Dam
---	New Excavated Side Channel	—	New Bridge	---	Project Area Extents		
---	Enhanced Existing Side Channel	—	Re-Align Road	---	Protection Area		
---	Reconnected Side Channel	—	Remove Road	---	Approximate 5-Year Flood Elevation		

Feet
0 200 400



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-2
 Project Area 2, River Mile 49.1 to 48.65
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

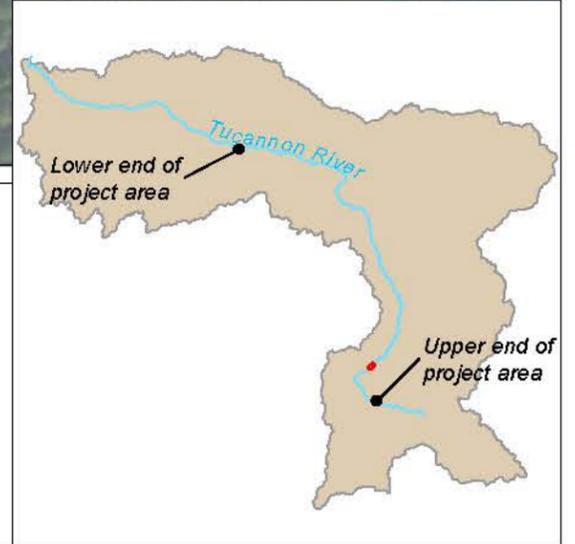
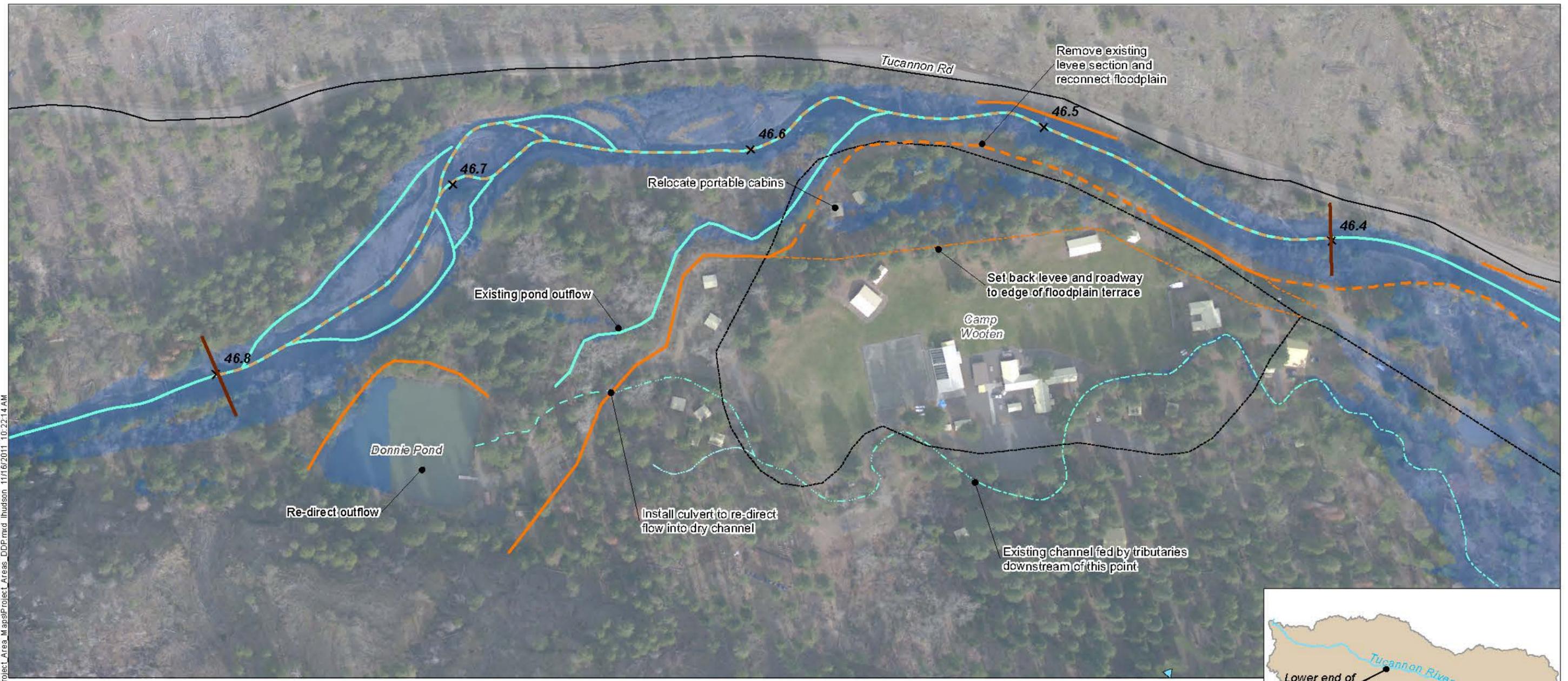


NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.



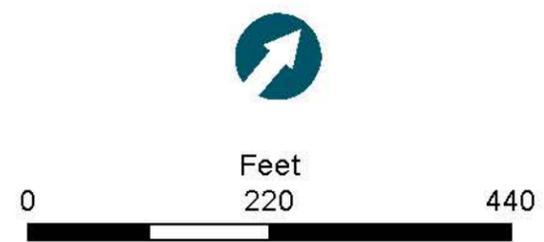
Figure B-3
 Project Area 3, River Mile 48.65 to 46.8
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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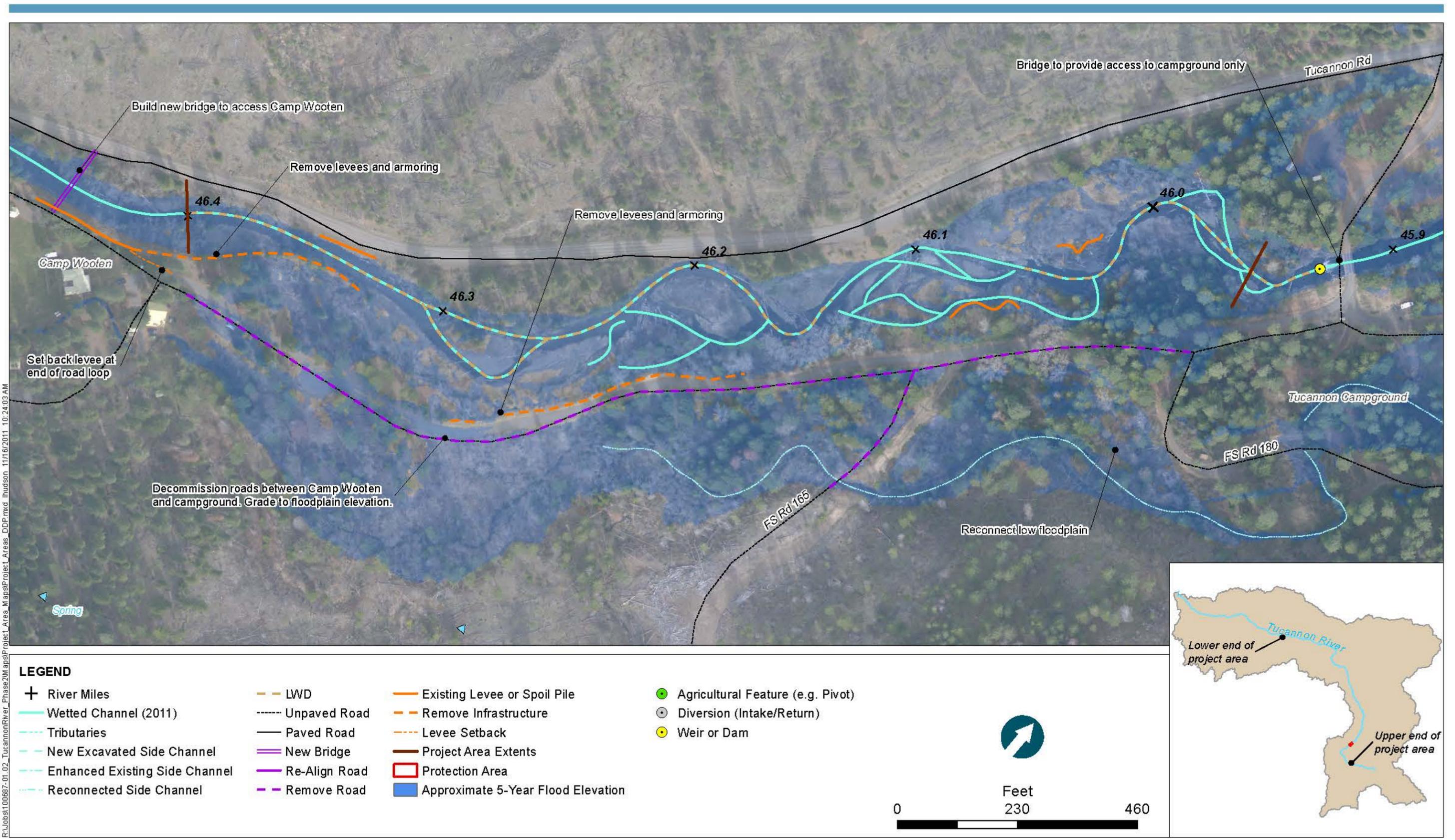
LEGEND

- | | | | | | | | |
|-----|--------------------------------|-----|---------------|-----|------------------------------------|---|------------------------------------|
| + | River Miles | --- | LWD | — | Existing Levee or Spoil Pile | ● | Agricultural Feature (e.g. Pivot) |
| — | Wetted Channel (2011) | --- | Unpaved Road | --- | Remove Infrastructure | ○ | Diversion (Intake/Return) |
| --- | Tributaries | — | Paved Road | --- | Levee Setback | ● | Weir or Dam |
| --- | New Excavated Side Channel | — | New Bridge | --- | Project Area Extents | □ | Protection Area |
| --- | Enhanced Existing Side Channel | — | Re-Align Road | --- | Remove Road | ■ | Approximate 5-Year Flood Elevation |
| --- | Reconnected Side Channel | --- | Remove Road | --- | Approximate 5-Year Flood Elevation | | |



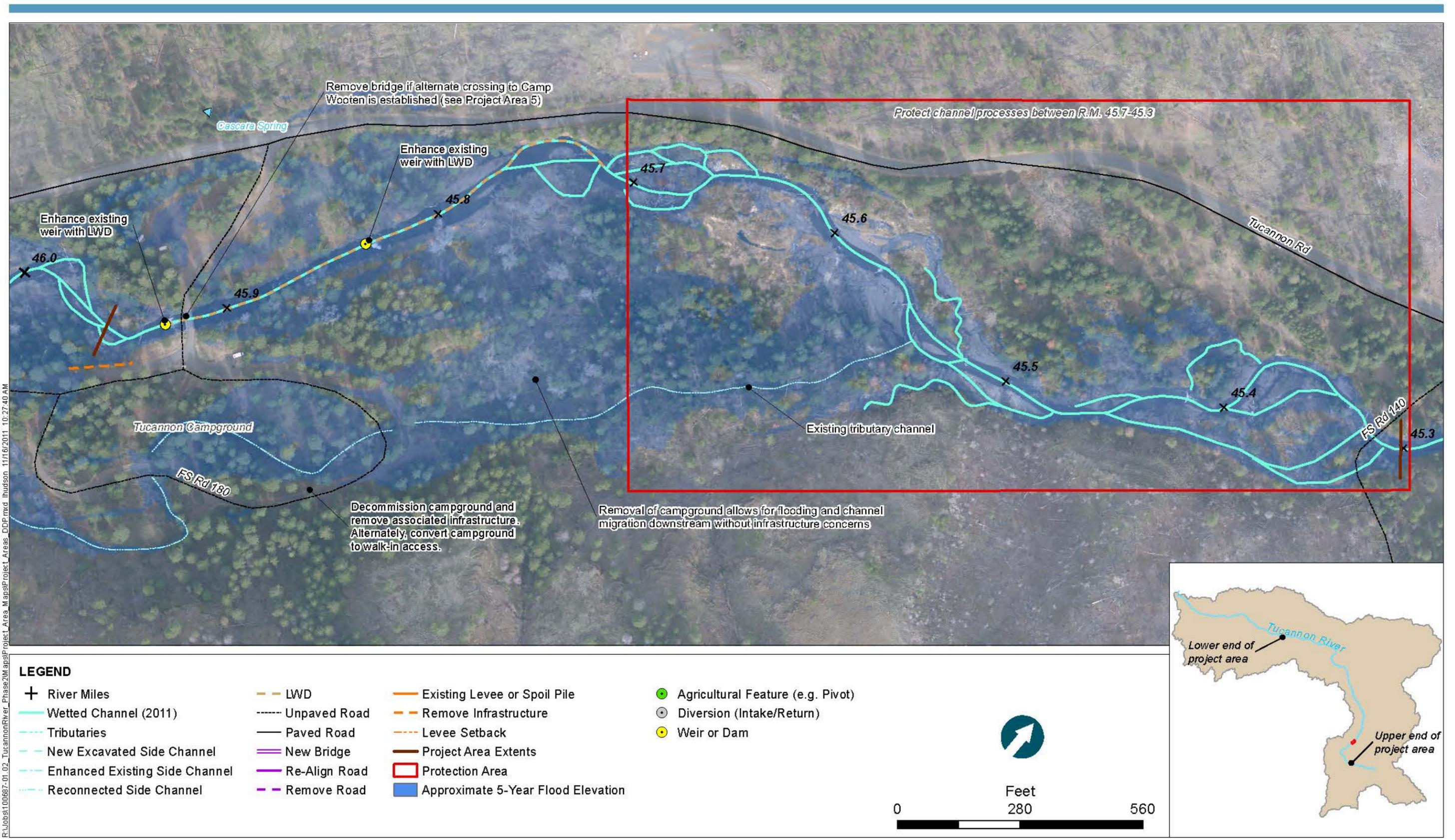
NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-4
 Project Area 4, River Mile 46.8 to 46.4
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-5
 Project Area 5, River Mile 46.4 to 45.95
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

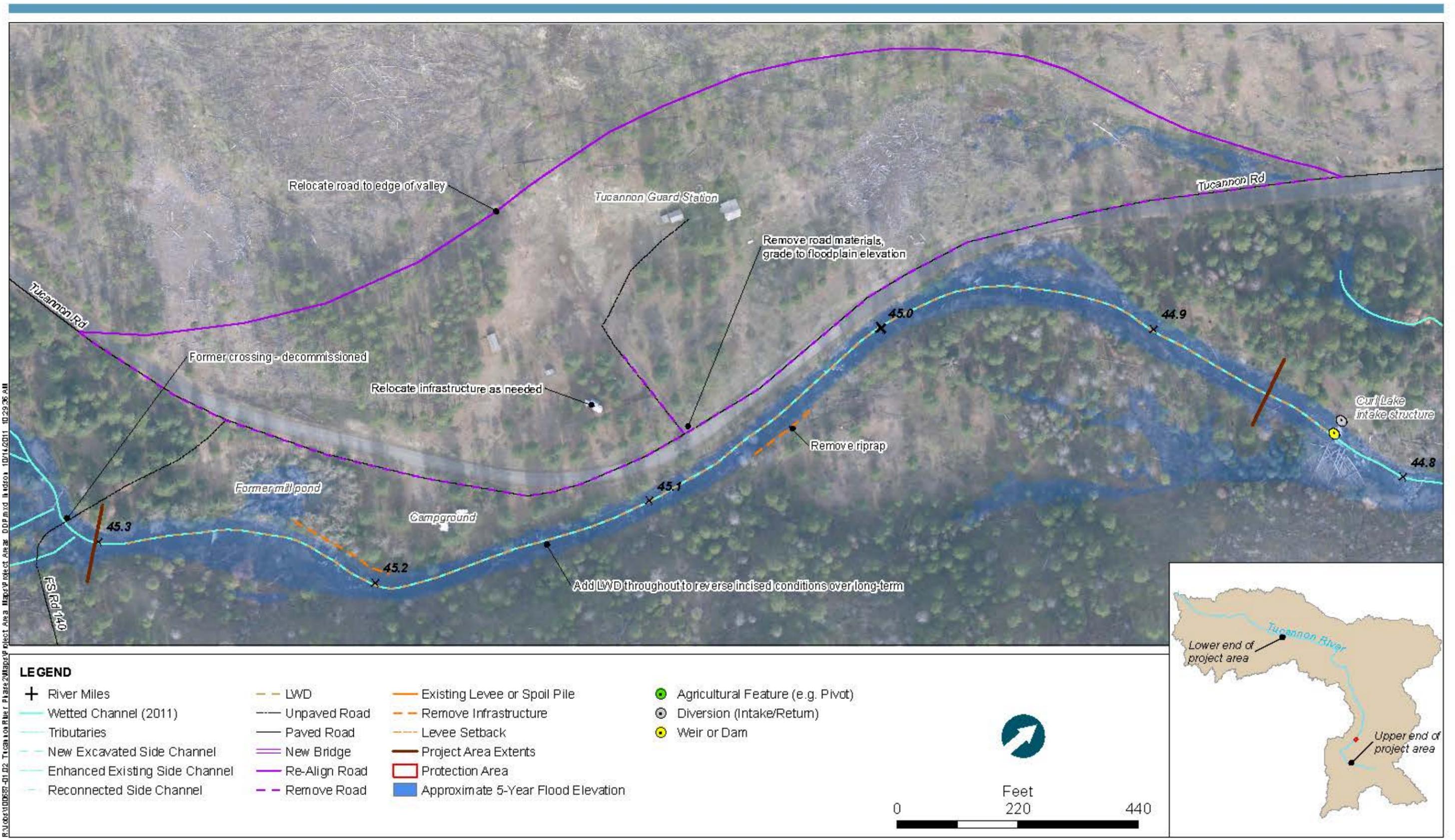


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NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-6
 Project Area 6, River Mile 45.95 to 45.3
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

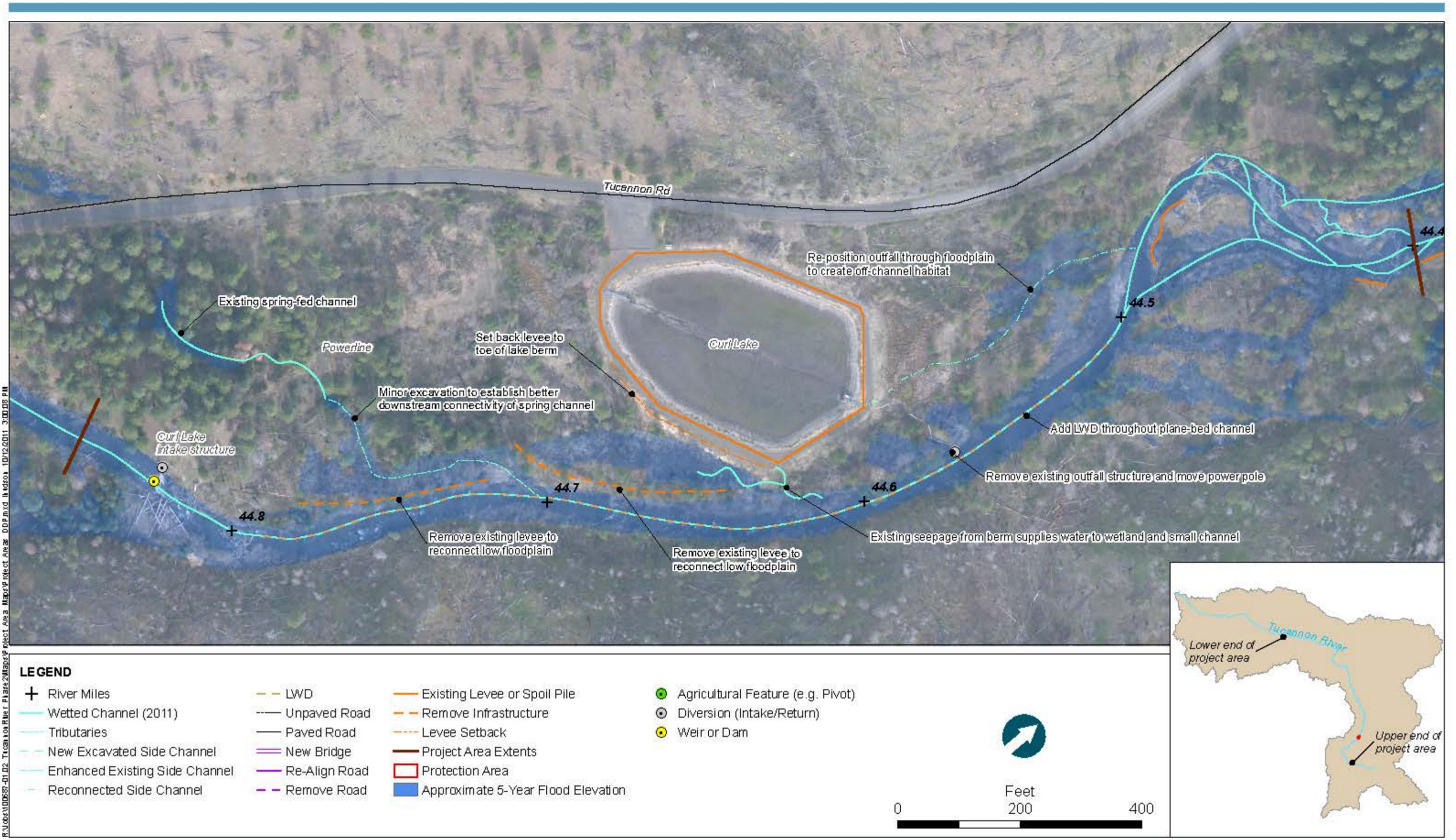


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NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-7
 Project Area 7, River Mile 45.3 to 44.85
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

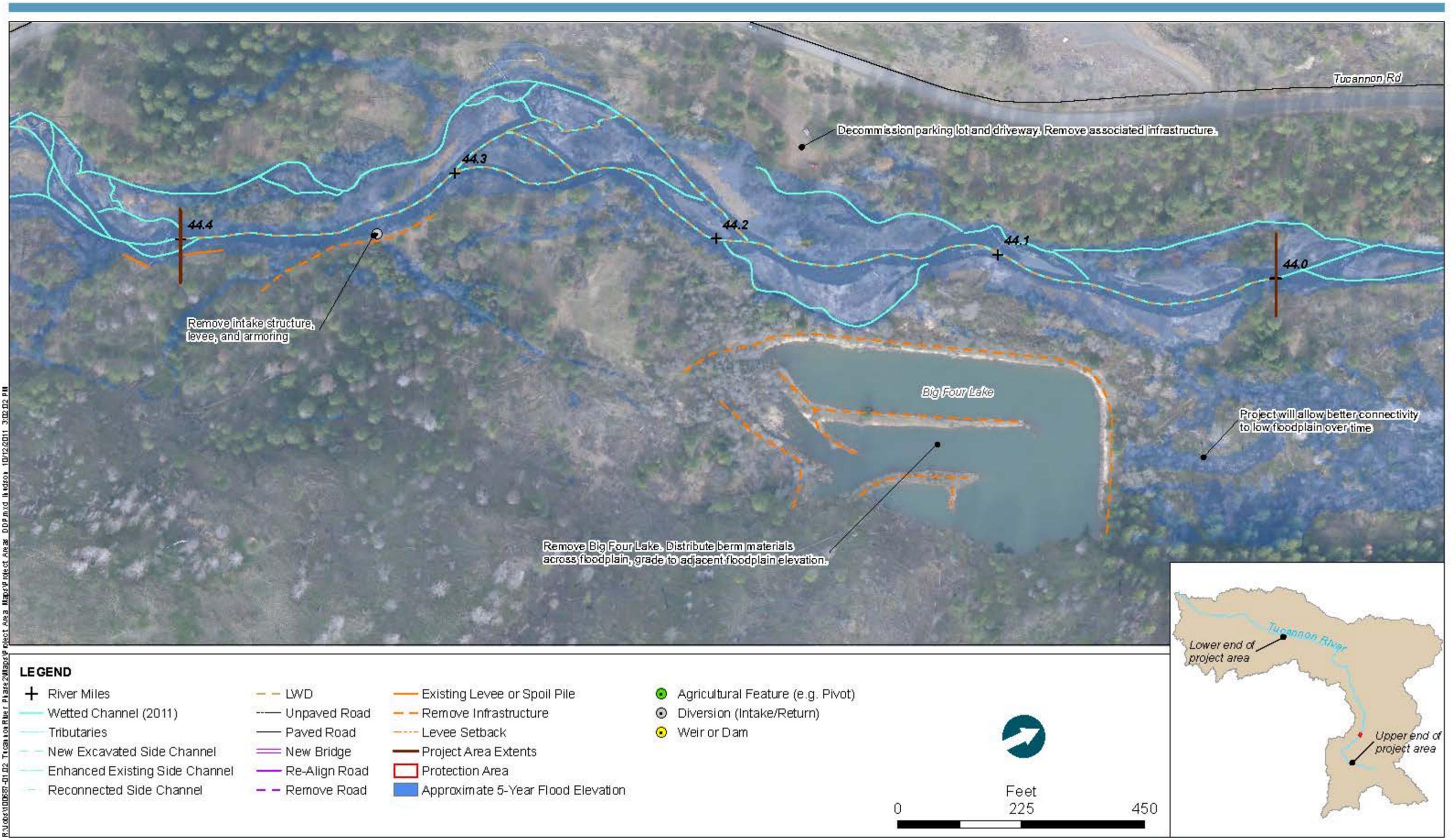


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NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-8
 Project Area 8, River Mile 44.85 to 44.4
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District



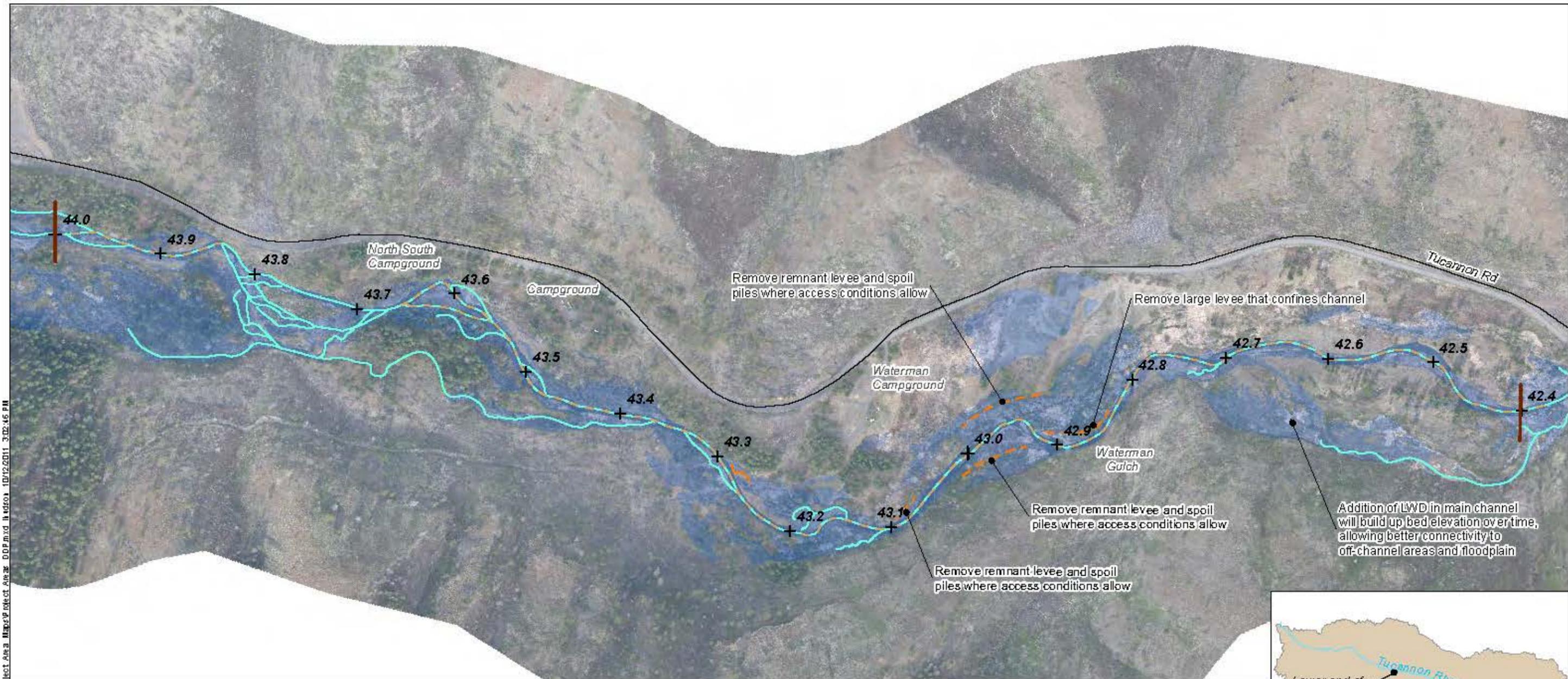
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Figure B-9

Project Area 9, River Mile 44.4 to 44.0
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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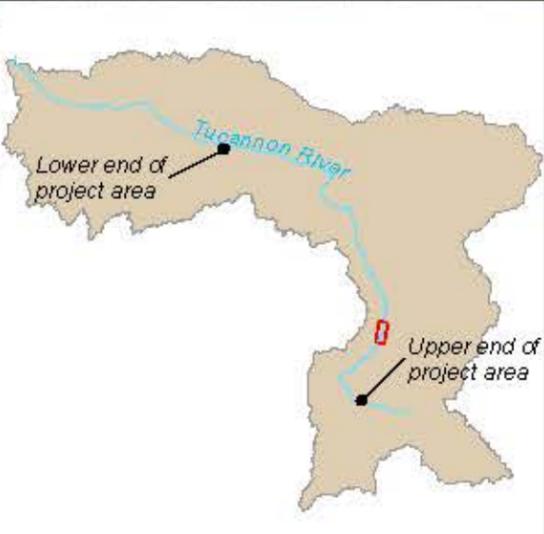


LEGEND

+ River Miles	--- LWD	--- Existing Levee or Spoil Pile	● Agricultural Feature (e.g. Pivot)
Wetted Channel (2011)	--- Unpaved Road	--- Remove Infrastructure	⊙ Diversion (Intake/Return)
Tributaries	--- Paved Road	--- Levee Setback	⊙ Weir or Dam
New Excavated Side Channel	--- New Bridge	--- Project Area Extents	
Enhanced Existing Side Channel	--- Re-Align Road	□ Protection Area	
Reconnected Side Channel	--- Remove Road	■ Approximate 5-Year Flood Elevation	



Feet
0 630 1,260

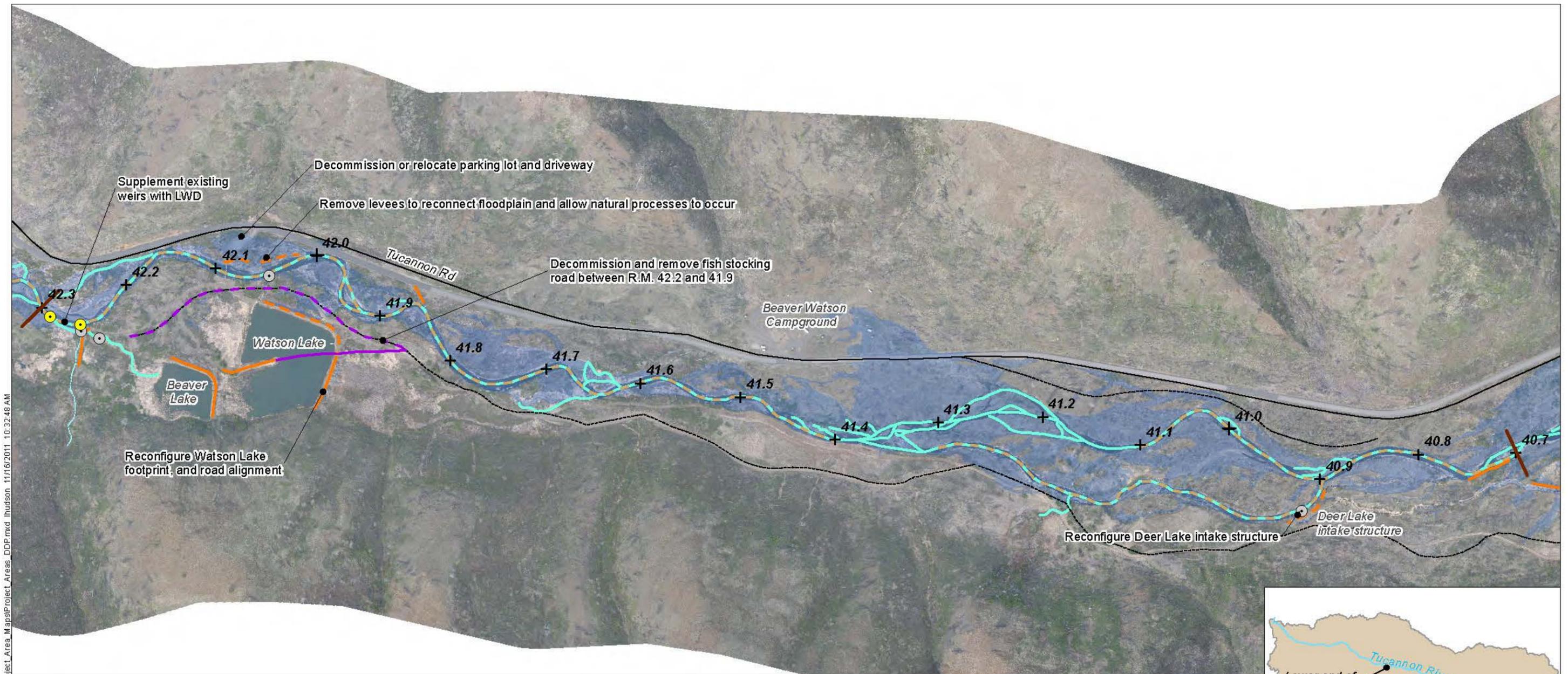




NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

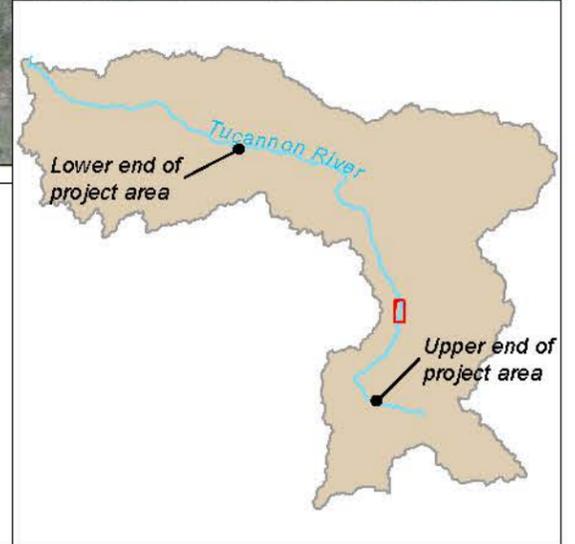
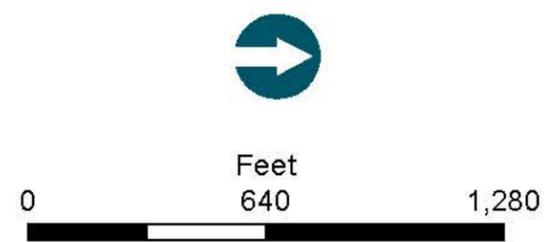
Figure B-10
 Project Area 10, River Mile 44.0 to 42.4
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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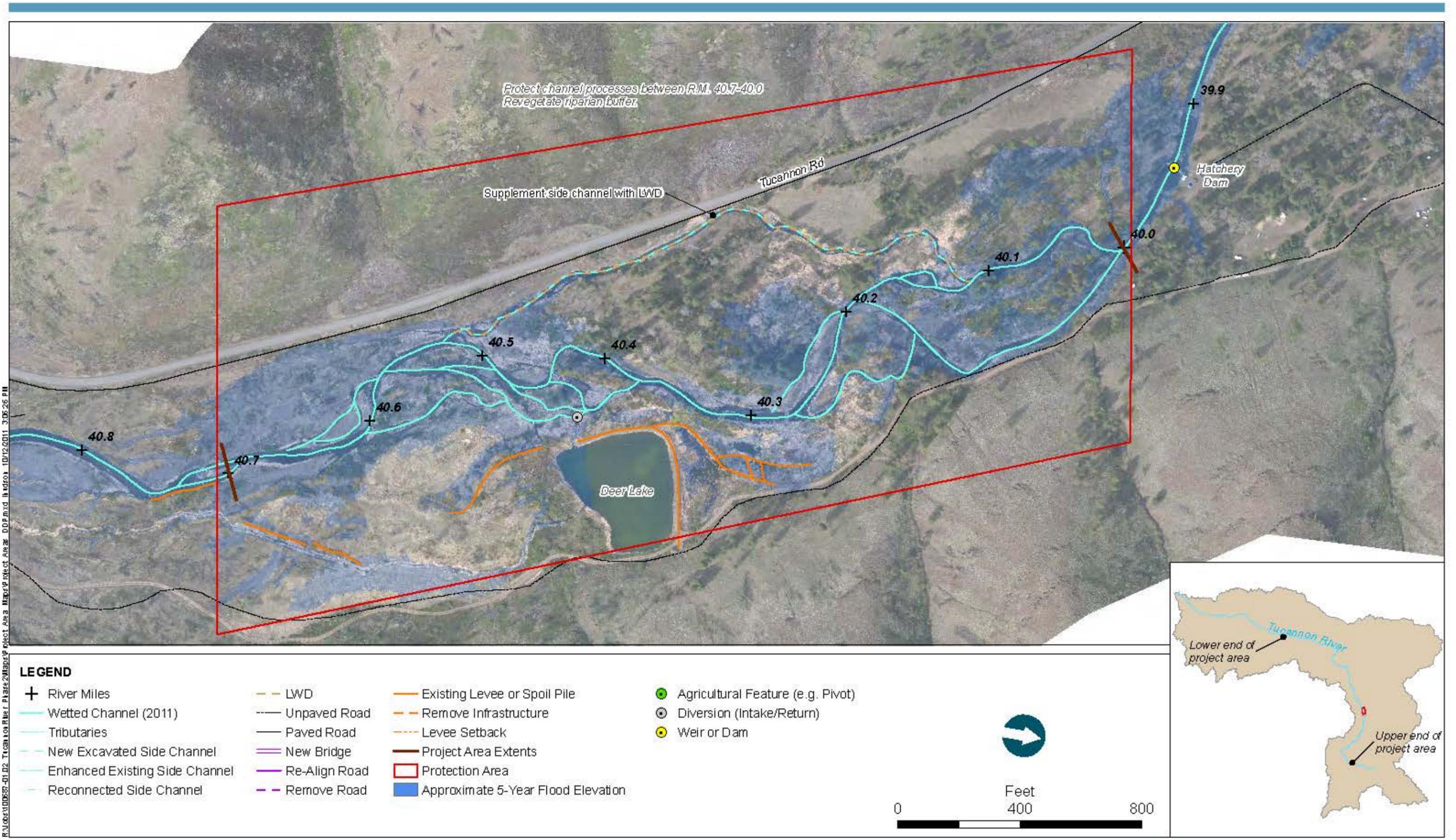
LEGEND

- | | | | | | | | |
|-----|--------------------------------|-----|---------------|-----|------------------------------------|---|-----------------------------------|
| + | River Miles | --- | LWD | — | Existing Levee or Spoil Pile | ● | Agricultural Feature (e.g. Pivot) |
| — | Wetted Channel (2011) | --- | Unpaved Road | --- | Remove Infrastructure | ○ | Diversion (Intake/Return) |
| --- | Tributaries | — | Paved Road | --- | Levee Setback | ● | Weir or Dam |
| --- | New Excavated Side Channel | — | New Bridge | --- | Project Area Extents | | |
| --- | Enhanced Existing Side Channel | — | Re-Align Road | --- | Protection Area | | |
| --- | Reconnected Side Channel | — | Remove Road | --- | Approximate 5-Year Flood Elevation | | |

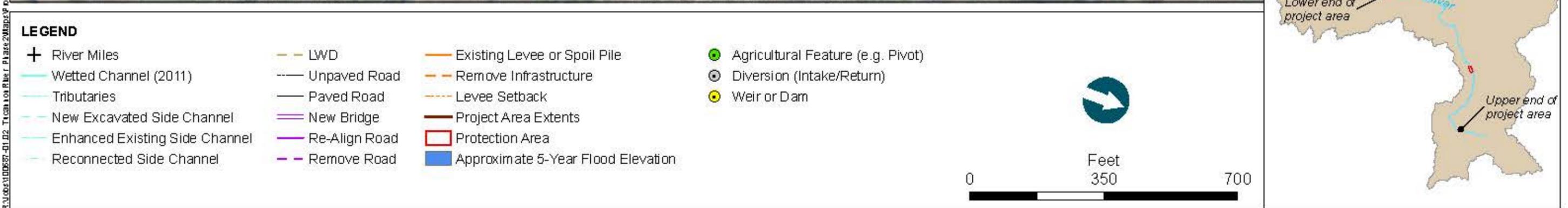
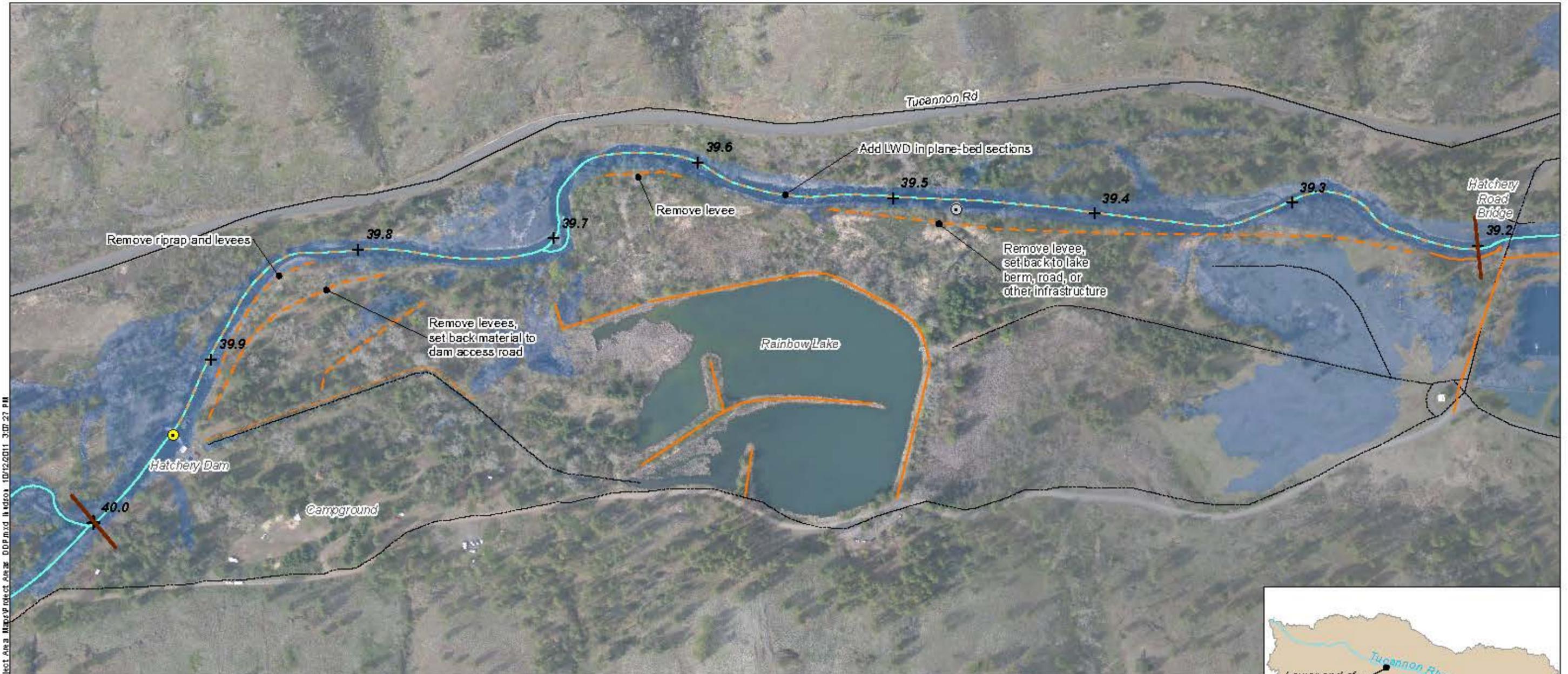


NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-11
 Project Area 11, River Mile 42.3 to 40.7
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District



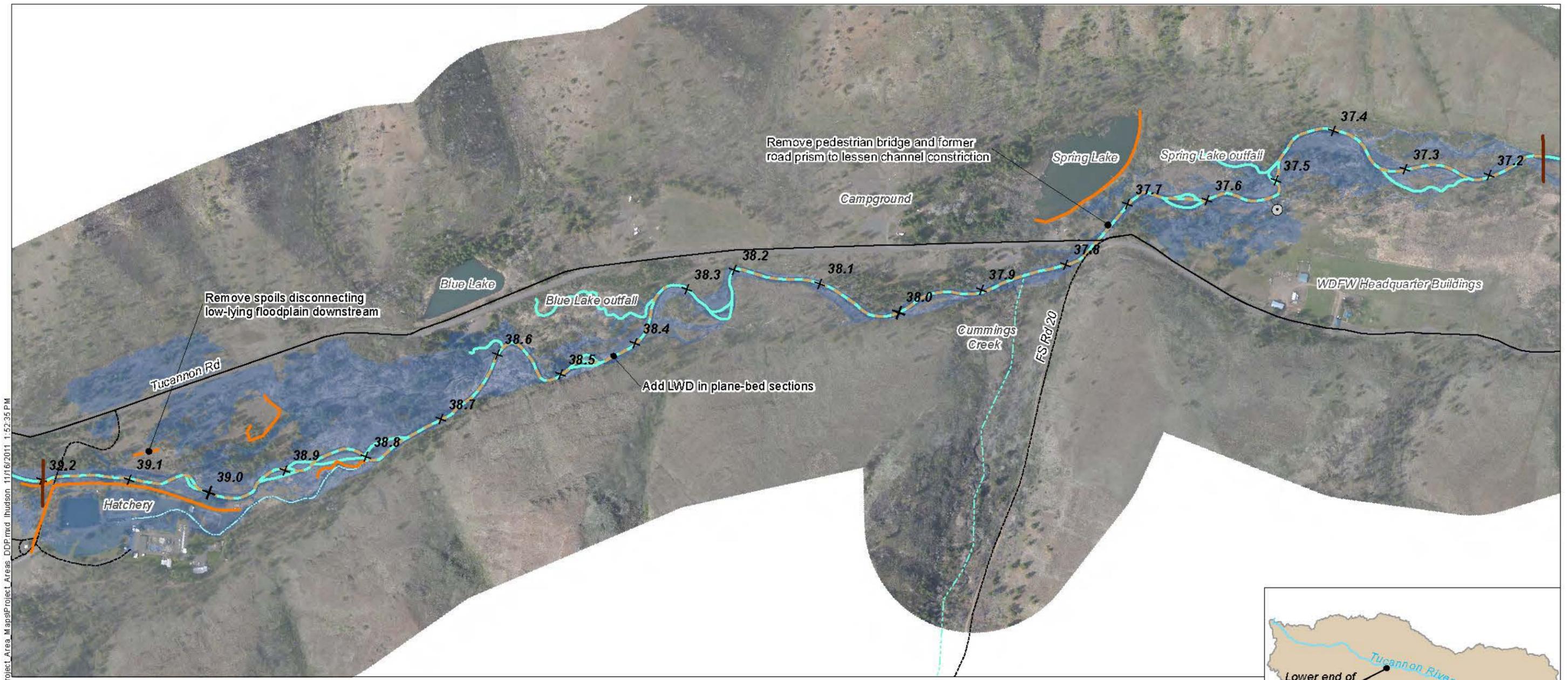
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NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

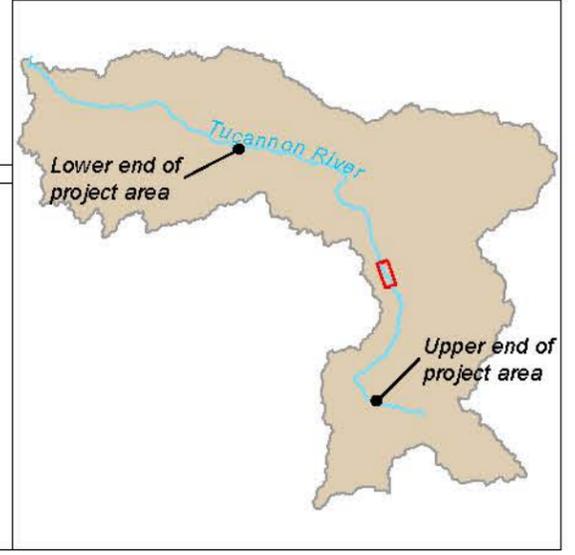
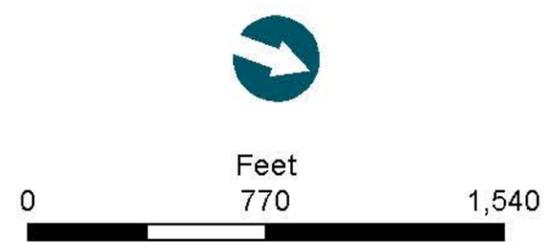
Figure B-13
 Project Area 13, River Mile 40.0 to 39.2
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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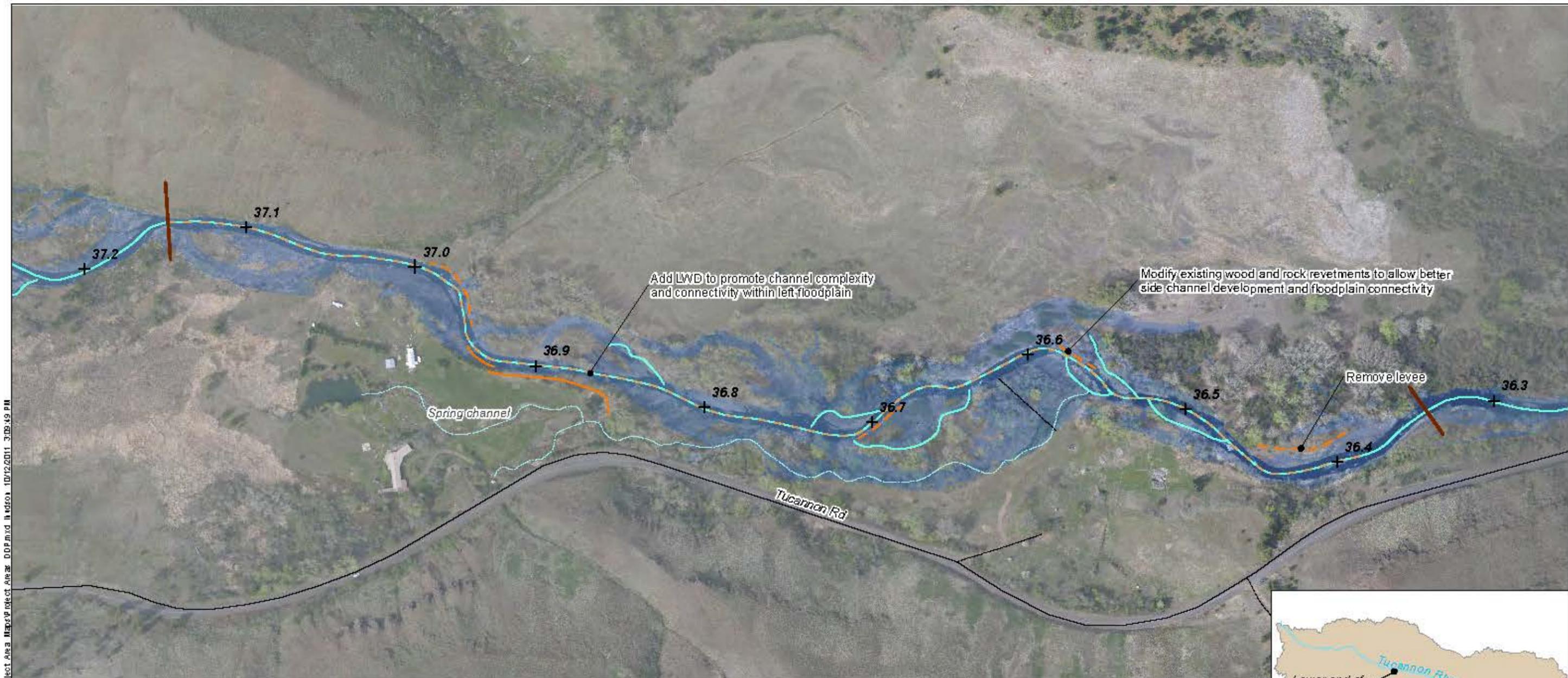
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|---|--------------------------------|---|---------------|---|------------------------------------|---|-----------------------------------|
| + | River Miles | — | LWD | — | Existing Levee or Spoil Pile | ● | Agricultural Feature (e.g. Pivot) |
| — | Wetted Channel (2011) | — | Unpaved Road | — | Remove Infrastructure | ⊙ | Diversion (Intake/Return) |
| — | Tributaries | — | Paved Road | — | Levee Setback | ● | Weir or Dam |
| — | New Excavated Side Channel | — | New Bridge | — | Project Area Extents | □ | Protection Area |
| — | Enhanced Existing Side Channel | — | Re-Align Road | — | Approximate 5-Year Flood Elevation | | |
| — | Reconnected Side Channel | — | Remove Road | | | | |



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-14
 Project Area 14, River Mile 39.2 to 37.15
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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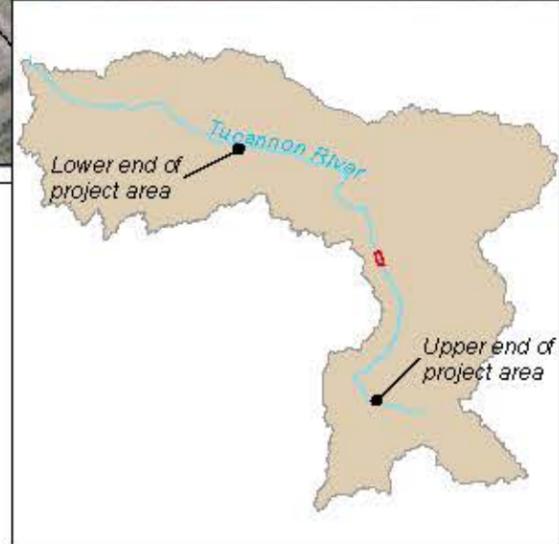


LEGEND

+ River Miles	- - - LWD	- - - Existing Levee or Spoil Pile	● Agricultural Feature (e.g. Pivot)
Wetted Channel (2011)	— Unpaved Road	- - - Remove Infrastructure	⊙ Diversion (Intake/Return)
Tributaries	— Paved Road	- - - Levee Setback	⊙ Weir or Dam
New Excavated Side Channel	— New Bridge	- - - Project Area Extents	
Enhanced Existing Side Channel	— Re-Align Road	□ Protection Area	
Reconnected Side Channel	- - - Remove Road	■ Approximate 5-Year Flood Elevation	



Feet
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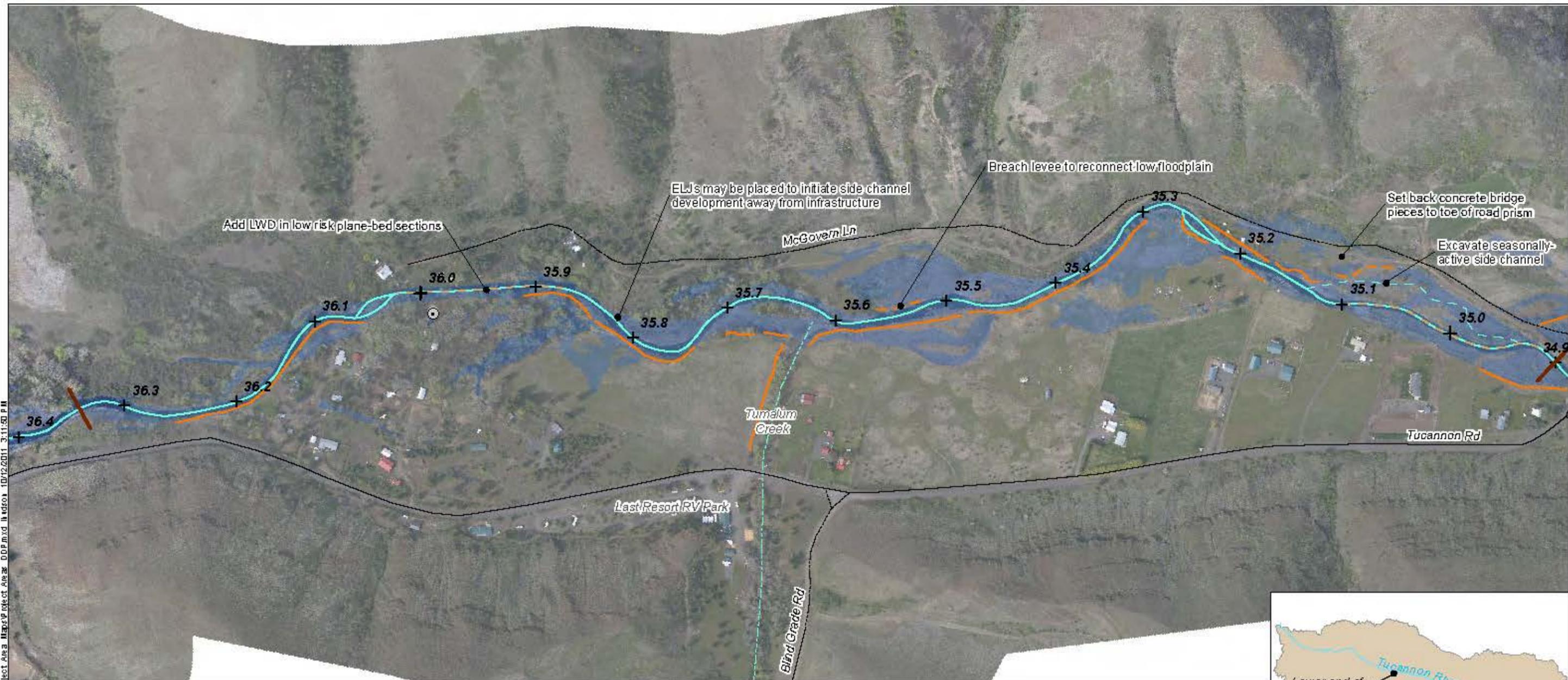




NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

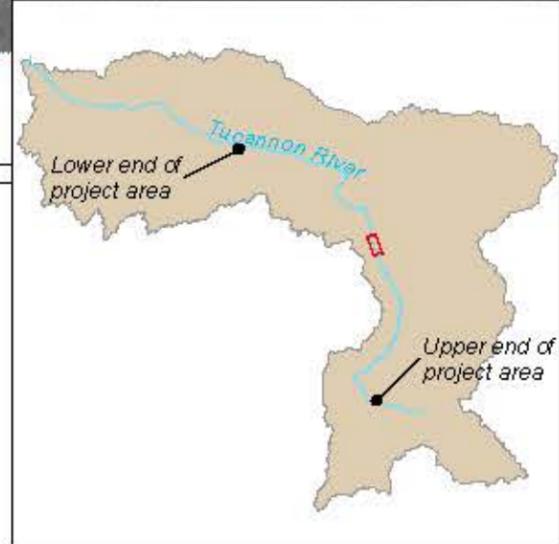
Figure B-15
 Project Area 15, River Mile 37.15 to 36.35
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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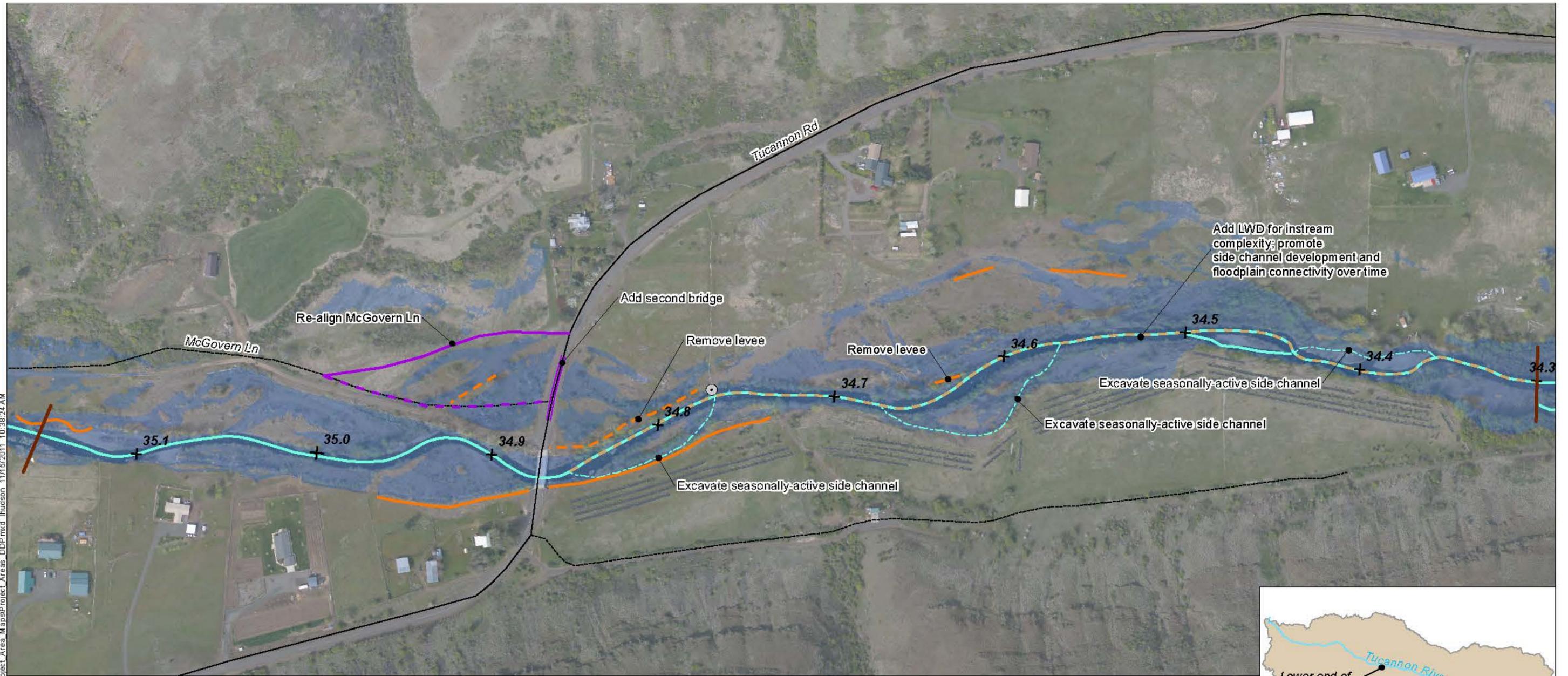
- | | | | |
|--------------------------------|-------------------|--------------------------------------|-------------------------------------|
| + River Miles | - - - LWD | - - - Existing Levee or Spoil Pile | ● Agricultural Feature (e.g. Pivot) |
| Wetted Channel (2011) | — Unpaved Road | - - - Remove Infrastructure | ⊙ Diversion (Intake/Return) |
| Tributaries | — Paved Road | - - - Levee Setback | ● Weir or Dam |
| New Excavated Side Channel | — New Bridge | - - - Project Area Extents | |
| Enhanced Existing Side Channel | — Re-Align Road | □ Protection Area | |
| Reconnected Side Channel | - - - Remove Road | ■ Approximate 5-Year Flood Elevation | |



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

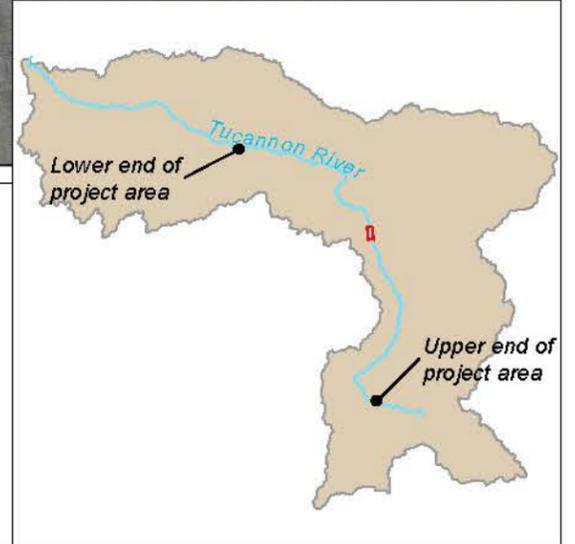
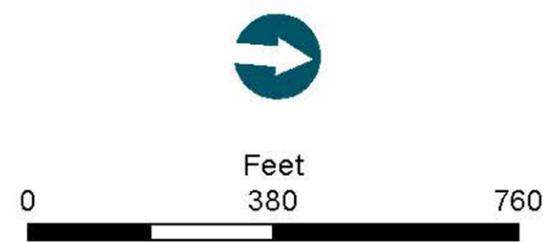
Figure B-16
 Project Area 16, River Mile 36.35 to 34.9
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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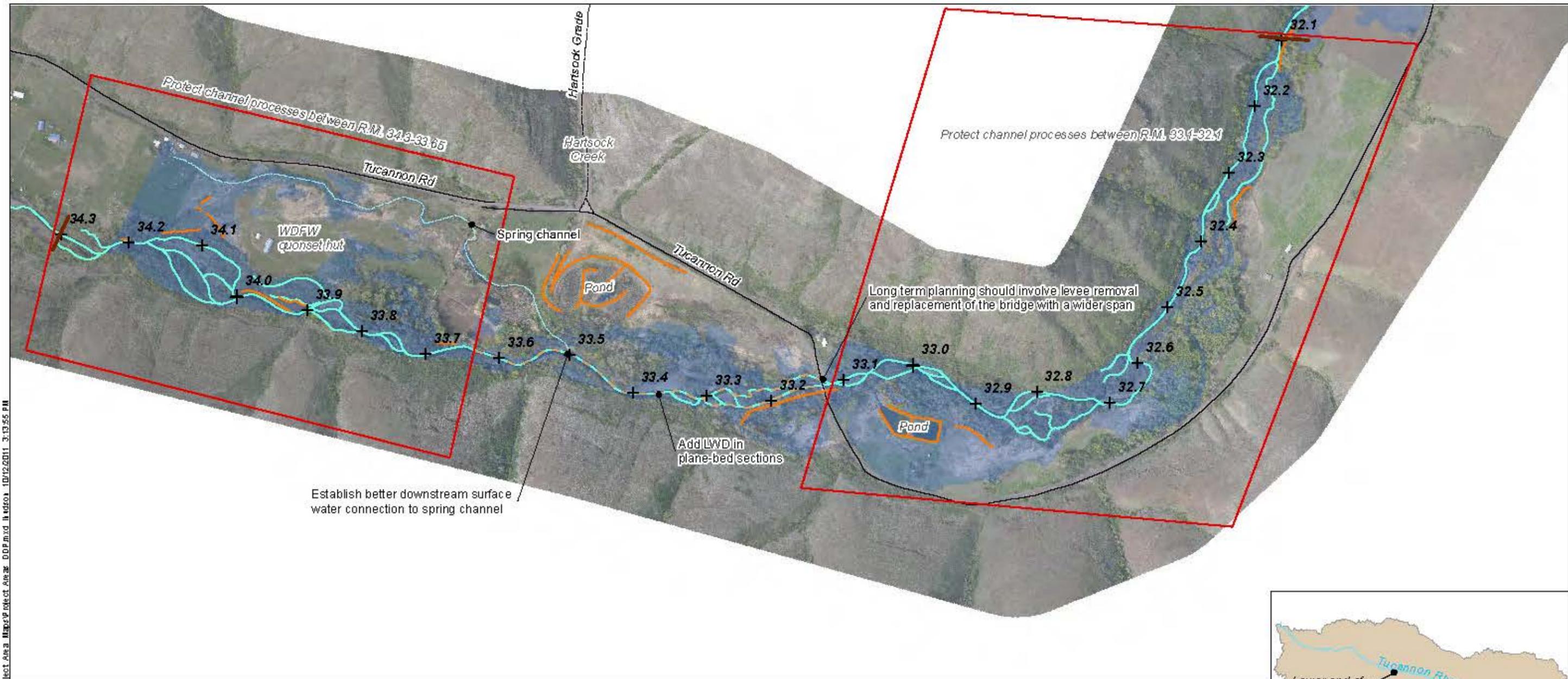
- | | | | | | | | |
|-----|--------------------------------|-----|---------------|-------|------------------------------------|---|-----------------------------------|
| + | River Miles | --- | LWD | — | Existing Levee or Spoil Pile | ● | Agricultural Feature (e.g. Pivot) |
| — | Wetted Channel (2011) | --- | Unpaved Road | - - - | Remove Infrastructure | ⊙ | Diversion (Intake/Return) |
| --- | Tributaries | — | Paved Road | - - - | Levee Setback | ● | Weir or Dam |
| --- | New Excavated Side Channel | — | New Bridge | — | Project Area Extents | □ | Protection Area |
| --- | Enhanced Existing Side Channel | — | Re-Align Road | — | Approximate 5-Year Flood Elevation | | |
| --- | Reconnected Side Channel | — | Remove Road | | | | |



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-17
 Project Area 17, River Mile 35.15 to 34.3
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District

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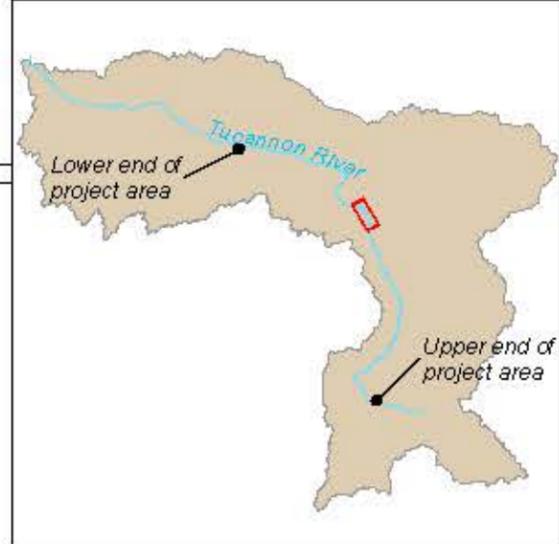
Establish better downstream surface water connection to spring channel

Long term planning should involve levee removal and replacement of the bridge with a wider span

Add LWD in plane-bed sections

LEGEND

- | | | | |
|--------------------------------|-------------------|--------------------------------------|-------------------------------------|
| + River Miles | --- LWD | --- Existing Levee or Spoil Pile | ● Agricultural Feature (e.g. Pivot) |
| Wetted Channel (2011) | --- Unpaved Road | --- Remove Infrastructure | ⊙ Diversion (Intake/Return) |
| Tributaries | --- Paved Road | --- Levee Setback | ● Weir or Dam |
| New Excavated Side Channel | --- New Bridge | --- Project Area Extents | |
| Enhanced Existing Side Channel | --- Re-Align Road | □ Protection Area | |
| Reconnected Side Channel | --- Remove Road | ■ Approximate 5-Year Flood Elevation | |



NOTES:
 1. Aerial photo collected in 2010 provided by CCD.
 2. Roads from WA DNR.
 3. Tributary alignments from DOE.
 4. Locations of mapped features are approximate.
 This figure is to be used for conceptual purposes only.

Figure B-18
 Project Area 18, River Mile 34.3 to 32.1
 Tucannon River Habitat Restoration Design, Preliminary Project Areas Memorandum
 Columbia Conservation District