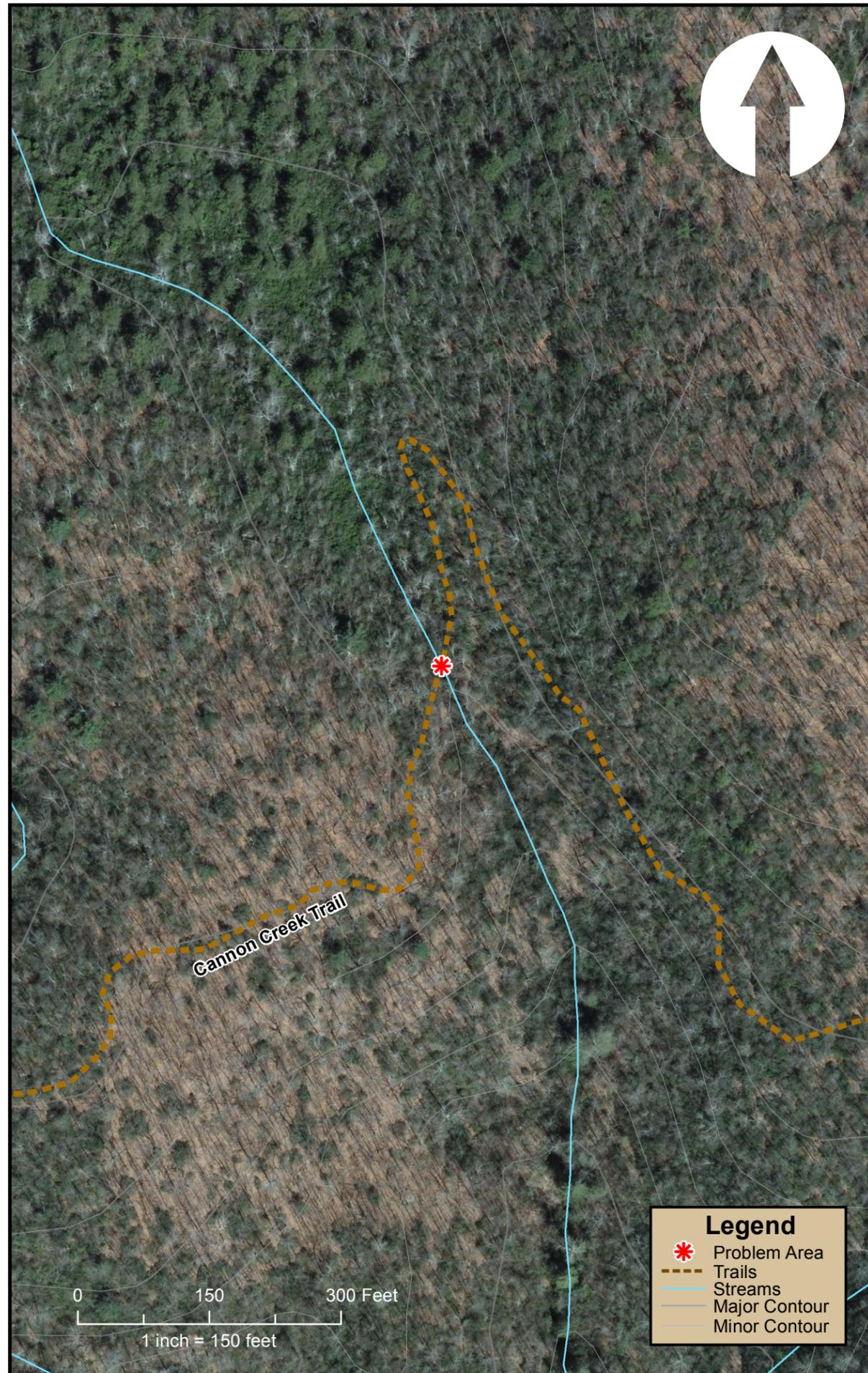


APPENDIX F

Area of Concern Assessments

Area of Concern – Site: P01

Map Grid Location: B9 Site visit date/ team): 4/13/15/ BK, JZ. Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Stream crossing at Cannon Creek Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Cannon Creek Trail
- | | |
|---|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, feces, fecal) |

5. Other Problem Area(s) (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

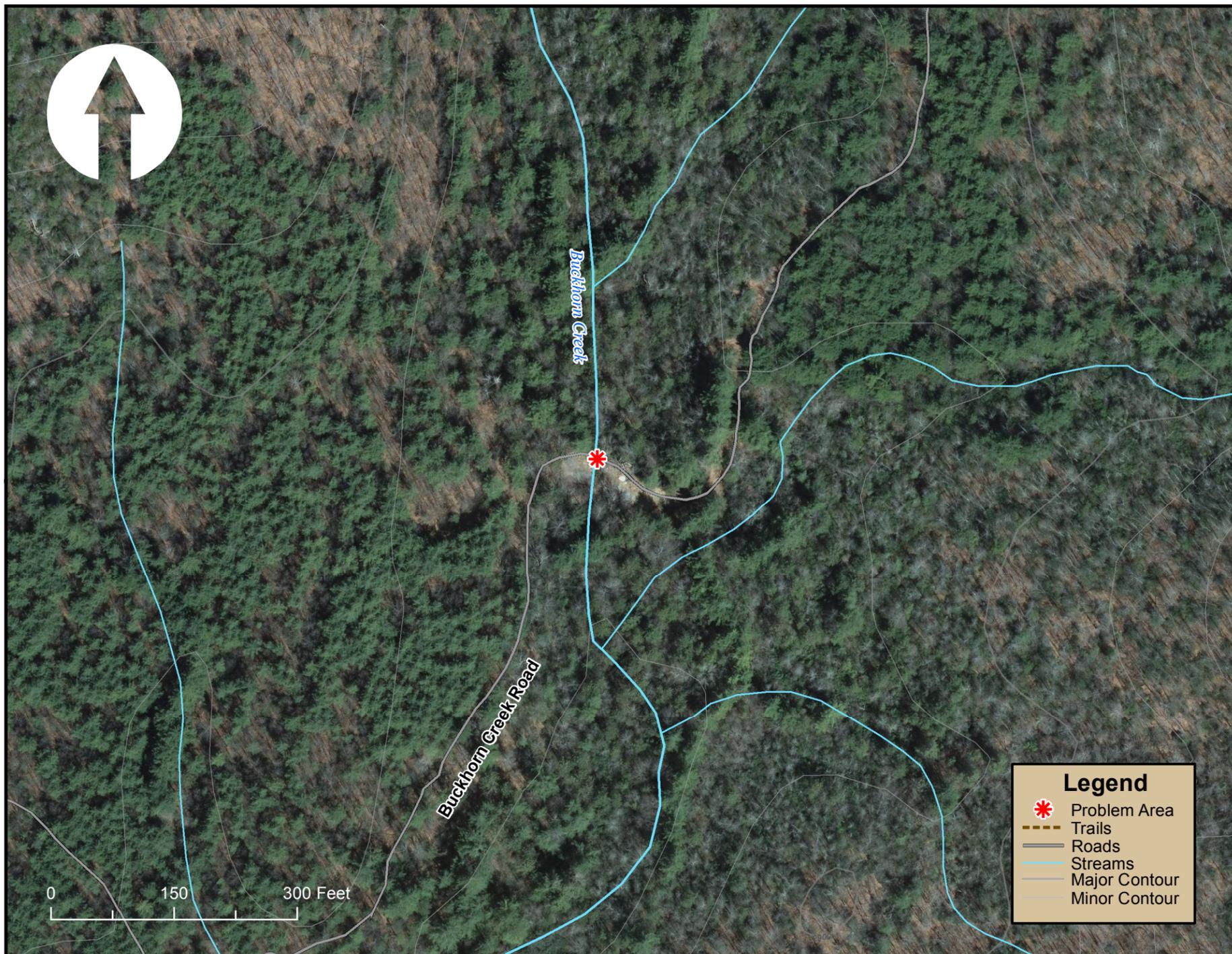
Comments

Minor erosion and sediment deposition due to trail crossing of stream.



Area of Concern – Site: P02

Map Grid Location: C9 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): 0.52
 Name & Location: Buckhorn Creek Road at Buckhorn Creek



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Buckhorn Creek Road
- | | |
|---|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) (list contributing factors)

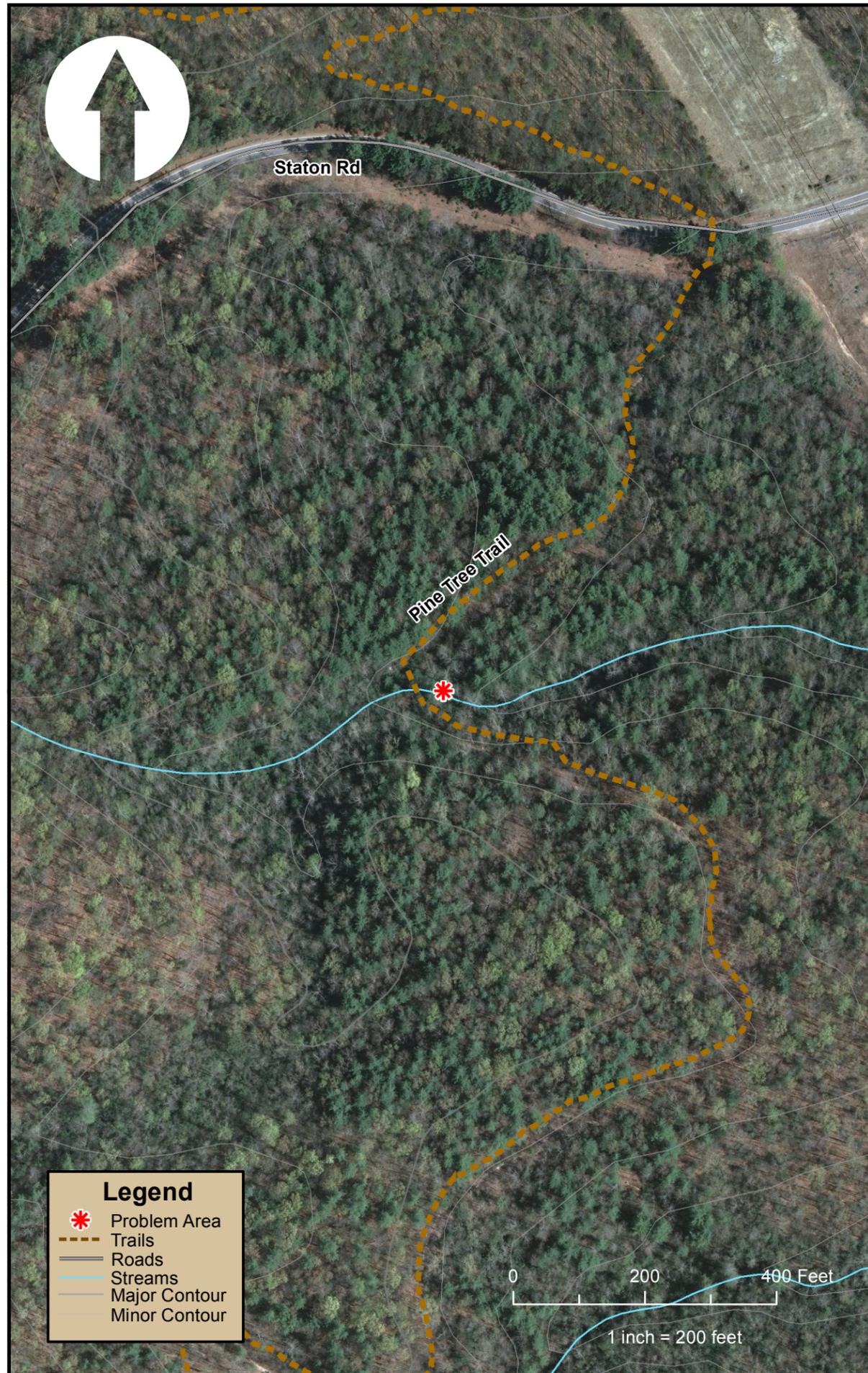
Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Road crossing of creek appears to be overwide and contributing fine sediment. Re-design of crossing could improve water quality.





Area of Concern – Site: P03

Map Grid Location: D7 Site visit date/ team): 8/26/15 / JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Pine Tree Trail

1. **Culvert (diameter/material/length):** Not Observed
 - clogged
 - crushed
 - lack of natural bed
 - safety hazard
 - aquatic organism passage/ perched
 - erosion (upstream/ downstream)
 - piping
 - overtopping
2. **Trail/ Road Impact (trail/ road name):** Pine Tree Trail
 - stormwater input
 - bridge
 - unstable trail crossing
 - safety hazard
 - missing vegetation
 - sediment input
 - utilities
 - erosion
 - human impact (hiking/biking)
 - equine/ dog impacts
3. **Upland/ Stormwater**
 - nonpoint source pollution
 - pollutant point source
 - upland erosion
 - unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 - erosion
 - equine impact
 - safety hazard
 - lack of vegetation
 - human impact (hiking/biking)
 - water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

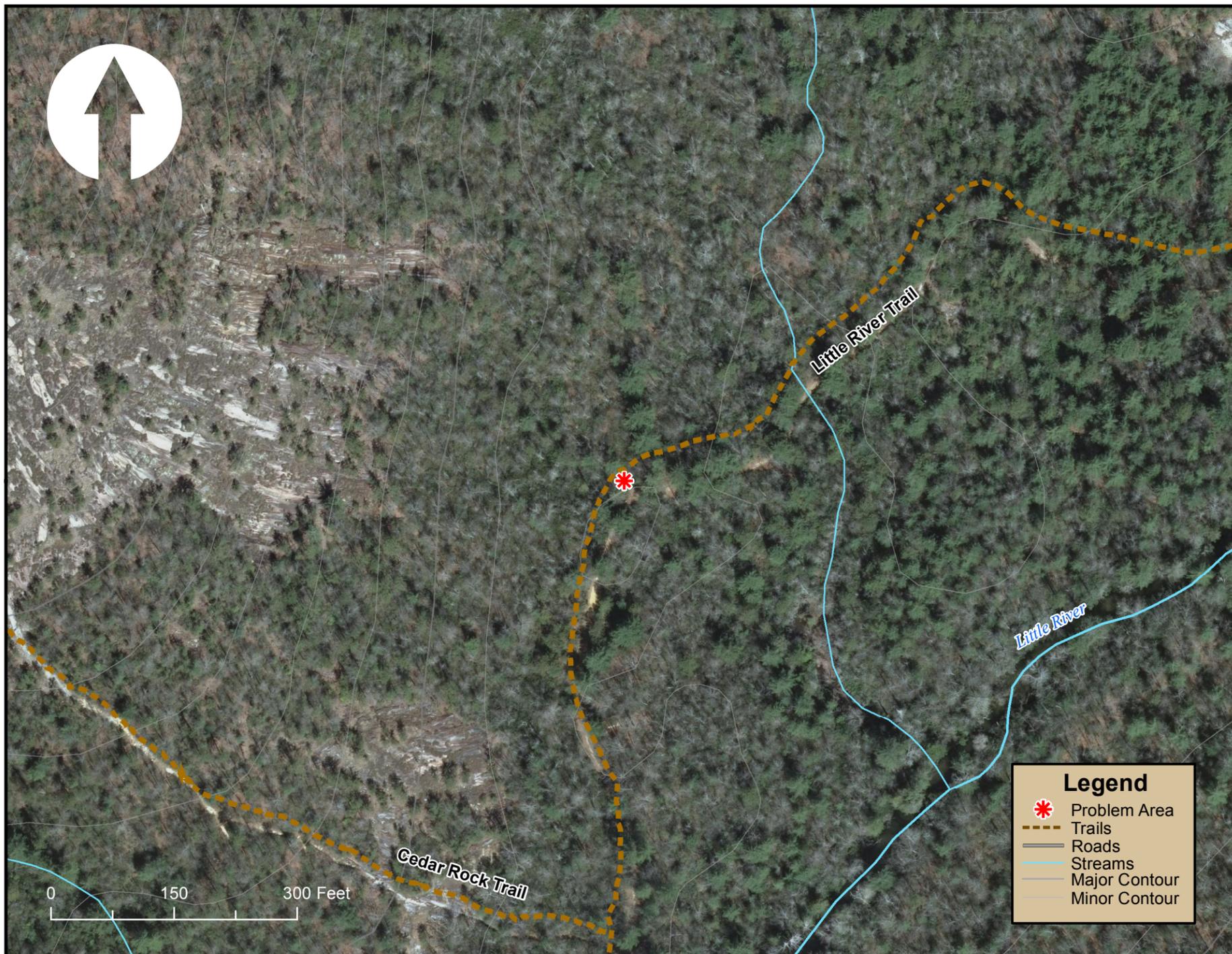
- relocate trail/close trail/road
- vegetation/ shoreline planting
- stormwater treatment
- human/ animal exclusion
- signs
- maintenance
- trail/road crossing improvement
- mechanical grading
- animal watering
- culvert rehabilitation/ replacement
- culvert daylighting
- bridge replacement/improvement

Comments

Some sediment input from trail. Channel bank erosion downstream of trail at culvert outlet.

Area of Concern – Site: P04

Map Grid Location: D9 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Little River Trail



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** Little River Trail

| | |
|---|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |
3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

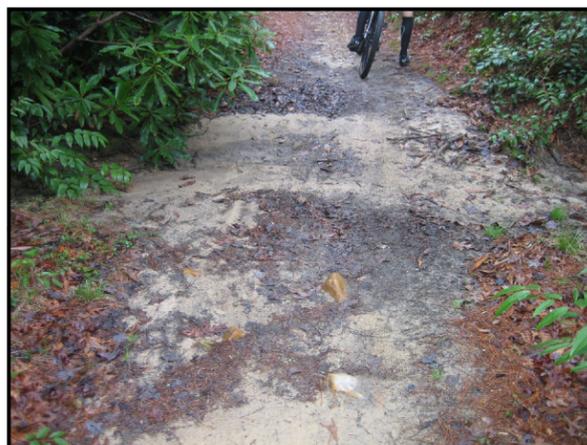
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

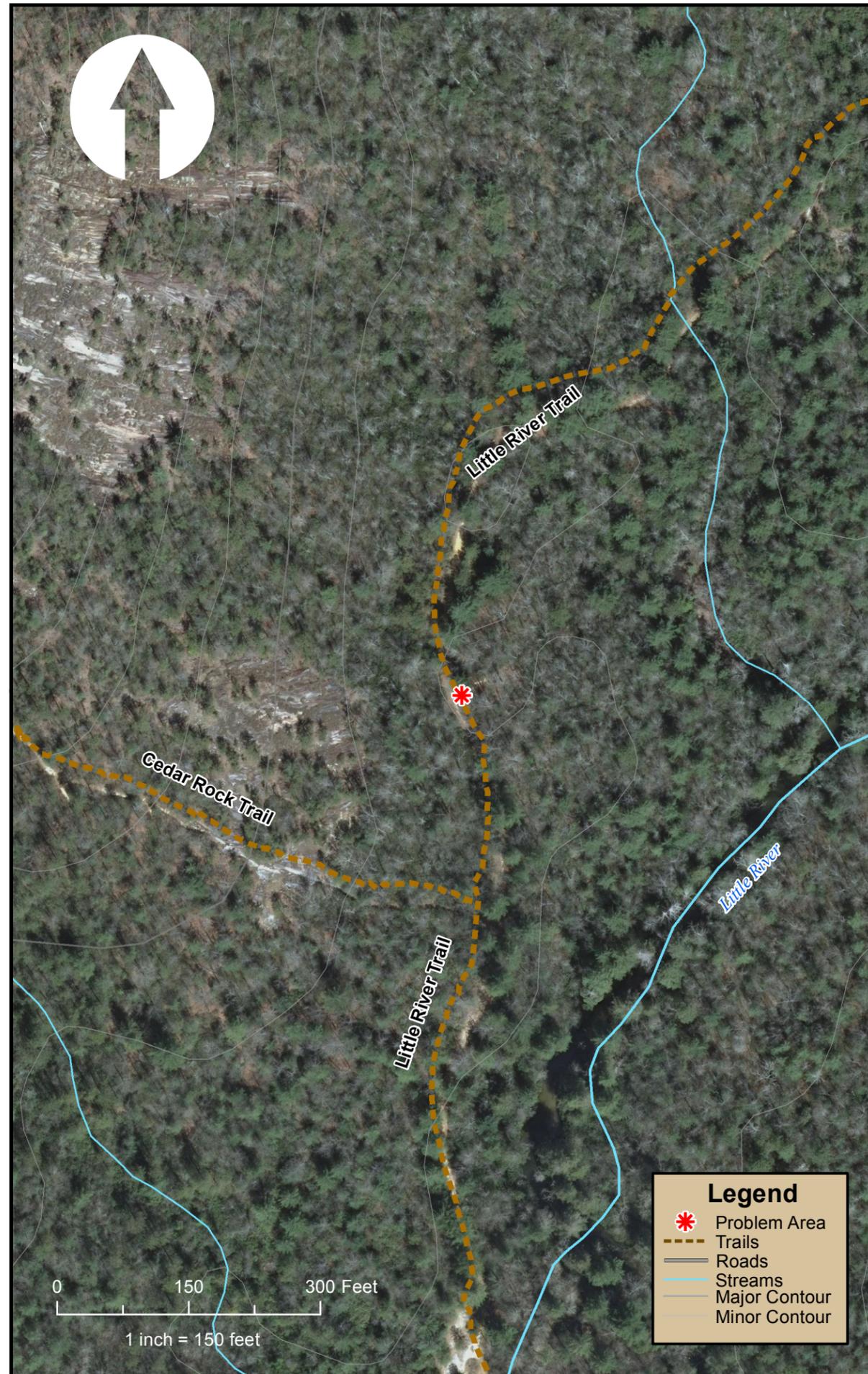
Comments

Stormwater drainage crosses Little River Trail, with trail serving as sediment source to Little River.



Area of Concern – Site: P05

Map Grid Location: D9 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Little River Trail



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Little River Trail

| | |
|---|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

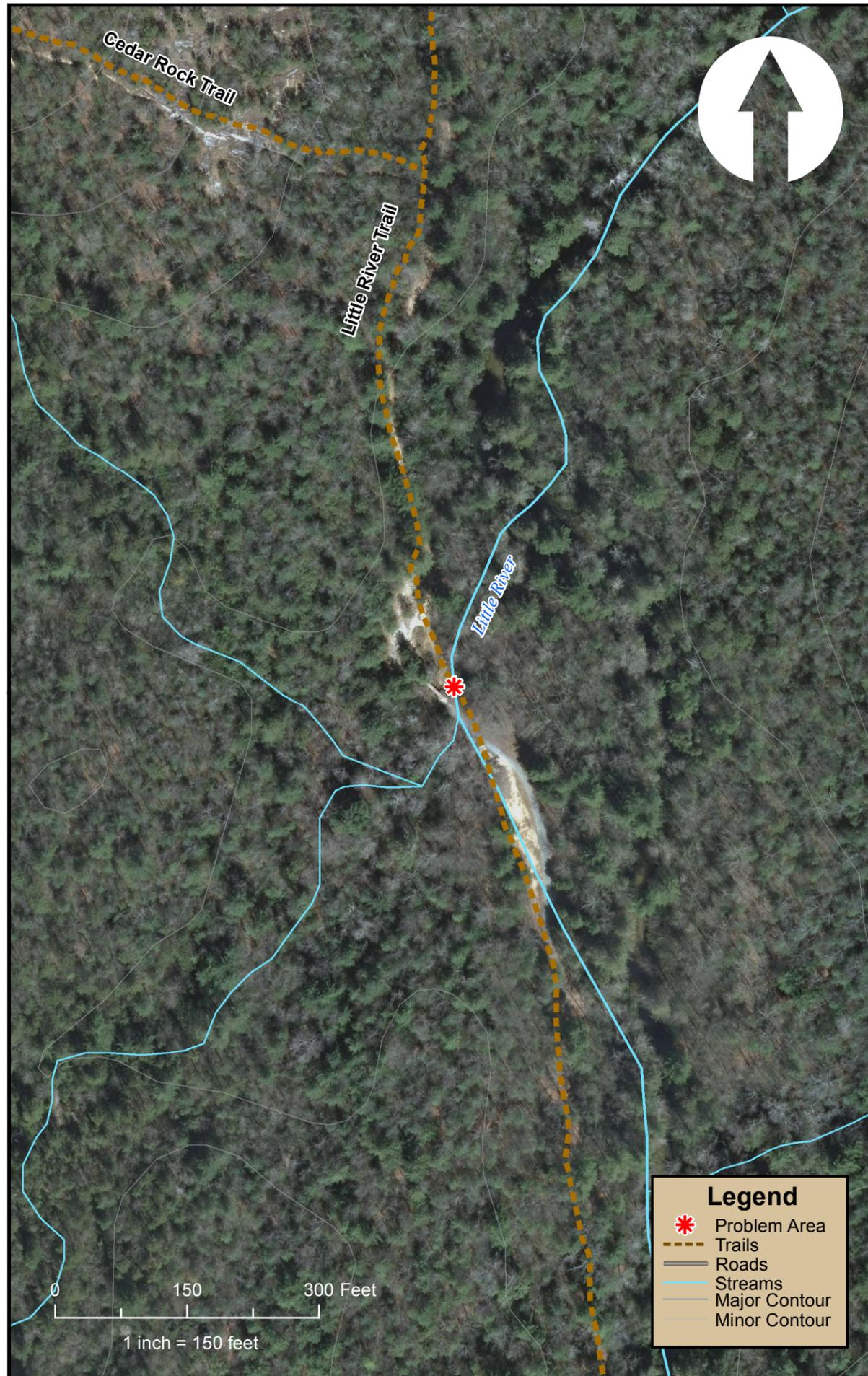
- Potential Solutions**
- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Stormwater drainage crosses Little River Trail, with trail serving as sediment source to Little River.



Area of Concern – Site: P06

Map Grid Location: D10 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): 1.1
 Name & Location: Bridge/ crossing near Little River



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Little River Trail
- | | |
|---|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input checked="" type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input checked="" type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input checked="" type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input checked="" type="checkbox"/> bridge replacement/improvement |

Comments
 Tributary to Little River is crossed by bridge and ford. Bridge is in poor condition. Ford is over widened with fine sediment in streambed. Entire crossing could be reconstructed for increased stability/ safety.



Area of Concern – Site: P07

Map Grid Location: D10 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): 0.89
 Name & Location: Culvert under Corn Mill Shoals Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Corn Mill Shoals Trail
- | | |
|--|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

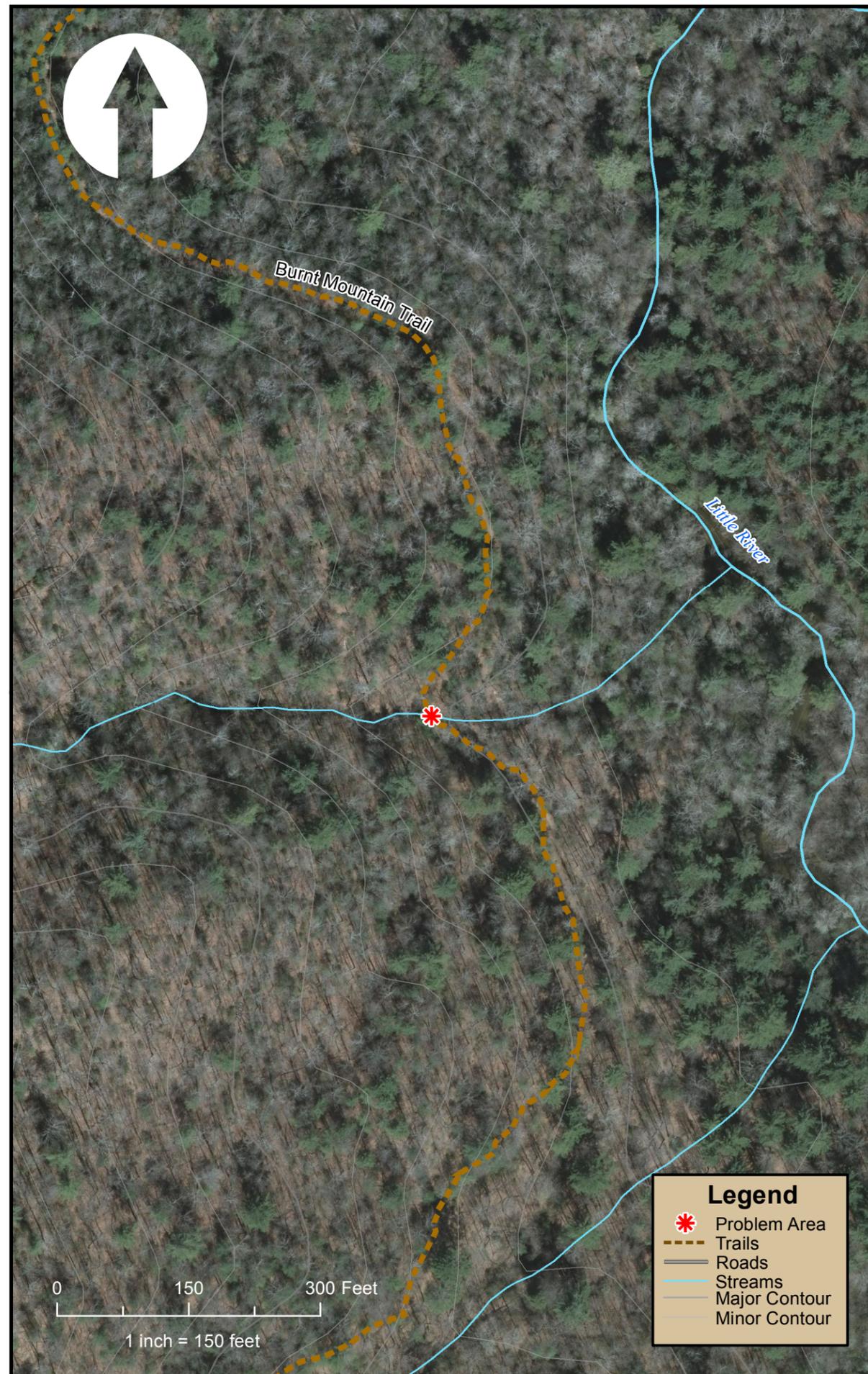
Comments

Minor sediment/ stormwater input to stream at trail crossing – install vegetation and/ or regrade trail for improvement.



Area of Concern – Site: P08

Map Grid Location: D11 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Burnt Mountain Trail



1. **Culvert (diameter/material/length):** 12"/ CPP

| | |
|--|--|
| <input checked="" type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input checked="" type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** _____

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input checked="" type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Stream banks eroded, especially upstream of culvert. Culvert appears to be clogged with baseflow piping through earth.

Legend

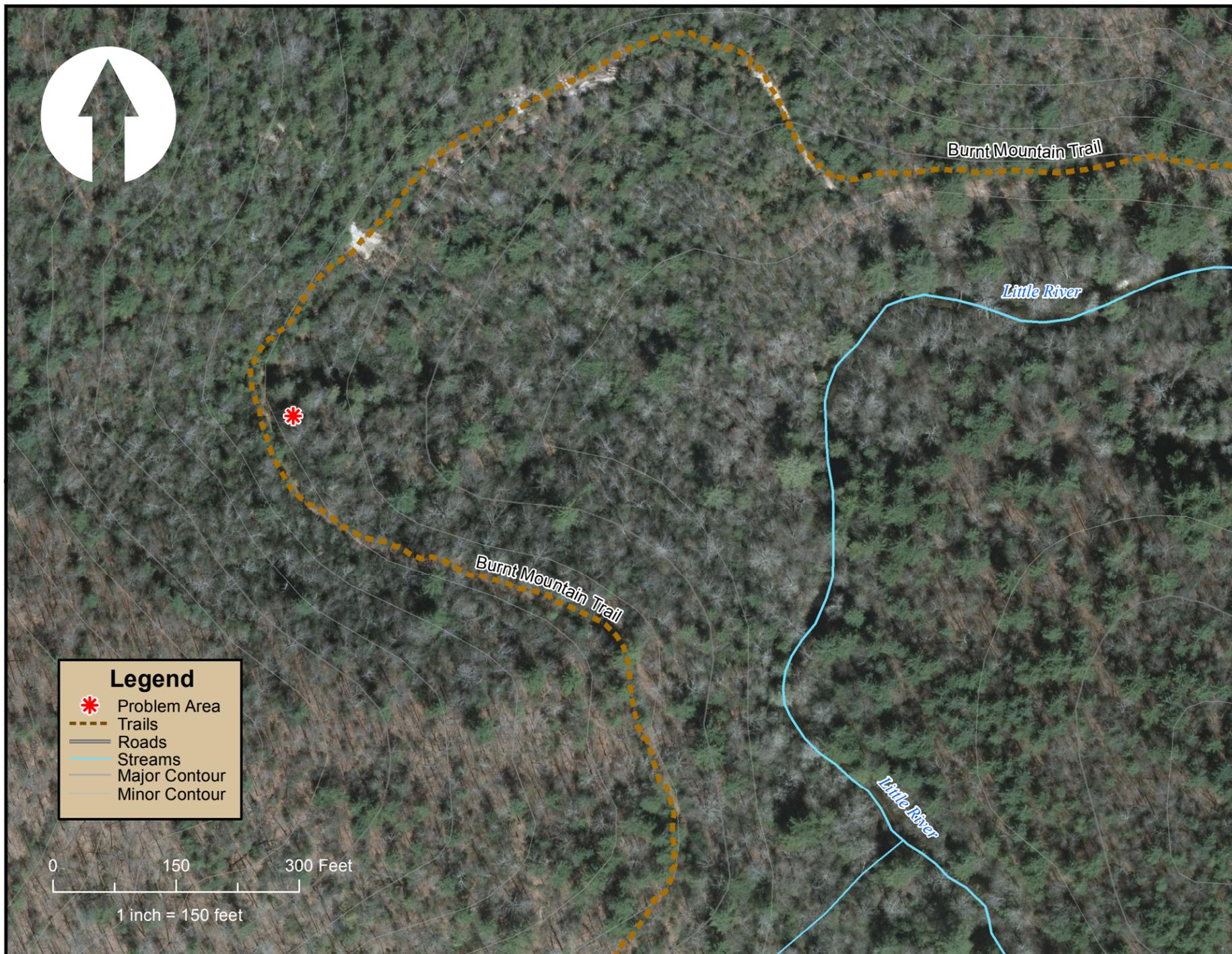
- * Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

0 150 300 Feet
 1 inch = 150 feet



Area of Concern – Site: P09

Map Grid Location: D11 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Burnt Mountain Trail



1. **Culvert (diameter/material/length):** 12"/ CPP

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** _____

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |
3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

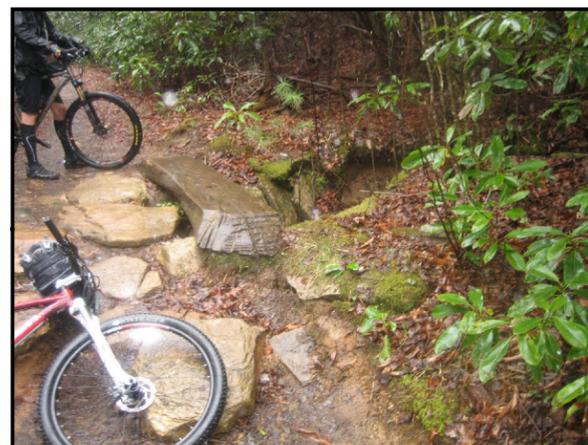
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input checked="" type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

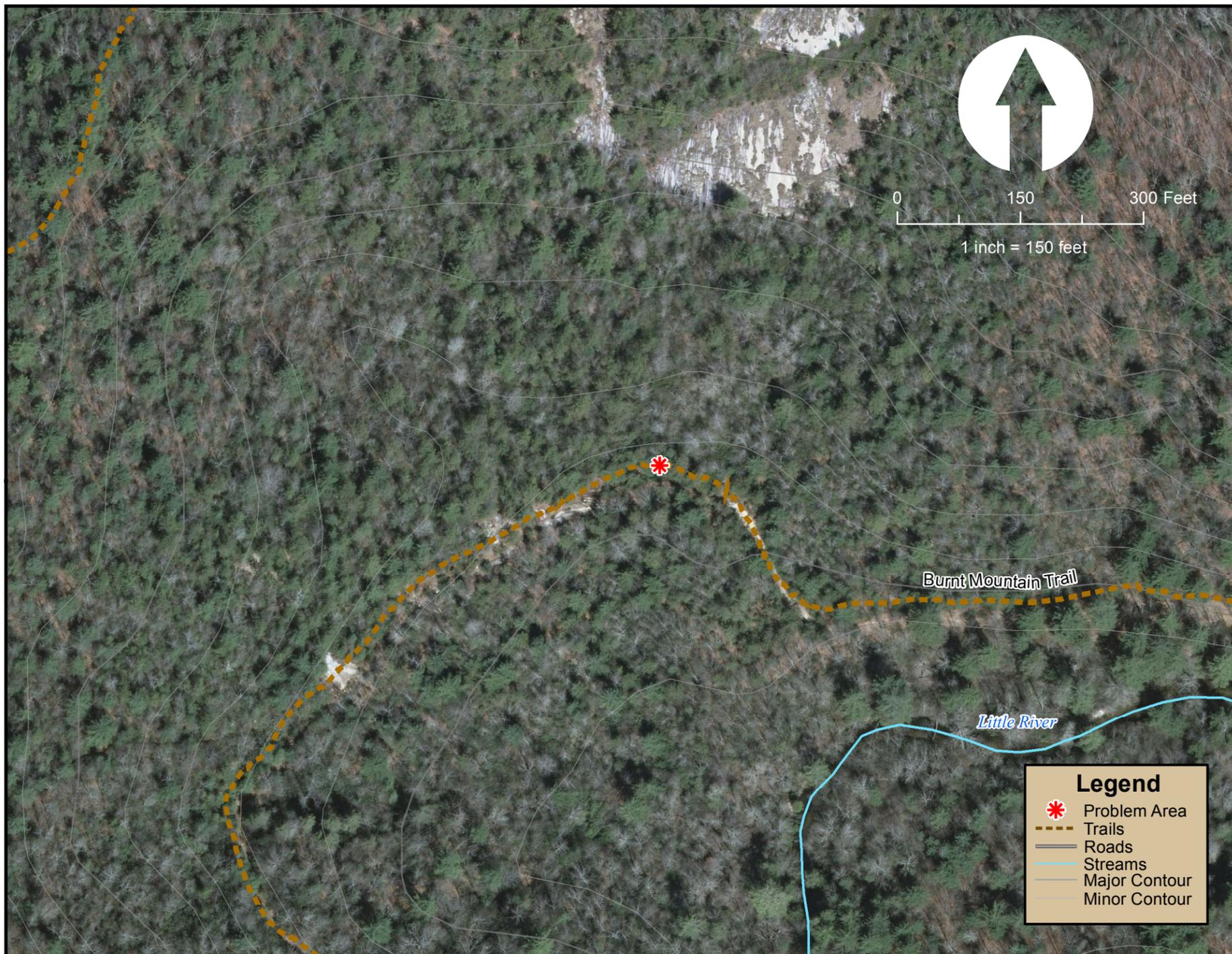
Comments

Stream banks eroded upstream/ downstream of culvert. Trail currently intact.



Area of Concern – Site: P10

Map Grid Location: D11 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Burnt Mountain Trail



1. **Culvert (diameter/material/length):** 12"/ CPP

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** _____

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |
3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

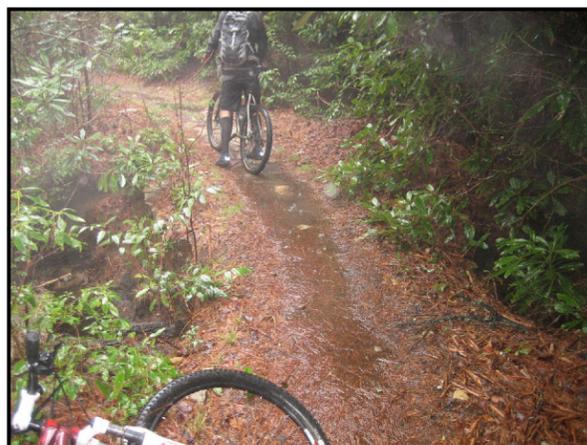
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input checked="" type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

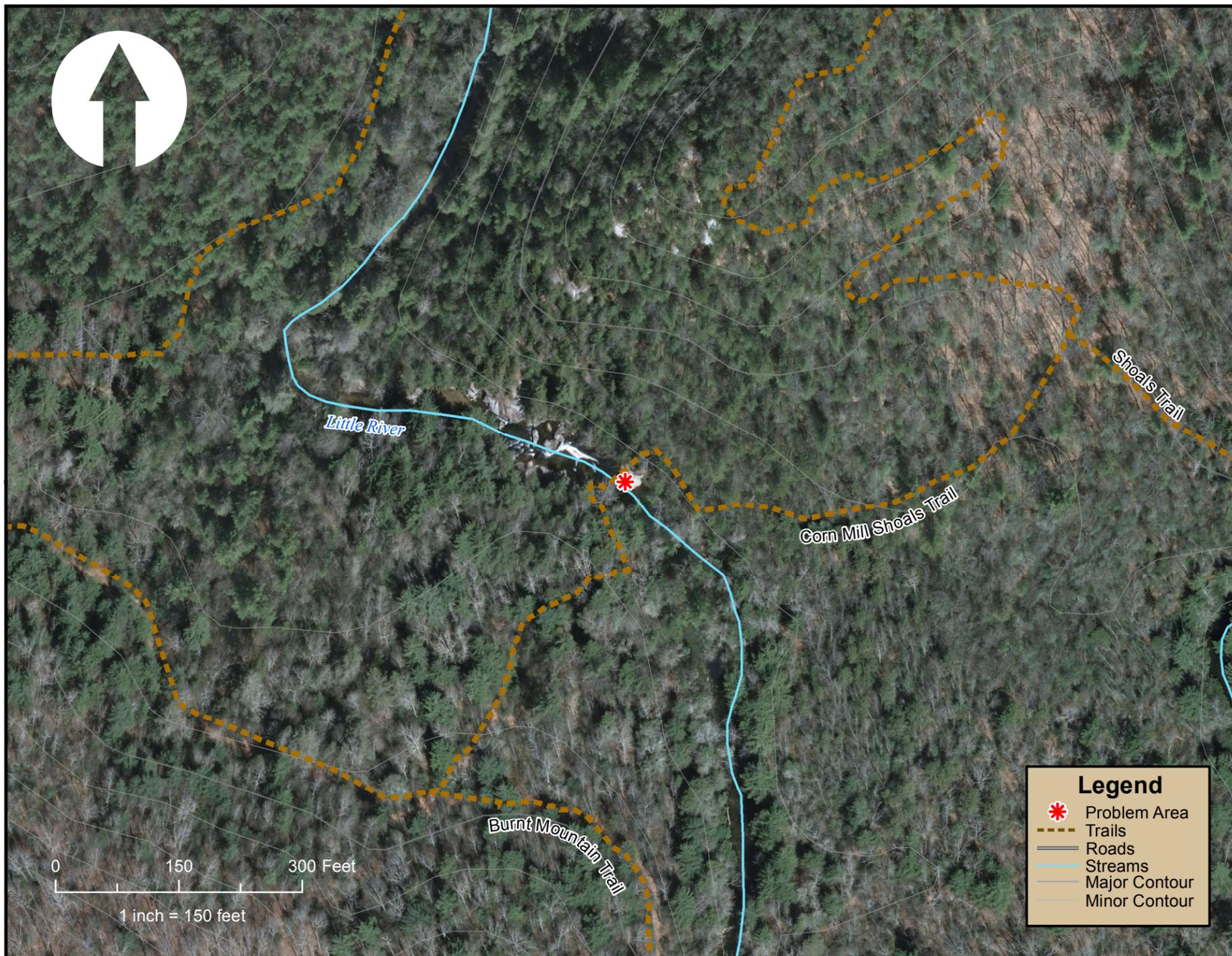
Comments

Stream banks eroded upstream/ downstream of culvert. Trail currently intact.



Area of Concern – Site: P11

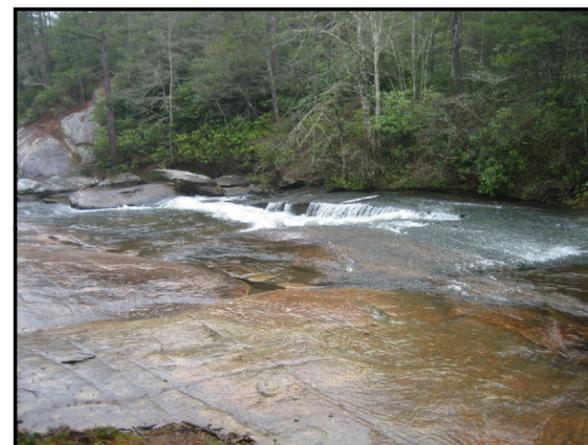
Map Grid Location: E10 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): 16.7
 Name & Location: Corn Mill Shoals Trail at Little River Crossing

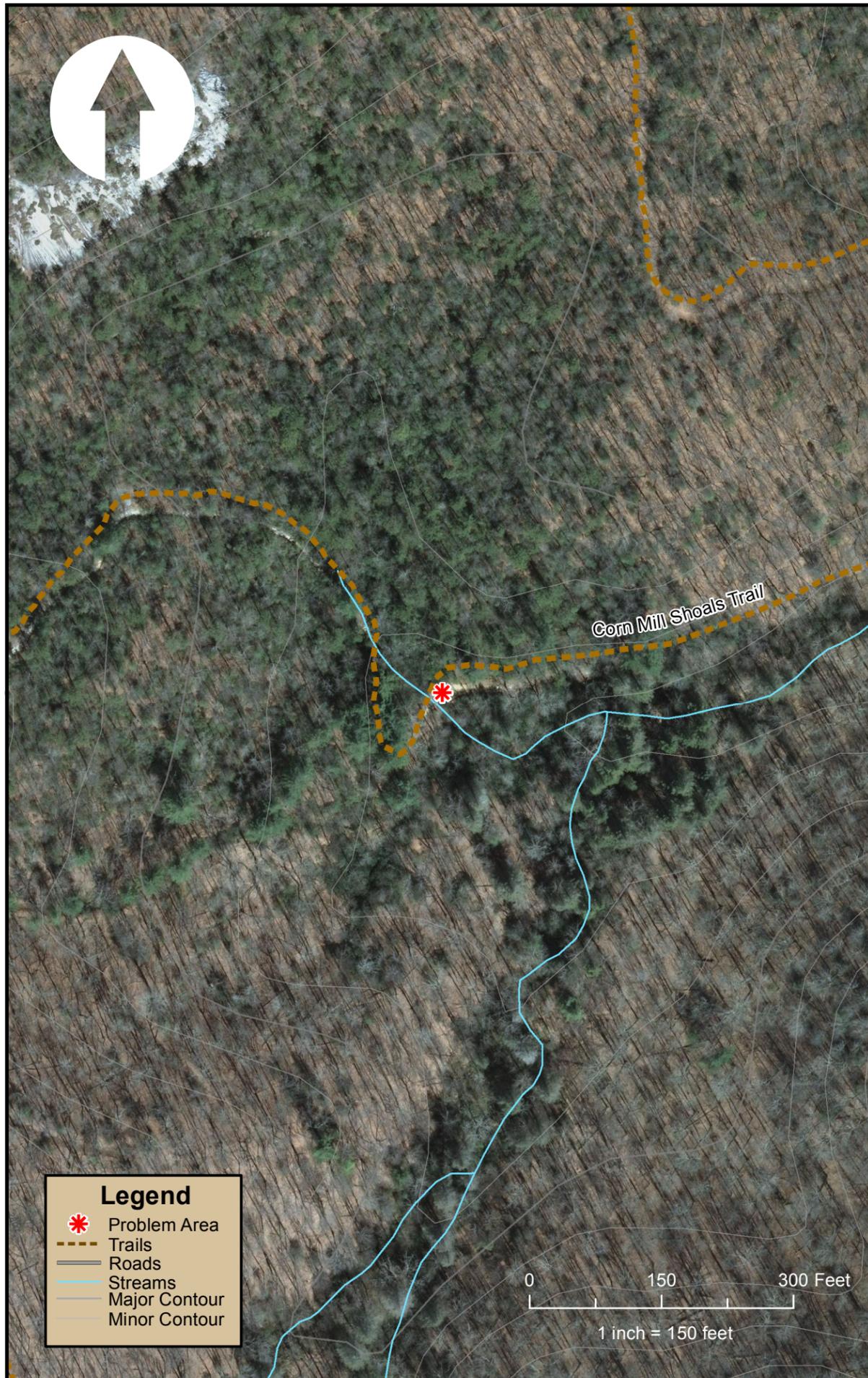


1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Corn Mill Shoals Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Trail over widened and missing vegetation in vicinity of crossing. Actual crossing stable due to bedrock in riverbed.





Area of Concern – Site: P12

Map Grid Location: E10 Site visit date/ team): 4/13/15/ BK, JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Corn Mill Shoals Trail

1. **Culvert (diameter/material/length):** 24" / CPP

| | |
|--|---|
| <input type="checkbox"/> clogged | <input checked="" type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** Corn Mill Shoals Trail

| | |
|--|---|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |
3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** (list contributing factors)

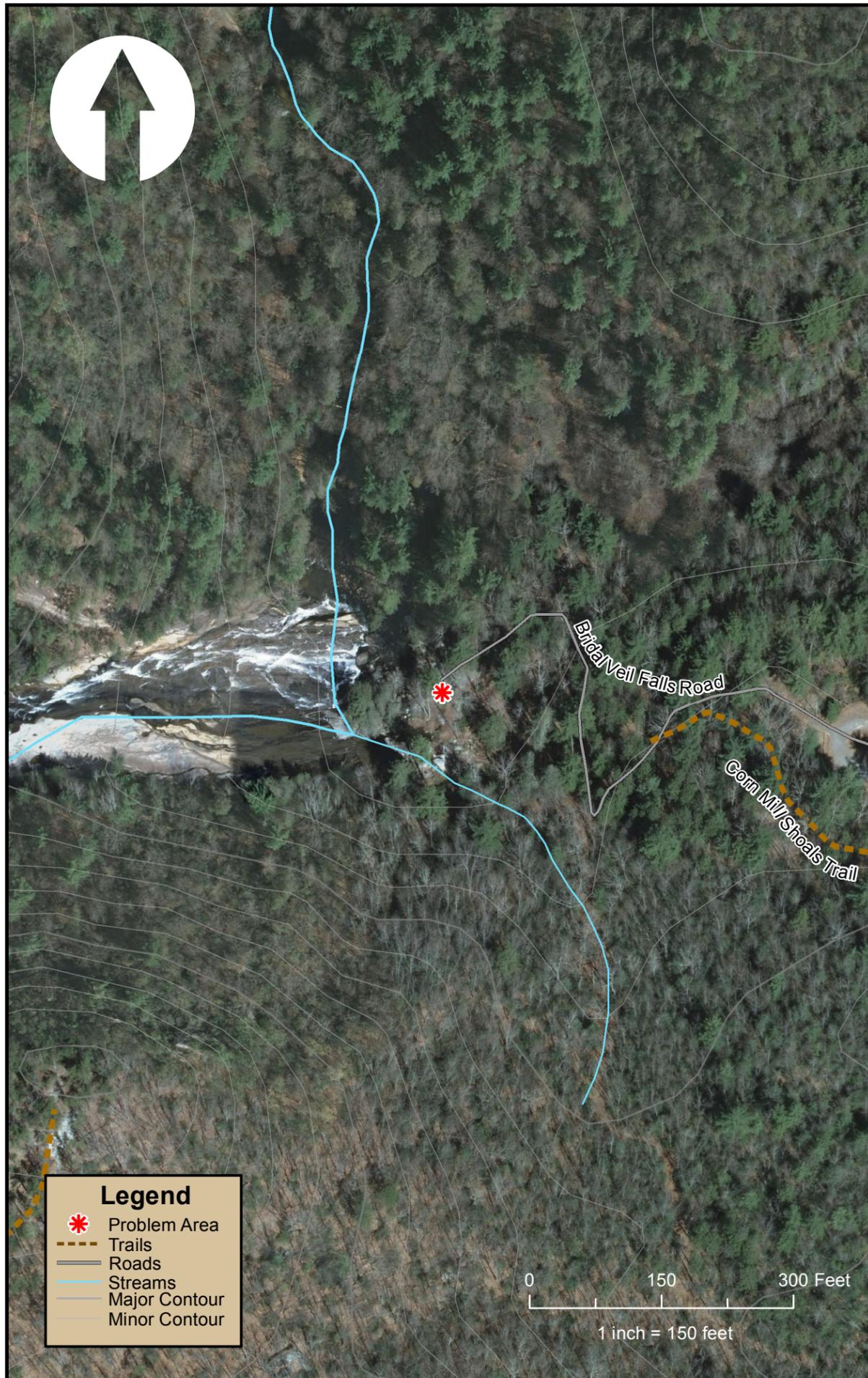
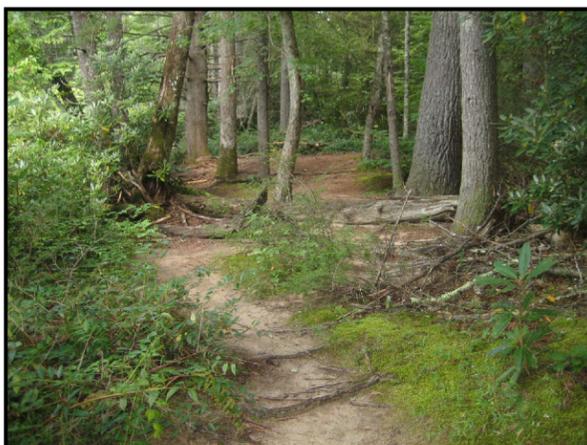
Potential Solutions

- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Culvert appears to be in good condition, though perched at downstream end. Trail serves as sediment source to stream, with sediment traps full.





Area of Concern – Site: P13

Map Grid Location: E9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Bridal Veil Falls

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Bridal Veil Falls Road
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

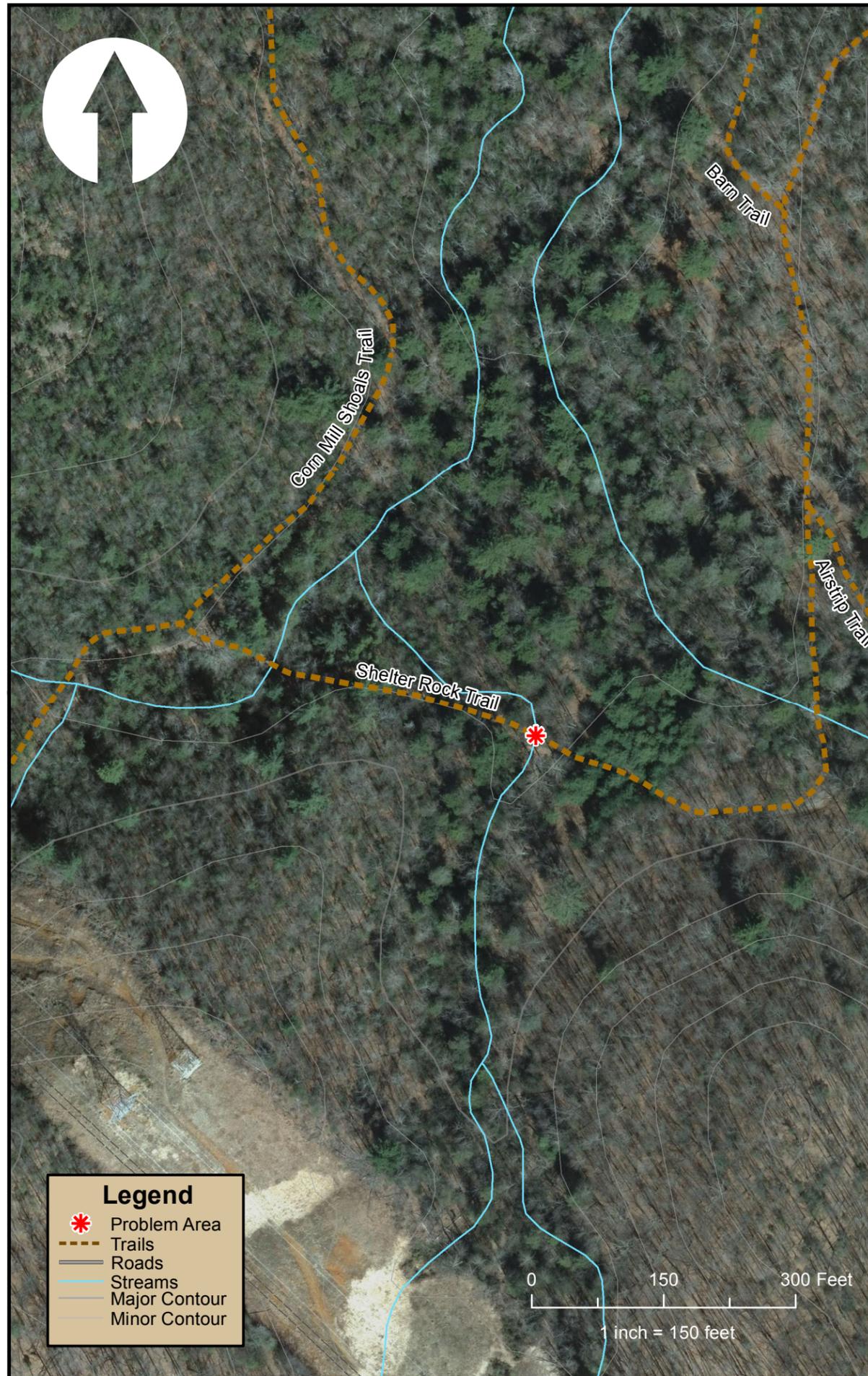
- Potential Solutions**
- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Human access to Bridal Veil Falls has resulted in bare areas and multiple small trails to access falls. Primary (gravel) road in good condition.



Area of Concern – Site: P14

Map Grid Location: F9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): 0.1
 Name & Location: Tributary at Shelter Rock Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Shelter Rock Trail
- | | |
|--|--|
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) list contributing factors)

Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

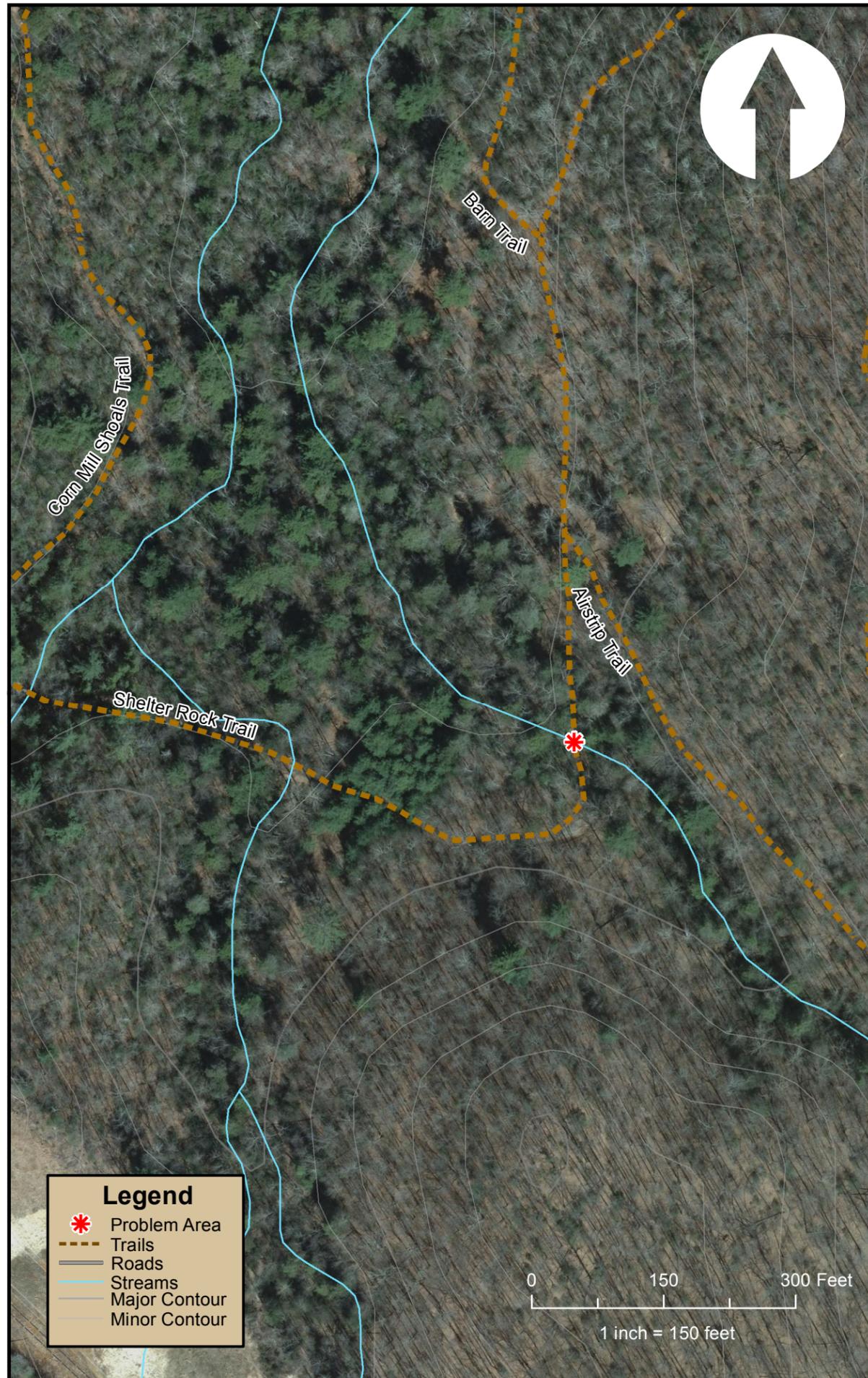
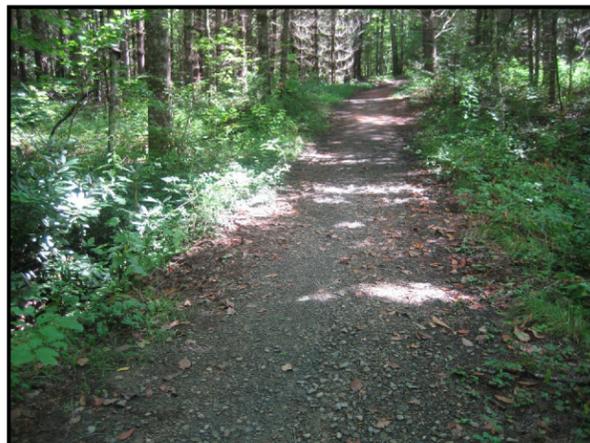
Comments

Culvert exists and appears to be in good condition. Bare area between trail and stream caused/ exacerbated by human access and stormwater.



Area of Concern – Site: P15

Map Grid Location: F9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): 0.07
 Name & Location: Tributary at Shelter Rock Trail



Legend

- * Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Shelter Rock Trail

| | |
|--|--|
| <input checked="" type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

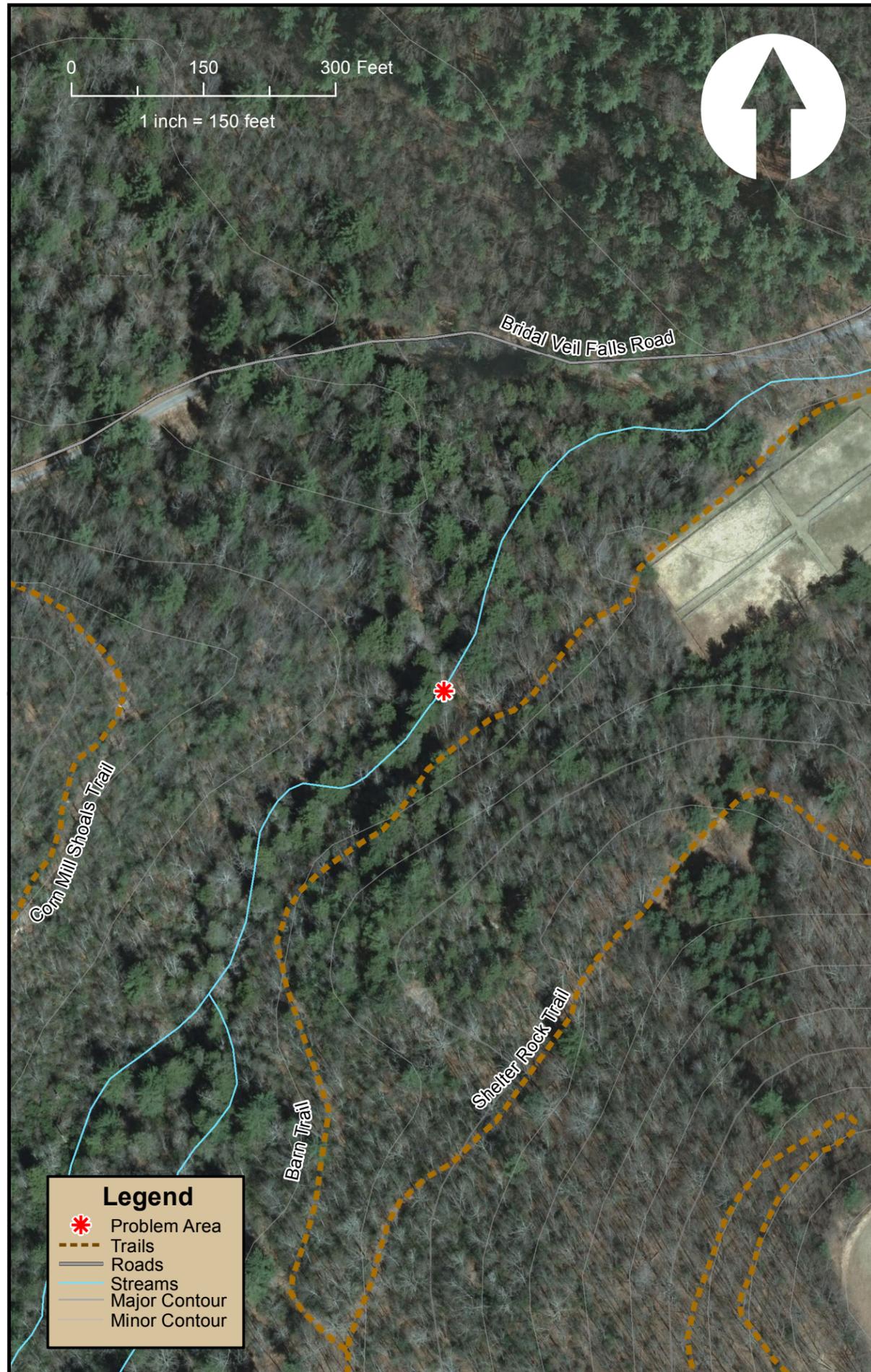
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** list contributing factors)

- Potential Solutions**
- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Culvert exists and appears to be in good condition. Bare area between trail and stream caused/ exacerbated by human access and stormwater.





Legend

- Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

Area of Concern – Site: P16

Map Grid Location: F9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): 0.42
 Name & Location: Horse watering at Barn Trail

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Unnamed spur from Barn Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- relocate trail/close trail/road trail/road crossing improvement
 - vegetation/ shoreline planting mechanical grading
 - stormwater treatment animal watering
 - human/ animal exclusion culvert rehabilitation/ replacement
 - signs culvert daylighting
 - maintenance bridge replacement/improvement

Comments
 Unvegetated stream banks and fine sediment in stream at horse watering area.





Area of Concern – Site: P17

Map Grid Location: F9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Airstrip Trail below airstrip

1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** _____

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|---|---|
| <input checked="" type="checkbox"/> nonpoint source pollution | <input checked="" type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input checked="" type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)
 Impervious surface (airstrip) contributing runoff.

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input checked="" type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

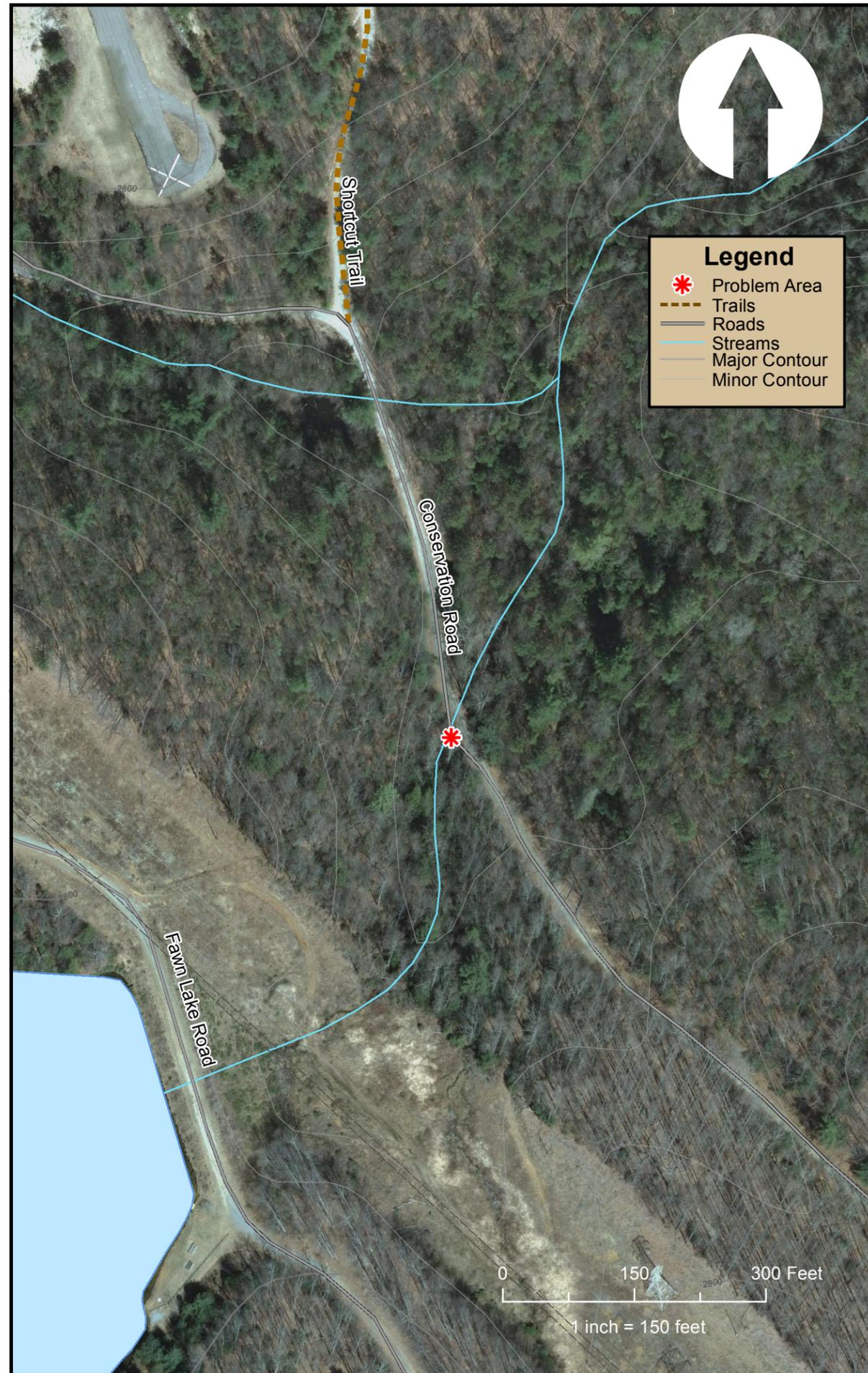
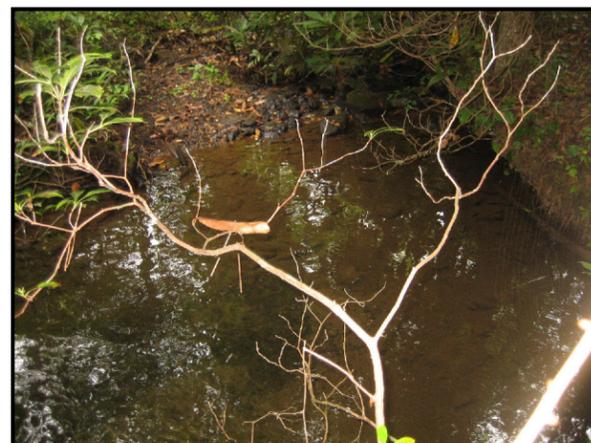
Comments

Airstrip Trail is in good condition. However, runoff from impervious airstrip has formed gully crossing Airstrip Trail in multiple locations. Potential solution includes treating stormwater at its source.



Area of Concern – Site: P18

Map Grid Location: F10 Site visit date/ team): 8/17/15/ JZ Drainage Area (Sq. Mi.): 0.15
 Name & Location: Fawn Lake outlet at Conservation Road



1. **Culvert (diameter/material/length):** 15"/ RCP
 - clogged
 - aquatic organism passage/ perched
 - crushed
 - erosion (upstream/ downstream)
 - lack of natural bed
 - piping
 - safety hazard
 - overtopping

2. **Trail/ Road Impact (trail/ road name):** Conservation Road
 - stormwater input
 - sediment input
 - bridge
 - utilities
 - unstable trail crossing
 - erosion
 - safety hazard
 - human impact (hiking/biking)
 - missing vegetation
 - equine/ dog impacts

3. **Upland/ Stormwater**
 - nonpoint source pollution
 - upland erosion
 - pollutant point source
 - unvegetated upland area

4. **Lake/Pond/ Reservoir (reservoir name):** _____
 - erosion
 - lack of vegetation
 - equine impact
 - human impact (hiking/biking)
 - safety hazard
 - water quality (temperature, algae, geese, fecal)

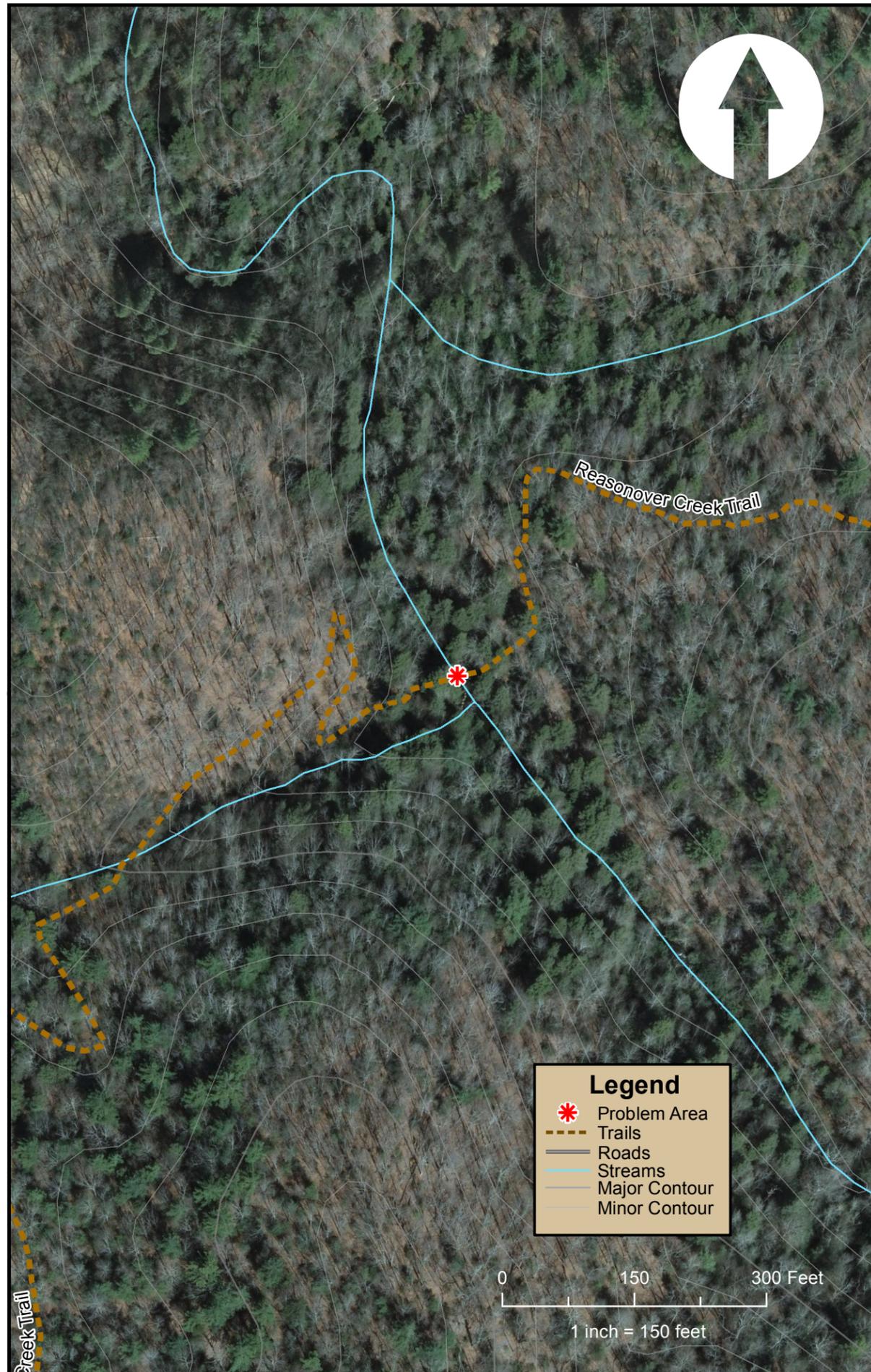
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- relocate trail/close trail/road
- trail/road crossing improvement
- vegetation/ shoreline planting
- mechanical grading
- stormwater treatment
- animal watering
- human/ animal exclusion
- culvert rehabilitation/ replacement
- signs
- culvert daylighting
- maintenance
- bridge replacement/improvement

Comments

Very minor bank erosion and deposition upstream and downstream of culvert, possible piping, minor erosion around culvert at downstream end.



Area of Concern – Site: P19

Map Grid Location: G11 Site visit date/ team): 8/17/15/ JZ Drainage Area (Sq. Mi.): 2.58
 Name & Location: Reasonover Creek at Reasonover Creek Trail

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Reasonover Creek Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Trail crosses at confluence with tributary; hardened trail each side of Reasonover Creek. Left bank: very minor bank erosion and erosion along trail. Right bank: unvegetated area.

Legend

- Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour





Area of Concern – Site: P20

Map Grid Location: F9 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage across Reasonover Creek Trail

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Reasonover Creek Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Stormwater drainage flows across trail; erosion and sediment deposition in vicinity. Potentially install small ford or culvert.

Area of Concern – Site: P21

Map Grid Location: F10 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): 3.27
 Name & Location: Reasonover Creek at Reasonover Creek Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Reasonover Creek Trail
- | | |
|---|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input checked="" type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

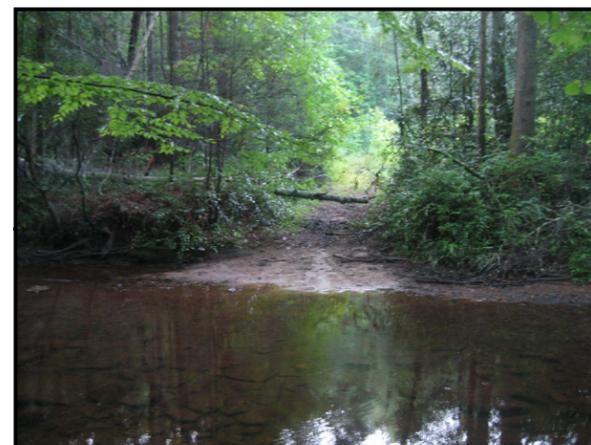
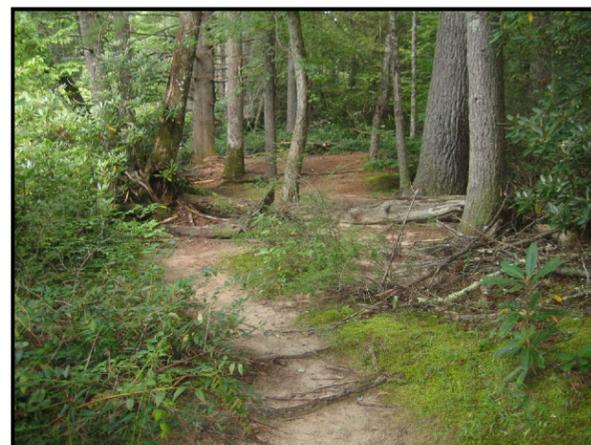
5. Other Problem Area(s) list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Fine sediment entering creek as result of trail crossing. Potentially improve to harden crossing.



Area of Concern – Site: P22

Map Grid Location: F10 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Reasonover Creek Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Reasonover Creek Trail
- | | |
|---|--|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

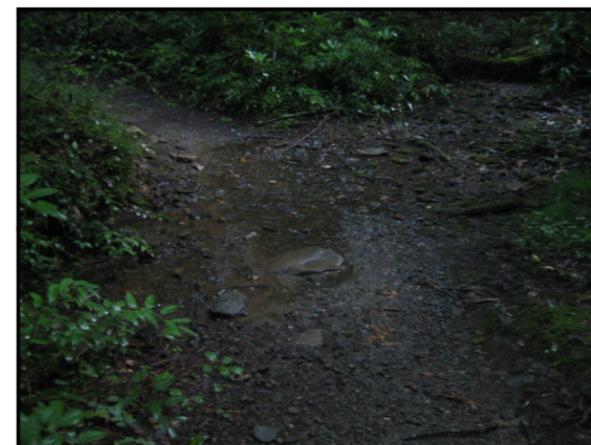
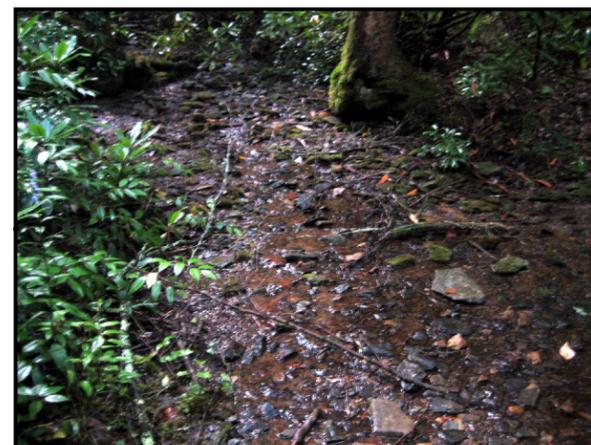
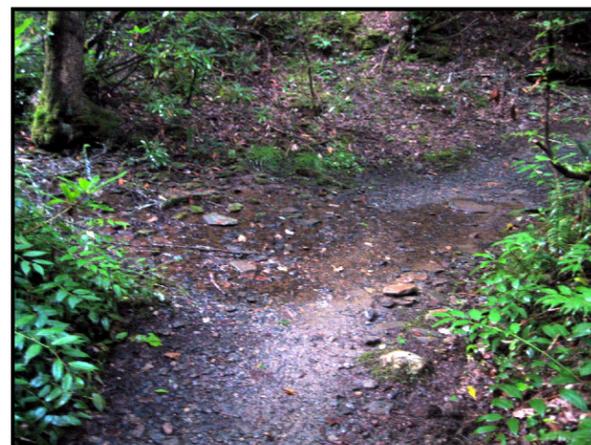
5. Other Problem Area(s) (list contributing factors)

Potential Solutions

- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

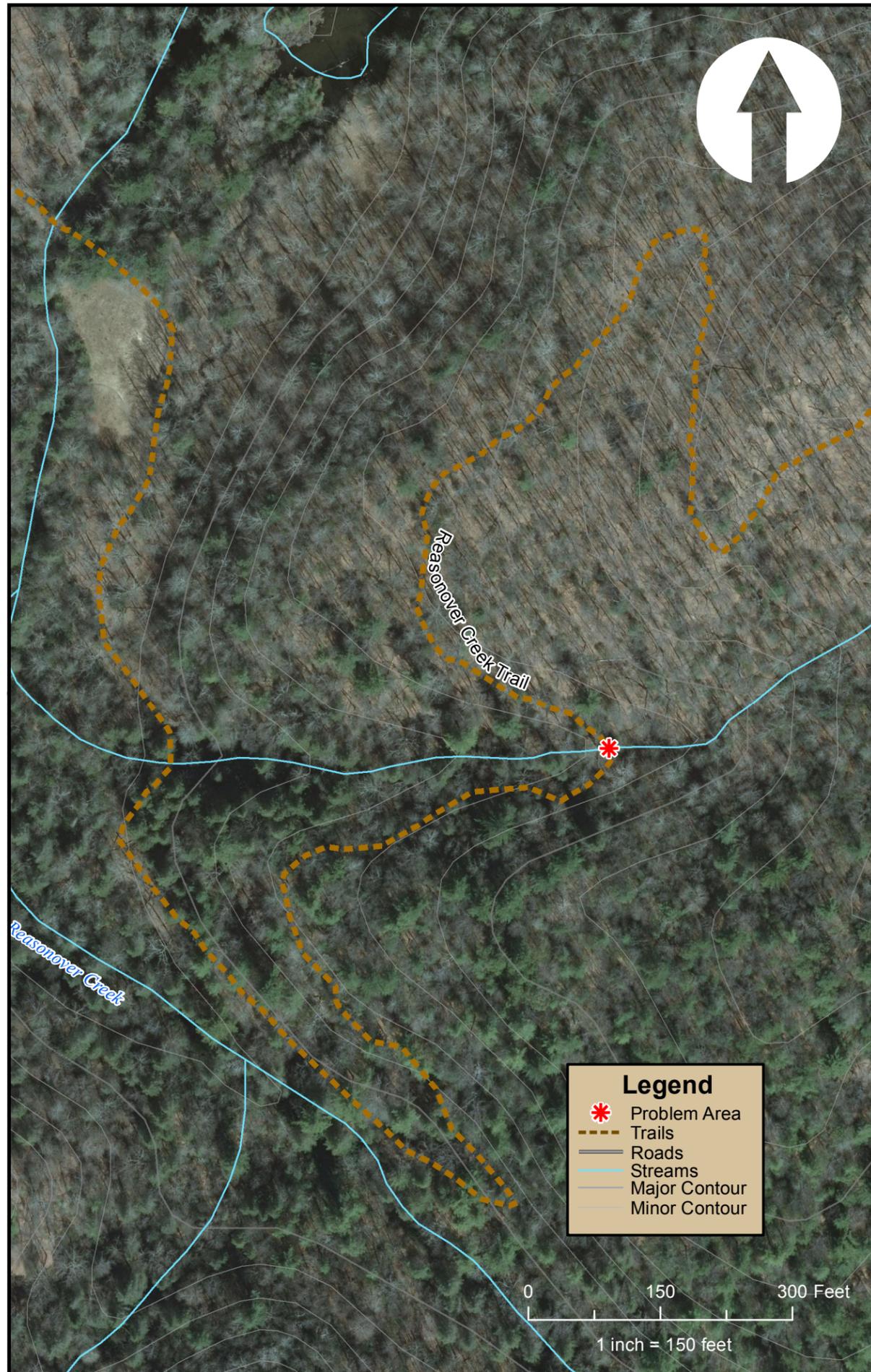
Comments

Tributary over widened and unvegetated at trail crossing.



Area of Concern – Site: P23

Map Grid Location: F10 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Reasonover Creek Trail



1. **Culvert (diameter/material/length):** 12"/ CPP
 - clogged
 - aquatic organism passage/ perched
 - crushed
 - erosion (upstream/ downstream)
 - lack of natural bed
 - piping
 - safety hazard
 - overtopping
2. **Trail/ Road Impact (trail/ road name):** _____
 - stormwater input
 - sediment input
 - bridge
 - utilities
 - unstable trail crossing
 - erosion
 - safety hazard
 - human impact (hiking/biking)
 - missing vegetation
 - equine/dog impacts
3. **Upland/ Stormwater**
 - nonpoint source pollution
 - upland erosion
 - pollutant point source
 - unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 - erosion
 - lack of vegetation
 - equine impact
 - human impact (hiking/biking)
 - safety hazard
 - water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

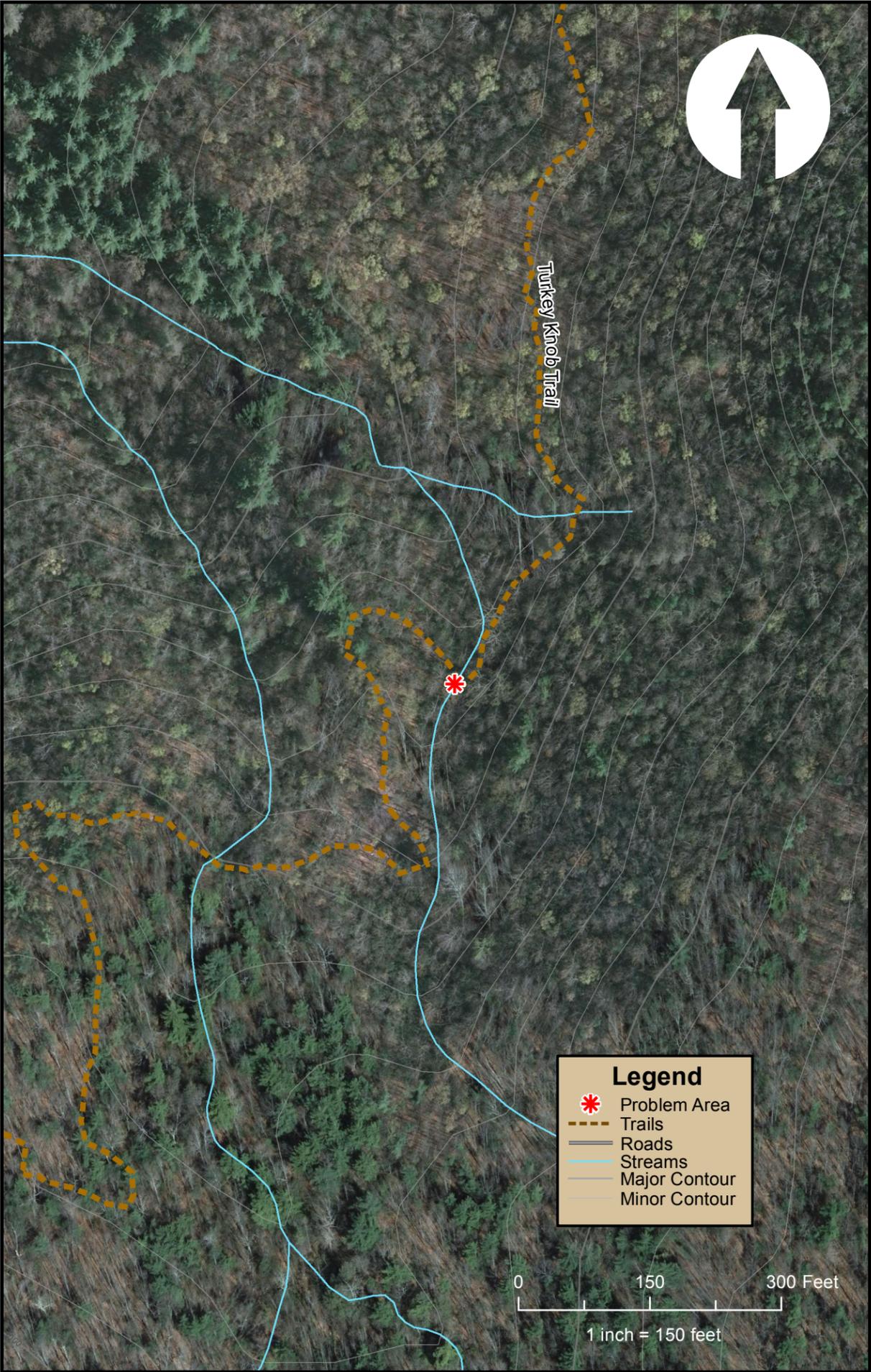
- relocate trail/close trail/road
- trail/road crossing improvement
- vegetation/ shoreline planting
- mechanical grading
- stormwater treatment
- animal watering
- human/ animal exclusion
- culvert rehabilitation/ replacement
- signs
- culvert daylighting
- maintenance
- bridge replacement/improvement

Comments

Culvert appears to be clogged. Trail currently stable, but potential exists for overtopping.

Area of Concern – Site: P24

Map Grid Location: I9 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Turkey Knob Trail



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
- 2. Trail/ Road Impact (trail/ road name):** Turkey Knob Trail
- | | |
|---|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |
- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
- 5. Other Problem Area(s)** (list contributing factors)

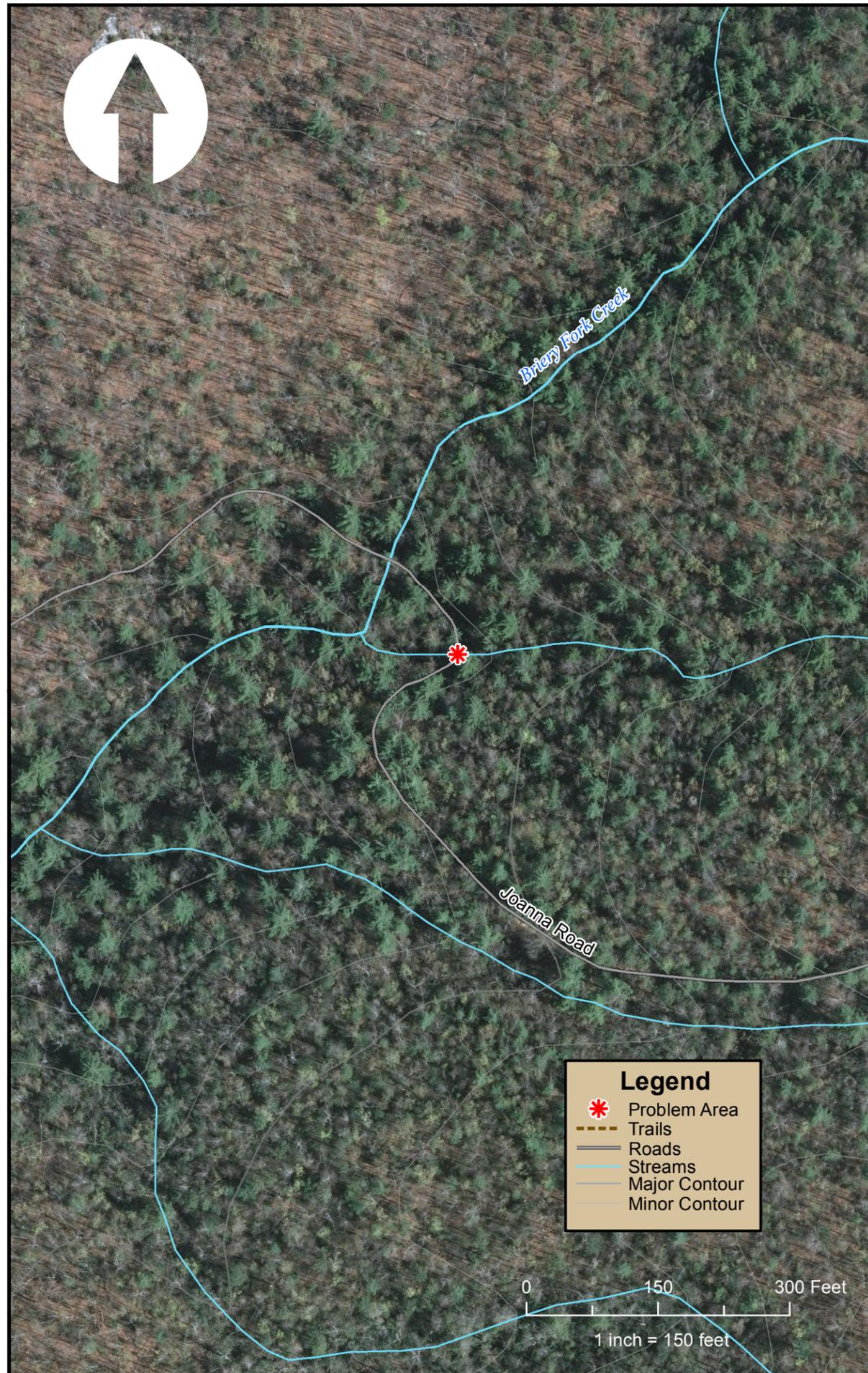
- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Hardened trail crossing, though surrounding trail has minor erosion and serves as sediment source.



Area of Concern – Site: P25

Map Grid Location: J8 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary to Briery Fork Creek at Joanna Road



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Joanna Road

| | |
|---|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

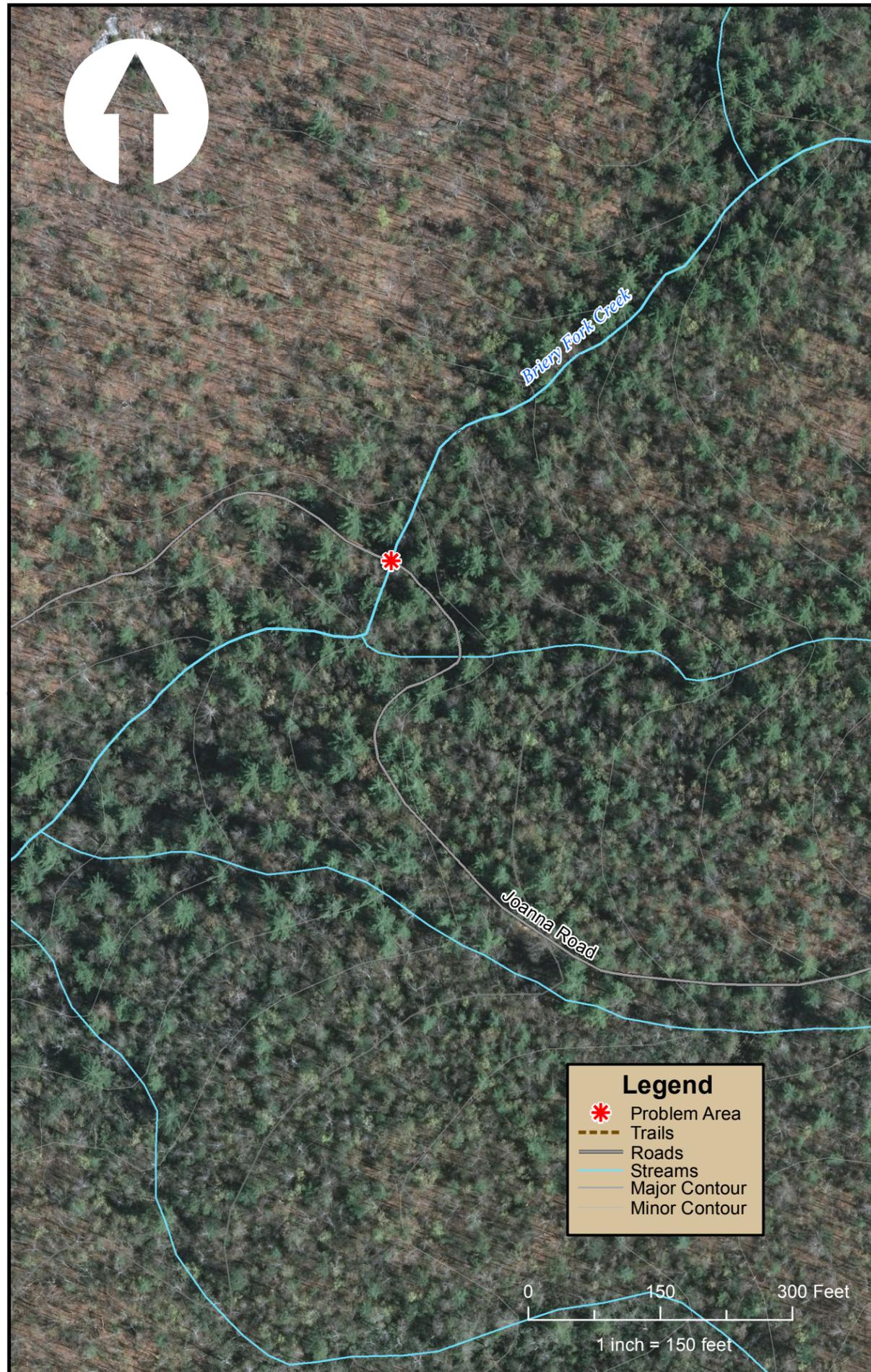
- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Trail crossing serves as source of fine sediment. Potentially install bridge/ culvert or sediment traps/ diversions on trail.



Area of Concern – Site: P26

Map Grid Location: J8 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary to Briery Fork Creek at Joanna Road



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Joanna Road

| | |
|---|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

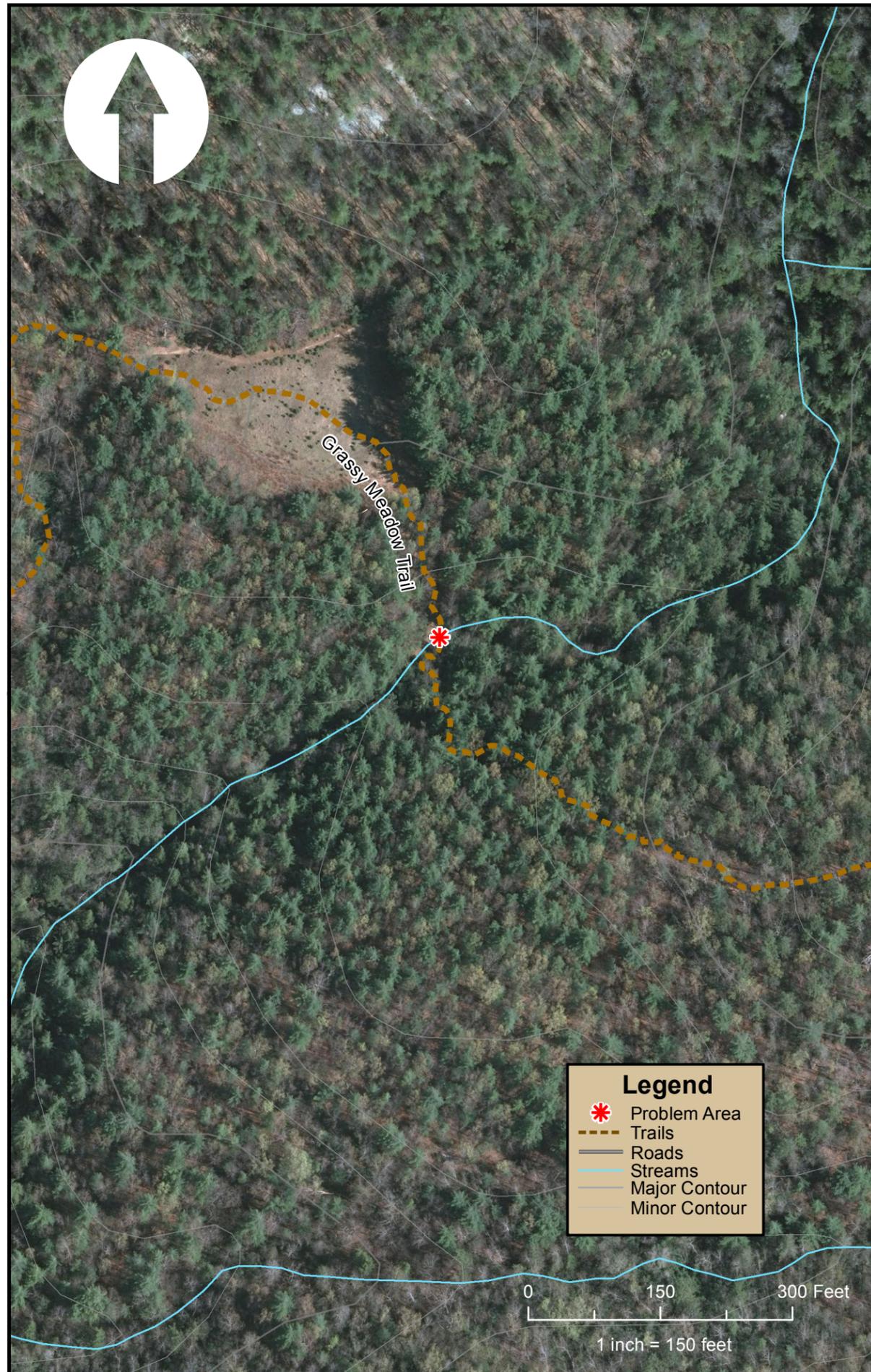
- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Trail crossing serves as source of fine sediment. Potentially install bridge/ culvert or sediment traps/ diversions on trail.



Area of Concern – Site: P27

Map Grid Location: I7 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): 0.42
 Name & Location: Tributary at Grassy Meadow Trail



1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Grassy Meadow Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Trail crossing serves as source of fine sediment, though crossing itself is stable on bedrock. Potentially install sediment traps/ diversions on trail.



Area of Concern – Site: P28

Map Grid Location: I7 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): 0.52
 Name & Location: Tributary at Joanna Road



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Joanna Road

| | |
|---|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

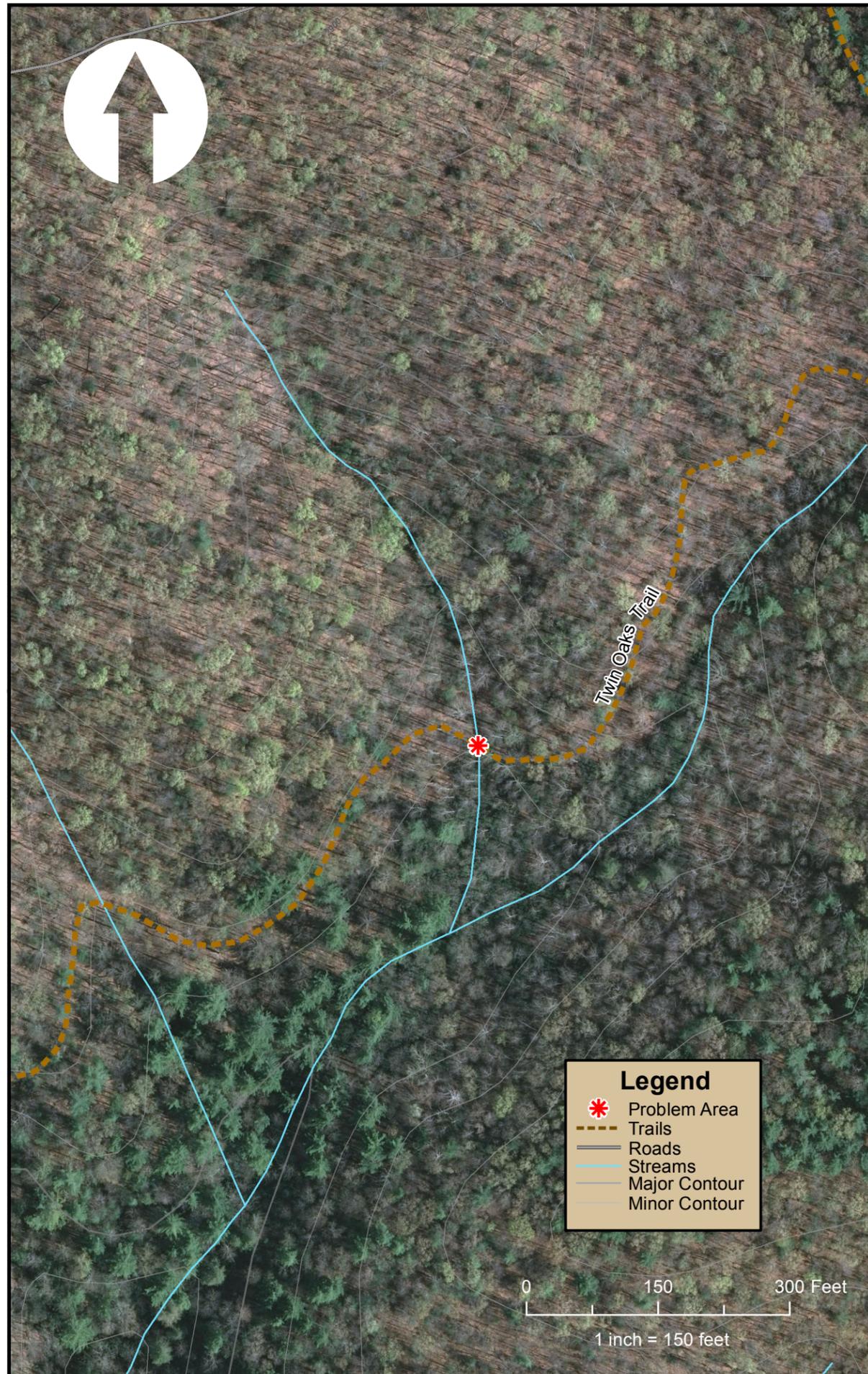
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Trail crossing serves as source of fine sediment. Potentially install sediment traps/ diversions on trail.





Area of Concern – Site: P29

Map Grid Location: H8 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Twin Oaks Trail

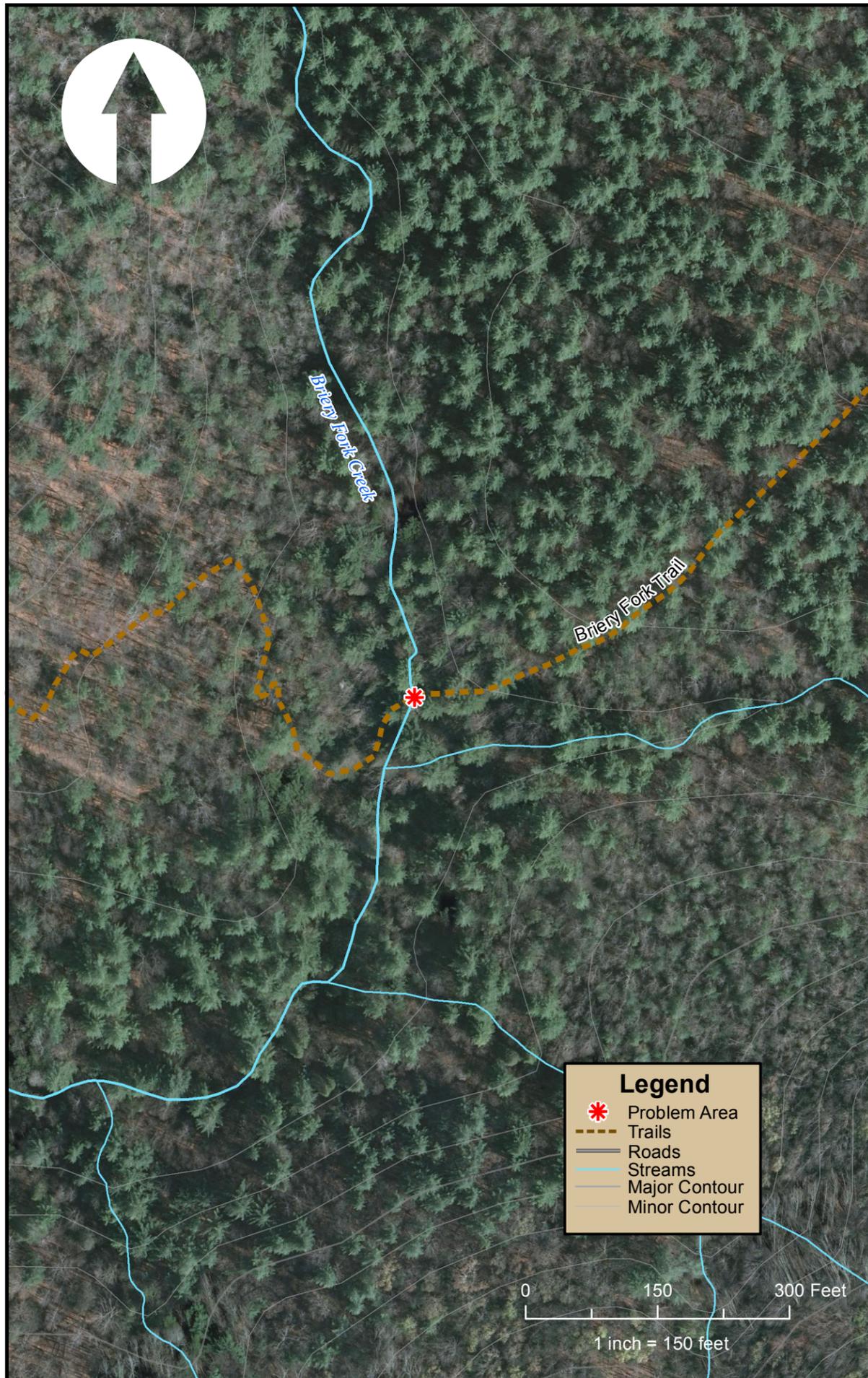
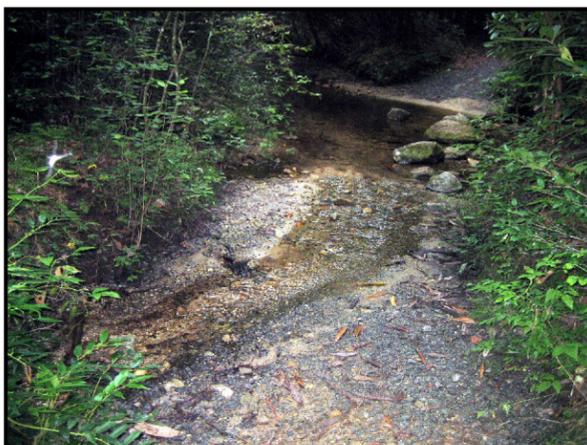
1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Twin Oaks Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Trail serves as source of sediment. Eroding banks and head cut in channel downstream of trail are sediment source and may threaten trail.



Area of Concern – Site: P30

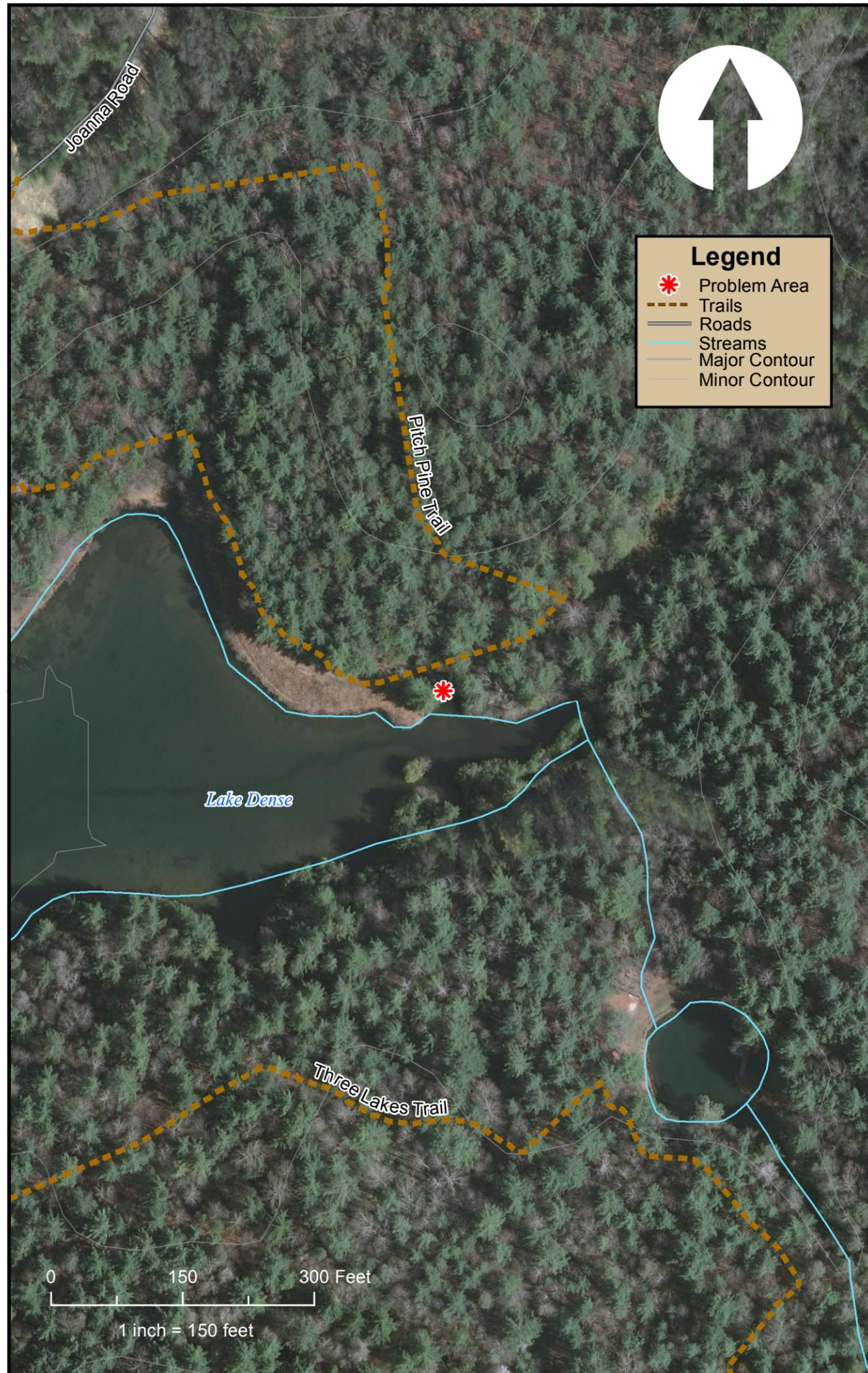
Map Grid Location: I 8 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): 1.24
 Name & Location: Briery Fork Creek at Briery Fork Creek Trail

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Briery Fork Creek Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 At trail crossing, creek is over widened with fine sediment input. A small tributary coincides with the trail.





Area of Concern – Site: P31

Map Grid Location: F7 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Lake Dense

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Pitch Pine Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** Lake Dense
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

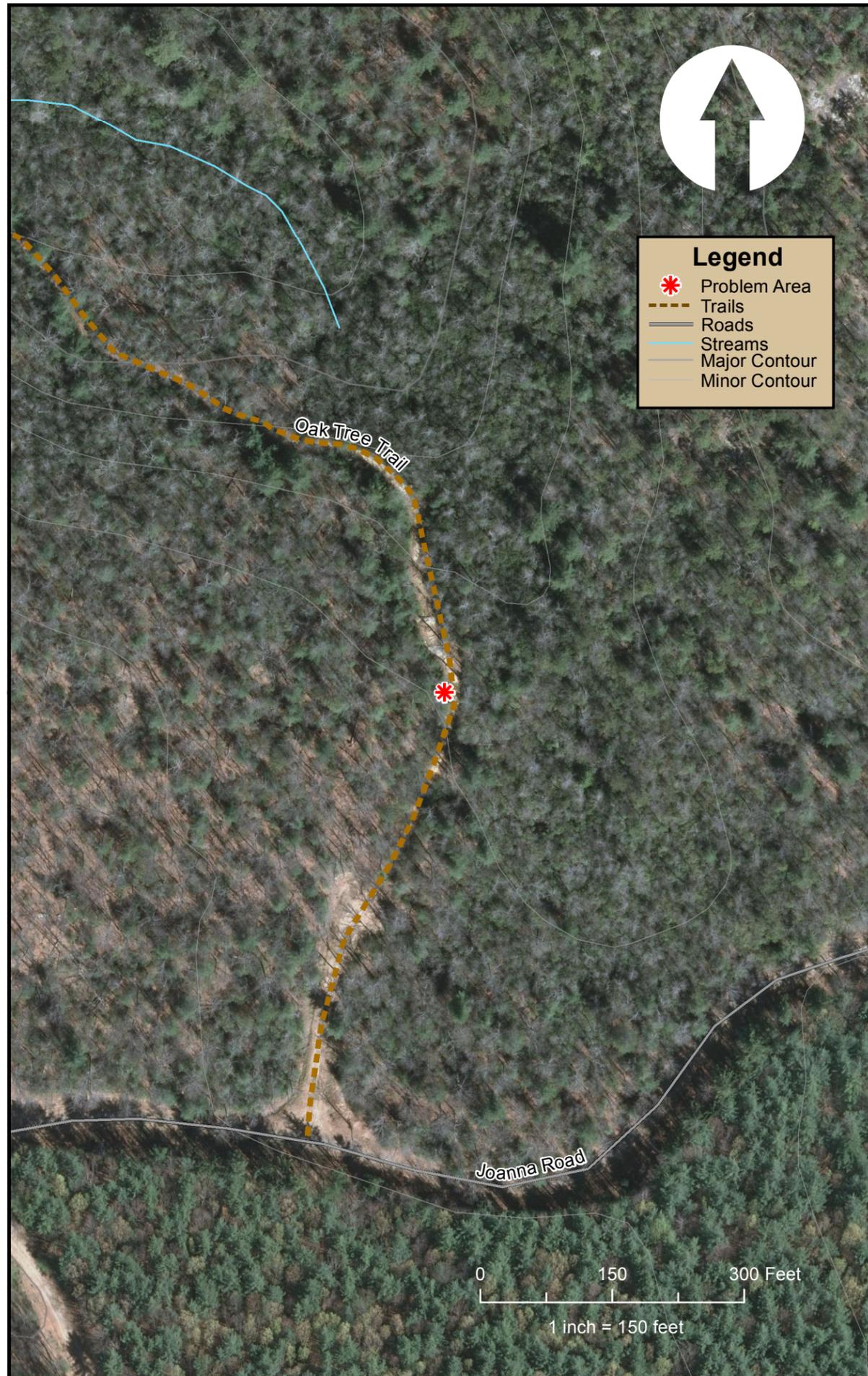
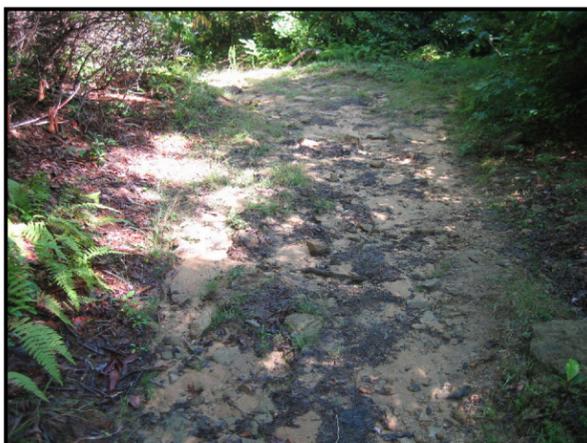
- | | |
|---|--|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Unvegetated and bare areas along Pitch Pine Trail on shore of Lake Dense. Trail within lake buffer.

Area of Concern – Site: P32

Map Grid Location: G7 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Oak Tree Trail



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Oak Tree Trail

| | |
|--|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

3. **Upland/ Stormwater**

| | |
|---|--|
| <input checked="" type="checkbox"/> nonpoint source pollution | <input checked="" type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

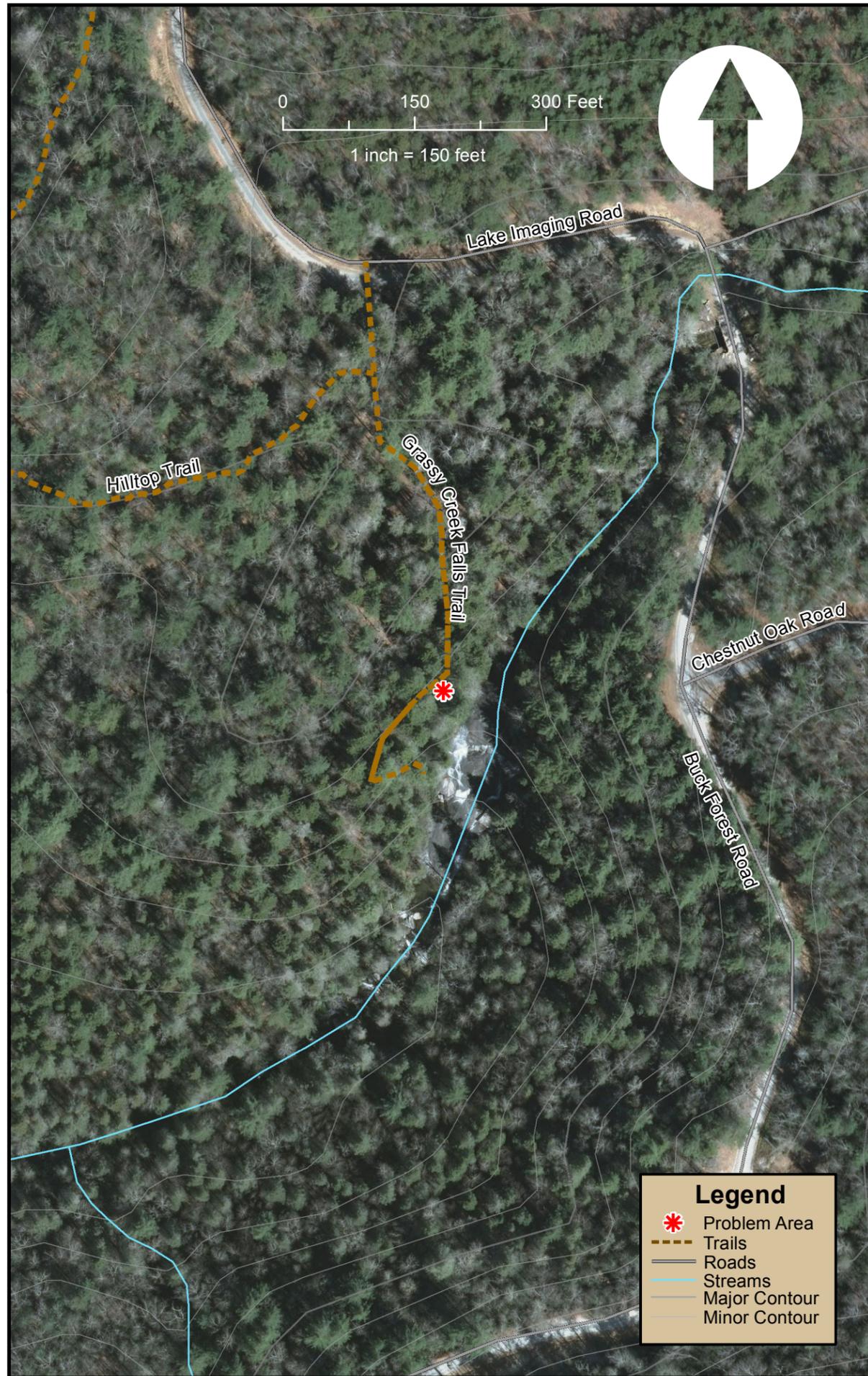
| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|---|--|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Upland sediment source on eroding, over widened trail. Trail serves as stormwater drainage to receiving water.





Area of Concern – Site: P33

Map Grid Location: F6 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Grassy Creek Falls

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Grassy Creek Falls Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

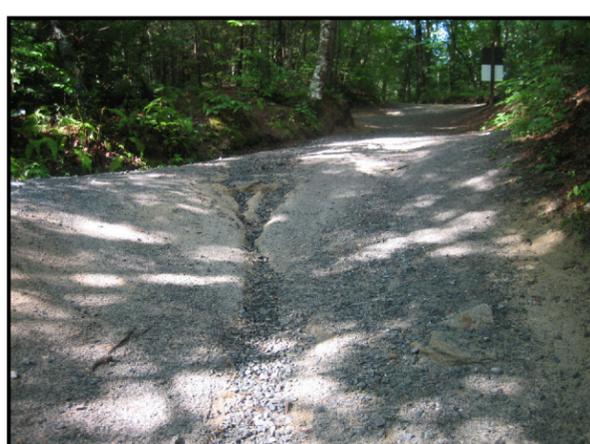
Comments

Human access to Grassy Creek Falls has resulted in bare areas and multiple small trails to access falls.



Area of Concern – Site: P34

Map Grid Location: F5 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): 33.3
 Name & Location: Triple Falls Trail along Little River



- 1. Culvert (diameter/material/length):** _____
- | | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** Triple Falls Trail
- | | |
|--|--|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input checked="" type="checkbox"/> equine/ dog impacts |

- 3. Upland/ Stormwater**
- | | |
|---|---|
| <input checked="" type="checkbox"/> nonpoint source pollution | <input checked="" type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input checked="" type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) (list contributing factors)

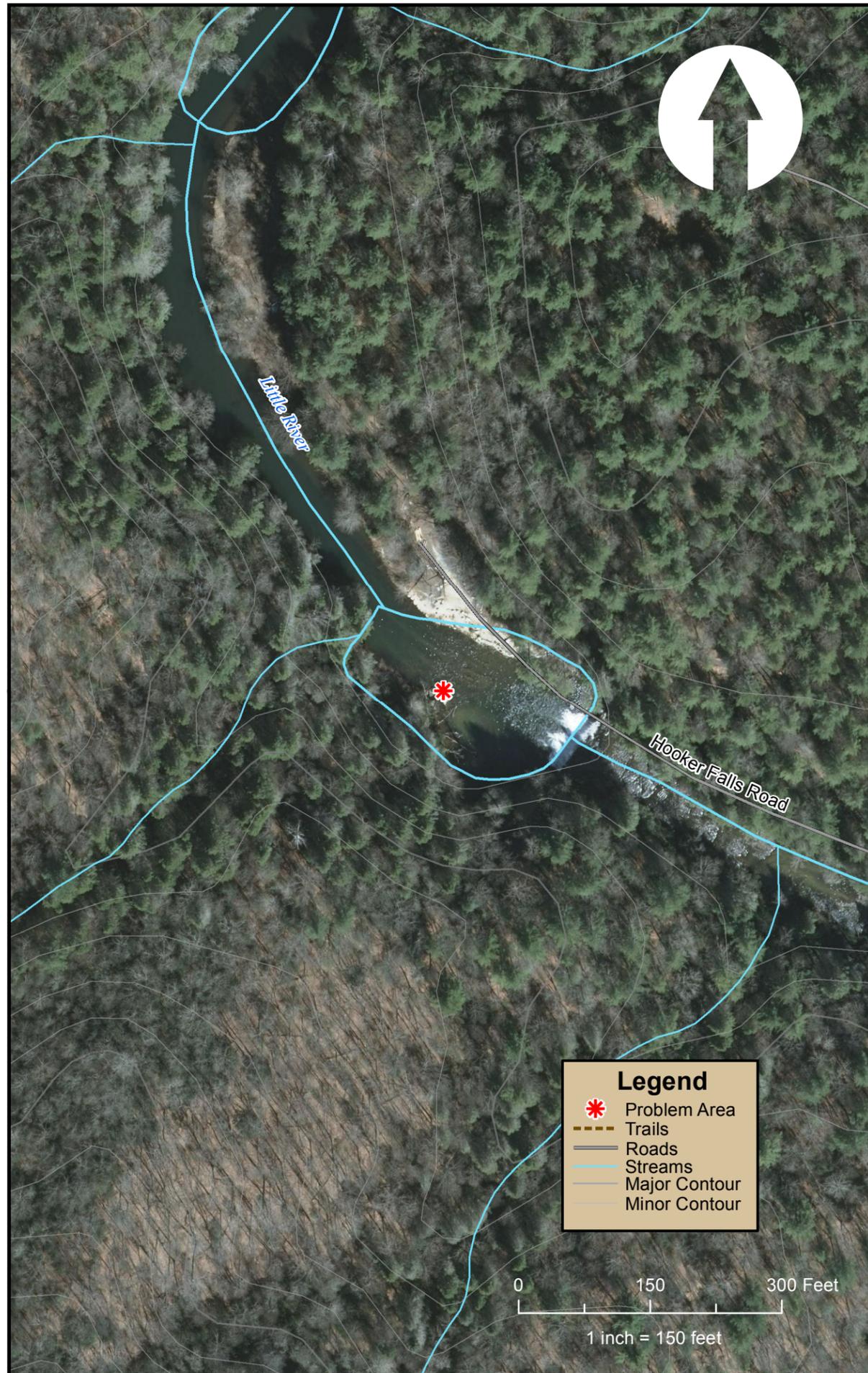
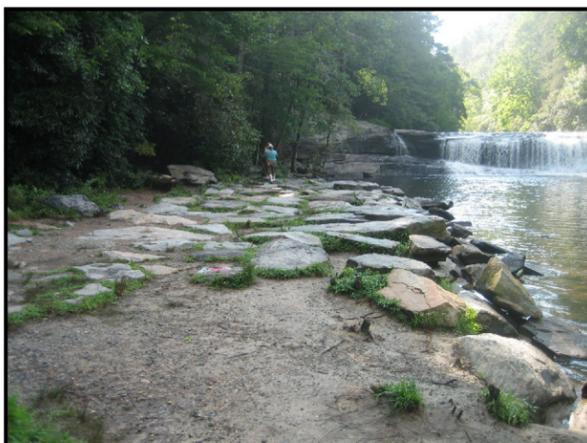
Potential Solutions

- | | |
|---|--|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input checked="" type="checkbox"/> mechanical grading |
| <input checked="" type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Trail is wide, steep and eroding along several hundred feet. Heavily used trail could be rerouted or stabilized in place with BMPs.





Area of Concern – Site: P35

Map Grid Location: E5 Site visit date/ team): 8/19/15/ JZ Drainage Area (Sq. Mi.): 35.6
 Name & Location: Hooker Falls

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** _____
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** Cascade Lake
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

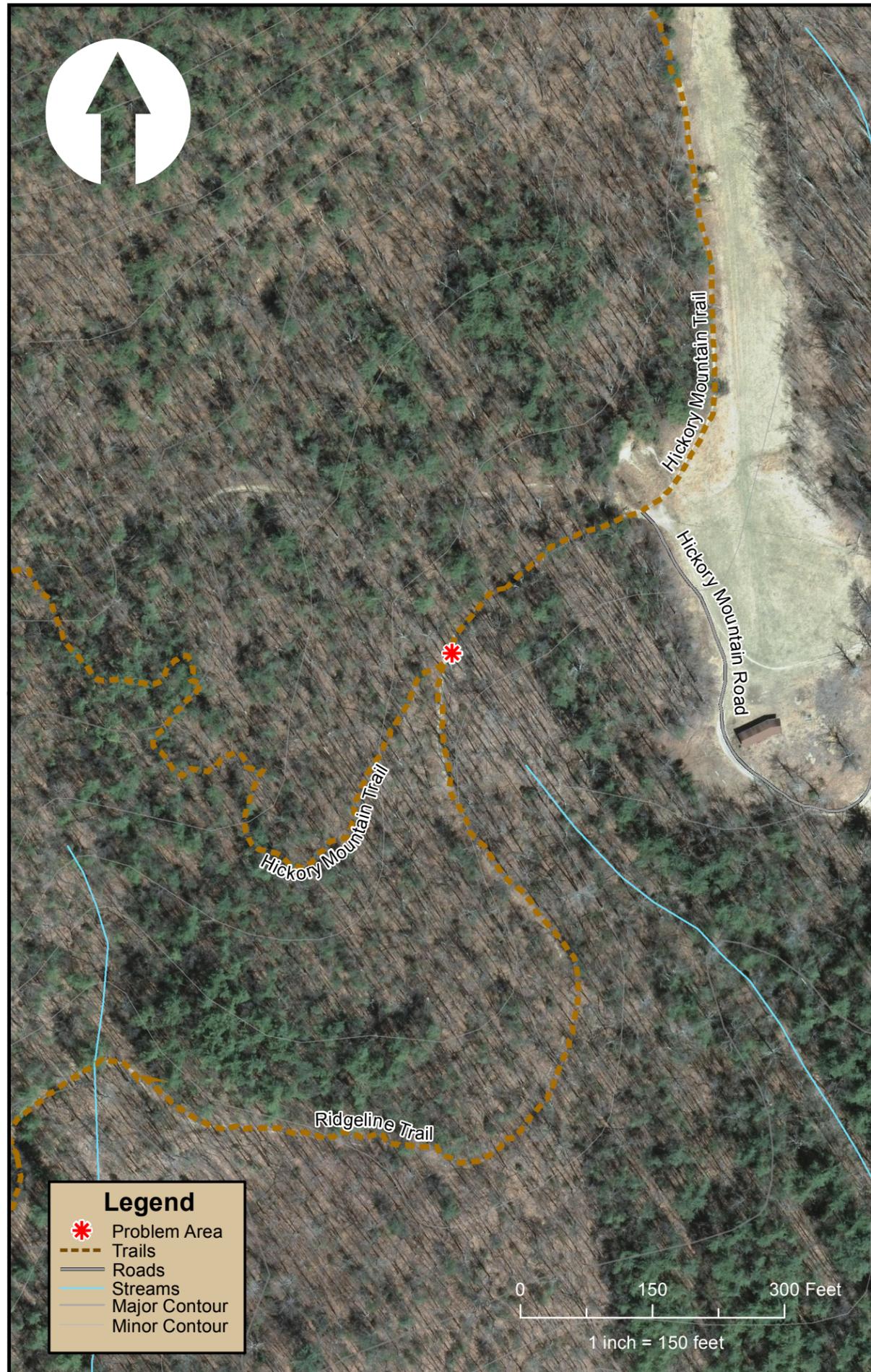
Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input checked="" type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Barc areas along viewing area below Hooker Falls.





Area of Concern – Site: P36

Map Grid Location: G2 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Hickory Mountain Trail

- Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
- Trail/ Road Impact (trail/ road name):** Hickory Mountain Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
- Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
- Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
- Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Intersection of multiple trails result in sediment source to small drainage. Channel drops off steeply downstream of trail, and future head-cut may threaten trail.





Area of Concern – Site: P37

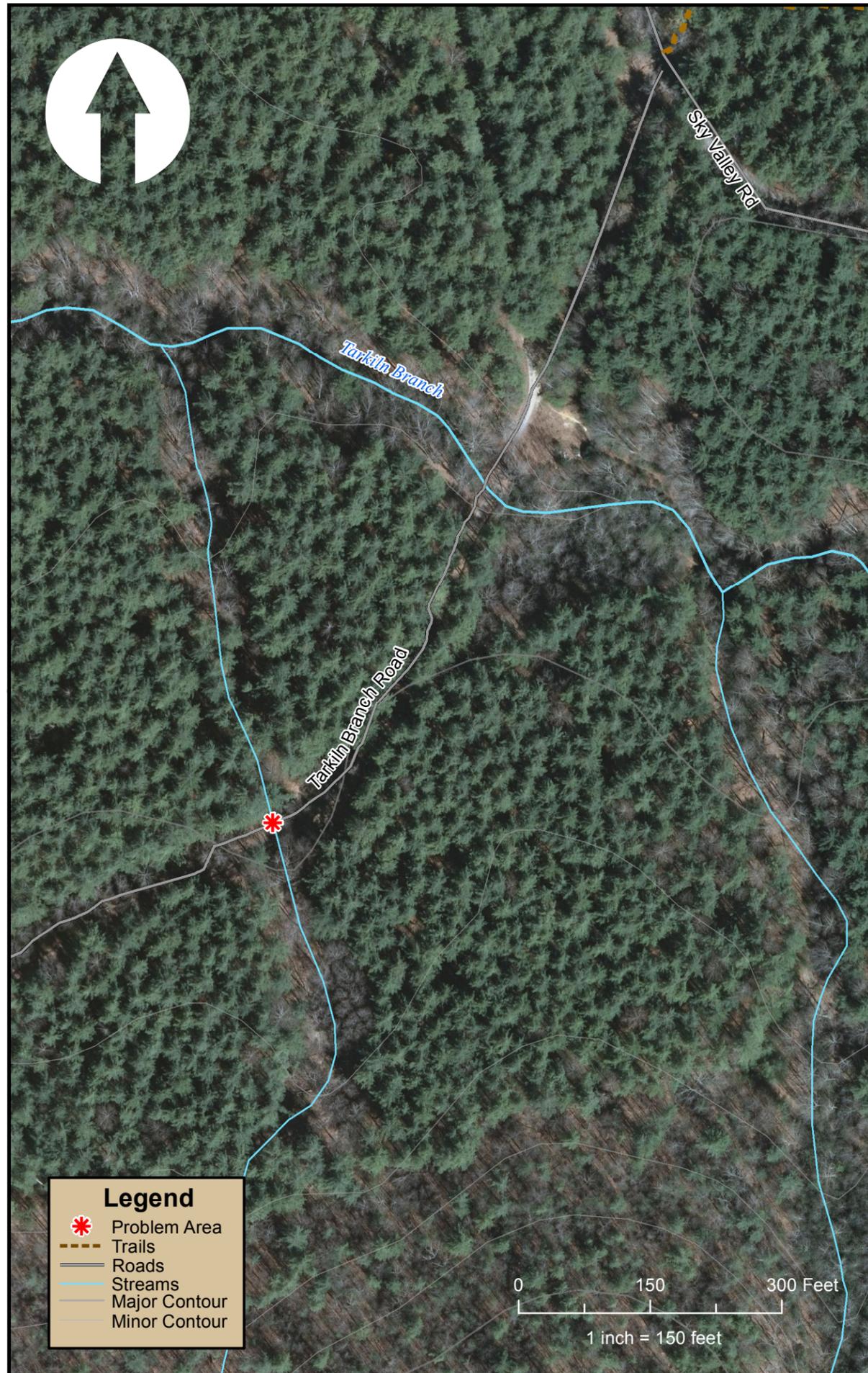
Map Grid Location: H6 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Sandy Trail

- Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
- Trail/ Road Impact (trail/ road name):** Sandy Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
- Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
- Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
- Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- relocate trail/close trail/road trail/road crossing improvement
 - vegetation/ shoreline planting mechanical grading
 - stormwater treatment animal watering
 - human/ animal exclusion culvert rehabilitation/ replacement
 - signs culvert daylighting
 - maintenance bridge replacement/improvement

Comments
 Hardened trail crossing, though trail still serves as sediment source. Minor bank erosion in channel just downstream of crossing.





Legend

- Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

Area of Concern – Site: P38

Map Grid Location: H4 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Tarkiln Branch Road

1. **Culvert (diameter/material/length):** 16"/ CPP

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** Tarkiln Branch Road

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |
3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** (list contributing factors)

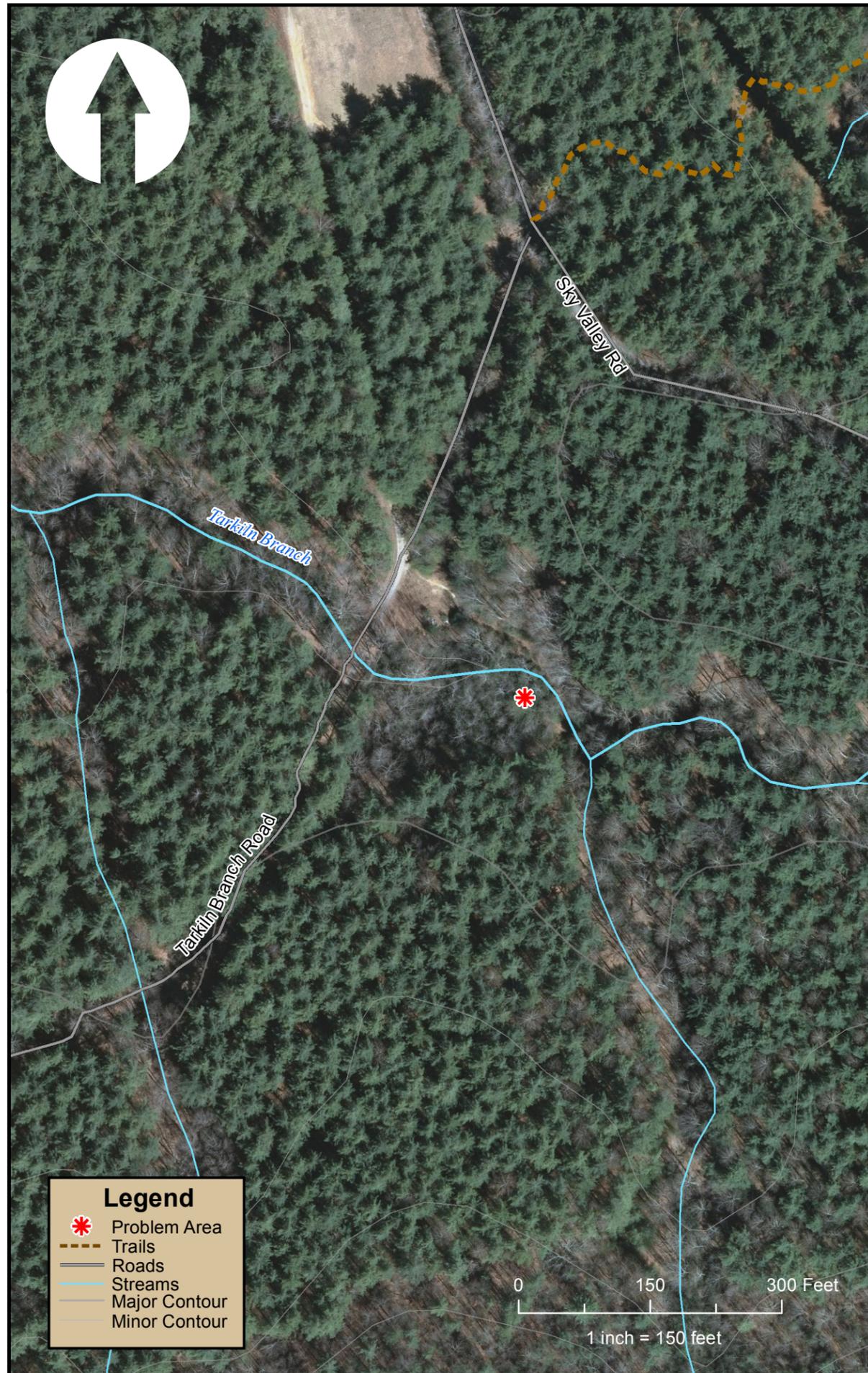
Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Culvert appears to be in good condition; however, bare areas exist in the vicinity.





Area of Concern – Site: P39

Map Grid Location: H4 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Horse watering along Tarklin Branch Road

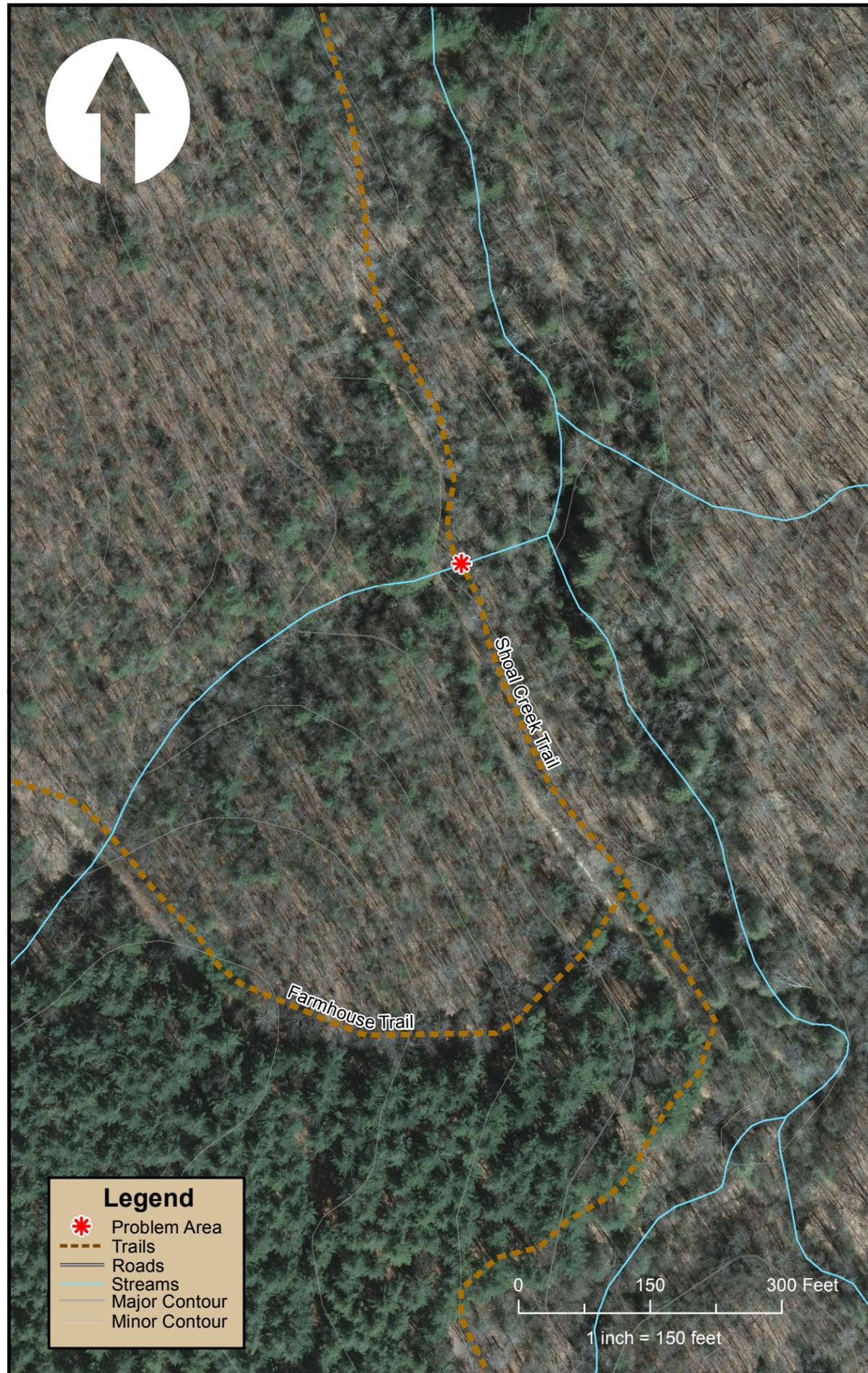
1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Unnamed trail to horse watering
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|---|--|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input checked="" type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Trampled banks and sediment input to stream at signed horse watering area. Despite "Dead End Trail" sign, watering area also appears to be used as stream crossing.



Area of Concern – Site: P40

Map Grid Location: H3 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Shoal Creek Tributary at Shoal Creek Trail

1. **Culvert (diameter/material/length):** 10"/ iron

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Shoal Creek Trail

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

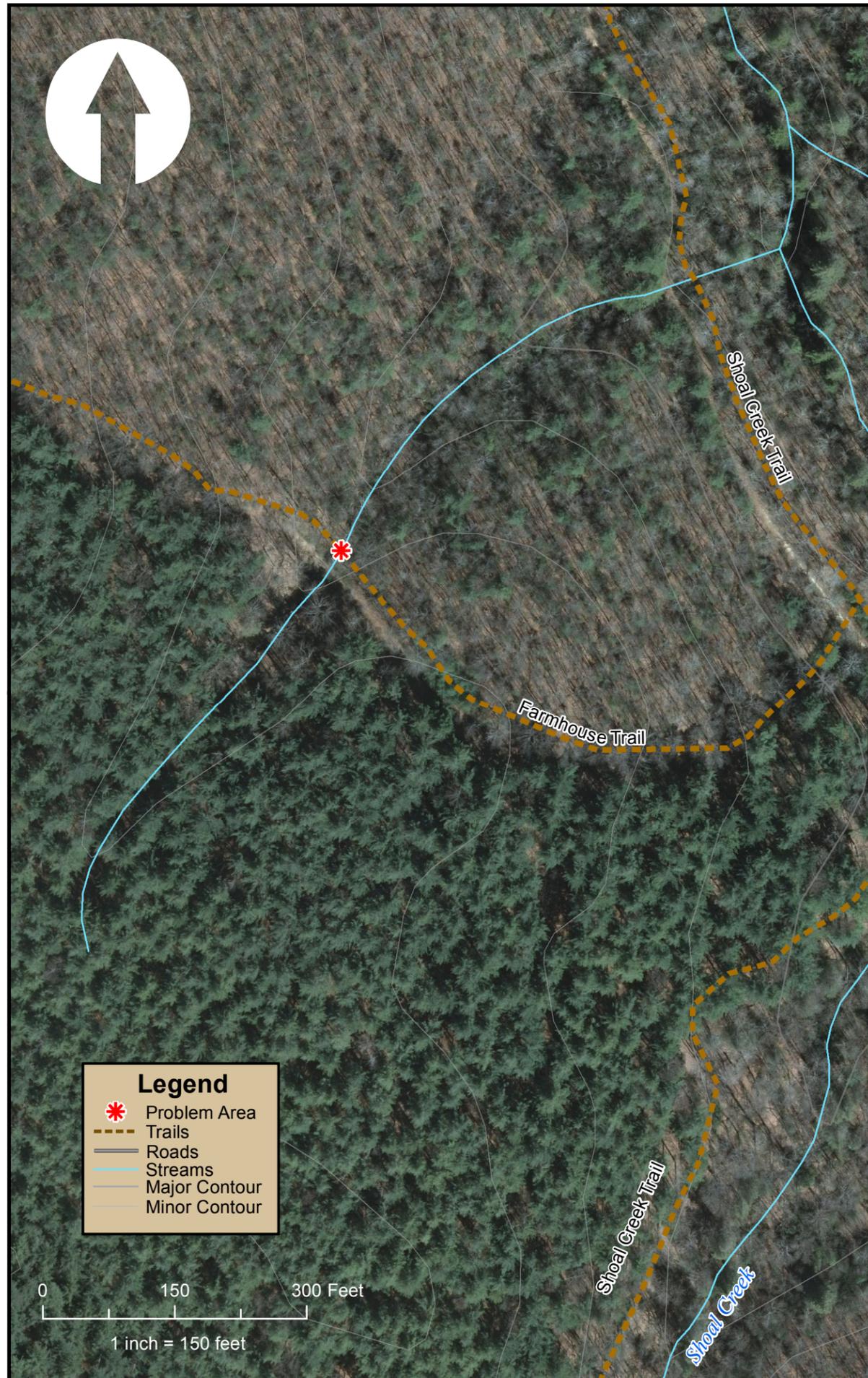
Comments

Culvert appears to be in good condition. Barc areas in vicinity could benefit from vegetation.



Area of Concern – Site: P41

Map Grid Location: H3 Site visit date/ team): 8/26/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Shoal Creek Tributary at Farmhouse Trail

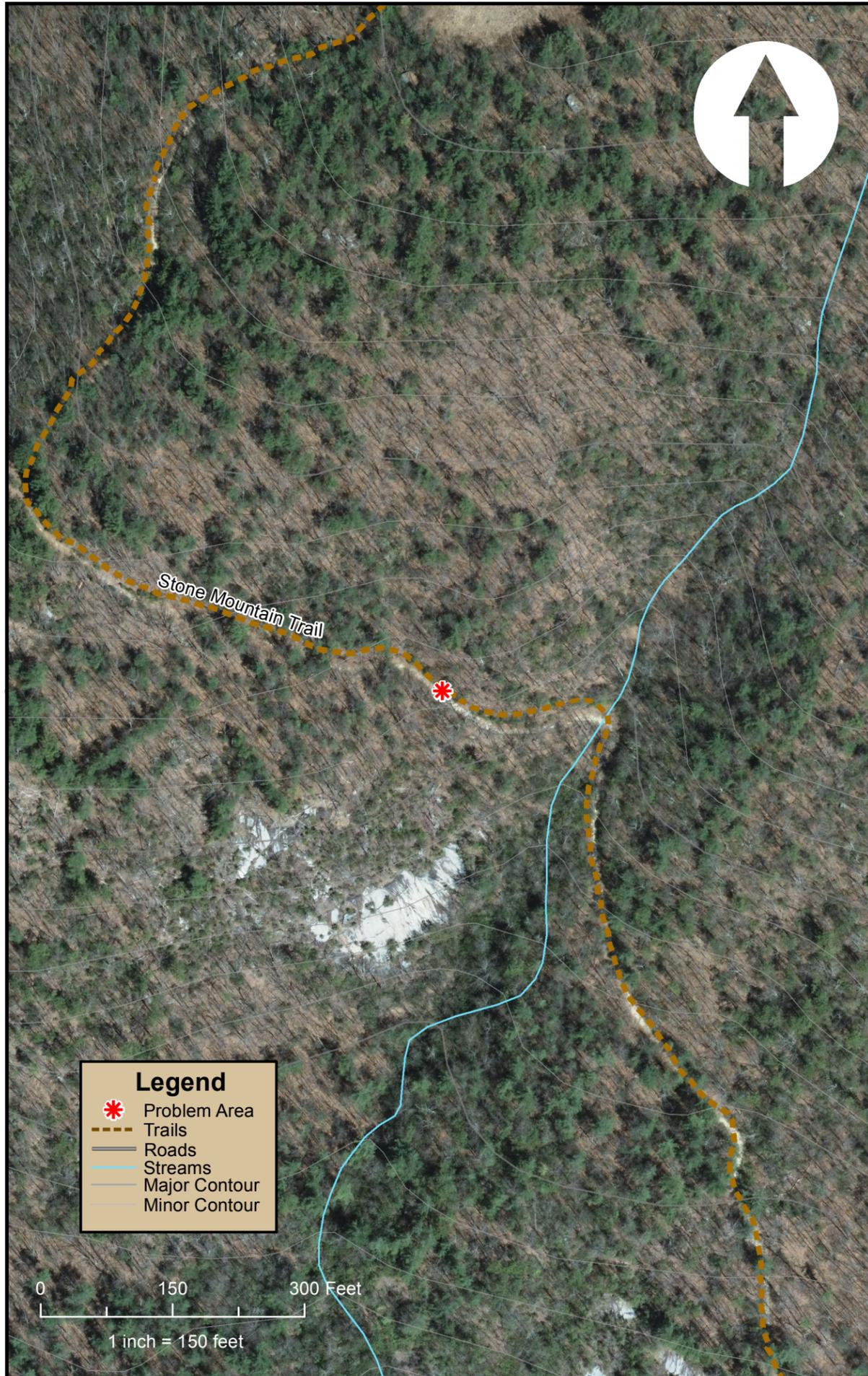
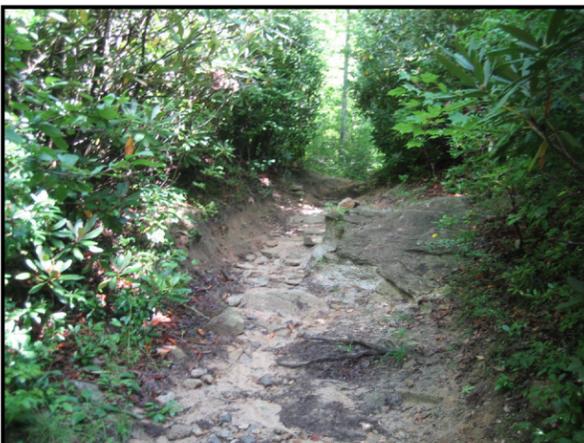


1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Farmhouse Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/ dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)** (list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Farmhouse Trail is steep on both sides of the creek crossing, leading to trail erosion. Sediment traps are full, resulting in fine sediment input to creek. Consider short-term maintenance and/or long-term trail relocation upvalley.





Area of Concern – Site: P42

Map Grid Location: I 2 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Stone Mountain Trail

1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |
2. **Trail/ Road Impact (trail/ road name):** Stone Mountain Trail

| | |
|--|--|
| <input type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input checked="" type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |
3. **Upland/ Stormwater**

| | |
|---|--|
| <input checked="" type="checkbox"/> nonpoint source pollution | <input checked="" type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |
4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

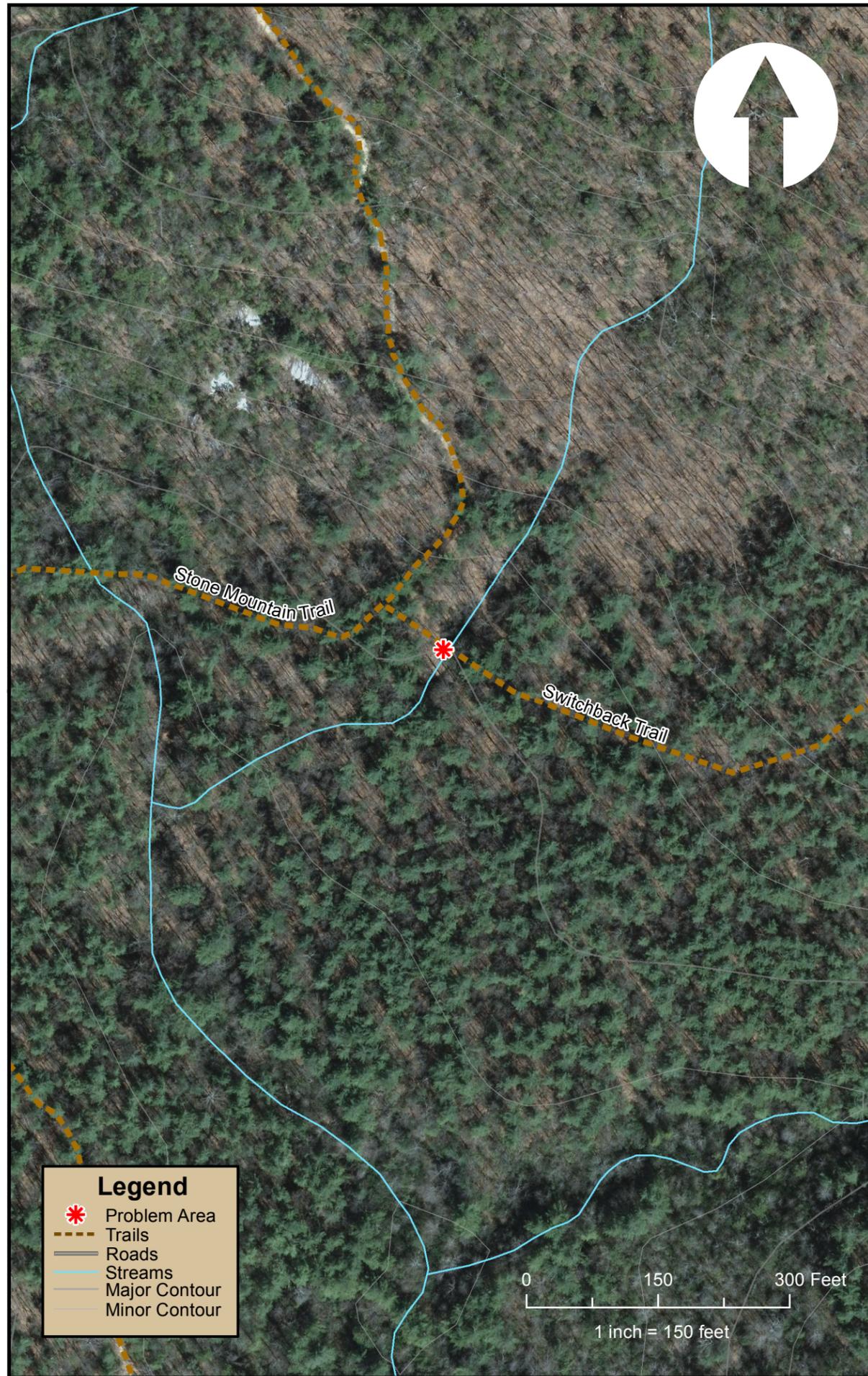
- | | |
|---|--|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Significant upland erosion along much of Stone Mountain Trail.

Area of Concern – Site: P43

Map Grid Location: I 3 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Switchback Trail



- 1. Culvert (diameter/material/length):** 8"/ CPP
- | | |
|---|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input checked="" type="checkbox"/> piping |
| <input checked="" type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** _____
- | | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. Other Problem Area(s) list contributing factors)

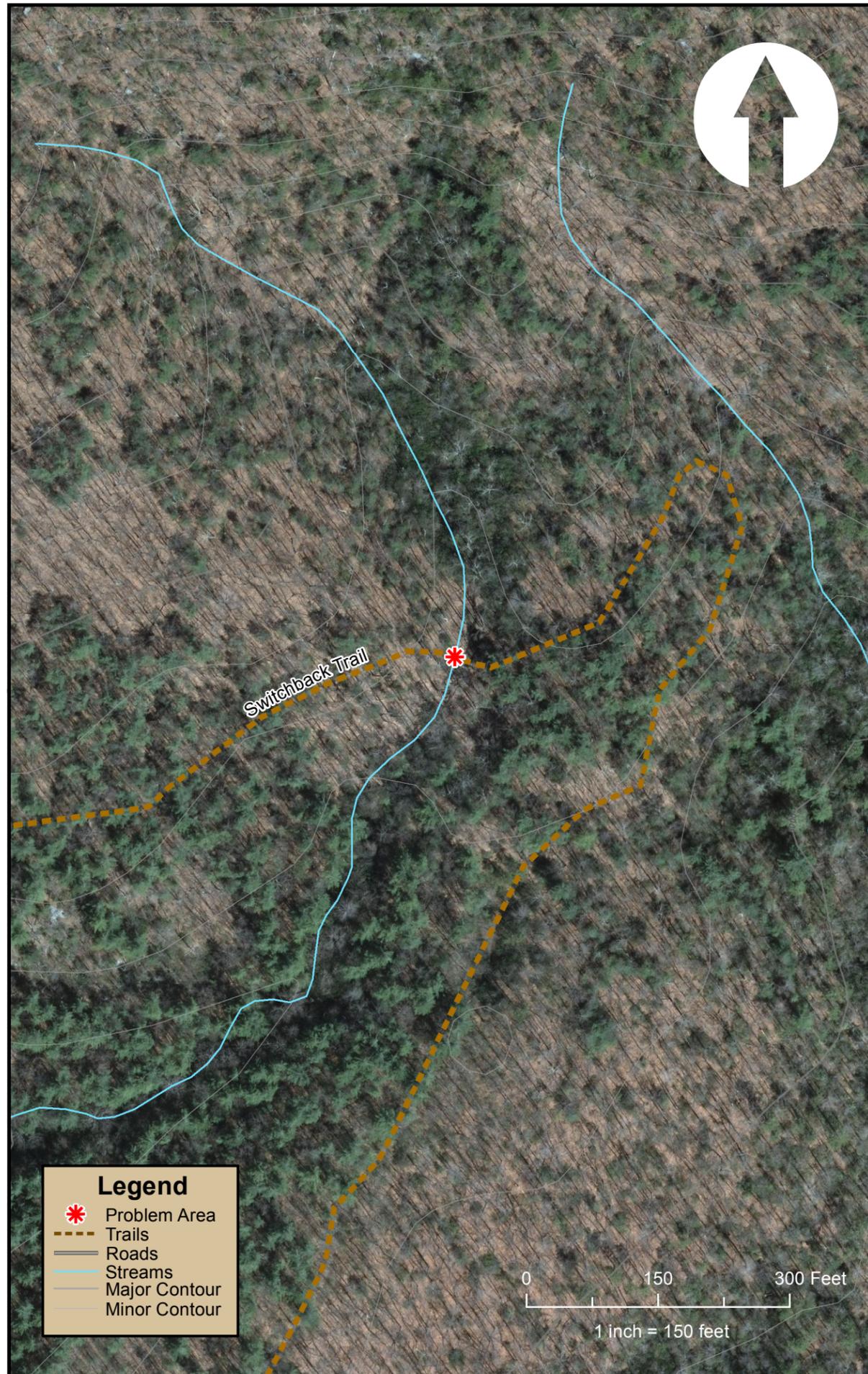
- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input checked="" type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input checked="" type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Culvert failure by piping, leading to trail and downstream channel erosion.



Area of Concern – Site: P44

Map Grid Location: J2 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Switchback Trail



1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Switchback Trail

| | |
|---|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input checked="" type="checkbox"/> unstable trail crossing | <input checked="" type="checkbox"/> erosion |
| <input checked="" type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** list contributing factors)

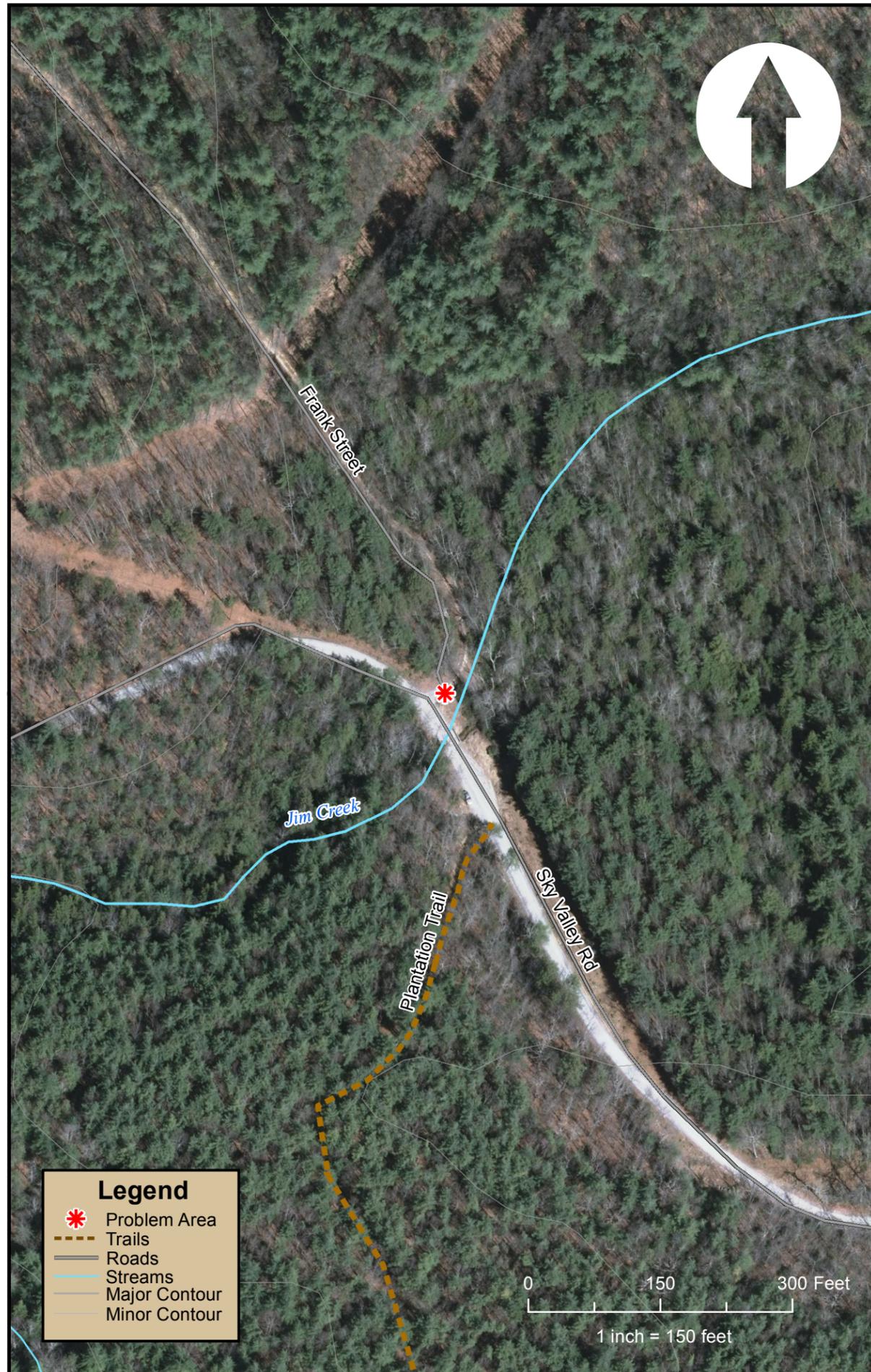
- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input checked="" type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Large eroded hole just downstream of culvert. Trail relocation suggested along with measures to stabilize hole (head-cut).



Area of Concern – Site: P45

Map Grid Location: J3 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): 1.19
 Name & Location: Sky Valley Road at Jim Creek



Legend

- * Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

1. **Culvert (diameter/material/length):** _____

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Sky Valley Road

| | |
|--|---|
| <input checked="" type="checkbox"/> stormwater input | <input checked="" type="checkbox"/> sediment input |
| <input checked="" type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** list contributing factors)

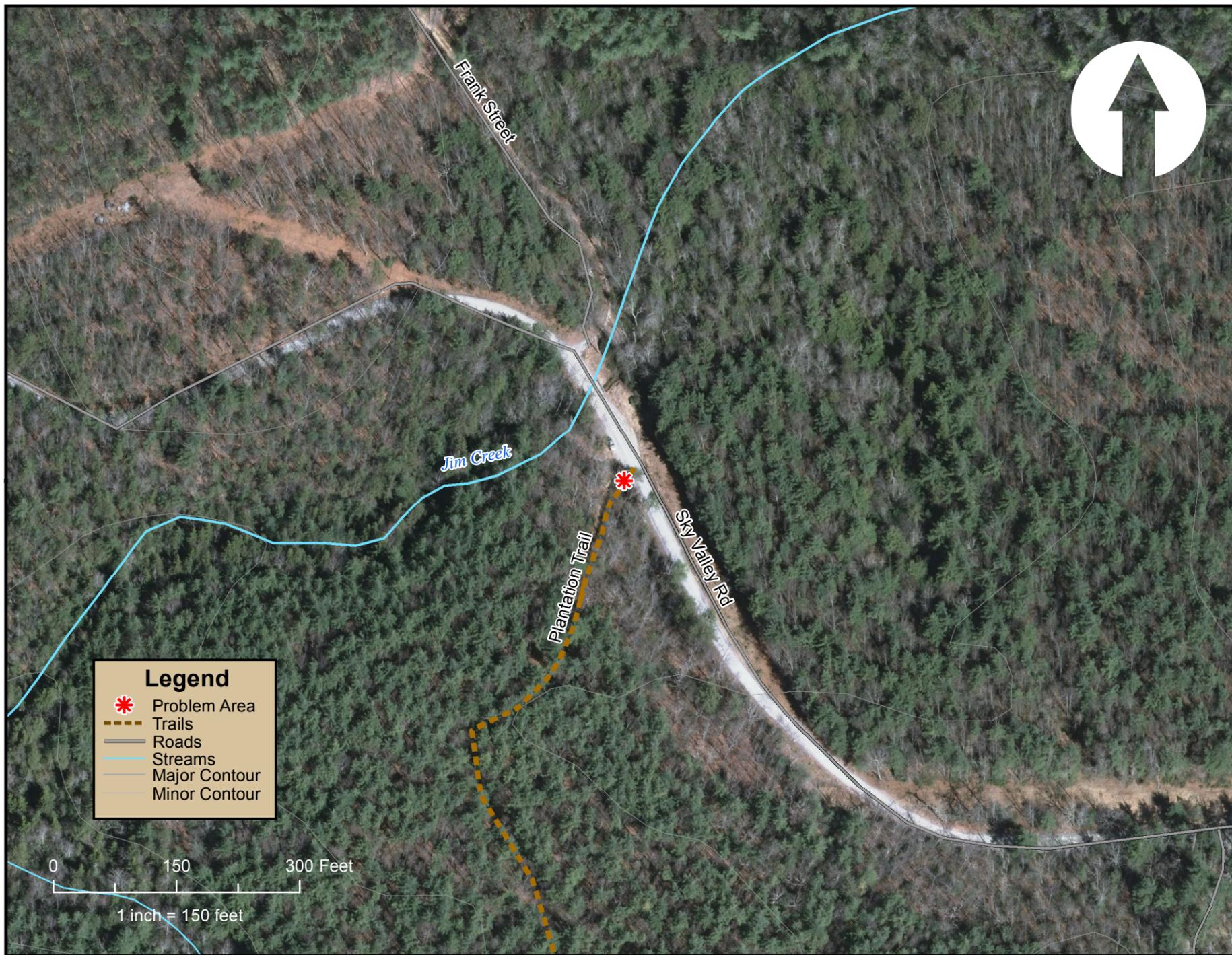
- Potential Solutions**
- | | |
|--|---|
| <input type="checkbox"/> relocate trail/close trail/road | <input checked="" type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input checked="" type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Gravel road serves as source of fine sediment to Jim Creek. Space appears to exist for BMPs on either side of creek.



Area of Concern – Site: P46

Map Grid Location: J3-4 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Plantation Trail at Sky Valley Road



- 1. Culvert (diameter/material/length):** 12"/ CPP
- | | |
|--|--|
| <input checked="" type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input checked="" type="checkbox"/> crushed | <input type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

- 2. Trail/ Road Impact (trail/ road name):** _____
- | | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/dog impacts |

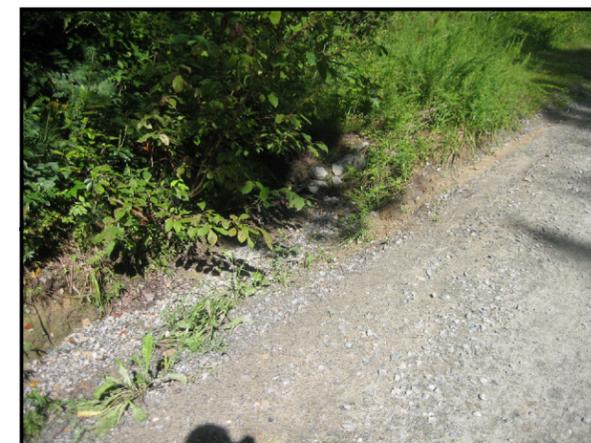
- 3. Upland/ Stormwater**
- | | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

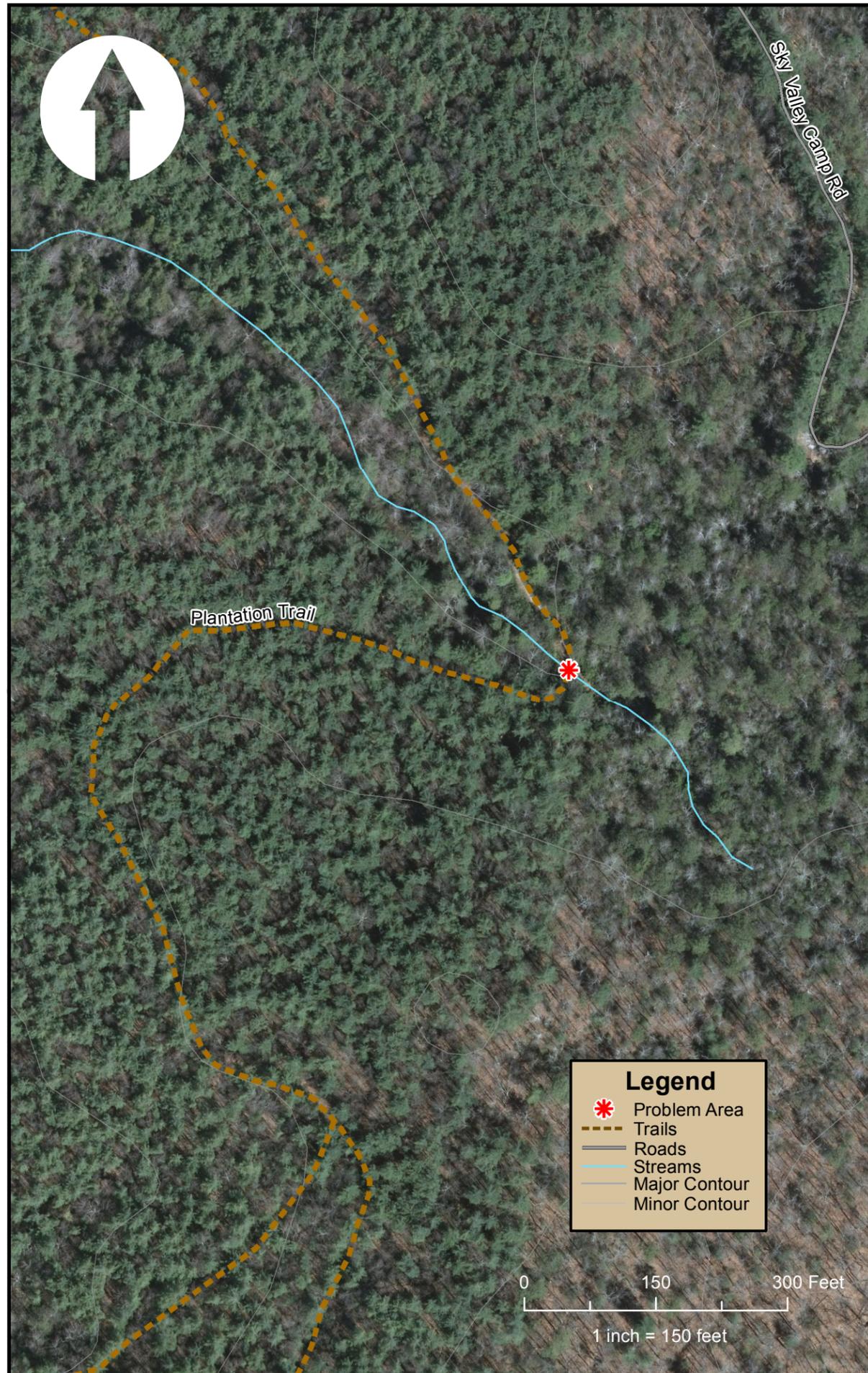
- 4. Lake/Pond/ Reservoir (reservoir name):** _____
- | | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algac, geese, fecal) |

5. Other Problem Area(s) (list contributing factors)

- Potential Solutions**
- | | |
|---|---|
| <input checked="" type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input checked="" type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Culvert under Plantation Trail filled with road sediment and perhaps crushed.





Area of Concern – Site: P47

Map Grid Location: J4 Site visit date/ team): 8/20/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Plantation Trail

1. **Culvert (diameter/material/length):** 18"/ CPP

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** Plantation Trail

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input checked="" type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

3. **Upland/ Stormwater**

| | |
|--|--|
| <input type="checkbox"/> nonpoint source pollution | <input type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

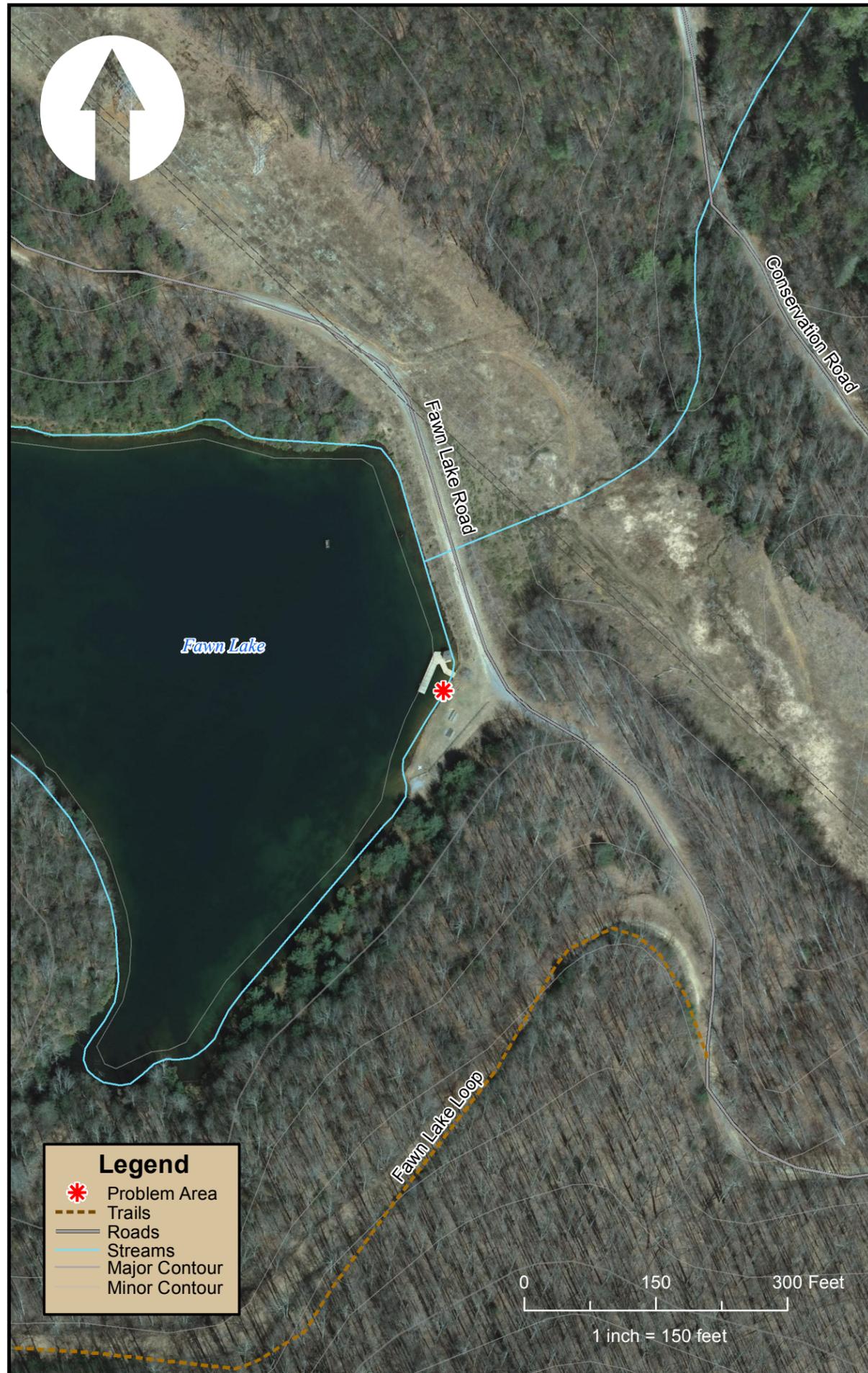
5. **Other Problem Area(s)** (list contributing factors)

Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

No problems with culvert. However, trail in vicinity is over widened and lacking vegetation.



Area of Concern – Site: P48

Map Grid Location: F11 Site visit date/ team): 8/17/15/ JZ Drainage Area (Sq. Mi.): _____
 Name & Location: Fawn Lake

- Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
- Trail/ Road Impact (trail/ road name):** _____
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
- Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
- Lake/Pond/ Reservoir (reservoir name):** Fawn Lake
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
- Other Problem Area(s)** (list contributing factors)

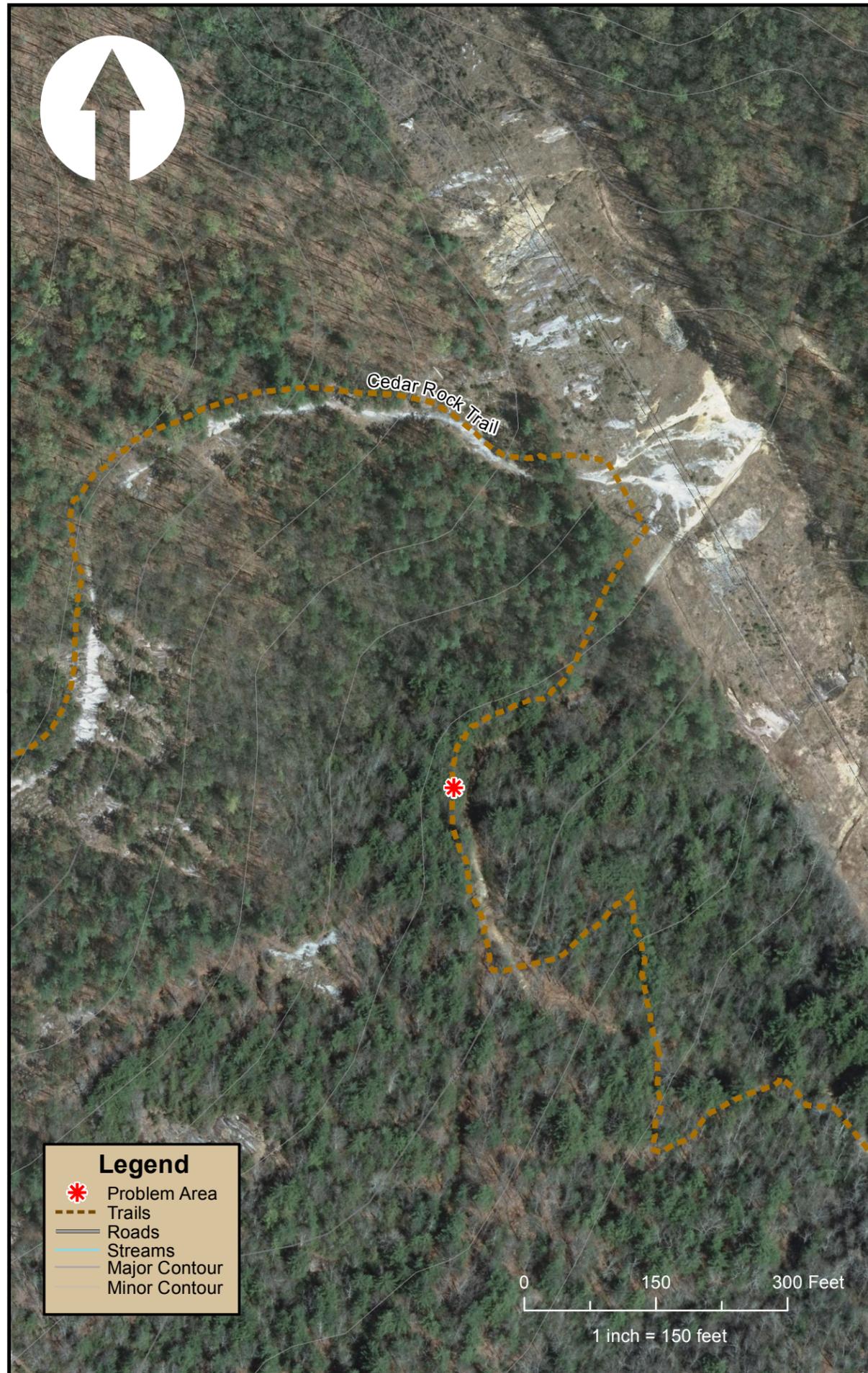
Potential Solutions

- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input type="checkbox"/> mechanical grading |
| <input type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input checked="" type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input checked="" type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments

Shoreline of lake unvegetated and partially eroding at human access area; vegetation could be improved between lake and Fawn Lake Road.





Legend

- Problem Area
- Trails
- Roads
- Streams
- Major Contour
- Minor Contour

Area of Concern – Site: P50

Map Grid Location: E8 Site visit date/ team): 8/30/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Tributary at Cedar Rock Trail

1. **Culvert (diameter/material/length):** _____
 clogged aquatic organism passage/ perched
 crushed erosion (upstream/ downstream)
 lack of natural bed piping
 safety hazard overtopping
2. **Trail/ Road Impact (trail/ road name):** Cedar Rock Trail
 stormwater input sediment input
 bridge utilities
 unstable trail crossing erosion
 safety hazard human impact (hiking/biking)
 missing vegetation equine/dog impacts
3. **Upland/ Stormwater**
 nonpoint source pollution upland erosion
 pollutant point source unvegetated upland area
4. **Lake/Pond/ Reservoir (reservoir name):** _____
 erosion lack of vegetation
 equine impact human impact (hiking/biking)
 safety hazard water quality (temperature, algae, geese, fecal)
5. **Other Problem Area(s)**(list contributing factors)

- Potential Solutions**
- relocate trail/close trail/road trail/road crossing improvement
 - vegetation/ shoreline planting mechanical grading
 - stormwater treatment animal watering
 - human/ animal exclusion culvert rehabilitation/ replacement
 - signs culvert daylighting
 - maintenance bridge replacement/improvement

Comments
 Trail crossing serves as source of fine sediment. Head-cut downstream of trail may threaten trail and/ or be safety hazard in the future. Potentially install bridge. Culvert and stabilize head-cut.





Area of Concern – Site: P51

Map Grid Location: F9 Site visit date/ team): 8/31/15/ JZ Drainage Area (Sq. Mi.): < 0.1
 Name & Location: Drainage at horse barn

1. **Culvert (diameter/material/length):** 12"/ CPP

| | |
|--|--|
| <input type="checkbox"/> clogged | <input type="checkbox"/> aquatic organism passage/ perched |
| <input type="checkbox"/> crushed | <input checked="" type="checkbox"/> erosion (upstream/ downstream) |
| <input type="checkbox"/> lack of natural bed | <input type="checkbox"/> piping |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> overtopping |

2. **Trail/ Road Impact (trail/ road name):** _____

| | |
|--|---|
| <input type="checkbox"/> stormwater input | <input type="checkbox"/> sediment input |
| <input type="checkbox"/> bridge | <input type="checkbox"/> utilities |
| <input type="checkbox"/> unstable trail crossing | <input type="checkbox"/> erosion |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> missing vegetation | <input type="checkbox"/> equine/ dog impacts |

3. **Upland/ Stormwater**

| | |
|---|---|
| <input checked="" type="checkbox"/> nonpoint source pollution | <input checked="" type="checkbox"/> upland erosion |
| <input type="checkbox"/> pollutant point source | <input checked="" type="checkbox"/> unvegetated upland area |

4. **Lake/Pond/ Reservoir (reservoir name):** _____

| | |
|--|---|
| <input type="checkbox"/> erosion | <input type="checkbox"/> lack of vegetation |
| <input type="checkbox"/> equine impact | <input type="checkbox"/> human impact (hiking/biking) |
| <input type="checkbox"/> safety hazard | <input type="checkbox"/> water quality (temperature, algae, geese, fecal) |

5. **Other Problem Area(s)** (list contributing factors)
 Unstable stormwater ditch.

- Potential Solutions**
- | | |
|--|--|
| <input type="checkbox"/> relocate trail/close trail/road | <input type="checkbox"/> trail/road crossing improvement |
| <input checked="" type="checkbox"/> vegetation/ shoreline planting | <input checked="" type="checkbox"/> mechanical grading |
| <input checked="" type="checkbox"/> stormwater treatment | <input type="checkbox"/> animal watering |
| <input type="checkbox"/> human/ animal exclusion | <input type="checkbox"/> culvert rehabilitation/ replacement |
| <input type="checkbox"/> signs | <input type="checkbox"/> culvert daylighting |
| <input type="checkbox"/> maintenance | <input type="checkbox"/> bridge replacement/improvement |

Comments
 Eroding, unvegetated stormwater ditch drains portions of horse fields. Opportunities exist for stormwater BMPs, including grassed/ vegetated swale.



APPENDIX G

Conceptual Design Drawings for High-Priority Stream Sites

- G1. Little River above Bridal Veil Falls (S02)
- G2. Shoal Creek (S15)
- G3. Little River at Hooker Falls Road (S17)
- G4. Cross-sections
- G5. Reference Data, Cross-sections
- G6. Longitudinal Profile
- G7. Reference Data, Longitudinal Profile
- G8. Planting Zones