

REACH CHARACTERIZATION FIELD DATA SHEET

| | | | |
|-------------------|---|--------------------------|-----------------------|
| STREAM NAME | | LOCATION | |
| REACH ID # | | RIVER BASIN | |
| UTM (us end) N | E | TOPOS | |
| UTM (ds end) N | E | STREAM ORDER | ELEVATION |
| INVESTIGATORS | | | |
| FORM COMPLETED BY | | DATE _____ TIME _____ | ASSOCIATED SITE ID #s |

| | | | |
|--------------------|---|---------------------------------|---|
| WEATHER CONDITIONS | Now | Past 24 hours | Has there been a heavy rain in the last 7 days? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | <input type="checkbox"/> storm (heavy rain) | <input type="checkbox"/> | Air Temperature _____°C |
| | <input type="checkbox"/> rain (steady rain) | <input type="checkbox"/> | Other _____ |
| | <input type="checkbox"/> showers (intermittent) | <input type="checkbox"/> | |
| | _____% <input type="checkbox"/> % cloud cover | <input type="checkbox"/> _____% | |
| | <input type="checkbox"/> clear/sunny | <input type="checkbox"/> | |

| | | | | | |
|-------------------|--|---------------------------------------|--|---|--|
| STREAM MORPHOLOGY | Stream Subsystem | | Reach Type | | |
| | <input type="checkbox"/> Perennial | <input type="checkbox"/> Intermittent | <input type="checkbox"/> Tidal | <input type="checkbox"/> Riffle-Pool | <input type="checkbox"/> Cascade |
| | Stream Origin | | | <input type="checkbox"/> Plane-Bed | <input type="checkbox"/> Bedrock w/alluvial veneer |
| | <input type="checkbox"/> Glacial | <input type="checkbox"/> Spring-fed | <input type="checkbox"/> Non-glacial montane | <input type="checkbox"/> Mixture of origins | <input type="checkbox"/> Step-Pool |
| | <input type="checkbox"/> Swamp and bog | <input type="checkbox"/> Other _____ | Rosgen Type _____ | | |

| | | | | |
|--------------------|---|--|--|---|
| WATERSHED FEATURES | Predominant Surrounding Landuse | | Local Hydrologic Alterations | |
| | <input type="checkbox"/> Forest/Natural | <input type="checkbox"/> Residential | <input type="checkbox"/> No Evidence | <input type="checkbox"/> Augmentation |
| | <input type="checkbox"/> Field/Pasture | <input type="checkbox"/> Commercial/Industrial | <input type="checkbox"/> Dam/Retention | <input type="checkbox"/> Channelization |
| | <input type="checkbox"/> Agricultural | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Diversion | <input type="checkbox"/> Other _____ |

| | | | | |
|------------------|---|---|---|--|
| SEDIMENT SOURCES | MANAGEMENT ACTIVITIES (include short description) | | | |
| | Timber Harvesting <input type="checkbox"/> Yes <input type="checkbox"/> No _____ | | | |
| | Mining (Hardrock / Placer) <input type="checkbox"/> Yes <input type="checkbox"/> No _____ | | | |
| | Grazing and/or Agriculture <input type="checkbox"/> Yes <input type="checkbox"/> No _____ | | | |
| | Evidence of Fire <input type="checkbox"/> Yes <input type="checkbox"/> No _____ | | | |
| | EROSIONAL FEATURES | | | |
| | Local Hillslopes | | Roads and related features | |
| | <input type="checkbox"/> No Evidence | <input type="checkbox"/> Major gulying/rilling | <input type="checkbox"/> No Evidence | <input type="checkbox"/> Culvert/Bridge |
| | <input type="checkbox"/> Minor gulying/rilling | <input type="checkbox"/> Mass wasting (slides,debris) | <input type="checkbox"/> Unpaved | <input type="checkbox"/> Ditch/Roadcut |
| | <input type="checkbox"/> Moderate gulying/rilling | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Paved | <input type="checkbox"/> Other _____ |
| | Does sediment reach channel directly? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Does sediment reach channel directly? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Channel Stability | | Is the channel armored? Evidence of bank undercutting? | |
| | <input type="checkbox"/> Stable | <input type="checkbox"/> Aggrading | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | <input type="checkbox"/> Moderately stable | <input type="checkbox"/> Downcutting | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| | <input type="checkbox"/> Unstable | <input type="checkbox"/> Widening | Percent of streambank with deep binding root mass | |
| | <input type="checkbox"/> >85% <input type="checkbox"/> 85-65% <input type="checkbox"/> 65-35% <input type="checkbox"/> <35% | | | |
| | DEPOSITIONAL FEATURES | | | |
| | <input type="checkbox"/> Pool In-filling | <input type="checkbox"/> Floodplain | Degree of instream sedimentation | |
| | <input type="checkbox"/> Lee (DS) deposits | <input type="checkbox"/> Terraces | <input type="checkbox"/> None | <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High |
| | <input type="checkbox"/> Channel bars | <input type="checkbox"/> Other _____ | | |

| | | |
|------------------|---|--|
| CHANNEL FEATURES | Estimated Reach Length _____m | Canopy Cover |
| | Average Stream Width _____m | <input type="checkbox"/> Open <input type="checkbox"/> Partly shaded <input type="checkbox"/> Shaded |
| | Average Stream Depth _____m | Proportion of Reach Represented by Stream Morphology Types |
| | Sampling Reach Area _____m ² | Riffle _____% Run _____% |
| | Estimated Manning's n _____ | Pool _____% |

REACH CHARACTERIZATION FIELD DATA SHEET

| | |
|-------------|----------|
| STREAM NAME | LOCATION |
|-------------|----------|

| | |
|----------------------------|---|
| RIPARIAN VEGETATION | <p>Indicate the dominant type and record the dominant species present</p> <p><input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous</p> <p>dominant species present _____</p> <p>Extent of Riparian Buffer Zone Width of Riparian Buffer Zone Riparian Vegetation Age</p> <p><input type="checkbox"/> None <input type="checkbox"/> < 1 Channel width <input type="checkbox"/> Immature (< 5yrs)</p> <p><input type="checkbox"/> Fragmentary <input type="checkbox"/> 1-5 Channel widths <input type="checkbox"/> Established (5-30 yrs)</p> <p><input type="checkbox"/> Continuous <input type="checkbox"/> > 5 Channel widths <input type="checkbox"/> Mature/Old Growth (>30 yrs)</p> <p>Extent of vegetation encroachment into stream channel</p> <p><input type="checkbox"/> None <input type="checkbox"/> Minimal <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <input type="checkbox"/> Extreme</p> |
|----------------------------|---|

| | |
|---------------------------|--|
| LARGE WOODY DEBRIS | <p><input type="checkbox"/> Not Present <input type="checkbox"/> Present in Cutbank <input type="checkbox"/> Present in Channel</p> <p>Density of LWD _____ m²/km² (area of LWD/ reach area)</p> |
|---------------------------|--|

| | |
|---------------------------|--|
| AQUATIC VEGETATION | <p>Indicate the dominant type</p> <p><input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating</p> <p><input type="checkbox"/> Floating Algae <input type="checkbox"/> Attached Algae</p> <p>Portion of the reach with aquatic vegetation _____%</p> |
|---------------------------|--|

| | |
|----------------------|---|
| WATER QUALITY | <p>Temperature _____ °C</p> <p>Specific Conductance _____</p> <p>Dissolved Oxygen ___ N/A ___</p> <p>pH _____</p> <p>Turbidity _____</p> <p>Water Odors</p> <p><input type="checkbox"/> Normal/None <input type="checkbox"/> Sewage</p> <p><input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical</p> <p><input type="checkbox"/> Fishy <input type="checkbox"/> Other _____</p> <p>Water Surface Oils</p> <p><input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks</p> <p><input type="checkbox"/> None <input type="checkbox"/> Other _____</p> <p>Turbidity (visual)</p> <p><input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid</p> <p><input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other _____</p> |
|----------------------|---|

| DISCHARGE | <p>Velocity-Area Method</p> <table style="width:100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width:20%;">Distance from water's edge (m)</th> <th style="width:20%;">Depth (m)</th> <th style="width:20%;">Velocity (m/s)</th> <th style="width:20%;">Discharge (cms)</th> <th style="width:20%;">Notes</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p style="text-align: right;">Total Discharge (cms) _____</p> | Distance from water's edge (m) | Depth (m) | Velocity (m/s) | Discharge (cms) | Notes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------|--|--------------------------------|-----------------|----------------|-----------------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Distance from water's edge (m) | Depth (m) | Velocity (m/s) | Discharge (cms) | Notes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DISCHARGE | <p>Float Method</p> <table style="width:100%; border-collapse: collapse; margin-bottom: 10px;"> <thead> <tr> <th style="width:15%;"></th> <th style="width:20%;">Width (m)</th> <th style="width:20%;">Avg Depth (m)</th> <th style="width:20%;">Float Distance (m)</th> <th style="width:20%;">Time (s)</th> <th style="width:20%;">Discharge (cms)</th> </tr> </thead> <tbody> <tr> <td>XS 1</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>XS 2</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p style="text-align: right;">Estimated Discharge (cms) _____</p> | | Width (m) | Avg Depth (m) | Float Distance (m) | Time (s) | Discharge (cms) | XS 1 | | | | | | XS 2 | | | | | |
|------------------|---|---------------|--------------------|---------------|--------------------|----------|-----------------|------|--|--|--|--|--|------|--|--|--|--|--|
| | Width (m) | Avg Depth (m) | Float Distance (m) | Time (s) | Discharge (cms) | | | | | | | | | | | | | | |
| XS 1 | | | | | | | | | | | | | | | | | | | |
| XS 2 | | | | | | | | | | | | | | | | | | | |