WORKSHEET 1: ADVERSE IMPACT FACTORS FOR RIVERINE SYSTEMS WORKSHEET

| Stream Type | Intermittent | | | Perennial Stream > 15' in width | | | Perennial Stream $\leq 15'$ in width | | |
|-------------|----------------|----------|----------|---------------------------------|--|-------------|--------------------------------------|---------------|----------|
| Impacted | 0.1 | | | 0.4 | | | 0.8 | | |
| Priority | | Tertiary | | Secondary | | | Primary | | |
| Area | | 0.5 | | 0.8 | | | 1.5 | | |
| Existing | Fully Impaired | | | Somewhat Impaired | | | Fully Functional | | |
| Condition | 0.25 | | | 0.5 | | | 1.0 | | |
| Duration | Temporary | | | Recurrent | | | Permanent | | |
| | 0.05 | | | 0.1 | | | 0.2 | | |
| Dominant | Shade/ | Utility | Bank | Deten- | Stream | Impound | Morpho- | Pipe | Fill |
| Impact | Clear | X-ing | Armor | tion | Crossing | | logic | >100' | |
| | | | | | (≤ 100') | | Change | | |
| | 0.05 | 0.4 | 0.7 | 1.5 | 1.7 | 2.7 | 2.7 | 3.0 | 3.0 |
| Scaling | < 100' | 100-200' | 201-500' | 501- | > 1000' impact | | | | |
| Factor | impact | impact | impact | 1000' | 0.4 for each 1000' feet of impact | | | | |
| (Based on # | | | | impact | (round impacts to the nearest 1000') | | | |) |
| linear feet | | | | | (example: $2,200$ ' of impact – scaling factor = 0.8 ; | | | | r = 0.8; |
| impacted) | 0 | 0.05 | 0.1 | 0.2 | 2, | 800' of imp | act – scaling | g factor – 1. | 2) |

| Reaches to Be Impacted | Reach 1 | Reach 2 | Reach 3 | Reach 4 | | | | |
|---|--|------------------|------------------|------------------|--|--|--|--|
| | Complete the Following for Each Reach to Be Impacted | | | | | | | |
| Simon Channel Evolution Stage | | | | | | | | |
| Rosgen Stream Type/D50 | | | | | | | | |
| Criteria for Selecting Existing Condition for Each Reach | | | | | | | | |
| Bankfull Width and Depth | Width: Depth: | Width: Depth: | Width: Depth: | Width: Depth: | | | | |
| Bankfull Indicators (attach photograph showing bankfull for each reach) | | | | | | | | |
| Factors | Reach 1 | Reach 2 | Reach 3 | Reach 4 | | | | |
| Stream Type Impacted | | | | | | | | |
| Priority Area | | | | | | | | |
| Existing Condition | | | | | | | | |
| Duration | | | | | | | | |
| Dominant Impact | | | | | | | | |
| Scaling Factor | | | | | | | | |
| Sum of Factors M = | | | | | | | | |
| Feet Stream in Reach Impacted LF = | | | | | | | | |
| M X LF = | | | | | | | | |

Total Mitigation Credits Required = (M X LF) = _____

WORKSHEET 2: STREAM CHANNEL RESTORATION, STREAM RELOCATION, AND STREAMBANK RESTORATION WORKSHEET

| | All proposals must include at least a 25' riparian buffer on both banks Buffers \geq 50' +2'/% slope also may generate riparian credit (use see buffer worksheet) | | | | | | | | h banks ffer worksheet) | |
|-------------------|--|-----------|---------|---|--|--------------|------------------------|-----------|----------------------------|------------------------|
| Net Benefit | Streambank Structure Stabilization Remova | | e ll | Stream Channel Restoration and Stream Relocation | | | ation and | | | |
| | | | | | | | | | | |
| | 2.0 | 4.0 to 8. | | 0 Prior 0 1. | | 1ty 4 0 | Priority 3 4.0 | | | Priority 1 or 2 8.0 |
| Monitoring/ | Minimal (Required) N | | Aodera | Ioderate Substantia | | al Excellent | | Excellent | | |
| Contingency | 0 | | | 0.3 0.4 | | | | 1.0 | | |
| Priority Area | Tertiary | у | | Secondary | | Primary | | | | |
| | 0.05 | | | 0.2 | | | 1.0 | | | |
| Control | RC on restored channel and | | el and | Required RC + CE or GPP | | | Required RC + CE + GPP | | | |
| | 25' buffer (Required) | | - | | | | _ | | | |
| | 0.1 | | | 0.3 | | | 0.5 | | | |
| Mitigation Timing | Schedule 3 | | | Schedule 2 (Use for all banks) | | | Schedule 1 | | | |
| | 0 | | | 0.1 | | | 0.5 | | | |

| Factors | Reach 1 | Reach 2 | Reach 3 | Reach 4 | | | | |
|--|---|-----------------|-------------------|---------|--|--|--|--|
| | Submit Representative Photographs a Completed Table 2 and Conceptual Restoration Design for Each Restored or | | | | | | | |
| | Relocated Reach; Submit Photographs of Each Bank Where | | | | | | | |
| | Stream | mbank Stabiliza | tion will be Conc | lucted | | | | |
| Net Benefit | | | | | | | | |
| Monitoring/Contingency (at least minimal M&C required) | | | | | | | | |
| Priority Area | | | | | | | | |
| Control (at least a RC required) | | | | | | | | |
| Mitigation Timing | | | | | | | | |
| Sum of Factors M = | | | | | | | | |
| Feet Stream in Reach (do not count each bank separately) LF = | | | | | | | | |
| M X LF = | | | | | | | | |

Total Channel Restoration/Relocation Credits Generated = (M X LF) = _____

WORKSHEET 3: RIPARIAN RESTORATION AND PRESERVATION WORKSHEET

| Net Benefit - select value | Riparian Restoration/Habitat Improvement/Preservation Factors – MBW = Minimum Buffer Width | | | | | | | |
|----------------------------|--|---------|--------------------------------|--------------------|------------------------|------------------------|--|--|
| for each stream side | = 50'+2'/% slope | | | | | | | |
| | Select Values from Table 1 | | | | | | | |
| System Credit Condition 1 | Condition 1: MWB restored or protected on both streambanks | | | | | | | |
| | To Calculate Value: | Averag | ge of the Net Ben | efit values for St | ream Si | de A and Stream Side B | | |
| System Credit Condition 2 | RC Placed | on Char | nnel | RC ar | nd CE Pl | aced on Channel | | |
| | 0.0 | 05 | | | | 0.1 | | |
| M&C - select value for | Mimimal (Required) | 1 | Moderate | Substantial | | Excellent | | |
| each stream side | 0 | | 0.2 | 0.25 | | 0.3 | | |
| Priority Area | Tertiary | | Secondary | | Primary | | | |
| | 0.05 | | 0.2 | | 0.7 | | | |
| Control | RC on restored channel and | | Required RC + CE or GPP | | Required RC + CE + GPP | | | |
| | 25' buffer (Required) | | • | | | _ | | |
| | 0.1 | | 0.3 | | 0.5 | | | |
| Mitigation Timing - select | Schedule 3 | | Schedule 2 (Use for all banks) | | Schedule 1 | | | |
| value for each stream side | 0 | | 0.05 | | 0.15 | | | |

| Riparian Rea | aches | Reach 1 | Reach 2 | Reach 3 | Reach 4 | | | | |
|--|------------------|--|---------|---------|---------|--|--|--|--|
| | | Complete the Following for Each Riparian Reach | | | | | | | |
| Simon Channel Evolution St | tage | | | | | | | | |
| Rosgen Stream Type/D50 | | | | | | | | | |
| Rosgen Stream Type/D50 | | | | | | | | | |
| Criteria for Selecting Existin | ng Condition for | | | | | | | | |
| Each Reach | | | | | | | | | |
| Bankfull Width and Depth | | Width: | Width: | Width: | Width: | | | | |
| | | Depth: | Depth: | Depth: | Depth: | | | | |
| Bankfull Indicators (attach p | hotograph | | | | | | | | |
| showing bankfull for each re | each) | | | | | | | | |
| Factors | - | Reach 1 | Reach 2 | Reach 3 | Reach 4 | | | | |
| Net Benefit | Stream Side A | | | | | | | | |
| | Stream Side B | | | | | | | | |
| System Credit: Condition 1 | Met | | | | | | | | |
| System Credit: Condition 2 only if Condition 1 met) | met (applicable | | | | | | | | |
| M&C (at least minimal | Stream Side A | | | | | | | | |
| M&C required) | Stream Side B | | | | | | | | |
| Priority Area | 1 | | | | | | | | |
| *Control (at least a RC required) | | | | | | | | | |
| *Mitigation Timing (none | Stream Side A | | | | | | | | |
| for riparian preservation) Stream Side B | | | | | | | | | |
| Sum of Factors | M = | | | | | | | | |
| Linear Feet of Stream Buffe | red | | | | | | | | |
| (do not count each bank sepa | arately) LF = | | | | | | | | |
| M X LF = | | | | | | | | | |
| | | | | | | | | | |

Total Riparian Restoration Credits Generated = (M X LF) = _____