**Attachment 12501.1 - SPD Mitigation Ratio Setting Checklist**

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| 1 | Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Corps file no.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Project Manager: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Impact site name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ORM impact resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Impact Cowardin or HGM type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Impact area (acres): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Impact distance (linear feet): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
|  |  | Column A:  Mitigation site name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin/HGM type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Column B (optional):  Mitigation site name: \_\_\_\_\_\_\_\_\_\_  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin/HGM type: \_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Column C (optional):  Mitigation site name: \_\_\_\_\_\_\_\_\_\_  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin/HGM type: \_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
| 2.a | **Qualitative impact-mitigation comparison:**  For preservation, complete steps 2.c. and 3.  For other mitigation methods, has a Corps-approved functional/condition assessment been obtained? If not, complete step 2.a\*; otherwise, complete step 2.b. \*Optional: use Table 2 page 4.  Yes  No | Starting ratio: 1:1  Ratio adjustment: \_\_\_  Baseline ratio: \_\_:\_\_  PM justification: | Starting ratio: 1:1  Ratio adjustment: \_\_\_  Baseline ratio: \_\_:\_\_  PM justification: | Starting ratio: 1:1  Ratio adjustment: \_\_\_  Baseline ratio: \_\_:\_\_  PM justification: |
| 2.b | **Quantitative impact-mitigation comparison:**  Use step 2.b if a Corps-approved functional/condition assessment has been obtained.  Use Before-After-Mitigation-Impact (BAMI) spreadsheet (attachment 12501.4). See examples in attachment 12501.2. | Baseline ratio from BAMI procedure (attached): \_\_:\_\_ | Baseline ratio from BAMI procedure (attached): \_\_:\_\_ | Baseline ratio from BAMI procedure (attached): \_\_:\_\_ |
| 2.c | Preservation baseline ratio (complete Table 2 step A). | Baseline ratio: \_\_:1  PM justification: | Baseline ratio: \_\_:1  PM justification: | Baseline ratio: \_\_:1  PM justification: |
| 3 | Preservation adjustment (complete Table 2 steps B-E and enter total adjustment from step E). | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 4 | **Mitigation site location:** | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 5 | **Net loss of aquatic resource surface area:** | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 6 | **Type conversion:** | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 7 | **Risk and uncertainty:** | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 8 | **Temporal loss:** | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: | Ratio adjustment:  PM justification: |
| 9 | **Final mitigation ratio(s):** | Column A:  1. Baseline ratio (step 2.a, b or c) = \_\_:\_\_  2. Total adjustments (steps 3-8) = \_\_\_  3. Final ratio: \_\_ : \_\_  Proposed impact (total):  \_\_\_ acre  \_\_\_ linear feet  to  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin or HGM: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Required mitigation:  \_\_\_ acre  \_\_\_ linear feet  of  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin or HGM: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Additional PM comments: | Column B:  1. Baseline ratio (step 2.a, b or c) = \_\_:\_\_  2. Total adjustments (steps 3-8) = \_\_\_  3. Final ratio: \_\_ : \_\_  Remaining impact: \_\_\_\_\_\_\_\_\_\_\_  Required mitigation:  \_\_\_ acre  \_\_\_ linear feet  of  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin or HGM: \_\_\_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Additional PM comments: | Column C:  1. Baseline ratio (step 2.a, b, or c) = \_\_:\_\_  2. Total adjustments (steps 3-8) = \_\_\_  3. Final ratio: \_\_ : \_\_  Remaining impact: \_\_\_\_\_\_\_\_\_\_\_  Required mitigation:  \_\_\_ acre  \_\_\_ linear feet  of  Mitigation type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_  Resource type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Cowardin or HGM: \_\_\_\_\_\_\_\_\_\_\_  Hydrology: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Additional PM comments: |
| 10 | **Final compensatory mitigation requirements:** | PM summary: | | |

**Table 1 for qualitative comparison of functions (functional loss vs. gain):**

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| --- | --- | --- | --- |
| **Function** | **Impact site** | **Mitigation site** | **PM Justification** |
| Short- or long-term surface water storage |  |  |  |
| Subsurface water storage |  |  |  |
| Moderation of groundwater flow or discharge |  |  |  |
| Dissipation of energy |  |  |  |
| Cycling of nutrients |  |  |  |
| Removal of elements and compounds |  |  |  |
| Retention of particulates |  |  |  |
| Export of organic carbon |  |  |  |
| Maintenance of plant and animal communities |  |  |  |
| Step 2.a adjustment for column \_\_: | |  | |

**Table 2. Baseline ratio and total adjustment determinations for preservation:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Steps** | **Criteria** | **Results** | **PM Justification** |
| A. | Baseline ratio (5:1, 3:1, or 1:1): |  |  |
| B. | Functions adjustment (5, 3, or 1): |  |  |
| C. | Threat adjustment (5, 3, or 1): |  |  |
| D. | Degree of protection adjustment (5, 3, or 1): |  |  |
| E. | Total adjustment for column \_\_ (add steps B-D): |  |  |
| Supporting information: | | | |
| Impacted aquatic resource(s): | |  | |
| Preserved aquatic resource(s)/site(s): | |  | |
| Threat: | |  | |
| Protection type: | |  | |