Bank Use Plan

# Using Credits from Wetland Mitigation Banks:Guidance to Permit Applicants on Submittal Contents for Bank Use Plans

The Interagency Review Team[[1]](#footnote-1) (IRT) is issuing this paper to provide guidance to permit applicants (applicants) who wish to use wetland mitigation bank (bank) credits to compensate for unavoidable impacts to wetlands and other aquatic resources, including buffers, associated with their projects. Aquatic resources include but are not limited to wetlands, streams, rivers, other waters, and associated buffers. This paper does not replace or modify any existing laws and policies enforced by the regulatory agencies. The IRT reserves the right to make exceptions to or modify this guidance when doing so would benefit the public interest, the aquatic environment, and/or the banking program in Washington State.

This paper consists of an annotated outline for a report that serves as the mitigation plan for impact projects. Standard permittee-responsible mitigation plans are not appropriate when the applicant is proposing to use bank credits as compensation. We will refer to this report as the Bank Use Plan.

The purpose of the Bank Use Plan is to provide permit decision-makers at the regulatory agencies with sufficient information to decide whether applicants will:

1. Avoid and minimize aquatic resource impacts to the maximum extent practicable, and
2. Provide sufficient and ecologically appropriate compensation for the unavoidable aquatic resource impacts by proposing to purchase, use, or transfer credits from a specific wetland mitigation bank

Project managers and wetland specialists at the U.S. Army of Corps Engineers (Corps) and Washington State Department of Ecology (Ecology) typically have general knowledge of approved banks in the regions they cover. However, it is up to the applicant to provide enough information in their application package to demonstrate how the bank adequately compensates for their specific project’s impacts.

The following outline summarizes the information that should be included in a Bank Use Plan. To address questions about what to include in the Bank Use Plan or the process of permitting unavoidable impacts using bank credits as compensation, applicants should contact the project manager designated for their region. See below for links to staff and guidance information.

* [Corps Project Managers](http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Contact-Us/)[[2]](#footnote-2)
* [Ecology Wetland Specialists](https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Contacts-by-subject-region)[[3]](#footnote-3)
* General guidance can be found in Wetland Mitigation in Washington State -
	+ [*Part 1: Agency Policies and Guidance (Version 2)*](https://apps.ecology.wa.gov/publications/summarypages/2106003.html)[[4]](#footnote-4)
	+ [*Part 2: Developing Mitigation Plans*](https://fortress.wa.gov/ecy/publications/summarypages/0606011b.html)[[5]](#footnote-5)

Directions to applicants:

* Check [Ecology’s map showing the locations of approved banks](https://ecology.wa.gov/Water-Shorelines/Wetlands/Mitigation/Wetland-mitigation-banking/Mitigation-bank-projects).[[6]](#footnote-6) Click on a specific bank to find detailed information including a brief summary of the bank, the bank sponsor’s contact information, the bank’s service area, and the Mitigation Banking Instrument (MBI). Applicants should contact the bank sponsor directly for additional information on the process to purchase credits and on the functions provided by the bank. If the impact project is located outside of a bank’s service area, see *Section 11. Out-of-Service Area (OOSA) Request* for details of additional information that should be provided in your Bank Use Plan.
* The applicant must demonstrate that the project’s proposed impacts to aquatic resources will be avoided and minimized to the maximum extent practicable AND that use of bank credits will provide ecologically appropriate compensation for their project’s impacts. Location of an impact project within a bank’s service area does not guarantee that federal, state, or local regulatory agencies will approve use of bank credits as compensation. Regulatory agencies review and approve specific Bank Use Plans on a case-by-case basis.
* Applicants should communicate with all regulatory agencies early in the permit process and show due caution when considering early purchase of bank credits (reserved credits). Purchase of reserved credits does not provide any guarantee that a project will be authorized under existing regulatory programs or that the reserved credits would be approved as compensation for a specific project’s impacts. Reserved credits are purchased at the buyer's sole risk.
* If other compensation for aquatic resource impacts is proposed for a project in addition to purchasing bank credits, applicants should describe this in detail in a separate permittee-responsible mitigation plan. Brief description of the additional compensation for the permittee-responsible mitigation plan should be included in *Section 8. Wetland and Other Aquatic Resource Functions Not Compensated at the Wetland Mitigation Bank* and the citation should be included in *Section 12. References*.
* Before deciding on a compensation option, check with the specific bank sponsor to confirm that their bank will have sufficient credits available at the time your project is expected to be permitted. Be aware that bank sponsors are not authorized to sell credits that have not yet been released by the IRT. Prospective buyers may request an updated credit ledger from the bank sponsor prior to committing to credit purchase.
* Applicants must include figures in their Bank Use Plan. The Bank Use Plan Outline includes the minimum figure requirements that the regulatory agencies need to make a permit decision; however, additional figures may be necessary depending on the impact project.
* Applicants should coordinate with the regulatory agencies because they may decide that impacts would be better compensated on-site, or closer to, the project site.
* One agency may require that more bank credits be used, or one or more agencies may determine that the bank will not compensate for the loss of certain functions, and therefore, compensation for those functions must be provided separately.
* Agencies cannot guarantee that an applicant will be approved to use bank credits as compensation prior to review of the complete application package and a permit decision.

# Bank Use Plan Outline

## 1. Project Description

Provide a brief description of the project and the types of activities that will impact wetlands and other aquatic resources including buffers. If a more detailed project description is available in other documents in the application package, this section should summarize the project description, cite the detailed document(s), and provide the full citation(s) in *Section 12*. If the impact project is located outside of the bank’s service area, clearly state that in the project description.

* **Figure**: Provide a project vicinity map that marks the actual location of the project. Please use a base map that includes labelled roads, cities, and other geographic features to make it easier to identify the project’s location.

## 2. Existing Conditions of Wetlands and Other Aquatic Resources

Provide a brief description of the wetlands, buffers, and other aquatic resources on the project site. Include the location, landscape position, size (in acres), vegetation, soils, hydroperiod, source of water, surrounding land uses, and functions. Include the hydrogeomorphic classification and wetland rating as determined by the Eastern or Western [Washington State rating systems](https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Rating-systems).[[7]](#footnote-7) Information in this section is intended to be a summary of existing wetlands and other aquatic resources at the site. The wetland delineation report and any other aquatic resource assessments[[8]](#footnote-8) with more detailed descriptions should be cited here and in the references listed in *Section 12.* Information should also be summarized in a table format as shown in the following Example Tables 1 and 2.

* **Figure**: Provide an aerial image with delineated wetland boundaries, aquatic resources (including all ditches), and buffers outlined and labeled.

Table 1. Example: Existing Wetland Ratings and Buffer Widths

| Resource Identifier | Wetland Area (acres) | Local Jurisdiction[[9]](#footnote-9) Buffer Width  | Ecology Rating | Local Jurisdiction[[10]](#footnote-10) Rating | Cowardin Classification | HGM Classification |
| --- | --- | --- | --- | --- | --- | --- |
| Wetland A | 1.01 | 50 ft | IV | 4 | PEM | Depressional |
| Wetland B | 0.46 | 50 ft | IV | 4 | PEM | Depressional |
| Wetland C | 5.88 | 75 ft | III | 3 | PSS | Riverine |
| Wetland D | 2.43 | 110 ft | II | 2 | PFO | Depressional |
| **TOTALS** | **9.78 ac** |  |  |  |  |  |

Table 2. Example: Other Existing Aquatic Resources and Buffer Widths

| Resource Identifier | Watercourse Area (acre/linear ft)[[11]](#footnote-11) | Local Jurisdiction[[12]](#footnote-12) Buffer Width  | Classification System Used[[13]](#footnote-13) | Water Type | [303(d) Listed](https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d) (parameters)[[14]](#footnote-14) |
| --- | --- | --- | --- | --- | --- |
| Stream A | 0.021/300 | 50 ft | WDNR | Ns = Non-fish seasonal  | None |
| Stream B | 0.17/500 | 100 ft | WDNR | F = Fish | Temperature |
| **TOTALS** | 0.191 ac/800 lf |  |  |  |  |

## 3. Avoidance and Minimization of Wetland and other Aquatic Resource Impacts

Describe how adverse impacts (direct, indirect, and temporary) to wetlands and other aquatic resources will be avoided and minimized by the project to the greatest extent practicable. This should include consideration of project location, design, construction practices, monitoring efforts, and/or other relevant factors. If other project sites were considered and rejected on the basis of wetland and other aquatic resource impacts, briefly mention them here. If a [Clean Water Act Section 404(b)(1) Alternatives Analysis](https://www.epa.gov/cwa-404/section-404b1-guidelines-40-cfr-230)[[15]](#footnote-15) was prepared for the project, cite that document here and list the reference in *Section 12.*

Additional information on this topic can be found on [Ecology’s *Avoiding and Minimizing Wetland Impacts* webpage](https://ecology.wa.gov/Water-Shorelines/Wetlands/Mitigation/Avoidance-and-minimization).[[16]](#footnote-16)

Summarize measures taken to avoid and minimize impacts to wetlands and other aquatic resources using tables similar to the following Example Tables 3 and 4.

Table 3: Example: Avoided, Minimized, and Expected Impacts to Wetlands

| Wetland Identifier | Total WetlandArea (acres) | Potential Wetland Impacts Prior to Avoiding and Minimizing (acres) | Proposed Wetland Impacts (acres) | Avoidance and Minimization Measures |
| --- | --- | --- | --- | --- |
| A | 1.01 | 0.08 | 0.03 | Stormwater outfall designed to minimize impacts to wetland. |
| B | 0.46 | 0.46 | 0.46 | Impacts unavoidable – no practicable methods for reducing wetland impacts in this area while still meeting project goals for improved safety. |
| C | 5.88 | 2.43 | 0.95 | A retaining wall will be constructed along the entirety of this wetland to avoid and minimize impacts. A new embankment will be constructed that will extend the wall an additional 10 feet to the west. This additional 10 feet is required to meet the flow (head) requirements to allow the embankment to function properly. |
| D | 2.43 | 0.40 | 0 | Impacts to wetland avoided entirely by changing road alignment to widen toward the median. |
| **TOTALS** | **9.78** | **3.37** | **1.44** |  |

Table 4: Example: Avoided, Minimized, and Expected Impacts to Other Aquatic Resources and Buffers

| Resource Identifier | Impact Area Before[[17]](#footnote-17) (acres/linear ft) | Impact Area After[[18]](#footnote-18) (acres/linear ft) | Temporary Impact Area (acres/ linear ft) | Buffer Impact Area (acres) | Indirect Impact Area (acres/ linear ft) | Avoidance and Minimization Measures  |
| --- | --- | --- | --- | --- | --- | --- |
| Stream A | 0.07 ac/200 lf | 0.02 ac/57 lf | 0 | 0.1 ac | 0 | Bridge used for crossing, bridge abutments in stream |
| Stream B | 0.06 ac/180 lf | 0 | 0 | 0.5 ac | 0 | Design altered to avoid stream altogether. Road path chosen to minimize need for clearing large conifers. Temporary road will be decommissioned and replanted at end of project. |
| TOTALS | 0.13 ac/380 lf | 0.02 ac/57 lf | 0 ac/0 lf | 0.6 ac | 0 ac/0 lf |  |

Notes to applicants:

Examples of impact avoidance/minimization for several types of projects include:

* Commercial facility: Minimizing new impervious surface, using permeable surfaces for parking lots, using infiltration to treat stormwater, enhancing wetland buffers, providing appropriate water quality treatment, reducing the project footprint from the original proposal, using native landscape plants, using integrated pest management techniques, using other low impact development measures, etc.
* Road Widening: widening asymmetrically to avoid wetlands or other aquatic resources, widening toward the road median, using retaining walls to reduce side-slopes, minimizing new impervious surface by lane re-striping, using road shoulder-installed filters for water quality treatment, locating stormwater facilities outside of wetlands and other aquatic resources, etc.
* Residential Development: Redesigning, re-orienting, and/or relocating houses and infrastructure to avoid/minimize impacts, retaining native vegetation where possible, infiltrating roof runoff, using permeable surfaces for driveways, using other low impact development measures, enhancing aquatic resource buffers, etc.

## 4. Unavoidable Aquatic Resource Impact Acreage

Summarize the acreage of unavoidable aquatic resource impacts expected using tables similar to the following examples.

* **Figure**: Proposed site plan with impacts to wetlands (direct and indirect), aquatic resources, and buffers outlined and labeled.

Table 5: Example: Expected Impacts to Wetlands

| Wetland Identifier | Wetland Area (acres) | Permanent ImpactWetland Area (acres) | Temporary ImpactWetland Area (acres) | Buffer Impact Area (acres) | Indirect Impact Area (acres) | Cowardin Classification | HGM Classification | Ecology Rating | Local Jurisdiction Rating |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | 1.01 | 0.03 | 0 | 0.01 | 0 | PEM | Depressional | IV | 4 |
| B | 0.46 | 0.46 | 0 | 0 | 0 | PEM | Depressional | IV | 4 |
| C | 5.88 | 0.95 | 0.52 | 0.02 | 0.02 | PSS | Riverine | III | 3 |
| **TOTALS** | **7.35** | **1.44** | **0.52** | **0.03** | **0.02** |  |  |  |  |

## 5. Impacted Wetland and Aquatic Resource Functions

Describe the wetland and other aquatic resource functions that are expected to be lost or altered; include the potential indirect and/or temporary impacts to the remaining wetlands and other aquatic resources. The discussion can be divided into groups of functions such as water quality, hydrologic, and habitat. If a more detailed function description is available in other documents in the application package, this section should simply summarize the functions that will be affected and cite the more detailed document(s) and list the reference(s) in *Section 12.* If monitoring has been done or is available to characterize the baseline conditions of stream reach to be impacted, summarize the existing conditions and the proposed alterations to the stream conditions.[[19]](#footnote-19)

* Water Quality Functions – Briefly describe characteristics of wetlands and other aquatic resources relative to water quality functions such as water movement, vegetation extent and community type as it relates to potential for slowing and filtering water (e.g., extent of grazing), extent of ponding, opportunity to improve water quality, and so on. Describe how these functions will be affected by the project.
* Hydrologic Functions – Briefly describe characteristics of wetlands and other aquatic resources relative to the ability and opportunity to store water, slow water movement, and/or reduce erosion. Describe how these functions will be affected by the project.
* Habitat Functions – Briefly describe characteristics of wetlands and other aquatic resources relative to habitat functions such as interspersion of habitats, corridor connectivity, plant species richness, buffer condition, etc. Describe how these functions will be affected by the project.

Notes to applicants:

* All applicants should use the Washington State Wetland Rating System and submit the rating forms and accompanying maps/drawings for all wetland impact projects requiring a Section 401 Water Quality Certification or RCW 90.48 Administrative Order. [Rating methods for both western and eastern WA](https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Rating-systems)[[20]](#footnote-20) are available on our webpage. Applicants may use other wetland function assessments in addition to the rating system, at their discretion, but they should not substitute for the rating system.
* If the project will entirely eliminate a wetland and/or other aquatic resources, then assume that all functions will be lost. If a wetland or other aquatic resource will be partially filled or otherwise affected, discuss the extent to which existing functions will be lost. Include a discussion of the potential indirect and/or temporary impacts to the remaining aquatic resource area, if any.
* Functions may not be evenly distributed throughout a wetland or other aquatic resource area. For example, a wetland may be mostly forested with some disturbed emergent patches along the edges. If the project will only fill those emergent patches, then habitat functions may be less affected than if forested areas were eliminated. However, in this example, indirect impacts to habitat in the forested areas may result and should be accounted for.
* Fill or clearing in a wetland or other aquatic resource buffer may result in indirect impacts that could also require compensatory mitigation. Even temporary clearing of forested or shrub areas in wetlands or other aquatic resources or their buffers may have long-term indirect impacts to aquatic resources and may require compensation.

## 6. Wetland and Other Aquatic Resource Compensation Site Selection Rationale

Identify which bank you intend to use credits from. Identify whether your project is located inside or outside of the bank’s service area and that the bank has credits available for sale. Also determine if the bank provides the appropriate type of credits to compensate for your aquatic resource impacts. If the Bank provides more than one type of credit (e.g., Fish Conservation credits in addition to Universal wetland credits), specify which type(s) of credit(s) you propose to use.

* **Figure**: Provide a map that shows the location of the impact site(s), location of the bank site, and the boundary of the associated service area. Ensure that your map is precise, especially if your impact site is located outside of the bank’s service area.

Provide ecological rationale for selecting the bank as compensation. This discussion may include such points as:

* How the wetland and other aquatic resource compensation needs of the impact site correspond with the purpose, goals, and objectives of the bank site
* Whether the impacts will affect critical wetland or other aquatic resource functions that should be replaced on-site and, if so, describe the on-site compensation opportunities that were considered (consult with agency project managers to determine the presence of critical functions)
* If the impact site is located outside of the Bank’s service area, provide a clear rationale for use of the Bank site, including a description of all efforts made to find compensation opportunities closer to the impact site. See *Section 11.* for details of information that should be provided

## 7. Wetland and Other Aquatic Resource Functions Compensated at Wetland Mitigation Bank

Describe the functions that are expected to be provided at the bank from which credit use is proposed. This information should be obtained directly from the bank sponsor or the bank’s MBI.[[21]](#footnote-21) Describe how the functions and wetland types (e.g., freshwater/estuarine, HGM type, landscape setting) and other aquatic resources of the bank site relate to the functions and wetland types and other aquatic resources that are expected to be affected by the project. This section should demonstrate how credits from the selected bank will provide ecologically appropriate and adequate compensation for project impacts, so be sure to provide sufficient detail.

For ease of comparison, please discuss the bank’s functions in the same way as the impact wetland’s functions – grouped as water quality, hydrologic, and habitat functions.For stream and other aquatic resource functions, be sure to use the same stream typing and other methods for characterizing impacts and aquatic resource functions at the bank.

## 8. Wetland and Other Aquatic Resource Functions Not Compensated at the Wetland Mitigation Bank

Describe the functions that will be affected by the project that are not expected to be compensated for by the bank. This may include functions that are not provided by the bank or functions that a regulatory agency has determined must be replaced/compensated within or near the project area. Examples include water quality improvement, groundwater recharge, flood storage, riparian habitat, spawning habitat, and others. If there are impacts to functions or aquatic resource types that will not be addressed by the bank, then summarize how these functions and aquatic resources will be compensated. Cite the document(s) that describe this other compensation and list the reference(s) in *Section 12*. Other compensation may include restoration of temporarily impacted areas on-site as well. Alternatively, it is possible that a specific bank will not compensate for every function of the affected wetland or other aquatic resource, but there will be a net gain in other functions that could address that loss. If so, explain the ecological reasoning that leads to that conclusion.

## 9. Proposed Mitigation Credits

Show the mitigation ratios that were used to calculate the total number of bank credits needed to compensate for the project impacts. MBIs for all banks include a table that provides recommended mitigation ratios for determining the number of credits needed. Table 6 is an example from one MBI that shows the ratios used to determine the number of bank credits typically required from that bank to compensate for each acre of permanent loss of wetland by Category. These ratios are not the same for all banks; check the specific bank’s MBI for this information. These ratios are recommendations. Ratios for any specific project are determined considering the factors listed below the table.

Table 6: Example: Credits Recommended for Wetland Impacts

| Category of Impacted Wetland | Credit Recommended per Impact Acre |
| --- | --- |
| I | Case-by-Case |
| II | 1.2:1 |
| III | 1:1 |
| IV | 0.85:1 |

If you propose ratios for determining credits that differ from those recommended in the specific Bank’s MBI, provide the ecological rationale. Factors that may increase or decrease the actual number of bank credits needed to compensate for an adverse impact to wetlands and other aquatic resources include:

* Whether the impact is permanent or temporary
* The extent to which the functions are affected due to indirect impacts
* Whether some of the functions affected by a project are compensated elsewhere
* The extent to which the functions provided at the bank differ from the impacted functions
* Whether the impact is located inside or outside of the service area (if outside service area see *Section 11*)
* And other factors

Use of bank credits to compensate for impacts to Category I wetlands and wetlands with special characteristics[[22]](#footnote-22) will be determined by the regulatory agencies on a case-by-case basis. This is due to the high level of functioning and/or variety of special characteristics these wetlands provide. Applicants should consult with agency staff early in the permitting process to discuss mitigation ratios.

For other credit types provided at the bank, such as Fish Conservation credits, applicants should coordinate with the appropriate regulatory agency to determine the compensation required.

Show the number and types of credits that are proposed to be purchased, used, or transferred from the bank. If more than one wetland is impacted, it is helpful to use a table such as the following example to show the credit calculations.

Based on the example below, the applicant is proposing to purchase 1.375 credits from the wetland mitigation bank to compensate for 1.44 acres of permanent impacts plus 0.02 acre of indirect impacts to wetlands.

Table 7: Example: Wetland Mitigation Bank Credits Proposed for Use by Impact Project

| Wetland | Total Wetland Area (acres) | Permanent Wetland Impacts (acres)  | Indirect Wetland Impacts **(acres)** | Ecology Rating | Credit Needed per Permanent Impact Acre[[23]](#footnote-23) | Credit Needed per Indirect Impact Acre[[24]](#footnote-24) | Credits Proposed for Use |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A | 1.01 | 0.03 | 0 | IV | 0.85 | N/A | **0.025** |
| B | 0.46 | 0.46 | 0 | IV | 0.85 | N/A | **0.39** |
| C[[25]](#footnote-25) | 5.88 | 0.95 | 0.02 | III | 1 | 0.5 | **0.96**(0.95 + 0.01 = 0.96) |
| **TOTALS** | **7.35** | **1.44** | **0.02** |  |  |  | **1.375** |

Notes to applicants:

* The number of credits awarded per acre of a bank site is determined during bank certification. Credits generated at the bank vary depending on the expected lift in functions that would result from the actions undertaken at the bank site. Credits earned by a bank are grouped into one pool and considered ‘Universal’, because there is no way of pinpointing which acre on the site, or which action is represented by which credit.
* A Universal wetland credit typically represents more than one acre on the ground and represents the sum of all functional lift resulting from activities at the bank site. The ratios shown in Example Table 6 are recommended ratios for the number of Universal wetland credits that should be purchased, used, or transferred for each acre of wetland impacted.

## 10. Credit Purchase or Transfer Timing

This section should note the anticipated timing of purchase, use, or transfer of the credits and any other details regarding credit use that may be relevant to the permit process. It is not necessary to disclose credit costs or specific financial arrangements made between the applicant and bank sponsor. If purchasing credits, the final sale generally should not occur until the permits relevant to the wetland or other aquatic resource impacts have been issued. Prior to impacting wetlands or other aquatic resources, applicants typically must submit proof of purchase (e.g., bill of sale) or transfer of credits to the regulatory agencies as part of their permit conditions.

## 11. Out-of-Service Area (OOSA) Request

Applicants proposing to use bank credits for an impact site that is located outside of the service area must document that there are no other practicable compensation alternatives capable of offsetting the proposed impacts. Applicants should consider compensation alternatives including on-site, off-site, in-kind, out-of-kind, or resource tradeoffs within the same WRIA[[26]](#footnote-26) as the impact. The agencies will review proposals for OOSA credit use, provided that OOSA use is allowed by the specific bank’s MBI.

If allowed by the MBI, the agencies will coordinate with the bank’s IRT Co-chairs to determine whether use of credits outside of the service area provides compensation that is ecologically preferable as compared to other compensation options. Approval by the bank’s IRT must be received prior to use of credits as compensation.

In addition to the standard Bank Use Plan requirements, applicants proposing to use bank credits for an impact site that is outside of the bank’s service area must also provide the following information:

* A clear rationale for use of the bank site, including a description of all efforts made to find compensation opportunities closer to the impact site.
* Information on why this OOSA request is the best ecological compensation option for your project’s impacts. Describe why this specific bank is your preferred option.
* The distance between the bank site and the impact site, and the distance between the bank’s service area boundary and impact site.
* Description of the aquatic relationship between the bank site and the impact site.
	1. Describe the hydrologic pathway of the bank site and compare it to the hydrologic pathway of the impact site i.e., how does the water move?
	2. Where does the water flow or drain to for both locations? Are the two locations in the same or different WRIAs?
	3. Is the impact site located upstream or downstream of the bank site?
* Provide a figure that shows the locations of the impact site, the bank site, and the boundary of the associated service area as specified in *Section 6. Wetland and Other Aquatic Resource Compensation Site Selection Rationale.* More than one figure may be necessary depending on the figure scale(s) and the relative distances of the locations.
* Other information requested by the regulatory agencies.

If the applicant’s request to use credits is approved, the agencies will generally require an increase to the mitigation ratio specified in the bank’s MBI. Per the [new guidance](https://apps.ecology.wa.gov/publications/documents/2106003.pdf),[[27]](#footnote-27) a mitigation ratio multiplier will now be added to most OOSA requests. A typical increase would be a multiplier of 0.25 or 0.50[[28]](#footnote-28) of the bank's mitigation ratio (a 25% or 50% increase of the ratio) (see example table below).[[29]](#footnote-29) The value of the multiplier is determined by the bank’s IRT on a case-by-case basis. It is based on the ecological factors that the applicant describes within their Bank Use Plan including the OOSA information requested in this section.

Table 8: Example: Application of the OOSA Multipliers to Determine Bank Credits

| Wetland | Ecology Rating | Mitigation Ratio (from the Bank’s MBI) | OOSA Ratio Multiplier | OOSA Mitigation Ratio | Permanently Filled Wetland Area (acres) | Credits Proposed for Use |
| --- | --- | --- | --- | --- | --- | --- |
| E | IV | 0.85:1 | 0.50 | **1.275:1**(0.85 x 0.50) + 0.85 = 1.275  | 0.76 | **0.969\***(1.275 x 0.76 = 0.969) |
| F | III | 1:1 | 0.25 | **1.25:1**(1 x 0.25) + 1 = 1.25 | 0.52 | **0.65**(1.25 x 0.52 = 0.65) |
| G | II | 1.2:1 | 0.50 | **1.8:1**(1.2 x 0.50) + 1.2 = 1.8 | 0.02 | **0.036**(1.8 x 0.02 = 0.036) |

\*Note: Calculating the OOSA mitigation ratio involves multiplying the standard mitigation ratio (0.85:1) by the OOSA ratio multiplier (0.50) and then adding that OOSA increase to the standard mitigation ratio which equals 1.275. Calculating the bank credits needed involves multiplying the impact area (0.76 ac) by the adjusted OOSA mitigation ratio (1.275:1) which is equal to 0.969 credits.

## 12. References

Provide a list of all reference documents and sources cited within this Bank Use Plan. List the sources in alphabetical order by the last name of the first author and by year using the citation examples listed below.

Notes to applicants:

* If you have multiple references from the same year by the same author(s), you should differentiate them by using small letters after the year (Smith, 1999b).
* Report titles should include the complete date including any dates of revision.
* The below list does not include all types of examples, please ensure you provide enough details within your citation that the reviewers of this plan will be able to locate the document.

### Examples

Government Documents:

Hruby, Tom. 2014. Washington State Wetland Rating System for Western Washington: 2014 Update. Publication #14-06-029. Washington State Department of Ecology, Olympia, WA.

Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10. 2021. Wetland Mitigation in Washington State-Part 1: Agency Policies and Guidance (Version 2). Publication #21-06-003. Washington State Department of Ecology, Olympia, WA.

Reports (examples are not actual reports):

Jones, Emily and Edward Craft. 2021. Wetland Delineation Report for the Somerset Property, April 21, 2021. Prepared for Acme Development Company by Wetland Consultants Inc., Seattle, WA.

Williams, John and Samuel Barber. 2022. Wetland Mitigation Plan for the Somerset Property, May 1, 2022. Prepared for Acme Development Company by Restoration Specialists Inc., Bellevue, WA.

Internet:

U.S. Army Corps of Engineers. NWPL- National Wetland Plant List website: https://wetland-plants.sec.usace.army.mil/nwpl\_static/v34/home/home.html Accessed on June 1, 2022.

Scientific Journal Articles (examples are not actual articles):

Rodriguez, Andrew A. 2021. Depressional Wetland Restoration. Wetland Science 10: 1035.

Tomtil, Stephen, Charlene Bentley, Eloise Platzer, and Ben Jackson. 2022. Wetland Restoration Assessment Method. Ecosystem Journal 17: 25.

Books:

Cooke, Sarah Spear, Editor. 1997. A Field Guide to the Common Wetland Plants of Western Washington and Northwestern Oregon. Seattle Audubon Society, Seattle, WA

Mitsch, William J. and James G. Gosselink. 2015. Wetlands, Fifth Edition. John Wiley & Sons, Inc. Hoboken, New Jersey.

1. The IRT for Washington State includes standing members representing the U.S. Army Corps of Engineers (Corps), U.S. Environmental Protection Agency (EPA), and Washington State Department of Ecology (Ecology). The IRT oversees the certification, implementation, and management of wetland mitigation banks. [↑](#footnote-ref-1)
2. http://www.nws.usace.army.mil/Missions/Civil-Works/Regulatory/Contact-Us/ [↑](#footnote-ref-2)
3. https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Contacts-by-subject-region [↑](#footnote-ref-3)
4. https://apps.ecology.wa.gov/publications/SummaryPages/2106003.html [↑](#footnote-ref-4)
5. https://apps.ecology.wa.gov/publications/SummaryPages/0606011b.html [↑](#footnote-ref-5)
6. https://ecology.wa.gov/Water-Shorelines/Wetlands/Mitigation/Wetland-mitigation-banking/Mitigation-bank-projects [↑](#footnote-ref-6)
7. https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Rating-systems [↑](#footnote-ref-7)
8. To document what fish may use a specific waterbody or hydrologic unit the Washington State Department of Fish and Wildlife’s SalmonScape geodatabase is a good resource: <http://geo.wa.gov/datasets/1e56a648718543ab952e75ff9971f086>. [↑](#footnote-ref-8)
9. Change the “Local Jurisdiction” text within the column header to the specific local jurisdiction where the bank site is located. [↑](#footnote-ref-9)
10. Change the “Local Jurisdiction” text within the column header to the specific local jurisdiction where the bank site is located. [↑](#footnote-ref-10)
11. Report the area of impact in both acres and linear feet. The total acreage will reflect the length and width of these two streams. [↑](#footnote-ref-11)
12. Change the “Local Jurisdiction” text within the column header to the specific local jurisdiction where the bank site is located. [↑](#footnote-ref-12)
13. This example uses the Washington Department of Natural Resources Stream Typing system https:/www.dnr.wa.gov/forest-practices-water-typing. [↑](#footnote-ref-13)
14. https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d and to determine what designated beneficial uses are for a specific water body refer to <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A> [↑](#footnote-ref-14)
15. https://www.epa.gov/cwa-404/section-404b1-guidelines-40-cfr-230 [↑](#footnote-ref-15)
16. https://ecology.wa.gov/Water-Shorelines/Wetlands/Mitigation/Avoidance-and-minimization [↑](#footnote-ref-16)
17. Before = prior to any avoidance and minimization measures implemented. [↑](#footnote-ref-17)
18. After = expected impact after avoidance and minimization measures implemented. [↑](#footnote-ref-18)
19. The agencies may require additional baseline information to characterize proposed impacts to streams. Tools for obtaining additional information on streams include: the EPA Region 10 In-stream Biological Monitoring Handbook for Wadable Streams in the Pacific Northwest, or EPA’s Rapid Bioassessment Protocols: <https://www.epa.gov/wqc/rapid-bioassessment-protocols-use-streams-and-wadeable-rivers-periphyton-benthic>, or the more recent EPA developed Stream Function Assessment method adopted for use in Oregon and applicable in Washington: [https://www.oregon.gov/dsl/WW/Documents/Stream\_Function\_Assessment\_Method\_(SFAM)\_v\_1.0\_User%20Manual.pdf](https://www.oregon.gov/dsl/WW/Documents/Stream_Function_Assessment_Method_%28SFAM%29_v_1.0_User%20Manual.pdf) [↑](#footnote-ref-19)
20. https://ecology.wa.gov/Water-Shorelines/Wetlands/Tools-resources/Rating-systems [↑](#footnote-ref-20)
21. Mitigation Banking Instruments can usually be found on each bank’s specific project webpage, which can be located from [Ecology’s bank project webpage](https://ecology.wa.gov/Water-Shorelines/Wetlands/Mitigation/Wetland-mitigation-banking/Mitigation-bank-projects) and clicking on the bank name of your choice. [↑](#footnote-ref-21)
22. As defined in the Washington Rating System. [↑](#footnote-ref-22)
23. Find recommended credit use ratio table (similar to Example Table 6) in the MBI of the bank you are using credits from or propose alternative ratios. [↑](#footnote-ref-23)
24. For ratio on compensating for indirect impacts, please see [*Wetland Mitigation in Washington State-Part 1: Agencies Policies and Guidance (Version 2), Chapter 6B.4.7 Compensating for indirect impacts*](https://apps.ecology.wa.gov/publications/documents/2106003.pdf#page=147)*.* [↑](#footnote-ref-24)
25. In this example, the temporary impacts to the palustrine scrub shrub wetlands listed in Table 5 will be compensated by restoring those areas on-site following construction. [↑](#footnote-ref-25)
26. Water Resource Inventory Area (WRIA) [↑](#footnote-ref-26)
27. Wetland Mitigation in Washington State Part 1: Agency Policies and Guidance, Version 2. April 2021. Publication 21-06-003 [↑](#footnote-ref-27)
28. The multiplier may go above or below this typical range depending on the ecological factors. The multiplier has ranged between 0.0-2.0 [↑](#footnote-ref-28)
29. Example: For impacts to a Category III Wetland using a 0.50 multiplier, the 1:1 mitigation ratio would be 1.5:1 (compensation to impact) [↑](#footnote-ref-29)