

Interagency Review Team for Washington State Guidance Paper

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

The Interagency Review Team (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 is issuing this paper to provide guidance to applicants who wish to use wetland mitigation bank credits to compensate for wetland impacts associated with their projects. This paper does not replace or modify any of the existing laws and policies enforced by the IRT member 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 mitigation banking program in Washington State.

This paper consists of an annotated outline for a report that would serve as the mitigation plan for impact projects. Since the applicant is proposing to use bank credits as mitigation, standard mitigation plans are not appropriate, although some of the same components occur in both. For the purposes of this guidance, we will refer to this submittal as a 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 project applicants have:

- 1) avoided and minimized wetland impacts to the extent practicable, and
- 2) provided sufficient compensation for unavoidable wetland impacts by proposing to purchase or transfer credits from a specific wetland mitigation bank.

Project managers and wetland specialists at the Corps and Ecology typically have general knowledge of the wetland mitigation banks that are approved in the regions they cover. However, it is up to the permit applicant to provide enough information in their application package to demonstrate how the bank adequately mitigates for their specific project's impacts. Following this outline will help applicants to do so.

The following outline summarizes the type of information the IRT recommends for inclusion in a Bank Use Plan. If applicants have questions about what to include in the plan or on the process of permitting mitigation using bank credits, they should contact the project manager designated for their region (see http://www.nws.usace.army.mil/PublicMenu/documents/REG/PM_county_assignment_list_2-11-09_.pdf for a list of Corps project managers and <http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm> for Ecology wetland specialists. General guidance can be found in *Wetland Mitigation in Washington State* (Part 1 of this guidance is at <http://www.ecy.wa.gov/biblio/0606011a.html>, and Part 2 is at <http://www.ecy.wa.gov/biblio/0606011b.html>).

Important Notes to Applicants:

- *A map showing the locations of approved mitigation banks is available at <http://www.ecy.wa.gov/programs/sea/wetlands/mitigation/banking/map.html>. Click on a specific bank (currently approved banks are shown with green dots) to find links to either the bank's website, or an Ecology site with a brief summary of the bank. From there you should be able to find the bank sponsor's contact information, the bank location, service area, and other general information. Applicants should contact bank sponsors directly for additional information on the process of purchasing credits and on the functions provided by the bank.*
- *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 mitigation. As with all mitigation, approval of a specific plan is done on a case-by-case basis. The permit application should demonstrate that potential impacts to wetlands have been avoided and minimized to the greatest extent practicable and that mitigating at the bank will provide appropriate compensation for project impacts. In some cases, agencies may decide that impacts would be better mitigated on 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, mitigation for those functions must be provided separately. Applicants should communicate with all permitting agencies early in the permit process and show due caution when considering early purchase of bank credits. Agencies cannot guarantee that an applicant will be approved to use bank credits prior to review of the complete application package and a permit decision.*
- *If other mitigation for aquatic resource impacts is proposed for a project in addition to purchasing bank credits, this should be described in detail in a separate standard mitigation plan. Brief mention of the additional mitigation and the citation for the mitigation plan should be included in Section 8 of the Bank Use Plan.*
- *Be aware that bank sponsors are not authorized to sell credits that have not yet been released by the IRT. Before deciding on a mitigation path, check with Corps or Ecology project managers to confirm that a particular bank will likely have adequate credit released at the time your project is expected to be permitted. It is reasonable for prospective buyers to request an updated credit ledger from the bank sponsor prior to committing to credit purchase.*

Bank Use Plan Outline

1. Project Description

Provide a brief description of the development project and the types of activities that will impact wetlands. If a more detailed project description is available in other documents in the application package, this section should just summarize the project description and cite the more detailed document(s).

2. Existing Conditions of Wetlands and Buffers

Provide brief descriptions of the wetlands and buffers on the development 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. This is intended to be a summary of wetland and buffer existing conditions. The wetland delineation report should be cited for more detailed descriptions.

3. Avoidance and Minimization of Wetland Impacts

Describe how adverse impacts, both direct and indirect, to wetlands 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 sites were considered and rejected on the basis of wetland impacts, briefly mention them here. If a Clean Water Act Section 404(b)(1) Alternatives Analysis was prepared for the project, cite that document here (see <http://www.epa.gov/owow/wetlands/regs/mitigate.html> or [http://www.nws.usace.army.mil/publicmenu/DOCUMENTS/REG/Sec_404_\(b\)\(1\)_Guidelines_-_40_CFR_230.doc](http://www.nws.usace.army.mil/publicmenu/DOCUMENTS/REG/Sec_404_(b)(1)_Guidelines_-_40_CFR_230.doc) for information on alternatives analysis).

If site-specific measures were used adjacent to specific wetlands, a table similar to the following example may be useful for capturing those.

Example Table 1
Avoidance and Minimization Measures

Wetland Identifier	Total Wetland Area (acres)	Potential Fill in Wetland Prior to Avoiding and Minimizing (acres)	Proposed Fill in Wetland (acres)	Avoidance and Minimization
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 ecology 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 ecology 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	

Note: Examples of impact avoidance/minimization for several types of development include:

- *Commercial facility: Minimizing new impervious surface, using pervious 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, and others.*
- *Road Widening: widening asymmetrically to avoid wetlands, widening toward the road median, using retaining walls to reduce sideslopes, minimizing new impervious surface by lane re-striping, using road shoulder-installed filters for water quality treatment, locating stormwater treatment facilities outside of wetlands, and others.*
- *Residential Development: Retaining native vegetation where possible, infiltrating roof runoff, using pervious surfaces for driveways, using other low impact development measures, enhancing wetland buffers, and others.*

4. Unavoidable Wetland Impact Acreage

Summarize the acreage of unavoidable wetland impacts expected using tables similar to the following examples. Cite corresponding drawings in application package.

**Example Table 2
Expected Impacts to Wetlands**

Wetland Identifier	Wetland Area (acres)	Permanently Filled Wetland Area (acres)	Temporarily Impacted Wetland Area (acres)	Indirect Impact Area (acres)	Cowardin Classification	Ecology Rating	Local Jurisdiction Rating	HGM Classification
A	1.01	0.03	0	0	PEM	IV	4	Depressional
B	0.46	0.46	0	0	PEM	IV	4	Depressional
C	5.88	0.95	0.52	0	PSS	III	3	Riverine
TOTALS	7.35	1.44	0.52	0				

**Example Table 3
Wetland Impact Summary by Classification**

Classification System	Class¹	Area of Permanent Impacts (acres)	Area of Temporary Impacts (acres)	Area of Indirect Impacts (acres)
Washington State Rating	I			
	II			
	III	0.95	0.52	
	IV	0.49		
Local Jurisdiction Rating	1			
	2			
	3	0.95	0.52	
	4	0.49		
USFWS (Cowardin)	PFO			
	PSS	0.95	0.52	
	PEM	0.49		
	PAB			
	POW			
Hydrogeomorphic	Depressional	0.49		
	Riverine	0.95	0.52	
	Slope			
	Flats			
	Lake Fringe			
	Freshwater Tidal Fringe			
	Estuarine Fringe			

1 Delete unneeded rows

5. Impacted Wetland Functions

Describe the wetland functions that are expected to be lost or altered. The discussion can be divided into groups of wetland 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.

Note: Ecology requests that all applicants 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. Rating methods for both western and eastern WA are available at <http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/index.html>). 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. For large projects that will impact substantial acreage or function of wetlands, both Ecology and the Corps recommend using the Washington State Function Assessment Method (available at <http://www.ecy.wa.gov/programs/sea/wetlands/wfap/index.html>.)

If the project will entirely eliminate a wetland, then assume that all functions will be lost. If a wetland 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 wetland, if any.

Note: Fill or clearing in a wetland buffer may result in indirect wetland impacts that could also require compensatory mitigation. Even temporary clearing of forested or shrub areas in wetlands or buffers may have long-term indirect impacts to wetlands and may require mitigation. Also, functions are not evenly distributed throughout a wetland. 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.

Water Quality Functions – Briefly describe characteristics of wetlands relative to water quality functions such as water movement, vegetation extent 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 relative to the ability and opportunity of the wetland to store water. Describe how these functions will be affected by the project.

Habitat Functions – Briefly describe characteristics of wetlands relative to habitat functions such as interspersed habitats, corridor connectivity, plant species richness, buffer condition, and so on. Describe how these functions will be affected by the project.

6. Wetland Mitigation Site Selection Rationale

Identify which bank you intend to use credits from and confirm that your project is located within the service area for that bank and that there are credits available for sale at the bank. Provide rationale for selecting the bank as mitigation. This discussion may include such points as:

- whether the development project will affect critical wetland functions that should be replaced on-site and, if so, have on-site mitigation opportunities been considered (consult with agency project managers to determine the presence of critical functions);
- how the wetland mitigation needs of the project correspond with the purpose, goals, and objectives of the bank;
- any other relevant considerations.

7. Wetland Functions Provided at Wetland Mitigation Bank

Describe the functions that are expected to be provided at the wetland mitigation bank from which you are proposing to use credits. This information should be obtained directly from the bank sponsor or the bank's Mitigation Banking Instrument (MBI). Describe how the functions and wetland types (e.g., freshwater/estuarine, HGM type, landscape setting) of the bank relate to

the functions and types of wetlands that are expected to be affected by the project. This section should demonstrate how credits from the selected bank will provide adequate mitigation for project impacts, so be sure to provide appropriate 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.

8. Wetland Functions Not Mitigated at Wetland Mitigation Bank

Describe the functions that will be affected by the project that are not expected to be compensated for by the mitigation bank. This may include functions that are not provided by the bank or functions that a regulatory agency has determined must be replaced within or near the project area. Examples include stormwater treatment, groundwater recharge, flood storage, riparian habitat and others. If there are functions that will not be addressed by the mitigation bank, then explain how these functions will be otherwise mitigated by the project – cite other documents that describe this mitigation. This may include restoration of temporarily impacted areas as well. Alternatively, it is possible that a specific bank will not compensate for every function of the affected wetland but that there will be a net gain in other functions that justifies that loss. If so, explain the reasoning that lead 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 mitigation banks include a table that provides suggested mitigation ratios for determining the amount of credits needed. Table 4 is an example from one MBI that shows the approximate number of bank credits typically required for that bank to compensate for each acre of permanent loss of wetland. These ratios are not the same for all bank projects, so look in the specific bank’s MBI for this information.

**Example Table 4
Credits Recommended for Wetland Impacts**

Category of Impacted Wetland	Credit Recommended per Impact Acre
I	Case-by-Case
II	1.25:1
III	1:1
IV	0.85:1

Note: How credits are generated at a bank – 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 could result from the restoration 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 restoration action is represented by which credit.

The universal credit does not represent actual acreage on the bank site, but rather a unit in which to measure the sum of the functional lifts that all restoration activities at the site will provide. The ratios shown in Example Table 4 are suggested ratios for the number of universal credits that should be purchased or transferred for each acre of wetland impacted.

If proposed ratios for determining the credits needed differ from those suggested in the MBI for the selected bank, provide the rationale for this. Factors that may affect the actual number of bank credits needed to compensate for an adverse impact to wetlands include:

- whether the impact is permanent or temporary,
- the extent to which the functions of a wetland are eliminated when indirect impacts are concerned,
- whether some of the wetland functions affected by a project are mitigated for elsewhere,
- the extent to which the functions provided at the bank differ from the impacted functions,
- and other factors.

Due to the variety and typically high level of functioning of Category I wetlands, compensation for impacts to these resources by bank credits will be determined by the regulatory agencies on a case-by-case basis. Applicants should consult with agency staff early in the permitting process to discuss credit use ratios.

Show the number of credits that are proposed to be purchased 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.

**Example Table 5
Mitigation Bank Credits Proposed for Use by Impact Project**

Wetland	Total Wetland Area (acres)	Permanently Filled Wetland Area (acres)¹	Ecology Rating	Credit Needed per Impact Acre²	Credit Proposed for Use
A	1.01	0.03	IV	0.85	0.025
B	0.46	0.46	IV	0.85	0.39
C	5.88	0.95	III	1	0.95
TOTAL	7.35	1.44			1.36

¹ In this example, the temporary impacts to the palustrine emergent wetlands listed in Table 2 will be mitigated by restoring those areas on-site following construction.

² Find recommended credit use ratio table (similar to Example Table 4) in the Mitigation Banking Instrument (MBI) of the bank you are using credits from or propose alternative ratios.

Based on this example, the applicant is proposing to purchase 1.36 credits from the wetland mitigation bank to compensate for 1.44 acres of permanent fill in wetlands.

10. Credit Purchase or Transfer Timing

This section should note the anticipated timing of purchase 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 should generally not occur until the permits relevant to the wetland impacts have been issued. Prior to impacting project wetlands, applicants typically must submit proof of purchase (e.g., bill of sale) or transfer of credits to project managers for both Ecology and the Corps.