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TECHNICAL DOCUMENT AND RESEARCH CENTER KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

# GUIDE TO IG COUNTY WETLAND MITIGATION BANKING PROGRAM PUBLIC RULES

#### TECHNICAL DOCUMENT AND RESEARCH CENTER KING COUNTY DEPARTMENT OF NATURAL RESOURCES AND PARKS

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# I. PROGRAMMATIC GUIDANCE

#### **Goals:**

It is the goal of the King County Wetland Mitigation Banking Program to:

- A. Establish ecologically and economically successful restoration sites.
- B. Expedite the permit process when wetland impacts are unavoidable.
- C. Save time and cost by aggregating small isolated impacts into one mitigation site.
- D. Contribute to "no net loss" in wetland acreage and function, and long-term resource gain.
- E. Direct growth to specific basins in compliance with the King County Comprehensive Plan.
- F. Increase the ecologic success of wetland mitigation.
- G. Avoid temporal losses of wetland resources by establishing banks before mitigation is required.
- H. Contribute to the knowledge of restoration science.

Additional goals and objectives were identified by the King County Wetland Mitigation Banking Committee (KCWMBC) and the Interagency Oversight Committee (IOC) in 1995 before the King County Wetland Mitigation Banking Program rules and guidelines were drafted. These goals and objectives are included in Appendix A of this document.

#### **Decision-Making Process:**

For both the KCWMBC and the IOC, recommendations and approvals shall be agreed upon by consensus. However, if consensus cannot be reached, an issue may be resolved by a vote of all the members participating in negotiations. If more than two members are not in agreement with the other members, the result is no resolution. At this point, an issue can be elevated to equivalent levels of each agency.

Members will normally participate in negotiations and vote in person. Members unable to attend a meeting in person may participate by conference call or by other means, or may vote by designee of participant's agency.

All recommendations and dissenting opinions shall be documented and distributed to each member within thirty (30) days of each action.

The Bank Manager does not have the authority to make decisions independently, but must go through the KCWMBC.

#### In-Kind versus Off-Site/Out-of-Kind Compensation:

To be eligible for use of the mitigation bank to compensate for unavoidable impacts, off-site compensation must be approved by the King County Department of Development and Environmental Services (DDES). Use of a wetland mitigation bank to compensate for adverse

impacts will normally be in-kind of the same system and class (as defined by Cowardin, et al., 1979) and provide functions similar to or greater than the impacted wetland. However, use of wetland mitigation banks should be based primarily on replacement of functions at the impacted site rather than in-kind versus out-of-kind.

The department may approve use of credits from a bank when:

- A. The credits represent the creation, restoration, or enhancement of wetlands of like kind and in close proximity when estuarine wetlands are being mitigated;
- B. There is no practicable opportunity for on-site compensation; or
- C. Use of credits from a bank is environmentally preferable to on-site compensation.

Ratios provided in Tables 1 and 2 of this document are for in-kind compensation only. Ratios for out-of-kind replacement will be determined by the IOC and KCWMBC and reviewed on a case-by-case basis in individual bank Implementation Plans.

#### TABLE 1

MITIGATION RATIOS FOR IN-KIND WETLAND REPLACEMENT

Mitigation ratios for: (1) after approval of as-built conditions; and (2) before performance standards have been achieved at the bank site.

	BANK SITE					
	RESTORATION OR CREATION			ENHANCEMENT		
CLASS OF IMPACTED WETLAND	CLASS 1	CLASS 2	CLASS 3	CLASS 1	CLASS 2	CLASS 3
CLASS 3	1.2:1	1.5:1	1.8:1	2:1	2:1	3:1
CLASS 2	2:1	2:1	2:1	2.5:1	3:1	4:1
CLASS 1	2:1	2:1	N/A	3:1	4:1	N/A

#### TABLE 2

#### MITIGATION RATIOS FOR IN-KIND WETLAND REPLACEMENT

Mitigation ratios to be applied after performance standards have been approved at the bank site.

	BANK SITE					
	RESTORATION OR CREATION			ENHANCEMENT		
CLASS OF IMPACTED WETLAND	CLASS 1	CLASS 2	CLASS 3	CLASS 1	CLASS 2	CLASS 3
CLASS 3	1:1	1:1	1:1	1:1	1.5:1	2:1
CLASS 2	1:1	1:1	1:1	1.5:1	2:1	2:1
CLASS 1	1:1	1:1	N/A	1.5:1	2:1	N/A

#### Currency of Mitigation Banking

The Banking Committee and the IOC shall initially determine potential credits at the time of Preliminary Mitigation Bank Site Design. Initially, credits in the bank represent the total number of acres that are restored, created, enhanced and/or preserved within the mitigation bank site.

Other forms of currency may be adopted by the Banking Committee and the IOC and shall be documented in bank site specific Implementation Plans. In all cases, the currency of an existing mitigation bank shall remain the same from the time the first credit is withdrawn until the last credit is withdrawn.

Impacted wetland(s) at the proposed development site shall be identified in the Mitigation Impact Analysis and verified by DDES. The extent of wetland impacts off-site shall be the debits.

#### Credit Release

Credits shall be released incrementally based on timing and performance of the mitigation bank site (see Figure 1).

Initially, credits can be withdrawn from a mitigation bank site only after all of the following conditions have been met:

- A. Construction of a mitigation bank based on an approved site plan; and
- B. After approval of the as-built conditions by the Banking Committee and the IOC; and
- C. After the site has been protected in perpetuity through fee simple acquisition, deed restriction, or a conservation easement.

After approval of as-built conditions, 25 percent of the total bank credits (acres) will be available for release. (See Appendix C for a complete discussion of credit release procedures.)

When hydrology performance standards have been achieved and approved by the Banking Committee and the IOC, an additional 25 percent of the bank credits shall be available for release. No further credits shall be released until hydrology performance standards have been achieved and approved.

The remaining credits (50 percent) shall be not be available for release until one of the following conditions have been met:

- A. All remaining performance standards have been successfully achieved and approved by the IOC; or
- B. Contingency plans to successfully achieve performance standards have been completed and implemented and the success of the Final Mitigation Bank Site Design has been achieved; or
- C. At 5 years after approval of as-built conditions, if remaining performance standards have not been achieved. The final determination of remaining credits may differ from, and does supersede the initial estimate of credits available at a specific site.

Prior to the release of remaining 50 percent of credits (at 5 years or when the remaining performance standards have been approved, whichever is sooner) the actual size of the functioning wetland shall be determined to accurately identify number of credits remaining for release.

#### Mitigation Replacement Ratios

Mitigation replacement ratios reflect both the obligation to replace the impacted wetlands and the risks and benefits associated with the type of mitigation method used. Replacement ratios based on acreage and King County Wetland Class are presented in Tables 1 and 2.

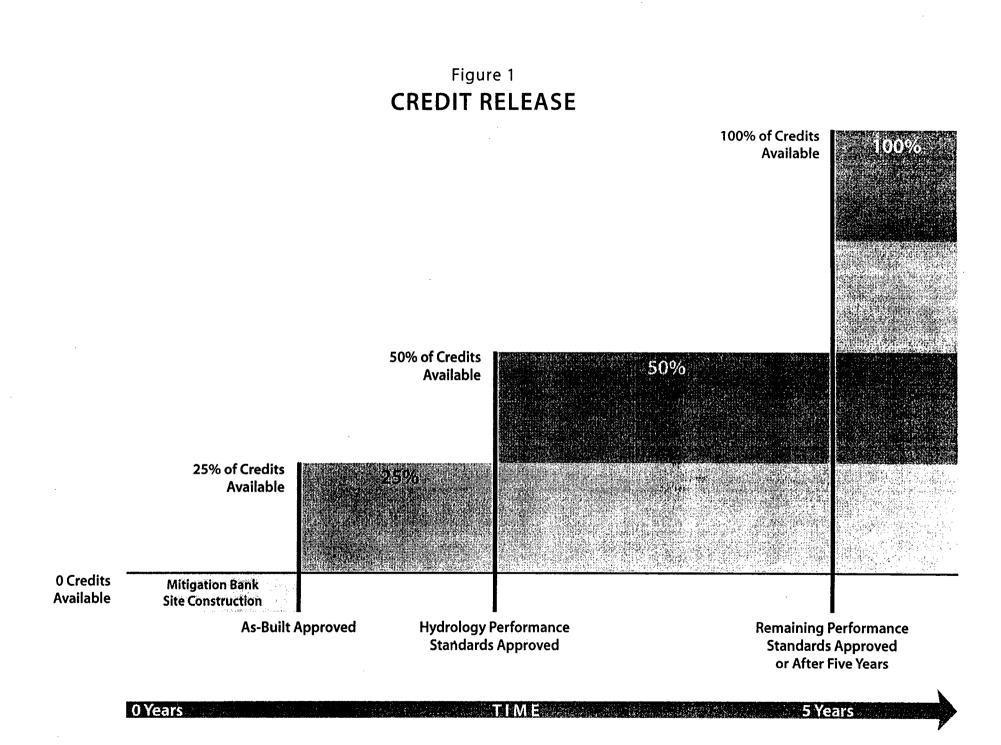
Mitigation ratios to compensate for adverse impacts to wetlands shall be based on ratios identified in King County Title 21A. Higher ratios, as presented in Table 1, shall be required for use of the bank before performance standards have been achieved at the bank site. Lower ratios, as presented in Table 2, shall be applied only after performance standards have been achieved at the bank site and approved by the IOC. More specifically, mitigation ratios shall be determined in the following manner:

- A. After approval of as-built conditions, credits shall be available at the highest ratios (Table 1). These higher ratios reflect the low functions of the recently restored, created or enhanced wetland mitigation bank.
- B. After 5 years, if remaining performance standards have not been achieved, higher ratios shall continue to be applied as presented in Table 1.
- C. After performance standards have been achieved and approved, lower ratios shall be applied as presented in Table 2.

The following mitigation methods are presented in the preferred order based on ecological benefits and degree of risk in achieving success. Mitigation ratios presented in Tables 1 and 2 reflect these differing ecological benefits and degree of risk.

**Restoration:** Restoration of historic wetland areas is the preferred method of compensatory mitigation, since restoration provides greater ecological benefit and has a higher probability of successfully establishing a functioning wetland system.

**Creation:** Although wetland creation may result in a net increase in wetland acreage, the degree of success is not assured due to the complexity of creating a functioning wetland



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system that replicates the functions of a natural wetland. For that reason, it is considered the next most preferred method of compensation.

**Enhancement:** Enhancement of wetlands that have been degraded or altered by human-caused activities is often easy to achieve. However, enhancement activities do not result in a net increase in wetland acreage. For that reason, enhancement requires the highest ratios, but can be very effective for buffers.

**Preservation:** As an incentive to achieve more effective wetland protection and to maintain the ecological integrity of the wetland, in exceptional circumstances, credits may be given when adjacent wetland or stream buffers are preserved beyond the minimum required under the King County Title 21A. Preservation must occur in conjunction with restoration, creation or enhancement, and shall be allowed only when it can be demonstrated that the preservation will augment the functions of the restored, created, or enhanced wetland. Credit may be given for the inclusion of upland areas occurring naturally within a bank or created as part of a bank development plan to the degree that such features increase the overall ecological value of the bank. Credits for preservation will only be allowed under exceptional circumstances, and will require consideration of the following factors: (a) the adjacent wetland or stream meets criteria defined under Regionally Significant Resource Area (RSRA); or (b) preservation of wider buffers would off-set impacts due to surrounding land-use activities which threaten the long-term viability of the bank site.

No credits for preservation shall be provided to compensate for adverse impacts to wetlands unless credits for restoration and/or creation have been required at least at the ratio of 1:1 or enhancement at 2:1. When done in conjunction with restoration, creation and/or enhancement, the following mitigation replacement ratios for buffer preservation shall be applied:

- A. By preserving an adjacent wetland or stream buffer which meet the criteria listed above at a ratio of 10:1; or
- B. By enhancing and preserving the wetland buffer beyond the minimum width required under King County Title 21A.24 at a ratio of 5:1.

#### Local Permits:

All clearing and grading permits and sensitive areas special studies as identified in the King County 21A.24 are required. Refer to *Guidelines for Developing Freshwater Wetlands Mitigation Plans* and Proposals (Washington State Department of Ecology, 1994. Publication #94-29) for guidance on information to be included in reports.

#### Appeals:

Any decision to approve condition or deny a development proposal based on the requirements of King County Title 21A.24 may be appealed according to and as part of the appeal procedure for the permit or approval involved.

If the application of this Program would prohibit a development proposal by a public agency or utility, the agency or utility may apply for an exception pursuant to King County Title 21A.24.070. Approval to allow release of credits from a mitigation bank prior to the construction of the bank shall only be allowed through the exceptions process. If approved, no more than 10 percent of the bank credits shall be released prior to construction of the bank site and higher mitigation replacement ratios shall be required per Table 1.

It is recommended that no credits be released from a bank unless the following conditions have been met, at a minimum:

- A. For state and federal agencies to allow any credit to be released, a banking instrument must be in place, and site specific plans must be approved;
- B. A bank site must be secured; and
- C. Appropriate financial assurances must be in place.

These recommendations are consistent with those put forward in the Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (Federal Register, November 1995, p. 58612).

#### Accounting:

Mitigation bank costs are determined per unit (acreage) for each mitigation bank site. Mitigation bank costs include all costs related to site development and management and shall include costs of site acquisition, site design and construction, permitting, administration, monitoring, maintenance and management costs.

Payments for mitigation bank credits may be used as reimbursement for the costs of the specific mitigation bank site where the credits were generated. The Mitigation Banking Program shall be fiscally self-supporting.

# II. BANK SITE GUIDANCE

#### Criteria for Bank Site Creation:

Public agencies, utilities and private sector developers may develop a property for use as a wetland mitigation bank to provide compensation for approved adverse impacts to wetlands by other agencies, utilities or private sector development. Bank sites held by private property owners shall be entered into King County's Public Benefit Rating System (PBRS), with assistance from the Bank Manager, if they meet the criteria for eligibility of the PBRS Program.

## Mitigation Bank Site Selection:

Candidate wetland mitigation bank sites shall be selected based on their potential to provide sustainable wetland functions and for their potential to compensate for anticipated unavoidable adverse impacts to wetlands (or buffers) due to development within the same basin. In addition, candidate wetland mitigation bank sites should be sites that are capable of supporting wetlands that are similar to or of a higher function and value than wetlands to be impacted by development.

Candidate wetland mitigation bank sites that match a larger number of the following hierarchy shall be preferred:

- A. A site where one or more of the three parameters used to identify wetlands (soils, vegetation, and especially hydrology) has been eliminated and can be restored.
- B. A site that will maintain or restore historic wetland diversity and distribution, or that will maintain or restore a connected system of wetlands, waterways, and upland habitat that provide important wildlife habitat corridors.
- C. A site that is not a wetland, but where a wetland can be created that is adjacent to and has high potential to complement existing wetlands.
- D. A site that is not a wetland, but where a wetland can be created without disturbing existing high quality upland habitat, including habitat for threatened, endangered, or priority animal species or sensitive plant species.
- E. A site where functions have been degraded or altered by human activities and where development, management and maintenance could appropriately enhance one or more existing wetlands.
- F. A site that is an appropriate size to provide adequate compensation for anticipated future impacts.
- G. A site that can be protected over time from direct, indirect, and cumulative impacts from current and foreseeable future land uses.
- H. A site with the potential for being self-maintaining with minimum maintenance and human intervention.
- I. A site which may contribute to improvement of identified management problems within the basin or sub-basin, such as sedimentation, water quality degradation or flood control.
- J. A site that can provide improved overall wetland functions within the basin or sub-basin.
- K. A site with the potential for providing a broad range of functions and values.
- L. A site with the potential for enhancing or providing habitat for threatened, endangered or priority animal species or sensitive plant species.
- M. Sites which are in public ownership, or which may be acquired or otherwise protected in perpetuity.
- N. A site which is located within an area which has adopted a wetland management plan that has been recognized by local, state, and federal agencies.

## Criteria for Use of a Permitted Mitigation Bank:

Public agencies and utilities with proposed unavoidable impacts to wetlands within King County may be eligible to participate in the Program. Public agencies and utilities may be required to go through a Public Agency and Utility Exception (PAUE) process. Private sector developers with proposed unavoidable impacts to wetlands within King County may be eligible to participate in the Program. Private sector participation in the Program shall be limited to impacting projects exempted or already permitted by state and federal agencies and:

- A. Projects with proposed unavoidable impacts to "isolated wetlands" (K.C.C. 21A.06.1410); or
- B. Projects for which a Reasonable Use Exception to King County Title 21A have been approved (K.C.C. 21A.24.070).

#### Bank Service Area:

Compensation for impacts through a mitigation bank shall occur within the same basin as the impacted wetland. Use of a mitigation bank within the same sub-basin and lower in the drainage basin from the impacted site is preferred. Replacement of flood storage shall be required within the same sub-basin.

Compensation for impacts to fish habitat shall be located in the same river reach where the fisheries impacts occur, and may be required to be mitigated separately, depending on the location of the mitigation bank.

Basins are defined and mapped in the King County Comprehensive Plan (Figure 2). A watershed is an area that drains to a common outlet or an identified water body such as Puget Sound, a river, stream, lake, or wetland. There are six major watersheds in King County (Cedar River, Skykomish River, Green River, Snoqualmie River, White River, and Puget Sound) divided into 72 individual basins that, in turn, contain numerous individual water bodies with small drainages.

#### Basin Prioritization for Development of Mitigation Bank Site:

The following criteria shall be considered in prioritizing basins for development of a Mitigation Bank Site. Basins that include the highest number of criteria will be preferred. (Note: Criteria are not listed in order of priority.)

- A. Impact analysis identifies need for a mitigation bank site
- B. Projected high rate of development in basin
- C. Basin within Urban Growth Boundaries
- D. Adopted basin plan or conformance with goals of other planning documents
- E. Indication of interest from public agencies and utilities
- F. Qualified bank site available for acquisition
- G. Funding available for development of bank site in basin
- H. Ecological priorities identified within the basin
- I. Ability of proposed banking site to dovetail with other King County Programs (such as Waterways 2000) to maximize habitat corridors within watersheds
- I. Appropriate size to mitigate for anticipated impacts within a basin

#### Mitigation Bank Site Plans:

Mitigation plan content and format shall be consistent for all mitigation bank proposals. Technical guidelines for the development, construction, performance standards, monitoring and management of mitigation sites are presented in the *Guidelines For Developing Freshwater Wetlands Mitigation Plans and Proposals* (WS DOE, 1994) as well as *Objectives and Standards of Success for Wetland Mitigation Projects-A Guideline* (Ossinger, 1997). The following information shall be required:

- A. Preliminary Mitigation Bank Site Design to include the following:
  - 1. Function Assessment
  - 2. Hydrologic Analysis
  - 3. Monitoring Plan
  - 4. Performance Standards
  - 5. Contingency Agreement

**B.Final Mitigation Bank Site Design** 

Both the Preliminary and Final Mitigation Bank Site Designs will be documented in the Implementation Plan.

### Monitoring:

Bank sites shall be monitored. Specific parameters to be monitored will be determined based on site conditions. More detailed information on monitoring protocol (including monitoring requirements, monitoring timetable, and contingency requirements) is presented in the *Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals* (WS DOE, 1994) as well as *Objectives and Standards of Success for Wetland Mitigation Projects – a Guideline (Ossinger, 1997)*. King County Water and Land Resources Division is developing monitoring protocols for the banking program in compliance with these guidelines.

First phase performance monitoring shall take place after the first hydrologic year and shall evaluate hydrologic conditions. If hydrology performance standards are not achieved, contingency plans shall be implemented until success has been achieved.

#### **Implementation Plan Review Process:**

Each bank site shall be authorized under an Implementation Plan that will document the following:

- A. Site selection
- B. Preliminary Mitigation Bank Site Design
- C. Final Mitigation Bank Site Design and number of credits anticipated
- D. As-builts and number of potential credits
- E. Attainment of hydrology performance standards
- F. Attainment of other performance standards
- G. Contingency plans
- H. Maintenance and monitoring

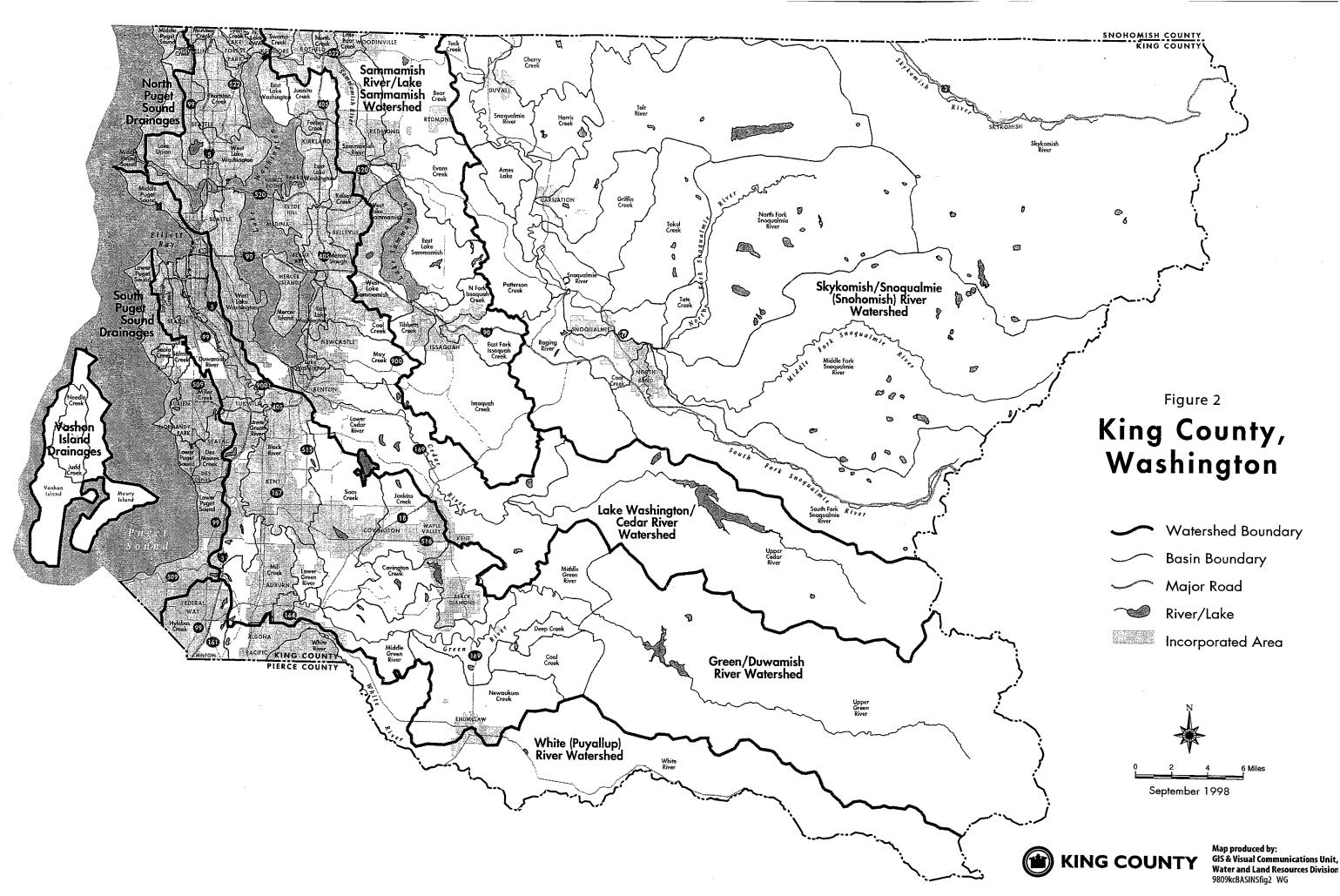
The IOC can be informed of the site selection process and preliminary design via technical reports. These reports will be submitted to IOC members for technical input.

Final design and determination of number of credits available will require a mandatory meeting with the IOC; consensus must be achieved from the IOC at this stage prior to proceeding.

A report documenting final design and proposed number of credits shall be submitted to the IOC for their review. A thirty-day (30) period of review shall be granted. A meeting shall be held with the IOC, during this comment period if possible, to obtain consensus on the final design and proposed number of credits available at a bank site.

Once consensus on final design and number of credits available at a bank site has been achieved, the Bank Manager shall document this decision in the Implementation Plan.

The IOC will be kept up to date on progress at each mitigation bank site via regular meetings and submittal of technical reports addressing final as-builts and number of credits, attainment of hydrology performance standards, attainment of other performance standards, contingency, maintenance and monitoring plans.



Water and Land Resources Division

#### Bank Site Protection:

King County shall acquire controlling real estate interest in a mitigation bank site or shall cause a conservation easement to be conveyed to the County. No credits shall be released from a bank site until the site has been protected through fee simple acquisition, deed restriction or a conservation easement. After all available creditable acres have been expended at an individual bank site, the bank shall be managed in perpetuity to allow it to mature and develop as a natural system.

All conservation easements shall be granted in perpetuity and all real property conveyances shall be in fee simple without encumbrances that adversely affect the integrity of the bank.

, The conservation easement shall include all restrictions necessary to provide for the long-term ecological viability of the mitigation bank.

In the event of incorporation of an area that includes a wetland mitigation bank site, the property shall continue to be managed and protected as a wetland mitigation bank.

If a candidate bank site is in public ownership, the custodial agency has rights of refusal for use of the site as a mitigation bank. If the custodial agency approves use of the property as a mitigation bank, compensation for the property shall be provided prior to the establishment of a bank. Mitigation banks located on publicly owned property shall be encumbered in perpetuity by a conservation easement to ensure long-term protection.

#### References

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classifications of Wetlands and Deepwater Habitats*. US Fish and Wildlife Service - Biological Services Program; FWS/OBS-79/31. 103 pp.

Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks. November 1995. Department of Defense, Department of Army Corps of Engineers, Environmental Protection Agency, Department of Agriculture Natural Resource Conservation Service, Department of the Interior Fish and Wildlife Service, Department of Commerce National Oceanic and Atmospheric Administration, Federal Register, Volume 60, No. 228, November 28, 1995, Notices. page. 58612.

Ossinger, Mary. 1997. Objectives and Standards of Success for Wetland Mitigation Projects-A Guideline. Second Review Draft, May 1, 1997 Washington State Department of Transportation, Environmental Affairs Office.

Washington State Department of Ecology. 1994. Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals. Publication #94-29. Olympia, WA. 32 pp.

# APPENDIX A

# King County Wetland Mitigation Banking Program Goals

#### KING COUNTY WETLAND MITIGATION BANKING GOALS AND OBJECTIVES

#### Planning

To promote no net loss of wetland functions and acreage and, in the long term, to promote a net functional gain.

• Establish mitigation ratios which promote no net loss of functions and acreage and which promote mitigation in advance of unavoidable impacts.

To provide guidelines on a subset of the wetland mitigation sequencing process that support advanced compensation of wetland impact through the use of permitted wetland banks, but do not undermine avoidance of wetland impact as the primary wetland protection goal.

- Require that wetland mitigation sequencing be demonstrated prior to permitting participation in a wetland mitigation bank.
- Identify appropriate bank sites and sizes by coordinating with agencies whose planning documents anticipate unavoidable wetland impacts (e.g. Sewerage General Plans, Transportation Plans). This objective does not change wetland mitigation sequencing requirements in compliance with current local, state, and federal laws.

# To maintain and encourage a predictable and efficient regulatory, fiscal and administrative framework for completing mitigation banking within King County.

- The wetland permit system should involve state, federal and tribal agencies throughout the process, from policy development to implementing wetland mitigation banks.
- Develop a Memorandum of Agreement (MOA) between wetland regulatory agencies to implement wetland mitigation banking in King County per the technical guidelines described herein.
- Develop standardized Wetland Mitigation Banking permitting procedures for use in King County.

# To shift the focus of the wetland compensatory mitigation process from obtaining a permit to obtaining ecologically successful wetland mitigation bank sites.

- Create King County technical guidelines for mitigation banking that provide economic incentives to attaining ecological success.
- Ensure that mitigation bank design is scientifically rigorous and minimizes risks associated with failure of mitigation sites.

#### To create a program that is fiscally self-supporting.

- Develop an accounting system to track project costs associated with mitigation banking (including site acquisition, administration, design, construction, monitoring, risk, and long-term management) for use in determining cost-per-credit for each bank site.
- Develop an accounting system for tracking bank credits and debits.

#### Ecological

To provide greater resource protection within a basin or sub-basin and reduce the effects of isolation and fragmentation of wetland habitat by restoring an area that was historically a wetland, enhancing an existing wetland system or enhancing the ecological functions of existing rivers, streams, or other waterways, or creating wetland or habitat areas.

- Establish site selection criteria that:
  - 1) Maintain and restore a connected system of wetlands, waterways and upland habitat which provide important habitat corridors;
  - 2) Locate wetland compensation sites within the landscape to maximize the functions of the wetland and adjacent interacting ecosystems; and
  - 3) Create wetlands where appropriate.

To maintain or restore historic wetland diversity and distribution and to replace or augment the functions of existing wetlands in the landscape whenever feasible, and if possible, to expand essential habitat for threatened, endangered or priority animal species and sensitive plant species and alleviate habitat fragmentation.

- Identify appropriate function assessment methods for use at the impact area and/or compensation site.
- Identify existing habitat for threatened, endangered and priority animal species and sensitive plant species within the basin, based on existing information.
- Establish mitigation ratios that reflect the benefits and risks of restoration, creation, enhancement and/or preservation of wetlands.
- Identify potential mitigation banking sites based on plant, animal, hydrological, soil, historical, and other information.

To preserve wetland mitigation bank sites in perpetuity.

- Establish legal options for protection in perpetuity including acquisition in fee simple, conservation easements, and/or deed restrictions, etc.
- Identify agency responsible for long-term protection and management.
- Develop a permit tracking system to ensure site is protected in perpetuity.

To provide monitoring and maintenance of wetland mitigation bank sites to ensure performance standards are met and ecosystem functions will persist over time.

- Establish monitoring protocol, timetable and guidelines.
- Identify parties responsible for monitoring and management of site.
- Review monitoring results and recommend acceptance or identify contingency measures.

#### To utilize adaptive management strategy to monitor performance of mitigation bank planning process and allow adjustment of policies and guidelines.

- Use East Lake Sammamish pilot project to evaluate performance and to modify policies and guidelines based on results.
- Coordinate with King County Departments and Interagency Oversight Committee (composed of state, federal and tribal agency representatives) to review and recommend policy and guideline changes.

### APPENDIX B

# King County Wetland Mitigation Bank Site Transaction Notice

# King County Wetland Mitigation Bank Site Transaction Notice Summary of Proposed Current Transaction

Project Proponent:				
Date: Project Activity Number (KCDDES):				
Location of Proposed Impacts:				
Basin:				
Proposed Development Activity:				
Date of Proposed Development Activity:				
Proposed Wetland Impacts:    Type(s) of wetland:  Scrub-shrub; Forested; Emergent; Open water    Wetland Class:  Class 1; Class 2; Class 3    Wetland #:				
Extent of Proposed Impacts (acres):				
Permits (Indicate if submitted (S) or approved (A):				
Number of Required Credits (From KCDDES):				
Proposed Bank Site Information				
Bank Creator:				
Name of Bank Site:				
Location:				
Basin:				
Enclose the following: Copy of Final Letter of Approval (FLOA) (from KCDDES to Bank User) Current Mitigation Bank Site Accounting Ledger				

# APPENDIX C

Example of Release of Credits from Mitigation Bank Site

#### Example of Release of Credits from Mitigation Bank Site

The mitigation bank site consists of 20 acres of restored Class II wetland.

#### **Impact Site A**

King County Roads Department has proposed to construct a road. After DDES review of the permit, it is determined that 1 acre of Class II wetland impact is unavoidable. Since the existing mitigation bank site is within the same basin as the impact, use of the mitigation bank to compensate for unavoidable adverse impacts is approved by DDES.

The as-built conditions of the mitigation bank have just been approved by IOC, therefore higher mitigation ratios (Table 1) apply and only 25% of the credits are available for release (5 acres). Credits may be associated with different replacement ratios. 25% of the TOTAL credits available at the bank are available for release at this stage (i.e. if 5 acres of the bank is restoration/creation credit, 5 acres is wetland enhancement credit, and 10 acres is wetland buffer enhancement credit, then 1.25 acres of restoration/creation credit is available, 1.25 acres of enhancement credit, and 2.5acres of wetland buffer enhancement credit is available, for a total of 25% of credits available from the bank).

1 acre impact @ 2:1 = 2 acres

Total credits in mitigation bank:	20.00 acres		
%/acres of credits available for release:	25%/5 acres		
Credits available for release:	5.00 acres		
Credits required for Impact Site A:	-2.00 acres		
Credits (acres) remaining for release:	3.00 acres		
Total credits remaining after release:	18.00 acres		

#### Impact Site B

The Sammamish Sewer and Water District is proposing construction of a new water line that would serve an area that is within the same sub-basin as the mitigation bank. The proposed line would adversely impact a total of 1.5 acres of Class III wetland. Permits have been reviewed and approved by DDES.

The as-built conditions of the mitigation bank have been approved by IOC, but hydrology performance standards have not yet been approved. Therefore, the remainder of the 25% (3 acres of credit) is available for release.

Since the as-built conditions have been approved, but hydrology performance standards have not been approved, higher mitigation ratios apply (Table 1); 1.5 acres impact requires compensation @ 1.5:1 = 2.25 acres.

Total credits remaining at mitigation bank:	18.00 acres
%/acres credits available for release:	25%/5 acres
Remaining credits available for release:	3.00 acres
Credits required for Impact Site B:	2.25 acres
Credits (acres) remaining for release:	.75 acres
Total credits remaining after release:	15.75 acres

#### Impact Site C

King County Parks Department proposes to expand a baseball field and would impact 1.5 acres of Class III wetland. Permits have been reviewed and approved by DDES. At the mitigation bank site, hydrology performance standards have been approved by IOC. Therefore, an additional 25% of the credits are available for release. (25% of 20 acres = an additional 5 acres).

1.5 acres impact @ 1.5:1 = 2.25 acres

Total credits remaining at mitigation bank:	15.75 acres
%/acres credits available for release:	50%/10 acres
Credits available for release:	5.75 acres
Credits required for Impact Site C:	-2.25 acres
Credits (acres) remaining for release:	3.50 acres
	10 50
Total credits remaining after release:	13.50 acres

#### Impact Site D

King County Roads Department is proposing to widen an existing road and would impact a total of 2.5 acres of Class II wetland and buffer. The hydrology performance standards have been approved, but the remaining performance standards have not yet been achieved.

2.5 acres impact @ 1:1 = 2.5 acres.

Total credits remaining at mitigation bank:	13.50 acres
%/credits available for release:	50%/10 acres
Remaining credits available for release:	3.50 acres
Credits required for impact site D:	-2.50 acres
Credits (acres) remaining for release:	1.00 acre
Total credits remaining after release:	11.00 acres

#### Impact Site E

Sammamish Sewer and Water District proposes to bury approximately 3 miles of sewer line to service a new subdivision. After DDES review of the permit, it is determined that the project will have unavoidable impacts in two areas including .6 acres of Class I wetland and 1.1 acres of Class III wetland. Since the existing mitigation bank site is within the same basin as the impact, use of the mitigation bank to compensate for unavoidable adverse impacts is approved by DDES.

All performance standards at the mitigation bank site have been achieved and approved by IOC. In this case, two different ratios apply: 1) Because the wetland mitigation bank site is a class II wetland, and .6 acres of Class I wetland is being impacted by the District's project, higher ratios apply for that portion of the project (.6 acres impact @ 2:1 = 1.2 acres); and 2) additional impacts are to a Class III wetland, while the mitigation bank is a Class II wetland, therefore lower ratios apply for that portion of the project (1.1 @ 1:1 = 1.1 acres).

Total credits required to compensate for Impact Site E is 2.3 acres (1.2 acres + 1.1 acres = 2.3 acres)

Total credits remaining at mitigation bank:	11.00 acres
%/acres credits available for release:	100%/20 acres
Remaining credits available for release:	11.00 acres
Credits required for impact site E:	- 2.30 acres
Credits (acres) remaining for release:	8.70 acres
Total credits remaining for release:	8.70 acres

Continue process until no more credits are available from mitigation bank site.