

State of Washington Alternative Mitigation Policy Guidance For Aquatic Permitting Requirements from the Departments of Ecology and Fish and Wildlife

INTRODUCTION

The following is adopted as the State of Washington's Interagency Policy Guidance for evaluating aquatic mitigation alternatives. The intent of this guidance is to represent consensus on mitigation policy among the disciplines and the agencies responsible for evaluating, approving, implementing and enforcing aquatic resource mitigation.

Because stocks of salmon are genetically different, and because these stocks have associations with particular stream reaches, there will be limitations on uses of alternative mitigation in such cases. Nothing in the guidance should be assumed to direct the use of alternative mitigation when it would result in loss of at-risk fish stocks, prevent salmon recovery, or create policy of the state that would be in conflict with the Federal Endangered Species Act, Federal Clean Water Act, Native American Treaty Rights to fish habitat protection, or Department of Fish and Wildlife – Treaty Tribes Wild Salmonid policy. Alternative mitigation tools will be used only where they are the best choices for mitigating unavoidable impacts and are agreed to by the participating parties. However, where federal or local policies are more stringent than those identified in the state interagency policy guidance, the more stringent policies will have precedence for state-issued permits.

This policy guidance will assist the Departments of Ecology or Fish and Wildlife in issuing permits or reviewing actions under section 401 of the Clean Water Act, the Shoreline Management Act or Title 75 of the Hydraulics Code. The policy guidance was developed to be consistent with WDFW's mitigation policy (M5002 – *Requiring or Recommending Mitigation*). While this guidance represents consensus between agencies for a general approach to mitigation, it is not intended to supersede any existing authority or responsibility for regulatory and resource decisions of permitting agencies as they relate to site-specific conditions. Because this policy guidance is intended to address many media, the authors seek to use a standardized language, which departs from traditional syntax adopted within these disciplines. For example, water quality managers use the term “beneficial uses” where wetlands or fish and wildlife managers use “functions and values”. To avoid confusion, neutral terms such as “functions” will be substituted.

Background - Increasingly, governmental programs designed to protect, enhance, and restore natural resources are expected to coordinate policy and implementation. Watersheds function as ecological units. Actions in one part of a watershed influence the remaining parts, potentially affecting its ability to function as a self-sustaining ecosystem. Regulators and applicants need to look at the watershed ecosystem as a whole when considering impacts and the use of preservation, mitigation banking, and off-site or out-of-kind mitigation as tools for salmon and watershed recovery. Despite the agreed upon

benefits of a watershed-based approach, guidance has not been in place to assist regulators and developers with the selection and evaluation of mitigation proposals for alternative watershed-based approaches.

In 1998 the State Legislature passed the Salmon Recovery Act (RCW 75.46/ESHB 2496) in response to the state's need for a coordinated approach to respond to listings of salmon and steelhead runs as threatened or endangered under the federal endangered species act (16 U.S.C. Sec. 1531 et seq.). The Legislature also recognized the need to coordinate mitigation activities, where appropriate, with the state's proposed salmon and watershed recovery programs. The Washington State Departments of Ecology, Fish and Wildlife, and Transportation, along with interested Tribes were required by this legislation to develop policy guidance to evaluate mitigation alternatives and opportunities. In addition, the Department of Natural Resources (DNR), and the Department of Community, Trade and Economic Development (CTED) have aided in the effort.

Mitigation Policy Guidance - RCW 75.46 states that the guidance shall create procedures that provide for alternative mitigation which have a low risk to the environment, yet have a high net environmental, social, and economic benefit compared to status-quo options. The guidance shall be designed to enable committees established under RCW 75.46.060 to develop and implement habitat project lists that maximize environmental benefits from project mitigation while reducing project design and permitting costs. The committees must also ensure that federal, state, treaty-right, and local environmental laws and ordinances are met. Benefits of agreed-upon state mitigation policy guidance include improved consistency with existing state and federal policies, improved predictability for better project planning, and increased flexibility for applicants and regulatory agencies to address watershed needs and limiting factors in the implementation of watershed planning goals and salmon recovery efforts. The guidance sets forth a framework for decisions to be made, and identifies appropriate mitigation strategies that are acceptable to the agencies.

The 1996 State Legislature passed the Aquatic Resources Mitigation Act (RCW 90.74) which stipulates that it is the policy of the state to authorize innovative mitigation measures by requiring state regulatory agencies to consider mitigation proposals for infrastructure projects that are timed, designed, and located in a manner to provide equal or better biological functions and values compared to traditional on-site, in-kind mitigation proposals. For infrastructure projects, the agencies may not limit the scope of options to be considered in a mitigation plan to traditional on-site, in-kind mitigation proposals. When making regulatory decisions, the agencies shall consider whether the mitigation plan provides equal or better functions and values, compared to the existing conditions, for the target resources or species identified in the mitigation plan and agreed to by the resource agencies. The factors the agencies must consider in making this decision are identified in the Hydraulic Code, the State Water Pollution Control Act, and the Aquatic Resources Mitigation Act. The mitigation policy guidance developed under the Salmon Recovery Act is required to be consistent with those criteria established under the Aquatic Resources Mitigation Act. The Departments of Ecology and Fish and Wildlife are not required to grant approval to a mitigation plan that the Departments find does not provide equal or better biological functions and values within the watershed or bay.

The 1998 Washington State Legislature passed legislation creating Chapter 90.84 RCW, Wetland Mitigation Banking, as one element of compensatory mitigation. It directed consistency with Federal Guidance on Mitigation Banking. The statute used the definition for mitigation listed in federal guidance (sequentially avoiding impacts, minimizing impacts, and compensating for remaining unavoidable impacts).

Agency and Tribal Authority - The Washington Departments of Fish and Wildlife (WDFW) and Ecology (WDOE) have the regulatory authority to require or recommend mitigation of impacts to aquatic resources for the State of Washington. Authority for state agencies to recommend or require mitigation is granted by the following:

Federal Coastal Zone Management Act
Federal Clean Water Act
Federal Endangered Species Act
Federal Fish and Wildlife Coordination Act
National Environmental Policy Act
State Water Pollution Control Act (RCW 90.48)
Shoreline Management Act (RCW 90.58)
Hydraulic Code (RCW 75.20)
Aquatic Resources Mitigation Act (RCW 90.74)
Wetlands Mitigation Banking Law (RCW 90.84)
State Environmental Policy Act (RCW 43.21C)
Growth Management Act [RCW 36.70(A)]
International Treaties on Migratory Birds

Note: Not all of these authorities rest with each agency.

Federally recognized Indian Tribes of the State of Washington possess treaty rights intended to ensure that rights retained under treaty agreements include provisions to hunt, fish, and gather within their usual and accustomed grounds. In addition, the Orrick Decision in Federal Court determined that the Tribes are guaranteed the right to fish habitat protection. When applying this guidance for mitigation site selection, any affected tribe must be consulted to ensure that no net loss of the tribal Usual and Accustomed Area will occur. Agencies and applicants need to be in contact with tribes, be cognizant of which tribes co-manage what areas, and work with the tribes on any mitigation decisions that affect the tribe. Each respective tribe adversely affected by a prospective permit or mitigation decision should be contacted directly and involved from the start. It is important to note that the Northwest Indian Fisheries Commission (NWIFC) does not act in place of individual tribes when treaty rights are concerned, and notice to the NWIFC does not constitute notice to the separate tribes.

The Washington State Department of Transportation (WSDOT) is responsible for building, operating, and maintaining the state's transportation system in an environmentally responsible manner. As such, WSDOT has a vested interest in policies affecting the management of the state's natural resources both as a permit applicant and as an agency of government. WSDOT is committed to implementing this

interagency mitigation policy guidance to assure project compliance, and to ensure that WSDOT's mitigation expenditures are directed towards those sites offering the greatest ecological benefit.

Because of its role in providing growth management technical assistance to local governments, the Department of Community, Trade, and Economic Development (CTED) participated in the development of this policy guidance along with the required participants identified in RCW 75.46 (e.g., WDFW, Ecology, Tribes, and WSDOT). CTED is responsible for developing Best Available Science guidelines for local governments to use in the designation and protection of critical areas. The Best Available Science guidelines will serve to support the interagency mitigation policy guidance. The interagency mitigation policy guidance will provide a framework for local governments to consider as they evaluate and update mitigation sections within their Critical Area Ordinances. Use of the guidance by local governments is also intended to facilitate consistency among local ordinances in the same watershed and between the local ordinances and the state's approach to mitigation.

SPECIAL NOTE ON STORMWATER IMPACT MITIGATION

Stormwater management is a critical issue in implementing salmon recovery and watershed improvement efforts of the state. The emphasis for stormwater management should be on prevention of impacts to aquatic resources through appropriate development regulations, and best management practice applications for erosion control, water quantity and water quality treatment. The guiding principal should be to do no further harm to aquatic resources and to build into projects and plans the incremental improvements necessary to protect, restore and enhance the beneficial uses and functions of the state's water bodies.

It is the general consensus of the resource agencies of the state, as discussed at the January, 1999 salmon summit, that the best way to set priorities, create effective and cohesive recovery strategies, and get the greatest gain is to use watersheds as fundamental planning/management units for applying stormwater management strategies. The state agencies have recognized the need to take an adaptive-management and continuous-improvement approach to stormwater issues. Ecology has approved a mitigation strategy implemented by establishing Supplemental Treatment as an appropriate best management practice (BMP) per WAC 173-201(A). Supplemental Treatment may be applied to stormwater projects to result in improvements to water-quality and quantity needs in watersheds. A short summary on how Ecology will implement the Supplemental Treatment BMP is provided in the compensatory mitigation section of this document. For more detailed information please refer the Ecology Policy #1-22, and Procedure #1-23 "*Adopting and Use of Supplemental Treatment as a BMP*".

SPECIAL NOTE ON PRESERVATION

It has been decided by the permitting agencies that, in some cases, protecting high-functioning, irreplaceable areas at substantially higher ratios may be the best ecological choice and acceptable for compensatory mitigation, as long as there is no overall loss of habitat functions. There is value gained in protecting sites that are already providing high quality functions necessary for watershed health and salmon recovery efforts. For example, protecting aquatic habitat high in the watershed serves to protect downstream resources from erosion and degradation.

Preservation may be beneficial in some circumstances because; a) larger mitigation areas can be set aside due to the higher preservation mitigation ratios; b) can ensure protection for high quality, highly functioning aquatic systems that are critical for the health of the watershed and aquatic resources that may otherwise be adversely affected; and c) preservation of an existing system removes the uncertainty of success inherent in a creation or restoration project.

Additional information on preservation can be found in the Interagency Report , “*Mitigation Tools for Special Circumstances: Preservation of High Quality Wetlands*” prepared by WSDOT and an interagency workgroup. Contact WSDOT Environmental Affairs office at (360) 705-7494 for a copy of the report.

POLICY GUIDANCE

I. REQUIRING OR RECOMMENDING MITIGATION

This policy guidance will assist the Washington Department of Fish and Wildlife and the Washington State Department of Ecology when issuing or commenting on permits, documents, appeals or compensation agreements which adversely affect aquatic resources. Agencies with permitting authority may require a specific type of mitigation (e.g. on- or off-site), if the permitting authority determines that the situation warrants it. Regulatory agencies must consider alternative mitigation proposed by the applicant using criteria set forth in this guidance document. The applicant must demonstrate to the permitting agencies that there will be a net gain to the resources. Local governments are encouraged to adopt these guidelines when requiring mitigation for impacts to critical areas.

A. Goal:

The basic goal of mitigation is to achieve no net loss of habitat functions by offsetting losses at the impact site through gains of mitigation. The goal of this interagency mitigation policy guidance is to maintain, protect, and enhance the functions of fish and wildlife habitat, wetlands and other waters of the state and to seek a net gain in those functions through restoration, creation, and enhancement.

B. Definition:

“Mitigation” means actions that shall be required or recommended to avoid or compensate for impacts to fish and other aquatic resources from a proposed project. Mitigation shall be considered and implemented, where feasible, in the following sequential order of preference. Use of the word “mitigation” is comprehensive of all three parts of the following sequence and is not to be considered as synonymous with compensatory mitigation. Complete mitigation is achieved when these mitigation elements ensure no net loss of ecological functions, wildlife, fish and aquatic resources.

Avoiding the Impact altogether by not taking a certain action or parts of an action.

Minimizing Impacts by limiting the degree or magnitude of the action and its implementation.

Compensating for the Impact by replacing and providing substitute resources or environments through creation, restoration, enhancement or preservation of similar or appropriate resource areas.

II. AVOIDANCE

FEDERAL -- If your project will require a federal permit from the Corps of Engineers, the Federal MOA, *“Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water*

Act, Section 404(b)(1) Guidelines” will apply. It states, “the determination of avoidance requirements will not be based on characteristics of the proposed projects such as need, societal value, or the nature or investment objectives of the project’s sponsor”. It is also important to note that per the Federal Clean Water Act and MOA requirements, avoidance measures are required so that only the “least environmentally damaging and practicable alternative (as determined by the Corps and EPA) may be permitted”. Avoidance requires relocation of the proposed project if 1) alternatives are available for non-water dependent activities that do not involve special aquatic sites, or 2) alternatives are available that have less adverse impacts on the aquatic environment than the proposed impact site.

STATE -- When applying this state policy guidance, a potential site for development or alteration should have all aquatic resources delineated and project proponents should examine avoidance alternatives. The agencies will strive to avoid adverse impacts to existing aquatic systems through implementation of the Clean Water Act and State Aquatic protection laws. Decisions on avoidance may take into consideration the quality and size of the resource impacts.

Compensatory mitigation may not be used as a method to reduce environmental impacts in the decision of avoidance or when defining alternatives (e.g. in SEPA, NEPA or project permitting). Unacceptable activities may include, but are not limited to the following:

- When the activity will cause violations of state water quality numerical or anti-degradation standards
- When the activity will cause violations of toxic-effluent standards
- When the activity impacts threatened or endangered species or their habitats
- When activity will cause or contribute to permanent loss of aquatic resource functions
- When non-affecting or less affecting alternatives are available
- When the activity is determined non-water dependent per the Clean Water Act, State Shoreline Management Act, or Local Shoreline Management Plans and Programs

III. MINIMIZATION

Minimization refers to actions taken on a site to reduce impacts that will occur to aquatic resources. An applicant must first demonstrate to the satisfaction of the permitting agencies that avoidance of those impacts is not practicable or possible. Methods of minimization include, but are not limited to:

- Choosing the location of an impact so as to minimize the adverse effect to aquatic resource functions
- Ensuring that indirect impacts do not occur as a result of choosing an impact location or method of site alteration and development
- Avoiding creating changes in water current and circulation patterns that would interfere with the movement of sediment transport, plants, fish and wildlife
- Avoiding changes in water inundation regimes that would interfere with the distribution of native plants
- Avoiding creation of a habitat conducive to undesirable species

- Enhancing on-site aquatic-resource functions through innovative planning and construction practices
- Timing impacts to avoid interruption of critical natural cycles such as spawning, breeding or migrations seasons
- Avoiding destruction of remnant natural sites within areas already affected by development or alteration
- Avoiding impacts to features of the site that protect water quality
- Avoiding creation of an incompatible human activity or a need for on-going maintenance

IV. COMPENSATORY MITIGATION

A. **Ecology Decision Basis:** For those impacts that are determined to be unavoidable, Ecology considers these seven questions when planning compensation of unavoidable impacts:

1. What are the species, habitat types, or functions being adversely affected?
2. Is replacement or reintroduction of the species, habitat type, or functions vital to the health of the watershed, and if so, do they need to be replaced on site to maintain the necessary functions?
3. If it is determined that on-site, in-kind replacement is not necessary, are there higher priority species, habitat types, or functions that are critical or limiting within the watershed?
4. If both on- and off-site compensatory mitigation is available, will the species, habitat type, or functions proposed as off-site compensatory mitigation provide greater value to the health of the watershed than those proposed as on-site?
5. How will the proposed compensatory mitigation maintain, protect, or enhance impaired functions, or the critical or limiting functions of a watershed?
6. Will the proposed compensatory mitigation have a high likelihood of success?
7. Will the proposed compensatory mitigation be sustainable in consideration of expected future land uses?

B. **WDFW Decision Basis:** For those impacts that are determined to be unavoidable, WDFW's existing mitigation policy (M5002 – *Requiring or Recommending Mitigation*) states that priorities for compensatory mitigation location and type, in the following sequential order of preference, are:

1. On-site, in-kind
2. Off-site, in-kind
3. On-site, out-of-kind
4. Off-site, out-of-kind

Note –WDFW’s preference for sequencing alternatives does not prohibit project proponents from considering off-site and/or out-of-kind actions if on-site, in-kind conditions are first considered, any ESA or state aquatic resource recovery considerations are satisfied, and the compensatory mitigation requirements outlined in Section IV Part D of this policy guidance are met. Section IV Part D is intended to help project proponents and regulatory agency staff determine the most appropriate action within the above sequence of alternatives. Other permitting agencies do not require formal sequencing of alternatives before considering the Section IV Part D requirements for compensatory mitigation. Combinations of the four types of mitigation may be acceptable to all state agencies.

C. **Definitions:** To further understand how resource agencies will determine the appropriate mitigation for the impact site’s functions, the following definitions will be used in making decisions:

- “On site” means on or adjacent to the impact site or in the same stream reach, based on resource needs. It is not to be limited to property ownership or city/county boundaries that do not restrict the needs and uses of the resources.
- “In-kind” mitigation means replacing the same species, habitat type, and function as those affected. However, disturbed habitat shall not be replaced with additional disturbed habitat. In these cases the applicant must restore the site to its natural condition based on adjacent undisturbed sites, as approved by the permitting agencies.
- “Off site” means outside of the area from where the impact has occurred. Acceptable off-site mitigation must occur in the same Water Resource Inventory Area (WRIA), basin or sub-basin as the impacts, depending on affected functions, but not necessarily directly adjacent to the impacts. However, permitting agencies may approve compensatory mitigation sites outside a WRIA for projects with impacts in more than one WRIA, or when it is determined that moving to a different WRIA makes the most sense for the resource needs. For federal threatened or endangered species, mitigation must occur within the habitat supporting the same Evolutionary Significant Unit (ESU). For off-site mitigation to be acceptable, it must be demonstrated that greater functions can be achieved off site than is possible on site.
- “Out of kind” means species, habitat types and/or functions that are different than those at the impact site. For out-of-kind mitigation to be acceptable, applicants must demonstrate that the mitigation will provide an overall net gain for the resources of the watershed.
- “Special Species” means plants or animals listed by the state or federal government as threatened or endangered, and those that are candidates for listing. It also includes the priority habitats and species designated by WDFW, and those species designated as species of local concern under the Growth Management Act.

D. Compensatory Mitigation Requirements:

Exceptions to these requirements must be approved by the permitting agency or agencies.

1. **On site** is required when the greatest ecological benefits can be obtained on site. This may include, but is not limited to the following:
 - a) The on-site location is critical for protecting or replacing important location- dependent functions that are lost due to project impacts.
 - b) The location or natural conditions on site play a key role in larger watershed functions and health, or to a Special Species.
 - c) The on-site location has a high likelihood of success and will not be highly influenced by adjacent development pressures.
 - d) On site may be required in other circumstances as determined by site-specific needs or at the discretion of the permitting agencies.

2. **In kind** is required when the greatest ecological benefits for the watershed can be obtained by replacing adversely affected functions. In-kind requirements include, but are not limited to the following situations:
 - a) When adversely affected functions are limiting within the watershed and are critical for replacement, as agreed to by the permitting agency.
 - b) When adversely affected functions are critical to the continued health of the watershed or of a special species.
 - c) When adversely affected functions are of high quality and should be replaced.
 - d) When replacement of adversely affected functions may be required in other circumstances as determined by site-specific needs or at the discretion of the permitting agencies.

3. **Off site** may be acceptable in the following circumstances if the conditions for on site above do not apply and:
 - a) The project proponent can demonstrate to the agencies' satisfaction that greater limiting or critical functions can be achieved off site than is possible on site.
 - b) Adversely affected functions are of low quality, and an off-site location can be restored, preserved, or created to obtain a limiting factor identified for the watershed, for critical habitat for Special Species, or to provide higher quality functions than what is adversely affected.
 - c) There are no reasonable on-site opportunities.
 - d) On-site opportunities do not have a high likelihood of success due to development pressures or adjacent impacts to the compensatory mitigation area.
 - e) Off-site enhancement and restoration opportunities may be considered to have a higher likelihood of success than on- or off-site creation options.
 - f) Acceptable off-site mitigation must occur in the same Water Resource Inventory Area (WRIA), basin or sub-basin as the impacts, unless otherwise approved by the permitting agencies.

- g) If impacts occur to habitat for federally threatened or endangered species, mitigation must occur within the habitat supporting the same Evolutionary Significant Unit (ESU).

4. **Out of kind** may be acceptable in the following circumstances:

- a) When the resources adversely affected provide minimal desirable function and are not considered limiting for a Special Species, or determined limiting within the watershed; or
- b) When out-of-kind functions proposed are demonstrated by the proponent and agreed to by the permitting agencies, to be critical or limiting within the watershed and provide a net gain for the resources of the watershed.

5. **Preservation**

Preservation is an acceptable form of compensatory mitigation when used in combination with other forms of compensation such as creation, restoration or enhancement at the preservation site, or at a separate location. Preservation may also be used by itself, but more restrictions as outlined below will apply.

a) **Preservation in combination with other forms of compensation:**

Preservation as compensatory mitigation has been determined to be acceptable by the agencies when done in combination with creation, enhancement or restoration, providing that the criteria below are met. The criteria are designed to limit inappropriate uses, and ensure protection of high-quality sites under imminent threat of destruction or impairment of ecological functions, wildlife, or fish and aquatic resources.

i. **Preservation is most desirable when**

- The impact area is small and impacts are occurring to a low functioning system; and
- Preservation of a high quality system occurs in the same WRIA or watershed where a resource loss has occurred; and
- When the functions lost occur within the preservation site, or can be exchanged for higher quality functions determined to be limiting by local or regional resource needs; and
- Preservation sites should include buffer areas adequate to protect the habitat and it's functions from encroachment and degradation. When the site contains large, diverse buffers that provide exceptional wildlife habitat, the buffer may be accepted as part of the ratio if agreed to by the permitting agencies.

ii. **Preservation is undesirable when**

- Preservation sites are smaller than 3 acres, including the buffer; or
- Proposed sites are highly fragmented; or
- Proposed sites are dominated by non-native plants or animals (or non-natives are expected to spread and threaten the sites natural diversity).

iii. **Acceptable Use of Preservation --** Preservation of at-risk, high-quality habitat may be considered as part of an acceptable mitigation plan when **all** of the following criteria are met:

- 1) Preservation is used as a form of compensation only after the standard sequencing of mitigation (avoid, minimize, and then compensate); and
- 2) Creation, restoration, and enhancement opportunities have also been considered, and preservation is proposed by the applicant, and approved by the permitting agencies as the best mitigation option; and
- 3) The site is determined to be under imminent threat – “Sites with the potential to experience a high rate of undesirable ecological change due to on or off site activities. (Potential includes permitted, planned or perceived action); and
- 4) The area proposed for preservation is high quality, critical for the health of the watershed or basin. Some of the following features may be indicative of high quality sites:
 - Category I or II wetland rating;
 - Rare wetland type (e.g. bogs, estuaries);
 - Habitat for threatened or endangered species;
 - Aquatic habitat or wetland type that is rare in the area;
 - A high-quality habitat that is located in a floodway, or floodplain and is documented as a frequently-flooded area, or is providing flood retention and storage;
 - Provides biological and/or hydrological connectivity
 - High regional or watershed importance (e.g. listed as priority site in watershed plan);
 - Large size with high species diversity (plants and/or animals) and/or high abundance;
 - A site that is continuous with the head of a watershed, or with a lake or pond in an upper watershed that significantly improves outflow hydrology and water quality.

b) Using Preservation Alone for Compensation:

Preservation alone shall only be used as compensatory mitigation in exceptional cases. Preservation alone shall not apply if impacts are occurring to functions that must be replaced on site, such as flood storage or water quality treatment that need to be replicated by water quality measures implemented within the project limits.

Preservation alone shall only be considered in the following circumstance:

- i. The impacts shall be unavoidable; and
- ii. All requirements listed in a) above for using preservation in combination, are met; and
- iii. The impact site is providing minimal functions, (or is isolated and significantly degraded); and
- iv. The impacts occur to relatively small sites; and
- v. There are no adverse impacts to fish habitat functions; and
- vi. There is no net loss of habitat functions within the watershed; and
- vii. The proposed preservation site is high quality and at risk, as defined above; and
- viii. Higher mitigation ratios are applied.

6. **Mitigation Banking:** Mitigation banking may be an acceptable form of mitigation for wetland, floodplain, habitat, and/or stream bank impacts. While these types of resource-banking proposals may be considered by project applicants and permitting agencies, no federal or state guidance defining the management, limitations or use of credits for resource banking has been undertaken, with the exception of wetlands. Developing such guidance for all types of banking proposals is beyond the scope of this document. However, mitigation criteria contained throughout this document may be helpful for determining the appropriateness of the use of banks for off-site mitigation. Available specific guidance for wetland banking is provided as follows:

Wetland Mitigation Banking – As defined in RCW 90.84.010, a Wetland Mitigation Bank is a site where wetlands are restored, created, or enhanced or, in exceptional circumstances preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

- a) Credits from a mitigation bank are used as a form of compensation only for unavoidable impacts.
- b) Credits and debits shall be based on acreage or other scientifically valid measure of aquatic-resource functions acceptable to the appropriate agencies.

As of February, 2000, Ecology is continuing to work with an advisory team to develop an Administrative Rule for a wetland bank certification program. Specific criteria for wetland banking and limitations on the use of banking credits will be listed in the Certification Rule (WAC 173-700) now under development. Adoption of WAC 173-700 is expected in the winter of 2001. Additional site specific restrictions on the use of bank credits will be listed in banking instruments for specific banks. It is the intent that this alternative mitigation policy guidance be consistent with any requirements developed within the banking rulemaking process. The alternative mitigation policy guidance may be used to assist project proponents and permitting agencies with decision making for the use of a wetland bank as an acceptable option for compensatory mitigation. However, decisions regarding the bank restrictions and credit acceptance should be based on any local banking agreements in place, and ultimately with the Administrative Rule, when complete.

7. **Stormwater:** Ecology has approved an off-site mitigation strategy implemented by establishing Supplemental Treatment as an appropriate best management practice (BMP) per WAC 173-201(A) for discharges permitted under Section 401 of the CWA. Supplemental Treatment may be applied to stormwater projects to result in improvements to water-quality and quantity needs in watersheds. Please note the use of Supplemental Treatment to meet stormwater discharge requirements is only to be used after Ecology has ensured that all necessary avoidance and minimization measures have been incorporated into the design, construction, or operation of the proposed project. Additionally, in order to ensure compliance with the water quality standards, applicants must provide for agency approval, a justification of how any supplemental treatment approach will improve the water quality of the water body segment receiving the new discharge. The justification may include, but is not limited to: numeric modeling techniques, ambient

monitoring, biological indices, and indirect indicators such as total impervious area for treatment. For more detailed information please refer to the Ecology Policy #1-22, and Procedure #1-23 “*Adopting and Use of Supplemental Treatment as a BMP*”.

a) How to Apply Stormwater Off-Site Supplemental Treatment BMP:

- 1) A stormwater discharge will not be allowed if the new effluent will increase any 303(d)-listed parameter, or does not meet the Total Maximum Daily Load (TMDL) requirements defined for the discharge reach;
- 2) For new discharges, the water quality standards must be met.
- 3) Compliance with the water quality standards shall be obtained through on-site application of BMPs where reasonable as determined by Ecology.
- 4) If after on-site application of BMPs, it is determined that the water quality standards can not reasonably be met, off-site Supplemental Treatment shall be applied as follows:
 - a) The off-site treatment shall occur within the same receiving water as the new discharge, and within the allowable dilution zone as determined by Ecology, and
 - b) The additional off-site supplemental treatment will be required to compensate for the increase from the new discharge not being treated at the new discharge site, and a combination of the on- and off-site treatment shall result in a net improvement to water quality within the dilution zone.
 - c) The applicant shall demonstrate that the Supplemental Treatment BMP may reduce background loadings to provide additional assimilative capacity for proposed projects. Background loadings may be reduced by meeting one of the following criteria:
 - i. For 303(d) listed waters, the off-site treatment shall reduce the chemical parameters that are identified as limiting within the reach; or
 - ii. For non-303(d) listed waters, the off-site treatment shall apply one of the following justifications for permitting agency approval:
 - a) Parameter based – Supplemental Treatment BMPs must remove the same pollutant off-site as is being discharged at the new discharge site, and must result in a net reduction of that pollutant within the discharge reach as averaged between the on and off-site treatments; or
 - b) Source based -- Provide in-kind treatment replacements (i.e. additional off-site highway runoff treatment or retrofits for highway runoff impacts); or
 - c) Quantity based -- Provide flood management and erosion control where stormwater quantity or erosion is the problem identified for the receiving water.

In all cases, Ecology reserves the right to deny the discharge if it is determined that there will be unacceptable or unmitigatable impacts to waters of the state.

V. OTHER REQUIREMENTS OF AQUATIC-RESOURCE FUNCTIONS MITIGATION

1. When determined necessary by the permitting agencies, project impacts and mitigation success should be measured with the Habitat Evaluation Procedure (HEP), the Washington State Wetlands Functional Assessment Method (WSWFAM), photographic documentation or other methods acceptable to the permitting agencies.
2. Compensation techniques should be based on best available science. Best Available Science may:
 - a) Include experimental techniques that will require higher replacement ratios until the method is tested and determined a successful form of mitigation;
 - b) Advise mitigation to be performed as part of a mitigation bank, or
 - c) Require implementation of a fully functional system prior to project impacts.
3. Cumulative impacts of mitigation strategies used within the watershed should be taken into consideration, and appropriate measures utilized to avoid or minimize further degradation of the resources. Permitting decisions for unavoidable project impacts may take into consideration the benefits or adverse impacts of other compensatory mitigation, watershed restoration or recovery projects, or impact sites within the watershed, WRIA or basin.
4. Mitigation measures are an integral part of a construction project and shall be completed before or during project construction.
5. Compensatory mitigation that must be implemented after project construction, or requires a long time to reach replacement functions, shall include additional acreage or water-quality measures to mitigate for those losses at the impact site over time.
6. The permitting agencies shall make the determination of the project impacts, the significance of impacts, the type and amount of compensation required after implementing the mitigation sequence, and the level of replacement functions achieved. The permitting agencies shall base their determinations on the best available information, including the applicant's plans and specifications. For large projects with potentially significant impacts, determinations may be based on review of studies required and approved by the permitting agencies.
7. In order to save time and resources of both the applicant and the state, conceptual mitigation plans should be discussed with the lead permitting agency prior to preparing a detailed mitigation plan.
8. Mitigation plans shall be required for projects with significant impacts and shall include, at a minimum, the following:
 - Baseline impact site conditions
 - Quantitative and spatial estimate of impacts

- ❑ Proposed avoidance, minimization, and rectification measures
 - ❑ Statement of need for compensation / justification of why impacts are unavoidable
 - ❑ Goals and objectives of compensation
 - ❑ Detailed implementation plan
 - ❑ Adequate replacement ratio to compensate for temporal losses as negotiated with permitting agencies
 - ❑ Performance standards to measure whether goals are being reached
 - ❑ Maps and drawings of proposal
 - ❑ Operation and maintenance plans (including who will perform)
 - ❑ Monitoring and evaluation plans (including schedules)
 - ❑ Contingency plans, including corrective actions that will be taken if mitigation developments do not meet goals and objectives
 - ❑ Any agreements on performance bonds or other guarantees that the proponent will fulfill mitigation, operation and maintenance, monitoring, and contingency plan.
9. Mitigation plans must include a monitoring plan. The monitoring plan shall include a monitoring schedule of adequate frequency and duration to assure success for the stated goals and performance standards (e.g. hydrology, initial plant success and long-term survival, control of invasive species, fish and wildlife resources, habitat structure and system complexity). The monitoring schedule will vary depending on site conditions and mitigation goals. Early and frequent site monitoring will be needed to address success of elements such as hydrology, plant establishment, and to control any invasive species. Less frequent monitoring may be needed for other elements of the plan.
10. Reasonable thresholds for determining success in achieving the desired functions and goals of a compensation project should be agreed upon prior to approval of a compensation proposal. Performance standards may include establishment of water regime, survival and establishment of vegetative plantings, fish and wildlife use, resistance to invasion by exotic species, or other measurable ecological parameters. Greater uncertainty will necessitate larger compensation ratios.
11. If the project mitigation is failing and the identified contingency measures and corrective actions are not successful, or an unanticipated failure occurs that is not addressed by the stated contingencies, the applicant must contact the permitting agencies and work with the agencies using an adaptive management approach to address how to best achieve the stated performance standards for successful mitigation.
12. When determined necessary by the permitting agencies, a performance bond, letter of credit, escrow account, or other written financial guarantee may be accepted or required to ensure a project proponent will fulfill mitigation requirements, operation and maintenance, monitoring, and contingency plans. The amount of the bond should cover the costs plus 10 percent. A performance bond shall not be required in situations where prior agreements precluding the use of performance bonds have been instituted with a project proponent.
13. The mitigation site shall be protected permanently or at a minimum for the life of the project, unless otherwise approved by the permitting agencies. This protection shall be cited through conservation easement, deed restriction, donation or other legally binding method to WDFW,

the Department of Natural Resources (DNR), a private land trust, non-profit organization, or local government with restrictive easement. This may include land transfer fees, operations and maintenance costs.

14. Compliance monitoring may be performed by the agencies through routine site inspections, review of monitoring reports, and response to reports of non-compliance. Access agreements must be made part of the permit requirements.

15. A commitment by applicants to complete mitigation requirements shall be documented in one or more of the following ways:

- Mitigation plan approved by the regulatory agencies.
- Federal Energy Regulatory Commission (FERC) Order.
- Conditions on an environmental permit.
- Conservation easement.
- Energy Facility Site Evaluation Council (EFSEC) site certification.
- Agency Mitigation Contract

To ensure that the required mitigation was satisfactorily completed, such mitigation should be confirmed by the permitting agency.

16. Project proponent pays mitigation costs. Mitigation costs may include but are not limited to:

- Studies to determine impacts and mitigation needs.
- Alteration of project design in response to sequencing requirements
- Planning, design, and construction of mitigation features.
- Operation and maintenance of mitigation measures for duration of project (including personnel).
- Monitoring success of mitigation measures performance standards.
- Contingency costs associated with non-compliance with permit conditions or non-attainment of performance standards.