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State of Washington



Legislative Report E2SHB 2238

Environmental Mitigation

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Legislative Report: E2SHB 2238

Environmental Mitigation

by

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Executive Summary

The 2012 Legislature directed the Washington State departments of Ecology (Ecology) and Fish and Wildlife (WDFW) to consider the use of forest landowner programs as environmental mitigation. When projects unavoidably impact wetlands or fish life, compensatory mitigation is required to offset the environmental losses. The intent of E2SHB 2238 is to use funds that would pay for compensatory mitigation to fund programs for forest landowners. The E2SHB law adds language to the Aquatic Resources Act, 90.74 RCW, to allow development projects to use three underfunded forest landowner forestry programs to meet compensatory mitigation needs. In addition, the agencies were directed to report on any successes, as well as constraints, in using the forestry programs as environmental mitigation.

The agencies worked with the Washington State Department of Transportation (WSDOT) and county staff to solicit potential projects that could be used to test the applicability of the forestry programs as mitigation. WSDOT and the county public works entities were unable to identify any qualifying infrastructure-related projects during 2012. In addition, no non-infrastructure projects were identified as candidates to use the forestry programs as mitigation. Because the forestry programs were not able to be utilized, Ecology and WDFW developed some hypothetical examples to describe when the forestry programs may be acceptable to meet regulatory requirements for compensatory mitigation.

Based on our review, the Forestry Riparian Easement Program, the Riparian Open Space Program, and the Family Forest Fish Passage Program, will have limited use for compensatory mitigation. Most mitigation is required to occur near the project impacts, particularly for impacts to fish life, while the location of the forestry programs will often be distant from the impact site. Additionally, it appears that in many cases, sites within the forestry easement programs may not contain wetlands, severely limiting their ability to meet wetland mitigation requirements.

For the forestry programs to be used as off-site mitigation they must meet several key criteria.

- Mitigation projects must have a functional link between the impact and the compensation (nexus).
- There needs to be a net environmental benefit that generates credit for mitigation.
- The mitigation must be located within the same watershed and often the same stream reach as the impacts.
- The sites must be permanently protected.
- The mitigation must be environmentally preferable to on-site and/or in-kind mitigation.

Ecology and WDFW will report in December 2013 on any additional programs that may be suitable for meeting mitigation needs.

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Environmental Mitigation: E2SHB 2238

Background

Mitigation is often required to compensate for unavoidable impacts to aquatic resources as part of the environmental permitting process. This usually takes the form of creating new habitats or enhancing existing ones with the goal of replacing or improving the ecological resources impacted by the permitted action. Part of planning a development or transportation project involves identifying mitigation that appropriately compensates for the particular types of unavoidable impacts to wetland and fish resources. This can be a challenging and costly task depending on what properties, opportunities and partnerships are available in the project area. Those who plan compensatory mitigation are often seeking innovative means to effectively address their mitigation needs.

In some places, wetland mitigation banks have been established and In Lieu fee mitigation programs are beginning to become available to provide some options for mitigation. Partnerships have also been used by various entities for effective projects where interests converge for mitigation and other compatible land management activities. There is continued interest in exploring how conservation needs could be paired with mitigation activities and how this might be able to meet multiple objectives in a coordinated way.

This report describes the opportunities and constraints for using certain forestry programs for forest landowners to meet mitigation requirements for impacts to fish resources and wetlands.

State and federal regulations, including the federal rule on compensatory wetland mitigation (33 CFR Part 332), provide some framework for what is required for acceptable wetland mitigation. Under the state water pollution control act (Ch. 90.48 RCW) Ecology issues Administrative Orders to ensure that the beneficial uses of the waters of the state are protected (WAC 173-201-310). Wetlands are waters of the state. As part of the protection of beneficial uses, Ecology and local governments require that all projects proposing to affect a wetland must follow mitigation sequencing. The federal Clean Water Act also requires the use of mitigation sequencing to ensure that only unavoidable impacts are authorized. Some projects may require permits at the federal, state and local levels and mitigation sequencing is a crucial part of those permit review processes.

WDFW mitigates impacts to fish and their habitat caused by construction projects in or near water through the application of the Hydraulic Code (Ch. 75.20 RCW). WDFW requires mitigation sequencing when a new project has adverse impacts that cause a net loss of fish life, aquatic and riparian habitat functions necessary to sustain fish life or loss of aquatic and riparian area by habitat type ([Chapter 220-110-020\(68\) WAC](#)).

The Hydraulic Code rules, [WAC 220-110-020 \(66\)](#), defines mitigation sequencing as follows:

"Mitigation" means actions that shall be required as provisions of the HPA to avoid or compensate for impacts to fish life resulting from the proposed project activity. The type(s) of mitigation required shall be considered and implemented, where feasible, in the following sequential order of preference:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action;*
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;*
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;*
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;*
- (e) Compensating for the impact by replacing or providing substitute resources or environments; or*
- (f) Monitoring the impact and taking appropriate corrective measures to achieve the identified goal.*

For projects with potentially significant impacts, a mitigation agreement may be required prior to approval. Replacement mitigation may be required to be established and functional prior to project construction.

The mitigation sequencing approach is also enforced through the federal Clean Water Act Section 404(b)(1) guidelines. These guidelines require that applicants must avoid and minimize impacts prior to moving to compensatory mitigation. Once all avoidance and minimization of wetland impacts has occurred, compensatory mitigation is required for all remaining unavoidable impacts.

The State aquatic resources mitigation law in [RCW 90.74.010 \(2\)](#) defines compensatory mitigation as follows:

“Compensatory mitigation” means the restoration, creation, enhancement, or preservation of uplands, wetlands, or other aquatic resources for the purposes of compensating for unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved. “Compensatory mitigation” includes mitigation that:

- (a) Occurs at the same time as, or in advance of, a project's planned environmental impacts;*
- (b) Is located in a site either on, near, or distant from the project's impacts;*
and
- (c) Provides either the same or different biological functions and values as the functions and values impacted by the project.*

Bill synopsis

E2SHB 2238 allows the use of certain forestry programs to meet mitigation needs based on current mitigation requirements. The law outlines three existing DNR programs for forest landowners that could be used:

- Forestry Riparian Easement Program (FREP)
- Family Forest Fish Passage Program (FFFPP)
- Riparian Open Space Program (ROSP)

The bill directs the Washington State Departments of Ecology (Ecology) and Fish and Wildlife (WDFW) to consider projects that propose to use these forestry programs for mitigation of environmental impacts. The bill also directs Ecology and WDFW to provide a report to the Legislature describing any successes in using these existing programs to mitigate impacts for development projects, as well as any constraints discovered that limit the applicability of the above forestry programs to provide compensatory mitigation.

Overview of selected forestry programs

Forestry Riparian Easement Program

The Forestry Riparian Easement Program (FREP) was established as part of the Forests and Fish legislation in 1999. This program is aimed at providing an opportunity to small forest landowners to be partially compensated for trees in riparian areas that are required to be left under forest practice rules. As a result of the Forest Practices requirements to protect riparian areas, many small forest landowners experienced disproportionate economic impacts compared to industrial forest landowners. This program is set up on a first-come, first-served basis where willing landowners are compensated 50-89 percent of the stumpage value in exchange for a 50-year conservation easement on the required leave trees. Generally these are areas along fish-bearing streams. As of May 2012, the program has spent approximately \$25 million to purchase 290 easements at an average cost of \$87,200 per easement on over 4,900 riparian acres adjacent to 161.4 miles of stream. There is currently a backlog of 108 forestry riparian easement applications that property owners have offered for purchase under FREP representing \$10.33 million in easement value.

Family Forest Fish Passage Program

The Family Forest Fish Passage Program (FFFPP) was established in 2003 to provide cost-share funding to assist small forest landowners eliminate fish barriers on their forest land. Small forest landowners are not required to remove fish passage barriers until timber harvest is conducted. They can then apply for assistance from FFFPP to replace undersized or failing stream crossings such as culverts and bridges. These fish barriers are fixed on a priority basis, relative to the applications received to date. Since 2003, nearly 200 small forest landowners have taken advantage of the Family Forest Fish Passage Program, replacing 232 barriers and opening more than 485 miles of stream for salmon and trout. There is currently a backlog of 611 fish barriers in the program.

Riparian Open Space Program

The Riparian Open Space Program (ROSP) was also established as part of the forests and fish legislation. In part, this program applies to forested property within channel migration zones that cannot be harvested due to forest practices rules protections. These areas may contain flood plains but are primarily islands of timber along large streams or rivers that tend to migrate or abruptly change within channel migration zones. These areas may qualify for mitigation depending on site-specific conditions. Willing forest landowners (both small and industrial) may apply for compensation for these areas in exchange for a permanent conservation easement on a competitive basis. Since 2002, when funding first became available, 16 easements, representing \$4.16 million and 1042 acres, have been purchased that protect important habitat. Unfortunately, at this time the program is unfunded.

2012 efforts

Ecology and WDFW, as well as the Washington Forest Protection Association (WFPA), worked with county governments and WSDOT to identify any appropriate pilot projects that could be used to test the concept of providing compensatory mitigation associated with either wetlands permitting or Hydraulic Project Approvals (HPAs) on state highway projects or local government roads.

While there are a number of WSDOT transportation projects under way, many of these have been in planning stages for quite some time and already have significant investment in mitigation planning. Although we looked to the best of our ability, contacting headquarters and regional staff, we were unable to find any WSDOT projects which were seeking mitigation that would be a suitable match for these programs. Most of the planned transportation work is in more urban areas, distant from the applicable forest lands, already had a plan for mitigation or needed site-specific mitigation that could not be provided by these programs. Moreover, the number of new starts for WSDOT projects is sharply declining due to the gas tax funding cycle, reducing future options at this time.

No local governments had projects that used this mitigation option. These projects often require compensatory mitigation. The federal natural resource agencies as well as Ecology and WDFW often negotiated and agreed to the mitigation as part of the project development process. As a result, county public works departments are hesitant to revise mitigation plans because project schedules and budget can be affected by re-negotiating the mitigation.

As a result of the lack of real world examples to describe and evaluate, we would like to step through a few hypothetical examples of how this opportunity might work, and identify the potential difficulties with this concept.

Mitigation sideboards

Wetlands

When evaluating the proposed compensatory mitigation to offset the unavoidable wetland impacts, Ecology considers these seven questions⁴:

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?

⁴ Alternative Mitigation Policy Guidance, (2000) WDFW, Ecology and WSDOT (See Appendix B)

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?

For the compensatory mitigation to be acceptable, the mitigation must have a functional link with the impact. Usually this means in-kind replacement; that is the functions provided are similar to those lost. In-kind compensation is required where the functions are critical or limiting in the watershed and direct replacement is important to the functioning and health of the watershed. In situations where in-kind wetland mitigation is not critical and the wetland functions are not limiting in the watershed, out-of-kind mitigation may be allowed. Out-of-kind mitigation may include wetland types or functions different from those affected. Ecology accepts out-of-kind mitigation where:

- The functions to be impacted are not limiting in the watershed.
- Greater environmental benefit can be gained in the watershed than by in-kind mitigation.
- The proposed out-of-kind functions are critical to the health of the watershed.

Generally, the agencies do not accept non-wetland out-of-kind mitigation for impacts to wetlands and their functions unless there is a link in functions with the losses.

Mitigation may be required to occur on-site due to the importance of the functions and the location of the wetland on the landscape. However, on-site mitigation has not always been successful because of bad design and site location. Ecology accepts off-site mitigation within the same watershed where it can be shown that the off-site mitigation provides greater benefit and is more sustainable than on-site mitigation. Impacts should be mitigated as near to the impact as possible to ensure that the functions are replaced close to where they are lost. Off-site mitigation may be acceptable when:

- The impacted functions are not critical to be provided on-site.
- There are no opportunities for on-site mitigation.
- The off-site mitigation has a higher likelihood of success than on-site mitigation.
- Greater environmental benefit from a watershed perspective can be obtained off site.

Compensatory mitigation must result in a net gain to make up for functions and area lost. Generally this means restoring former wetlands, creating new ones or enhancing degraded wetlands. All of these actions result in a net gain of functions that can be used as compensatory mitigation. In exceptional cases, Ecology may allow the use of preservation of high quality wetlands as mitigation. For preservation to be acceptable, the wetlands must be high quality, rare or irreplaceable, and they must be at risk of degradation or loss.

All compensatory mitigation sites are required to be permanently protected. This includes some restriction on the title that indicates that the site is a mitigation site and cannot be altered. A common form of protection is a conservation easement. Conservation easements are generally preferred because they have a third party overseeing the easement.

Finally, all compensatory mitigation projects are required to be monitored for five to ten years to ensure that the proposed functions successfully develop and the required area and wetland type are achieved.

Fish life and hydraulic project approvals

The Department of Fish and Wildlife prioritizes compensatory mitigation location and type, in the following order of preference.

1. In kind, on-site.
2. In kind, off-site.
3. Out-of-kind, on-site.
4. Out-of-kind, off-site.

In general, in-kind/on-site mitigation is preferable to out-of-kind/off-site mitigation because it is most likely to compensate for habitat functions and area lost at or near the area affected.

However, this does not prevent applicants from proposing off-site or out-of-kind mitigation measures. [RCW 77.55.241](#) requires the department to consider off-site mitigation when it is more cost-effective and provides the most benefit to fish life.

In-kind mitigation requires replacing the impacted habitat with habitat of the same physical and functional type. Out-of-kind mitigation involves replacing impacted habitat with habitat of a different physical and functional type. Out-of-kind mitigation is appropriate when it provides more ecological or watershed benefit than in-kind mitigation, such as:

- When the resources adversely affected provide minimal desirable function, and they are neither limiting for a special species nor limiting within the watershed.
- When out-of-kind functions are critical or limiting within the watershed and provide a net gain for the resources of the watershed.

Off-site compensatory mitigation, or a combination of on-site and off-site compensatory mitigation, can be appropriate when:

- Off-site mitigation can achieve greater improvements to limiting or critical functions than is possible on site.
- Functions that will be adversely affected on site are of low quality.
- There are no reasonable on-site opportunities.
- On-site opportunities do not have a high likelihood of success.
- Off-site enhancement and restoration opportunities have a higher likelihood of success than on-site options.

Examples of possible applications

In the absence of actual projects, the agencies outlined hypothetical situations where compensatory mitigation using the forestry programs may be viable. We also describe limitations or constraints on using the forestry programs for compensatory mitigation.

Because the three forestry programs were not used to meet compensatory mitigation needs during 2012, the following hypothetical cases illustrate when these programs may be acceptable to meet regulatory requirements. These examples are not meant to be an exhaustive list of scenarios.

Wetlands

The objective of wetland mitigation is no net loss of wetland area or function. There are different options for compensatory mitigation. The most common option is the creation, restoration and enhancement of wetland areas to increase wetland area and function. These improvements can then be used to offset wetland losses. In some cases, preservation of wetlands can be used if the wetlands are of high quality, irreplaceable, and under demonstrable threat of degradation. All mitigation sites must be preserved in perpetuity and monitored for success. The following examples illustrate when forestry programs may be appropriate as compensatory mitigation.

Hypothetical Case: Small residential project located in foothills

The project will result in unavoidable impacts to a wetland requiring compensatory mitigation. The impacts are small to a low-quality wetland and functions lost include habitat and water quality. There are no opportunities to mitigate on site. The project proponent proposes to use FREP for mitigation.

This option may be appropriate if the following apply:

- There is a degraded wetland within the FREP area in need of enhancement to provide a net gain in functions.
- There is a link between the impact and the mitigation provided. In this case it includes restoration and enhancement of wetland functions in exchange for wetland losses.
- The mitigation is located within the same watershed or preferably the same basin.
- The project is not located in the service area of a wetland bank or In Lieu Fee program. Mitigation provided by these options will be preferable to out-of-kind mitigation since the programs have established wetland mitigation already available.
- The mitigation must be permanently protected. The 50-year easement under FREP is not sufficient, and the easement will need to be perpetual for the site to serve as mitigation.

The FREP program would generally not be adequate if wetlands are not included in the easement. This would result in a net loss of wetland function. However, a trade-off may be allowed if a watershed analysis demonstrates that functions provided by the riparian area are critical to watershed health and are more important than replication of functions in-kind and closer to the impact.

Hypothetical Case: Development project with small wetland impacts to low quality wetland located in the foothills.

A development project will impact the functions and area of a wetland and compensatory mitigation is required. There are no mitigation opportunities available on site so the entity starts looking within the watershed for mitigation alternatives. The applicant proposes to use the FFFPP program to compensate for the wetland impacts.

- Use of the FFFPP program would require a trade off in functions from wetlands to fish passage, resulting in non-wetland out-of-kind mitigation that would most likely be considered inadequate.

Hydraulic Project Approvals (HPAs)

Impacts to fish life from development projects requiring a Hydraulic Project Approval are typically able to be either avoided or minimized through project design and timing. When impacts cannot be avoided or minimized, mitigation is often achieved on site and in-kind. Compensatory mitigation is required only in a small number of cases, and is usually associated with large WSDOT or county highway projects. Compensatory mitigation for impacts to fish life associated with Hydraulic Project Approvals is typically in the form of in-kind/on-site mitigation, although out-of-kind or off-site mitigation can be appropriate under certain circumstances. The following hypothetical cases illustrate how the three forestry programs may provide appropriate compensatory mitigation.

Hypothetical Case: Short Term Culvert Fix

Applicants must design culverts and bridges to provide unimpeded fish passage. Therefore, using the Family Forest Fish Passage Program to provide in-kind/off-site mitigation is possible in limited situations. For example, a situation can arise (although rarely) where a stream crossing constitutes a public safety hazard due to a failing culvert, providing fish passage is a lower priority relative to other barriers, providing passage would be extremely expensive, and funds are not currently available. In order to address the public safety hazard, WDFW may permit a temporary short-term fix to the structure that does not provide fish passage. In this case, the applicant, such as a county government, may be able to fix a much less expensive fish passage barrier in the Family Forest Fish Passage Program to mitigate for not providing fish passage at the county road.

Hypothetical Case: Fish Habitat Impacts

If a project will have impacts to the habitat of a particular fish species and there is limited ability to mitigate the impacts on the project site, there may be an opportunity to provide mitigation from other areas within the watershed. General examples are improving flood plain areas within a channel migration zone using the Riparian Open Space Program, or enhancing degraded wetlands or stream riparian habitat within areas proposed for the Forestry Riparian Easement Program. However, in order to make these viable options, a landowner would need to allow enhancements or rehabilitation to degraded flood plains, streams, or wetlands under the easement programs, and easements would need to be permanent.

Constraints to implementation

It appears the viability of these forestry programs to fulfill mitigation requirements for impacts to wetlands will be limited. The approach also appears to have limited potential to provide mitigation for impacts associated with Hydraulic Project Approvals.

The agencies have identified some potential barriers that could affect the implementation of this law.

Who holds the easements?

Under the FREP program DNR holds the 50-year easements. To qualify for mitigation, the easements must be permanent. The permanent easements would not be paid for out of DNR's appropriation, they would be paid for by project applicants. It is not clear who would hold these permanent conservation easements for the mitigation. Would DNR hold the perpetual easements if the funding source is different than the FREP appropriation? If DNR will hold the easements, it would require a change in statute.

Nexus with impact

When proposing mitigation, it is up to the applicant to demonstrate how the mitigation will offset the resource losses. Use of out-of-kind mitigation can make it difficult to find a nexus with the impacts. Applicants will need information on critical needs for the watershed in order to be able to make the case that the mitigation is environmentally preferable from a watershed perspective.

Scarcity of information on wetland resources in FREP areas

The FREP database does not contain information on which areas have wetlands on them. In order to be used for mitigation, there needs to be a link or nexus to the impacts. For wetland mitigation this means that the mitigation must usually include some wetland restoration, enhancement or preservation. Without information on wetlands in the database, each project would require individual field review to identify potential parcels for mitigation. This can be time consuming for the project applicant who proposes the mitigation. We estimate that only a small percentage of FREP easement applications are likely to contain degraded wetlands within the proposed FREPs.

Wetland banks

Where projects are located in the service area (market area) of a wetland mitigation bank, the bank will usually be preferable to use of the forestry programs because:

- The banks are specifically designed to provide wetland areas and functions for compensatory mitigation.
- The banker has already constructed the mitigation and it has been meeting performance standards before it can be used.
- Temporal losses are minimized since the mitigation is functional prior to use.
- The bank program has several mechanisms to reduce the risk of failure such as reserving credits until the mitigation is successful and requiring financial assurances.

In-Lieu Fee Programs

Where projects are located in the service area (market area) of an In-Lieu fee (ILF) Program, it will usually be preferable to use those programs over the forestry programs because the In Lieu Fee Program has been specifically developed to provide wetland area and functions. There is however an opportunity for mitigation under these forestry programs to be incorporated into an existing ILF program. King County has a federally approved ILF program. King County has indicated that they would be open to including forestry sites in their existing program.

Payments into FREP

One potential approach that was explored was whether applicants could simply pay into the state accounts for the three forestry programs. However, payment in lieu of mitigation would need to be established as a formal program with the US Army Corps of Engineers for use as wetland mitigation. The easiest approach to meet the intent of the legislation would be to have the project proponent pay the landowner directly for the easement rather than paying into the FREP fund.

Timing of mitigation

Project planning timeframes for the Department of Transportation and county governments meant that projects were too far along in the process, and any needed mitigation was either already secured or planned. Pre-planning to identify qualifying forestry sites appears to be essential to linking compensatory mitigation with forest conservation interests.

Criteria for successful implementation

In order for the three forestry programs to provide adequate compensatory mitigation the following elements are generally necessary. Specific decisions will be made on a case-by-case basis.

For wetlands:

Wetland mitigation projects should meet the following:

- Impacts are small and to a low-quality system or there is a very limited opportunity for onsite mitigation of more significant impacts.
- There are wetlands that would benefit from enhancement within a forestry easement.
- The mitigation site is close to the impacts, preferably within the same watershed or stream.
- The functions provided by the mitigation are critical or limiting in the watershed.
- The mitigation site has permanent protection.
- There is a functional linkage between the environmental impacts and the proposed mitigation that achieves no net loss objectives.

Out-of-kind mitigation is generally not likely to be determined to be adequate unless the functions provided by the mitigation are more critical to the watershed than those lost. It would be difficult to authorize fish passage for wetland mitigation unless there was a nexus to the impacts or the use of out-of-kind mitigation is environmentally preferable based on watershed conditions.

For HPAs:

- Functional linkages between fish habitat impacts and needed mitigation.
- FFFPP projects should occur within the same watershed and for same fish species impacted, particularly for listed salmonid species.

Summary and next steps

In summary, the three forestry programs appear to have limited utility as compensatory mitigation for infrastructure and non-infrastructure projects that impact wetlands or fish life. As discussed above, there are many factors that inhibit the use of these programs as mitigation.

Therefore, in 2013, Ecology and WDFW will explore, as funding and resources allow, mitigation options beyond the three existing forestry programs identified in the legislation.

ESSHB 2238 directed Ecology and WDFW to submit a report to the legislature next year. The law says:

(2) The department of ecology and the department of fish and wildlife must provide a report to the legislature, consistent with RCW 24 43.01.036, by December 31, 2013,

on:

(a) The identification of any additional programs that may be appropriate for inclusion in an environmental mitigation plan;

- (b) The feasibility of developing new programs that may be appropriate for inclusion in an environmental mitigation plan, including the identification of:*
- (i) How often a program would be suitable for inclusion;*
 - (ii) When and where a new program would be suitable for inclusion;*
 - (iii) Constraints on the suitability of any new program; and*
 - (iv) Timelines, implementation costs, agency resource needs, and requests for new legal authority.*

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Appendix A

Engrossed Second Substitute House Bill 2238

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CERTIFICATION OF ENROLLMENT

ENGROSSED SECOND SUBSTITUTE HOUSE BILL 2238

Chapter 62, Laws of 2012

62nd Legislature
2012 Regular Session

ENVIRONMENTAL MITIGATION--EXISTING ENVIRONMENTAL PROGRAMS

EFFECTIVE DATE: 06/07/12

Passed by the House February 13, 2012
Yeas 88 Nays 9

FRANK CHOPP

Speaker of the House of Representatives

Passed by the Senate March 1, 2012
Yeas 42 Nays 7

BRAD OWEN

President of the Senate

Approved March 23, 2012, 11:15 a.m.

CHRISTINE GREGOIRE

Governor of the State of Washington

CERTIFICATE

I, Barbara Baker, Chief Clerk of the House of Representatives of the State of Washington, do hereby certify that the attached is **ENGROSSED SECOND SUBSTITUTE HOUSE BILL 2238** as passed by the House of Representatives and the Senate on the dates hereon set forth.

BARBARA BAKER

Chief Clerk

FILED

March 23, 2012

**Secretary of State
State of Washington**

ENGROSSED SECOND SUBSTITUTE HOUSE BILL 2238

Passed Legislature - 2012 Regular Session

State of Washington

62nd Legislature

2012 Regular Session

By House General Government Appropriations & Oversight (originally sponsored by Representatives Wilcox, Clibborn, Armstrong, Billig, Takko, Rivers, Angel, Hinkle, Schmick, Orcutt, Johnson, Warnick, Dahlquist, Blake, and Chandler)

READ FIRST TIME 02/06/12.

1 AN ACT Relating to pairing required investments in compensatory
2 environmental mitigation, including the mitigation of transportation
3 projects, with existing programs currently referenced in Title 76 RCW
4 that enhance natural environmental functions; amending RCW 47.01.300,
5 90.74.005, 90.74.010, 90.74.020, and 90.74.030; adding a new section to
6 chapter 90.74 RCW; adding a new section to chapter 76.09 RCW; creating
7 a new section; and providing an expiration date.

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

9 **Sec. 1.** RCW 47.01.300 and 1994 c 258 s 4 are each amended to read
10 as follows:

11 The department shall, in cooperation with environmental regulatory
12 authorities:

13 (1) Identify and document environmental resources in the
14 development of the statewide multimodal plan under RCW 47.06.040;

15 (2) Allow for public comment regarding changes to the criteria used
16 for prioritizing projects under chapter 47.05 RCW before final adoption
17 of the changes by the commission;

18 (3) Use an environmental review as part of the project prospectus
19 identifying potential environmental impacts, mitigation, the
1 utilization of the mitigation option available in section 5 of this
2 act, and costs during the early project identification and selection

3 phase, submit the prospectus to the relevant environmental regulatory
4 authorities, and maintain a record of comments and proposed revisions
5 received from the authorities;

6 (4) Actively work with the relevant environmental regulatory
7 authorities during the design alternative analysis process and seek
8 written concurrence from the authorities that they agree with the
9 preferred design alternative selected;

10 (5) Develop a uniform methodology, in consultation with relevant
11 environmental regulatory authorities, for submitting plans and
12 specifications detailing project elements that impact environmental
13 resources, and proposed mitigation measures including the mitigation
14 option available in section 5 of this act, to the relevant
15 environmental regulatory authorities during the preliminary
16 specifications and engineering phase of project development;

17 (6) Screen construction projects to determine which projects will
18 require complex or multiple permits. The permitting authorities shall
19 develop methods for initiating review of the permit applications for
20 the projects before the final design of the projects;

21 (7) Conduct special prebid meetings for those projects that are
22 environmentally complex; and

23 (8) Review environmental considerations related to particular
24 projects during the preconstruction meeting held with the contractor
25 who is awarded the bid.

26 **Sec. 2.** RCW 90.74.005 and 1997 c 424 s 1 are each amended to read
27 as follows:

28 (1) The legislature finds that:

29 (a) The state lacks a clear policy relating to the mitigation of
30 wetlands and aquatic habitat for infrastructure development;

31 (b) Regulatory agencies have generally required project proponents
32 to use compensatory mitigation only at the site of the project's
33 impacts and to mitigate narrowly for the habitat or biological
34 functions impacted by a project;

35 (c) This practice of considering traditional on-site, in-kind
36 mitigation may provide fewer environmental benefits when compared to

1 innovative mitigation proposals that provide benefits in advance of a
2 project's planned impacts and that restore functions or habitat other
3 than those impacted at a project site; (~~and~~)

4 (d) Regulatory decisions on development proposals that attempt to
5 incorporate innovative mitigation measures take an unreasonably long
6 period of time and are subject to a great deal of uncertainty and
7 additional expenses; and

8 (e) Greater environmental benefits may be achievable through
9 compensatory environmental mitigation when the collective mitigation
10 investments of project proponents is paired with the structure of
11 successful state programs that are referenced in statute and are
12 designed to enhance and preserve aquatic and riparian functions when
13 there is a clear linkage between the environmental impacts and the
14 goals of the state program. Programs such as the forestry riparian
15 easement program, the family forest fish passage program, and the
16 riparian open space program created pursuant to RCW 76.09.040 may have
17 a logical and physical nexus with many underlying projects, especially
18 road projects, and are proven to create a sustained benefit in the
19 aquatic environment.

20 (2) The legislature therefore declares that it is the policy of the
21 state to authorize innovative mitigation measures by requiring state
22 regulatory agencies to consider mitigation proposals for
23 (~~infrastructure~~) projects that are timed, designed, and located in a
24 manner to provide equal or better biological functions and values
25 compared to traditional on-site, in-kind mitigation proposals.

26 (3) It is the intent of the legislature to authorize local
27 governments to accommodate the goals of this chapter. It is not the
28 intent of the legislature to: (a) Restrict the ability of a project
29 proponent to pursue project specific mitigation; or (b) create any new
30 authority for regulating wetlands or aquatic habitat beyond what is
31 specifically provided for in this chapter.

32 **Sec. 3.** RCW 90.74.010 and 1997 c 424 s 2 are each amended to read
33 as follows:

34 The definitions in this section apply throughout this chapter
35 unless the context clearly requires otherwise.

36 (1) "Mitigation" means sequentially avoiding impacts, minimizing
37 impacts, or compensating for remaining unavoidable impacts.

1 (2) "Compensatory mitigation" means the restoration, creation,
2 enhancement, or preservation of uplands, wetlands, or other aquatic
3 resources for the purposes of compensating for unavoidable adverse
4 impacts that remain after all appropriate and practicable avoidance and
5 minimization has been achieved. "Compensatory mitigation" includes
6 mitigation that:

7 (a) Occurs at the same time as, or in advance of, a project's
8 planned environmental impacts;

9 (b) Is located in a site either on, near, or distant from the
10 project's impacts; and

11 (c) Provides either the same or different biological functions and
12 values as the functions and values impacted by the project.

13 (3) "Infrastructure development" means an action that is critical
14 for the maintenance or expansion of an existing infrastructure feature
15 such as a highway, rail line, airport, marine terminal, utility
16 corridor, harbor area, or hydroelectric facility and is consistent with
17 an approved land use planning process. This planning process may
18 include the growth management act, chapter 36.70A RCW, or the shoreline
19 management act, chapter 90.58 RCW, in areas covered by those chapters.

20 (4) "Mitigation plan" means a document or set of documents
21 developed through joint discussions between a project proponent and
22 environmental regulatory agencies that describe the unavoidable wetland
23 or aquatic resource impacts of ~~((the))~~ a proposed infrastructure
24 development or noninfrastructure development and the proposed
25 compensatory mitigation for those impacts.

26 (5) "Project proponent" means a public or private entity
27 responsible for preparing a mitigation plan.

28 (6) "Watershed" means an area identified as a state of Washington
29 water resource inventory area under WAC 173-500-040 as it exists on
30 ~~((July 27, 1997))~~ the effective date of this section.

31 (7) "Family forest fish passage program" means the program
32 administered by the recreation and conservation office created pursuant
33 to RCW 76.09.410 that provides public cost assistance to small forest
34 landowners associated with the road maintenance and abandonment
35 processes.

36 (8) "Forestry riparian easement program" means the program
37 established in RCW 76.13.120.

1 (9) "Noninfrastructure development" means a development project
2 that requires the completion of compensatory mitigation that does not
3 meet the definition of "infrastructure development" and is consistent
4 with an approved land use planning process. This planning process may
5 include the growth management act, chapter 36.70A RCW, or the shoreline
6 management act, chapter 90.58 RCW, in areas covered by those chapters.

7 (10) "Riparian open space program" means the program created
8 pursuant to RCW 76.09.040.

9 **Sec. 4.** RCW 90.74.020 and 1997 c 424 s 3 are each amended to read
10 as follows:

11 (1) Project proponents may use a mitigation plan to propose
12 compensatory mitigation within a watershed. A mitigation plan shall:

13 (a) Contain provisions that guarantee the long-term viability of
14 the created, restored, enhanced, or preserved habitat, including
15 assurances for protecting any essential biological functions and values
16 defined in the mitigation plan;

17 (b) Contain provisions for long-term monitoring of any created,
18 restored, or enhanced mitigation site; and

19 (c) Be consistent with the local comprehensive land use plan and
20 any other applicable planning process in effect for the development
21 area, such as an adopted subbasin or watershed plan.

22 (2)(a) The departments of ecology and fish and wildlife may not
23 limit the scope of options in a mitigation plan to areas on or near the
24 project site, or to habitat types of the same type as contained on the
25 project site. The departments of ecology and fish and wildlife shall
26 fully review and give due consideration to compensatory mitigation
27 proposals that improve the overall biological functions and values of
28 the watershed or bay and accommodate the mitigation needs of the
29 infrastructure development or noninfrastructure development, including
30 proposals or portions of proposals that are explored or developed in
31 section 5 of this act.

32 (b) The departments of ecology and fish and wildlife are not
33 required to grant approval to a mitigation plan that the departments
34 find does not provide equal or better biological functions and values
35 within the watershed or bay.

36 (3) When making a permit or other regulatory decision under the
37 guidance of this chapter, the departments of ecology and fish and

1 wildlife shall consider whether the mitigation plan provides equal or
2 better biological functions and values, compared to the existing
3 conditions, for the target resources or species identified in the
4 mitigation plan. This consideration shall be based upon the following
5 factors:

6 (a) The relative value of the mitigation for the target resources,
7 in terms of the quality and quantity of biological functions and values
8 provided;

9 (b) The compatibility of the proposal with the intent of broader
10 resource management and habitat management objectives and plans, such
11 as existing resource management plans, watershed plans, critical areas
12 ordinances, the forestry riparian easement program, the riparian open
13 space program, the family forest fish passage program, and shoreline
14 master programs;

15 (c) The ability of the mitigation to address scarce functions or
16 values within a watershed;

17 (d) The benefits of the proposal to broader watershed landscape,
18 including the benefits of connecting various habitat units or providing
19 population-limiting habitats or functions for target species;

20 (e) The benefits of early implementation of habitat mitigation for
21 projects that provide compensatory mitigation in advance of the
22 project's planned impacts; and

23 (f) The significance of any negative impacts to nontarget species
24 or resources.

25 (4) A mitigation plan may be approved through a memorandum of
26 agreement between the project proponent and either the department of
27 ecology or the department of fish and wildlife, or both.

28 NEW SECTION. Sec. 5. A new section is added to chapter 90.74 RCW
29 to read as follows:

30 (1)(a) To the degree that resources are deemed available by the
31 affected departments, the department of ecology and the department of
32 fish and wildlife shall allow, when appropriate, programs that are
33 related to environmental mitigation, or explore the potential of
34 developing new programs, to utilize the forestry riparian easement
35 program, the riparian open space program, or the family forest fish
36 passage program to mitigate for environmental impacts from projects

1 conducted in the state where compatible with existing regulations. The
2 use of these programs may not be additive to existing compensatory
3 mitigation requirements.

4 (b) In implementing this subsection, the department of natural
5 resources may be used as a resource, consistent with section 8 of this
6 act, to assist in identifying potential projects that can be used for
7 the mitigation of infrastructure and noninfrastructure development.

8 (2) The department of ecology and the department of fish and
9 wildlife are authorized to seek federal or private funds and in-kind
10 contributions to implement this section. The scope of effort in
11 implementing this section may be defined by the success of the
12 department of ecology and the department of fish and wildlife in
13 securing specific funding.

14 NEW SECTION. **Sec. 6.** (1) The department of ecology and the
15 department of fish and wildlife must provide a report to the
16 legislature, consistent with RCW 43.01.036, by December 31, 2012, on:

17 (a) Any successes in using existing programs to mitigate impacts
18 for infrastructure and noninfrastructure development, as those terms
19 are defined in RCW 90.74.010, as provided in section 5 of this act; and

20 (b) Any constraints discovered that limits the applicability of
21 section 5 of this act.

22 (2) The department of ecology and the department of fish and
23 wildlife must provide a report to the legislature, consistent with RCW
24 43.01.036, by December 31, 2013, on:

25 (a) The identification of any additional programs that may be
26 appropriate for inclusion in an environmental mitigation plan;

27 (b) The feasibility of developing new programs that may be
28 appropriate for inclusion in an environmental mitigation plan,
29 including the identification of:

30 (i) How often a program would be suitable for inclusion;

31 (ii) When and where a new program would be suitable for inclusion;

32 (iii) Constraints on the suitability of any new program; and

33 (iv) Timelines, implementation costs, agency resource needs, and
34 requests for new legal authority.

35 (3) The report required in subsection (2) of this section should,
36 if deemed appropriate and funding allows, be developed in consultation
37 with the department of transportation, the department of natural

1 resources, the department of commerce, affected federally recognized
2 Indian tribes, and private sector stakeholders such as forest
3 landowners, environmental interests, and the development community.

4 (4) The authority provided in section 5(2) of this act relating to
5 the acceptance of nonstate money may be utilized to fund the
6 implementation of this section. The scope of effort in implementing
7 this section may be defined by the success of the department of ecology
8 and the department of fish and wildlife in securing specific funding.

9 (5) This section expires July 30, 2014.

10 **Sec. 7.** RCW 90.74.030 and 1997 c 424 s 4 are each amended to read
11 as follows:

12 (1) In making regulatory decisions relating to wetland or aquatic
13 resource mitigation, the departments of ecology and fish and wildlife
14 shall, at the request of the project proponent, follow the guidance of
15 (~~RCW 90.74.005 through 90.74.020~~) this chapter.

16 (2) If the department of ecology or the department of fish and
17 wildlife receives multiple requests for review of mitigation plans,
18 each department may schedule its review of these proposals to conform
19 to available budgetary resources.

20 NEW SECTION. **Sec. 8.** A new section is added to chapter 76.09 RCW
21 to read as follows:

22 The department and, when appropriate, the small forest landowner
23 office established in RCW 76.13.110 must assist in identifying
24 potential projects that can be used for the mitigation of
25 infrastructure and noninfrastructure development, as those terms are
26 defined in RCW 90.74.010, as provided in section 5 of this act.

Passed by the House February 13, 2012.

Passed by the Senate March 1, 2012.

Approved by the Governor March 23, 2012.

Filed in Office of Secretary of State March 23, 2012.

Appendix B

Alternative Mitigation Policy Guidance Interagency Implementation Agreement

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FEB 17 2000



Washington Department of FISH and WILDLIFE



Washington State DEPARTMENT OF TRANSPORTATION

ALTERNATIVE MITIGATION POLICY GUIDANCE INTERAGENCY IMPLEMENTATION AGREEMENT

The Washington Departments of Fish and Wildlife, Ecology and Transportation have developed the final Alternative Mitigation Policy Guidance, dated February 10, 2000, prepared under the auspices of the Salmon Recovery Act (RCW 75.46) Tribes were invited to participate on the work group, and were sent draft versions of the document for comment. All comments received from the interested tribes were included in the final guidance document. The Department of Community, Trade, and Economic Development (CTED) also voluntarily participated in the development of the policy guidance in order to bridge the gap between state and local needs and requirements. CTED is responsible for developing Best Available Science guidelines for local governments to use in the designation and protection of critical areas, so they provided an essential link to ensure consistency between the policy guidance and the development of Best Available Science.

The above agencies have cooperatively developed this guidance in order to improve the ecological benefits from compensatory mitigation for project impacts to wetlands, water quality, and fish and wildlife habitat. This guidance uses a holistic approach to aquatic resource mitigation and provides flexibility needed to address watershed restoration and salmon recovery efforts while operating within existing regulatory frameworks.

The Washington Departments of Fish and Wildlife, Ecology and Transportation will:

- 1) Implement the final Alternative Mitigation Policy Guidance, dated February 10, 2000;
- 2) Strive to meet the stated goals of the Policy Guidance;
- 3) Strive to find the most appropriate mitigation for project impacts that will result in addressing the needs of the watershed, and work towards salmon recovery where appropriate.

Tom Fitzsimmons, Director
Department of Ecology

2-10-00
Date

Jeff Koenings, Director
Department of Fish and Wildlife

2-14-00
Date

Sid Morrison, Secretary
Department of Transportation

2/10/00
Date

<p style="text-align: center;">RCW 75.46 - Alternative Mitigation Strategies Workgroup Summary of Mitigation Policy Guidance</p>
--

ESHB 2496 Workgroup Members -- Ecology, WSDOT, Tribes, WDFW, DCTED

Legislative Mandate – (per ESHB 2496 and RCW 75.46 requirements)

Alternative Mitigation Policy Guidance – RCW 75.46 requires the State Departments of Ecology, Fish and Wildlife and Transportation, and Interested Tribes to develop policy guidance to evaluate mitigation alternatives within a watershed context. The Tribes were invited to participate in the workgroup, and were sent draft versions of the document for comments. All comments received by the interested tribes were included in the final version of the document. The Department of Community Trade and Economic Development voluntarily joined the workgroup to provide technical assistance to ensure local governments ordinances were considered, and to ensure the policy guidance would be consistent with the Best Available Science being developed to guide local government ordinance revisions. Other requirements stated in the legislation:

- Guidance shall create procedures that provide mitigation that has low risk to the environment, yet high net environmental, social, and economic benefits compared to status quo options.
- Guidance should maximize environmental benefits while reducing project design and permitting costs.
- Guidance should be designed to enable the implementation of watershed priority lists developed by local salmon recovery committees.
- Guidance shall seek technical assistance to ensure federal, state, treaty right, and local environmental laws and ordinances are met.
- Evaluation guidance shall include all elements of mitigation.

How does policy guidance meet the need for changes in mitigation?

- a) Ability to maintain no net loss of functions;
- b) Ability to mitigate cumulative impacts from small projects that currently are not being mitigated;
- c) Ability to protect riparian and upland areas critical for aquatic function that are not currently protected;
- d) Flexibility to choose the mitigation scenario that makes the best biological sense;
- e) No longer limited by on-site constraints or adjacent development pressures that can be contributing factors towards unsuccessful mitigation;
- f) Higher quality systems can sometimes be developed by going off-site, or out-of-kind to get the greatest ecological benefit for the resources affected;
- g) Larger wetland mitigation sites can be more cost effective, and they may offer a greater assurance of success.
- h) Mitigation efforts need to be coordinated and decided on a watershed rather than a project-by-project basis.

Policy Changes or Clarifications:

- 1) Compensatory Mitigation needs to function at optimal levels
 - On-site compensation is not required when the compensation site would not fully function or be sustainable over time.
 - In-kind is not required when impacting low quality, and low functioning habitat.
 - Allows off-site mitigation options such as Endangered Species Habitat restoration or Limiting Factors for Watershed
- 2) Preservation will be incorporated into more mitigation measures to ensure functional replacement, either in combination with other mitigation (creation, enhancement, restoration) or as stand alone when it provides the best opportunity to protect habitat functions. Focus on:
 - Preserve Endangered, Threatened, or Sensitive Species Habitat
 - Preserve Frequently Flooded Areas
 - Preserve Healthy and At-Risk Habitat
- 3) Mitigation Banking Allowed for unavoidable habitat losses
- 4) Guidance directs Stormwater Supplemental Treatment when appropriate for compliance with Clean Water Act and ESA requirements

Application/Potential Uses of Policy Guidance

- a) The guidance will be used to help guide Ecology and WDFW permitting decisions on mitigation and help provide consistency on decisions allowing off-site or out-of-kind mitigation;
- b) Assist in development of local watershed plans;
- c) Assist in providing additional fish habitat enhancement projects by identifying mitigation links with HB 2879;
- d) Assist Mitigation Bank Review Teams in evaluating individual mitigation banks;
- e) Assist Local Governments to identify best available science and mitigation approaches for mitigation sections of sensitive areas ordinances and on-going permitting decisions;
- f) Link with pilot project coordination efforts initiated by the Capital Budget Coordination Committee. The 1997 capital budget included a proviso that requires state agencies to attempt to coordinate their mitigation and restoration projects, where appropriate. The committee has undertaken a pilot effort in the Snohomish and Cedar-Sammamish Basins;
- g) Local governments consider guidance to supplement innovative mitigation sections of sensitive areas ordinances, and to assist staff with mitigation project permitting decisions.

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

0 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.

W. 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.

