

## Hydraulic Project Approval (HPA)

### Mitigation for better projects

#### Overview

Each year the Washington Department of Fish and Wildlife (WDFW) issues about 2,000 HPAs for projects in or near water. These HPAs include requirements designed to ensure hydraulic projects are done in a way that avoids and minimizes impacts to fish life. Sometimes, however, projects exceed allowable impacts even though project proponents follow the requirements. When this occurs, WDFW requires compensatory mitigation to fully offset the remaining impacts. In these cases, a person may need to do something else, not necessarily part of the project, to make up for the resulting effects on fish life. The purpose of mitigation is to ensure that public resources continue to exist for public use.

#### Mitigation Principles

- Take all appropriate and reasonable steps to avoid or minimize negative impacts to fish and shellfish.
- Compensatory mitigation projects should offset the loss of fish habitat functions, habitat values, and area by habitat type.
- A Habitat Biologist will determine if compensatory mitigation is needed to offset impacts. The biologist will require a mitigation ratio greater than one-to-one to account for the following:
  - Type of compensatory mitigation.
  - Likelihood of success.
  - Differences between the habitat functions and values lost at the project site and those expected to be gained at the compensatory mitigation site.
  - Losses of fish habitat functions over time.
  - Difficulty of restoring or establishing the desired fish habitat functions or habitat type.
  - Distance between the affected fish habitat and the compensation site.

- Whenever possible, conduct the compensatory mitigation work before or at the same time as the primary project. Additional mitigation may be required for the duration of time between the date of the impact and the date the compensation is realized.
- Protect the mitigation site in perpetuity or at least for the duration of the impact.

## Impacts

The Habitat Biologist or a consultant biologist can identify project impacts to make sure the proposed project will mitigate potential impacts.

- Direct loss of habitat: This is the immediate and permanent loss or destruction of habitat.
- Indirect loss of habitat: This occurs later in time or farther away from the project location, but is still reasonably foreseeable. It may change the character or state of the habitat over time.
- Death or injury of fish: This can occur during project construction. Some activities have a higher risk of mortality or injury than others do.
- Change to fish behavior or health: This can reduce the ability of fish or shellfish to survive and grow.

## Compensatory Mitigation

Compensatory mitigation is usually conducted at the site where the impact to fish life or their habitat occurred. This is called “in kind, on site” mitigation, which is the department’s preference. However, project proponents may propose an out-of-kind and off-site mitigation project. This mitigation is appropriate when out-of-kind provides more ecological benefit than in-kind mitigation and when off-site mitigation provides the most benefit to the impacted fish populations. Habitat Biologists will consider these factors when analyzing and prioritizing proposed compensatory mitigation measures:

- Benefit to the fish populations impacted by the hydraulic project.
- Value of the mitigation site to the fish populations impacted by the hydraulic project.
- Response time, probability, and chance of success.
- Life expectancy of the mitigation measure.

- Legal protection.
- Amount of mitigation.

In general, the department prefers mitigation projects with a high chance of success that provide predictable and immediate benefits for fish life compared to other actions.

### **Types of Compensatory Mitigation**

There are four types of compensatory mitigation, in order of preference:

- **Restoration** either re-establishes aquatic functions at an aquatic site, or rehabilitates those functions at a damaged aquatic site, returning fish habitat to a fully functioning condition.
- **Enhancement** changes an aquatic site to increase, strengthen, or improve specific aquatic habitat and its functions, but usually results in short-term benefits.
- **Creation** develops aquatic habitat in an area where it did not previously exist, but does not address the root cause of degradation.
- **Preservation** protects high-functioning, irreplaceable aquatic habitat areas. This is an acceptable form of mitigation only if important habitat functions are not lost and high-priority habitats are at risk.

Table 1 Example mitigation projects grouped by mitigation category

	Category			
	Restoration	Enhancement	Creation	Preservation
	Provide long-lasting changes on habitat-forming processes	Create structural habitat elements and/or mimic natural processes.	Create habitat elements where they previously did not exist.	Protect existing habitat and limit future impacts
<b>Mitigation measure</b>	Armor Removal or Modification	Aquatic Vegetation Restoration	Channel Creation Off-channel Creation	Property Acquisition and Conservation
	Berm or Dike Removal or Modification	Beach Nourishment	Reintroduction of Native Species	Physical Exclusion
	Groin Removal or Modification	Boulder Cluster Installation Channel Rehabilitation	Substrate Modification	
	Hydraulic Modification	Debris Removal		
	Levee Removal or set back	Drop Structure Installation		
	Overwater Structure Removal or update to current specifications	Fish Passage Barrier Removal or Correction		
	Revegetation	In-Stream Structure Installation		
	Topography Restoration	Large Wood Placement		
		Porous Weir Installation		
		Off-channel Rehabilitation		
	Species specific Habitat improvement			

## **Ways to Provide Compensatory Mitigation**

- The project proponent can perform the mitigation and is ultimately responsible for the implementation and success of the mitigation. This mitigation may occur at the site of the permitted impacts or at an off-site location
- A permittee can secure credits from a conservation bank. A conservation bank is an aquatic area that is restored, created, enhanced, or preserved to provide mitigation credit for impacts to fish life.
- A project proponent can pay a fee to an in-lieu fee (ILF) program instead of conducting permittee-responsible mitigation or obtaining credits from a conservation bank. The main use of ILF mitigation is to compensate for impacts when better approaches to compensation are not available, reasonable, or when using an ILF is in the best interest of the fish population recovery. This fee must cover all aspects of attaining the required benefits.

## **Mitigation Plans**

The Habitat Biologist will determine if a mitigation plan is needed. A mitigation plan describes the reason for the mitigation site selected, the project's goals and objectives, performance criteria, construction specifications, monitoring and maintenance protocols, and methods for long-term protection. The biologist must approve the final plan before issuing the HPA.

Often the Habitat Biologist and the project proponent work together to identify, evaluate, and choose mitigation measures. The project proponent prepares and submits a draft mitigation plan to the biologist for initial review, and then a final mitigation plan addressing the biologist's comments.

The HPA will cite the approved mitigation plan by reference. In general, the biologist will issue HPAs for the life of the mitigation plan. If the mitigation plan extends beyond the 5-year statutory limit of a standard HPA, a mitigation agreement is also required.

## **Mitigation Agreements**

A mitigation agreement is a legally enforceable contract between the department and the project proponent. A mitigation agreement is required if compensatory mitigation work including monitoring extends beyond the 5-year limit of the standard HPA.

A mitigation agreement includes both background information and a legal agreement. The background section provides an overview of the project and the reason for the compensatory mitigation. The agreement section spells out the compensatory mitigation

measures and often references a mitigation plan or HPA provisions. Mitigation measures can include long-term maintenance and monitoring of the compensation site.

The Habitat Biologist will contact his or her supervisor as soon as it becomes clear that a mitigation agreement is required. If the project proponent has submitted a complete application, the project proponent will be asked by the Habitat Biologist to request a suspension of the 45-day application review period because mitigation agreements typically require more than 45 days to finalize.

This is the process for developing a mitigation agreement:

1. The biologist drafts the mitigation agreement language with help from the Assistant Attorney General (AAG).
2. The AAG and Assistant Director of the Habitat Program approve the draft agreement.
3. The department or AAG sends the draft agreement to the project proponent. The project proponent and their legal representative review the agreement. They negotiate language changes directly with the AAG.
4. The WDFW contracts office enters the final agreement into the agency contract system.
5. The WDFW contracts office obtains all agency approvals.
6. The WDFW contracts office sends two copies of the signed agreement to the project proponent for their signature.
7. The biologist can issue the HPA after the project proponent returns the signed mitigation agreement to the WDFW contracts office.
8. The biologist attaches a copy of the mitigation agreement to the HPA file in the agency permit tracking system.