DPD

Director's Rule XX -2008

Applicant:	Page	Supersedes:
City of Seattle Department of Planning and Development	1of 6	
	Publication:	**Effective:**
Subject: Shoreline Permit Mitigation Procedures	**Code and Section Reference:** SMC 23.60	
	Type of Rule: Code Interpretation	
	Ordinance Authority: SMC 3.06.040	
Index: Shoreline Master Program	**Approved** **Date** _____ Diane M. Sugimura, Director, DPD	

BACKGROUND:

Pursuant to SMC 23.60.xx. The Director has the authority to condition the approval of Shoreline Substantial Development Permits to provide for adequate mitigation of environmental impacts. Mitigation is required of projects once all relevant development standards and changes in project design are made to minimize potential adverse impacts. The standard practice of determining project mitigation requirements on a case by case basis can result in an unpredictable and time consuming process for project applicants. Additionally, required mitigation measures may not be feasible given site constraints and the necessarily limited amount of shoreline available to water-dependent land uses. These uncertainties and operational constraints discourage the investment in and expansion of water-dependent industries which are an important component of Seattle's industrial base.

This Director's Rule establishes a standardized procedure for determining impacts and providing mitigation for a standard set of development activities that occur within the Lake Washington Ship Canal system. This rule also establishes a procedure allowing for a payment of a fee-in-lieu of mitigation for water-dependent uses within the LWSC. All Shoreline development projects shall continue to comply with the Shoreline Master Program, including

development standards and the potential to condition project approval on changes in project design to minimize adverse environmental impact.

Rule

1. **Boundaries**: This Director's Rule applies to all shoreline development projects located on shorelines within the Lake Washington Ship Canal system (LWSC) as shown in Exhibit 1.

2. **Project Review**: All shoreline development projects within the LWSC boundaries shall comply with relevant development standards and review procedures for shoreline substantial development projects.

3. **Covered Development Activities**: This Director's Rule establishes a procedure to evaluate potential long-term impacts for a specific set of shoreline development activities. These impacts are:

    1. Increase in overwater coverage.
    2. Loss of shallow water.
    3. New shoreline armoring.
    4. Loss of shoreline vegetation.
    5. Changes in topography of submerged portions of shoreline parcels.
    6. Changes in substrate composition.

    Other development activities not listed above are subject to review by planning staff and will be evaluated on a case by case basis. In addition, evaluation of short-term impacts related to construction activity or land use will continue to be reviewed on a case by case basis.

4. Measuring impacts of development activity.

All potential development impacts and mitigation activities will be quantified using 'habitat units' as a standard unit of measure. All decreases in baseline habitat units resulting from a shoreline development project shall be offset with a corresponding number of new habitat units resulting from a mitigation program approved by the Director or his/her designee.

The tables below contain an itemized list of development activities and corresponding habitat unit values. One table sets out habitat equivalencies for in water impacts and other sets out habitat equivalences for upland impacts. Habitat units in each table are equivalent to every other habitat unit in that table and are interchangeable across different types of development/mitigation activity and project location.

Table 1

In-Water Development Activity/Impact	Habitat Unit Equivalency
Creation/Reduction in the amount of shallow water (up to 12 feet in depth) present on submerged portion of subject property.	26 HU per SF
Change in slope of submerged parcel area.	
Less than 2% slope	27 HU per SF
Greater than 2 up to 4% slope	16 HU per SF
Overhead Cover	
None	24 HU per SF
Grated Surface Area	11 HU per SF
Solid – less than 3 feet in width	11 HU per SF
Substrate Composition	
Sand/Silt/Gravel	26 HU per SF
Invasive Aquatic Macrophytes/submerged Debris	
Absent	44 HU per SF
Moderately Dense	14 HU per SF

Table 2

Upland Development Activity/Impact	Habitat Unit Equivalency
Shoreline Condition	
Natural/Unretained	30 HU per LF
Sloping Bulkhead	20 HU per LF
Vertical Bulkhead	10 HU per LF
Riparian Vegetation	
Grass	7 HU per LF
Shrubs	15 HU per LF
Native Vegetation 1-3 M tall within: 0 to 10 feet of shoreline 10 to 100 feet of shoreline	 30 HU per LF 30 HU per LF
Native Vegetation greater than 3 M tall within: 0 to 10 feet of shoreline 10 to 100 feet of shoreline	 45 HU per LF 70 HU per LF

5. Mitigation Ratios

The number of habitat units necessary to mitigate shoreline development impacts varies depending on the type and location of development activity and proposed mitigation. The following ratios will be used to determine the

number of mitigation habitat units necessary to offset the loss of habitat units created through development activity:

a. Onsite/In-kind: When mitigation is provided at the same site as the subject development project and takes the same form as the specific activity generating a loss of habitat units, i.e. removing overhead cover as mitigation for new overhead cover, the ratio of habitat units created through mitigation to habitat units lost through development activity is 1:1.

b. Onsite/Out-of-kind: When mitigation is provided at the site of impact, but takes a different form than the activity generating the impact, i.e. removal of submerged debris as mitigation for increased overhead coverage, the ratio habitat units created through mitigation to habitat units lost through development activity is 1.5:1.

c. Offsite: When mitigation occurs at a site other than the site of impact, the ratio of habitat units created through mitigation to habitat units lost through development activity is 2:1.

6. Offsite Mitigation.

Water-dependent industrial uses may choose to satisfy some or all of their mitigation requirements through payment of a fee-in-lieu of mitigation. Fees collected shall be used to fund shoreline restoration project within the LWSC and will produce a corresponding number of habitat units to offset project impacts. The Fee shall be equivalent to $0.26 per habitat unit for activities identified in Table 1, above, and $0.04 per habitat unit for activities identified in Table 2, above. Acceptance of a fee-in-lieu payment by DPD means the project applicant has satisfied mitigation requirements and the City is responsible for providing adequate mitigation.

7. Measurement.

a. Overwater Coverage: Overwater coverage is measured as the area of any floating or fixed structure.

b. Substrate Composition: For purposes of mitigation, substrate amendment must be equivalent to 1 cubic foot of substrate material for each square foot of submerged parcel area.

c. Shoreline Vegetation: Shoreline vegetation is measured in linear feet with credit given for vegetated area contiguous to the shoreline.

d. Invasive Aquatic Macrophytes/Submerged Debris: For purposes of providing mitigation, debris removal is assumed to equal 2 cubic feet of debris for each square foot of submerged parcel area.

e. Shallow Water: Shallow water must be contiguous to the shoreline. For mitigation purposes, a minimum of 100 SF must be created.

Reason

This rule establishes a standard procedure to measure the severity of shoreline impacts and determine an equivalent level of mitigation that results in no net loss of shoreline ecological function. Standard practice is to determine project-specific mitigation through a case-by-case analysis of potential impacts. This approach results in a process that is unpredictable to applicants in terms of both timeliness and anticipation of the actual conditions of approval that will apply to their project. This rule establishes a standardized approach impact evaluation and determination of required mitigation that will result in a greater degree of consistency and efficiency in reviewing shoreline permit applications, ensuring that mitigation is based on current scientific evaluation of habitat needs, and to provide some degree of flexibility to water-dependent industrial uses located on shoreline within the Lake Washington Canal System.

Subject Shorelines

All shoreline development projects located on the shorelines of the LWSC between the Hiram Chittenden Locks and the Montlake Cut are subject to the provisions of this rule. The equivalencies used to standardize measurement of impacts and mitigation is based on consideration of shared habitat functions of shorelines within LWSC. This system serves as a critical migratory corridor for juvenile Chinook and other species of salmon migrating from the Cedar River and Lake Sammamish water sheds. These shorelines share a common ecological function, a homogenous development pattern, and are affected similarly by development impacts.

Project Review

Application of this rule does not relieve project applicants of compliance with any applicable provision of the City's Shoreline Master Program or other regulations. All projects shall comply with relevant development standards and feasible design alternatives to reduce and minimize development impacts prior to evaluation of potential impacts pursuant to this rule. The purpose of this rule is to set out clear procedures for compliance with section 23.60.xx of the city's zoning code.

Development Activity Addressed

The specific development activities that this rule addresses are those which occur with some frequency, can be clearly evaluated in terms of potential to effect ecological functioning of these shorelines, and result in long-term impacts. Short term impacts, such as those associated with construction activity, are not addressed by this rule.

Impact Equivalency

Measurement is based on a scientific model of key habitat supporting functions of the subject shorelines. This model compares actual shoreline conditions to ideal shoreline conditions and establishes a baseline level of ecological function. Development impacts that alter this baseline ecological function have been quantified to clearly document changes in the baseline ecological function that may result from a development project. Using these standard measures of impact, mitigation can be provided that returns shoreline ecological function to baseline levels.

Mitigation Ratios

Scientific uncertainty about precise levels of mitigation required to offset development impacts requires that higher levels of mitigation are required for in some cases to ensure that baseline ecological function is maintained. In-kind mitigation on site represents the surest guarantee that mitigation will compensate for development impacts. Onsite out-of-kind mitigation introduces less certainty and requires a greater ratio of mitigation to impact to ensure baseline ecological function is maintained. Off-site mitigation represents the greatest source of scientific uncertainty and requires the greatest ratio of mitigation to impact ratio.

Offsite Mitigation

Although offsite mitigation introduces greater scientific uncertainty about of its effectiveness it does provide greater flexibility for land uses that require shoreline access. By limiting offsite mitigation through a payment in lieu of mitigation to water-dependent industrial land uses, this rule advances the City's goal of protecting the shoreline environment and encouraging these land uses on specific shorelines within the City.

The costs per habitat unit established in this rule is based on an evaluation of a generic shoreline restoration project that consists of each of the specific activities identified in Tables 1 and 2 and then estimating total habitat units produced and their associated costs. Cost data was obtained through evaluation of past work on LWSC shorelines and incorporation of City overhead costs for capital projects.