



Project Address: _____
Parcel Number: _____
Owner Name(s): _____

HIP Native Landscaping Project City of Bellingham Application

Complete each section applicable to your project.

<input type="checkbox"/>	I have defined the total area that will be converted into native landscaping.
	Native landscaping will replace _____ ft² of lawn/existing landscape and/or _____ ft² of impervious surface
<input type="checkbox"/>	If any of my planting is in the public road right-of-way, I have received and attached written approval from the City of Bellingham.
	The size of the area of the right-of-way I plan to landscape is _____ ft².
<input type="checkbox"/>	I have selected a vegetation layer combination for each of my unique planting areas (e.g., right-of-way area, front yard, back yard, etc..) and used a HIP planting worksheet to calculate the minimum number of plants and yards of mulch required for each planting area.

Attachments

- City of Bellingham Stormwater Permit Application
- Written approval to plant in the City right-of-way (if applicable)
- Existing conditions map showing the location of impervious surfaces with area labeled in square feet
- Proposed improvements map showing the location of each unique planting area with area labeled in square feet
- Planting worksheet(s) with proposed plant list for each unique planting area (total proposed plants may exceed the minimum required)
- Supplemental documents that must be attached to your application but do not need to be filled out (provided with application materials for your convenience)



Permit Center
210 Lottie Street
Bellingham, WA 98225

360-778-8300
pwpermits@cob.org
www.cob.org

Stormwater Permit Application

See separate handouts for complete submittal requirements and fees.

Project Information

Site Address:

Parcel Number:

Project Description:

Total Site Area (SF):

Total Land Disturbance (SF):

Total Grading (CY):

Total Import (CY):

Total Export (CY):

*Grading over 500 CY requires a Major Grading Land Use Approval through Planning Department

Stormwater Management Requirements

Minimum Req. #2 Minimum Req. #1-5 Minimum Req. #1-9 Lake Whatcom

Is this property subject to any **plat limitations** for stormwater or impervious surface?

No Yes, _____

Applicant

Name:

Address:

City/State/Zip:

Phone:

E-mail:

Contractor

Same as applicant

Name:

Address:

City/State/Zip:

Phone:

E-mail:

Property Owner

Same as applicant

Name:

Address:

City/State/Zip:

Phone:

E-mail:

HARD SURFACE CALCULATION

When determining your permit level, or if stormwater thresholds are met or exceeded, the entire project must be considered. A project is defined as that portion of a property, properties, or right of way subject to land disturbing activities, new hard surfaces and replaced hard surfaces. The hard surface on your property will determine the storm water utility fees and the stormwater development charge. All new or replaced hard surfaces should be accounted for, including any hard surface changes subsequent to 9/1/1995, that did not provide permanent water quality and quantity mitigation BMPs. If your project is in Lake Whatcom Watershed then you will also need to account for partially pervious surfaces. Below are excerpts from [Bellingham Municipal Code 15.42 Stormwater Management](#) that may assist you in your determination. Please also see the [Stormwater Submittal Requirements packet](#).

"Hard surface" means an impervious surface, a permeable pavement, or a vegetated roof.

"Impervious surface" means a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, packed gravel surfaces, packed earthen materials, or other surfaces which similarly impede the natural infiltration of stormwater.

"New impervious surface" means impervious surfaces that replace or supplant existing pervious surfaces. Further, any of the following are considered new impervious surfaces:

- Extending the pavement edge of a road or paving gravel shoulders
- Upgrading from dirt to gravel, asphalt, concrete or structural development
- Upgrading from gravel to asphalt, concrete or structural development
- Upgrading from chip seal to asphalt, concrete or structural development

"Replaced impervious surface" means, for structures, the removal and replacement of any exterior impervious surfaces or foundation. For other impervious surfaces, the removal down to bare soil or base course and replacement is considered "replaced".

Description	Existing (SF)	Removed (SF)	Proposed Replaced (SF)	Proposed New (SF)
Non Pollution Generating (NPG) Hard Surface: Sidewalks, Paths, Patios etc.				
Pollution Generating (PG) (i.e. subject to vehicular traffic) Hard Surface: Driveway, Parking, etc.				
TOTAL HARD SURFACE				

I am the owner of the property described above or I am authorized by the owner to sign and submit this application. I hereby acknowledge that I have read this permit application in its entirety and state the information is correct, and agree to comply with all city ordinances and state laws regulating activities covered by this permit application. I also acknowledge that by signing this application I am the responsible party to receive all correspondence from the City regarding this project. I understand that if this form is being submitted electronically then my typed name on the signature line will qualify as my signature for purposes of the above certification.

SIGNATURE _____ **DATE** _____

HIP Native Landscaping Planting Worksheet

Owner Name:	Address:	Parcel #:
Planting Area Description (e.g., front yard, side yard, back yard, etc.):		

Step 1. Calculations: Enter planting area size; select vegetation layer option; calculate minimum yards of mulch and minimum plant numbers.

Option	Vegetation Layer Combination	Minimum Planting Density				
A	Tree, Shrub, and Groundcover	Divide planting area by 225 (15' o.c.)		Trees	Total Planting Area (square feet)	
		Divide planting area by 64 (8' o.c.)		Shrubs		
		Divide planting area by 25 (5' o.c.)		Groundcovers		
B	Tree and Shrub Only (No Groundcover)	Divide planting area by 144 (12' o.c.)		Trees		
		Divide planting area by 36 (6' o.c.)		Shrubs		
C	Tree and Groundcover Only (No Shrub)	Divide planting area by 144 (12' o.c.)		Trees		Cubic Yards of Mulch (planting area ft ² ÷ 80)
		Divide planting area by 16 (4' o.c.)		Groundcovers		
D	Shrub and Groundcover Only (No Tree)	Divide planting area by 49 (7' o.c.)		Shrubs		
		Divide planting area by 25 (5' o.c.)		Groundcovers		
					round up	

Step 2. Plant List: Enter the number of existing plants. List plant name and quantities to be installed. Use name as written on the HIP native plant list or complete scientific name (*Genus species*). Note if a plant is non-native with NN (up to 10% max of new plants, not reimbursable).

Trees			Shrubs			Groundcovers		
Species Name	#	NN	Species Name	#	NN	Species Name	#	NN
# existing trees:			# of existing shrubs:			# of existing groundcovers:		
TOTAL			TOTAL			TOTAL		

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Species Name	#	NN	Species Name	#	NN	Species Name	#	NN
# existing trees:			# of existing shrubs:			# of existing groundcovers:		
TOTAL			TOTAL			TOTAL		



Homeowner Incentive Program

Lake Whatcom Watershed Stormwater Considerations

Applicable to HIP-Eligible projects within Basin One of the Lake Whatcom Watershed, under the jurisdiction of the City of Bellingham and regulated by Bellingham Municipal Code.

Submitted on behalf of HIP-eligible participants by Eli Mackiewicz, City of Bellingham HIP representative in order to address *Lake Whatcom Stormwater Guidance* document and meet requirements for phosphorus- and/or flow-limiting projects as described in BMC 15.42.060, section B.3.d.

Contact:

Eli Mackiewicz

Engineering Technician / HIP Representative

City of Bellingham Public Works - Natural Resources

emackiewicz@cob.org

360-778-7800

www.lakewhatcomHIP.org

The Homeowner Incentive Program and the projects it supports are designed to go above and beyond all existing requirements for stormwater management, and specifically phosphorus reduction, applicable to single family lots in the Lake Whatcom Watershed. As such, HIP projects are compliant with land disturbing regulations, generally, and special regulations applicable to the Lake Whatcom watershed, specifically. Compliance can be demonstrated in multiple ways, as follows:

I. HIP Do-It-Yourself Projects Meet the Phosphorus-limiting Standard

HIP DIY Best Management Practices (BMPs) are specifically designed to maximize potential phosphorus reduction. Therefore, by definition, all HIP projects are phosphorus-limiting. The following BMPs are allowed through the HIP DIY Native Landscaping Program and must follow specific HIP Design Guidelines in order to qualify for the program;

- A. **Native Landscaping.** Replacing lawn or ineffective landscape, defined as landscape without adequate plant density and/or mulch layer, with a thick layer of low-Phosphorus mulch and native plants can reduce phosphorus discharge by up to 80%.
- B. **Dry Creek Bed.** This BMP, as designed for and allowed by the HIP DIY Program, does not involve earthwork. Instead it is simply a method by which woody mulch is replaced with clean drain rock or river rock within an approved native landscaping area. This feature cannot be made of impermeable surfaces and its area must be accounted for in the total landscape density calculations.
- C. **Wet Garden.** This BMP, as designed for and allowed by the HIP DIY Program, does not involve earthwork. Instead it is simply a method by which low-lying, wet areas can be incorporated into an approved native landscaping area. This feature cannot contain impermeable surfaces, strictly ornamental species, or vegetable gardens and its area must be accounted for in the total landscape density calculations.
- D. **Rainwater Harvesting.** This is a secondary HIP BMP only allowed as a source of irrigation water for HIP-funded native landscaping areas. Cisterns used for other purposes are not eligible for HIP. Tanks exceeding particular dimensions and/or storage volumes will require a separate plumbing permit and separate submittal for review by the Building Services Department.

All HIP BMPs are required to be sized, located, and constructed following the HIP Design and Submittal Guidelines specific to each. This includes use and reference to HIP Standard Details, the HIP Material Specifications book, and HIP sizing calculators. Alternative sizing methods are not approved under the streamlined HIP design and submittal process, but may be utilized by qualified professionals at their discretion.

II. HIP Projects Comply with Minimum Requirements for Land Disturbing Projects

HIP Plans and Submittal Documents are intended to meet the minimum requirements for projects disturbing land and making changes to surfacing in the Lake Whatcom watershed. Specifically, these projects are not designed to result in the replacement of impervious or partially pervious surfaces in excess of thresholds set forth by Bellingham's redevelopment requirements. Stormwater management Minimum Requirements 1-5, as defined by the Department of Ecology and adopted by the City of Bellingham, are addressed as follows:

- 1. Preparation of Stormwater Site Plans.** All HIP submittals will require the submission of an Existing Conditions sheet, a Proposed Improvements sheet, and a standard erosion control plan. This plan set will contain all applicable considerations regarding stormwater management before, during, and after the proposed project. Existing site conditions will be addressed, quantified, and analyzed. All improvements and construction activities are illustrated in overview and detailed formats. The plan set and project details cover all temporary and permanent stormwater controls in detail.
- 2. Construction Stormwater Pollution Prevention Plan.** Special SWPPP considerations and requirements are in place to allow some select native landscaping activities to occur in the winter months, under a Director's Exemption from BMC 16.80.120 (Seasonal Restrictions on Earthwork). Those details will also be included in any submittal for a project wishing to do planting activities in the period between October 1 and June 1.
- 3. Source Control of Pollutants.** Other than potential sediment transport via a turbid water surface discharge, there are no potential pollutant sources expected to be associated with HIP projects. Special care will be taken in site design steps and in the implementation of erosion and sediment controls to avoid sediment transport.
- 4. Preservation of Natural Drainage Systems and Outfalls.** HIP projects will not concentrate storm flows outside of the basin in which they normally flow and discharge. In the event of a facility overflow or failure, excess water will be directed into the same drainage outfall as currently exists for that water. No new outfalls will be installed. No cross-vain drainage features will be installed. No additional flow will be introduced to downstream waterways in any appreciable way, other than the minor control of otherwise unmanaged surface flows entering waterways via overland flow.
- 5. On-Site Stormwater Management.** Reforestation, infiltration, dispersion, and applicable low-impact development strategies are employed in HIP projects and designed and installed in such a way as to maximize on-site management of stormwater. No HIP project activities are expected to result in a need for additional stormwater management techniques or facilities beyond the HIP-specific BMPs.

III. HIP Project Submittals Exceed Permitting Requirements

For each HIP-eligible project, a Stormwater (STM) permit application will be completed and submitted to the City for review and approval. The application will be subject to intake, stormwater, and planning-level reviews, as well as reviews related to site history that ensure no other active permits conflict with the proposed HIP project. While HIP projects are expected to vary slightly in their detailed design, general information and site-level descriptions of work will be significantly more uniform in their content.

Developing consistent and understandable submittals is the responsibility of the homeowner, with significant support from the City's HIP-focused staff as well as a project specialist from the Whatcom Conservation District, a direct partner in HIP. It is expected that HIP DIY submittals will have been developed by the homeowner with direct assistance from the WCD prior to submission to the City. For that reason, it is anticipated that designs and submittal documents will be, in large part, complete, accurate, field-verified, and understood consistently by all stakeholders. Therefore, it is not expected that intensive review of these projects will be necessary, but due diligence is certainly required. The City's HIP staff will ensure that documents received are accurate and complete and that the rules of HIP (which incorporate compliance with the City's development regulations) are followed in the design. These reviews ensure that HIP projects comply with regulations and receive the appropriate level of review for a voluntary project meant solely to improve water quality.

All HIP-supported projects, as a broad rule, will comply with the following conditions:

1. The project is **voluntary** and intended solely to protect water quality in the Lake Whatcom watershed.
2. The methods used to design and construct provide reasonable assurance that the improvement will provide a **public benefit** in terms of water quality protection for Lake Whatcom.
3. The project follows applicable rules and regulations associated with work in the Lake Whatcom watershed.
4. Plans were developed in accordance with pre-approved HIP Best Management Practices (BMPs) to the maximum extent feasible and with reasonable considerations taken to adjust the project to site-specific conditions. **Variations from pre-approved BMPs have been assessed by HIP Staff and approved as effective and/or appropriate variations.** All unique or non-standard components result in improved water quality and provide a public benefit.

IV. Submittal Summary: Native Landscaping Projects

For projects consisting of only the HIP Native Landscaping BMP, and adhering to all HIP requirements of that BMP's design, the following items will constitute a complete submittal to be reviewed by City of Bellingham staff in concert with HIP staff at the City and Whatcom Conservation District. Example projects with all documents completed will be provided to designers and review staff in order to communicate the intent and proper use of the forms and the information required to be shown on plan sheets.

Plan Set (11"X17" minimum sheet size, with scale bar and north arrow):

1. Existing conditions with hard surfaces delineated and utilities shown
2. Proposed Native Landscaping areas with square footages shown

Submittal Documents:

1. HIP DIY Native Landscaping City of Bellingham Application
2. City of Bellingham Stormwater Permit Application
3. HIP DIY Native Landscaping Planting Worksheet
4. City-Specific forms: HIP Lake Whatcom Stormwater Considerations, Winter Work Requirements, and Director's Exemption Letter

V. Conclusion

The success of the HIP will depend on the effort of homeowners, the effectiveness of program staff to support those homeowners, and the efficiency of jurisdiction staff to process the wide variety of potential project scopes. This document is intended to outline the framework in which HIP projects will be in compliance with all regulations applicable to voluntary water quality improvement projects that do not include work that trips new or re-development requirements.



Winter Work Allowances and Exemptions

Condition 1: Seasonal Restrictions on Land Disturbing Activities (BMC 16.80.120),

HIP Projects are required to comply with seasonal restrictions on earthwork (no land disturbance between October 1 and May 31, annually) **with the following exceptions**; a) spreading approved mulch using hand tools is permitted, 2) planting approved native plants within a fully mulched area (at least 4" depth of approved mulch) in dry weather is permitted and c) exposed soil is allowed within a 6" radius around the base of plantings. All other work is restricted to the period from June 1 - September 30th, annually.

Condition 2: Enforcement and Penalty, without exception.

Condition 3: Materials Handling for Watershed Work

During the wet season (October 1 – May 31) materials shall be handed in a way that does not cause any dirty water to enter any storm drains or ditches, as well as meeting the following additional considerations:

- a) importation, delivery, and spreading of materials shall not occur during adverse weather conditions, including precipitation events and strong winds with or without precipitation;
- b) storage of materials shall be performed per BMP C123 Plastic Covering, found in the Washington State Department of Ecology Stormwater Management Manual for Western Washington, Volume II, Construction Stormwater Pollution Prevention, and
- c) any activity which results in materials contacting impervious surfaces shall be mitigated by sweeping clean any impervious surfaces as soon as is reasonably possible.

Condition 4: Adaptive Management

If the owner or City of Bellingham staff determine that further erosion controls are necessary to prevent an illicit discharge, formal TESC measures shall be implemented as directed by City staff or a Certified Erosion and Sediment Control Lead (CESCL). The project owner shall immediately contact City staff if any potential discharge is witnessed or imminent. Failure to do so may result in fines per Condition 2: Enforcement and Penalty (BMC 16.80.150).

Condition 5: Permanent Site Stabilization

Upon completion of all planting activities, regardless of season, mulch must be applied to all erodible surfaces and must be maintained as needed to prevent exposed soils. A minimum of 2" of cover must be maintained in the long term.



Public Works Department City of Bellingham

March 8, 2018

To All City of Bellingham Lake Whatcom Watershed Residents

Re: Directors' Exemption to Seasonal Restrictions on Land Disturbing Activities (BMC 16.80.120)

Dear Resident:

The City of Bellingham supports and encourages homeowners' efforts to take voluntary action on their properties to protect water quality in the Lake Whatcom basin. Many of these voluntary water quality improvements involve the replacement of lawns and hard surfaces with native landscapes which can better replicate the natural hydrology and nutrient cycling found in native forests. Native plants, either in container or in bare-root form, are available in desirable quantities and at reasonable costs during the time when the Lake Whatcom watershed area is normally closed to land disturbing activities (October 1 - May 30, per BMC 16.80.120).

Considering the benefits of establishing native plant landscapes in the Lake Whatcom Watershed, and considering that fall and winter months are the ideal time for installing native plants, the Public Works and Planning Department directors grant this exemption to Homeowner Incentive Program (HIP) participants.

The exemption allows homeowners to install native plants as part of a voluntary phosphorus- or flow- limiting project in the City portion of the Lake Whatcom watershed at any time of year when all of the following criteria are met:

1. The project shall be in compliance with BMC 16.80 (Lake Whatcom Regulatory Chapter) and BMC 15.42 (Stormwater Management).
2. The project shall be designed as a phosphorus- and flow- limiting feature that will not increase flows or phosphorus loading above that expected from a forested condition.
3. A no-fee stormwater permit shall be obtained prior to any activity. This permit review process will determine if the project meets the phosphorus- or flow- limiting definitions.
4. The project shall adhere to the following minimum requirements associated with participation in the Homeowner Incentive Program:

Engineering
104 W. Magnolia Street, Suite 109
Bellingham, WA 98225
Phone: (360) 778-7900
Fax: (360) 778-7901
TTY: (360) 778-8382
Email: pw@cob.org

Natural Resources
Physical: 2200 Nevada Street
Mailing: 2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7800
Fax: (360) 778-7801
Email: pw@cob.org

Operations
2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7700
Fax: (360) 778-7701
Email: pw@cob.org

- a. The project is **voluntary** and intended solely to protect water quality in the Lake Whatcom watershed.
 - b. The methods used to design and construct provide **reasonable assurance** that the improvement will provide a **public benefit** in terms of water quality protection for Lake Whatcom.
 - c. The project follows **applicable rules and regulations** associated with work in the Lake Whatcom watershed.
 - d. Plans were developed in accordance with pre-approved HIP Best Management Practices (BMPs) to the maximum extent feasible and with reasonable considerations taken to adjust the project to site-specific conditions. **Variations from pre-approved BMPs have been assessed by HIP Staff and approved as effective and/or appropriate variations.** All unique or non-standard components result in improved water quality and provide a public benefit.
5. The planting project shall be installed following the guidance provided by the Homeowner Incentive Program's "Design Standards and Permitting Requirements: Native Landscaping" document. (Available online at www.lakewhatcomHIP.org/resources).
6. Work must follow, to the maximum extent practicable, the guidance provided in the HIP-required document titled "Winter Work Allowances and Exemptions", which must be included in the permit application packet in order to utilize this exemption. (Available online at www.lakewhatcomHIP.org/resources).

Sincerely,



Ted Carlson
Public Works Director



Rick Sepler
Planning and Community Development Director

References/Enclosures:

HIP Design Standards for Native Landscaping Projects

HIP Winter Work Allowances and Exemptions

Full Design Manual and all technical information for HIP Projects is available online here:

www.lakewhatcomHIP.org/resources

Cc: Jason Porter, Stormwater Manager
Renee LaCroix, Assistant Director of Public Works
Eli Mackiewicz, Engineering Technician
Kim Weil, Environmental Planner
Jessica Bennett, Project Engineer