

**Program Area: 3. Urbanization & Land Development**

**Goal:**

Prevent water quality degradation associated with urban development through zoning changes, development standards and density limits.

The Urbanization and Land Development Program Area aims to reduce water quality impacts resulting from residential and land use development activities. As areas are developed, land cover is often converted into less pervious surfaces that result in increased stormwater runoff going into the lake. The focus of this program area is to identify and adopt code changes that will result in reduced water quality impacts from residential uses. Another focus of this program area has been the improvement of data sharing between jurisdictions and the joint review of significant projects.

**Notable Accomplishments:**

In July 2009 the City adopted an amendment to the Lake Whatcom Reservoir Regulatory Chapter and Stormwater Regulations, making significant changes to the regulations for development and redevelopment, with a focus on eliminating phosphorus runoff. Methods to eliminate phosphorus include stormwater engineering, restoring and preserving forested conditions, or a combination of both of these methods.

In 2009, the City and County established a protocol for mutual review of proposals in the Lake Whatcom watershed that trigger a SEPA determination. This not only informs the jurisdictions of potential impacts to the watershed, but also allows for input on mitigation measures.

In 2009, the County modified the dates of the seasonal restrictions on clearing activities, and the parameters regarding the date of development permit issuance within the regulated watersheds. The amended dates provide greater protection from soil erosion due to the reduction of antecedent soil moisture content during the construction season. Soil disturbance is regulated to no more than 500 square feet from October 1<sup>st</sup> through May 31<sup>st</sup>. Development permits are only issued up to two weeks prior to the seasonal closure to allow sufficient and reasonable time for applicants to complete permitted land disturbance activities within the months of June through September.

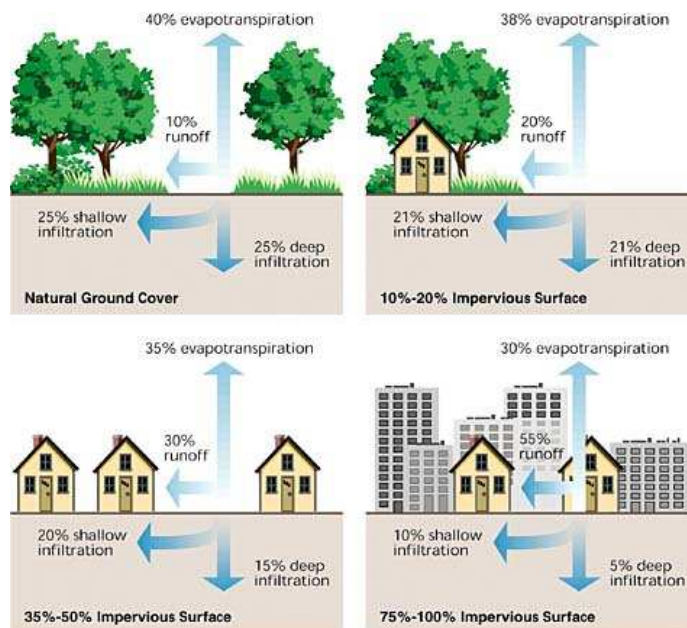


Fig. 3.21 – Relationship between impervious cover and surface runoff. Impervious cover in a watershed results in increased surface runoff. As little as 10 percent impervious cover in a watershed can result in stream degradation. In Stream Corridor Restoration: Principles, Processes, and Practices (10/98). By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U.S.)

**Reference Documents:**

Bellingham Municipal Code (BMC) 16.80 (Lake Whatcom Reservoir Regulatory Chapter), 15.42 (Stormwater Regulations), 16.55 (Critical Areas Ordinance), Title 22 (Shoreline Master Program)

Whatcom County Code (WCC) 20.80.735, 16.16 (Critical Areas Ordinance), Title 23 (Shoreline Management Program)

**Program Area: 3. Urbanization & Land Development**  
**Task: 3.1 Maintain and improve permit tracking system**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	City/County/District	\$26,000	Active/Hold*	Indirect

**Task Objective:** Improve the system for tracking building and development activities in the watershed and make accessible to City, County, and District

**Actions:**

- Continue using Tidemark in the City and County to track permits and other activities in the watershed and share data between jurisdictions
- Develop data summaries in response to identified reporting needs
- Enhance the capability to track progress achieved by phosphorus limiting facilities and practices on private and public properties
- Convene a Development Tracking Team as necessary

**Intended Lake Benefits:** Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:** Track activities to identify trends that can be addressed through new policies or regulations

**Performance Measures:** Annual report to include:

- 1) Evaluation of progress limiting phosphorus due to facilities and practices on private and public properties
- 2) Current permit and development data from both jurisdictions updated monthly (for staff access and use)
- 3) Data summaries
- 4) Examples of standardized reporting on permits and activities for each jurisdiction
- 5) Outcomes of Development Tracking Team meetings

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City	0.02 (\$2,000)			\$2,000
	County	0.1 (\$10,000)			\$10,000
	District/Other	0.01 (\$1,000)			\$1,000
2011	City	0.02 (\$2,000)			\$2,000
	County	0.1 (\$10,000)			\$10,000
	District/Other	0.01 (\$1,000)			\$1,000
2012	City	undetermined*			
	County	undetermined*			
	District/Other	undetermined*			
2013	City	undetermined*			
	County	undetermined*			
	District/Other	undetermined*			
2014	City	undetermined*			
	County	undetermined*			
	District/Other	undetermined*			
<b>Total</b>		<b>0.26 (\$26,000)</b>			<b>\$26,000</b>

**Program Area: 3. Urbanization & Land Development**  
**Task: 3.2 Maintain joint development review process**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 – 2014	City/County	\$4,000	Active/Hold*	Indirect

**Task Objective:** Maintain the City/County joint development review process

**Actions:**

- Continue notification and joint review of development applications in the UGA portion of the watershed
- Continue notification between City and County of projects triggering SEPA
- Re-evaluate joint development review process as necessary

**Intended Lake Benefits:** Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:** Coordinated review efforts result in improved outcomes for lake water quality

**Performance Measures:** Annual report to include:

- 1) Records of joint SEPA review
- 2) Summary of projected impact of each SEPA determination on Lake Whatcom TMDL targets

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City	0.01 (\$1,000)			\$1,000
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2011	City	0.01 (\$1,000)			\$1,000
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2012	City	undetermined*			
	County	undetermined*			
	District/Other				
2013	City	undetermined*			
	County	undetermined*			
	District/Other				
2014	City	undetermined*			
	County	undetermined*			
	District/Other				
<b>Total</b>		<b>0.04 (\$4,000)</b>			<b>\$4,000</b>

**Program Area: 3. Urbanization & Land Development**  
**Task: 3.3 Continue to assess the effectiveness of regulations**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	City/County/SVCA	\$45,000	Active/Hold*	Indirect

**Task Objective:** Continue to assess the effectiveness of regulations

**Actions:**

- County will expand its Low Impact Development Program through code amendments, permit process modifications, a technical assistance manual, and public education and outreach to accomplish TMDL and Phase II requirements (2010)
- City will revisit the 2009 code changes to the Lake Whatcom Reservoir Regulatory Chapter before Council and modify accordingly (2010)
- City will review the Silver Beach Neighborhood Plan (SBNP) (2010)
- Each jurisdiction will be updated on any proposed changes to regulations and BMPs
- Sudden Valley will modify portions of its existing guidelines to address problematic regulations and find areas where consistent regulations with other agencies can be adopted

**Intended Lake Benefits:** Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:**

**Performance Measures:** Annual report to include:

- 1) Number of acres in Native Vegetation Protection Area (NVPA - forested) in City
- 2) Number of properties with engineered stormwater facilities in City and County
- 3) Summary of effectiveness of regulations at minimizing phosphorus runoff LID Program
- 4) Actions taken to accomplish TMDL and Phase II requirements (2010)
- 5) Modifications to Lake Whatcom Reservoir Regulatory Chapter 2009 code changes
- 6) SBNP recommendations presented to the Neighborhood Association and City Council
- 7) Interjurisdictional updates on proposed changes to regulations

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City	0.05 (\$5,000)			\$5,000
	County	0.05 (\$5,000)			\$5,000
	District/Other	0.05 (SVCA) (\$5,000)			\$5,000
2011	City	0.05 (\$5,000)			\$5,000
	County	0.05 (\$5,000)			\$5,000
	District/Other	0.05 (SVCA) (\$5,000)			\$5,000
2012	City	undetermined*			
	County	undetermined*			
	District/Other	0.05 (SVCA) (\$5,000)			\$5,000
2013	City	undetermined*			
	County	undetermined*			
	District/Other	0.05 (SVCA) (\$5,000)			\$5,000
2014	City	undetermined*			
	County	undetermined*			
	District/Other	0.05 (SVCA) (\$5,000)			\$5,000
<b>Total</b>		<b>0.45 (\$45,000)</b>			<b>\$45,000</b>