



# **Lake Whatcom Reservoir Management Program 2005-2009 Work Plan Accomplishments**

**DRAFT**

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Interjurisdictional Coordinating Team

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## Introduction

For the past two decades, the water quality in the Lake Whatcom Reservoir has been deteriorating as a result of phosphorus entering the lake which has led to widespread algal blooms and dissolved oxygen deficits. In 1998, Lake Whatcom failed to meet state dissolved oxygen standards and was placed on Washington's list of polluted waters. In response to this listing, a Total Maximum Daily Load (TMDL) study was completed by the Washington Department of Ecology (DOE) to determine acceptable loading levels to reduce water quality degradation in Lake Whatcom. Information from this TMDL study, in conjunction with other reports, is now being used by Lake Whatcom Management Program staff as we work to improve the water quality of the lake.

The Lake Whatcom Cooperative Management Program was established by an Interlocal Agreement in 1998 between the City of Bellingham, Whatcom County and the Lake Whatcom Water and Sewer District (formerly Water District 10). The goal of the program is to jointly manage and implement programs affecting the Lake Whatcom watershed.

Since 2003, staff from the three jurisdictions have worked to improve the functional components of the management program. The Interjurisdictional Coordinating Team (ICT) was created in 2000 to help coordinate activities and programs between the three jurisdictions. The ICT, composed of staff from each of the three jurisdictions, meets regularly to coordinate implementation of the Lake Whatcom Reservoir Management Program.

In 2005, the City and County Councils and the Lake Whatcom Water and Sewer District adopted the *Lake Whatcom Reservoir Management Program 2005-2009 Work Plan*. The five-year work plan outlined tasks under twelve Program Areas. The goals of each Program Area are summarized on page 5. Priority water quality concerns for this five-year work plan included: phosphorus, fecal coliform bacteria, and other pollutants (i.e. pesticides, metals, petrochemicals). This work plan placed a greater emphasis on phosphorus and fecal coliform loading reductions than previous work plans.

Over the past five years, this work plan has guided the management activities being conducted in the Lake Whatcom watershed. The following document provides a summary of accomplishments from 2005 through 2009 for each task. This accomplishments report is structured differently from previous work plans to provide a clearer, more detailed portrayal of the work that was accomplished under this five-year plan. The format of this report is a modified version of the format used in the Lake Whatcom Reservoir Technical Review Task Force report, *Recommended Management Actions for the Protection and Restoration of the Lake Whatcom Reservoir*, that was presented to the Mayor and City Council of Bellingham in May, 2009.

This accomplishments report is organized by Program Area and Task. Each Program Area's tasks have been color-coded for easy identification throughout the report. A header table at the top of each task sheet provides a quick overview of the task and includes:

- the time period in which the task was implemented,
- the party or parties responsible for implementing the task,
- an estimate of the costs associated with the task,
- the status of the task, and
- the phosphorus reduction pathway.

A detailed introduction to the new format and the header table can be found on pages 6 and 7.

The ICT is using a similar format for the *Lake Whatcom Reservoir Management Program 2010-2014 Work Plan* to be presented to the Joint Councils for review in early 2010. This next five-year work plan will be used as part of the initial phase of the TMDL response strategy by the City of Bellingham and Whatcom County to be delivered to the Department of Ecology in 2010.

## Program Area Goals

- 1. Land Preservation-** *To pursue public ownership and protection of the watershed whenever possible through public/private partnerships, tax exemptions, transfer of development rights, land trusts, and other means.*
- 2. Stormwater Management –** *To prevent water quality and quantity impacts due to stormwater runoff by implementation of best management standards and practices, pollutant source control, and construction, maintenance and retrofit of stormwater facilities.*
- 3. Urbanization and Land Development –** *To prevent water quality degradation associated with urban development through zoning changes, development standards and density limits.*
- 4. Community Outreach –** *To increase lake stewardship through the provision of educational programs and materials to watershed residents, the general public and decision makers on topics related to water quality, source control, and land use and development regulations.*
- 5. Data Management and Information –** *To maintain and enhance databases sufficient for detection of water quality and quantity trends, assessment of problems, evaluation and selection of management actions, and monitoring of action effectiveness.*
- 6. Spill Response and Hazardous Materials –** *To prevent water quality degradation due to hazardous material spills through spill prevention and response programs, and continual improvement of communication network to handle spill response.*
- 7. Forestry/Fish/Wildlife –** *To develop and maintain a comprehensive watershed forest management plan that minimizes impacts to water quality, and promotes actions and programs that protect and enhance fish and wildlife habitat.*
- 8. Transportation –** *To design and develop transportation systems that: include alternatives to automobiles, locate “through” routes away from the lakeshore, ensure treatment of runoff before entering the lake and otherwise protects water quality.*
- 9. Recreation –** *To promote recreational opportunities that do not degrade water quality, and improve on ways to reduce impacts of existing activities.*
- 10. Utilities and Waste Management –** *To promote conservation of water resources and provision of city sewer to areas with on-site treatment.*
- 11. Administration –** *To administer and coordinate ICT activities to support Management Plan implementation.*
- 12. Enforcement-** *To improve City and County enforcement of regulations aimed at protecting lake water quality.*

## Reading the Header Table

**Quick Reference:** Program Area and Task Number

**Program Area: 1. Land Preservation**  
**Task: 1.1 Develop and distribute education materials**

Period	Responsible Party	Costs	Status	P Reduction
2005-2009	City	\$20,000	Done	Indirect
2005-Ongoing	County	Staff	Active	Direct
	SVCA		Hold	
	District			
	WSU Extension			

**Quick Reference:** Key information for each task is found in the **Header Table** (left) and can also be found in the **Accomplishments Summary Table on pages 8-11**

### Header Table Descriptions:

**Period:** This column refers to the time period in which the task was/is being implemented. For example, the period **2005-2009** indicates that the task was first implemented in 2005 and was completed, or activity stopped, in 2009. The period **2005-Ongoing** indicates that this task was first implemented in 2005 and is ongoing.

**Responsible Party:** This column refers to the party or parties responsible for implementing the task.

**Costs:** This column gives an estimated cost for the implementation of the task over the 5-year timeframe. If the monetary value is known, it is given in **dollars**. If there is no hard cost associated with the task, the cost is entered as **Staff** in the Costs column.

**Status:** This column refers to the status of the task which is indicated by the following:

- **Done** indicates the task has been completed or is no longer being implemented,
- **Active** indicates the task is still actively being implemented, and
- **Hold** indicates the task is on hold until further notice due to resource constraints or informational delays.

**P Reduction:** This column is used to indicate 1) whether this task results in a reduction in phosphorus loading, and 2) if there is a reduction, is it a) **Indirect**, meaning that the phosphorus reduction is occurring as a result of the impact the successful implementation of this task had on other actions, e.g. education program influence on stewardship activities, or b) **Direct**, meaning that this task is directly resulting in a reduction in phosphorus loading, e.g. retrofitting a stormwater facility.

**Quick Reference:** Detailed descriptions of all **Header Table** entries can be found here

## Reading the Task Sheet

**Program Area: 1. Land Preservation**  
**Task: 1.4 Manage Acquisition Program properties**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City/County Parks	>\$30,000/year	Active	Direct

Here is an example of the **Header Table** from the previous page

**Task Objective:** Protect the watershed by managing Acquisition Program properties

A more detailed description of the **Task Objective** can be found in this section.

**Accomplishments:**

**2009**

- Management Plans completed for all Acquisition Program properties. Projects include invasives control, planting, trail construction, beaver deceiver, and encroachment responses
- All acquisition properties inspected including projects on 3 Creeks, Olson, Geneva Point, and Lookout Mountain Preserves

A list of **Accomplishments** from each year can be found in this section.

**2008**

- Implemented priority management recommendations and created summary of tasks completed on properties

Boxes in this section are checked to indicate specific benefits the lake receives as a result of this task. If **Other** is checked, a description will follow below.

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

**If other, please describe:** Lake protection as result of increased land preservation in watershed

**Performance Measures:** Acres restored, encroachment responses, special projects.

**Performance Measures** indicate how progress toward completing the task objective is being measured.

**Outcome:** All acquisition properties are managed to eliminate impacts to lake

The **Outcome** section describes what happened as a result of this task being implemented.

**Resources/Funding:** City – 0.1 FTE contract through Acquisition Program - \$30,000  
 County Parks – costs undetermined (2007-2008)

**Key Next Steps:** Continue property management activities

The **Key Next Steps** section lists any updates to the task or recommended next steps for completing the task.

The **Resources/Funding** section gives an estimate of the resources and funding used to implement the task given in Full Time Equivalents (FTEs) and/or dollars depending on the information available. N/A is used to indicate when no resource/funding information is available.



## Accomplishments Summary Table

1. Land Preservation	Period	Responsible Party	Costs	Status	P Reduction
1.1 Develop and distribute educational materials	2005-2008	City	\$20,000	Done	Indirect
1.2 Enhance Whatcom County TDR Program	2005-2009	City/County	\$125,000	Hold	Indirect
1.3 Acquire easements or titles to watershed properties	2008-Ongoing	City/County	\$2.1 million	Active	Indirect
1.4 Manage Acquisition Program properties	2008-Ongoing	City/County	>\$30,000/yr	Active	Direct
1.5 Pursue preservation options with DNR	2008-Ongoing	County	\$291,000*	Active	Indirect
1.6 Create Conservation Easements	2008-Ongoing	City	\$39,150	Active	Indirect
1.7 Increase effectiveness of Acquisition Program	2008-Ongoing	City	Staff	Done	Indirect
2. Stormwater Management	Period	Responsible Party	Costs	Status	P Reduction
2.1 Use models to prioritize stormwater projects	2005-Ongoing	City/County	\$175,000 TMDL Review	Active	Indirect
2.2 Improve phosphorus removal in stormwater facilities	2005-Ongoing	City/County	\$3.39 million	Active	Direct
2.3 Implement comprehensive stormwater plans for phosphorus control	2005-Ongoing	City/County	\$543,000	Active	Direct
2.4 Identify sites for stormwater retrofits	2008-Ongoing	City/County	Staff	Active	Indirect
2.5 Conduct daily stormwater control inspections of development projects	2005-Ongoing	City/County/SVCA	Staff	Active	Direct
2.6 Coordinate and implement NPDES Phase II stormwater requirements	2005-Ongoing	City/County	Staff	Active	Direct
2.7 Develop strategy for pollutant source reduction	2008-Ongoing	City/County	Staff	Done	Direct
2.8 Explore options for purchasing properties for stormwater retrofits	2007-Ongoing	City/County	Staff	Active	N/A
2.9 Coordinate stormwater management with transportation program area	2007-Ongoing	City/County	Staff	Hold	N/A

<b>3. Urbanization and Land Development</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
3.1 Develop and implement a tracking system	2005-Ongoing	County	Staff	Active	N/A
3.2 Enhance established joint development review process	2005-Ongoing	City/County	Staff	Active	Indirect
3.3 Evaluate options for consistent development regulations across jurisdictions	2006-2009	ICT	Staff	Done	Indirect
3.4 Explore enforcement and education options to improve compliance	2005-2008	ICT-County/SVCA	Staff	Done	Indirect
<b>4. Community Outreach</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
4.1 Improve Lake Whatcom Management Program website	2008-Ongoing	City/County Lead	Staff	Active	Indirect
4.2 Develop an integrated community outreach strategy	2005-Ongoing	City/County/SVCA/ Extension	Staff	Active	Indirect
4.3 Expand efforts to educate and activate watershed residents and visitors	2005-Ongoing	City/County/SVCA	Staff	Active	Indirect
4.4 Create stewardship incentive programs	2008-Ongoing	ICT	Staff	Active	Indirect
4.5 Expand Lake Friendly Gardening Program	2008-Ongoing	City/County/Extension	Staff	Active	Direct
4.6 Provide watershed education in schools	2008-Ongoing	City	Staff	Active	Indirect
<b>5. Data Management and Information</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
5.1 Review all monitoring studies and reports	2005-Ongoing	Joint/District	\$50,000	Active	Indirect
5.2 Provide data for tributary pollutant loading model updates	2005-Ongoing	City/County/Consultants	\$342,000	Active	Indirect
5.3 Maintain and update data records	2005-Ongoing	Joint/City	\$1,200	Active	N/A
<b>6. Spill Response and Hazardous Materials</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
6.1 Update spill response capability	2005-2008	Joint	\$10,000	Done	N/A
<b>7. Forestry/Fish/Wildlife</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
7.1 Seek updates from the IJC review of DNR activities	2005-Ongoing	City/County	Staff - \$6,000 per yr	Active	Indirect

<b>8. Transportation</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
8.1 Improve transportation planning and coordination	2005-Ongoing	City/County	Staff	Active	Indirect
8.2 Reduce vehicle mile trips (VMT) in watershed	2006-Ongoing	City/County	Staff	Active	N/A
<b>9. Recreation</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
9.1 Reduce park impacts to watershed water quality	2005-2009	ICT/Park Staff	Staff	Active	Direct/ Indirect
<b>10. Utilities and Waste Management</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
10.1 Continue OSS contract with County Health Department	2005-Ongoing	City	\$90,000	Active	Direct
10.2 Improve oversight of the provision of water and sewer services	2008-2009	Joint	Staff	Done	Indirect
10.3 Improve monitoring and maintenance of utilities	2005-Ongoing	District/City	Staff	Active	Direct
10.4 Reduce water supply impact from new residential construction	2008-2009	Joint	Staff	Done	Direct
<b>11. Administration</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
11.1 Maintain coordination between the ICT	2005-Ongoing	ICT	Staff	Active	N/A
11.2 Facilitate and coordinate appropriate staff to accomplish tasks	2005-Ongoing	ICT	Staff	Active	N/A
11.3 Establish regular communication and coordination between committees	2005-Ongoing	ICT	Staff	Active	N/A
11.4 Organize and facilitate Joint Councils/Commissioners meetings	2005-Ongoing	ICT	Staff	Active	N/A
11.5 Integrate Lake Whatcom Program Management Program goals	2005-Ongoing	ICT	Staff	Active	N/A
11.6 Coordinate and maintain contact with agencies	2005-Ongoing	ICT	Staff	Active	N/A

<b>12. Enforcement</b>	<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
12.1 Improve enforcement capability	2008-Ongoing	ICT-County	Staff	Active	Direct
12.2 Improve enforcement of regulations	2008-Ongoing	County/Health Department/SVCA	Staff	Active	Indirect





**Program Area: 1. Land Preservation**  
**Task: 1.3 Acquire easements or titles to watershed properties**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City/County	\$2.1 million	Active	Indirect

**Task Objective:** Protect the watershed through the acquisition of easements or titles to watershed properties

**Accomplishments:**

**2009**

- City purchased Nielsen property through the Acquisition Program: 24 acres/12 units
- Changes were made to scope and membership of Watershed Advisory Board

**2008**

- City reduced the potential number of development units in the watershed by purchasing 3 watershed properties through the Acquisition Program: Shipley (2.5 acres), Hawley (10 acres), and Three River (32 acres).

**Lake Benefits:**

Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:**

**Performance Measures:** Reduction of development potential (# of units), Acres purchased

**Outcome:** 44.5 acres of protected watershed property

**Resources/Funding:** City – 0.2 FTE through City acquisition program (\$2.1 million)  
 County – budgeted (2007-2008)  
 City - Nielson Property - \$1,690,000 (2009)

**Key Next Steps:**





**Program Area: 1. Land Preservation**  
**Task: 1.5 Pursue preservation options with DNR**

Period	Responsible Party	Costs	Status	P Reduction
2008-2009	County	\$291,000*	Active	Indirect

**Task Objective:** Protect the watershed by re-conveying DNR land for Park purposes

**Accomplishments:**

**2009**

- County Council approved an interagency agreement with DNR to authorize reimbursement of appraisals and all other work necessary to prepare intergrant transfers of property within the watershed in anticipation of a County request for reconveyance of lands for park purposes

**2008**

- Initiated process to reconvey ~ 8,000 acres from DNR to Whatcom County for Park purposes
- Negotiations between City, County, and DNR resulted in increased coordination and discussion of land preservation options and priorities
- Memorandum of Agreement passed by County Council

**Lake Benefits:**

Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:** Assumed reductions from decreased forest practices

**Performance Measures:** Steps taken to complete reconveyance

**Outcome:** Assumed local management of watershed forest properties will reduce sediment and phosphorus loads

**Resources/Funding:** County – costs not to exceed \$291,000 (\*appropriated)

**Key Next Steps:** Completion of inter-grant transfers by DNR; preparation of reconveyance request by Whatcom County

**Program Area: 1. Land Preservation  
Task: 1.6 Create Conservation Easements**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City	\$39,150	Active	Indirect

<b>Task Objective:</b> Protect the watershed by creating Conservation Easements (CEs) for Acquisition Program properties				
<b>Accomplishments:</b>				
- Conservation Easements (CEs) negotiated with the Whatcom Land Trust				
<b>2009</b>				
- Olson Creek Preserve				
- Three Creeks Preserve II				
<b>2008</b>				
- Agate Bay Preserve				
<b>2007</b>				
- Three Creeks Preserve				
<b>Lake Benefits:</b>				
Phosphorus Reduction	<input checked="" type="checkbox"/>	Fecal Coliform Reduction	<input type="checkbox"/>	Sediment Reduction
			<input type="checkbox"/>	Other <input type="checkbox"/>
<b>If other, please describe:</b>				
<b>Performance Measures:</b> Acres in Preserves				
<b>Outcome:</b> Protection and legal defense of conservation objectives in perpetuity				
<b>Resources/Funding:</b> City – 0.02 FTE Funded City ER. \$39,150 for Land Trust oversight and legal fund.				
<b>Key Next Steps:</b> Continue to develop Conservation Easements for acquisition properties				

**Program Area: 1. Land Preservation**  
**Task: 1.7 Increase effectiveness of Acquisition Program**

Period	Responsible Party	Costs	Status	P Reduction
2008	City	Staff	Done	Indirect

<b>Task Objective:</b> Protect the watershed by increasing the effectiveness of the Acquisition Program				
<b>Accomplishments:</b>				
<b>2009</b>				
- Task has been retired as the acquisition strategy now includes use of the evaluation criteria and attention to acquisition opportunities in Basin 2 with a focus on expansion of the Preserves				
<b>2008</b>				
- Focused acquisition activities in Basin 2 to protect the land that drains into the lake basins where intake structures are located				
<b>Lake Benefits:</b>	Phosphorus Reduction <input checked="" type="checkbox"/>	Fecal Coliform Reduction <input type="checkbox"/>	Sediment Reduction <input type="checkbox"/>	Other <input type="checkbox"/>
<b>If other, please describe:</b>				
<b>Performance Measures:</b> Evaluation criteria used to assess progress				
<b>Outcome:</b> Increased attention to effectiveness strategy				
<b>Resources/Funding:</b> Part of acquisition program				
<b>Key Next Steps:</b> Continue to evaluate strategy				

**Program Area: 2. Stormwater Management**  
**Task: 2.1 Use models to prioritize stormwater projects**

Period	Responsible Party	Costs	Status	P Reduction
2005- Ongoing	City/County	\$175,000	Active	Indirect

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by using pollutant loading models to identify priority projects in the watershed

**Accomplishments:**

**2009**

- Department of Ecology (DOE) released TMDL study
- City and County contracted with Brown and Caldwell to prepare technical review of DOE models
- Draft reports submitted and currently under review

**2008**

- Established priority stormwater project areas within each jurisdiction
- Summarized and ranked priority drainages in the watershed
- County completed Comprehensive Lake Whatcom Stormwater Plan

**2007**

- Completed City Stormwater Comp Plan including HSPF model of City and Watershed
- Results from studies and models on Lake Whatcom done by Portland State University and Utah State University in 2006 used to prioritize watershed protection actions

**2005-2006**

- Portland State University and Utah State University conducted studies on Lake Whatcom
- County completed a hydrologic model of the Geneva sub-area drainage

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

**If other, please describe:**

**Performance Measures:** N/A

**Outcome:** Provide better understanding of phosphorus loading and hydrology of the watershed

**Resources/Funding:** City – 0.2 FTE  
 County – 0.2 FTE, unfunded (\*Brown and Caldwell through 2009 City \$66k County \$109k)

**Key Next Steps:** Incorporate data into new models as they become available, i.e. from TMDL and USU studies, City Comp Plan model.



## Program Area: 2. Stormwater Management

### Task: 2.3 Implement comprehensive stormwater plans for phosphorus control

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County	\$543,000	Active	Direct

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by implementing comprehensive stormwater plans for phosphorus control

**Accomplishments:**

**2009**

- Implementation of Stormwater Plans is ongoing
- City passed revised Lake Whatcom code to align with TMDL requirements

**2008**

- County adopted Lake Whatcom Stormwater Plan
- Coordinated stormwater control projects
- Created recommendations for developing funding for future efforts
- County completed implementation of the Watershed Friendly Gardening Program

**2007**

- City completed Stormwater Comp Plan and Lake Whatcom Phosphorus Reduction Plan
- County began process to create Lake Whatcom Comp Stormwater Plan
- County adopted regulations restricting the use of phosphorus containing fertilizers in watershed

**2006**

- City enacted new regulations from DOE 2005 Manual to comply with NPDES Phase II

**2005**

- City began process for Stormwater Comprehensive Plan
- County received \$130k grant for Watershed Friendly Gardening Program

**Lake Benefits:**

Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:**

**Performance Measures:**

**Outcome:** Provides framework for projects to implement

**Resources/Funding:** Total cost of Comp Plan and Phosphorus Plan 2005- 2007 \$250,000  
 City – Future funding for Lake Whatcom from SSWU to be determined year by year  
 County – Total County expenditure for Watershed Friendly Garden Program and Lake Whatcom Comp Stormwater Plan was \$293,000.

**Key Next Steps:** Continue to update plans as needed

**Program Area: 2. Stormwater Management**  
**Task: 2.4 Identify sites for stormwater retrofits**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City/County	Staff	Active	Indirect

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by identifying and prioritizing sites for potential stormwater retrofits within high priority areas

**Accomplishments:**

**2009**

- 90% of City stormwater outfalls are retrofitted
- City discussed plans to modify existing facilities to improve performance
- County conducted field review of County’s portion of Silver Beach Creek to determine locations for design and construction of stormwater retrofit projects

**2008**

- City and County Stormwater Plans adopted in early 2008
- Developed list of options, costs, and timelines for priority retrofit projects in watershed (including private residential projects)
- Created summary of potential locations and options for stormwater retrofit projects
- City and County Stormwater Plans identify Silver Beach Creek Watershed as a high priority
- Silver Beach Creek is selected as target area for demonstration projects

**2007**

- County established list of priority areas for retrofits

**2005**

- County selected Geneva sub-area as the highest priority area for stormwater retrofits

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

**If other, please describe:**

**Performance Measures:** N/A

**Outcome:** Provides land for stormwater retrofits to occur

**Resources/Funding:** City - \$100,000/yr, funded  
 County – Funding TBD

**Key Next Steps:** Continue to assess areas in watershed for retrofits

**Program Area: 2. Stormwater Management**

**Task: 2.5 Conduct daily stormwater inspections of development projects**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County/SVCA	Staff	Active	Direct

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by conducting daily stormwater inspections of development projects in the watershed during construction season

**Accomplishments:**

**2009**

- Watershed staff conduct daily inspections during the construction season and daily patrols for illegal out-of-season work

**2005 -2008**

- City hired extra labor for Lake Whatcom construction season
- Projects in the City portion of the watershed were reported and inspected on a daily basis
- Projects in the County portion of the watershed were reported and inspected on a daily basis
- In 2005, County hired 3<sup>rd</sup> Watershed Planner dedicated to daily inspections of stormwater BMPs, erosion and sediment control measures, education and outreach, and watershed regulation compliance.

**Lake Benefits:**

- Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:**

**Performance Measures:**

**Outcome:** Observed a decrease in the amount of dirt leaving building sites

**Resources/Funding:** City – 0.5 FTE, funded  
County – PDS – 1 FTE  
SVCA – 0.2 FTE

**Key Next Steps:** Tighter controls/enforcement is needed to prevent problems. Inspections need to be ongoing.



## Program Area: 2. Stormwater Management

### Task: 2.6 Coordinate and implement NPDES Phase II stormwater requirements

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County	Staff	Active	Direct

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by coordinating and implementing NPDES Phase II stormwater requirements

**Accomplishments:**

**2009**

- City completed new illicit discharge review of city watershed area and sampled all flowing storm drains for fecal coliform and phosphorus during low flow period
- County adopted NPDES Phase II Ordinances and established Illicit Discharge Reporting Hotline
- County utilizing grant funding completed comprehensive NPDES Phase II facility map

**2008**

- Coordinated NPDES required programs: Illicit Discharge Detection, Construction Site Controls, Permanent Water Quality Facilities, Public Outreach, and Public Education
- Increased understanding between City and County on NPDES requirements

**2007**

- (Formerly Task 2.4) City updated stormwater code with Ordinance No. 2006-05-047 to comply with federal and state regulatory requirements. Ordinance promotes use of Low Impact Development (LID) for stormwater management.
- County hired CH2M Hill to build on existing work and develop comprehensive plan for the Lake Whatcom watershed. Plan identified gaps and needs associated with meeting Phase II requirements.

**2005**

- City completed illicit discharge review of city watershed area and sampled all flowing storm drains for fecal coliform and phosphorus during low flow period

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

**If other, please describe:**

**Performance Measures:** Remaining in compliance with NPDES Phase II requirements

**Outcome:** Reduce effects of stormwater pollution in urbanized areas

**Resources/Funding:**

City – 2.0 FTE, funded, watershed only  
 County – 0.5 FTE, funded; 1.5 FTE, unfunded and budgeted for 2008; 2.0 FTE M&O and PDS, unfunded and not budgeted

**Key Next Steps:** Continue to move forward and expand NPDES Phase II Stormwater Management Programs (SWMP) as required.

**Program Area: 2. Stormwater Management**  
**Task: 2.7 Develop strategy for pollutant source reduction**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City/County	Staff	Done	Direct

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by developing a strategy for pollutant source reduction that considers community outreach, regulations, and enforcement options

**Accomplishments:**

**2009**

- Created Education Enforcement Teams comprised of all agencies with jurisdiction in the watershed
- Lake Whatcom Rain Barrel Residential Retrofit Project started to lower residential runoff and provide information to citizens on lake-friendly stormwater practices
- County trained County Planning, Maintenance and Operations, and Health staff in Illicit Discharge and Detection regulations and reporting responsibilities
- County Public Works, Planning and Health staff members participated in frequent team meetings and continued and initiated new outreach programs in stormwater source control

**2008**

- Coordinated and convened appropriate departments to develop recommendations to implement the education, regulation, and enforcement options for pollutant source reduction in the watershed
- Created a description of the pollution source reduction strategy
- Summarized activities to be completed in the pollution source reduction strategy
- Incorporated reduction strategies from City and County Stormwater Comprehensive Plans

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

**If other, please describe:**

**Performance Measures:** N/A

**Outcome:** Proposed to improve knowledge base of Lake Whatcom residents

**Resources/Funding:** City – 1.0 FTE, funded; County – 0.2 FTE, funded

**Key Next Steps:** Continue improvement to education programs. Examine web-based education tools.



**Program Area: 2. Stormwater Management**

**Task: 2.9 Coordinate stormwater management with transportation program area**

Period	Responsible Party	Costs	Status	P Reduction
2007-Ongoing	City/County	Staff	Hold	N/A

**Task Objective:** Prevent water quality and quantity impacts due to stormwater runoff by coordinating stormwater management with transportation planning program areas

**Accomplishments:**

**2009**

- Convened Stormwater and Transportation Team in 2009

**2008**

- Evaluated stormwater management activities and transportation planning program areas to locate projects where coordination would be beneficial
- Summarized actions taken to coordinate stormwater management with transportation planning

**2007**

- (Formerly Task 2.8) County contracted with RH2 Engineering to evaluate traffic flow patterns along Lake Whatcom Boulevard and Lake Louise Road to determine traffic flow with least impact to lake water quality
- City continued to use Lake Whatcom road development standards for new roads

**Lake Benefits:**

Phosphorus   
Reduction

Fecal Coliform   
Reduction

Sediment   
Reduction

Other

**If other, please describe:**

**Performance Measures:**

**Outcome:**

**Resources/Funding:** City – 0.1 FTE, funded; County - unfunded position vacant due to hiring freeze

**Key Next Steps:**



**Program Area: 3. Urbanization and Land Development**  
**Task: 3.2 Enhance the established joint development review process**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County	Staff	Active	Indirect

**Task Objective:** Prevent water quality degradation associated with development by enhancing the established joint development review process in the UGA portion of the watershed, where applicable, to achieve water quality protection goals

**Accomplishments:**

**2009**

- City and County established a protocol for joint development review using SEPA as a threshold for shared review in the watershed
- Joint review resulted in an opportunity to develop SEPA conditions that further reduce phosphorus loading

**2008**

- Identified issues from review process in administering watershed regulations
- Analyzed development projects and watershed development issues for Management Committee consideration
- City of Bellingham requested and is now included in the distribution of SEPA notifications to comment on all projects within the Lake Whatcom watershed that trigger SEPA

**2007**

- City and County designated a staff member tasked with attending joint review meetings
- Opportunities to improve communication and coordination between County and City staff were sought

**2005**

- City and County began performing joint reviews of watershed developments in the Urban Grown Area (UGA)

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

**If other, please describe:**

**Performance Measures:** All SEPA determinations reviewed by the respective jurisdictions

**Outcome:** Improved method of sharing interjurisdictional information and improved outcomes for development proposals

**Resources/Funding:** Current staff

**Key Next Steps:** Formalize the protocol in the Interlocal Agreement and the Lake Whatcom Management Program and include defining roles and responsibilities for each jurisdiction

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

**Task: 3.3 Evaluate options for consistent development regulations across jurisdictions**

Period	Responsible Party	Costs	Status	P Reduction
2006-2009	ICT	Staff	Done	Indirect

**Task Objective:** Prevent water quality degradation associated with development by evaluating options for consistent development regulations among the City, County, and District

**Accomplishments:**

**2009**

- City and County adopted the same seasonal restriction period: October 1<sup>st</sup> through May 31<sup>st</sup>

City

- Amended the Lake Whatcom Reservoir Regulatory Chapter to require forested or fully engineered methods for new development and redevelopment over 300 sq. ft.
- Amended BMC 15.42, Stormwater Management, regulating impervious and partially pervious surfaces
- Worked with Sudden Valley Community Association in development of amended code

County

- Amended WCC 20.80.735, Water Resource Special Management Areas modifying the dates of the seasonal clearing restrictions and imposing a deadline of the issuance of development permits to two weeks prior to the seasonal closure date to ensure compliance with this section

**2006-2008**

- Identified and evaluated differing City, County, and District watershed regulations and made recommendations to make more consistent/watershed-wide regulations
- Convened Enforcement Team in 2008

**Lake Benefits:**

Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:**

**Performance Measures:** Improved level of compliance with Lake Whatcom regulations in City and County

**Outcome:** Evaluated options for consistent development regulations resulting in improved regulations and coordination between jurisdictions

**Resources/Funding:** N/A for City and County  
SVCA – 0.1 FTE

**Key Next Steps:** Modify regulations to achieve better phosphorus reduction





**Program Area: 4. Community Outreach**

**Task: 4.1 Improve Lake Whatcom Management Program website**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	City/County Lead	Staff	Active	Indirect

<b>Task Objective:</b> Improve lake stewardship by improving the Lake Whatcom Management Program website information and use				
<b>Accomplishments:</b>				
<b>2009</b>				
<ul style="list-style-type: none"> <li>- City and County staff began coordinating efforts to improve the Lake Whatcom Management Program website by making it more accessible and up-to-date</li> <li>- Website maintenance has been dependent on limited staff availability</li> </ul>				
<b>2008</b>				
<ul style="list-style-type: none"> <li>- Posted regular updates on Lake Whatcom regulations, projects, and events</li> <li>- Provided email notifications when significant updates occurred</li> <li>- Added information regarding new on-site sewage system regulations</li> </ul>				
<b>Lake Benefits:</b>	Phosphorus Reduction <input checked="" type="checkbox"/>	Fecal Coliform Reduction <input checked="" type="checkbox"/>	Sediment Reduction <input checked="" type="checkbox"/>	Other <input checked="" type="checkbox"/>
<b>If other, please describe:</b> Increased awareness of issues and events pertaining to Lake Whatcom				
<b>Performance Measures:</b> General update of monthly, reports, announcements and events				
<b>Outcome:</b> Improved coordination of staff working on website will make the website a useful tool for improving lake stewardship, increase number of visits (hits) to the website				
<b>Resources/Funding:</b> Minimal resources available				
<b>Key Next Steps:</b> More time needs to be devoted to maintaining the website and marketing it as an information tool for the community				













**Program Area: 5. Data Management and Information**  
**Task: 5.2 Provide data for tributary loading model updates**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County/Consultants	\$342,000	Active	Indirect

**Task Objective:** Manage data and information to detect water quality and quantity trends by providing data for tributary pollutant loading model updates

**Accomplishments:**

**2009**

- Completed the Joint County, City, and District Tributary Monitoring Project
- County developed plans to continue monitoring storm events at existing and new locations

**2008**

- Conducted tributary monitoring for pollutant loading data model calibration and update
- Created report with water quality and quantity data for specified tributaries

**2007**

- Compiled data from Institute for Watershed Studies' tributary monitoring for data reporting
- Consultant hired to expand upon tributary monitoring program to include other parameters

**2005-2006**

- Institute for Watershed Studies (IWS) at WWU conducted monthly monitoring at multiple tributaries for the 2005/2006 sampling year. Data from these studies is located on IWS website.

**Lake Benefits:**

Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:** Development of increasingly accurate lake load/response models

**Performance Measures:** Improved model calibration and accuracy

**Outcome:** Information generated from Tributary Monitoring Project will be beneficial in proceeding with the TMDL implementation plan

**Resources/Funding:** 2-year cost \$342,000 (2009)  
 Joint 0.1 FTE – Funded City and County staff admin services  
 Consultants WWU, Brown and Caldwell – Funded \$200,000

**Key Next Steps:** Input data into lake models



**Program Area: 5. Data Management and Information**

**Task: 5.3 Maintain and update data records**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	Joint/City	\$1,200	Active	N/A

**Task Objective:** Manage data and information to detect water quality and quantity trends by maintaining and updating data records

**Accomplishments:**

**2009**

- No activity in 2009

**2008**

- Completed annual update of bibliography, abstracts, and library collections of Lake Whatcom reports
- Updated Lake Whatcom Data Catalog and provided reports to libraries

**2005-2007**

- Updated Lake Whatcom Data Catalog at Whatcom County's Stormwater Division

**Lake Benefits:**

Phosphorus  
Reduction

Fecal Coliform  
Reduction

Sediment  
Reduction

Other

**If other, please describe:**

**Performance Measures:** Number of updates made to data catalog

**Outcome:** Maintain access to comprehensive data catalog

**Resources/Funding:** Joint 0.02 FTE – Funded City ER  
\$1,200

**Key Next Steps:** Update in 2010

**Program Area: 6. Spill Response and Hazardous Materials**  
**Task: 6.1 Update spill response capability**

<b>Period</b>	<b>Responsible Party</b>	<b>Costs</b>	<b>Status</b>	<b>P Reduction</b>
2005-2009	Joint	\$10,000	Done	N/A

**Task Objective:** Prevent water quality degradation due to the spill of hazardous materials by updating spill response capabilities

**Accomplishments:**

**2009**

- No activity in 2009

**2008**

- Obtained additional National Incident Management System (NIMS) training
- Plans made to add Lake Whatcom chapter to the City, County, Lake Whatcom Water and Sewer District, and Fire District Emergency Operations Plans
- Created Spill Response Plans specific to Lake Whatcom for each jurisdiction

**2007**

- City contracted with CH2M to conduct an exercise to evaluate spill response capabilities

**2005**

- Lake Whatcom Water and Sewer District published an emergency management plan that included provisions for spill response among other potential hazards

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

**If other, please describe:** Prevention of water quality degradation resulting from hazardous material spills

**Performance Measures:** Number of exercises to assess and maintain capabilities

**Outcome:** Improved interjurisdictional response capability

**Resources/Funding:** Joint 0.03 FTE  
 Current staff or consultants- \$10,000

**Key Next Steps:** Add Lake Whatcom chapter to local Emergency Operations Plans and conduct simulation exercises more frequently to measure progress in terms of improved capabilities

## Program Area: 7. Forestry/Fish/Wildlife

### Task: 7.1 Seek updates from the IJC review of DNR activities

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County	Staff/\$6,000 per year	Active	Indirect

<p><b>Task Objective:</b> Promote actions and programs that protect and enhance fish and wildlife habitat by seeking updates from the Interjurisdictional Committee’s (IJC) review of DNR activities</p>												
<p><b>Accomplishments:</b></p> <p><b>2009</b></p> <ul style="list-style-type: none"> <li>- Annual IJC Report to Management Committee delivered at February meeting</li> <li>- ICT reviewed and commented on Forest Practice Applications for timber harvesting on private forest lands</li> <li>- ICT received and reviewed consultant reports on the 2009 DNR Timber Harvest and Lands Management Plan</li> <li>- Staff met with DNR to discuss FPA process and our need for strict water quality protection measures</li> <li>- ICT requested meeting with Department of Ecology to advocate for stricter DOE enforcement of water quality standards</li> </ul> <p><b>2008</b></p> <ul style="list-style-type: none"> <li>- Set up annual meeting to review IJC findings</li> <li>- Provided ICT recommendations to the IJC</li> </ul> <p><b>2005</b></p> <ul style="list-style-type: none"> <li>- IJC formally convened and established ground rules for project reviews</li> </ul>												
<p><b>Lake Benefits:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Phosphorus Reduction</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Fecal Coliform Reduction</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;">Sediment Reduction</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">Other</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>					Phosphorus Reduction	<input checked="" type="checkbox"/>	Fecal Coliform Reduction	<input type="checkbox"/>	Sediment Reduction	<input checked="" type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Phosphorus Reduction	<input checked="" type="checkbox"/>	Fecal Coliform Reduction	<input type="checkbox"/>	Sediment Reduction	<input checked="" type="checkbox"/>	Other	<input checked="" type="checkbox"/>					
<p><b>If other, please describe:</b> Ensure Lake Whatcom Landscape Plan implementation.</p>												
<p><b>Performance Measures:</b> Compliance with Lake Whatcom Landscape Plan</p>												
<p><b>Outcome:</b> Compliance with Lake Whatcom Landscape Plan, reduce forest impacts to water quality</p>												
<p><b>Resources/Funding:</b> 0.01 FTE, funded by City and County. Staff time increased in 2009 to respond to FPA conditions.</p>												
<p><b>Key Next Steps:</b> Continue review of IJC reports</p>												

**Program Area: 8. Transportation**

**Task: 8.1 Improve transportation planning coordination**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City/County	Staff	Active	Indirect

**Task Objective:** Protect water quality from transportation-related activities by improving transportation planning coordination in a manner consistent with water quality protection goals

**Accomplishments:**

**2009**

- No activity in 2009

**2008**

- Amended comprehensive plans to guide transportation projects to minimize water quality impacts in the watershed
- Convened Transportation Team during 2008
- County staff began process for 2011 County Comprehensive Plan Update

**2005-2006**

- New goals and policy added to Transportation Element of the City’s Comprehensive Plan under a new “Lake Whatcom Watershed” heading. City Council adopted Comp Plan in June 2006.
- Meeting held with City and County transportation staff, Lake Whatcom staff, and members of the trucking industry to discuss truck route issues in the watershed.

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

**If other, please describe:** reduction of transportation related pollutants

**Performance Measures:** N/A

**Outcome:** N/A

**Resources/Funding:** N/A

**Key Next Steps:** City and County plans to revisit goals and policies regarding transportation in the Lake Whatcom watershed and for their 2011 Comprehensive Plan updates

**Program Area: 8. Transportation**  
**Task: 8.2 Reduce vehicle mile trips (VMT) in watershed**

Period	Responsible Party	Costs	Status	P Reduction
2006-Ongoing	City/County	Staff	Active	N/A

**Task Objective:** Protect water quality from transportation-related activities by reducing vehicle mile trips (VMT) in the watershed

**Accomplishments:**

**2009**

- No activity in 2009

**2008**

- Coordinated with WTA to identify and implement strategies to increase transit ridership in watershed
- Coordinated with neighborhood groups and associations within watershed to identify and implement programs and physical improvements that promote commute trip reduction
- Planned and designed bike/pedestrian facilities along major transportation routes
- City completed section of pervious bike lane on Northshore Drive in September of 2008

**2006-2007**

- WTA modified transit schedule to Sudden Valley to increase ridership, which reduced single vehicle trips

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

**If other, please describe:** Reduce petro-chemical pollutant load to lake

**Performance Measures:** Education and traffic counts

**Outcome:** Reduction of vehicle generated pollution

**Resources/Funding:** City – Existing staff for coordination Transportation Team. Additional FTEs required for implementation. County –0.05 FTE (funded) for coordination. Additional FTEs required for implementation.

**Key Next Steps:** Continue development in the watershed to create more SOV trip opportunities

## Program Area: 9. Recreation

### Task: 9.1 Reduce park impacts to watershed water quality

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT/Park staff	Staff	Active	Direct/Indirect

**Task Objective:** Promote recreational opportunities that do not degrade water quality by reducing park impacts to watershed water quality

**Accomplishments:**

**2009**

- County and City staff reviewed parking plan for Lookout Mountain Preserve
- Convened ICT and Park Staff

**2008**

- Coordinated with City and County Parks Departments to develop and manage parks and open spaces in the watershed in a manner consistent with water quality protection goals
- Developed recommendations and supported implementation of Park and Open Space Master Plans to minimize water quality impacts in the watershed
- Convened ICT/Park staff meeting
- Participated in project review team for Silver Beach Preserve Trail

**2007**

- City's Watershed Advisory Board provided recommendations for managing open space that are consistent with water quality protection goals

**2005**

- County updated Comprehensive Parks, Recreation and Open Space Plan to provide guidance for the long-range development, acquisition and delivery of parks and recreation services in Whatcom County.

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

**If other, please describe:** reduce park impacts to watershed

**Performance Measures:** Treed acres restored

**Outcome:** Park design and use will not further degrade tributary or lake water quality

**Resources/Funding:** Joint - Current ICT and Park staff

**Key Next Steps:** Cooperate in design and use of reconveyed lands

**Program Area: 10. Utilities and Waste Management**  
**Task: 10.1 Continue OSS contract with County Health Department**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	City	\$90,000	Active	Direct

**Task Objective:** Promote conservation of water resources by continuing onsite septic system (OSS) contract with the County Health Department

**Accomplishments:**

**2009**

- Contract current with focus on Silver Beach Creek

**2008**

- Contract updated to include survey inspections, updated database of septic systems, response to failing septic systems, and homeowner education
- Summarized results of on-site septic system surveys, water quality monitoring and follow-up actions

**2007**

- (Formerly Task 10.3) County Health Department continued to conduct OSS surveys, education, and water quality monitoring. 20% of the OSS in the Lake Whatcom watershed are inspected each year.

**2005**

- Contract renewed at the end of 2005

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

**If other, please describe:**

**Performance Measures:** Septic systems inspected and maintained

**Outcome:** Reduce pollutant loading from failing OSS

**Resources/Funding:** City – 0.015 FTE, funded contract \$90,000 (2008)

**Key Next Steps:** Annual re-evaluation of contract deliverables

**Program Area: 10. Utilities and Waste Management**

**Task: 10.2 Improve oversight of the provision of water and sewer services**

Period	Responsible Party	Costs	Status	P Reduction
2008-2009	Joint	Staff	Done	Indirect

**Task Objective:** Promote conservation of water resources and provision of sewer to areas with on-site treatment by improving the oversight of the provision of water and sewer services

**Accomplishments:**

**2008-2009**

- Standardized City and Water District regulations for provision of services
- Through RCW 57.16.101, the County evaluates water and sewer plans for consistency with GMA and other related planning documents, and uses the results of that analysis to condition the approval or to justify the decision to reject the plan(s).

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

**If other, please describe:**

**Performance Measures:**

**Outcome:** Task discontinued

**Resources/Funding:** County staff, funded

**Key Next Steps:** Task discontinued



**Program Area: 10. Utilities and Waste Management**  
**Task: 10.3 Improve monitoring and maintenance of utilities**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	District/City	Staff	Active	Direct

**Task Objective:** Promote conservation of water resources and provision of sewer to areas with on-site treatment by improving the monitoring and maintenance of utilities

**Accomplishments:**

**2009**

- Lake Whatcom Water and Sewer District (District) replaced two sewer pump stations: North Point Sewer Pump Station and The Tomb Sewer Pump Station
- District continued TV inspection of sewer mains
- District installed 500 sewer manhole dishes in Geneva and Sudden Valley to reduce ground and surface water inflow and infiltration to sewer system
- City and District completed sewer line inspections and identified and completed maintenance and repair projects

**2008**

- District replaced two sewer pump stations: Strawberry Canyon Sewer Pump Station and Plum Sewer Pump Station
- District continued TV inspection of sewer mains
- City and District conducted annual sewer line inspection and repair report
- Reported on results of inspections and identified and scheduled repairs
- City maintained 5 sewer line vaults
- Whatcom County Health Department implemented new septic system maintenance regulations

**2007**

- District replaced Airport Sewer Pump Station and Austin Sewer Pump Station
- District constructed emergency containment berm at Ranch House Sewer Pump Station
- District continued TV inspection of sewer mains

**2006**

- District repaired 29 sewer main locations that had groundwater infiltration
- District replaced 3 deteriorated sewer manholes along Lake Whatcom Boulevard
- District continued TV inspection of sewer mains

**2005**

- District replaced Marina Sewer Pump Station and added permanent standby generator to Ranch House Sewer Pump Station and Louise Sewer Pump Station
- District continued TV inspection of sewer mains
- District installed 200 sewer manhole dishes near creeks and ditches along Lake Whatcom Boulevard and Sudden Valley

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

**If other, please describe:**

**Performance Measures:** Number of inspections, Number of repairs

**Outcome:** Improved monitoring and maintenance of utilities

**Resources/Funding:** District – 0.25 FTE, funded  
 City – 0.5 FTE, funded Sewer; 0.01 for ICT report, funded

**Key Next Steps:**

**Program Area: 10. Utilities and Waste Management**

**Task: 10.4 Reduce water supply impact from new residential construction**

Period	Responsible Party	Costs	Status	P Reduction
2008-2009	Joint	Staff	Done	Direct

**Task Objective:** Promote conservation of water resources by reducing water supply impacts resulting from new residential construction

**Accomplishments:**

**2009**

- No activity in 2009

**2008**

- Began enforcing water and sewer availability requirements before approving exempt wells and on-site septic systems

**Lake Benefits:**

Phosphorus Reduction  Fecal Coliform Reduction  Sediment Reduction  Other

**If other, please describe:**

**Performance Measures:** N/A

**Outcome:** Task completed

**Resources/Funding:** Joint – 0.1 FTE, depending on other priorities ICT staff can accomplish

**Key Next Steps:** Will revisit task in 2010-2014 work plan

**Program Area: 11. Administration**  
**Task: 11.1 Maintain coordination between the ICT**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	N/A

**Task Objective:** Support Management Plan implementation by maintaining coordination between the Interjurisdictional Coordinating Team (ICT) in developing and accomplishing Lake Whatcom Management Program (LWMP) goals and tasks for each program element

**Accomplishments:**

**2009**

- Coordination among the ICT members resulted in successfully fulfilling numerous Lake Whatcom Management Program tasks

**2008**

- Actively participated in ICT staff meetings to discuss, implement, and summarize progress of the LWMP work plan
- Scheduled regular ICT meetings and began creating semi-annual progress reports for LWMP Work Plan

**2005-2007**

- ICT regularly scheduled for two monthly meetings. Work Plan updates outline the progress that has been made on designated tasks.

**Lake Benefits:**

Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:**

**Performance Measures:** Number of meetings held, Number of staff participating in regular meetings

**Outcome:** Implementation of 2005-2009 Work Plan

**Resources/Funding:** ICT funded

**Key Next Steps:** Continue to maintain coordination between ICT staff

## Program Area: 11. Administration

### Task: 11.2 Facilitate and coordinate appropriate staff to accomplish tasks

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	N/A

**Task Objective:** Support Management Plan implementation by facilitating and coordinating appropriate City, County, Sudden Valley, and District staff to develop and accomplish tasks for each program element

**Accomplishments:**

**2009**

- Facilitated planning, stormwater, enforcement, education and transportation staff coordination

**2008**

- Re-established the enforcement, data, and education teams and directed appropriate staff members to participate in each team
- Integrated interjurisdictional and interdepartmental efforts in planning and implementation of program areas and work plan tasks
- Summarized efforts coordinated among City, County, and District departments
- City completed a chronology of City actions taken to improve water quality in Lake Whatcom, from 1999-2009

**2005-2007**

- (Formerly Task 11.3) Each program task has an established point contact that extends updates and accomplishments to ICT staff through written communication, personal interviews and presentations at ICT meetings.

**Lake Benefits:**

Phosphorus   
Reduction

Fecal Coliform   
Reduction

Sediment   
Reduction

Other

**If other, please describe:**

**Performance Measures:** Appropriate staff gave task progress reports at ICT meetings

**Outcome:** Ensure interjurisdictional coordination of Work Plan implementation

**Resources/Funding:** ICT funded

**Key Next Steps:** Implement Project Management approach for Lake Whatcom Management Program to establish a project manager for the program and project leads for each Program Area

## Program Area: 11. Administration

### Task: 11.3 Establish regular communication and coordination between committees

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	N/A

**Task Objective:** Support Management Plan implementation by establishing regular communication and coordination between the ICT and the Lake Whatcom Management Committee

**Accomplishments:**

**2009**

- Organized two meetings of the Lake Whatcom Management Committee

**2008**

- Organized monthly meetings between LWMC and ICT to discuss progress of work plan
- Held monthly Lake Whatcom Management Committee meetings

**2005-2007**

- (Formerly Task 11.4) ICT meets with the Lake Whatcom Management Committee on a monthly basis for progress reports on the Work Plan and other relevant Lake Whatcom topics

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

**If other, please describe:**

**Performance Measures:** Number of meetings held

**Outcome:** Established regular communication and coordination between ICT and Lake Whatcom Management Committee

**Resources/Funding:** ICT funded

**Key Next Steps:**

## Program Area: 11. Administration

### Task: 11.4 Organize and facilitate Joint Councils/Commissioners meetings

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	N/A

**Task Objective:** Support Management Plan implementation by organizing and facilitating Joint Councils/Commissioners meetings for Lake Whatcom Management Program updates

**Accomplishments:**

**2009**

- Semi-annual meetings of the Joint Councils/Commissioners held
- Lake Whatcom Joint Policy Group subcommittee meetings held to discuss status of Lake Whatcom Management Program

**2008**

- Lake Whatcom Joint Policy Group formed as a subcommittee to the Joint Councils/Commissioners
- Semi-annual meetings of the Joint Councils/Commissioners held
- Organized joint meetings, sent notifications to mailing lists, provided copies of meeting materials, and videotaped meetings
- Postcard and email meeting notifications sent
- Videotaped meetings in library and broadcasted on local government channel

**2006**

- Joint Council and Commissioners meeting was held on Nov. 29, 2006 focusing on stormwater management

**2005**

- ICT presented at the Joint Councils and Commissioners meeting on March 23, 2005 and again on Nov. 16, 2005.

**Lake Benefits:**

Phosphorus Reduction

Fecal Coliform Reduction

Sediment Reduction

Other

**If other, please describe:**

**Performance Measures:** Number of meetings held

**Outcome:** Organized and facilitated Joint Councils/Commissioners meetings for Lake Whatcom Management Program updates

**Resources/Funding:** ICT funded

**Key Next Steps:**

**Program Area: 11. Administration**

**Task: 11.5 Integrate the Lake Whatcom Management Program goals**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	Indirect

**Task Objective:** Support Management Plan implementation by integrating the Lake Whatcom Management Program goals and tasks with City, County, and District comprehensive planning

**Accomplishments:**

**2009**

- The City and County revisited goals and policies regarding the Lake Whatcom watershed for their 2011 Comprehensive Plan Updates

**2008**

- Developed recommendations for amendments to the City, County, and District Comp Plans
- Made amendments to City, County, and District comprehensive plans to include LWMP Goals from 1992 Joint Resolution

**2005-2007**

- City's Comp Plan update included Lake Whatcom Watershed sections in the Land Use and Transportation Elements for the first time

**Lake Benefits:**

Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:**

**Performance Measures:** Goals and policies integrated into Comprehensive Plans

**Outcome:** Efforts made to integrate the Lake Whatcom Management Program goals and tasks into City, County, and District Comprehensive Plans

**Resources/Funding:** ICT funded

**Key Next Steps:**

**Program Area: 11. Administration**  
**Task: 11.6 Coordinate and maintain contact with agencies**

Period	Responsible Party	Costs	Status	P Reduction
2005-Ongoing	ICT	Staff	Active	N/A

<p><b>Task Objective:</b> Support Management Plan implementation by coordinating and maintaining contact with agencies for updates on studies pertaining to Lake Whatcom</p>				
<p><b>Accomplishments:</b></p> <p><b>2009</b></p> <ul style="list-style-type: none"> <li>- Staff met frequently with Department of Ecology staff to discuss TMDL requirements</li> <li>- Staff met with DNR to communicate concerns with forest practice permit process</li> </ul> <p><b>2008</b></p> <ul style="list-style-type: none"> <li>- Used updates and studies as a part of the annual review of Lake Whatcom monitoring through the Data and Information Management program element of the Work Plan</li> <li>- Summarized studies that had been incorporated into policy recommendations</li> <li>- Received updates from Huxley Institute of Watershed Studies and other agencies</li> </ul> <p><b>2005-2007</b></p> <ul style="list-style-type: none"> <li>- ICT staff attended various meetings in order to coordinate and maintain contact with agencies for updates on studies related to Lake Whatcom</li> </ul>				
<p><b>Lake Benefits:</b></p> <p style="text-align: center;">             Phosphorus <input type="checkbox"/>              Reduction                         Fecal Coliform <input type="checkbox"/>              Reduction                         Sediment <input type="checkbox"/>              Reduction                         Other <input type="checkbox"/> </p> <p><b>If other, please describe:</b></p> <p><b>Performance Measures:</b> Number of meetings/contacts with agencies</p>				
<p><b>Outcome:</b> Information exchange improved agency understanding of local jurisdictions perspective and resources</p>				
<p><b>Resources/Funding:</b> ICT funded</p>				
<p><b>Key Next Steps:</b></p>				



**Program Area: 12. Enforcement**  
**Task: 12.1 Improve enforcement capability**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	ICT - County	Staff	Active	Direct

<b>Task Objective:</b> Protect lake water quality by improving City and County enforcement capabilities				
<b>Accomplishments:</b>				
<b>2009</b>				
- County and Sudden Valley staff worked to increase cooperation on enforcement issues, relating to new construction projects and critical areas				
<b>2008</b>				
- Convened Enforcement Team				
- Dedicated new FTEs to watershed regulatory enforcement				
- Convened Lake Whatcom Management Team to discuss Enforcement Team recommendations				
- Developed a comprehensive calling list and discussed importance of “closing the loop” with enforcement staff				
- Sudden Valley hired one additional FTE to increase enforcement capability				
<b>Lake Benefits:</b>	Phosphorus Reduction <input checked="" type="checkbox"/>	Fecal Coliform Reduction <input type="checkbox"/>	Sediment Reduction <input checked="" type="checkbox"/>	Other <input type="checkbox"/>
<b>If other, please describe:</b>				
<b>Performance Measures:</b> Increased interjurisdictional coordination on enforcement issues				
<b>Outcome:</b> Improved enforcement capabilities in watershed				
<b>Resources/Funding:</b> County – Existing 0.1 FTE, funded ICT – 0.15 FTE, funded SVCA – 1.0 FTE				
<b>Key Next Steps:</b>				

**Program Area: 12. Enforcement**  
**Task: 12.2 Improve enforcement of regulations**

Period	Responsible Party	Costs	Status	P Reduction
2008-Ongoing	County/Health Department/SVCA	Staff	Active	Indirect

**Task Objective:** Improve City and County enforcement of regulations aimed at protecting lake water quality

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**Accomplishments:**

**2009**

- Sudden Valley staff increased frequency of watershed monitoring, development inspections, complaint response, and on-site compliance review

**2008**

- Began diligently enforcing all development, clearing, and other land use codes
- Enforced OSS M/O regulations and coordinated with the County Health Department
- Convened management to discuss Enforcement Team recommendations
- Now have daily presence in watershed

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

**If other, please describe:**

**Performance Measures:** Tracking of enforcement actions and compliance review

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**Outcome:** Improved enforcement of regulations aimed at protecting lake water quality

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**Resources/Funding:** County – Existing watershed inspectors and compliance staff  
Existing Health Department staff, SVCA – 1.0 FTE

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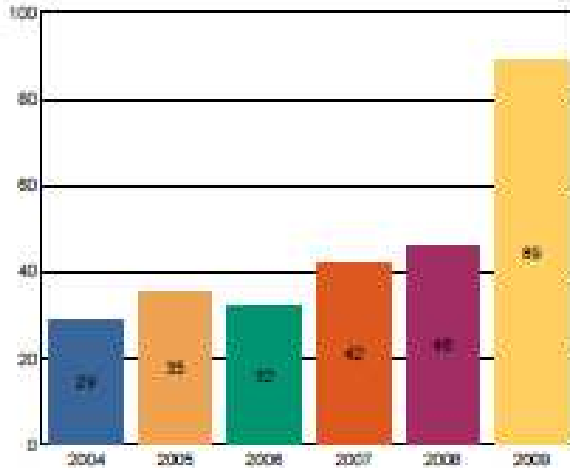
**Key Next Steps:**

# Appendices

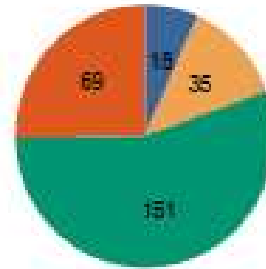


City of Bellingham - Public Works  
 City Hall - 210 Lottle Street - Bellingham, WA 98225  
 PHONE: (360) 778-7900 FAX 360-778-7901  
 Total Parcels: 163  
 Number of cases: 273

Count of Permits by (Received) Year



Code Enforcement	18	6.6%
New Construction or Tenant Improvement	35	12.8%
Planning and Land Use	151	55.3%
Public Works or Storm Water	69	25.3%
Total	273	100.0%



Case Type Groups:  
 SUB,ADU,MIS,SEP,GRD,CUR,STR,VAR,BHR - Planning and Land Use  
 BLD,CMB,DEM,SON - New Construction or Tenant Improvement  
 PBW,STM,PFC - Public Works or Storm Water

Active Permits  
 (APP,ACC,AJN,API,CCL,HLD,ISS,PND,REC,RTI) in the Lake  
 Whatcom Watershed (based on parcel tag import  
 5/2008) Since 1/1/2004 to 11/23/2009  
 Grouped by Application Received Date  
 Excludes Ancillary Electrical Permits (ELE), Plumbing (PLM),  
 and Mechanical (MEC) Permits  
 Status of report: **Final**  
 Last run: 11/23/2009

**Status Key**  
 ACC Accepted for Review  
 CCL Reviewed by City sent back for corrections  
 ISS Issued  
 AJN Amend Plans Accepted/ Inspections OK  
 API Amend Plans Accepted  
 RTI Ready to Issue  
 HLD Hold  
 APP Approved (Planning)  
 REC Received (Planning)

### 3603220601550000

CMB2004-00014 ISS 150 NORTHSORE DR Received Date: 01/20/2004

Role	Name	Address
OWN	DAVID C & BONITA L EBENAL	P O BOX 31548 BELLINGHAM WA 98228
CON	EBENAL GENERAL INC	4338 PACIFIC HWY BELLINGHAM WA 98228
APL	ZIGOR PEANINGTON	1304 LINDSAY LP MT VERNON WA 98274

--- Project Description ---  
 New Construction or Tenant Improvement  
 NEW SINGLE FAMILY RESIDENCE WITH  
 ATTACHED GARAGE

### 3603225432080000

LLD2004-00003 REC SILVER BEACH AVE Received Date: 01/20/2004

Role	Name	Address
OWN	DANA A-MARGARET A LAGMAY TRUST	MARGARET A LAGMAY TR P O BOX 51018 ELEELE HI 96705-1018

--- Project Description ---  
 Planning and Land Use  
 Legal Lot Determination for subject property

**3803213920290000**SUB2004-00008 REC 2318 CRESTLINE DR Received Date: 02/18/2004

Role	Name	Address
OWN	VENTURADO JO ANNE	2318 CRESTLINE DR BELLINGHAM WA 98226-5003

**--- Project Description ---**  
Planning and Land Use

Request for a 3 lot street plat, Alabama and Crestline, Alabama Hill Neighborhood, Area 2, Residential Single

**3803223904250000**VAR2004-00004 REC 4725 E OREGON ST Received Date: 02/17/2004

Role	Name	Address
OWN	NEMER TIMOTHY A	4725 E OREGON ST BELLINGHAM WA 98226

**--- Project Description ---**  
Planning and Land Use

Extension of VAR2002-00002. Previous app expired. Request for variance for public street construction of abutting E Oregon St and extension of public sewer to less than normal standards.

**3803275415040000**SEP2004-00082 APP 2024 NORTHSHORE DR Received Date: 03/25/2004

Role	Name	Address
OWN	LOUIS A & KATHRYN J JANSEN	4071 HANNEGAN RD #0 BELLINGHAM WA 98226-7623

**--- Project Description ---**  
Planning and Land Use

SEPA application for replacing existing pilings and dock structure. Same dimensions and in the same location

**3803220601550000**PBW2004-00547 ISS 150 NORTHSHORE DR Received Date: 04/23/2004

Role	Name	Address
OWN	DAVID C & BONITA L EBENAL	P O BOX 51548 BELLINGHAM WA 98226
CON	EBENAL GENERAL INC	4326 PACIFIC HWY BELLINGHAM WA 98226

**--- Project Description ---**  
Public Works or Storm Water

NEW SINGLE FAMILY RESIDENCE w/ ATTACHED GARAGE TO REPLACE EXISTING SINGLE FAMILY RESIDENCE, CUSTOMER ACCT #3391. NEW FUTURE METER BOX, AND INSPECTION PERMITS. ALL EROSION CONTROLS MUST BE IN PLACE AND INSPECTED PRIOR TO LAND DISTURBANCE.

**3803220944540000**MIS2004-00021 ISS 4047 SPRINGLAND CT Received Date: 04/02/2004

Role	Name	Address
OWN	TRAVIS & CAROL S MOSKAL	4047 SPRINGLAND CT BELLINGHAM WA 98226-6885

**--- Project Description ---**  
Planning and Land Use

Request for overweight fence at subject property.

**3803224700820000**MIS2004-00028 REC 1780 NORTHSHORE DR Received Date: 04/30/2004

Role	Name	Address
OWN	GILBERT A & VIRGINIA A BAKER	1780 NORTHSHORE DR BELLINGHAM WA 98226-0418

**--- Project Description ---**  
Planning and Land Use

Request to remove 5 Pine Street Trees obstructing view of road. Owner would like to replace trees with a fence

**3803225423080000**LLD2004-00011 APP ACADEMY ST Received Date: 04/30/2004

Role	Name	Address
OWN	JEAN D BAKER TRUST/TR	7511 HAM RD FERNDALE WA 98248

**--- Project Description ---**  
Planning and Land Use

Request for legal lot determination, 2000 block of Huntington, Silver Beach Nbrhd, Area 4

**3803225133570000**SUB2004-00028 REC 3001 HUNTINGTON ST Received Date: 04/26/2004

Role	Name	Address
OWN	HEAPS EVELYN A	P O BOX 814 BELLINGHAM WA 98227-0814
APL	M P COSTELLO DESIGN & CONST LLC	2400 40TH BELLINGHAM WA 98226

**--- Project Description ---**  
Planning and Land Use

Request for lot line adjustment, Huntington &amp; E Indiana, Silver Beach Nbrhd, Area 4, Residential Single, SP #2073-A

**Lake Whatcom Management Program Contacts:**

Whatcom County Public Works  
Jon Hutchings, 676-6692, [jhutchin@co.whatcom.wa.us](mailto:jhutchin@co.whatcom.wa.us)

City of Bellingham Environmental Resources Division  
Clare Fogelsong, 778-7965, [cfogelsong@cob.org](mailto:cfogelsong@cob.org)

Lake Whatcom Water and Sewer District  
Office Phone: 734-9224, [WD10@comcast.net](mailto:WD10@comcast.net)