

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

**Goal:**

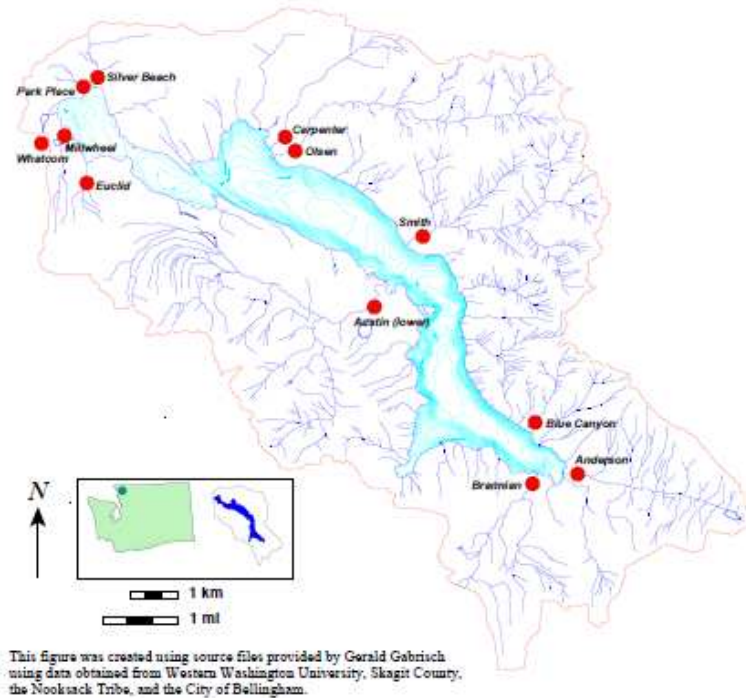
Maintain and enhance databases sufficient for detection of water quality and quantity trends, assessment of problems, evaluation and selection of management actions, and monitoring of action effectiveness.

The Data and Information Management Program Area aims to collect and manage data to increase our understanding of water quality, pollution source, and land use trends over time and to guide management decisions accordingly. This Program Area is administered by a Data Management Team composed of staff from the City, County, District, WWU’s Institute for Watershed Studies, and the Department of Ecology.

**Notable Accomplishments:**

City and County staff worked together to compile and update the Lake Whatcom Data Catalog, an Access database containing over 290 titles, summaries, and document locations of Lake Whatcom related studies and reports.

In 2009, the first phase of the Lake Whatcom Tributary Monitoring Program was completed. Findings from the study, conducted by Brown and Caldwell, were evaluated by the Data Management Team who recommended that a second phase of monitoring at new and existing tributaries be conducted.



The Lake Whatcom Data Management Team continues to work closely with WWU’s Institute for Watershed Studies to collect and manage Lake Whatcom monitoring data.

**Reference Documents:**

Lake Whatcom Data Catalog

Copies of the documents are available at the Whatcom County Public Works Water Resources Library and the Bellingham Public Library

Lake Whatcom Monitoring Reports

<http://www.ac.wvu.edu/~iws/>

**Program Area: 5. Data Management & Information**  
**Task: 5.1 Continue Lake Whatcom water quality monitoring**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	Data Team	\$1.23 million*	Active/Hold*	Indirect

**Task Objective:** Continue long-term baseline water quality monitoring in Lake Whatcom and selected tributary streams

**Actions:**

- Contract with Institute for Watershed Studies
- Create annual monitoring report

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

**If other, please describe:** Information/data used to improve water quality policies and management actions

**Performance Measures:** 1) Distribute monthly progress reports to Data Team  
 2) Annual monitoring reports

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City			\$226,963	\$226,963
	County				
	District/Other				
2011	City			\$236,031	\$236,031
	County				
	District/Other				
2012	City			\$245,472	\$245,472
	County				
	District/Other				
2013	City			\$255,000*	\$255,000*
	County				
	District/Other				
2014	City			\$265,000*	\$265,000*
	County				
	District/Other				
<b>Total</b>				<b>\$1.23 million*</b>	<b>\$1.23 million*</b>

## Program Area: 5. Data Management & Information

### Task: 5.2 Update tributary loading models

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	Data Team	\$362,000	Active/Hold*	Indirect

**Task Objective:** Provide data and oversee tributary pollutant loading model updates

**Actions:**

- Refine the tributary monitoring project to more precisely determine phosphorus loading sources

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

**If other, please describe:**

**Performance Measures:** 1) End of study report of phosphorus loading sources with water quality and quantity data for specified tributaries integrated into loading models

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City			\$80,000	\$80,000
	County	0.03 (\$3,000)		\$80,000	\$83,000
	District/Other			\$18,000	\$18,000
2011	City			\$80,000	\$80,000
	County	0.03 (\$3,000)		\$80,000	\$83,000
	District/Other			\$18,000	\$18,000
2012	City				
	County	undetermined*		undetermined*	
	District/Other				
2013	City				
	County	undetermined*		undetermined*	
	District/Other				
2014	City				
	County	undetermined*		undetermined*	
	District/Other				
<b>Total</b>		<b>0.06 (\$6,000)</b>		<b>\$356,000</b>	<b>\$362,000</b>

**Program Area: 5. Data Management & Information**  
**Task: 5.3 Review and summarize monitoring studies and reports**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	Data Team	\$10,000	Active	None

**Task Objective:** Review and summarize monitoring studies and reports to determine policy implications

**Actions:**

- Read, discuss and summarize reports
- Provide summaries to ICT

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

**If other, please describe:** New information/data used to improve water quality policies and management actions

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

- 1) Summary of water quality issues identified by monitoring studies and reports
- 2) Policy recommendations in response to reports
- 3) Tasks that are modified or new in response to reports

**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	0.01 (\$1,000)			\$1,000
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2013	City	0.01 (\$1,000)			\$1,000
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2014	City	0.01 (\$1,000)			\$1,000
	County	0.01 (\$1,000)			\$1,000
	District/Other				
<b>Total</b>		<b>0.1 (\$10,000)</b>			<b>\$10,000</b>

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

**Task: 5.4 Maintain and update Data Catalog**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	Data Team	\$5,000	Active	None

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

**Actions:**

- Add entries into the Lake Whatcom Data Catalog for all Lake Whatcom research, monitoring and reports published in the prior year

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

**If other, please describe:** Data Catalog acts as an information source for the public to improve lake stewardship

**Performance Measures:** 1) Annual update of Lake Whatcom Data Catalog

**Cost Estimates:**

Year	Party	FTEs (\$)	Capital Costs	Other	Total
2010	City				
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2011	City	0.01 (\$1,000)			\$1,000
	County				
	District/Other				
2012	City				
	County	0.01 (\$1,000)			\$1,000
	District/Other				
2013	City	0.01 (\$1,000)			\$1,000
	County				
	District/Other				
2014	City				
	County	0.01 (\$1,000)			\$1,000
	District/Other				
<b>Total</b>		<b>0.05 (\$5,000)</b>			<b>\$5,000</b>

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**Task: 5.5 Establish new monitoring programs**

Period	Responsible Party	Cost Estimate	Status	P Reduction
2010 - 2014	Data Team	As needed*	Hold	Indirect

**Task Objective:** Continue to improve detection of water quality and quantity trends by establishing new monitoring programs as needed

**Actions:**

- Respond to data needs identified by staff and/or consultants by initiating new monitoring programs

**Intended Lake Benefits:**

Phosphorus Reduction       Fecal Coliform Reduction       Sediment Reduction       Other

**If other, please describe:** New information/data used to improve water quality policies and management actions

**Performance Measures:** 1) Annual review of identified data needs and update of monitoring program

**Cost Estimates:**

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