



LAKE WHATCOM WATER AND SEWER DISTRICT
1220 LAKEWAY DRIVE
BELLINGHAM, WASHINGTON 98229

REGULAR MEETING
OF THE BOARD OF COMMISSIONERS

AGENDA

September 11, 2013

6:30 p.m. – Regular Session

1. CALL TO ORDER
2. PUBLIC COMMENT OPPORTUNITY
At this time, members of the public may address the Commission. Please state your name prior to making comments.
3. ADDITIONS, DELETIONS, OR CHANGES TO THE AGENDA
4. CONSENT AGENDA
5. SPECIFIC ITEMS OF BUSINESS:
 - A. Stormwater Management Discussion
 - B. Monthly Budget Analysis
 - C. Summary of Existing District Projects
 - D. Boulevard Sewer Pump Station Project
6. OTHER BUSINESS
7. MANAGER'S REPORT
8. PUBLIC COMMENT OPPORTUNITY
9. ADJOURNMENT



LAKE WHATCOM WATER AND SEWER DISTRICT

AGENDA BILL

DATE SUBMITTED:	September 4, 2013		
TO BOARD OF COMMISSIONERS			
FROM: Bill Hunter	MANAGER APPROVAL <u>B.H.</u>		
MEETING AGENDA DATE:	September 11, 2013		
AGENDA ITEM NUMBER:	5.A.		
SUBJECT:	Stormwater Management Discussion		
LIST DOCUMENTS PROVIDED ⇒ NUMBER OF PAGES INCLUDING AGENDA BILL: _____	1. Stormwater & Water Quality Management Within the Lake Whatcom Watershed – Report by Wilson Engineering		
	2.		
	3.		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL/ OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

Attached is the final report regarding Stormwater Management options and issues that will be included in the District's Comprehensive Sewer Plan update. The Comprehensive Sewer Plan update is currently in progress and a draft of the plan will be presented to the Board for review and comment late September / early October.

This agenda item is for discussion only.

FISCAL IMPACT

None at this time.

RECOMMENDED BOARD ACTION

None at this time.

PROPOSED MOTION

None at this time.

**STORMWATER & WATER QUALITY MANAGEMENT
WITHIN THE LAKE WHATCOM WATERSHED**

**POTENTIAL GOVERNANCE AND FUNDING MECHANISMS AVAILABLE TO LAKE WHATCOM
WATER & SEWER DISTRICT**

Prepared for: Lake Whatcom Water & Sewer District

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Date: DRAFT June 14, 2013
FINAL August 30, 2013 (Revised to Reflect June 18, 2013 Stormwater Workshop)

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ACRONYMS AND ABBREVIATIONS

BBWARM	Birch Bay Watershed Aquatic Resources Management District
BMPs	best management practices
CAOs	Critical Areas Ordinances
CIP	capital improvement program
City	City of Bellingham
County	Whatcom County
District	Lake Whatcom Water and Sewer District
DNR	Washington Department of Natural Resources
Ecology	Washington State Department of Ecology
ESA	Endangered Species Act
HOA	home owner's association
HPA	Hydraulic Project Approval
JMUSA	Joint Municipal Utility Service Authority/Agreement
LMD	Lake Management District
LWMP	Lake Whatcom Management Program
NPDES	National Pollution Discharge Elimination System
OSS	on-site sewage system
O&M	operation and maintenance
Phase II Permit	Western Washington Phase II Municipal Stormwater Permit
RCW	Revised Code of Washington
SSWU	Storm and Surface Water Utility (City)
SVCA	Sudden Valley Community Association
TMDL	total maximum daily load
WAC	Washington Administrative Code
Watershed	Lake Whatcom Watershed
WCC	Whatcom County Code
WDFW	Washington Department of Fish and Wildlife

I. OVERVIEW

The need for increased stormwater and water quality management has been well documented as it relates to Whatcom County as a whole, and in particular as it relates to the Lake Whatcom Watershed (watershed). As a significant member of the watershed community, Lake Whatcom Water and Sewer District (District) has continuously endeavored to play a meaningful part in protecting and improving the water quality within the watershed. Currently, the District is engaged in updating its comprehensive sewer plan and is planning a chapter which explores the District’s options for assisting in the effort to protect the waters of the watershed. This brief has been prepared as a background document for the Board’s review and consideration regarding possible future local agency partnering efforts in stormwater management and/or water quality projects or the protection of Lake Whatcom’s water quality and other needs.

In this brief, we first explore the current stormwater and water quality management hierarchy within the watershed in an effort to illustrate the complex governance inter-relationships currently managing the watershed. We next focus on the driving forces and potential benefits to the District of becoming more involved in stormwater and water quality management within the watershed. We also examine what governance options are currently available for the District to either act alone or partner with local agencies in the watershed’s protection. Finally, we have included a summary outlining what we feel is the best governance option for partnering, and summarizing some key issues to keep in mind when setting up any local agency partnering effort.

II. CURRENT STORMWATER & WATER QUALITY MANAGEMENT WITHIN THE WATERSHED

There are several state and local agencies, as well as private sector groups, who have key roles in addressing the water quality issues in and around the lake, (reference Figure 1). Currently, Whatcom County (County) and the City of Bellingham (City), operating under Washington Department of Ecology’s (Ecology) Western Washington Phase II Municipal Stormwater Permit (Phase II permit), split the lion’s share of the responsibility as it relates to planning and implementation of stormwater management and water quality protection within the watershed, (reference Figure 2 for a jurisdictional overview of the watershed).

In addition to administration of the Phase II permit, Ecology sets ground water and surface water standards, and regulates nonpoint pollution and pollution runoff through field assessments, phosphorus reduction programs, clean/green boating programs, education, and financial assistance. Ecology also regulates construction stormwater pollution prevention, sets stormwater infrastructure design standards, and regulates water and wastewater treatment. Other involved state agencies include the Washington Department of Fish and Wildlife (WDFW) who provides permit regulation for any and all work within the surface waters of the state through the hydraulic permit approval (HPA) process and the

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Washington Department of Natural Resources (DNR) administers stormwater management within the watershed on land zoned commercial, state and rural forestry.

On the private front, groups such as Sudden Valley are developing in-house programs to identify and address stormwater infrastructure concerns and to plan for future stormwater management improvements within their boundaries. In addition, individual private property owners and homeowner associations (HOAs) play a role in stormwater management and pollution control through the maintenance and operation of their own, private, onsite stormwater facilities.

Below, we have provided additional detail regarding the specific stormwater and water quality management functions performed by each of these parties. The purpose of this expanded description is to highlight the fact that stormwater and water quality management within the watershed is a multileveled endeavor with many overlapping and interconnecting mandates. Our hope is to give a clear understanding of the management complexities involved in administering to stormwater pollution and water quality issues in the watershed. This will aid the District in the process of identifying where their assistance could be most beneficial.

A. STATE STORMWATER & WATER QUALITY MANAGEMENT

i. Washington State Department of Ecology – Water Quality Program

Ecology's Water Quality Program strives to provide technical, financial and education assistance to public agencies engaged in water quality improvement activities statewide. The goal of the program is to prevent and clean up water pollution within the State. In compliance with EPA's National Pollution Discharge Elimination System (NPDES), Ecology requires the County and the City to seek coverage under the Phase II permit. The County is responsible for Phase II permit compliance within all urbanized areas and urban growth areas associated with cities which are under the jurisdictional control of the County. The City is responsible for Phase II permit compliance for all areas within the city limits. Under this joint jurisdiction, the watershed has been designated for coverage under the Phase II permit.

Under Ecology's Water Quality Program, the department sets ground and surface water standards, permits wastewater treatment facilities, administers target programs to address nonpoint pollution and pollution runoff, and administers construction stormwater pollution prevention and the NPDES Phase I and II permit programs. Ecology's Stormwater Management Manual for Western Washington governs the stormwater infrastructure design for both new development and redevelopment within the watershed. The manual also dictates the stormwater pollution prevention measures, (Best Management Practices or BMPs) to be used to prevent stormwater pollution on construction projects.

Under Ecology's surface water quality program, the department makes regular field assessments of the surface waters of the state and establishes "total maximum daily loads" (TMDLs) for various pollutants within those waters. Lake Whatcom has been the subject of many field assessments over the past two

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decades. Currently, Lake Whatcom is listed as an impaired water body under Section 303d of the Federal Clean Water Act for total phosphorus and bacteria.

ii. Washington State Department of Fish and Wildlife (WDFW)

According to the department’s website, WDFW requires issuance of an HPA for “any work that uses, obstructs, diverts, or changes the natural flow or bed of state waters. The conditions of an HPA are designed to protect fish, shellfish, and their habitat. Regulated activities include bank protection, dredging, fish passage corrections, flow control structures, overwater structures and pilings, habitat and shoreline modifications, and other activities that affect waters of the state.” WDFW also has an active program in which it identifies existing man-made fish passage barriers in the field and then coordinates with other government agencies and the private sector to have them removed. Their enforcement mechanism is the conditions attached to the HPA permit which is required when existing drainage structures are repaired or replaced.

iii. Washington State Department of Natural Resources (DNR)

DNR administers stormwater pollution prevention within the forestlands of the state under Title 222 of the Washington Administrative Code (WAC). The role of the Forest Practices Board is to establish minimum standards for forest practices, provide procedures for the voluntary development of resource management plans, set forth necessary administrative provisions, establish procedures for the collection and administration of forest practices fees, allow for the development of watershed analyses, foster cooperative relationships and agreements with affected tribes, and establish the riparian open space program. The Board is an independent state agency chaired by the Commissioner of Public Lands. DNR operates under the forest practice rules outlined in Title 222 WAC and a technical advisory supplement to those rules known as the Forest Practices Board Manual. The stormwater pollution prevention program outlined in the manual was developed by DNR in cooperation with and with the approval of Ecology.

B. LOCAL STORMWATER & WATER QUALITY MANAGEMENT – COUNTY AND MUNICIPAL

i. Whatcom County

Stormwater and water quality management within the County is accomplished through several different county departments working together and utilizing various Whatcom County Codes (WCC), ordinances, and planning documents. Some of the management efforts of the various departments are discussed below:

1. Whatcom County Planning and Development Services

Planning and Development regulates development within the watershed primarily through two county codes; WCC Title 20 Zoning and WCC Title 21 Subdivision. Through the provisions included in both of these codes, Planning and Development is able to implement the management planning outlined in the County’s Comprehensive Plan. Within WCC Title 20, there exists three subsections specific to stormwater and water quality management within the

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watershed (these are the codes as they existed in June, not the codes adopted by the County Council in late July. Changes will be incorporated into the Stormwater chapter of the Sewer Comprehensive Plan):

- WCC Title 20.71 – Water Resource Protection Overlay District - which imposes additional development and land use controls aimed at preserving and protecting the unique water resources of the basin.
- WCC Title 20.80.635 – Stormwater Special District – which requires permanent onsite stormwater quality and quantity facilities on all lots less than five acres in size or projects that meet either of the following criteria:
 - New construction or remodels that increase impervious surfaces by more than 500 square feet, or
 - Renovation projects where the estimated cost of the work exceeds 50-percent of the assessed value of the existing structure, (with some exemptions).
- WCC Title 20.80.735 – Water Resource Special Management Area – which establishes a more stringent standard for clearing activity in highly valued water resource areas, environmentally sensitive areas, or areas where natural conditions are so unstable that clearing activity in the areas can result in hazardous conditions.

The underlying intent of all three of these subsections is to further control development within the watershed and to allow for more targeted techniques in managing stormwater and water quality control in the area.

Natural Resources Division – The Natural Resources Division of Planning and Development Services “provides technical and project assistance to County departments, community groups, and government agencies dealing with water quality, marine resource protection, salmon recovery, noxious weeds and other ecosystem-related watershed concerns within the County. The Division helps implement the *Whatcom County Comprehensive Water Resources Plan* which includes specific planning elements regarding watershed planning and management. The Division’s activities are paid for out of the County’s general budget.

2. Whatcom County Health Department

As it relates to stormwater and the public water supply, the Health Department operates under WCC Title 24 and regulates on-site sewage systems, solid waste handling and disposal, and drinking water. The Department’s *On-site Sewage System (OSS) Local Management Plan* was developed to assist in the management of the OSS’s within the County. Under the *OSS Local Management Plan*, the Lake Whatcom Basin has been designated as a sensitive area requiring special protections and inspection priorities. The Department’s activities have been paid for out of the County’s general budget and current budgetary constraints do not allow for a heightened level of service or inspection despite the watershed being listed as a “sensitive” area. However, according to the Health Department website, “effective January 1, 2013, the OSS Operation and Maintenance (O&M) Program will be funded by a new annual OSS fee. The County Council

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approved the 2013 fee schedule, which includes a new \$19 annual OSS fee that will be included on property tax statements starting in 2013, and collected through the Treasurer's Office with property tax payments." It is unclear whether this new dedicated source of funding will adequately support the enhanced requirements within the watershed.

3. Whatcom County Public Works

Stormwater Division – The Stormwater Division implements stormwater programs and builds capital improvement projects in target watersheds, (such as Lake Whatcom). The Stormwater Division also leads the County's Phase II permit stormwater program. In 2008, the Stormwater Division completed preparation of the *Lake Whatcom Comprehensive Stormwater Plan* which helped identify some of the highest priorities for stormwater management within the watershed to reduce phosphorus inputs to the lake and to mitigate altered hydrology within the basin. Since completion of this comprehensive plan, the Stormwater Division has implemented several of the capital improvement projects (CIP) outlined in the plan, (especially in Lake Whatcom's Geneva Area); however, budgetary constraints have continued to hamper the CIP implementation process.

Maintenance & Operations (M&O) Division– Stormwater maintenance and operation within the County right-of-ways is provided by the M&O Surface Drainage Management Division. M&O is not responsible for maintenance and repair activities either outside the ROW or on private property. The M&O's Roadway Maintenance Program is responsible for maintaining "the county road system by preventing, reducing, or restoring deterioration of the roadway infrastructure through road surface and roadway structure management". The M&O's Surface Drainage Management Program is to ensure that all County-owned drainage structures are maintained and in good working conditions including drainage ditches, culverts, catch basins, and manholes. Finally, the M&O's Roadside Vegetation Management Program is responsible for controlling vegetation and brush within the right-of-way. All of these activities are paid for out of the County's general budget, and the M&O Division's staff are responsible for covering the whole county. Despite the fact that the watershed has been designated as a "sensitive" and/or "special" water resource, current manpower and budget makes it difficult for the M&O Division to provide any more than basic services in the area.

Engineering Division – The Engineering Division is responsible for capital improvement projects on the County's roadways and bridges, as well as maintaining the development standards to be used for other roadway improvement projects undertaken in the county.

ii. City of Bellingham

The City has several programs which address stormwater and water quality related issues within its borders. Below is an overview of some the more critical activities, programs, and projects with regard to this effort as they relate to the watershed.

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City of Bellingham Public Works - Storm and Surface Water Utility (SSWU) – The SSWU funds improvements and maintenance of the stormwater system in the City. Funding is generated from four sources; permit fees and storm drainage fees, street funds, grant and loan funding, and revenue bonds. Permit fees and storm fees are one-time fees which cover the costs of permit review and capital improvements related to storm drainage for new development. The City's Street Fund is charged a fee by the SSWU based on the impervious surface of the City's streets, (WSDOT is also charged for the impervious surface on I-5 within the City). The SSWU pursues grants and low-interest loans through Washington's State Revolving Fund, Public Works Trust Fund, and other programs. Finally, the utility can also issue revenue bonds, backed by rate revenues, to fund large capital projects.

The SSWU administers the City's Stormwater Management Program which was developed specifically to address compliance issues related to Ecology's mandated Phase II permit. The City's *Stormwater Comprehensive Plan* outlines the compliance measures instituted to address the Phase II permit, and the City issues an annual compliance report, (*Stormwater Management Program 2012 NPDES Report*, most recent) which evaluates progress enacting the permit conditions.

The SSWU is also responsible for maintaining the City's drainage system which is comprised of natural components, (creeks and lakes), and manufactured conveyance and detention, (network of open ditches, catch basins, closed pipes, manholes, and water quality facilities such as ponds, vaults, storm filters, and bioswales). Maintenance activities include: open ditch cleaning; catch basin pumping; storm line jetting; trash rack cleaning and storm patrol; tile, frame and grate repair; culvert cleaning and creek drainage; regional detention facility maintenance; and water quality facility maintenance.

Environmental Resources Division - The Environmental Resources Division oversees programs associated with resource protection of the watershed. Among its other duties, the division administers many of the joint County/City programs and projects developed to protect the watershed, such as;

- Lake Whatcom Management Program (LWMP) – Joint agency effort between the City, the County and the District to help protect the lake.
- LWMP Aquatic Invasive Species Program - A comprehensive program designed to guide aquatic invasive species prevention, monitoring, and response efforts in the watershed.
- Filter-Clogging Algae Mitigation Evaluation - Evaluation of alternatives to reduce algae clogging the filters at the City's water treatment plant.
- Property Acquisition Program – Efforts to purchase and preserve land within the watershed.
- Silver Beach Creek Pilot Project – Project aimed at discovering successful strategies to reduce phosphorus.
- Residential Stormwater Retrofit Program – Program aimed at reducing stormwater flows and increasing infiltration at residential properties. Completed 6/30/2011.
- Homeowner Incentive Program – Program offering reimbursement incentives to watershed residents who install projects that increase water infiltration on their properties, and

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- Miscellaneous Lake Whatcom Capital Improvement Projects.

iii. Whatcom County and City of Bellingham – Critical Areas Ordinances (CAOs)

In addition to the stormwater and water quality activities detailed above, both the County and the City have individual CAOs for the protection of critical areas within their jurisdictions. Critical areas include; geologically hazardous areas, frequently flooded areas, areas underlain by critical aquifer recharge zones, wetlands, and habitat conservation areas, (especially those for salmonid fish species). As it relates to stormwater and water quality management, wetlands and habitat conservation critical areas are the most crucial. Development and infrastructure improvements within these CAOs are regulated by the County and City under ordinances which seek to minimize impacts to the unique characteristics of each critical area through various management strategies including but not limited to buffer setbacks, buffer enhancement, habitat restoration, and maintenance of critical hydrologic functions within the critical areas.

C. PRIVATE STORMWATER & WATER QUALITY MANAGEMENT

i. Sudden Valley Community Association (SVCA)

As a private entity, the SVCA oversees approximately 1,600 acres of private land within the watershed. The SVCA is responsible for the maintenance and repair of all of the roadways and drainage infrastructure within the association boundaries. Currently, the SVCA has embarked on a comprehensive drainage inventory and stormwater planning process to identify what current and future infrastructure issues will need to be addressed as they relate; to maintenance and repair, capacity improvement, fish barrier removal, and stormwater pollution prevention. This planning effort is being funded internally and is expected to eventually result in the development of a capital improvement program and improved maintenance and operation guidelines.

ii. Private Stormwater Flow-Control & Water Quality Installations

There are current many privately owned stormwater flow-control and water quality facilities installed within the watershed boundaries, (See Figure 3 for a map of those in the County). These installations have been installed by private owners and developers in response to statutory requirements by both the County and the City. The individual owners of these facilities are responsible for their regular maintenance and operation. The County and City are responsible (by statute) for periodic inspections to confirm that the required maintenance is being performed at each facility. Historically, budgetary constraints have made regular inspection and oversight of these facilities an ongoing challenge for these two agencies.

III. GOVERNANCE AND FUNDING OPTIONS FOR DISTRICT PARTICIPATION

There are several governance options which would allow the District to partner with local agencies in the protection of the watershed. Each governance option has pros and cons with regard to formation, leadership, management powers, and funding resources. Below we have given a brief overview of the

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governance options currently available. Table 1 can be referenced for a summary of the individual characteristics of each option detailed below.

A. JOINT MUNICIPAL UTILITY SERVICE AUTHORITY/AGREEMENT (JMUSA)

A JMUSA is a separate legal entity, a Washington municipal corporation, created under a statute passed in 2011 and now codified in Ch. 39.106 RCW. It is formed by an agreement between two or more governmental entities, i.e., city, town, county, or special purpose district. Formation does not require boundary review board approval, state approval, or a public vote. The agreement describes the utility services to be provided and can specify powers not to be exercised. It must spell out member financial obligations, a process for adding additional members, conditions for withdrawal (including disposition of assets and liabilities), define which public works law it will be operating under, specify an amendment process, and a process for dissolution.

Utility services which can be addressed in a JMUSA include the services the District currently provides (water and sewer), however, utility services can also include point and non-point water pollution monitoring programs, and management and handling of storm water, surface water, drainage, and flood waters. Each member executing the agreement must be providing the type of service which the JMUSA is to provide, which makes it important that the District adopt a comprehensive drainage plan and have some sort of responsibility for this activity before a JMUSA is entered into.

The JMUSA is governed by a board consisting of an agreed upon number of directors. Each director must be an elected official of one of the member governments forming the authority. The agreement must specify how they would be chosen, whether each would have an equal vote or there would be weighted voting, whether a supermajority vote is required, and if so, for what decisions, and so on.

The JMUSA does not have the power to tax. If agreed to by the members, the JMUSA would have the ability to set and collect rates and charges. The City already has a watershed fee for its water customers that is used for land acquisition and preserving water quality in the Lake Whatcom reservoir. However, if the agreement were to include the City, this may be a means of having all who benefit from a clean lake pay a uniform rate or classes of rates, for its cleanup.

B. INTERLOCAL AGREEMENT

The District, City and County have used an interlocal agreement in their ongoing efforts to address lake water quality through the Lake Whatcom Management Group and are very familiar with how the agreement works. The JMUSA legislation was put forth largely because an interlocal agreement does not form a separate legal entity, and the issuance of bonds for any group effort is therefore much more complicated. The JMUSA has the express authority to issue bonds.

The interlocal agreement is a true partnership with an administrator or joint board. Participating agencies may appropriate funds and provide personnel, property and services but rates and charges could not be implemented to fund the program.

C. COOPERATIVE WATERSHED MANAGEMENT

Watershed management partnerships and projects are governed by RCWs 39.34.190, 39.34.200, 39.34.210, 39.34.215, and 39.34.220 (under 39.34- Interlocal Cooperation Act). Under RCW 39.34.210, any two or more public agencies may enter into agreements with one another to form a watershed management partnership for the purpose of implementing any portion or all elements of a watershed management plan, including the coordination and oversight of plan implementation. Cooperative management would require the execution of a watershed partnership agreement which includes the provisions required of all interlocal agreements under RCW 39.34.030(3). The watershed partnership agreement can establish a separate legal entity to conduct the cooperative undertaking of the partnership. This legal entity would be authorized to contract indebtedness and to issue and sell general obligation bonds and to issue revenue bonds.

RCW 39.34.190 states that a water-sewer district “may authorize up to ten percent of its water-related revenues to be expended in the implementation of watershed management plan projects or activities that are in addition to the County's, City's, or District's existing water-related services or activities”.

RCW 36.89.130 allows that a county may, as a part of maintaining a system of storm water control facilities, participate in and expend revenue on cooperative watershed management actions, including watershed management partnerships under RCW 39.34.210 and other intergovernmental agreements, for purposes of water supply, water quality, and water resource and habitat protection and management.

At this time, it is unknown if other agencies would be interested in entering into a cooperative watershed management agreement for implementation of a comprehensive stormwater management program in the Lake Whatcom Basin. Efforts by the District would be limited to what could be funded with ten percent of its water-related revenues and rates and charges could not be implemented to fund the program.

D. COUNTY FLOOD CONTROL SUBDISTRICT

The Board has heard presentations from Mr. Hutchings, formerly of Whatcom County Public Works and from Mr. Montfort of Birch Bay Watershed Aquatic Resources Management District (BBWARM), concerning this approach. The County could form a Lake Whatcom Flood Control sub-district. As noted in their presentations, the sub-district has a local advisory board. However, County Public Works provides the staffing, and the County Council has final say on what projects are approved and to what purpose funds are devoted.

An advantage of this approach is that it would use existing County staff and administration, and possibly additional staff at the County, rather than a separate entity. Cost savings may be achievable as a result. Disadvantages are that the same government entity and division responsible for setting road maintenance budgets and capital spending on stormwater control related to roads would be in charge

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of setting priorities for spending on any fees assessed on local residents for other stormwater related projects. Since the need easily outstrips available public funding sources and there are a number of impaired water bodies in the County, as well as critical Endangered Species Act (ESA) and other concerns as to the Nooksack basin, there is a potential, as identified by Mr. Montfort in his presentation regarding BBWARM, that such funds would not be spent as local residents desire, and that funds otherwise spent on controlling runoff from County roads in the watershed may be diverted to controlling runoff from roads outside the watershed.

E. LAKE AND/OR BEACH MANAGEMENT DISTRICT

Lake and Beach Management Districts are governed by RCW 36.61, and can either be initiated by County Resolution or by landowner petition (15% of acreage contained within District). After appropriate public hearings, the creation of the Lake Management District is subject to a vote of the landowners, then a Special Assessment roll is adopted - a process very similar to the Utility Local Improvement District (ULID) process. It does not look like RCW 36.61 allows a water-sewer district to run a Lake Management District - it is set up for Counties to manage.

If our interpretation of the Code is correct, funding the Lake Management District can be through a single Special Assessment, and/or an annual Special Assessment, or Rates and Charges, and would need to be declared in the formation petition / resolution, along with the amount of money proposed to be raised. It also looks like any changes to the Special Assessment would need to be voted on, and any changes to rates and charges would be determined by the County.

There has been at least one Lake Management District in Whatcom County. Lake Management District No. 1 (LMD) was formed in 1991 at Lake Samish to provide administration, operation and maintenance of a new retention dam structure located at the Friday Creek outlet. The original assessment also covered annual maintenance for a fixed period of time. In 2006, when the original assessment monies were due to run out, the LMD approached the County requesting the formation of a Samish Watershed Subzone, under the existing Whatcom County Flood Control Zone District No. 1, which could enact an new assessment and assume the administrative, operation and maintenance activities for the retention dam. The LMD has since been relieved of its duties which were transferred to the Lake Samish Flood Control Subzone.

F. WHATCOM COUNTY – COUNTY-WIDE STORMWATER UTILITY

RCW 36.89 allows for municipal stormwater management through the establishment of community-based stormwater utilities. These types of utilities are commonly formed to address not only stormwater infrastructure issues, but also issues related to stormwater and surface water quality, public education and outreach, flood control, and planning. The power to comprehensively address such a broad spectrum of stormwater and water resource issues makes the stormwater utility an appealing choice for addressing county-wide issues. Utility funding is usually accomplished through user fees based upon a property's percentage of impervious surface. User fees charged must establish a connection between the fee amount and the benefit received. The utility's funding plan must decide if

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both developed and undeveloped properties will be assessed and what fees will be assessed for public roadways and other public properties.

In recent years, the County has investigated the possible establishment of a stormwater utility as a means to plan, provide, and fund a county-wide stormwater program. A comprehensive County stormwater utility could; provide a baseline level of stormwater services throughout the county, ensure compliance with current Western Washington Phase II Permit (Phase II) regulations, and be responsive to the specialized stormwater needs of various sensitive watersheds and water resources within the County. Additional information on the stormwater utility approach is included in the report “National Pollutant Discharge Elimination System Phase II Stormwater Funding Study For Whatcom County” prepared by CH2MHill, December 2010.

G. STORMWATER UTILITY DISTRICT – LWWSD CONTROLLED

An option available to the LWWSD is to become a Stormwater Utility District within the Lake Whatcom watershed, independent of the City or the County. RCW 57.08.005 Powers, Section 7 allows the district to “construct, condemn and purchase, add to, maintain, and operate systems of drainage for the benefit and use of the district, the inhabitants thereof, and persons outside the district with an adequate system of drainage, including but not limited to facilities and systems for the collection, interception, treatment, and disposal of storm or surface waters, and for the protection, preservation, and rehabilitation of surface and underground waters, and drainage facilities for public highways, streets, and roads, with full authority to regulate the use and operation”.

Comprehensive rate setting authority is specified in both Section 7 and Section 11 for stormwater control (See Exhibit 1, District Drainage Powers – RCW 57.08.005 abbreviated). In addition, Section 10 authorizes various types of bonding for a district to “to provide for the reduction, minimization, or elimination of pollutants from those waters [lake, stream, or groundwater] in accordance with the district’s comprehensive plan”.

Unique from the other governance options, LWWSD would have complete control over planning activities, decision making, and implementation timelines by the stormwater utility. This would not be a partnering effort. Along with control over the stormwater utility, LWWSD would also assume all of the associated risk and liability and would become a separate permittee under the Phase II permit.

IV. DISTRICT INVOLVEMENT IN STORMWATER & WATER QUALITY MANAGEMENT WITHIN THE WATERSHED – DRIVING FORCES AND POSSIBLE END GOALS

As is evidenced by the governing hierarchy outlined above, the current stormwater and water quality management within the watershed is a complex and crowded field. In an effort to identify why exactly the District might want to become involved in the complex management scheme for the watershed, we have attempted to identify some of the possible driving forces and goals for that involvement. These

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lists are not meant to be exhaustive, but rather “jumping off” points for the discussions about possible future partnering efforts.

A. DRIVING FORCES

i. Lake Whatcom as a Drinking Water Source

Currently, Lake Whatcom serves as the primary drinking water supply for the majority of residents within the Lake Whatcom Basin and in the City. The current Lake Whatcom Comprehensive Stormwater Plan outlines a number of stormwater and water quality goals in management of the watershed. Managing water quality and quantity for long-term uses, with first priority being domestic water supply and prioritization of protection before treatment of Lake Whatcom water are just a couple of examples. As the primary public water purveyor to residents around the lake, the District has a vested interest in protection of the lake’s water quality.

ii. TMDL Listing of Lake Whatcom as an Impaired Water Body for Both Phosphorus and Bacteria
As previously mentioned, Lake Whatcom is currently listed as an impaired water body under Section 303d of the Federal Clean Water Act for total phosphorus and bacteria. As outlined in the Lake Whatcom Comprehensive Stormwater Plan;

“Phosphorus is a key issue because it is the limiting factor in lake eutrophication and associated water quality problems: high algae and organic matter concentrations, and taste/odor/toxicity problems from algae-produced chemicals. Phosphorus delivered by stormwater can accelerate this eutrophication. At best, these water quality problems increase treatment costs. The potential threats to maintaining the lake as a high-quality source of drinking water and to preventing large increases in costs for treatment and additional infrastructure are increasing.”

Lake Whatcom suffers from several types of water quality degradation – each to a greater or lesser degree: suspended sediment; bacterial and protozoa contamination; pesticide, heavy metals, total organic carbon, and petroleum hydrocarbons such as oil and gas from vehicles; and increase water temperatures which are harmful to fish and other aquatic life in the ecosystem. Bacteria and protozoa provide an immediate risk to public health and safety. Coliform bacteria, including E. coli, are indicators of potential contamination by other disease-causing organisms. Potential sources for bacterial and protozoa contamination include livestock, pet, and wildlife droppings, failing septic systems, and sewer system overflows.

iii. Funding Gap

As outlined above, currently many of the County’s and City’s stormwater and water quality management programs are suffering from a lack of funds. Implementation of the capital improvement projects outlined in the Lake Whatcom Comprehensive Stormwater Plan is behind schedule because of budgetary shortfalls. These County projects are currently being funded by the County tax payers as a

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whole. There is currently no system in place which directly links those who benefit to those who pay to secure that benefit.

B. POSSIBLE END GOALS

i. Protection of Public Health and Safety

Through its public sewer system, the District currently plays one of the most crucial roles in the watershed related to water quality improvement and protection of public health and safety. Despite this, there is much more that can be done to address the issue in the area of stormwater management and water quality treatment within the basin. The District is in a unique position to effect improvement. The District boundaries completely surround the lake and encompass some of the most intensely developed areas within the watershed. Partnering for the improvement of stormwater and surface water quality in the area would be a direct extension of the stewardship role District currently plays.

ii. Reduced Treatment Costs

As the public water purveyor for the greater portion of the Lake Whatcom basin, any improvement to the water quality of the lake could result in treatment cost savings for the District and for the District's rate payers.

iii. Funding Assistance

By partnering with one or more local agencies, the District may be able to fill some of the existing funding gaps related to:

- public outreach and education programs related to stormwater and water quality improvement,
- oversight and inspection programs related to both private stormwater facilities and onsite sewage disposal,
- implementation of planned stormwater treatment CIPs identified in the *Lake Whatcom Comprehensive Stormwater Plan*,
- compliance with current Ecology Phase II permit requirements, and/or
- many other stormwater and water quality related projects and programs.

iv. Habitat Protection

Not only is Lake Whatcom the sole source for water consumption by residents living near the lake and throughout the City, but it also provides crucial habitat to fish in the lake, downstream of the lake in Whatcom Creek, and also for the Whatcom Falls Fish Hatchery. A healthy fish population provides enjoyment to sport fishers in addition to contributing to the overall health of the lake ecosystem.

DOE [2008] released water quality study findings for Lake Whatcom that go into great detail to describe the effect of reduced levels of dissolved oxygen and the correlated phosphorus levels on water quality and aquatic organisms.

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“The health of fish and other aquatic species depends on maintaining an adequate supply of oxygen dissolved in the water. Growth rates, swimming ability, susceptibility to disease, and the relative ability to endure other environmental stressors and pollutants are all affected by dissolved oxygen levels” [Pickett and Hood, 2008].

Reduction of phosphorus will also limit algal growth, which in turn increases dissolved oxygen levels.

V. SUMMARY

There are currently many opportunities available to the District to assist in the ongoing stormwater and water quality improvement efforts within the Lake Whatcom Basin. Choosing the right partnering relationship(s), governance type, and project end goals will be critical to building a successful program. The current field for stormwater and water quality management within the basin is crowded with many inter-related and sometimes conflicting mandates that are murky with regard to execution and priority. The District must choose the management areas which are most relevant to their own agency mandate and where they feel they can make the most difference.

The District would ideally like to partner with the City and the County in protecting the quality of Lake Whatcom through stormwater management efforts. Both the JMUSA and interlocal agreement would be potential options for this approach. Becoming a separate stormwater utility is also a potential option if the County and/or the City do not take action to address lake water quality. Below we have summarized what we feel is the District’s most advantageous governance option for setting up a management partnering relationship. We’ve also included a list of some of the key issues to keep in the forefront when developing any joint stormwater and water quality management strategy.

A. OPTIMAL GOVERNANCE OPTION FOR LOCAL AGENCY PARTNERING – JMUSA

After reviewing the possibilities, we feel that the JMUSA governing option provides the best option for the District when embarking on a joint stormwater management strategy for the watershed. A JMUSA would allow partnering with the County and/or City by creating a separate legal entity. Formation would not require any of the cost or complications associated with obtaining boundary review board approval, state approval or holding a public vote. The governing RCW specifically requires that the JMUSA agreement address many of the crucial operating issues up-front, (i.e. member financial obligations, process for adding members, conditions for withdrawal, determination of public works laws under which the JMUSA will operate, amendment process, and process for dissolution), limiting District uncertainty.

Although a JMUSA is unable to tax, it does have the ability to set rates and collect fees. This ability would be similar to the watershed fee charged by the City to their residents both inside and outside of the watershed, who rely on Lake Whatcom as their primary potable water source. The Lake Whatcom Watershed Land Acquisition and Preservation Program is billed to City customers as a base rate combined with a price per cubic foot of water consumed. Through a JMUSA, uniform rates or classes of

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rates could be likewise adopted. Since the governing board of directors must be made up of elected officials from the member governments, the District would be guaranteed a voice in the decisions regarding policy, funding and implementation.

If there is no interest from other entities to create a JMUSA, the District would still be able to partner with the City and/or County through an interlocal agreement (not a separate entity), however, funding would be restricted to budget allocations from the participating members or issuance of bonds.

Lastly, becoming its own stormwater district is an option available if it is determined that the District can more effectively accomplish water quality improvement and lake protection on their own. All of the other governing options detailed above such as the cooperative watershed management partnership, County flood control subdistrict, and Lake and/or Beach management District are not as desirable for the reasons previously mentioned in Section III..

The only real drawback to the JMUSA for this application is that the District would need to already be “in the business” of stormwater and water quality management prior to entering into a JMUSA and, under RCW 57, must adopt a comprehensive plan outlining its goals and responsibilities with respect to stormwater and water quality activities. This drawback is a bit of “red herring”, however, because the District undoubtedly will want to prepare an informed plan before committing to any joint partnering effort, and has already begun the process with this report and the subsequent scoping effort that will result in a “stormwater” chapter for the District’s upcoming comprehensive sewer plan update.

B. KEY ISSUES TO BE AWARE OF IN DETERMINING ANY JOINT STORMWATER MANAGEMENT STRATEGY

Within the development of any joint stormwater management strategy, there are a few key issues of which we feel the District should be aware:

- Public Support and Public Outreach – For the District to successfully expand its services to include a stormwater and water quality management component, local public support of the Lake Whatcom residents will be crucial. Early and frequent public outreach and education will most likely be an important component for the success of any agency partnership.
- Importance of Establishing Clear Goals and Timelines for Implementation – By establishing clear, identifiable goals at the outset and tying the accomplishment of those goals commitment to a specific timeline for implementation, the District will avoid entering into an open-ended partnership whose accomplishments are impossible to track and whose costs are difficult to justify.
- Avoid Inadvertent Assumption of Statutory Authority – Earlier in this brief, we provided an overview of the existing management hierarchy associated with stormwater and water quality management in the watershed. Many of the management and regulatory programs detailed are dictated by specific federal, state, and/or local statutes. The District is currently required under its charter to provide public water and sewer service within its boundaries. Before expanding

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into stormwater and water quality management activities within the watershed, the District should consult its legal counsel to ensure that they are not inadvertently assuming any liability related to the statutory requirements for which another agency is responsible.

- Retain Direct Joint Authority – Any joint partnering effort will probably result in the expending of District resources in the form of money and/or manpower. To offset, the District will likely want to enter into a local agency partnership which allows joint governing authority and guarantees them a voice in the decisions regarding policy, funding and implementation.

VI. REFERENCES

CH2M HILL. *Lake Whatcom Comprehensive Stormwater Plan*. Prepared for Whatcom County Public Works. March 2008

Department of Ecology,, *The Lake Whatcom Watershed Total Phosphorus and Bacteria TMDLs: WQ Study Findings, Volume 1*, Pickett and Hood. November 2008.

Lake Whatcom Reservoir Management Program. 2010. Website: <http://lakewhatcom.wsu.edu/>. A joint effort of the City of Bellingham, Whatcom County, and Lake Whatcom Water and Sewer District.

VII. ATTACHMENTS

EXHIBITS

Exhibit 1 – District Drainage Powers – RCW 57.08.005 (abbreviated)

TABLES

Table 1 - Summary of Governance Options

FIGURES

Figure 1 - Stormwater & Water Quality Management Hierarchy within the Lake Whatcom Watershed

Figure 2 - Lake Whatcom Watershed Jurisdictional Map

Figure 3 - Private Flow-Control and Water Quality Facilities within the Lake Whatcom Watershed

Exhibit #1 – District Drainage Powers - RCW 57.08.005 (abbreviated)

(7)(a) To construct, condemn and purchase, add to, maintain, and operate systems of drainage

(b) The rate a district may charge under this section for storm or surface water sewer systems shall be reduced by a minimum of ten percent for any new or remodeled commercial building that utilizes a permissive rainwater harvesting system.

(c) Drainage facilities may include natural systems. Drainage facilities may include facilities which result in combined drainage facilities and electric generation, except that the electricity generated thereby is a by-product of the drainage system.

(10) Where a district contains within its borders, abuts, or is located adjacent to any lake, stream, groundwater as defined by RCW 90.44.035, or other waterway within the state of Washington, to provide for the reduction, minimization, or elimination of pollutants from those waters in accordance with the district's comprehensive plan, and to issue general obligation bonds, revenue bonds, local improvement district bonds, or utility local improvement bonds for the purpose of paying all or any part of the cost of reducing, minimizing, or eliminating the pollutants from these waters;

(11) Subject to subsection (7) of this section, to fix rates and charges for water, sewer, reclaimed water, and drain service supplied and to charge property owners seeking to connect to the district's systems, as a condition to granting the right to so connect, in addition to the cost of the connection, such reasonable connection charge as the board of commissioners shall determine to be proper in order that those property owners shall bear their equitable share of the cost of the system...

...A water-sewer district shall not provide on-site sewage system inspection, pumping services, or other maintenance or repair services under this section using water-sewer district employees unless the on-site system is connected by a publicly owned collection system to the water-sewer district's sewerage system, and the on-site system represents the first step in the sewage disposal process.

STORMWATER & WATER QUALITY MANAGEMENT WITHIN THE LAKE WHATCOM WATERSHED
POTENTIAL GOVERNANCE AND FUNDING OPTIONS AVAILABLE TO LAKE WHATCOM WATER & SEWER DISTRICT

6/14/2013

LEGEND

	MOST FAVORABLE GOVERNANCE OPTION
	LESS FAVORABLE GOVERNANCE OPTION
	LEAST FAVORABLE GOVERNANCE OPTION

TABLE 1 - SUMMARY OF GOVERNANCE OPTIONS

GOVERNANCE OPTION	STATUTORY AUTHORITY	FORMATION		LEADERSHIP		MANAGEMENT POWERS	FUNDING
		MEMBERSHIP PARTICIPANTS	AGREEMENT APPROVAL	SEPARATE LEGAL ENTITY	GOVERNING BODY	SERVICES WHICH CAN BE PROVIDED	FUNDING MECHANISMS
Joint Municipal Utility Service Authority / Agreement (JMUSA)	RCW 39.106 (2011)	Cities, Towns, Counties, Special Purpose Districts, Federally Recognized Tribes	Legislative Authority of Each Member; No Boundary Review Board, Public Vote, or County/State Approval Required	YES - Municipal Corporation	Joint Board of Directors - Must be elected officials from the member governments.	Water;Sewer; Point & Non-Point Water Pollution Monitoring Programs; & Management and Handling of Stormwater, Surface Water, Drainage, & Flood Waters	Rates & Charges; Revenue Bonds; Pledge Revenues; Local Improvement District Assessments (member consent), no ability to tax
MOST FAVORABLE GOVERNANCE OPTION Partnership Opportunities, Concise Agreement Process, Separate Legal Entity, LWWSD Part of Leadership, Can Fund with Rates & Charges Linking Those Who Benefit to Those Who Pay							
Interlocal Agreement	RCW 39.34	Federal/State Agencies, Counties, Cities, Special Purpose Districts	Agreement shall be filed pursuant to RCW 39.34.040 with the county auditor of each county lying within the geographical watershed area to be addressed by the partnership.	NO	Administrator or Joint Board	Water, Sewer, Misc. Utilities and Facilities	Contributions from member agencies, or bonds. Because an interlocal is not a separate legal entity - bond issuance is difficult. Participating agencies may appropriate funds and provide personnel, property, & services. Joint boards are authorized to accept loans or grants of federal, state, or private funds.
LESS FAVORABLE GOVERNANCE OPTION Partnership Opportunity with LWWSD Part of Leadership, but Not a Separate Entity - So No Rates and Charges so Harder to Link Those Who Benefit to Those Who Pay							
Cooperative Watershed Management	RCW 39.34.210	Federal/State Agencies, Counties, Cities, Special Purpose Districts	Agreement shall be filed pursuant to RCW 39.34.040 with the county auditor of each county lying within the geographical watershed area to be addressed by the partnership.	EITHER - Can be set up as either a separate legal entity or not.	Administrator or Joint Board	Two or more public agencies form a partnership to implement any or all elements of a watershed management plan.	Contributions from member agencies, or bonds. Participating agencies may appropriate funds and provide personnel, property, & services. Joint boards are authorized to accept loans or grants of federal, state, or private funds. Water District may authorize up to 10% of its water-related revenues for implementation.
LESS FAVORABLE GOVERNANCE OPTION Partnership Opportunity with LWWSD Part of Leadership, but Not a Separate Entity - So No Rates and Charges so Harder to Link Those Who Benefit to Those Who Pay							
County Flood Control Sub-District	RCW 86.15.25	County - Not a partnership mechanism	Formation by vote of County Board of Commissioners or by petition from the public.	Quasi municipal corporation	County Board of Commissioners or elected Supervisors if population of sub-district is >2,000. Provision for local advisory committee included.	Flood water and stormwater control	Excess levies, assessments, regular levies, charges, general obligation bonds, and revenue bonds
LEAST FAVORABLE GOVERNANCE OPTION Not a Partnership Mechanism, County Leadership with LWWSD Limited to Advisory Role, Quasi Municipal Corporation - No Rates and Charges so Harder to Link Those Who Benefit to Those Who Pay							
Lake and/or Beach Management District	RCW 36.61	County - Not a partnership mechanism	County Ordinance	NO	County Board of Commissioners with a provision for a local advisory committee	(1) Controlling or removing aquatic plants and vegetation; (2) improving water quality; (3) controlling water levels; (4) treating and diverting storm water; (5) controlling agricultural waste; (6) studying lake or marine water quality problems and solutions; (7) cleaning and maintaining ditches and streams entering the lake or marine waters or leaving the lake; (8) monitoring air quality; and (9) the related administrative, engineering, legal, and operational costs, including the costs of creating the lake or beach management district.	Special assessments, rates and charges or bonds
LEAST FAVORABLE GOVERNANCE OPTION Not a Partnership Mechanism, County Leadership with LWWSD Limited to Advisory Role, Not a Separate Legal Entity but Rates and Charges Allowed Linking Those Who Benefit to Those Who Pay							
Whatcom County - Countywide Stormwater Utility	RCW 36.89	County - Not a partnership mechanism.	County Resolution	NO	County Board of Commissioners	Resolution for revenues by fixing rates and charges, issuing revenue bonds, or charging assessments for the furnishing of service to those served or receiving benefits or to be served or to receive benefits from any storm water control facility or contributing to an increase of surface water runoff.	Rates and charges, Revenue Bonds, Assessments
LEAST FAVORABLE GOVERNANCE OPTION Not a Partnership Mechanism, County Leadership with Possible Advisory Role for LWWSD, Not a Separate Legal Entity but Rates and Charges Allowed Linking Those Who Benefit to Those Who Pay							

LAKE WHATCOM STORMWATER AND WATER QUALITY MANAGEMENT HIERARCHY

State Level Governance

Department of Ecology

Department of Natural Resources

Department of Fish and Wildlife

Local Level Governance

Whatcom County

Lake Whatcom Water & Sewer District *

City of Bellingham

Private Level Governance

Sudden Valley Community Association

Private Storm Facilities - Flow Control & WQ

Lake Whatcom End Users

County Facilities

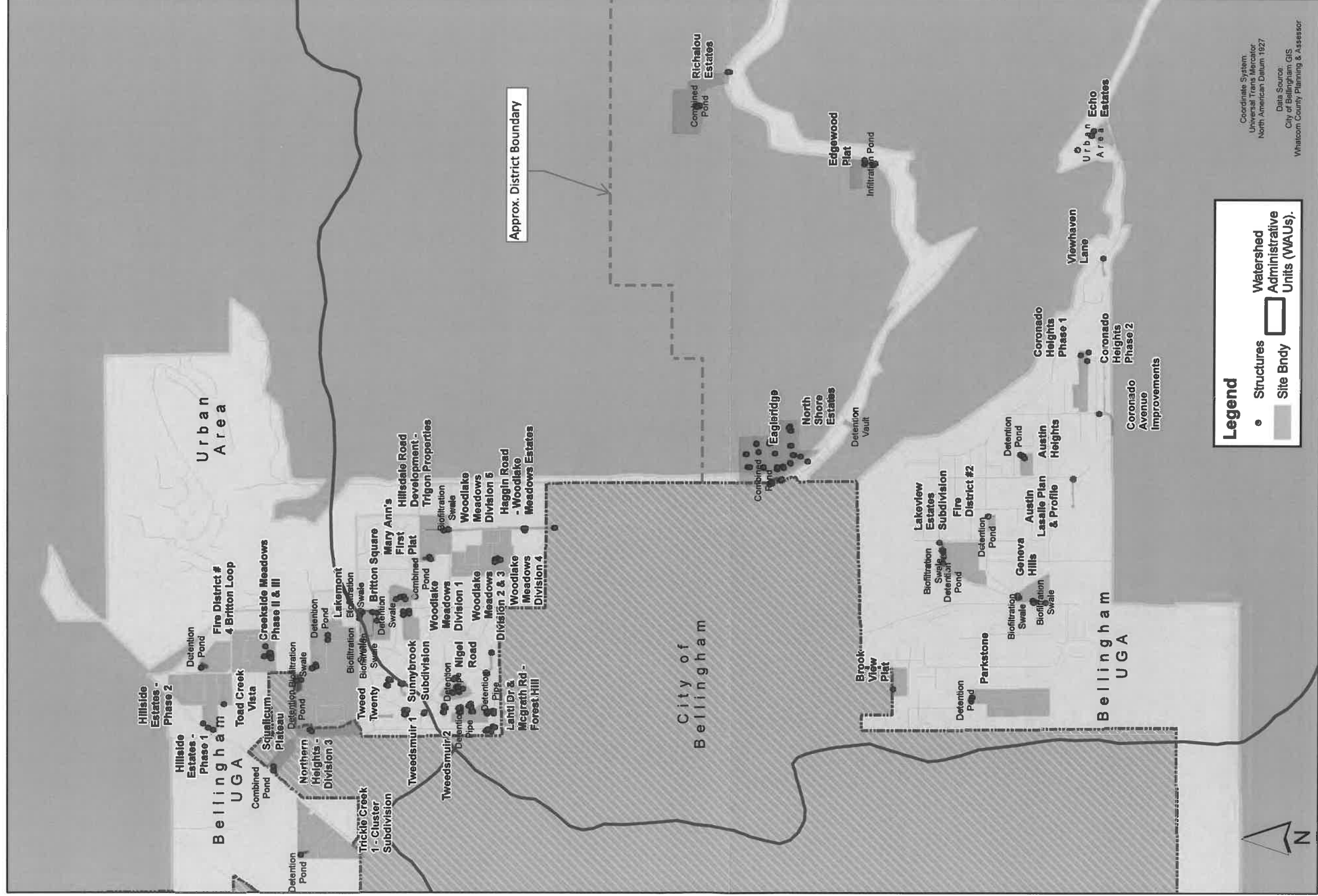
Sudden Valley

LWWSD users

Other Districts Users

Residents City Facilities City of Bellingham

*The LWWSD connection to end users is included because of contributions to watershed water quality currently provided by the district in addition to the water and sewer services. The connection also represents the potential to further impact water quality contributions.



1 inch = 2,000 feet

Wilson
SURVEY / ENGINEERING

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805 DUPONT STREET
BELLINGHAM, WA 98225
(360) 733-5100 FAX (360) 647-5051
www.wilsonengineering.com

NPDES Phase II Permit Areas

WHATCOM COUNTY **FIGURE 3** WASHINGTON

Private Stormwater Systems

Geneva / North Shore

DATE MAY 2013

SCALE 1:24,000

JOB NUMBER 2013-014

SHEET 1

OF 1



LAKE WHATCOM WATER AND SEWER DISTRICT
AGENDA BILL

DATE SUBMITTED:	September 4, 2013		
TO BOARD OF COMMISSIONERS			
FROM: Debi Hill	MANAGER APPROVAL <u>B.H.</u>		
MEETING AGENDA DATE:	September 11, 2013		
AGENDA ITEM NUMBER:	5.B.		
SUBJECT:	Monthly Budget Analysis		
LIST DOCUMENTS PROVIDED ⇒ NUMBER OF PAGES INCLUDING AGENDA BILL:	1. Monthly Budget Analysis as of 8/31/2013		
	2.		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL/ OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

Information only

FISCAL IMPACT

n/a

RECOMMENDED BOARD ACTION

n/a

PROPOSED MOTION

n/a



MONTHLY BUDGET ANALYSIS

Description		2013 Budget	YTD 8/31/2013	
OPERATING FUND - 401			67%	
REVENUES				
401-343-20-00	Latecomer Fee	1,000	-	0%
401-343-40-10	Water Sales Metered (9% rate increase) *	1,601,383	975,624	61%
401-343-40-18	Water Sales Lock/Unlock	9,500	2,079	22%
401-343-40-19	Water Sales Other (billing suspension,transfer fee etc.)	25,000	18,437	74%
401-343-50-11	Sewer Service Residential (4.5% rate increase) *	3,357,845	2,270,207	68%
401-343-50-19	Sewer Service Other (transfer fee, return item etc.)	1,300	6,546	504%
401-359-80-00	Late Charges / Lien fees	65,000	56,331	87%
401-360-10-00	Bank fees	2,000	1,815	91%
401-361-11-10	Investment Interest	-	194	
401-369-10-00	Sale of scrap/junk recycle		20,439	
401-379-10-20	Permits Operation portion (5 new connection permits)	15,000	21,021	140%
401-398-20-00	Insurance Recoveries		4,235	
401-397-10-40	Transfers in from ULID 18 Fund 480		165,000	
TOTAL REVENUES		5,078,028	3,541,927	70%

MONTHLY BUDGET ANALYSIS	Description	2013	YTD	
OPERATING FUND - 401		Budget	8/31/2013	
			67%	
EXPENDITURES				
401-53X-10-10	Payroll (2.3% cola plus step increases - 2013)	1,406,000	937,204	67%
401-53X-10-20	Personnel Benefits	560,000	346,082	62%
401-53X-10-31	Gen Admin Supplies (includes copy machine purchase)	25,000	16,974	68%
401-53X-10-32	Meetings/Team building	2,000	1,576	79%
401-53X-10-40	Bank Fees (BofA, AFTS)	8,000	5,778	72%
	County Auditor filing fees (Simplifile)	6,000		
	DataBar (Statement processing) Moved from Gen Admin Supplies	20,000		
	Answering Service	1,500		
	BIAS Financial Software	20,000		
	Webcheck	2,000		
	GE Scada System Software Maintenance	7,500		
	WA State Auditor	10,000		
	Wilson Engineering	10,000		
	Sewer Comp Plan Update C13-15	60,000		
	Resick and Hansen	35,000		
	Peninsula Financial Consulting (City Sewer Agreement)	6,000		
	FCS Rate Study	50,000		
	3D - Computer support	12,000		
	Data Pro - Time clock system	3,000		
	Watchguard	5,000		
	Vamer, Systems CPA firm	10,000		
	Tetra Tech	5,000		
	Cartograph	8,000		
	ESRI (Engineering)	1,000		
	Rockwell	500		
	Inovise (Engineering)	2,000		
	Custodial/Building maint. services/Security	11,000		
	Landscaping service	4,000		
	Interlocal - Lake Whatcom Management Program	25,000		
	Interlocal - Invasive Species	45,000		
	GIS with Whatcom County	1,000		
	Oasys (Docuware/copy machine contract)	5,000		
	Generator Load Testing	18,000		
	Cyberlock software	1,000		
	Misc (Bid notices etc.)	1,000		
401-53X-10-41	Professional Services (TOTAL)	385,500	230,278	60%
401-53X-10-42	Communication	51,500	30,652	60%
401-53X-10-43	Memberships/Dues	13,000	12,184	94%
401-53X-10-44	B&O Taxes	150,000	109,708	73%
401-53X-10-45	Admin Lease	3,000	1,790	60%
401-53X-10-46	Insurance	96,000	158	0%
401-53X-10-49	Admin Misc.	2,000	130	7%
401-53X-40-43	Training & Travel	30,000	20,738	69%
401-53X-40-44	Tuition reimbursement	6,000	-	0%
401-53X-49-40	Insurance claims	-	2,500	
401-53X-50-31	Maintenance Supplies	45,000	62,122	138%
401-53X-50-48	Oper Repair/Maint (includes Asset Mgmt tools)	85,000	21,612	25%
	Edge Analytical - water	5,000		
	Emergency Response - sewer tank trucks	5,000		
401-53X-60-41	Operations Contracted (TOTAL)	10,000	6,148	61%
401-534-60-47	Water Ops City of Bellingham	30,000	13,429	45%
401-535-60-47	Sewer Ops City of Bellingham	605,000	350,000	58%
401-53X-80-31	Operations Gen Supplies	60,000	24,833	41%
401-53X-80-32	Operations Fuel	40,000	15,985	40%
401-53X-80-34	Safety supplies	12,000	7,307	61%
401-53X-80-47	General Utilities	200,000	143,890	72%
401-53X-80-49	Laundry	5,000	1,224	24%
	TOTAL OPERATING EXPENSES	3,830,000	2,362,303	62%
TRANSFERS				
401-597-10-00				
	Transfers Out to Capital Projects Fund 420	790,000	85,000	
	Transfers Out to 2009 Bond Debt Service Fund 450	445,500	109,450	
	Transfers Out to Water Loan Debt Service Fund 470	92,000	66,075	
	TOTAL EXPENDITURES	5,157,500	2,622,828	
OPERATING FUND	REVENUES	5,078,028	3,541,927	
	EXPENDITURES	(5,157,500)	(2,622,828)	
	CASH/INVESTMENTS BALANCE		1,329,613	

MONTHLY BUDGET ANALYSIS	Description		2013 Budget	YTD 8/31/2013	
RATE FUNDED SYSTEM REPLACEMENT FUND - 415					
415-361-11-00	Investment Interest		-	-	
	TOTAL REVENUES		-	-	
415-597-10-00	Transfer out to System Reinvestment Fund 420		13,500	13,538	
	TOTAL EXPENDITURES		13,500		
RATE FUNDED SYSTEM REPLACEMENT FUND	REVENUES		-	-	
	EXPENDITURES		(13,500)	-	
	CASH/INVESTMENTS BALANCE			-	

MONTHLY BUDGET ANALYSIS		Description	2013 Budget	YTD 8/31/2013
SYSTEM REINVESTMENT FUND - 420				
420-343-40-19		DEA Permits	2,500	-
420-361-11-00		Investment Interest	-	-
420-379-10-30		Permits Capital Portion (5 permits for 2012)	35,000	41,560
420-379-10-40		Latecomer Fees	500	
420-397-10-00		Transfers In from Operating Fund 401	790,000	85,000
		Transfer In from System Replacement Fund 415	13,500	13,538
		TOTAL REVENUES	841,500	126,560
420-534-10-41		DEA Contracted Services	2,500	3,429
420-534-60-41		Contracted Operations	-	
420-534-90-61		DEA Refunds	-	
420-594-38-60		Capital Outlay		
		Previous Projects	271,400	
	C10-06	Sewer Emergency Response Equipment	7,700	1,005
	C12-02	SVWTP Coatings		965
	C12-03	Water Meter Data Collectors	22,000	
	C12-05	CMOM - Smoke testing		5,752
	C12-06	Agate WTP Restroom	8,000	6,273
	C12-07	Reservoir drains to daylight	13,000	
	C12-08	Lowell & Oriental PRVs		11,241
	C12-09	SVWTP Raw Motors	4,000	3,254
	C12-10	SVWTP Generator	56,200	
	C12-13	Sewer Camera Equipment	80,000	12,677
	C12-14	Dead end blow offs	38,000	
	C12-16	SVCA Polo Park Bridge	40,000	10,499
	C12-18	Sewer I & I Update	2,500	2,942
		New Projects	565,000	
	C13-02	CMOM Projects	88,000	
	C13-03	SVWTP Diesel Generator	325,000	100,090
	C13-04	Cathodic Corrosion protection	75,000	
	C13-05	Johnson well house	10,000	7,986
	C13-06	Replace air/vac valves	8,000	7,820
	C13-07	Portable dehumidifiers	3,000	3,310
	C13-08	Backup benchtop analyzer	3,000	
	C13-09	Demolition hammer	1,000	815
	C13-10	Water Service rebuilds	12,000	2,673
	C13-11	Thermal Imager	3,000	
	C13-12	Shop Facility Improvements	5,000	4,598
	C13-13	Safety Grates at Pump Stations	12,000	2,624
	C13-14	Server upgrade	10,000	
		Water main relocation (Geneva & S Fremont)	10,000	
		TOTAL EXPENDITURES	838,900	187,853
SYSTEM REINVESTMENT FUND		REVENUES	841,500	126,560
		EXPENDITURES	(838,900)	(187,853)
		CASH/INVESTMENTS BALANCE		4,660

MONTHLY BUDGET ANALYSIS	Description		2013 Budget	YTD 8/31/2013	
SEWER/STORM WATER CONTINGENCY FUND - 425					
425-361-11-00	Investment Interest			10	
425-397-10-00	Transfer in from ULID 18 Fund 480		1,000,000	1,000,000	
	Transfer in from Bond Reserve Fund 490		178,175	178,202	
	TOTAL REVENUES		1,178,175	1,178,212	
425-594-38-64	Machinery/Equipment		210,000	215,108	
	Comp Plan Stormwater Chapter		27,000		
	TOTAL EXPENDITURES		237,000	215,108	
SEWER/STORM WATER CONTINGENCY FUND	REVENUES		1,178,175	1,178,212	
	EXPENDITURES		(237,000)	(215,108)	
	CASH/INVESTMENTS BALANCE			960,940	

MONTHLY BUDGET ANALYSIS		Description	2013 Budget	YTD 8/31/2013	
CAPITAL BOND PROJECTS FUND (RESTRICTED) - 430					
430-361-11-00		Investment interest	-		
		TOTAL REVENUES	-		
430-594-38-63		Capital Outlay	-		
	C09-01	Cable-Ranch-PM Pump stations	63,000	520	
	C09-11	SVWTP Control System	24,000	4,497	
		TOTAL EXPENDITURES	87,000	5,017	
CAPITAL BOND PROJECTS FUND		REVENUES	-		
		EXPENDITURES	(87,000)	(5,017)	
		CASH/INVESTMENTS BALANCE		77,256	

MONTHLY BUDGET ANALYSIS	Description		2013	YTD	
			Budget	8/31/2013	
2009 BOND DEBT SERVICE FUND - 450					
450-361-11-00	Investment interest				
450-397-10-00	Transfers in from Operating Fund 401		445,500	109,450	
	TOTAL REVENUES		445,500	109,450	
450-535-10-41	Bond Admin Fee				
450-591-38-83	Bond Interest payments		225,500	109,450	
450-591-39-72	Redemption of Long Term Debt		220,000	-	
	TOTAL EXPENDITURES		445,500	109,450	
2009 BOND DEBT SERVICE FUND	REVENUES		445,500	109,450	
	EXPENDITURES		(445,500)	(109,450)	
	CASH/INVESTMENTS BALANCE			26	

MONTHLY BUDGET ANALYSIS	Description		2013	YTD	
			Budget	8/31/2013	
2009 BOND RESERVE FUND (RESTRICTED) - 460					
460-361-11-00	Investment interest		3,000		
	TOTAL REVENUES		3,000	-	
	TOTAL EXPENDITURES		-		
2009 BOND RESERVE FUND	REVENUES		3,000	-	
	EXPENDITURES		-	-	
	CASH/INVESTMENTS BALANCE			501,181	

MONTHLY BUDGET ANALYSIS	Description		2013	YTD	
			Budget	8/31/2013	
WATER LOANS DEBT SERVICE FUND - 470					
470-361-11-10	Investment Interest		-		
470-397-10-00	Transfers In from Operating Fund 401		92,000	66,075	
	TOTAL REVENUES		92,000	66,075	
470-591-38-79	Redemption of Long Term Debt		74,542	56,192	
470-592-34-83	Debt Service Interest Loan 44		6,385		
470-592-34-83	Debt Service Interest Loan 119		894	805	
470-592-34-83	Debt Service Interest Loan 064		10,395	9,450	
	TOTAL EXPENDITURES		92,216	66,447	
WATER LOANS DEBT SERVICE FUND	REVENUES		92,000	66,075	
	EXPENDITURES		(92,216)	(66,447)	
	CASH/INVESTMENTS BALANCE			-	

MONTHLY BUDGET ANALYSIS				
	Description		2013	YTD
			Budget	8/31/2013
ULID 18 LOAN DEBT SERVICE FUND (RESTRICTED) - 480				
480-361-11-10	Investment Interest		100	18,136
480-361-50-00	ULID 18 Interest/Penalties		40,000	37,101
480-379-10-30	Latecomers Fee		3,000	5,711
480-156-40-00	Current ULID 18 Principal Payments		60,000	69,026
480-397-10-00	Transfers In from ULID 18 Reserve Fund 490		178,175	
	TOTAL REVENUES		281,275	129,974
480-535-10-49	Sewer Debt Service Charges Misc		400	158
480-591-35-79	Redemption of Long Term Debt		3,000,000	2,663,577
480-592-35-83	Debt Service Interest Loan 44A			1,449
480-592-35-83	Debt Service Interest Loan 44B			8,372
480-592-35-83	Debt Service Interest Loan 063			6,321
480-597-10-01	Transfers Out to Operating Fund 401			165000
480-597-10-25	Transfers Out to Sewer/SW Contingency Fund 425		1,000,000	1,000,000
	TOTAL EXPENDITURES		4,000,400	3,844,877
ULID 18 LOAN DEBT SERVICE	REVENUES		281,275	129,974
	EXPENDITURES		(4,000,400)	(3,844,877)
	CASH/INVESTMENTS BALANCE			3,819

MONTHLY BUDGET ANALYSIS			2013	YTD	
	Description		Budget	8/31/2013	
ULID 18 LOAN RESERVE FUND (RESTRICTED) - 490					
490-361-11-10	Investment Interest		175		
	TOTAL REVENUES		175	-	
490-597-10-00	Transfers out to Sewer/SW Contingency Fund 425		178,175	178,202	
	TOTAL EXPENDITURES		178,175	178,202	
ULID 18 LOAN RESERVE FUND	REVENUES			-	
	EXPENDITURES			178,202	
	CASH/INVESTMENTS BALANCE			-	



LAKE WHATCOM WATER AND SEWER DISTRICT

AGENDA BILL

DATE SUBMITTED:	September 4, 2013		
TO BOARD OF COMMISSIONERS			
FROM: Bill Hunter and Staff	MANAGER APPROVAL <u>B.H.</u>		
MEETING AGENDA DATE:	September 11, 2013		
AGENDA ITEM NUMBER:	5.C.		
SUBJECT:	Summary of Existing District Projects		
LIST DOCUMENTS PROVIDED ⇒	1. September 2013 Summary of Existing District Projects		
NUMBER OF PAGES INCLUDING AGENDA BILL:	2.		
	3.		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input type="checkbox"/>	INFORMATIONAL/ OTHER <input checked="" type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

Information only

FISCAL IMPACT

n/a

RECOMMENDED BOARD ACTION

Review and discuss

PROPOSED MOTION

n/a

LAKE WHATCOM WATER AND SEWER DISTRICT
Summary of Existing District Projects

Meeting Date	Effective Date	Prepared by
September 11, 2013	September 4, 2013	LE/BH
Status of Water and Sewer Permit Issuance		
SCOPE	Provide a monthly update on permit activity.	
STATUS		Permits Issued 2013
		Permits Issued 2012
	No of permits issued	9
	No of permits projected 2013	5

Completed Capital Projects in 2013	
C0911	Sudden Valley Water Treatment Plant Control System and Telemetry
*C1006	Sewer Emergency Response Equipment (2)
*C1206	Agate Heights WTP Restroom
C1209	Sudden Valley Water Treatment Plant Raw Water Meters
*C1301	Purchase Flush Truck, Vac Trailer, Boom Truck
C1305	Johnson Well Shed Roof
C1307	Replace Treatment Plant Dehumidifiers
C1309	Demolition Hammer
C1310	Water Service Rebuilds (order brass parts)
C1311	Thermal Imager
*C1312	Diesel Tank Concrete Pad at Shop

Completed DEAs in 2013	
D0534	Polly's Plat – Butch Kvamme (AKA Whatcom Overlook Short Plat)

State Required Report Status				
Report Title	Due	Preparation	Due Date	Last Date Submitted
Chlorination Report (Agate Heights)	Monthly	Kevin	Postmarked 10th of month	July 10, 2012
Community Right to Know (Hazardous Materials)	Annually	Bill and Rich	March 2013	February 25, 2013
Consumer Confidence Reports	Annually	Kevin	July	<ul style="list-style-type: none"> • Geneva – 5/13 • Sudden Valley 5/13 • Eagleridge – 5/13 • Agate Heights – 5/13
CPR/First Aid Training	Biennially	Rich	Nov/Dec 2014	Completed 12/18/12
Department of Revenue	Monthly	Debi	End of following month	September 2013
Flagging Card Training	Triennially	Rich	7/22/16	7/22/2013
Hazardous Waste Activity Report	Annual	Rich	Annual 3/31	January 31, 2013
Labor & Industries Payroll Report	Quarterly	Norma	Quarterly	April 2013
OSHA 300 Log	Annually	Rich	February 2014	January 28, 2013
Surface Water Treatment Rule Report (Sudden Valley WTP)	Monthly	Kevin	Postmarked 10th of month	July, 2012
Unemployment Report	Quarterly	Norma	Quarterly	April 2013
WA State Cross Connection Report	Annual	Rich	Annual	April 23, 2013
Washington State Financial Report	Annual	Debi	May 29	April, 2012
Water Use Efficiency Perform Report	Annual	Kevin	July 1	March 8, 2011

SAFETY PROGRAM SUMMARY (Completed by Rich Munson)	
Annual Safety Training	
Staff participates in a local government on-line training system. Each employee is assigned with an individual training course that is relevant to their position. The courses contain check points, quizzes and tests to ensure the training was completed and understood by the employee. Learners can track their progress and manage their training with their workload.	
Weekly Crew Safety Meetings	
Safety meetings for the field crew take place every Tuesday at 4:30 p.m.	
Dates of Safety Committee Meetings	
January 13, 2013 - Complete	June 10, 2013 – Complete
February 14, 2013 - Complete	July 9, 2013 - Complete
March 14, 2013 - Complete	August 13, 2013-Complete
April 8, 2013 – Complete	September 11, 2013
May 6, 2013 - Complete	
Summary Of Work-Related Injuries & Illnesses (2013)	
Total Number of Work Related Injuries Defined as a work related injury or illness that results in:	
<ul style="list-style-type: none"> • Death • Medical treatment beyond first aid • Loss of consciousness • Significant injury or illness diagnosed by a licensed health care professional • Days away from work (off work) • Restricted work or job transfer 	2
Total Number of Days of Job Transfer or Restriction (Light duty or other medical restriction)	0
Total Number of Days Away From Work (At home, in hospital, not at work)	13
Summary Of Work-Related Injuries & Illnesses (2012)	
Total Number of Work Related Injuries	9
Total Number of Days of Job Transfer or Restriction/Light Duty	24 days as of 1/3/2013
Total Number of Days Away From Work	9

Lake Whatcom Water & Sewer District
Capital Improvement Projects Staff Report

C1203 Replace Water Meter Data Collectors

Replace handheld water meter data collectors used for radio reading meters

C1203-ADM Project Administration

- 7/3/2012 Staff researching meter reading equipment options.
- 8/7/2013 Obtained quote from supplier for radio read laptop and software. Staff reviewing quote and will issue purchase order in next few days.
- 9/4/2013 Purchase order issue to vender. Equipment will be shipped soon. Onsite training and testing scheduled for mid-October 2013.

C1207 Reservoir Overflow Drains to Daylight

Route reservoir overflow drains to daylight.

C1207-ENG Project Administration and Engineering

C1207-CON Construction Contract

C1211 Wet Well Pressure Transmitters

Install pressure transmitters at sewer pump station to monitor liquid level in wet wells.

C1211-ADM Project Administration

- 7/3/2012 Staff preparing materials list for each site.
- 8/1/2012 Staff obtaining quotes for 15 pressure transducers.
- 9/6/2012 Received transducers. Crews beginning installation. Staff will coordinate with Tetra Tech for PLC programming to incorporate new SCADA information and alarms.
- 10/3/2012 Installation and SCADA integration of transducers is in progress.
- 11/6/2012 Transmitters have been installed at Strawberry Point, Edgewater, Geneva, and Dellesta. Crews continue to install equipment.
- 9/4/2013 District crew continuing to install transmitters. 6 remaining to install.

C1214 Dead End Blow Offs

Install blow offs at water main dead ends.

C1214-ADM Project Administration

- 11/28/2012 Crews researching and inspecting dead end mains. Compiling list of dead ends with proposed installation sketches.

C1214-CON Construction Contract

C1216 SVCA Polo Park Bridge Water Main

Relocate water main to accomodate new SVCA bridge.

C1216-ENG Project Administration and Engineering

- 6/4/2012 Wilson made minor adjustments to construction contract documents. Project will be advertised in Bellingham Herald in the next couple days.
- 6/21/2012 Site visit with staff and Wilson. District staff to install isolation valves in July prior to bridge construction.
- 11/6/2012 Crews in progresss of relocating water services to prepare for installation of isolation valves and thrust blocks.

- 11/28/2012 Services have been moved and isolation valves installed on the main. Crews will be installing reverse thrust blocks when weather allows this winter. District will be ready for SVCA construction summer 2013.
- 4/3/2013 SVCA moving ahead with plans to construct summer 2013. Wilson preparing task order for upcoming work/support.
- 5/1/2013 Wilson made minor adjustments to construction contract documents. Project will be advertised in the next couple days.
- 5/5/2013 Advertisement for bids. Bellingham Herald legals.
- 5/21/2013 Bid Opening. 2:05pm.
- 5/29/2013 Board award contract to Strider Construction.
- 6/5/2013 Contract agreement, bonds, and insurance are being prepared for execution.

C1216-CON Construction Contract

- 7/16/2012 Bid opening 2:10pm. Two bids received.
- 7/31/2012 Bid Opening 2:05pm
- 8/1/2012 Bid cancelled 7/26/2012. All plan holders were notified 7/27/2012 of cancellation. Cancellation was due to permitting delays on SVCA's project. Project now tentatively scheduled for Summer 2013.
- 5/5/2013 Advertisement for Bids published in Bellingham Herald
- 5/21/2013 Bid Opening 2:10pm. Two bids received.
- 5/29/2013 Award contract to Strider Construction.
- 7/10/2013 Pre-Construction Meeting
- 8/7/2013 Contractor working on creek bed and bridge abutment improvements for SVCA. No water main work yet except for isolation and removal of pipe.

C1302 2013 Inflow & Infiltration Projects

Projects to reduce inflow and infiltration into District's sewer system. Tasks may include smoke testing, manhole grouting, sewer main spot repairs, and other methods to find and reduce I&I.

C1302-ADM

- 5/1/2013 Staff is preparing bid documents
- 5/10/2013 Tentative advertisement for bids published in Bellingham Herald.
- 5/30/2013 Bid opening. One bid received.
- 6/12/2013 Tentative contract award at Board meeting.
- 7/1/2013 Pre-Con with Pro-Vac, South Whatcom Fire Authority, Whatcom Emergency Management and District Staff. Project will start July 15th
- 7/8/2013 Pro-Vac grouting manholes
- 7/22/2013 Pro-Vac start smoke testing
- 8/7/2013 Smoke testing in progress. Should be done on 8/15/2013.
- 9/4/2013 Smoke testing and manhole grouting work done. 29 manholes were repaired. Staff is reviewing smoke testing reports and reviewing close out paperwork. Project physically done, only paperwork left.

C1303 SVWTP Generator

Replace undersized SVWTP natural gas generator with larger diesel unit capable of running treatment plant with two booster pumps on plus Afternoon Beach Sewer Pump Station.

C1303-ENG Project Administration and Engineering

- 1/25/2013 Advertise Request for Proposal in Bellingham Herald. (This request includes 3 other projects: Division 22 Reservoir, Strawberry Point & Boulevard Sewer Pump Stations, and Geneva Area AC Water Main Replacement).
- 2/21/2013 RFP Submittals due 4pm
- 3/5/2013 Tentative notification of short-list for interviews
- 3/12/2013 Tentative interviews
- 3/13/2013 Tentative recommendation to Board
- 4/3/2013 Board selects RH2 as consultant at 3/13/13 meeting. Staff working with RH2 on scope/fee for Phase 1 work which includes pre-design, design, and bidding support services.
- 5/1/2013 RH2 and staff working on predesign report and options.
- 5/7/2013 RH2 will present summary of predesign report. Receive Board comments to finalize report.
- 6/5/2013 RH2 submitted 60% drawings. RH2 and staff are meeting to go through drawings/design. Permit

- 7/16/2013 applications will be submitted to County in about a week.
7/16/2013 RH2 and District staff review of 90% drawings and specifications.
7/23/2013 RH2 completes bid documents. Project advertised in Bellingham Herald.
9/4/2013 RH2 assisting staff with construction administration/inspection as needed.

C1303-CON Construction Contract

- 7/23/2013 Advertisement for Bids published in Bellingham Herald.
7/30/2013 Pre-Bid Meeting.
8/6/2013 Bid Opening at 2:05pm. Two bids received.
8/14/2013 Tentative Construction Contract Award at Board Meeting.
9/4/2013 Contract, bond, & insurance forms received from contractor. Brian Hansen reviewing and will sign "As to Form" followed by Board president signature. Staff plans to issue Notice to Proceed week of 9/9/2013.

C1304 Steel Reservoir Cathodic Protection

Install cathodic protection systems in District's steel reservoirs: Geneva, Div 30, Div 22, Div 7, & SVWTP Contact Tank.

C1304-ADM

- 2/6/2013 Staff writing contract documents and specifications. Tentative advertisement for bids in April/May 2013 with installation in summer/fall 2013.

C1306 LLR Sewer Air-Vac Valve Replacement

Replace iron/steel air-vac valves with nylon valves.

C1306-ADM

- 4/3/2013 Staff solicited quotes from local suppliers. Ordered and received 9 valves from HD Supply (low quote). There are a total of 14 valves on the force main. Remaining 5 valves will be budgeted and purchased in 2014. Crews will begin installing new valves this spring.

C1308 Backup Benchtop Analyzer

Procure backup benchtop analyzer used at treatment plants.

C1308-ADM

C1313 Safety Grates at Pump Stations

Install safety grates in several sewer pump station wet wells: Sudden Valley, Beaver, Flatcar, & North Point.

C1313-ADM

- 4/3/2013 Received Task Order from Wilson for engineering/design. Safety committee to review on 4/8/2013.
5/1/2013 Wilson preparing memo for safety grate options and obtaining budget quotes from suppliers. District review fall protection preliminary design for reservoir fall protection anchors.
5/23/2013 Wilson submitted final structural drawings for reservoir fall protection tie-offs and technical memo on pump station wet well safety grates. Staff soliciting quotes for each project. Work tentatively to occur this summer/fall.
8/7/2013 Staff soliciting quotes for grates per structural drawings and specs.

C1314 Replace Server Hardware

Replace District's server hardware. Server runs all of District's accounting, engineering, and operations software and databases.

C1314-ADM

C1315 Sewer Comprehensive Plan Update

Wednesday, September 04, 2013

The District is required to update its Sewer Comprehensive Plan every six years. The last update was completed in September 2007 and conditionally approved by the Department of Ecology in February, 2008.

C1315-PH1 Sewer Comprehensive Plan Update

- 3/6/2013 Staff and Wilson working on Task Order scope of work.
- 3/20/2013 Wilson Task Order executed. Wilson and staff beginning work on sewer comp plan update.
- 5/1/2013 Wilson working on comp plan. Staff supplying data/support as needed.
- 8/7/2013 Work in progress.
- 9/4/2013 Work in progress.

C1315-PH2 Stormwater Chapter

- 3/6/2013 Staff and Wilson working on Task Order scope of work.
- 3/20/2013 Wilson Task Order executed. Wilson beginning work on stormwater chapter.
- 5/1/2013 Wilson preparing agenda and questions for Board workshop tentatively schedule for sometime in June 2013.
- 6/18/2013 Board workshop meeting scheduled for 5pm 6/18/2013 to discuss stormwater options/goals.
- 8/7/2013 Wilson finalizing stormwater chapter per Board discuss on 6/18/2013.
- 9/4/2013 Wilson submitted final stormwater chapter. Included in 9/11/2013 meeting packet for discussion.



LAKE WHATCOM WATER AND SEWER DISTRICT
AGENDA BILL

DATE SUBMITTED:	September 4, 2013		
TO BOARD OF COMMISSIONERS			
FROM: Bill Hunter	MANAGER APPROVAL <u>B.H.</u>		
MEETING AGENDA DATE:	September 11, 2013		
AGENDA ITEM NUMBER:	5.D.		
SUBJECT:	Boulevard Sewer Pump Station Project		
LIST DOCUMENTS PROVIDED ⇒ NUMBER OF PAGES INCLUDING AGENDA BILL:	1. RH2 Scope of Work and Fee Estimate		
	2.		
	3.		
TYPE OF ACTION REQUESTED	RESOLUTION <input type="checkbox"/>	FORMAL ACTION/ MOTION <input checked="" type="checkbox"/>	INFORMATIONAL/ OTHER <input type="checkbox"/>

BACKGROUND / EXPLANATION OF IMPACT

On January 25, 2013 the District advertised a Request for Proposals in the Bellingham Herald for several upcoming District projects including Boulevard Sewer Pump Station Improvements. Proposals were received from several engineering consultants on February 21, 2013. A consultant selection committee was formed to evaluate and select the most qualified consultants for the identified projects.

RH2 Engineering was selected for the SVWTP Generator Replacement Project as well as Sewer Pump Station Improvements for Boulevard and Strawberry Point.

RH2 has prepared a scope of work and fee estimate for predesign and permitting. The agreement is time and materials not to exceed a maximum amount. The scope is similar to previous District projects RH2 Engineering has completed, including Cable Street Sewer Pump Station, Ranch House Pump Station, Afternoon Beach Pump Station, and currently the Sudden Valley Water Treatment Plan Generator Replacement Project.

The objective of this initial scope of work is to evaluate and summarize options, along with costs, for pump station replacement. Options will be presented to the Board and documented in a predesign report. The scope includes assisting the District with required environmental permits and public hearings.

At the conclusion of the initial scope of work, the preferred option will be the basis to develop a Phase 2 – Design and Bidding scope of work, and Phase 3 – Services During Construction.

FISCAL IMPACT

The current Capital Improvement Plan schedules this project for construction in 2014 and funded by District revenues. Last year, the District applied for Public Works Trust Fund (PWTF) financing for this project as well as the Strawberry Point Sewer Pump Station. The PWTF is no longer an option, therefore the original funding plan (by revenue) is recommended by staff.

In order for this project to be ready for construction summer 2014, predesign and permitting need to begin as soon as possible.

The 2013 approved budget did not allocate funds to begin this project early. However, the Operating Fund should have sufficient reserves to absorb the early expenditures for predesign and permitting (approximately \$90k). The majority of the expenses (approximately \$570k) will occur during 2014 as planned.

Staff recommends allocating up to \$90,000 from the Operating Fund in 2013 to cover early project expenses. Staff is beginning work on the draft 2014 budget and Capital Improvement Plan which will specifically identify remaining expenses and funding for this project.

The current budget estimate for the entire project is follows:

Pre-Design, Shoreline Permit:	\$ 90,000
Design, Contract Admin & Inspection:	\$220,000
Construction:	<u>\$350,000</u>
Total: \$660,000	

(Note: Estimate is based on actual costs from previous Tomb Sewer Pump Station project in 2008/2009)

RECOMMENDED BOARD ACTION

See proposed motions below.

PROPOSED MOTION

1. Authorize the General Manager to execute an agreement with RH2 Engineering for predesign and permitting on the Boulevard Sewer Pump Station Improvements project with an amount to exceed \$89,771.
2. Allocate up to \$90,000 of reserve Operating Funds for the Boulevard Sewer Pump Station Improvements Project predesign and permitting.

Exhibit A2
Lake Whatcom Water and Sewer District
Boulevard Sewer Pump Station Improvements
Scope of Work
Contract No. 1
April 2013

Background

The Lake Whatcom Water and Sewer District's (LWWSD) Strawberry Point and Boulevard Sewer Pump Stations are located along Lake Whatcom Boulevard in constrained and challenging construction environments. LWWSD requested RH2 Engineering, Inc., (RH2) to provide alternatives and design improvements to these sewer pump stations.

The Boulevard Pump Station is adjacent to two waterfront homes and approximately 5 feet below road elevation. Power and telephone lines are directly overhead limiting how construction can proceed without expensive relocation of the overhead utilities.

Based discussions with LWWSD personnel, the likely alternatives will include rehabilitation of the wetwells, including adding manhole sections to raise the finished grade to road shoulder elevations and converting the pump system to a submersible pump station, which will include new telemetry and controls, metering, and emergency power generation pig tail connection points for LWWSD's portable generator. Other options will be considered before pursuing the final design, which will be based on LWWSD's decision, with adjacent neighbors and Whatcom County (County) input.

Major Scope Elements

The major elements of this Scope of Work are summarized as follows.

- Review existing equipment and facilities.
- Meet with LWWSD staff to review design criteria.
- Develop and review alternatives.
- Develop permitting criteria, including Shoreline Substantial Development Permit and Variance, meet with the County for a pre-application meeting, and submit shoreline permit forms to the County, and attend one (1) public hearing.
- Prepare a predesign report containing a decision on alternatives related to new pumps and controls, including metering.
- Meet with the LWWSD Board of Directors and affected neighbors to review the predesign report and receive acceptance for the proposed alternatives.
- Additional permitting, design, and services during bidding and construction will be accommodated by a subsequent scope of work.

Phase 1 – Predesign and Permitting

Task 1: Project Management

Objective: Organize, manage, and coordinate disciplines and provide quality assurance and control to complete the Scope of Work on schedule and in close coordination with LWWSD staff.

Approach:

- 1.1 Prepare meeting agendas for meetings with LWWSD staff described in this Scope of Work.
- 1.2 Prepare meeting minutes for meetings with LWWSD staff described in this Scope of Work.
- 1.3 Prepare monthly invoices and provide ongoing progress updates.
- 1.4 Maintain ongoing client communications, including phone calls and emails.
- 1.5 Prepare and update project schedule.

RH2 Products:

- Meeting agendas and minutes for meetings as listed in this Scope of Work.
- Monthly invoices.
- Ongoing correspondence.

Task 2: Topographic Survey

Objective: Obtain current electronic survey data, including invert piping elevations, existing manhole wetwell piping elevations, overhead utility locations, and overhead clearance to develop predesign and future design elements.

- 2.1 Coordinate with Larry Steele and Associates (LSA) to survey the two (2) sites, including an alignment (swath) from nearest upstream manholes for temporary pumping system design. *Survey costs are included in this Scope of Work for the Boulevard Pump Station site. Horizontal datum NAD 83/91, vertical datum City of Bellingham Vertical Datum.*
- 2.2 Review force main layout upstream of Boulevard Pump Station to determine elevation change and friction loss in force main and locate transition to gravity flow.
- 2.3 Review topographic survey information on site and update survey drawings based on site review. In particular, review upstream inlet manholes for temporary pumping needs.

RH2 Products:

- LSA will provide AutoCAD® electronic survey data on a CD and one (1) paper copy to RH2.
- Provide AutoCAD and PDF electronic survey files to LWWSD.

Task 3: Information Gathering – Sewer Pump Station

Objective: Document existing pump station information, review temporary bypass locations, develop alternatives, evaluate alternatives for replacement of the sewer pump stations to accommodate LWWSD’s goals, and meet neighborhood and permit review criteria.

Approach:

- 3.1 Review as-builts provided by LWWSD and integrate into 3D AutoCAD models.

- 3.2 Document existing conditions on site, including digital photographs, measurements of pumps, intakes, precast concrete manhole, and construction records, made readily available by LWWSD.
- 3.3 Conduct one (1) meeting with LWWSD staff to review temporary pumping port locations and coordinate LWWSD-directed construction to facilitate improvements.
- 3.4 Document peak and average day flows, and historical growth rates from available LWWSD data for the site (pump run times and the 2007 *Comprehensive Sewer Plan*). *It is assumed LWWSD will provide this data via email PDF scan or hard copy mailing to RH2.*
- 3.5 Complete drawdown test at the Boulevard Sewer Pump Station to document influent flow and discharge capacity. *It is assumed that LWWSD will provide all equipment and maintenance personnel for the drawdown test.*
- 3.6 Review basins and percentage of developed and undeveloped parcels to determine growth rates within the pump station basin and identify projections for future connections to the sewer pump station. *It is assumed that GIS data will be provided by LWWSD.*
- 3.7 Compare sewer connections with average and high flows to verify flow rates and percentage of infiltration and inflow (I&I) for the pump station basin.
- 3.8 Conduct one (1) meeting with LWWSD staff to develop up to three (3) pumping alternatives for the pump station site.
- 3.9 Develop design criteria checklist from alternatives chosen in order to evaluate alternatives.
- 3.10 Provide a preliminary construction cost estimate for the Boulevard Sewer Pump Station Improvements alternatives.

RH2 Products:

- AutoCAD topographic survey data.
- Existing as-built review documentation, including historic flow and pump run times, and average day flows incorporating growth rates.
- Design and permitting criteria.
- Preliminary construction cost estimates and operations and maintenance (O&M) cost comparisons of alternatives.

Task 4: Information Gathering – Power and Telemetry

Objective: Document existing pump station electrical, power, and telemetry information. Evaluate alternatives for replacement of the generator pig tail connection and telemetry equipment to best fit LWWSD's goals and meet neighborhood and permit review criteria.

- 4.1 Review emergency power generator conditions from as-built data and maintenance records available from LWWSD. Conduct one (1) site visit to document and photograph existing systems.
- 4.2 Review telemetry conditions from as-built data and records made available by LWWSD and conduct one (1) site visit to document and photograph existing systems.
- 4.3 Meet with LWWSD staff to develop up to three (3) power supply and telemetry control alternatives for the pump station site.

- 4.4 Develop power and telemetry control design criteria for the site based on proposed pump sizing criteria developed in Task 4 and design criteria for control systems.

RH2 Products:

- Electrical and telemetry design criteria.

Task 5: Permit Identification and Submission

Objective: Review permit requirements for preferred alternatives. Prepare 20-percent plans for permit submittal. Complete permit forms and coordinate with the County.

- 5.1 Develop permit criteria for each alternative to present to the County and the preferred alternative. *It is assumed a Shorelines Substantial Development Permit and Variance and Building Permit will be required for the alternatives chosen. Any other required permits shall be under an amendment to this Scope of Work. Draft building permit submittal will be completed future scope of work and completed during the design phase.*
- 5.2 Conduct one (1) meeting with LWWSD staff to review alternatives and confirm permit criteria and permit review timelines. Provide a memorandum summarizing required permits and documenting why the permit is required.
- 5.3 Prepare for and attend a pre-application conference with County staff. *Any County fees required shall be paid for by LWWSD and are not included in this Scope of Work. It is assumed one (1) meeting can be set to address the Boulevard Sewer Pump Station site.*
- 5.4 Prepare permit forms and plans as required assuming a Shoreline Substantial Development Permit and Variance are required for the site. *Building permits and revocable encroachment (if needed) will be applied for during the design phase of this project and will be done via an amendment to this Scope of Work*
- 5.5 Attend one (1) Public Hearing for the shorelines permit process.

RH2 Products:

- A memorandum detailing required permits for chosen alternatives to be submitted via e-mail to LWWSD
- Project file to submit to the County “buy-in” on permitting approach.
- Pre-application meeting minutes.
- Shoreline Permit forms and plans for the pump station permit submittal.

Task 6: Predesign Report

Objective: Provide written report of existing conditions, alternatives, costs and chosen alternative based on design criteria, LWWSD, and neighborhood involvement.

- 6.1 Prepare project background for the Boulevard Sewer Pump Station site and describe each of the three (3) (pumping, power, and telemetry) alternatives.
- 6.2 Prepare schematic figures of the improvement alternatives.
- 6.3 Develop ranking system to include cost, neighborhood input, and LWWSD staff input to decide preferred alternative.
- 6.4 Complete draft predesign report and deliver to LWWSD for review.

- 6.5 Prepare neighborhood flyers to affected people within 200 feet of the project sites and provide PDF copy for LWWSD to produce. *It is assumed LWWSD will produce and mail the flyers.*
- 6.6 Attend and present alternatives in one (1) special public meeting with the neighborhood. Neighbors will review the alternatives via full-size posters provided by RH2. RH2 will recommend an alternative and request input from neighbors.
- 6.7 Finalize predesign report with comments provided during the special public meeting. *It is assumed the report finalization will be minor, as shown in the Fee Estimate.*
- 6.8 Attend and present preferred alternatives, including comments received during the special public meeting, to the LWWSD Board of Directors. This will include review of the predesign report and the chosen alternatives for each site. Pursue Board of Directors input and acceptance of recommended alternatives for each site.
- 6.9 Update final predesign report based on the Board of Director meeting comments. *It is assumed the report finalization will be minor, as shown in the Fee Estimate.*

RH2 Products:

- Two (2) copies of a draft predesign report.
- Draft of the finalized predesign report as a PDF on a CD, and eight (8) hard copies, including each of the three project sites, and three (3) full-size (24-inch by 36-inch) figures for the special public meeting and board meeting.
- Final predesign report – one (1) hard copy, one (1) copy for RH2 files, and (1) CD containing a PDF of the full report. All figures will be 11-inch by 17-inch format (ANSI B).

Task 7: Begin Design

Objective: Provide a limited budget to carry over to the design phase of the project to begin design of the chosen alternatives for each site. *Note: The budget for this task is intended for continuation of the project at the transition from predesign to design.*

- 7.1 Attend one (1) scoping meeting to review the proposed alternatives and design elements with LWWSD staff.
- 7.2 Begin design of the proposed improvements during same time as scope development for the final design and bidding phase.
- 7.3 Perform up to two (2) test pits at the preferred location of proposed improvements to determine bearing capacity, fill placement, settlement concerns, and groundwater location. Prepare geotechnical memorandum summarizing findings. *Note: It is assumed an LWWSD operator and backhoe can be utilized to perform the test pits.*

RH2 Products:

- Geotechnical memorandum submitted as a PDF via email.

Provided by LWWSD:

- All as-built data for the sewer pump station site.
- All flow meter and pump run and stop data available for the site for the last three (3) years. Information shall include previous drawdown testing information and pump run times.
- GIS data of pump station basins, piping and manholes, force mains, customers presently connected to the system, and lots presently vacant.

- Production and mailing of flyers for public attendance at special public meeting.
- Attendance at the following.
 - Temporary bypass meeting.
 - Alternative development meeting for pumping, power, and telemetry improvements.
 - Site visit.
 - Meeting with the County to confirm permitting criteria.
 - Special public meeting to review alternatives with affected neighbors.
 - Board meeting to review predesign report.
 - Scoping meeting for design phase.

EXHIBIT B2

**Lake Whatcom Water and Sewer District
Boulevard Sewer Pump Station Improvements
Contract No. 1
Estimate of Time and Expense**

	Description	Project Review	Senior Technical Consult	Project Manager	Project Engineer Mech/Civil	Project Engineer Electrical	Project Manager Electrical	Project Engineer Structural	Project Manager Structural	Staff Engineer Mech/Civil	Staff Scientist	Word Processor	Total Hours	Total Labor	Subconst. Cost	Total Expense	Total Cost
	Classification	Professional V Bret B	Professional VIII Rick B	Professional V Dan B	Professional V Edwin	Professional VI Chris	Professional II Mark B	Professional III Jon C	Professional VII Karen	Professional III Ryan F	Professional II Nikki	Administrative II Jacki					
Phase 1 - Predesign and Permitting																	
Task 1	Project Management																
1.1	Prepare Meeting Agendas	-	-	4	1	1	2			-	-	1	9	\$ 1,226	\$ -	\$ 14	\$ 1,240
1.2	Prepare Meeting Minutes	-	-	8	1	1	2			-	-	1	13	\$ 1,881	\$ -	\$ 15	\$ 1,896
1.3	Prepare Invoices and Provide Progress Updates	-	-	8	-	-				-	-	2	10	\$ 1,423	\$ -	\$ 3	\$ 1,426
1.4	Maintain Ongoing Client Communications, Including Phone Calls and Emails	1	2	8	2	4	2	4		-	-	-	23	\$ 3,534	\$ -	\$ 179	\$ 3,714
1.5	Prepare and Update Project Schedule	1	2	8	-	-				-	-	-	11	\$ 1,897	\$ -	\$ 88	\$ 1,966
	Subtotal	2	4	36	4	6	6	4	-	-	-	4	66	\$ 9,962	\$ -	\$ 280	\$ 10,242
Task 2	Topographic Survey																
2.1	Coordinate with LSA	-	-	4	-	-		-	-			1	5	\$ 712	\$ 4,428	\$ 14	\$ 5,153
2.2	Review Force Main Layout	-	1	4	-	-	6					1	12	\$ 1,514	\$ -	\$ -	\$ 1,514
2.3	Review Survey Information	-	-	4	-	-	4					-	8	\$ 1,048	\$ -	\$ 41	\$ 1,089
	Subtotal	-	1	12	-	-	10	-	-	-	-	2	25	\$ 3,274	\$ 4,428	\$ 56	\$ 6,243
Task 3	Information Gathering - Sewer Pump Station																
3.1	Review As-builts, Integrate into 3D Models	-		4	4	4	16	4		16	-		48	\$ 5,683	\$ -	\$ 890	\$ 6,573
3.2	Document Existing Conditions On Site	-		4	4	-				4	-		12	\$ 1,675	\$ -	\$ 203	\$ 1,878
3.3	Meet with LWWSD to Review Temporary Pumping Port Locations	-		4	-	-				-	-		4	\$ 655	\$ -	\$ 45	\$ 700
3.4	Document Peak and Average Flows	-	1	4	-	-				4	-	2	11	\$ 1,410	\$ -	\$ 121	\$ 1,531
3.5	Complete Drawdown Test	-	1	4	-	-				4	-	1	10	\$ 1,353	\$ -	\$ 128	\$ 1,481
3.6	Review Basins to Determine Future Flow Conditions	-	1	2	-	-				6	2		11	\$ 1,333	\$ -	\$ 176	\$ 1,509
3.7	Compare Flows, Future Flows and I&I	-		4	2	-				2	-	1	9	\$ 1,222	\$ -	\$ 111	\$ 1,333
3.8	Meet with LWWSD to Review Findings and Develop Alternatives	-		4	2	-				4	-	1	11	\$ 1,437	\$ -	\$ 148	\$ 1,585
3.9	Develop Design Criteria	-		4	2	-				6	2	1	15	\$ 1,800	\$ -	\$ 193	\$ 1,994
3.10	Provide Preliminary Construction Cost Estimates of Alternatives	1	1	1	2	2	4			6	-		17	\$ 2,213	\$ -	\$ 276	\$ 2,489
	Subtotal	1	4	35	16	6	20	4	-	52	4	6	148	\$ 18,782	\$ -	\$ 2,291	\$ 21,073
Task 4	Information Gathering - Power and Telemetry																
4.1	Review Emergency Power Generator Conditions	-		1	-	2	4			-	-		7	\$ 897	\$ -	\$ 103	\$ 1,001
4.2	Review Telemetry Conditions	-		1	-	2	4			-	-		7	\$ 897	\$ -	\$ 103	\$ 1,001
4.3	Meet with LWWSD to Review Findings and Develop Alternatives	-		1	-	4				-	-		5	\$ 844	\$ -	\$ 11	\$ 855
4.4	Provide Preliminary Construction Cost Estimates of Alternatives	1	1	1	-	2	4			-	-		9	\$ 1,273	\$ -	\$ 93	\$ 1,367
	Subtotal	1	1	4	-	10	12	-	-	-	-	-	28	\$ 3,912	\$ -	\$ 311	\$ 4,223
Task 5	Permit Identification and Submission																
5.1	Develop Permit Criteria	-	-	1	-	-				-	12	1	14	\$ 1,113	\$ -	\$ 9	\$ 1,122
5.2	Meet with LWWSD to Confirm Permit Criteria and Timelines	-	-	4	-	-	-	-		4	4	2	14	\$ 1,496	\$ -	\$ 248	\$ 1,743
5.3	Prepare for and Attend County Pre-application Conference	-	-	4	-	-	-			1	4	1	10	\$ 1,117	\$ -	\$ 29	\$ 1,146
5.4	Prepare Permit Forms for Shoreline Substantial Development and Variance	-	-	12	-	-				-	32	4	48	\$ 4,572	\$ -	\$ 150	\$ 4,722
5.5	Attend Public Hearing	-	-	4	-	-				-	-	1	5	\$ 712	\$ -	\$ 64	\$ 775
	Subtotal	-	-	25	-	-	-	-	-	5	52	9	91	\$ 9,009	\$ -	\$ 499	\$ 9,509
Task 6	Predesign Report																
6.1	Prepare Project Background and Alternatives Descriptions	-	-	4	4	4	4	2	1	4	-	2	25	\$ 3,278	\$ -	\$ 308	\$ 3,586
6.2	Prepare Schematic Figures	-	-	6	3	3		6		24	-	2	44	\$ 5,324	\$ -	\$ 788	\$ 6,112
6.3	Develop Alternative Ranking System	1	1	4	2	4	6	2		-	-	1	21	\$ 2,886	\$ -	\$ 228	\$ 3,114
6.4	Complete Predesign Report Draft	-	-	8	4	4	4	2	1	8	-	4	35	\$ 4,476	\$ -	\$ 423	\$ 4,899
6.5	Prepare Neighborhood Flyers	-	-	6	2	2				8	-	3	21	\$ 2,648	\$ -	\$ 258	\$ 2,906
6.6	Prepare for and Attend Public Meeting	-	-	4	-	-				-	-	-	4	\$ 655	\$ -	\$ 162	\$ 817
6.7	Finalize Predesign Report	-	-	4	4	4	4	2	1	8	-	2	29	\$ 3,708	\$ -	\$ 415	\$ 4,123
6.8	Attend Board Meeting and Present Predesign Report	-	-	4	-	-				-	-	-	4	\$ 655	\$ -	\$ 142	\$ 797
6.9	Update and Finalize Report	-	-	4	4	4	4	2		4	-	4	26	\$ 3,209	\$ -	\$ 326	\$ 3,535
	Subtotal	1	1	44	23	25	22	16	3	56	-	18	209	\$ 26,838	\$ -	\$ 3,050	\$ 29,888
Task 7	Begin Design																
7.1	Attend Scoping Meeting	-	1	4	-	4	2	-	-		-	1	12	\$ 1,801	\$ -	\$ 76	\$ 1,877
7.2	Begin Design	-	2	4	8	8		4	-		-	1	27	\$ 4,143	\$ -	\$ 214	\$ 4,356
7.3	Perform Geotechnical Review	-	1	12	-						-	2	15	\$ 2,290	\$ -	\$ 69	\$ 2,359
	Subtotal	-	4	20	8	12	2	4	-	-	-	4	54	\$ 8,234	\$ -	\$ 359	\$ 8,593
Total		5	15	176	51	59	72	28	3	113	56	43	621	\$ 80,011	\$ 4,428	\$ 6,846	\$ 89,771