



Brief Overview of Lake Whatcom TMDL



Lake Whatcom Total Maximum Daily Load (TMDL)

- ◆ **Water quality decline over last fifty years**
- ◆ **1998 Washington State Dept. Ecology study found did not meet water quality standards**
 - Low dissolved oxygen in the lake
 - High fecal coliform bacteria in tributaries
 - Excess phosphorus → excess algae growth → algae decay = depleted DO
- ◆ **Ecology studied and collected data in the 2000s to develop the lake loading and lake response models as part of the TMDL study**
 - City of Bellingham contracted the development of a more precise loading model (HFAM)
 - City, County, and Water District contribute money to fund tributary monitoring to be used in the HFAM model (since 2007)
- ◆ **February 2013 Ecology published the “Lake Whatcom Watershed Total Phosphorus and Bacteria Total Maximum Daily Load” study**
 - Submitted to EPA in November 2014
 - Revised in February 2016
 - Approved in April 2016
- ◆ **This part of the process is complete**



Lake Whatcom Total Maximum Daily Load (TMDL) cont.

- ◆ **Ultimate goal to reduce phosphorus entering lake from developed areas by 87% compared to current**
 - Cleanup effort required in 50 years
 - Treat ~ 3,150 lbs of phosphorus (~410 lbs/year)
 - Equates to approximately \$1M/year in capital cost to County
- ◆ **City and County will have models updated by 2023 to reevaluate phosphorus reduction targets**
- ◆ **TMDL is under the jurisdiction of Department of Ecology and EPA**
- ◆ **Separate process from the rate setting**
- ◆ **Updates are provided at Lake Whatcom Policy Group meetings and annual Lake Whatcom Joint Councils meeting**
- ◆ **Information is available on website**



Stormwater Utility under RCW 36.89



Stormwater Utility under RCW 36.89

- ◆ **Fee for service funding mechanism; not a tax**
- ◆ **Not a new government; part of Whatcom County government**
- ◆ **Most common method to pay for stormwater related costs**
- ◆ **Fees typically assessed based on impervious surface area**



Stormwater Utility under RCW 36.89

RCW 36.89.080

1) ...any county legislative authority may provide by resolution for revenues by fixing rates and charges for the furnishing of service to those served or receiving benefits or to be served or to receive benefits from any stormwater control facility or contributing to an increase of surface water runoff. In fixing rates and charges, the county legislative authority may in its discretion consider:

- (a) Services furnished or to be furnished;**
- (b) Benefits received or to be received;**
- (c) The character and use of land or its water runoff characteristics;**
- (d) The nonprofit public benefit status, as defined in RCW [24.03.490](#), of the land user;**
- (e) Income level of persons served or provided benefits under this chapter, including senior citizens and disabled persons; or**
- (f) Any other matters which present a reasonable difference as a ground for distinction.**



Stormwater Utility under RCW 36.89

RCW 36.89.010

"stormwater control facilities" as used in this chapter mean any facility, improvement, development, property or interest therein, made, constructed or acquired for the purpose of controlling, or protecting life or property from, any storm, waste, flood or surplus waters wherever located within the county, and shall include but not be limited to the improvements and authority described in RCW 86.12.020 and chapters 86.13 and 86.15 RCW.



Stormwater Utility under RCW 36.89

RCW 36.89.130

In addition to the authority provided in RCW 36.89.030, a county may, as part of maintaining a system of stormwater 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.



Stormwater Utility under RCW 36.89

RCW 36.89.080

(2) The rate a county may charge under this section for stormwater control facilities shall be reduced by a minimum of ten percent for any new or remodeled commercial building that utilizes a permissive rainwater harvesting system. Rainwater harvesting systems shall be properly sized to utilize the available roof surface of the building. The jurisdiction shall consider rate reductions in excess of ten percent dependent upon the amount of rainwater harvested.

(3) Rates and charges authorized under this section may not be imposed on lands taxed as forestland under chapter [84.33](#) RCW or as timberland under chapter [84.34](#) RCW.



Stormwater Utility under RCW 36.89

RCW 36.89.080

(4) The service charges and rates collected shall be deposited in a special fund or funds in the county treasury to be used only for the purpose of paying all or any part of the cost and expense of maintaining and operating stormwater control facilities, all or any part of the cost and expense of planning, designing, establishing, acquiring, developing, constructing and improving any of such facilities, or to pay or secure the payment of all or any portion of any issue of general obligation or revenue bonds issued for such purpose.



Stormwater Utility under RCW 36.89

RCW 36.89.085

Except as otherwise provided in RCW [90.03.525](#), any public entity and public property, including the state of Washington and state property, shall be subject to rates and charges for stormwater control facilities to the same extent private persons and private property are subject to such rates and charges that are imposed by counties pursuant to RCW [36.89.080](#). In setting these rates and charges, consideration may be made of in-kind services, such as stream improvements or donation of property.



Stormwater Utility under RCW 36.89

Cannot charge for:

- **Parking permit at parks**
- **Septic Systems**
- **City of Bellingham diversion**



Capital Project Development Process



Lake Whatcom Capital Facilities Program

◆ **Plans**

- Lake Whatcom Comprehensive Stormwater Plan; March 2008
- Lake Whatcom Comprehensive Stormwater Plan: Stormwater Capital Program Update; September 2017

◆ **Process**

- Project Site Identification
- Feasibility Analysis
- Planning (Year 1)
- Design (Year 2)
- Construction (Year 3)

Every project is added to Whatcom County's Six-Year Capital Improvement Plan (CIP), is updated annually, and is adopted by resolution by the County Council.

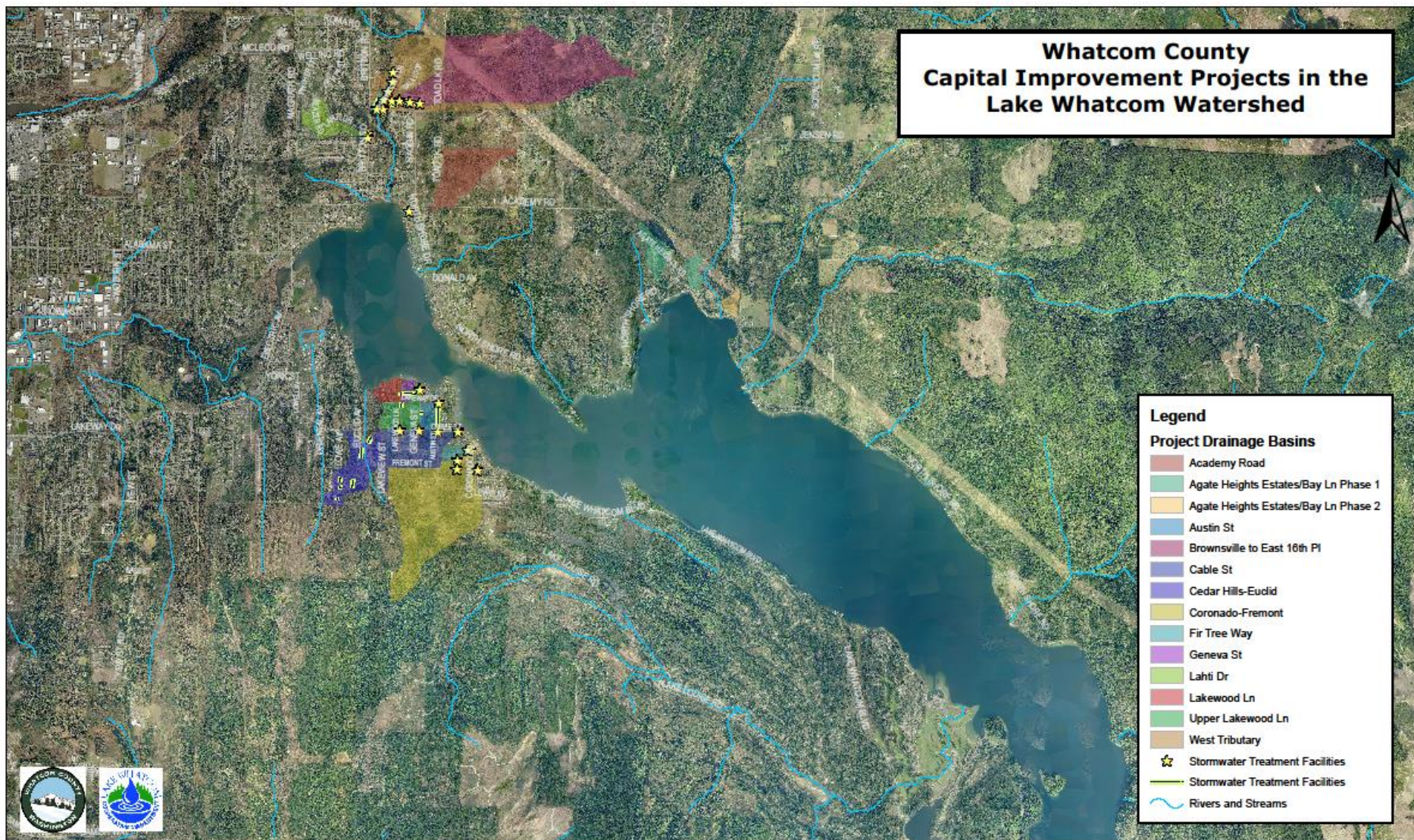
Capital Facilities

- ◆ **2006: Geneva Stormwater Retrofits**
 - Treatment Area: 23 acres
 - 4 Bioswales and 3 Filter Vaults
- ◆ **2007: Cable Street Reconstruction and Stormwater Improvements**
 - Treatment Area: 73 acres
 - 1 Bioswale, 1 Filter Vault, 4 Pretreatment/Flow Control Vaults
- ◆ **2010: Lahti Drive Stormwater Improvements**
 - Treatment Area: 31 acres
 - 1 Bioswale and 1 Pretreatment/Flow Control Vault
- ◆ **2011: Silver Beach Creek Improvements-Brownsville Dr. to E. 16th Place**
 - Treatment Area: 338 acres
 - 1 Bioswale, 1 Filter Vault, 4 Pretreatment/Flow Control Vault, and Channel restoration



Capital Facilities cont.

- ◆ **2012: Silver Beach Creek Improvements-West Tributary**
 - Treatment Area: 117 acres
 - 1 Bioswale Swale, 2 Pretreatment/Flow Control Vaults, 4 Filter Vaults, Channel Restoration
- ◆ **2014: Coronado-Fremont Improvements**
 - Treatment Area: 170 acres
 - 1 Bioswale swale, 1 Pretreatment/Flow Control Vault, 1 Filter Vault, Channel Restoration
- ◆ **2016: Cedar Hills-Euclid Improvements**
 - Treatment Area: 76 acres
 - 1 Bioswale Swale, 4 Filter Vaults
- ◆ **Current Project: Agate Bay Phase I**
 - Treatment Area: 40 acres
 - Vaults, media filter drains
- ◆ **2019: Agate Bay Phase II**
 - 36.89Vaults, media filter drains



Issue Paper #1: Supplemental Information



Current Funding Sources

Flood Control Zone District Tax

- County-wide tax
- Used to fund flood and water resources needs throughout County
- Provides base funding to LWMP

Real Estate Excise Tax (REET)

- Unincorporated county-wide tax
- Main source of funding for capital program

County Road Tax

- Unincorporated county-wide tax
- Base funding for NPDES program
- Can only be used to fund stormwater issues within the road right-of-way

Grants

- Supplements capital program funding
- Diminishing over time
- Can't be used for capital maintenance

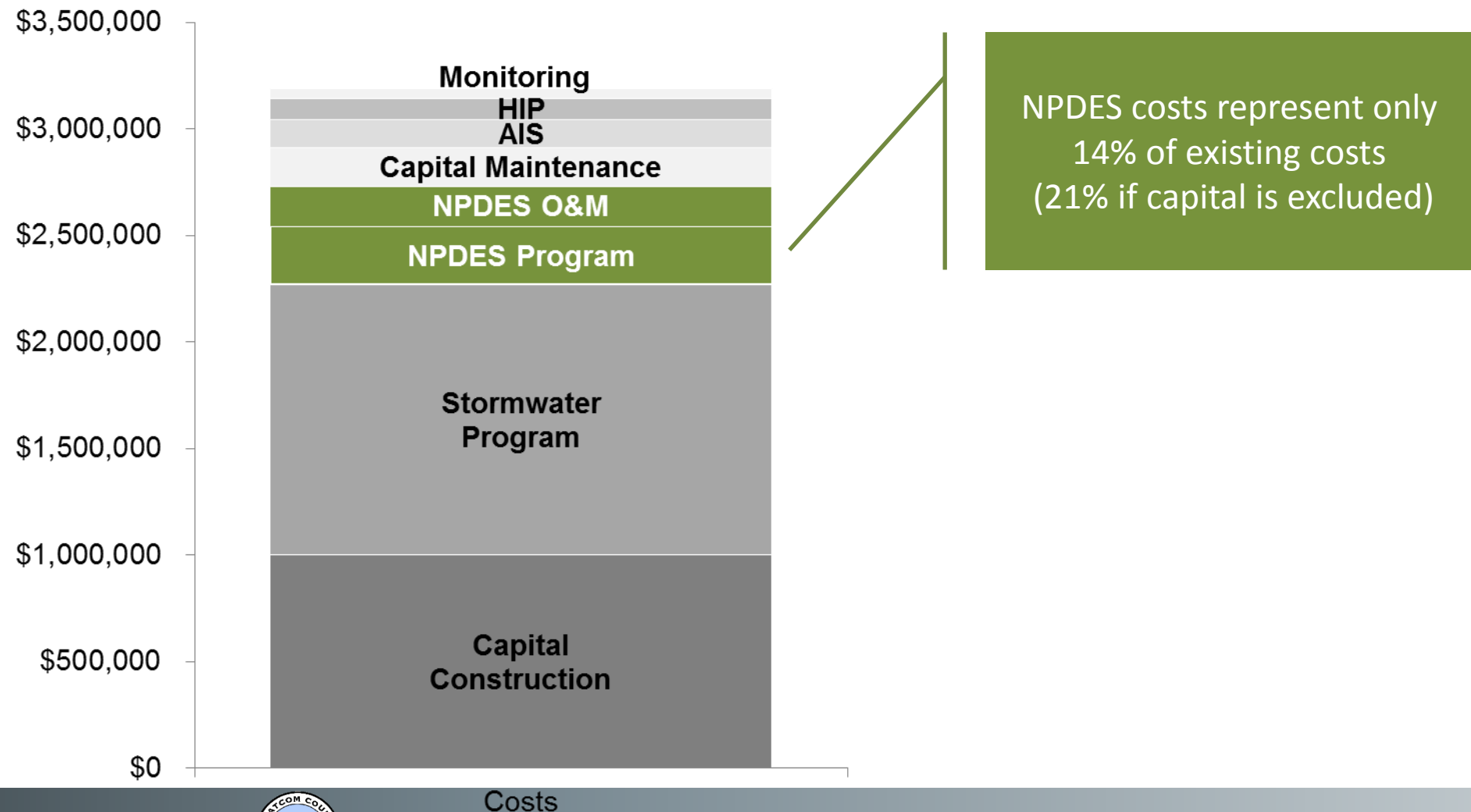


Existing Funds & Reserves Summary

- ◆ **Real Estate Excise Tax Fund:** No reserve for Lake Whatcom Stormwater Utility Service Area (LW SUSA)
 - No reserve for this fund
- ◆ **Flood Control Zone District Fund:** No reserve for LW SUSA
 - Reserve in place; reserved for flood emergency only
- ◆ **Road Fund:** Unlikely/small reserve for LW SUSA
 - Reserve in place; could *possibly* be used for LW SUSA as loan only
 - Only NPDES costs could be covered by this fund however
- ◆ **County General Fund:** No reserve for LW SUSA
 - Unlikely any stormwater projects would be funded from the General Fund
 - Has to compete with other general government needs
 - Could possibly be accessed in an emergency as loan only



Current Program Costs





Issue Paper #1: Options

- ◆ **Option 1: Sustain reserves for entire program**
 - LW Stormwater Utility Service Area fee funds reserve to cover entirety of stormwater program

- ◆ **Option 2: Sustain reserves for rate-funded increment only**
 - LW Stormwater Utility Service Area fee funds reserve to cover just the incremental costs funded by the fee

- ◆ **FCS GROUP recommendation: Option 1**
 - Given the lack of reserves available from other funds, it would be financially prudent for the Lake Whatcom Stormwater Utility Service Area to create and sustain reserves that cover the entire program
 - If Option 2 is chosen, existing programs and or capital projects could be impacted in the event that any of those resources are interrupted



Existing Funds & Reserves Detail

- ◆ **REET Fund:** There is no reserve for this fund. This fund is used to fund specific projects on an annual basis and has no operating costs or other need for a reserve. It acts more like a grant fund, where money is “awarded” to various projects.
- ◆ **Flood Fund:** The FCZD Board of Supervisors (which is the County council) has established a minimum fund balance of \$5 million to provide funding in the event of a flood emergency. This reserve also acts as an operating reserve.
- ◆ **Road Fund:** There is a county policy that sets a minimum reserve of 15% of the annual budget. This reserve amount includes operating and capital reserves. The road fund can be committed to repayment of debt. It has in the past to repair storm damage. We currently have no debt for road related purposes. Road funds can be used for road related stormwater projects.
- ◆ **The General Fund:** Could be used for stormwater projects but it would have to compete with other general government needs and it is unlikely that any stormwater projects would be funded from the General Fund, but could be in an emergency.

Issue Paper #2: Supplemental Information



Rate Structure Alternatives

Rate Structure	Equity / Defensibility	Administratively Feasible	Cost of Implementation
(A) Impervious Surface Area	●	◐	\$\$
(B) Density of Development	●	◐	\$\$
(C) Trip Generation	●	◐	\$\$
(D) Parcel Size	○	●	\$
(E) Impervious Surface plus Vegetated Surface Type	● ●	○	\$\$\$
(F) Lawn Size	◐	○	\$\$

Equity & Administration Legend:

- = More equitable or easier to administer
- ◐ = Middle option
- = Least equitable or more difficult to administer

Estimated, Relative Cost Comparison Legend:

- \$ = Less costly
- \$\$ = Middle option
- \$\$\$ = More costly