

## **Section 2.6 Drivers**



## 2.6 DRIVERS

### Introduction

There are a number of factors or drivers that will affect future program and budget decisions in the Clean Water District. The most significant are the following:

- National Pollutant Discharge Elimination System (NPDES)
- Critical Areas Regulations (Monitoring)
- Endangered Species
- Drainage Needs
- Flooding
- Impact of Annexation
- Value of Fees (Cost of Inflation)
- SWM Funding Reliability

### NPDES

The federal Clean Water Act authorizes a permit system to control water pollution, known as the National Pollutant Discharge Elimination System, or NPDES. The system includes permits issued to many municipalities that require them to implement programs to prevent or minimize stormwater pollution. In 1990, the United States Environmental Protection Agency (EPA) issued regulations requiring municipalities with a 1980 population greater than 100,000 to obtain “Phase 1” municipal stormwater permits. The term “Phase 1” indicated that this group of municipalities was the first group to receive municipal stormwater permits.

Administration of the NPDES permit system in Washington State has been delegated by EPA to the State Department of Ecology (Ecology). In Washington State, the Phase 1 municipalities are Snohomish County, King County, Pierce County, Clark County, the cities of Seattle and Tacoma, and the Washington State Department of Transportation. Ecology issued the first set of Phase 1 municipal stormwater permits in 1995. The required programs under this permit included the following:

- adoption of revisions to the County’s drainage and grading codes
- adoption of a water pollution control code
- adoption of the equivalent to the 1992 Stormwater Manual developed by Ecology
- a water quality monitoring program
- storm sewer mapping
- a capital program to construct or modify structural stormwater facilities
- an illicit discharge detection and elimination program
- stormwater facility maintenance
- stormwater pollution prevention at County properties
- public education

Overall, this permit cost approximately \$7,000,000 to \$8,000,000 per year to implement, of which over \$2,000,000 covered work done by SWM.

The NPDES municipal stormwater permits are supposed to be reissued on a 5-year cycle. However, Ecology did not reissue the Phase 1 municipal permit until January 17, 2007. This

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permit became effective on February 16, 2007. Changes to the permit requirements include the following:

- further revisions to the drainage and grading code
- regulation of clearing
- a new pollution source control code applicable to commercial properties
- adoption of the 2005 Stormwater Management Manual for Western Washington developed by Ecology
- increased inspection of private construction
- a new business inspection program (to enforce the new code)
- significantly increased inspection and maintenance of both public and private stormwater facilities
- expanded stormwater monitoring
- other actions in areas with completed Total Maximum Daily Load (TMDL) plans

The current estimated cost of implementing this permit is approximately \$20,000,000 per year, of which approximately \$10,000,000 per year will be needed to cover work done by SWM. These estimates were based on the February 2006 public review draft permit, and are being revised currently to reflect the permit issued in January 2007. However, even with revisions to the estimates, it is clear that the cost increases will require the County to consider ways of generating additional revenue, potentially including permit fees, stormwater utility fees, interlocal agreements with other municipalities, and other possible sources, as well as potential program restructuring.

Ecology also issued the first cycle of “Phase 2” municipal stormwater permits in January 2007. These permits apply to cities and counties with a 2005 population of 10,000 plus those that have “urbanized areas” with a population density greater than 1000 people / square mile. Like Phase 1 municipal stormwater permits, Phase 2 permits have a 5-year reissuance schedule. The population trigger for future iterations of the Phase 2 permit will be based on the most recent federal census, so cities and counties that are not Phase 2 permittees currently may become permittees if their populations increase. However, since the initial “Phase 1” designation was based on the 1980 census, no Phase 2 municipality – current or future – can ever fall under the more rigorous Phase 1 permit, regardless of future population.

The Phase 2 permitted cities in the Stillaguamish River basin are Arlington and Granite Falls. The Phase 2 permit does not require the same level of program development and costs as in the Phase 1 program, but the costs are substantial and will need revenue sources.

### **Critical Areas Regulations (Monitoring)**

The state Growth Management Act requires local governments to update their critical areas ordinances every seven years. The update must include the use of science-based information in policies and regulations to protect the functions and values of environmentally sensitive areas such as wetlands, fish and wildlife habitat, aquifer recharge areas, frequently flooded areas and geologically hazardous areas. Counties are held accountable by state agencies to assure that “no net loss” of critical area functions and values are achieved. Snohomish County is currently in the process of reviewing and updating these regulations, and has already completed a major effort, the 10-Year Update of the Comprehensive Plan. The County is currently conducting another

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major effort, the update of the Shoreline Management Program. (Planning and Development Services 2005, 2006)

Snohomish County's Critical Areas Regulations, collectively known as CAR, are specific sections of the Snohomish County Code (SCC) that regulate how development and redevelopment activities can occur on lands containing "critical areas." The County's Critical Area Regulations are primarily contained in SCC 30.62 (Critical Area Regulations), but also in SCC 30.64 (Groundwater Protection), and SCC 30.65 (Special Flood Hazard Areas), and other related code sections.

A monitoring program is also being recommended to assess the effectiveness of the Critical Areas Regulations over time to assist in future updates of the regulations. Surface Water Management is actively involved in monitoring activities in stream and lake water quality, habitat, stream bank conditions, stream flow and shoreline conditions. These activities and their associated costs can be expected to increase with the updates in the critical areas regulations, in order to monitor the collective program effectiveness of the Critical Areas Regulations. The Critical Areas Regulations monitoring has been assigned to SWM and will be a required part of the Critical Areas Regulations effort.

## **Endangered Species**

### The Endangered Species Act of 1973

The federal Endangered Species Act (ESA) of 1973 provides a framework for the recovery of threatened and endangered species populations, and the conservation of their habitat. The main provisions in the ESA that affect Snohomish County are:

- Section 4b Basis for Determination – deals with what is required of the Secretary to list a species, and the definition of critical habitat
- Section 4c Lists – deals with maintaining the list of species that are listed under the ESA, as well as the requirement for a status review of every listed species every five years after its listing in the Federal Register
- Section 4d Protective Regulations – authorizes the Secretary to develop regulations (in addition to those listed in ESA Section 9) that protect the species; these regulations are species specific
- Section 4f Recovery Plans – requires the Secretary to develop a species recovery plan that incorporates a description of site-specific management actions, objective and measurable criteria for de-listing, and an estimate of the time required and costs to carry out the measures in the plan
- Section 9 Prohibited Acts – deals mainly with "take," which is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

The ESA defines endangered species as any species in danger of extinction throughout all or a significant portion of its range. Threatened species are any species likely to become endangered in the foreseeable future in all or a significant portion of its range. Although not required in the ESA, the federal agencies use a third species designation, called "species of concern" for those species whose populations are becoming low enough to watch for potential listing.

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### *Listings*

As of 2006, more than 40 species (plant and animal) are listed in Puget Sound. The full list of species is included in *Appendix A.4*. The species most often affecting County actions are:

- Bald eagle
- Marbled murrelet
- Northern spotted owl
- Chinook salmon
- Bull Trout Char

At the state level, species are listed under the Washington Administrative Code (WAC), numbers 232-12-297 and 232-12-011. The list is included in *Appendix A.4*.

### County Response

#### *Response to Most Species*

The County's approach to most listed species (i.e., not salmon) covers four areas, which could be viewed as a risk management strategy. The County acts in ways that avoid take as defined by Section 9 and individual 4d Rules for specific species. The County's planning and development follow avoidance of areas of critical habitat. The County takes some proactive measures in protecting habitat in certain areas and avoiding others, as well as specific restoration projects that benefit multiple species. Finally, County projects go through the permitting process, which concludes in requiring provisions that protect listed species from take, such as noise restrictions for operating equipment or time windows during which work can take place.

#### *Response to Salmon*

The County's approach to the listing of Chinook salmon follows a very different path. Salmon are a cultural and religious icon for the tribes in the area, are a symbol of the northwest, are a commercially harvested fish (with considerable economic ramifications) and are among the first listed species that regularly "use" highly urbanized areas. For these reasons, the County has taken a much more proactive role in recovery planning and implementation, which are outlined in the "Planning", and "Projects" sections below.

#### *Planning and Leadership*

The County is the lead in recovery efforts in the Snohomish River Basin, is co-lead with the Stillaguamish Tribe in the Stillaguamish Watershed, and actively participates in efforts in the Lake Washington/Cedar/Sammamish and Sauk/Skagit basins.

The County first began to work on how an ESA listing of salmon would affect development, infrastructure projects and other County activities in about 1994. In 1998, as listing looked imminent, the most urbanized areas in Puget Sound came together to form a group called the Tri-County or G7, named after its seven constituents: King, Pierce, and Snohomish Counties, Bellevue, Everett, Seattle, and Tacoma. The G7 pooled resources and worked together to determine how they would respond to a listing, creating the Tri-County Initiative. After listing, the G7 adopted a document called the Regional Road Maintenance Guidelines (Salmoninfo.org).

About the same time, a group of agency and civic leaders met on the Olympic Peninsula and eventually formed a group called the Shared Strategy for Puget Sound. With the G7 as members, Shared Strategy and NOAA National Marine Fisheries Service (the lead federal agency with

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jurisdiction over listed salmon) worked with individual watersheds to develop the required recovery plans, over the course of 1999-2005. Shared Strategy created a regional overlay to the 14 individual watershed plans, each of which is a chapter in the regional plan. The chapters were completed in June of 2005, and the Puget Sound Salmon Recovery Plan was completed at the end of June 2005. The Puget Sound Salmon Recovery Plan was adopted by NOAA National Marine Fisheries Service on January 19, 2007.

The nature of the process to develop the recovery plan can not be overemphasized. The individual chapters were completed by consensus by watershed groups comprised of stakeholders who would be most affected by any recovery actions. NOAA's adoption of the plan marks the first time in the history of the ESA that anyone other than a federal agency (acting largely on its own) has developed a species recovery plan.

Snohomish County and the Stillaguamish Tribe are the co-leads for salmon recovery efforts in the Stillaguamish Watershed. Together with the Stillaguamish Implementation Review Committee (SIRC), they completed the Stillaguamish Watershed Chinook Salmon Recovery Plan (Plan), which is included in the regional recovery plan as a chapter. The 50-year Plan outlines the steps that would lead to de-listing of the two populations of Chinook salmon (North and South Fork) in the Stillaguamish Watershed. As of 2005, abundance figures for the populations are 861 South Fork and 2,430 North Fork Chinook. To reach recovery, these figures must increase to 15,387 South Fork and 17,795 North Fork Chinook. To reach these numbers, 50-year habitat targets for recovery are outlined for each of the limiting factors for the populations:

- Riparian habitat (8,000 acres total)
- Estuary (80% of estuary and nearshore habitat available)
- Large Woody Debris (amount equivalent to 62 log jams)
- Floodplain (no more than 9.3 miles of hardened banks out of 92.8 miles of riverbank)
- Sediment (fine sediment concentrations of less than 12%)
- Hydrology (restore or maintain mature forest cover to 80% of total forest cover)

### Snohomish County ESA Commitments

#### *County Council*

During the salmon recovery planning process, each jurisdiction was asked to commit to implementing the plan. Snohomish County passed Resolution Number 05-025, in which the County resolved that it would implement the Stillaguamish – WRIA 5 Chinook Salmon Recovery Plan, provided that funding is available and with a review of its participation and implementation commitments in five years.

#### *Programmatic Actions*

The County will work on programmatic actions, such as:

- Serving as the co-lead for salmon recovery plan coordination and implementation;
- Continued priority research and data collection efforts that further salmon recovery;
- Providing leadership and support to Tri-County and Shared Strategy;
- Providing lead staff support to the Snohomish Marine Resource Committee;
- Providing lead staff support to the Clean Water District Board;
- Providing support to flood management efforts;

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- Developing an agricultural initiative to support farming in the watershed;
- Updating policies, programs and regulations;
- Monitoring for water quality;
- Providing a watershed steward staff position.

### *Projects*

In addition, the County would actively implement restoration projects, such as:

- Estuary and floodplain restoration;
- Riparian restoration;
- Implementation of large wood projects; and
- Other projects as appropriate from the Plan.

A number of specific projects mentioned in the Resolution are underway or completed. Their current status are given below:

- Stillaguamish River Estuary project – technical assistance for Stilly Old Channel Flow Enhancement (*completed*)
- North Meander (*under construction*)
- South Meander (*feasibility*)
- Glade Bekken and Church Creek (*under construction*)
- Cloverdale (*completed*)
- Smokes Farm technical assistance (*completed*)
- Chatham Acres (*completed*)
- Small Stream Restoration (*ongoing*)

### *Costs of Projects and Staffing*

Restoration costs alone for recovery total \$44 million. Providing for outreach and education and adequate habitat protection would raise this cost to an estimated \$80 million

At present, Surface Water Management provides staffing for the Salmon Recovery citizen committees, funds scientific studies, and constructs salmon restoration projects.

### *Plan Implementation*

To fully implement the Plan, Snohomish County and our partners must invest more staff and project and program funding to the Stillaguamish. The full cost of implementation will require the County to consider ways of generating additional revenue, similar to other programs outlined in this document. The County's priorities for these funds include:

- *Investment in staffing to cover:*
  - planning,
  - regional coordination,
  - coordination with the SIRC,
  - project implementation,
  - monitoring and outreach.
- *Investment in projects, including but not limited to:*
  - floodplain and estuary restoration strategies,
  - South Fork Big Trees project,
  - South Fork Fine Sediment Analysis and Implementation,
  - South Meander project, and

investment with the co-managers in a South Fork conservation hatchery as an emergency measure to boost critically low South Fork Chinook population numbers.

## **Drainage Needs**

In 2002, SWM completed the Drainage Needs Report (DNR) Project, which involved the inventorying and evaluation of drainage, water quality and habitat needs of 73 square miles in unincorporated Snohomish County. Work included inventorying existing drainage systems, evaluating existing drainage ways and habitat problems, identifying potential future problems, and developing potential solutions and cost estimates. Study areas in the CWD included the Urban Growth Areas (UGAs) in Arlington, Stanwood, Granite Falls, and Darrington. In 2004, the County Council approved an increased SWM fee to address the most critical problems found in this report. Drainage projects were identified in the Stanwood UGA and Warm Beach areas, and improvements were made. Other historical drainage problems were identified in the other UGAs, but they had been closed or resolved by the time of the DNR study. (SWM, 2002a, SWM 2002b, SWM 2006, SWM, 2007b)

Over time, as urban development increases in the UGAs and the existing infrastructure ages, there will be increasing need for drainage system repair and improvement. The trend is also toward an increasing requirement for stormwater measures to improve runoff quality and reduce impacts to streams and receiving waters. These factors point to the continuing need for drainage planning and improvements in the CWD.

## **Flooding**

Severe flooding occurred in Snohomish County in 2003 and 2006. The flooding in 2003 resulted in substantial SWM staff and resource commitments to address immediate and long-term responses, while the effects of the 2006 floods are still being evaluated. Floods, when they occur, and the ensuing emergency response efforts, are high priority events, and SWM resources are redirected for appropriate action. Flood structure repairs are made with the use of River Funds, which largely does not affect CWD fee-funded projects. However, the redirection of River Funds and staff resources for emergency purposes could affect those CWD river capital improvements that depend on the River Fund. For example, the 2003 flood event resulted in substantial staff time commitments in follow up flood-related projects, one result of which was the formation of the Robe Valley Flood Control District (Engel 2007). Potential factors that could result in increasingly warmer and wetter conditions in the Pacific Northwest indicate that flooding is likely to increase in severity on Snohomish County rivers in the coming decades.

Tsunamis are other potential flood events that may affect the lower Stillaguamish floodplain and estuary. Puget Sound has a record of tsunamis occurring over the last several thousand years, which have been caused by earthquakes and landslides.

One potential long-term action could be evaluating flood control structures assuming greater damage over their life than what would be predicted by the current risk. More detailed mapping and analysis of flooding, including tsunamis, would be of benefit. Developing regulations for sensitive areas, as proposed in the new CAR regulations, could also help provide better flood risk

management. These all have potential implications for river planning and flood hazard management in the Stillaguamish Watershed. The Stillaguamish flood control structures, including revetment and levees, can have a detrimental effect on riparian habitat. These structures also need evaluation to assess the potential for abandonment or modification to improve their habitat function.

### **Impact of Annexation**

Annexation of Urban Growth Areas into adjoining cities has several long term implications for county surface water management. Annexations decrease the county's revenue base for surface water management fees. The land base is reduced. Also, SWM charges a surface water fee to the Washington Department of Transportation and Snohomish County Roads to manage surface water runoff from State and County roads. SWM loses revenue when county roads are annexed. In 2006 alone, annexations resulted in a projected loss of more than \$330,000 in SWM fees for 2007 (McGuinness 2007).

With annexations, county services provided to annexed areas, and their associated costs, are reduced. But the smaller, less contiguous, and increasingly fragmented service areas potentially increase unit costs, for providing service in the remaining unincorporated areas. The transfer of county surface water infrastructure assets to cities (that have not been paid off) can also present challenges to recovering costs, when the original revenue source is decreased or removed from the county. In addition, region-wide initiatives not specifically related to square miles of County area, which are currently funded by SWM fees, such as salmon recovery, will have less funding available for work that is not expected to be reduced significantly.

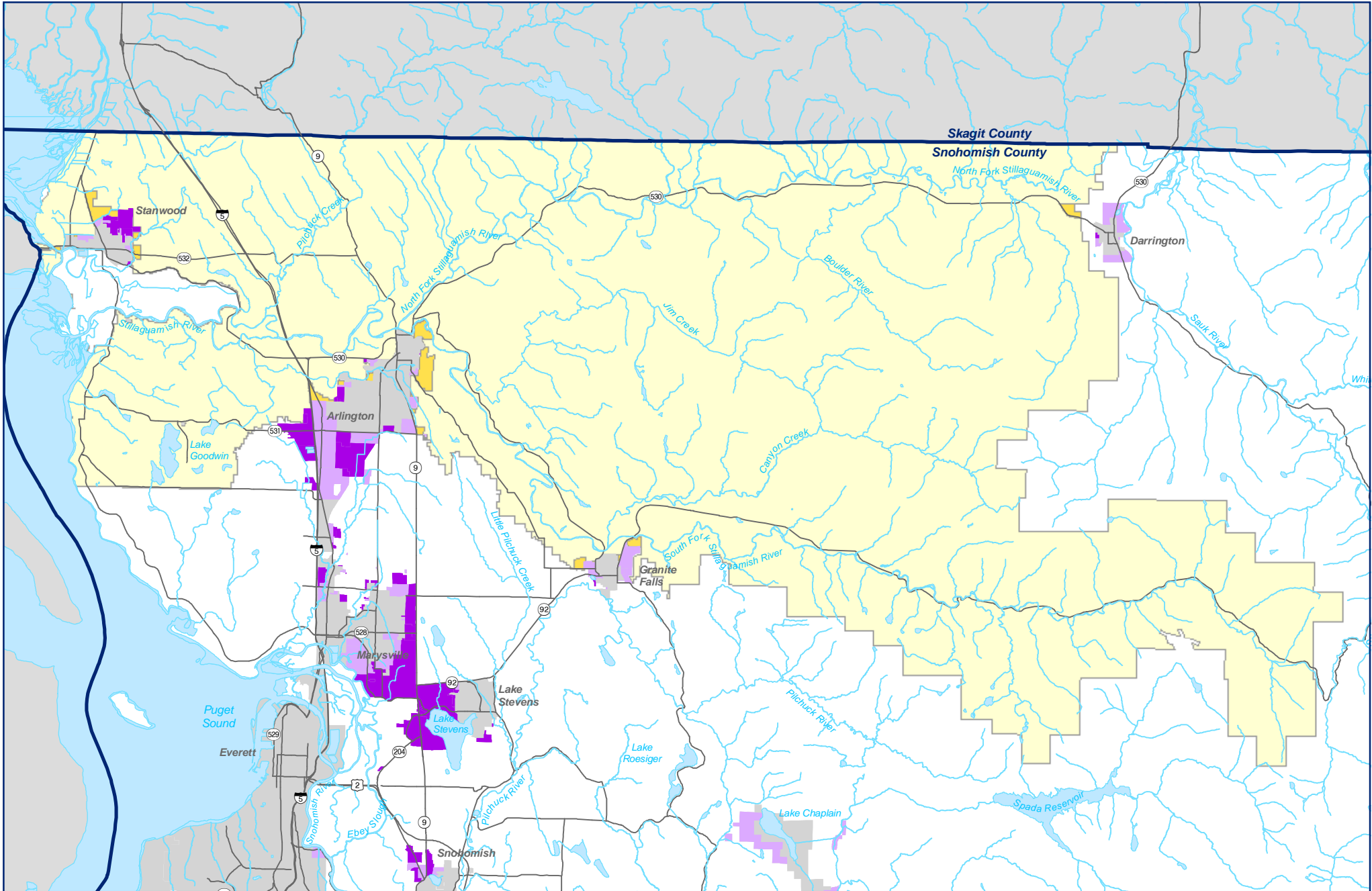
Figure 2.6-1 shows annexations that have occurred in the CWD since the CWD was formed in 1993. Altogether, 18.2 square miles were annexed from 1993 to 2002, and 12.4 square miles were annexed from 2003 through 2006 (SWM 2007c).

### **Value of Fees (Cost of inflation)**

Assessments in the CWD are set in Snohomish County Code (SCC) Title 25A, with rates effective the beginning of the year following adoption. Table 2.6-1 compares the CWD single family rates with the consumer price index for the Seattle-Tacoma-Bremerton area, as established by the Bureau of Labor and Statistics, and with the facilities construction cost index developed by Means Cost Data. The two cost indices are presented in this table because SWM staff costs are based on the Consumer Price Index (CPI) (per collective bargaining agreement), while project capital costs are construction related.

The Bureau of Labor and Statistics CPI annual averages are available since 1993, but no January statistics are available; the February indices were the closest to the beginning of the year, and those were available only since 1998.

The Means Cost Data presented are national average indices, based on January 1, 1993 = 100. In 2006, Everett materials costs were slightly higher than the national average, and installation costs slightly lower, with the overall costs about 102 percent of the national average. There may be some fluctuation in the local index over the years, but for the purposes of this report, they are assumed to be relatively minor and are not factored into Table 2.6-1. Recently, materials costs



**Figure 2.6-1 Annexations 1993 - Present**

- City Boundary 1992
- Annexations 1993-2001
- Annexations 2002-Present
- Stillaguamish CWD
- Stillaguamish CWD UGA
- Major Roads
- Rivers & Streams
- Lakes & Bays



  
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**Table 2.6-1**  
**Seattle-Tacoma-Bremerton CPI (1982-84=100)**  
**Means Facilities Construction Cost Indices (Jan. 1, 1993=100)**

YEAR	CPI Urban Consumers				Means Facilities Cost Indices			CWD Rates (Single Family)		
	FEB	ANNUAL AVERAGE	Annual Increase %	Value \$1 wrt 1993	July Index	Annual Increase %	Value \$1 wrt 1/93	SF Rate (Set in Yr)	Value relative to 1993 Annual CPI	Value relative to 1993 Const. Index
1993		<b>142.9</b>	2.8%	\$1.00	<b>101.7</b>	2.3%	\$0.98	<b>\$22.00</b>	\$22.00	\$21.63
1994		147.8	3.4%	\$0.97	104.4	2.7%	\$0.96		\$21.27	\$21.07
1995		152.3	3.0%	\$0.94	107.6	3.1%	\$0.93		\$20.64	\$20.45
1996		157.5	3.4%	\$0.91	110.2	2.4%	\$0.91		\$19.96	\$19.96
1997		163.0	3.5%	\$0.88	112.8	2.4%	\$0.89	<b>\$26.00</b>	\$22.79	\$23.05
1998	166.5	167.7	2.9%	\$0.85	115.1	2.0%	\$0.87	<b>\$30.00</b>	\$25.56	\$26.06
1999	170.6	172.8	3.0%	\$0.83	117.6	2.2%	\$0.85		\$24.81	\$25.51
2000	176.1	179.2	3.7%	\$0.80	120.9	2.8%	\$0.83		\$23.92	\$24.81
2001	184	185.7	3.6%	\$0.77	125.1	3.5%	\$0.80	<b>\$33.01</b>	\$25.40	\$26.39
2002	187.6	189.3	1.9%	\$0.75	128.7	2.9%	\$0.78		\$24.92	\$25.65
2003	191.3	192.3	1.6%	\$0.74	132.0	2.6%	\$0.76		\$24.53	\$25.01
2004	193.5	194.7	1.2%	\$0.73	143.7	8.9%	\$0.70		\$24.23	\$22.97
2005	197.6	200.2	2.8%	\$0.71	151.6	5.5%	\$0.66		\$23.56	\$21.77
2006	203.6	207.6	3.7%	\$0.69	162.0	6.9%	\$0.62		\$22.72	\$20.38
<b>Average annual change*:</b>			2.9%	-\$0.02		3.6%	-\$0.03		\$0.06	-\$0.10

Sources: U.S. Bureau of Labor and Statistics, website at: <http://www.bls.gov/ro9/9250.pdf>  
01/18/07 Consumer Price Index, All Items, 1982-84=100 for All Urban Consumers (CPI-U) SEMIANNUAL  
Means Facilities Construction Cost Data 2007, 22nd Ed. © 2006 Reed Construction Data Inc., U.S.A.

Notes: The \$22 starting rate went into effect January 1994 but was developed and approved in 1993. Other rates are shown for their effective dates.  
" wrt " = with respect to.  
\*Average annual change: for dollar values, this is the arithmetic mean of annual dollar changes; for percent values, this is the geometric mean of all change (in percent); change is from 1993 to 2006 (change from 1992 to 1993 omitted).

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have been rising for steel and plastic products, and energy costs have also increased, due to market conditions, so cost indices for 2007 may be higher.

Table 2.6-1 shows that the CWD rates have tended to track slightly above the original (1993) \$22 assessment per single family parcel in terms of the Consumer Price Index. However, services have had to increase since 1993 due to the advent of the NPDES program and ESA requirements: more is being done with the same dollars.

Construction costs have varied above and below the original \$22 assessment per single family parcel. In the last year, based on construction costs, the fees collected were about \$20.38 per single family parcel (in 1993 dollars) or about 92.4 percent of the original assessment.

Ordinance 97-110 linked the CWD rates with the Consumer Price Index, effective in 1998. However, Ordinance 01-130 repealed the link in 2002. The lack of an automatic link makes it necessary to periodically adjust fees to keep up with inflation and costs.

### **SWM Funding Reliability**

SWM fees are used to provide base services and are heavily leveraged. SCC Title 25A, which allows for collection of SWM fees, is scheduled to sunset at the end of 2007. Unless reauthorized, SWM fees will not be collected after 2007, resulting in significant reductions in SWM services.

The current base SWM fee of \$33.01 per single-family home per year (\$2.75/month) has approximately the same value as the \$22 fee that was imposed in 1993 when the CWD was first authorized. (See discussion in Section 2.6 Drivers, Value of Fees (Consumer Price Index)) However, since that time, Surface Water has significantly increased its programs and services, including the NPDES, ESA, groundwater, Marine Resources, and Master Drainage Planning (DNR) programs. In addition, some of SWM's work plan, such as work within river basins, groundwater, and marine resources, cannot be funded currently using SWM fees.

Although the total SWM fee revenue collected has increased over the years due to new development, SWM is still dependent on yearly non-SWM fee revenues for approximately two-thirds of its annual budget. In order to continue the same level of service and to meet regulatory requirements and customer service expectations, SWM has aggressively and successfully pursued other funding sources to supplement the SWM fees. These sources include Real Estate Excise Tax (REET), Road Fund, grants, and interlocal agreements. Similar to SWM fees, each of these funding sources has restrictions on where or how funds can be used. In addition, these other funding sources do not have the same long-term stability as SWM fees, and, thus, SWM programs dependent on these revenue sources vary yearly, depending on the amount of these other funding sources. Surface Water Management projects and programs compete with other County priorities for REET, Road Fund, and General Fund, which together make up about 25% of SWM's annual budget. In addition, grant opportunities vary from year to year. SWM's capital program, including drainage, water quality, river, and salmon restoration projects, is heavily dependent on REET and grant funding. Table 2.6-2 lists various funding sources and their relative stability for SWM programs, and describes limitations on specific funding sources.

**Table 2.6-2  
SWM Revenues, Relative Reliability**

Revenue Source	Relative Stability	Comments
SWM CWD/WMA fees	●	Sunsets 12/07; use in WMA/CWD only; can't be used for groundwater or marine resources
SWM Rate increase fees	●	Sunsets 12/09; use in WMA/CWD UGAs only; project list already approved
Fund Balance	○	Not expected to be significant source of funds in future years
REET 2	○	Construction projects only; increased competition from other County projects may result in less funding available for SWM; \$1.16 million yearly of REET2 repays DNR bond
Grants	○	Have been successful, but not dependable source of long-term revenues; grants mainly salmon recovery and water quality
Road Fund	○	Use for projects within County right-of-way only
REET 1	○	Construction projects only; increased competition from other County projects may result in less funding available for SWM
RPPT	○	River work only
Other	○	Varies yearly
Bond Proceeds	○	E-CIDI program; specific projects already identified
Interlocals	○	None in CWD yet

*Legend:*

- relatively stable
- moderately stable
- unstable

*Abbreviations:*

- UGA: Urban Growth Area*
- REET1,2: Real Estate Excise Tax*
- DNR: Drainage Needs Report*
- RPPT: Real and Personal Property Tax*

**SWM Fixed Costs**

In addition to the cost drivers discussed above, Surface Water Management has fixed costs as a necessary part of its operational budget. In 2007, these costs totaled \$1.8 million, about 8 percent of the total Surface Water Management budget of \$23 million in 2007. These costs included the following: administration and a portion of supervisor salaries and benefits (100% of director salary/benefits), COLA/Salary Difference, unemployment compensation, workers compensation, deferred compensation, General Obligation Bonds payments, Department of Information Service costs, County insurance premiums, indirect costs, and space.

## References

- Engel, John, personal communication, Snohomish County Surface Water Management, February 2007.
- McGuiness, Michael, February 2, 2007 email and attachments (tabulation of annexation revenue losses, comments on Marysville and Mill Creek proposed annexations).
- Northwest Straits Initiative, webpage information at: <http://www.nwstraits.org/PageID/132/default.aspx>, February 2007.
- Reed Construction Data Inc., *Means Facilities Construction Cost Data 2007, 22nd Ed.*, printed in U.S.A., 2006.
- Salmoninfo.org, webpage information and documents (February 2007) found at <http://www.salmoninfo.org/TriCounty/tricounty.htm>
- Snohomish County Planning and Development Services (PDS), *Critical Areas Regulations Review & Update*, found at [http://www.co.snohomish.wa.us/documents/Departments/PDS/Code\\_Development/carmailer0605.pdf](http://www.co.snohomish.wa.us/documents/Departments/PDS/Code_Development/carmailer0605.pdf), June 2005.
- Snohomish County Planning and Development Services (PDS), information found at [http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/Code\\_Development/CAR/CARUpdate.htm](http://www1.co.snohomish.wa.us/Departments/PDS/Divisions/Code_Development/CAR/CARUpdate.htm), June 2006.
- Snohomish County Public Works, Surface Water Management Division (SWM), *North UGAs Drainage Needs Report*, December 2002 (a), found at [http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/SWM/Library/Publications/Urban\\_Drainage/DNR/North\\_County\\_DNR.htm](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SWM/Library/Publications/Urban_Drainage/DNR/North_County_DNR.htm)
- Snohomish County Public Works, Surface Water Management Division (SWM), *Stanwood UGA Drainage Needs Report*, December 2002 (b), found at [http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/SWM/Library/Publications/Urban\\_Drainage/DNR/stanwood\\_dnr.htm](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SWM/Library/Publications/Urban_Drainage/DNR/stanwood_dnr.htm)
- Snohomish County Public Works, Surface Water Management Division (SWM), *South Warm Beach Master Drainage Plan*, September 2006, found at [http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/SWM/Library/Publications/Urban\\_Drainage/SouthWarmBeach.htm](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SWM/Library/Publications/Urban_Drainage/SouthWarmBeach.htm)
- Snohomish County Public Works, Surface Water Management Division (SWM), webpage information, February 2007 (a) found at [http://www1.co.snohomish.wa.us/Departments/Public\\_Works/Divisions/SWM/Work\\_Areas/Habitat/Salmon/countyactions.htm](http://www1.co.snohomish.wa.us/Departments/Public_Works/Divisions/SWM/Work_Areas/Habitat/Salmon/countyactions.htm)
- Snohomish County Public Works, Surface Water Management Division (SWM), drainage inventory database, February 2007 (b).

## Section 2.6 - Drivers

Snohomish County Public Works, Surface Water Management Division (SWM), GIS data and tabulations, 2007 (c).

Snohomish County Public Works, Surface Water Management Division (SWM), budget data, 2007 (d).

U.S. Bureau of Labor and Statistics (BLS), data table “01/18/07 Consumer Price Index, All Items, 1982-84=100 for All Urban Consumers (CPI-U) SEMIANNUAL,” found at the BLS website at: <http://www.bls.gov/ro9/9250.pdf>

U.S. Department of Commerce National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS), species listing (February 2007) found at [http://www.nmfs.noaa.gov/pr/pdfs/species/esa\\_table.pdf](http://www.nmfs.noaa.gov/pr/pdfs/species/esa_table.pdf)

U.S. Fish and Wildlife Services (USFWS), *ESA Basics*, May 2006, found at [http://www.fws.gov/endangered/pubs/ESA%20BASICS\\_050806.pdf](http://www.fws.gov/endangered/pubs/ESA%20BASICS_050806.pdf)

U.S. Fish and Wildlife Services (USFWS), species listing (February 2007), found at [http://ecos.fws.gov/tess\\_public/StateListing.do?status=listed&state=WA](http://ecos.fws.gov/tess_public/StateListing.do?status=listed&state=WA)

Walls, Tim, presentation on the Endangered Species Act to Surface Water Management, January 2007.

Washington State Department of Ecology (Ecology), NPDES webpage at <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/index.html>, February 2007.