

# Kitsap County Surface & Stormwater Management Program

**David Tucker**

*Senior Program Manager*



# Kitsap County SSWM Program

A unique approach to non-point pollution control that is:

- coordinated
- comprehensive
- multi-agency

# Outline

- Program Agencies
- Program History
- Surface and Stormwater Fund Activities
- Lessons Learned

# SSWM Agencies

- Kitsap County Public Works
- Kitsap County Health District
- Kitsap Conservation District
- Kitsap County Community Development





# Program History

- 1<sup>st</sup> Attempt 1983 was Basin Specific
  - Likely Failed due to “We know what you Need” Perception – and
  - Process Too Fast
- 1987 Drainage Ordinance
  - Established maintenance fee program
- 1987-1991 Stormwater Spotlight Brightens
  - Puget Sound Water Quality Plan
  - Dept of Ecology Manual
  - WAC 400-12 Plans



# Program History

- Program Established in October 1993
  - Funding source for 400-12 Plans
- Comprehensive Plan September 1994
  - Used to set fee
    - Initial Plan had \$60.00 fee
    - Final Fee \$45 per home per year
- Rate Structure Effective January 1995
  - Immediately revised to exclude timber and undeveloped land

# SSWM Program Fees

- Based on Equivalent Service Units of 4,200 ft<sup>2</sup> of impervious surface
- Residential = 1 ESU
- Commercial based on measured impervious surface
- ~111,100 ESU's in 2007
- ~ 1% growth rate per year

# Program History

- **1996 Two new Commissioners**
  - Value Analysis
    - Advisory Committee
    - Longer Budget Projections
- **2003 Determine need for fee Increase**
  - “Just a Latte a month”
  - Too Much at 1 time
    - Rate Increase + New Programs
- **2004 Rate Hearings**
  - Public Comment ~ 4 to 1 Against

Action	Status Quo	Proposed Action
<i>Existing Annual Fee Rate</i>	\$ 45.00	\$ 45.00
<b>Adjust Rate for Inflation</b>	\$ -	\$ 6.92
<b>Fee Credit Program</b>	\$ -	Included in Inflation Adjust
<b>OSS Loan Program</b>	\$ -	Included in Inflation Adjust
<b>Increase Capital Expenditure</b>	\$ -	\$ 3.96
<b>Runoff Control Rvw Funding</b>	\$ -	\$ 4.50
<b>NDAP</b>	\$ -	\$ 0.41
<b>Private Fish Passage Database</b>	\$ -	\$ 0.15
<b>TOTAL</b>	\$ 45.00	\$ 60.94

# Program History

- **2005 Utility Audit**
  - **Generally positive**
  - **Satisfied critics**
  - **Results in Higher Rate**
    - **\$2.30 for asset replacement**

# Work Load Indicators

	<u>1995</u>	<u>2005</u>	<u>Difference</u>	<u>% Increase</u>
<u>Facilities</u> <u>Maintained</u>	147	494	347	236%
<u>Catch</u> <u>Basins</u> <u>Cleaned</u>	1200	10,340	9,140	762%
<u>Accounts</u> <u>(Developed</u> <u>Properties)</u>	49,424	57,271	7,847	15.90%

# Work Load Indicators

	<u>1995</u>	<u>2005</u>	<u>Difference</u>	<u>% Increase</u>
<u>Sediment Removed from Facilities</u>	175 cubic yards	1450 cubic yards	1275 cubic yards	7285%
<u>Revenue</u>	\$4,200,568	\$4,866,556	\$665,988	15.9%
<u>Gallon of Regular Gas (national ave)</u>	\$1.06	\$2.19	\$1.13	1058%
<u>Stormwater Fee</u>	\$ 45/yr	\$ 50/yr	\$5	11.10%

# Work Load Indicators

	<u>1995</u>	<u>2005</u>	<u>Difference</u>	<u>% Increase</u>
<u>Drainage</u>	200	35	-165	-82.50%
<u>Complaints</u>				

Inflation as determined by the Consumer Price Index-Urban for Seattle-Tacoma-Bremerton for this period is 31.5%

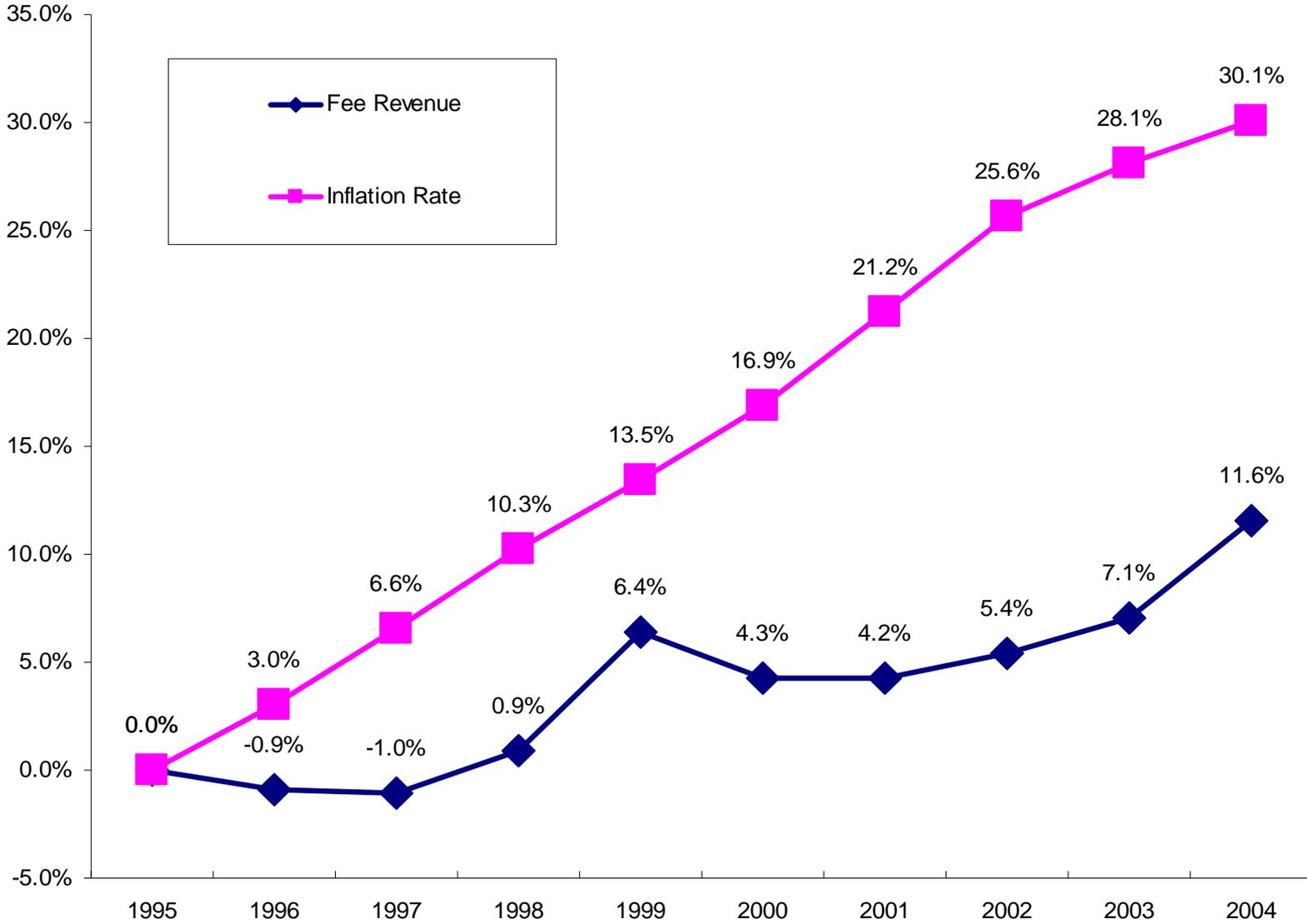
Average fee of Bremerton (\$72), Poulsbo (\$90), Bainbridge Island (\$78) in 2006 = \$80.00 for homes

Kitsap is \$50 or *37.5% less*

Bremerton (\$1254), Poulsbo (\$1307), Bainbridge Island (\$1133) in 2006 = \$1231 for 1 Acre of commercial parking/rooftop

Kitsap rate is \$518 or *58% less*

# SSWM Fee Revenue vs. Inflation



# Surface & Stormwater Fund Activities

- Basin and Watershed Planning
- Education/Outreach and Involvement
- Capital Improvements
- Operations and Maintenance
- Monitoring
- Source Control
- Shellfish Protection

Kitsap Code 12.36.050

# Basin and Watershed Planning

- Non Point Source Planning
  - Liberty/Miller Bay, Dyes/Sinclair Inlet, Hood Canal
- Localized Drainage Studies
  - Manchester, Suquamish, Navy Yard City, Kingston, East Port Orchard, Clear Creek, Converse Ave
- Alternative Futures
  - Chico Creek
  - Silverdale (Barker, Clear, Steele)
- Water Resource Inventory Area (WRIA)
  - Water Purveyors, Counties, Cities, Tribes

# Education/Outreach

- Credit for public schools that include water-related curriculum
- Community, Industry, and School presentations
- Coordination and partnership with other agencies
- Stream and watershed signage



Thumbs Up Thumbs Down



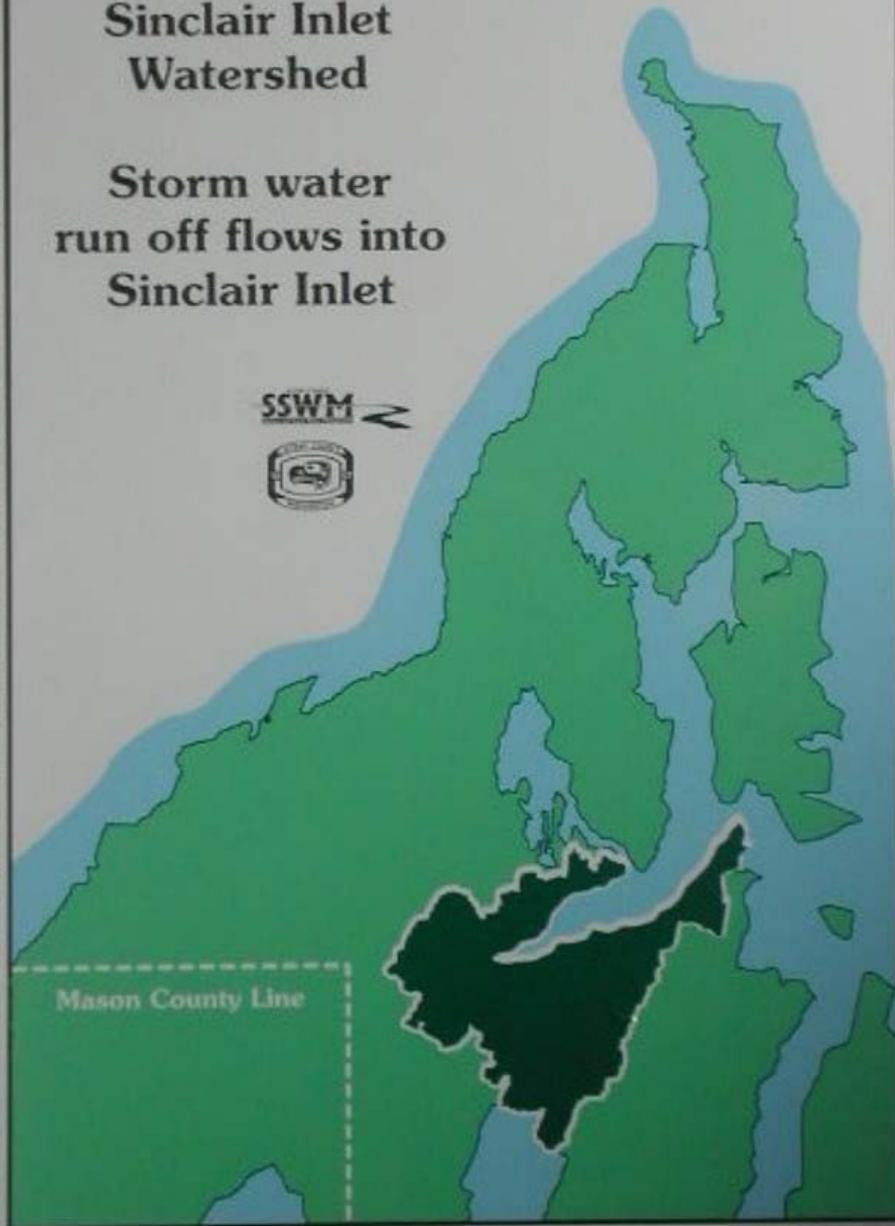
2005 Salmon Tour

# Entering Sinclair Inlet Watershed

Storm water  
run off flows into  
Sinclair Inlet



Mason County Line



# STEELE CREEK



# Public Involvement

- Stream Team
  - Organizes over 200 volunteers per year
  - Stream restoration and monitoring
  - Provides Small Project Grants
- Advisory Committee
- Community Surveys
- Storm Drain Stenciling



Stream Planting



Bug Monitoring



Storm Drain Stenciling

# Capital Project Construction

- Flood reduction
- Water quality enhancement
- Fish passage enhancement
- Project design and management



Silverdale Flooding 1986 & 1997



08/22/2007 12:05

Clear Creek Flood Plain

# Monitoring

- Trend Monitoring
- Pollutant source tracking
- Response to citizens
- Enforcement
- Compliance



Ambient Water Quality & Shellfish Monitoring



## Stormwater Outfall Mapping and Water Sampling

# Source Control Programs

- Pollution Identification and Correction
- Septic Operations and Maintenance
- Wellhead Protection
- Business Pollution Prevention
- Agricultural

# WARNING

**BOTTOMFISH, CRAB  
AND SHELLFISH MAY  
BE UNSAFE TO EAT  
DUE TO POLLUTION.**



Cá, Cua và Sò Ngươi có thể nguy hại đến  
sức khỏe của bạn vì sự ô nhiễm.

ငါး၊ ချွေး၊ နှင်း၊ နှင်း၊ နှင်း၊ နှင်း၊ နှင်း  
သည် အန္တရာယ်ရှိပြီး စားသုံးခြင်းဖြင့်  
ကျန်းမာရေးကို ထိခိုက်စေနိုင်ပါသည်။

海水魚類、蟹、現成貝殼類可能  
不潔宜慎食，因海產可能較污染。

이 새끼는 낚시 배에서, 2011. 08. 15.  
수출된 것으로 인해 위험할 수 있습니다.

El consumo de pescado de fondo,  
cangrejos y mariscos puede ser peligroso  
debido a la contaminación.



Contact Local Health Agency at:

Red Tide Hotline  
1-800-562-5632



TDD RELAY SERVICE  
1-800-933-6288

Washington State  
Department of Health

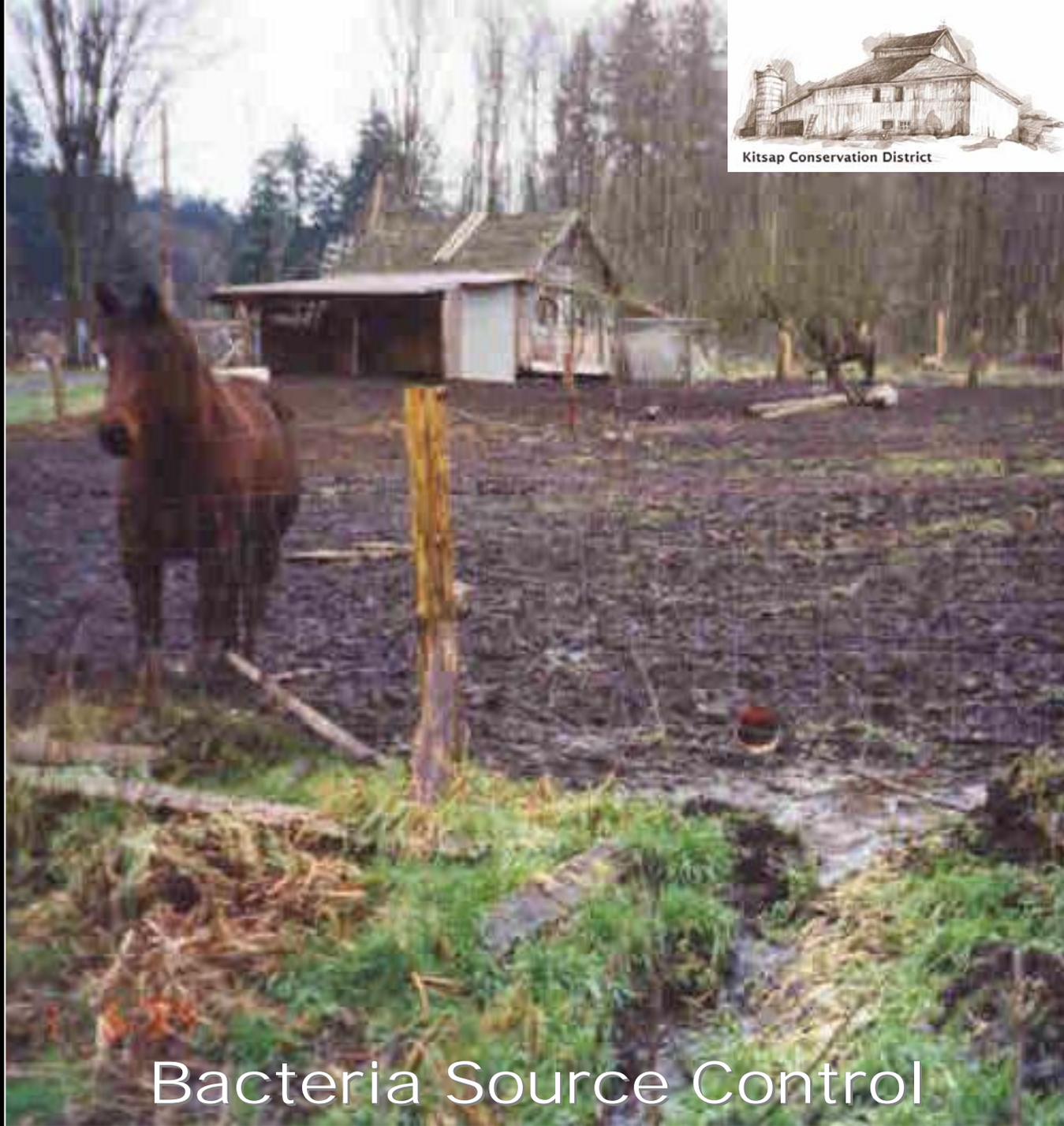
For information call (206) 763-6860



Bacteria Source Control



Kitsap Conservation District



Bacteria Source Control



# Operations and Maintenance

- **Maintain or Operate**
  - Systems in over 785 plats
  - Over 550 ponds, tanks, swales, WQ devices
  - Over 225 miles of pipe and 11,000 catch basins
  - 3 regional decant facilities
- **Inspect**
  - County-maintained systems
  - 700 private systems
  - 400 large or deep culverts
  - Complaint Response



Vactor

WASHINGTON  
62844C  
EVERETT, WA

Vactor Crew



Vault Inspection

# Lessons Learned

- **Base program on items that cannot be argued (Flood Reduction and Water Quality)**
- **Brag early and often**
- **“Brand” your utility (Think Blue in San Diego)**

# Lessons Learned

- **Show your results**
- **Exploit partnerships and efficiencies**
- **Benchmark**
- **Plan financially for Asset Replacement**

# Lessons Learned

- **May charge WSDOT roads @ 30% of private rate as long as local roads pay at least the same  
(RCW 90.03.525)**

# Lessons Learned

- **Avoid Acronyms (SWAMP, Now “swim”)**
- **Unions can be impacted**
- **Billing via Tax statement is inexpensive, but leads to other issues**

Questions?

# SSWM Program Fees

- 1995-2004 = \$45.00 per ESU
- 2005 = \$47.50
- 2006 = \$50.00
- 2007 = \$57.30
- 2008 = \$62.30
- 2009 = \$67.30
- 2010 = \$69.80



## Local SSWM Fees

- Bremerton = \$72 per ISU (2,500 ft<sup>2</sup>)
  - \$1,255 *per acre*
- Bainbridge Island = \$115 per ESU (2,500 ft<sup>2</sup>)
  - \$1,670 *per acre*
- Poulsbo = \$90 per ESU (3,000 ft<sup>2</sup>)
  - \$1,307 *per acre*
- Kitsap County = \$57.30 per ESU (4,200 ft<sup>2</sup>)
  - \$596 *per acre*

# 2007 Budget

- **Public Works**
  - \$ 4,056,539 Operations
  - \$ 1,222,971 Capital Construction
- **Community Development**
  - \$ 281,249
- **Conservation District**
  - \$ 324,296
- **Health District**
  - \$ 874,525

# 2007 Expenditures by Fund Activity

