

Effective Cost Recovery Structure for WSDOT, Jurisdictions, and Efficiencies in Stormwater Management

Presentation to the
Joint Transportation Committee

November 16, 2011

FCS GROUP,
PRR, and
Parametrix Consulting Team

Overview of RCW 90.03.525

Requirements for Jurisdictions to Recover Stormwater Costs from WSDOT

1. Must have a stormwater utility
2. Utility must charge its own streets
3. May charge WSDOT only 30% of comparable properties [WSDOT receives 70% exemption/credit]
4. Can charge only for limited access highways
5. WSDOT payments limited solely to offsetting WSDOT runoff impacts
6. Annual Application/Reporting requirements
7. Enactment predates NPDES implementation

Purposes of Study

1. To understand the stormwater relationship between WSDOT and local jurisdictions
2. To solicit feedback from jurisdictions on improvements in stormwater management and cost recovery
3. To develop options for efficiencies in cost recovery and stormwater management
4. To understand the impacts of NPDES on the stormwater relationship between WSDOT and local jurisdictions

Overview of Study

1. Overview of stormwater regulations and fee structures (“101” Guide)
2. Inventory of State highways subject to the Federal Clean Water Act
3. Survey of jurisdictions
4. Case Studies of 8 representative jurisdictions
5. Recommendations for efficiency improvements under consideration
6. Implementation through statute & ordinance amendments

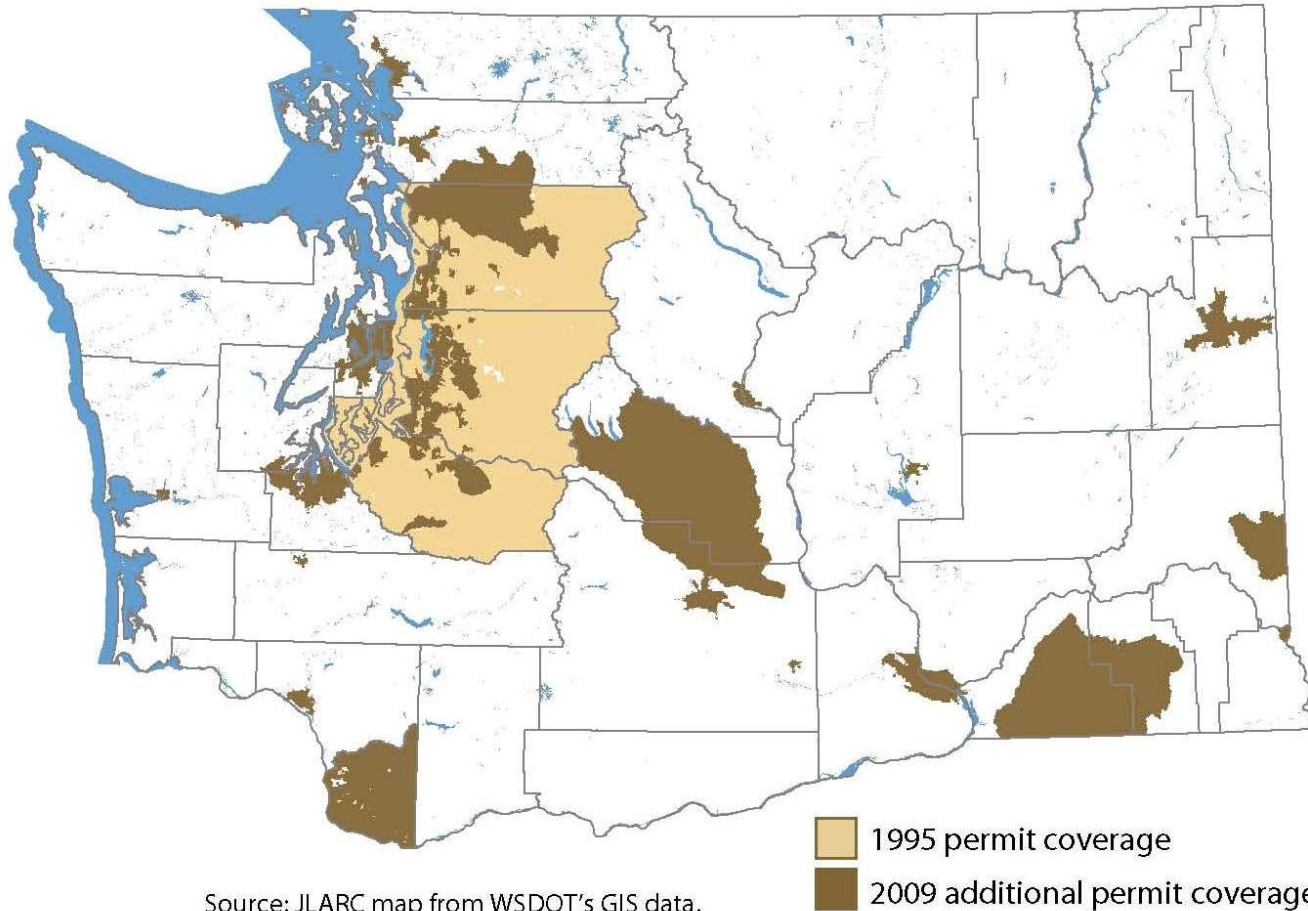
Stormwater “101” Guide

1. Includes short summary explanations of:
 - a. Stormwater characteristics: flow & quality
 - b. Regulations
 - c. Funding practices
2. Suitable for public outreach
3. Washington State a leader in stormwater management

Inventory of State Highways that are the Subject of this Study

1. Total State Highways: 7,058 centerline miles; 20,587 lane miles
2. Limited Access Highways: 2,220 centerline miles; 9,576 lane miles
3. Limited Access Highways within cities:
Subject of this study: 440 centerline miles
4. Limited access highways subject to NPDES requirements (Map)

WSDOT Permit Coverage



BMPs by Limited Access ROW

Sample from Database

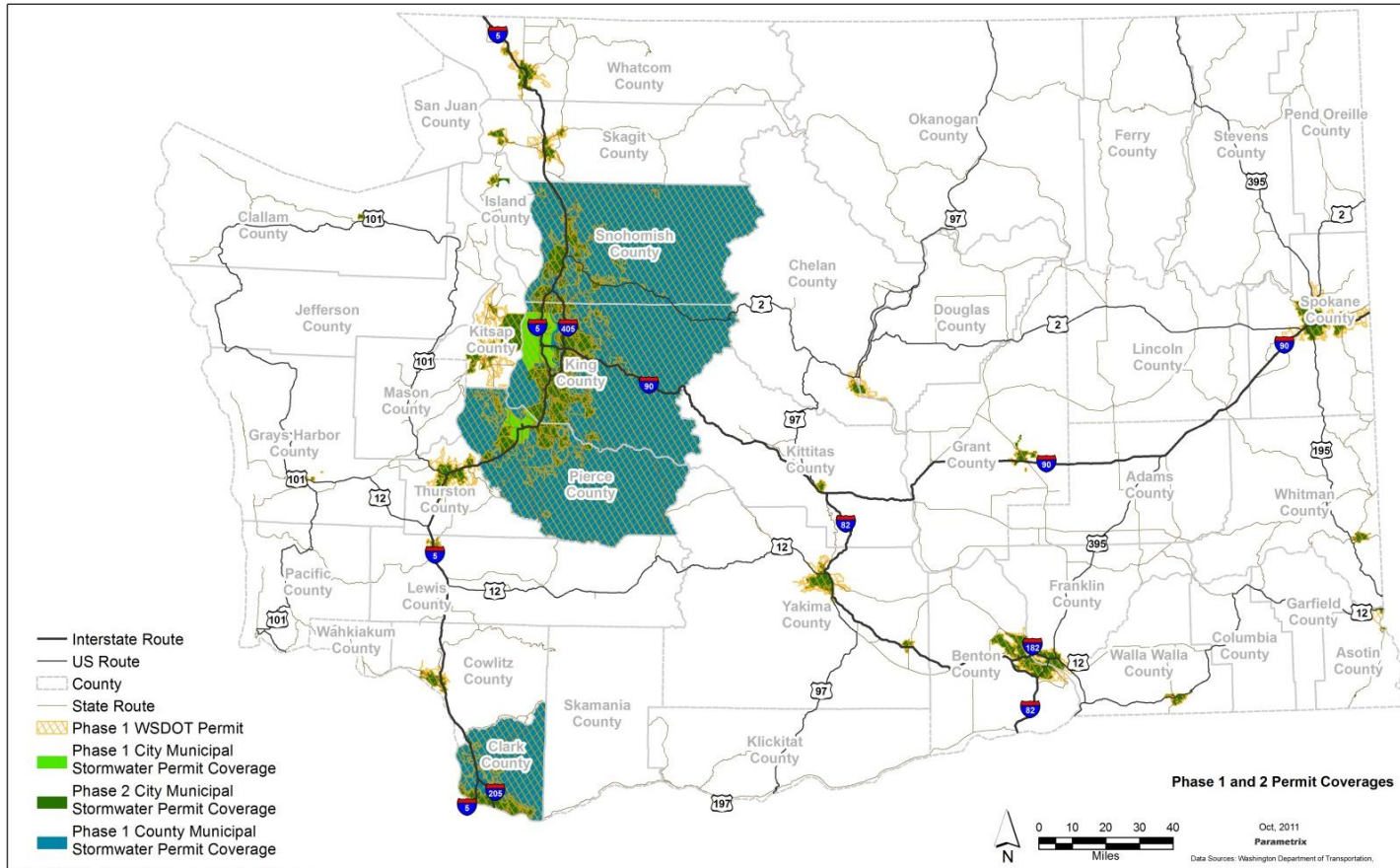
BMPTYPE	BMPCat	StateRoute	City	County	PH2city	PH2county	PH1County	PH1City
Media Filter Drain	Media Filter Drain	167	Algona	King	X		X	
Media Filter Drain	Media Filter Drain	167	Algona	King	X		X	
POND	Stormwater Ponds	18	Auburn	King	X		X	
Stormwater Pond	Stormwater Ponds	18	Auburn	King	X		X	
Stormwater Pond	Stormwater Ponds	18	Auburn	King	X		X	
Stormwater Pond	Stormwater Ponds	18	Auburn	King	X		X	
Stormwater Pond	Stormwater Ponds	18	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Ecology Ditch	Media Filter Drain	167	Auburn	King	X		X	
Detention Vault	Stormwater Vaults	167	Auburn	King	X		X	

Jurisdictional Summary

Sample from Database

City	NPDES Permittee Phase I or II	Limited Access Highway?	State Route Number	Highway miles	WSDOT Permit Coverage?
Aberdeen	x		12	2.11	x
Aberdeen	x		101	6.57	x
Aberdeen	x		105	1.93	x
Airway Heights			2	2	
Algona	x	x	167	1.34	x
Almira			2	0.6	
Anacortes	x		20	10.07	x
Arlington	x	x	5	1.53	x
Arlington	x		9	2.68	x
Arlington	x		530	0.47	x
Arlington	x		531	2.99	x
Asotin	x		129	1.52	x
Auburn	x	x	18	4.31	x
Auburn	x		164	4.4	x
Auburn	x	x	167	3.66	x
Bainbridge Island	x	x	305	6.8	x
Battle Ground	x		502	1.52	x
Battle Ground	x		503	3.65	x
Bellevue	x	x	90	5.81	x

Statewide NPDES Permit Coverage



Path: K:\gis\4893\FCS_Group\218-4893\02_001\trans\Committee\Map\locos\Ph1-2\permit.mxd

Overview of RCW 90.03.525

Requirements for Jurisdictions to Recover Stormwater Costs from WSDOT

1. Must have a stormwater utility
2. Utility must charge its own streets
3. May charge WSDOT only 30% of comparable properties [WSDOT receives 70% exemption/credit]
4. Can charge only for limited access highways
5. WSDOT payments limited solely to offsetting WSDOT runoff impacts
6. Annual Application/Reporting requirements
7. Enactment predates NPDES implementation

Survey of Jurisdictions: Purpose

- ◆ Survey questions were designed to identify successes experienced and challenges faced by the jurisdictions in:
 - a. Working with WSDOT to manage stormwater
 - b. Complying with RCW 90.03.525
 - c. Preparing documentation for recovery of costs associated with managing stormwater from limited access highways

Survey of Jurisdictions

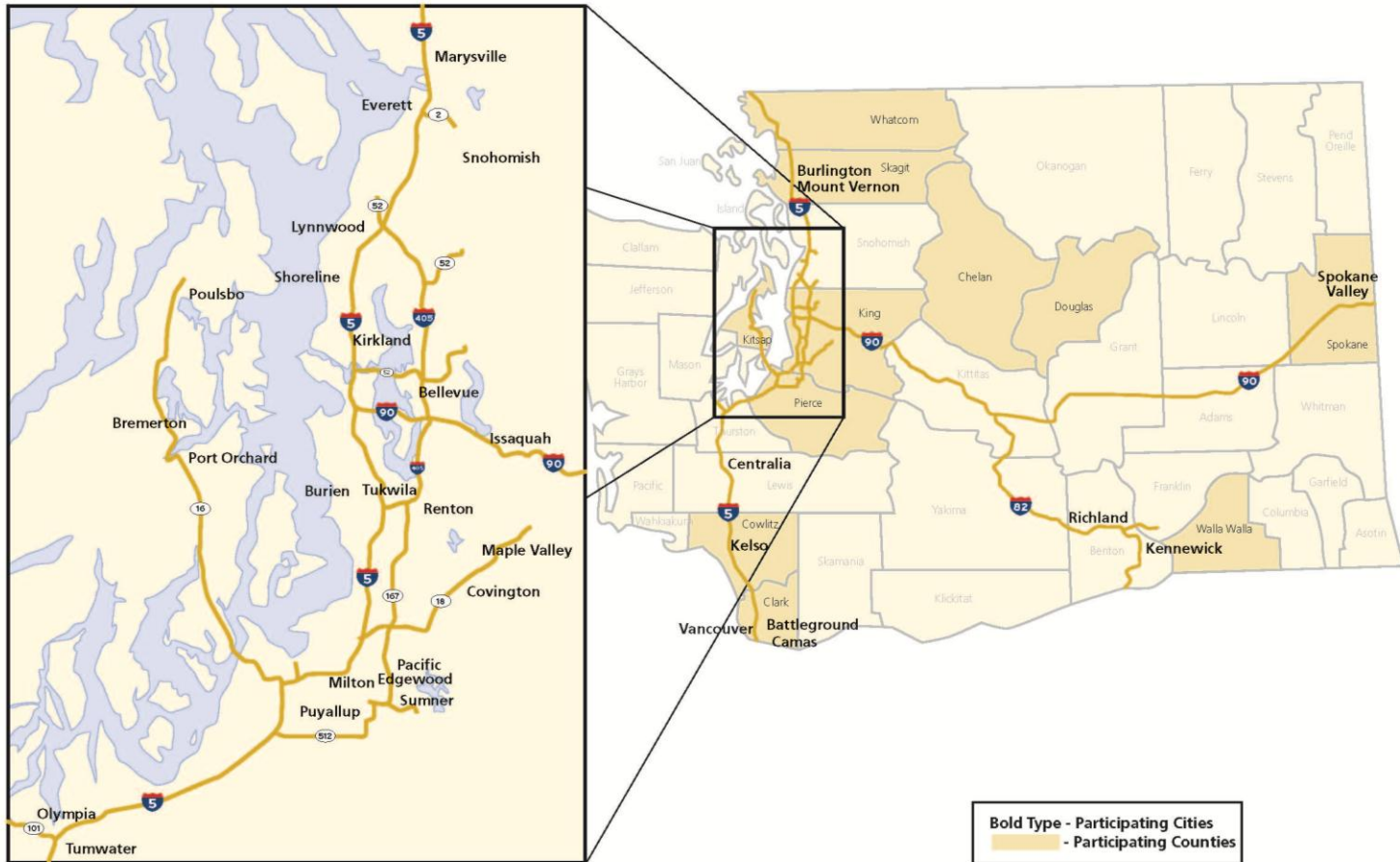
Criteria for Inclusion in Survey

1. Have a stormwater utility
2. Are subject to National Pollutant Discharge Elimination System (NPDES) Phase 1 or Phase 2 municipal stormwater permitting requirements, and
3. Have one or more limited access state highways within their jurisdiction

Survey Methods

1. Survey questions were administered through an online survey process
2. A total of eighty-one (81) qualified jurisdictions were invited to participate
3. Forty-five (45) completed the survey, for a response rate of 56%

Survey Respondents



Survey Responses and Results

Key findings:

1. Major challenges to managing stormwater from limited access highways: Stormwater system capacity, costs, water quality, and staff resources
2. Major challenges to complying with RCW 90.03.525: Factors upon which the fee is based, definition of what is eligible for reimbursement, and limited staff resources
3. Major reasons for not charging WSDOT: Not charging for city streets, burdensome work plan and reporting requirements, and not tracking costs of runoff from state highways
4. Working with WSDOT: Is OK, but could be improved especially in regard to communication (most of which referred to the issues above)

Case Studies

The consultants conducted in-depth case studies of 8 survey respondents:

1. To assess costs that jurisdictions incur to manage stormwater from State highways
2. To assess costs & challenges that jurisdictions experience to charge WSDOT for cost recovery
3. To assess barriers to jurisdictions charging WSDOT for cost recovery
4. To assess jurisdictions' satisfaction with current stormwater State framework
5. To collect jurisdictions' improvement ideas

Case Study Selection Criteria

1. Have completed the survey
2. Are representative of
 - a. Phase 1 NPDES jurisdictions
 - b. Small and medium Phase 2 NPDES jurisdictions
 - c. Sample both eastern and western Washington

Case Study Participants

Jurisdiction	Reasons Selected
City of Issaquah	Used to charge State, no longer does; NPDES Phase II
City of Puyallup	Used to charge State, no longer does; NPDES Phase II
City of Bellingham	Currently charges State; NPDES Phase II; geographic balance
Clark County	Currently charges State; NPDES Phase I; geographic balance
City of Tukwila	Currently charges State; NPDES Phase II
City of Olympia	Currently charges State; NPDES Phase II
City of Richland	Has never charged State; NPDES Phase II; Eastern Washington
City of Spokane Valley	Has never charged State; NPDES Phase II; Eastern Washington

Case Study Background

Jurisdiction	Population	Rate Approach	Monthly Rate	Eligible Highway Area	Annual WSDOT Payment	Notes
City of Issaquah	30,434	ESU	\$14.08	50 acres	\$0	Actual costs unknown
City of Puyallup	37,022	ESU	\$10.75	20 acres	\$0	Actual costs unknown
City of Bellingham	80,885	Impervious Square Feet	\$7.00	48 acres	\$44,500	Costs estimated at \$75,000
Clark County	425,363	Impervious Square Feet	\$2.75		\$81,489	Costs estimated at \$125,000
City of Tukwila	19,107	Development Density	\$7.75	92 acres	\$62,897	Costs estimated at \$134,000
City of Olympia	46,478	Impervious Square Feet	\$10.58	49 acres	\$33,554	Costs typically exceed charges
City of Richland	48,058	ERU	\$3.85	113 acres	\$0	City reports no WSDOT impact
City of Spokane Valley	89,765	ERU	\$1.75	82 acres	\$0	City reports no WSDOT impact

Cost Recovery under RCW 90.03.525

Case Study Results

Suggested Improvements	City of Issaquah	City of Puyallup	City of Bellingham	Clark County	City of Tukwila	City of Olympia	City of Richland	City of Spokane Valley
Eliminate required link between WSDOT payments & how \$ are spent	●	●	●	●	●	●		
Allow jurisdictions to charge non-limited access highways	●	●	●		●	●		●
Develop standard rate methodology for charging WSDOT	●	●	●	●	●	●		
Eliminate requirement that cities charge their own streets	●	●			●	●		
Develop standard application approach for charging WSDOT	●	●		●				
Increase flexibility in determining project / activity eligibility			●	●		●		
Charge full cost (not 30% of rate) to State highways			●			●		
Increase outreach to those not recovering costs	●							

Cost Recovery under RCW 90.03.525

Additional Consultant Observations

1. Most jurisdictions exempt their own roads from stormwater rates
2. Many jurisdictions don't provide stormwater rate credits
3. Among those who do, credits of as much as 70% are unusual
4. RCW 90.03.525 may not be compatible with the methods that jurisdictions use to calculate and bill stormwater utility rates
5. RCW 90.03.500 provides that local stormwater rates "may be imposed on any publicly-owned, including state-owned, real property that causes such damage" from runoff – except as provided in RCW 90.03.525
6. We currently know of no other states in which local jurisdictions charge stormwater rates to state highways

Stormwater Management Improvements

Summary of Case Study Results / Recommendations for Consideration

1. Collaboration with WSDOT on projects should be more straightforward & faster
2. Refer concerns regarding stormwater responsibilities for non limited access highways to the current process to update the Agreement interpreting RCW 47.24, in which cities accept certain highway responsibilities from the state
3. Improve WSDOT responsiveness to local maintenance needs
4. Information such as system mapping should be better shared
5. WSDOT should participate in watershed planning
6. Retrofitting existing WSDOT facilities should remain a priority

Stormwater Management Improvements

Additional Consultant Observations for Consideration

Addressing the following issues would likely result in lowering overall public costs:

1. Cost & liability concerns create barriers to cooperation on capital and M&O between WSDOT and jurisdictions
2. Uneven funding cycles between WSDOT and jurisdictions impede collaboration
3. Inconsistent relationships & implementation exists among WSDOT Regions & jurisdictions
4. Inadequate joint planning between jurisdictions & WSDOT reduces collaboration/produces inefficiencies
5. Overlap in NPDES permits for non-limited access highways creates shared responsibilities; covered in both WSDOT and jurisdiction permits

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 1: Retain requirement that to charge WSDOT a jurisdiction must have a SWM Utility

Rationale & Implications for Jurisdictions

1. The legal requirements for fund accounting on utilities provide accountability for use of funds
2. Requirement for a SWM utility not a burden; most stormwater programs, including those with NPDES permits, already have SWM Utilities or will in future

Rationale & Implications for WSDOT

1. Provides accountability for expenditure of payments from WSDOT without additional process

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 2: Eliminate the requirement that jurisdictions must charge their own roads

Rationale & Implications for Jurisdictions

1. Jurisdictions manage stormwater from their own roads using a mix of funds [e.g., road funds, general funds, stormwater fees]; source of funds should be irrelevant for WSDOT cost recovery
2. Treats charging for local & non-limited access roads the same
3. Removal of this barrier may allow up to 50 jurisdictions to seek cost recovery

Rationale & Implications for WSDOT

1. Removal of barrier likely to increase costs to WSDOT (Estimate up to \$2 M annual increase, or up to twice their current cost)

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 3: Streamline application and reporting processes

Rationale & Implications for Jurisdictions

1. Will reduce processing costs for each jurisdiction (Estimated annual savings \$1,500 / jurisdiction)
2. Will remove a barrier to cost recovery

Rationale & Implications for WSDOT

1. Will reduce time for preparation and review (Estimated annual savings ~\$5,000)
2. Negligible upfront cost to develop templates for applications and reporting

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 4: Provide written guidance and training on what is eligible for cost recovery

Rationale & Implications for Jurisdictions

1. Will reduce application and reporting costs (included in savings for Issue 3)

Rationale & Implications for WSDOT

1. Cost for WSDOT to develop outreach training and update each NPDES permit cycle if necessary (Estimate \$2,500 initially, minor every 5 years for update)
2. Will subsequently save processing costs (included in savings for Issue 3)

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 5: Calculate, justify and document an appropriate credit (or credits) for WSDOT

Rationale & Implications for Jurisdictions

1. Resolution of a long standing jurisdictional concern about equity
2. Potential increase or decrease in cost recovery for jurisdictions based on technical rationale

Rationale & Implications for WSDOT

1. Cost associated with determining an appropriate credit
2. If the technical rationale results in a credit less than or greater than 70%, WSDOT costs would need to adjust accordingly
 - a. Current costs approximately \$1.9 m (annual)

Summary of Draft Recommendations

Jurisdiction Cost Recovery

Issue 6: Create at least two uniform WSDOT stormwater utility rates, one for Eastern and one for Western Washington

Rationale & Implications for Jurisdictions

1. Would resolve issue of lack of documentation of current credit by generating new average uniform rates [Issue 5]
2. Removes process barriers (issues 3 & 4)
3. Recognizes geographic differences
4. Cost recovery might increase/decrease for some Cities that currently charge WSDOT
5. Supported by most case studied jurisdictions
6. Potential incompatibility with local rate methodologies; requires ordinance amendment

Rationale & Implications for WSDOT

1. Cost to develop new rates
2. Risk of increased WSDOT costs if new rates higher than current
3. More jurisdictions may apply for cost recovery
4. Rate updates may be needed periodically to account for new costs
5. Provides documentation of new rates
6. Eliminates need for application and reporting processes for WSDOT to manage

Cost Recovery Option A: Modify Existing Framework

1. Retain requirement that to charge WSDOT a jurisdiction must have a SWM Utility
2. Eliminate the requirement that jurisdictions must charge their own roads
3. Streamline application and reporting processes
4. Provide written guidance on what is eligible for cost recovery
5. Calculate, justify and document an appropriate credit(s) for WSDOT

Cost Recovery Option B: Create New Framework

1. Retain requirement that to charge WSDOT a jurisdiction must have a SWM Utility
2. Eliminate the requirement that jurisdictions must charge their own streets
3. Establish a new, special uniform rate for limited access highways for inclusion in all SWM Utility rate structures statewide (minimum: one for Eastern and one for Western Washington; more may be necessary to improve equity)
4. Eliminate application and reporting requirements

Cost Recovery Options Comparison

	One-Time Cost to Implement	Ongoing Savings	RCW Change	Ordinance Change	Time to Implement	Impact on WSDOT
Option A	\$\$	\$\$	Yes	Yes	≅ 1 yr	*
Option B	\$\$	\$\$\$	Yes	Yes	≅ 2 yrs	*

- * Depends primarily on whether the current 70% credit decreases or increases, or the new rate is higher than what WSDOT pays now. Both depend on new analysis. It also depends on whether the removal of the barriers for jurisdictions to charge encourages more to do so.

Draft Final Report

1. Will include and summarize the findings of the full study
2. Will include results of legal analysis
3. Will include draft amendments to RCW 90.03.525 for both options
4. Will include draft amendment language to local SWM Utility ordinances
5. Expected completion in December

QUESTIONS?