

CASE STUDIES

The project team agreed to research and write eight case studies from a representative cross-section of survey respondents. The case studies are to address at least the following issues:

1. The costs jurisdictions incur to manage stormwater runoff from state highways.
2. The costs that jurisdictions incur in order to impose stormwater fees upon WSDOT.
3. General challenges experienced by jurisdictions in imposing stormwater fees.
4. Barriers and challenges to jurisdictions' imposing stormwater fees on WSDOT.
5. The jurisdictions' level of satisfaction or dissatisfaction pertaining to existing state law and the WSDOT application process to recover stormwater costs.
6. Specific examples of potential improvements where WSDOT and jurisdictions may find efficiencies in the cost and management of stormwater facilities.

Case Study Selection

The following criteria were used to select case study participants:

- ◆ Is the selection eligible to charge WSDOT stormwater rates under RCW 90.03.525?
- ◆ Does the selection create / improve appropriate representation among subjects that (1) now charge WSDOT, (2) did charge WSDOT but no longer do, (3) never have charged WSDOT, and (4) have not but is now considering charging WSDOT?
- ◆ Does the selection create / improve appropriate representation between NPDES Phase I and Phase II communities?
- ◆ Does the selection create / improve appropriate representation between Eastern and Western Washington subjects?

It was further agreed that the mix of case studies should include the following characteristics:

- ◆ At least two respondents should be from Eastern Washington.
- ◆ At least one respondent should be a county.
- ◆ At least one respondent should be an NPDES Phase I permittee.

There were 45 survey respondents. Of these respondents,

- ◆ Twelve (Bellevue, Bellingham, Clark County, Douglas County, King County, Kitsap County, Olympia, Pierce County, Renton, Skagit County, Tukwila, and Vancouver) currently charge the State of Washington under RCW 90.03.525.
- ◆ Two (Issaquah and Puyallup) appear to have charged the State in the past but no longer do.
- ◆ The remaining thirty-three respondents have never charged the State under RCW 90.03.525.
- ◆ Of the 45 respondents, three (King County, Pierce County, and Clark County) are NPDES Phase I permittees.
- ◆ Seven (Chelan County, Douglas County, Kennewick, Richland, Spokane County, Spokane Valley, and Walla Walla County) are located in Eastern Washington.

Applying the above criteria to the survey respondents, the following eight jurisdictions were selected for case studies:

Table 1: Case Study Selections

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

Summary of Results

Selected background information on each of the case study selections is provided in Table 2 below.

Table 2: 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

Each of the case study participants was asked about suggested improvements to cost recovery under RCW 90.03.525. These results, a key outcome of the case studies, are summarized in Table 3 below.

Table 3: Case Study Results Regarding Cost Recovery under RCW 90.03.525

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 & spending	●	●	●	●	●	●		
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	●							

CASE STUDY #1: CITY OF ISSAQUAH

BACKGROUND

Overview of Participant Agency

Demographics

The City of Issaquah is located in King County, east of Renton and Bellevue, in the WSDOT Northwest / King Region. Portions of the City's 9 square miles border Lake Sammamish. The (2010) population of Issaquah is 30,434. The median household income is \$57,892.

Agency Stormwater Program

Program Scope

For a smaller city, the City of Issaquah stormwater program provides comprehensive services including management of stormwater quantity (local flooding), stormwater quality, and habitat restoration. The City is subject to National Pollutant Discharge Elimination System (NPDES) Phase II permitting requirements. The City stormwater utility generates \$4.1 million in annual rate revenue to pay for these services.

Rate Approach

The City of Issaquah utilizes the equivalent service unit (ESU) rate approach. Single family residences are charged a uniform rate, based on the average amount of impervious surface area for single family residences in Issaquah. The charge basis for all other customer types is actual measured impervious surface area by parcel, expressed as a number of ESUs. One ESU is equal to 2,000 square feet of impervious surface area. The rate per ESU for developed property is \$14.08 per month.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 90 (5.46 miles) and State Route 900 (2 miles) lie within Issaquah city limits. These Washington State Department of Transportation (WSDOT) facilities are subject to NPDES requirements under the Department's permit. Interstate 90 and only a small piece of SR 900 are limited access highways, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Issaquah, I-90 alone is approximately 50 acres of impervious surface area and carries 120,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that it manages stormwater runoff from both SR 900 and, in spots, I-90. The State is not generally impacted by runoff from the City, although some conveyance may be provided across State right-of-way.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

The City reports that its cost of managing runoff from State highways is unknown at this time. The City last charged the State in 2003, identifying a total of \$11,280 in expenditures associated with activities and projects that directly reduced State highway runoff impacts associated with the limited access portion of I-90. The City identified similar expenditures of \$73,230 in 2002, with the addition of a capital project not needed in 2003. The City does not charge for SR 900.

Charging the State for Its Impacts

The City reports that it no longer charges the State for highway impacts. City staff estimates that it would take several days to prepare the documentation required to support charging the State for its highway impacts again – described to be a burdensome process against the perceived benefit to the City. Further, the City no longer charges its own streets, a requirement of RCW 90.03.525. The City began exempting its own streets from stormwater rates in 2005.

General Challenges

Satisfaction with Relationship

The City reports that it has been somewhat dissatisfied with its relationship with WSDOT. Their observation is that WSDOT is very careful with fuel tax revenue, generally favoring capital expenditures over maintenance. Maintenance spending has seemed to be driven by lawsuits and other priorities. In one example, it was noted that the maintenance of a trash rack at Lewis Creek has been inconsistent, leading to destructive surges after WSDOT crews unplug it.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff suggested the following potential improvements:

- ◆ Allow local access into State right-of-way for maintenance as needed;
- ◆ Improve WSDOT responsiveness to local maintenance needs; and
- ◆ Streamline / improve process that now holds up WSDOT projects.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff suggested the following potential improvements:

- ◆ Develop a standard rate methodology for charging the State, provided that there be no charge for highways that do not discharge to local systems;
- ◆ Develop a standard “application” approach for charging the State;
- ◆ Eliminate the requirement that cities charge their own streets in order to charge State highways; costs are incurred by local jurisdictions anyway;

- ◆ Eliminate the requirement for documenting a specific link between WSDOT payments and activities / facilities. At a minimum, provide for straightforward reporting on how WSDOT money is expended;
- ◆ Consider allowing jurisdictions to charge for non limited access highways. Currently, cities own the responsibility with limited ways to recover the cost; and
- ◆ Increase outreach to inform jurisdictions of their ability to recover costs from WSDOT.

CASE STUDY #2: CITY OF PUYALLUP

BACKGROUND

Overview of Participant Agency

Demographics

The City of Puyallup is located in Pierce County, east of Tacoma and west of Sumner. The City is bisected slightly by the Puyallup river and lies both within the river floodplain as well as up on two high plateaus (north and south) looking down on the river. The City encompasses 12.2 square miles and has a population of 37,022 based on the 2010 census. The median household income is \$47,269.

Agency Stormwater Program

Program Scope

The City's stormwater program provides comprehensive services including management of stormwater quantity (local flooding), stormwater quality, and habitat restoration. The City is subject to National Pollutant Discharge Elimination System (NPDES) Phase II permitting requirements. The City stormwater utility generates \$3.2 million in annual rate revenue to pay for these services.

Rate Approach

The City of Puyallup utilizes the equivalent service unit (ESU) rate approach. Single family residences are charged a uniform rate, based on the average amount of impervious surface area for single family residences. The charge basis for all other customer types is actual measured impervious surface area by parcel, expressed as a number of ESUs. One ESU is equal to 2,800 square feet of impervious surface area. The rate per ESU for developed property is \$10.75 per month.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of State Route 512 (3.51 miles) lie within Puyallup city limits and it carries 86,000 average daily vehicle trips. This equates to approximately 20 acres of impervious surface. This roadway is subject to NPDES requirements under the Department's permit. State Route 512 is a limited access highway potentially subject to City stormwater rates as provided for in RCW 90.03.525.

Stormwater Services Provided

The City reports that it manages some stormwater runoff from SR512. The majority of State Route 512 runoff is contained within a separate WSDOT drainage system with a direct discharge to the Puyallup River. The City has an agreement with WSDOT allowing for City runoff to discharge through the State system. Portions of SR512 from the South Hill Mall area west to the city limits discharge into the City's system draining to Clark's Creek and then to the Puyallup River. The City has been focusing on improving the runoff quality into Clark's Creek due to the impaired condition of the creek. Overall, the State is not generally impacted by runoff from the City and an historic agreement provides for conveyance of City runoff through the State's system in SR 512.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

The City reports that its cost of managing runoff from State highways is unknown at this time. The City last charged the State in 2003, identifying a total of \$244 in expenditures associated with activities and projects that directly reduced State highway runoff impacts associated with the limited access portion of SR512 for the 2003-5 biennium. The City identified similar expenditures of \$31,605 in 2001-3 and \$33,541 in the 99-01 biennium.

Charging the State for Its Impacts

City staff estimates that it could take several days to prepare the documentation required to support charging the State for its highway impacts again. The initial startup would be expected to be longer than in following years but since the City has not participated since 2003/5 it would be viewed as a new effort. Additionally, the individual(s) who prepared the older plans and submittals are no longer with the City.

General Challenges

Satisfaction with Relationship

The City reports that it has limited contact with WSDOT and those contacts have been satisfactory. The current City staff believes the City no longer charges the State for highway impacts because it no longer charges its own streets, a requirement of RCW 90.03.525.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff had no suggestions based on limited interactions with WSDOT.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff thought the following potential improvements would be beneficial and encourage them to apply:

- ◆ Develop a standard rate methodology for charging the State;
- ◆ Develop a standard “application” approach for submitting to the State;
- ◆ Eliminate the requirement that cities charge their own streets in order to charge State highways; costs are incurred by local jurisdictions anyway;
- ◆ Eliminate the requirement for documenting a specific link between WSDOT payments and activities / facilities. At a minimum, provide for straightforward reporting on how WSDOT money is expended;
- ◆ Allow jurisdictions to charge for non limited access highways.

CASE STUDY #3: CITY OF BELLINGHAM

BACKGROUND

Overview of Participant Agency

Demographics

The City of Bellingham is located in Whatcom County, on Interstate 5, in the WSDOT Northwest / Baker Region. Portions of the City's 32 square miles border Puget Sound. The (2010) population of Bellingham is 80,885. The median household income is \$37,031.

Agency Stormwater Program

Program Scope

The City of Bellingham stormwater program is a mature program that provides fish enhancement, habitat and stream restoration, stormwater quantity (local flooding) and stormwater quality services. The City is subject to NPDES Phase II permitting requirements. The City inspects some 800 private facilities in addition to maintaining its own facilities. The City stormwater utility generates about \$5.1 million in annual rate revenue to pay for these services. The City funds some stream restoration through other sources.

Rate Approach

The City of Bellingham utilizes an impervious surface area-based rate. The City charges single family residences with small impervious footprints \$4.20 per month. Single family residences with medium impervious footprints are charged \$7.00 per month, the base rate. All other developed property with an impervious footprint of greater than 3,000 square feet is charged \$.004666 per square foot of impervious surface area.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 5 (8.32 miles), State Route 11 (3.29 miles), State Route 539 (2.4 miles), and State Route 542 (1.75 miles) lie within Bellingham city limits. Only Interstate 5 is a limited access highway, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Bellingham, I-5 totals more than 48 acres of impervious surface area and carries more than 70,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that it manages stormwater runoff from I-5 and the state routes in its jurisdiction. Little if any runoff from the City impacts State facilities.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

City staff estimates the cost of managing runoff from limited access State highways to be \$75,000 per year. To determine the cost allocable to managing runoff from limited access State highways, staff used the following general methodology. Staff reviews its costs in those basins impacted by limited access State highways. The State share is estimated by isolating its share of impervious surface area in the basin against the total impervious surface area in the basin. Costs are allocated based on that percentage, by basin. When the City has had large capital projects, staff spreads the costs over several years to reflect a realistic spending pattern. Staff reports that projects have been excluded, by their interpretation of the statute, including a \$5 million fish passage improvement. Staff reports that increased flexibility in determining those projects eligible for cost recovery would be desirable.

Charging the State for Its Impacts

The City has successfully charged the State under RCW 90.03.525 for at least six years, an average of \$44,500 per year. City staff estimates that it takes a couple days of staff time, including some input needed from other departments, to prepare the required documentation, noting that the City has systematized its submittals.

General Challenges

Satisfaction with Relationship

The City noted that it has absolutely no complaints with WSDOT or its staff.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff suggested the following potential improvements:

- ◆ State-facilities impacting the City are well-maintained; and
- ◆ The City reports that it maintains a good relationship with the WSDOT crew and that they coordinate pretty well.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff suggested the following potential improvements:

- ◆ There should be more leeway granted in determining project eligibility for cost recovery. It was further noted that the scrutiny applied to the inclusion of projects is not warranted in light of the 30% rate applied universally to WSDOT chargeable area;
- ◆ The State has accepted an allocation of 0.5% of City stormwater maintenance costs using the City's methodology, but the City's actual costs of managing runoff from State limited access highways would be much higher.

- ◆ The City charges its own streets, and is neutral on the idea of eliminating that as a requirement in order to charge State highways;
- ◆ City staff believes that combined effect of applying for cost recovery and reporting on how the money was spent is burdensome. In their view, either the application or the report would sufficiently document the highway impacts;
- ◆ Staff would favor recovery of the full cost of managing runoff from State highways. The 30% rate as applied to chargeable area is always less than their calculated actual cost;
- ◆ Cities should be allowed to charge state highways even if they are not limited access; and
- ◆ City staff would support a standardized rate for WSDOT facilities impacting local programs. The rate to WSDOT should not be linked to the City rate, but should instead be a standard, stand-alone rate.

CASE STUDY #4: CLARK COUNTY

BACKGROUND

Overview of Participant Agency

Demographics

Clark County is located in southwest Washington in the WSDOT Southwest Region. Portions of the County's 656 square miles border the Columbia and Lewis Rivers. The (2010) population of Clark County is 425,363. The median household income is \$56,351.

Agency Stormwater Program

Program Scope

The Clark County Clean Water Program provides stormwater quantity (local flooding) and stormwater quality services. The County is subject to NPDES Phase I permitting requirements. The County provides services consistent with its Stormwater Management Plan, exceeding minimum NPDES requirements in both monitoring and public education. The County estimates that 90% of its program costs are related to compliance with its NPDES permit. The Clean Water Program generates about \$4.9 million in annual rate revenue to pay for these services.

Rate Approach

Clark County utilizes an impervious surface area-based rate. The County charges single family residences on lots less than ½ acre \$33 per year, the equivalent of \$2.75 per month. Rates for single family residences on larger parcels decline to a low of \$19.80 per year for residences on parcels larger than 20 acres. All other developed property is charged \$33 per year for every 3,500 square feet of impervious surface area. Due to the size of the County and the number of County roads, County staff reports that the Road fund provides about 40% of the program's revenue from rates.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 5, Interstate 405, State Route 14, State Route 500, State Route 501, State Route 502, and State Route 503 lie within Clark County. Only Interstate 5, Interstate 205, and portions of State Route 14 are limited access highways, potentially subject to County stormwater rates as provided for in RCW 90.03.525.

Stormwater Services Provided

The County reports that it manages stormwater runoff State highways in the County. The County also discharges to State facilities in some areas.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

County staff broadly estimates the cost of managing runoff from limited access State highways to be \$125,000 per year, clarifying that the true costs is unknown. Staff reports that increased flexibility in determining how revenues from WSDOT should be spent, as needed, would be desirable. Staff further noted that the costs incurred by the State related to management of runoff generated in the County should offset those costs eligible for recovery from the State for its impacts.

Charging the State for Its Impacts

The County has successfully charged the State under RCW 90.03.525 for at least twelve years, receiving \$162,978 in the most recent biennium (an average of \$81,489 per year). County staff estimates that it takes less than \$10,000 to prepare the required documentation, noting that the County has systematized the preparation of its submittals. Staff did indicate that the reporting requirements are burdensome and that they have worked to improve the efficiency of their documentation efforts over time.

General Challenges

Satisfaction with Relationship

The County noted that they have had some difficulty getting WSDOT to engage in agreed-upon capital projects, perhaps in part due to WSDOT staff turnover. County staff reported that WSDOT had requested in 2007 that the County do more with the money it received from WSDOT, but offered little assistance. County staff indicated that projects were held up and that WSDOT engineering staff seemed to be unwilling to relinquish any of their role to County staff, essentially keeping projects from moving forward.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, County staff suggested the following potential improvements:

- ◆ Collaboration with WSDOT on projects should be more straightforward; and
- ◆ A more consistent, coordinated approach to collaboration is needed.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, County staff suggested the following potential improvements:

- ◆ The process of applying for and reporting on the expenditure of recovered costs from WSDOT should at a minimum be standardized;
- ◆ There should be more flexibility allowed in determining project eligibility for cost recovery;

- ◆ County staff would support a standardized rate for WSDOT facilities impacting local programs. The rate to WSDOT should not be linked to the County rate, but should instead be a standard, stand-alone rate; and
- ◆ Limits on how WSDOT revenues can be spent should be eliminated.

CASE STUDY #5: CITY OF TUKWILA

BACKGROUND

Overview of Participant Agency

Demographics

The City of Tukwila is located in King County, at the intersection of Interstate 5 and Interstate 405, in the WSDOT Northwest / King Region. Portions of the City's 9 square miles border the Green River. The (2010) population of Tukwila is 19,107. The median household income is \$40,718.

Agency Stormwater Program

Program Scope

The City of Tukwila stormwater program provides stormwater quantity (local flooding) and stormwater quality services. The City is subject to NPDES Phase II permitting requirements. The stormwater utility provides some funding for soil decontamination. Much of the stormwater conveyance system is on private property. The City is attempting to take responsibility for these systems through easements or by ensuring that maintenance is provided. The City stormwater utility generates \$3 million in annual rate revenue to pay for these services. The City funds some habitat restoration through the general fund.

Rate Approach

The City of Tukwila utilizes a density of development rate approach. Single family residences are charged a uniform rate. The charges for all other customer types are a function of the gross parcel size and the percentage of the parcel covered by impervious surface area. The percent coverage determines the rate per square foot. The rate for a single family residential parcel is equivalent to \$7.75 per month. The City of Tukwila is characterized by a comparatively large commercial customer base, hence the relatively low (for Puget Sound) unit rate.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 5 (6.49 miles), Interstate 405 (1.19 miles), State Route 99 (1.2 miles), State Route 181 (1.62 miles), State Route 518 (1.3 miles), State Route 599 (1.75 miles), and State Route 900 (0.9 miles) lie within Tukwila city limits. These Washington State Department of Transportation (WSDOT) facilities are subject to NPDES requirements under the Department's permit. Interstate 5, Interstate 405, SR 518, and SR 599 are limited access highways, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Tukwila, these limited access highways total almost 92 acres of impervious surface area and carry more than 300,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that it manages stormwater runoff from I-5 and I-405 as it impacts Gilliam Creek, and, most significantly, from SR 518. The lack of detention on SR 518 causes overflows into Gilliam Creek. The City now owns the flap gate, formerly a WSDOT facility, where the creek meets

the Green River. Much of the stormwater volume in the City creek is from WSDOT facilities, but it is difficult to quantify how much. The State is not generally impacted by runoff from the City, although some conveyance may be provided for the creek across State right-of-way.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

The City reports that its cost of managing runoff from limited access State highways (I-5, I-405, SR 518, and SR 599) was \$133,919 in 2010. Based on the chargeable impervious surface area and the 30% rate applied to limited access State highways, the City charged the State \$62,896.68 for the same period. The City does not charge for SR 99, SR 181, or SR 900.

Charging the State for Its Impacts

The City has successfully charged the State under RCW 90.03.525 for at least twelve years. City staff estimates that it costs \$541 to prepare the required documentation, noting that the City has systematized its submittals. It was also noted that quantifying the impacts of State highways is very difficult and only possible through rough estimation. City staff allocates responsibility for project and maintenance costs between the City and the State by line item.

General Challenges

Satisfaction with Relationship

The City reports that it has been generally satisfied with its relationship with WSDOT. Its only difficulties have been in clearly delineating shares of responsibility for runoff volumes.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff suggested the following potential improvements:

- ◆ Information such as system mapping should be better shared by WSDOT and between local governments and the State;
- ◆ Differences or lack of differences between stormwater and transportation responsibility should be better defined or acknowledged; and
- ◆ Retrofitting existing WSDOT facilities should remain a priority.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff suggested the following potential improvements:

- ◆ Eliminate the requirement that cities charge their own streets in order to charge State highways; costs are incurred by local jurisdictions anyway;

- ◆ The annual reporting requirement is burdensome and should be either eliminated or produced with less frequency than once a year. If responsibilities are delineated, then additional accounting requirements are not necessary;
- ◆ The rate to WSDOT should not be linked to the City rate, but should instead be a standard, stand-alone rate;
- ◆ Cities should be allowed to charge state highways even if they are not limited access. As an example, the City has spent time and money on SR 181 issues without a mechanism for recovering costs from the State; and
- ◆ As a general philosophical observation, stormwater rates should not be subsidizing the impacts of vehicle trips and reducing the responsibility of the fuel tax.

CASE STUDY #6: CITY OF OLYMPIA

BACKGROUND

Overview of Participant Agency

Demographics

The City of Olympia is located in Thurston County, on Interstate 5, in the WSDOT Olympic Region. Portions of the City's 18.5 square miles border Puget Sound. The (2010) population of Olympia is 46,478. The median household income is \$40,846.

Agency Stormwater Program

Program Scope

The City of Olympia stormwater program is a mature program that provides stormwater quantity (local flooding), stormwater quality, and aquatic habitat services. The City is subject to NPDES Phase II permitting requirements, but generally exceeds them. The City stormwater utility generates about \$4 million in annual rate revenue to pay for these services.

Rate Approach

The City of Olympia utilizes an impervious surface area-based rate. The City charges single family residences \$10.58 per month. Nonresidential parcels are charged \$10.36 per account plus a charge for impervious surface that varies with the date of development. Parcels developed before 1980 are charged an additional \$10.26 per billing unit; parcels developed between 1980 and 1990 are charged an additional \$8.14 per billing unit; and parcels developed after 1990 are charged an additional \$3.90 per billing unit. One billing unit is equal to 2,528 square feet of impervious surface area.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 5 (3.57 miles) and State Route 101 (2.81 miles) lie within Olympia city limits. Both are limited access highways, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Olympia, I-5 and SR 101 total more than 49 acres of impervious surface area and carry more than 170,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that it manages stormwater runoff from I-5 and SR 101 in its jurisdiction. There are two major stormwater facilities owned and maintained by the City. One serves only State highway runoff. The second serves SR 101 and the auto mall. The auto mall provides its own treatment, so the facility predominantly manages runoff from the State highway. The City indicated that there is a significant amount of unaccounted for State highway runoff that impacts streams and other local facilities that are City-maintained. Little if any runoff from the City impacts State facilities.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

City staff indicated that the total cost of managing runoff from limited access State highways is not known at this time. Essentially, they make sure that they can document actual costs in excess of the amount to be charged to WSDOT, and leave it at that. It can be stated with certainty then that their annual costs exceed \$34,000. Staff reports that the limitations placed on the types of facilities and activities eligible for cost recovery are overly constraining.

Charging the State for Its Impacts

The City has successfully charged the State under RCW 90.03.525 for at least twelve years, an average of \$33,554 per year for the most recent biennium. City staff estimates that it takes less than \$1,000 to prepare the required documentation, noting that the City has systematized its submittals. Staff also noted that they have held the rate charged to its streets and to WSDOT for many years, while it has increased its rates to other customers. They have been reluctant to increase charges to City streets.

General Challenges

Satisfaction with Relationship

City staff observed that WSDOT seems to be disengaged from stormwater management, particularly with regard to retrofitting its facilities. They also noted that runoff from State highways is very polluted and requires management. Staff cited two examples:

- ◆ First, there has been a longstanding problem with SR 101 on the west side of the City. WSDOT removed its control structure, allowing runoff to flow through to the City system. The City needs analysis and a retention solution there, and believes WSDOT should help – and could do so at much lower cost than the City.
- ◆ Second, the City will spend an estimated \$130,000 to clean out contaminants (haul sediment) from State highway runoff into the City's Indian Creek facility next year.

Staff also reported that working with WSDOT has improved significantly over the years.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff suggested the following potential improvements:

- ◆ The State needs to be more engaged and collaborative with regard to mitigating its impacts on local systems.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff suggested the following potential improvements:

- ◆ Increased flexibility in determining those projects and activities eligible for cost recovery would be a significant improvement;
- ◆ Restrictions on how WSDOT payments are spent should be eliminated;
- ◆ Eliminate the requirement that cities charge their own streets in order to charge State highways; costs are incurred by local jurisdictions anyway;
- ◆ Staff would favor recovery of the full cost of managing runoff from State highways. The 30% rate as applied to chargeable area is less than the calculated actual cost;
- ◆ Cities should be allowed to charge state highways even if they are not limited access; and
- ◆ City staff would support a standardized rate for WSDOT facilities impacting local programs. The rate to WSDOT should not be linked to the City rate, but should instead be a standard, stand-alone rate.

CASE STUDY #7: CITY OF RICHLAND

BACKGROUND

Overview of Participant Agency

Demographics

The City of Richland is located in Benton County, on Interstate 182 in the WSDOT South Central Region. Portions of the City's 37.8 square miles border the Columbia River. The (2010) population of Richland is 48,058. The median household income is \$53,092. It should also be noted that the average annual rainfall in Richland is less than 8 inches.

Agency Stormwater Program

Program Scope

The City of Richland stormwater program is a newer program driven in large part by stormwater quality regulations. The City is subject to NPDES Phase II permitting requirements. There is no separate stormwater division. The City provides services required to be compliant with its permit, sweeps streets, and maintains the conveyance system. The City stormwater enterprise generates about \$1.7 million in annual rate revenue to pay for these services.

Rate Approach

The City of Richland utilizes an equivalent residential unit (ERU) rate approach. Single family residences are charged a uniform rate, based on the average amount of impervious surface area for single family residences in Richland. The charge basis for all other customer types is actual measured impervious surface area by parcel, expressed as a number of ERUs. One ERU is equal to 3,000 square feet of impervious surface area. The rate per ERU for developed property is \$3.85 per month.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 182 (5.04 miles), State Route 224 (1.53 miles), and State Route 240 (14.3 miles) lie within Richland city limits. Both I-182 and SR 240 are limited access highways, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Richland, limited access State highways total about 113 acres of impervious surface area and carry about 100,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that the State fully mitigates the impacts of its State highways in the City, including SR 224, located in the Yakima River floodplain and served by a number of roadside ditches. Some City runoff discharges into State facilities.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

City staff reports that no costs are incurred by the City for managing runoff from State facilities. The State manages all of its runoff.

Charging the State for Its Impacts

The City does not charge and has not ever charged the State under RCW 90.03.525.

General Challenges

Satisfaction with Relationship

The City noted that its relationship with WSDOT is problem free.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, no suggested improvements were noted.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, no suggested improvements were noted.

CASE STUDY #8: CITY OF SPOKANE VALLEY

BACKGROUND

Overview of Participant Agency

Demographics

Incorporated in 2003, the City of Spokane Valley is located in Spokane County on Interstate 90, in the WSDOT Eastern Region. Portions of the City's 38 square miles border the Spokane River. The (2010) population of Spokane Valley is 89,765. The median household income is \$44,000 (from Spokane County). It should also be noted that the average annual rainfall in Spokane Valley is approximately 17 inches.

Agency Stormwater Program

Program Scope

The City of Spokane Valley's largely inherited stormwater system is made up of more than 8,000 drywells and few (if any) piped sections. Most stormwater drainage is directed into swales and drywells. Program costs include rehabilitation of older drywells. There is a push underway to improve the drywell system by adding more swales and reducing sediment. There are some minor localized flooding issues during infrequent rain events. The City is subject to National Pollutant Discharge Elimination System (NPDES) Phase II permitting requirements. The City stormwater utility generates \$1.6 million in annual rate revenue to pay for these mostly contracted services.

Rate Approach

The City of Spokane Valley utilizes an equivalent residential unit (ERU) rate approach. Single family residences are charged a uniform rate, based on the average amount of impervious surface area for single family residences in Spokane Valley. The charge basis for all other customer types is actual measured impervious surface area by parcel, expressed as a number of ERUs. One ERU is equal to 3,160 square feet of impervious surface area. The rate per ESU for developed property is \$21.00 per year, the equivalent of \$1.75 per month.

Local Program History / Background with WSDOT

State Highways in Jurisdiction

Portions of Interstate 90 (10.11 miles), State Route 27 (4.56 miles), and State Route 290 (8.53 miles) lie within Spokane Valley city limits. The City reports that only Interstate 90 is a limited access highway, potentially subject to City stormwater rates as provided for in RCW 90.03.525. Within the City of Spokane Valley, I-90 is more than 82 acres of impervious surface area and carries 65,000 average daily vehicle trips.

Stormwater Services Provided

The City reports that the State fully mitigates runoff from I-90. WSDOT maintains swales on SR 290. The City maintains drywells associated with SR 27 and is in the midst of a discussion with WSDOT about who should be responsible for repairs to those structures.

LOCAL RELATIONSHIP WITH WSDOT

Local Costs of State Highways

Managing Runoff from State Highways

The City reports that it incurs no cost for managing runoff from I-90, the only limited access highway in the City. The City does incur costs for maintaining drywells associated with SR 27, and expects those costs could increase substantially if they accept responsibility for future repairs to those structures.

Charging the State for Its Impacts

The City does not charge and has not ever charged the State under RCW 90.03.525.

General Challenges

Satisfaction with Relationship

The City reports that it has an excellent relationship with WSDOT. They view the two entities as partners trying to solve a problem.

Potential Improvements

State / Local Coordination on Facilities Operations and Maintenance

Regarding State and local coordination on facilities operations and maintenance, City staff suggested the following potential improvement:

- ◆ Revisit the agreement in which cities accept certain responsibilities for non limited access highways. They have found that agreement to be confusing as it relates to stormwater facilities maintenance and repair.

Ability of Local Jurisdictions to Charge under RCW 90.03.525

Regarding charging WSDOT for its stormwater impacts, City staff suggested the following potential improvement:

- ◆ Consider allowing jurisdictions to charge for non limited access highways. Cities need a way to recover the cost of their responsibilities.