

SOUTHEAST METRO STORMWATER AUTHORITY  
Acting by and through  
SEMSWA WATER ACTIVITY ENTERPRISE

RESOLUTION 10-49

(Adoption of System Development Fee Policy Revision and Revised System Development Fees  
for the Lone Tree Creek, Windmill Creek and Dove Creek Watersheds)

WHEREAS, the Southeast Metro Stormwater Authority (SEMSWA) was formed by Intergovernmental Agreement to plan, fund, construct, acquire, operate, and maintain drainage and flood control facilities as well to manage stormwater quality and comply with requirements of the National Pollutant Discharge Elimination System (NPDES) within its boundaries (Purposes); and

WHEREAS, SEMSWA established the SEMSWA Water Activity Enterprise to carry out these Purposes; and

WHEREAS, on June 24, 2009 the Board of Directors of SEMSWA acting by and through SEMSWA Water Activity Enterprise (Board), passed Resolution No. 09-20, which adopted and authorized the implementation of a System Development Fee (SDF) Policy , including a SDF Schedule for the watersheds in the SEMSWA service area; and

WHEREAS, the adopted SDF Policy and Fee Schedule was not implemented in the Lone Tree Creek, Windmill Creek and Dove Creek watersheds as a result of the NPDES MS4 Permit for these watersheds being held by the Arapahoe County Water and Wastewater Authority (ACWWA); and

WHEREAS, it is anticipated that ACWWA will transfer the NPDES MS4 Permit for that portion of the Lone Tree Creek, Windmill Creek and Dove Creek watersheds, which lie in the SEMSWA service area, to SEMSWA on January 1, 2011; and

WHEREAS, the Board has identified a need to adjust the SDF's for the Lone Tree Creek, Windmill Creek and Dove Creek watersheds and to adjust the method by which these SDF's are calculated; and

WHEREAS, the adopted SDF Policy includes provisions which allows the Board to adjust the adopted SDF's and the method by which the SDF's are calculated after the Board conducts a public hearing on any proposed adjustments; and

WHEREAS, on December 15, 2010 the Board conducted a public hearing on the proposed adjustments to the SDF's for the Lone Tree Creek, Windmill Creek and Dove Creek watersheds; and on the proposed adjustment to the SDF calculation method, which will eventually be applied to all watersheds in the SEMSWA service area.

NOW, THEREFORE, BE IT RESOLVED THAT:

The Board of Directors of SEMSWA acting by and through SEMSWA Water Activity Enterprise hereby:

1. Adopts the revised SDF's for the Lone Tree Creek, Windmill Creek and Dove Creek watersheds, which are presented in the attached report (System Development Fees and New Excess Capacity Fees for Lone Tree, Windmill and Dove Watersheds, December 3, 2010).
2. Adopts the proposed adjustment to the SDF calculation method, which is described in the attached report (System Development Fees and New Excess Capacity Fees for Lone Tree, Windmill and Dove Watersheds, December 3, 2010).
3. Authorizes SEMSWA's Executive Director and staff, pursuant to the Executive Director's direction, to implement the revised SDF's for the Lone Tree Creek, Windmill Creek and Dove Creek watersheds; and the adjusted SDF calculation method.

SOUTHEAST METRO STORMWATER AUTHORITY  
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SEMSWA WATER ACTIVITY ENTERPRISE

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson

APPROVED AS TO FORM:

Attorney for  
Southeast Metro Stormwater Authority

By \_\_\_\_\_  
Edward J. Krisor



**SYSTEM DEVELOPMENT FEES**  
**and**  
**NEW EXCESS CAPACITY FEES**  
**for**  
**LONE TREE, WINDMILL AND DOVE WATERSHEDS**

DECEMBER 3, 2010

I. PURPOSE OF PRESENTATION

- A. Present revised SDF's for Lone Tree, Windmill and Dove Watersheds.
- B. Present new methodology for computing SDF's.
- C. Propose Excess Capacity Fees (ECF's) for Regional Facilities.

- II. WHY REVISE SDF'S FOR LONE TREE, WINDMILL and DOVE WATERSHEDS?
- A. SDF's are means by which Developers pay their fair share of future Capital Improvements.
  - B. 2010 Master Plan for Lone Tree, Windmill and Dove Creek Watersheds provides an updated list of future Capital Projects and their associated costs; and also updated existing and future impervious areas.
  - C. SDF's should be based on updated information when available.
  - D. ACWWA is transferring their NPDES Permit to SEMSWA; allowing SEMSWA to collect SDF's in the Lone Tree, Windmill and Dove Creek Watersheds.

### III. WHY NEW METHODOLOGY FOR COMPUTING SDF's?

- A. Previously adopted methodology results in existing development paying more than its fair share of future capital project costs. As shown in the table below, Existing Development's contribution to CIP Costs is disproportionate when compared to its percentage of the future total impervious area in the watershed.

For instance, with the previously adopted methodology for calculating SDF's; existing impervious areas in the Dove Creek watershed, which represent only 27.1% of the total future impervious area, would fund 45.5% of future CIP costs. Impervious areas associated with Future Development in the Dove Creek watershed, which represent 72.9% of the total future impervious area, would fund only 54.5% of future CIP costs. As a result of this apparent inequity, SEMSWA rate payers are assuming the responsibility for **\$2.5 million of CIP costs** in the Lone Tree, Windmill and Dove Creek watersheds that should arguably be borne by the developers of the future impervious areas.

#### DISTRIBUTION OF CAPITAL IMPROVEMENT COSTS WITH EXISTING SDF's

| Portion of Watershed              | Impervious Area (acres) | % of Total Future Imp. Area (acres) | Contribution to CIP Costs Using Existing SDF's (\$) | Contribution as % of Total CIP Costs |
|-----------------------------------|-------------------------|-------------------------------------|---|--------------------------------------|
| <u>DOVE:</u>                      |                         |                                     |   |                                      |
| Existing Development <sup>1</sup> | 134                     | 27.1%                               | 2,515,200   | 45.5%                                |
| Future Development                | <u>360</u>              | <u>72.9%</u>                        | <u>3,007,800</u>                                    | <u>54.5%</u>                         |
| Total Future                      | 494                     | 100.0%                              | 5,523,000   | 100.0%                               |
| <u>LONE TREE:</u>                 |                         |                                     |   |                                      |
| Existing Development <sup>1</sup> | 383                     | 54.0%                               | 1,033,688   | 69.2%                                |
| Future Development                | <u>326</u>              | <u>46.0%</u>                        | <u>460,312</u>                                      | <u>30.8%</u>                         |
| Total Future                      | 709                     | 100.0%                              | 1,494,000   | 100.0%                               |
| <u>WINDMILL:</u>                  |                         |                                     |   |                                      |
| Existing Development <sup>1</sup> | 415                     | 37.0%                               | 4,003,020   | 54.0%                                |
| Future Development                | <u>706</u>              | <u>63.0%</u>                        | <u>3,409,980</u>                                    | <u>46.0%</u>                         |
| Total Future                      | 1121                    | 100.0%                              | 7,413,000   | 100.0%                               |

(1) Existing Development areas include public rights of way.

B. The proposed methodology results in the same cost assessment for both existing and undeveloped impervious areas. A comparison of the SDF's resulting from the previously adopted and the proposed methodologies are presented in columns 7 and 10 of the table below. The SDF's in the table below were calculated using the area and cost data that was presented in the 2008 SDF study. However, the SDF values in Column 10 will differ from the "revised" SDF's given on the next page because the "revised" SDF's are based on updated area and cost information from the 2010 Master Plan.

**COMPARISON OF ADOPTED AND PROPOSED METHODOLOGIES FOR CALCULATING SDF's**  
**(Area and Cost Data in Table from 2008 AMEC SDF Study)**

| Basin     | 1<br>Total<br>Basin<br>Area<br>(Acres) | 2<br>Total<br>Future<br>Imp.<br>Area<br>(Acres) | 3<br>Existing<br>Imp.<br>Area<br>(Acres) | 4<br>Undeveloped<br>Imp.<br>Area<br>(Acres) | 5<br>%<br>Developable<br>(AMEC<br>Study) | 6<br>Future<br>CIP Cost<br>(\$) | 7<br>SDF<br>Future<br>Imp.<br>Area<br>(\$/acre) | 8<br>Cost for<br>Exist.<br>Imp.<br>Area<br>(\$/acre) | 9<br>%<br>Developable<br>(Revised) | 10<br>SDF Future<br>& Exist<br>Imp. Area<br>(\$/acre) |
|-----------|--|---|--|---|--|---------------------------------|---|--|------------------------------------|---|
| Dove      | 658                                    | 494   | 74                                       | 390   | 59                                       | 5,523,000                       | 8,355   | 30,600   | 73                                 | 11,180  |
| Lone Tree | 1043                                   | 709   | 340                                      | 328   | 31                                       | 1,484,000                       | 1,403   | 3,032  | 46                                 | 2,107   |
| Windmill  | 1536                                   | 1121  | 341                                      | 706   | 46                                       | 7,413,000                       | 4,830   | 11,739   | 63                                 | 6,613   |

Note: Numbers in parenthesis reference columns in above table.

- (5) = (4)/(1) Undeveloped Imp. Area/Total Area  
(7) = (6)x(5)/(4) CIP Cost x % Developable/ Undeveloped Imp. Area  
(8) = (6)x((100%-5))/(3) CIP Cost x (100%- % Developable)/ Exist Imp. Area  
(9) = (4)/(2) Undeveloped Imp. Area/Total Imp. Area  
(10) = (6)/(2) CIP Cost/ Total Imp. Area

Notes:

- a.) Values in columns 1, 3, 4, 5, 6 and 7 are from AMEC SDF study.  
b.) Column 2 values, which represent future impervious acres under full build out conditions, are from the 2010 Master Plan.

The values in column #10, which are based on the proposed methodology, are simply calculated by dividing the total CIP Cost by the Total Future Impervious Area (both existing and future impervious areas contribute at the rate given in Column 10). The difference between the values in columns 7 and 10 is that the SDF in column 7 is calculated by dividing the Remaining Imp. Area by the *Total Basin Area*; and the SDF in column 10 is calculated by dividing the Remaining Imp. Area by the *Total Future Imp. Area*.

#### IV. REVISED SDF'S COMPUTED BY NEW METHODOLOGY

The SDF's in following table were computed using the proposed methodology and updated values for impervious areas, CIP Costs, and total areas in SEMSWA's service area. The SDF's in the following table differ from those in Column #10 in the table on the previous page due to the use of the updated information.

**REVISED SDF's**  
**(Area and Cost Data in Table from 2010 Master Plan)**

| Basin     | Total Area (Acres) <sup>1</sup> | Total Future Imp. Area (Ac.) <sup>2</sup> | Existing Imp. Area (Ac.) <sup>3</sup> | Undeveloped Imp Area (Ac.) <sup>4</sup> | % Developable <sup>5</sup> | MDP CIP Costs (\$) <sup>2</sup> | Developers Share of MDP CIP Costs (\$) <sup>6</sup> | SDF (\$/acre) <sup>7</sup> |
|-----------|---------------------------------|---|---------------------------------------|---|----------------------------|---------------------------------|---|----------------------------|
| Dove      | 614                             | 494                                       | 134                                   | 360                                     | 72.87%                     | 2,905,897                       | 2,117,658   | 5,882                      |
| Lone Tree | 962                             | 709                                       | 439                                   | 270                                     | 38.08%                     | 2,085,476                       | 794,187   | 2,941                      |
| Windmill  | 1611                            | 1121                                      | 486                                   | 635                                     | 56.65%                     | 3,862,110                       | 2,187,725   | 3,445                      |

(1) Area of that portion of watershed within the SEMSWA service area.

(2) Values from 2010 Master Plan

(3) Values from 2010 Master Plan, includes rights of way.

(4) Equals Total Future Imp. Area minus Existing Imp. Area

(5) % equals Undeveloped Imp. Area divided by Total Future Imp. Area

(6) Equals % Developable times MDP CIP Costs

(7) Equal to Developers Share of MDP Costs divide by Remaining Imp. Area



V. EXCESS CAPACITY FEE (ECF) – Why, What is It ?

- A. SEMSWA has made a significant investment in the construction of Regional detention and water quality facilities to accommodate future development.
- B. Costs associated with these facilities have been/are being borne by SEMSWA's existing rate payers.
- C. In the past ACWWA required developers to construct Regional Facilities and entered into Reimbursement Agreements, which allowed the developer to be reimbursed for costs which exceeded his fair share of the facility's total cost. These Reimbursement Agreements are being assigned to SEMSWA with the transfer of ACWWA's permit.
- D. The Regional facilities benefit future developers by eliminating or significantly reducing the need for the developer to construct onsite facilities.
- E. ECF's would provide SEMSWA with a means of recouping its investment in Regional facilities and fulfilling the obligations of the ACWWA Reimbursement Agreements.
- F. Developments, which benefit from an existing Regional facility, would be assessed an ECF for all newly constructed impervious areas.
- G. ECF's will be computed on a watershed basis by dividing the total cost of the Regional Facilities in the watershed (SEMSWA costs plus ACWWA reimbursement costs) by the remaining impervious acres in the watershed. Proposed ECF's for the Lone Tree, Windmill and Dove watersheds are given in the following table.

**PROPOSED EXCESS CAPACITY FEES (ECF)**

| <b>Basin</b> | <b>Remaining<br/>Impervious<br/>Area (Ac.)</b> | <b>ACWWA Reimb.<br/>Agreements<sup>1</sup><br/>(\$)</b> | <b>SEMSWA<br/>Facility<br/>Costs<sup>2</sup><br/>(\$)</b> | <b>Total Excess<br/>Capacity<br/>Costs<sup>3</sup><br/>(\$)</b> | <b>ECF<sup>4</sup><br/>(\$/acre)</b> | <b>Revised<br/>SDF<br/>(\$/acre)</b> | <b>Total Fees<br/>SDF + ECF<sup>5</sup><br/>(\$/acre)</b> |
|--------------|--|---|---|---|--------------------------------------|--------------------------------------|---|
| Dove         | 360  | 28,166  | 688,095   | 716,261   | 1,990                                | 5,882                                | 7,872   |
| Lone<br>Tree | 270  | 504,407   | 259,000   | 763,407   | 2,827                                | 2,941                                | 5,768   |
| Windmill     | 635  | 1,513,140   | 1,463,287   | 2,976,427   | 4,687                                | 3,445                                | 8,132   |

(1) ACWWA's investment in Regional Facilities; repayment assumed by SEMSWA with MS4 transfer.

(2) Recent SEMSWA expenditures for Regional Facilities.

(3) Summation of Reimbursement Agreements and SEMSWA expenditures.

(4) Equals Total Excess Capacity Costs divided by Remaining Impervious Area.

(5) Sum of proposed ECF and Revised SDF.