

**REDUCED CHARGES IN  
RELATION TO SURFACE  
WATER DRAINAGE:  
Assessment of partial  
surface water drainage  
allowance guidance**

# REDUCED CHARGES IN RELATION TO SURFACE WATER DRAINAGE

## Assessment of Partial surface water drainage allowance guidance

From the 1 April 2017, Northumbrian Water introduced a Partial surface water drainage (SWD) allowance to encourage measured non-household customers to sustainably manage their surface water arisings, on site.

This guidance note should be read in association with our Wholesale charges scheme. This guidance note will be updated periodically in light of actual experience. It is intended to provide additional guidance to Licensed Retailers and non-household customers on NWL's Partial surface water drainage allowance system.

The non-household customer's Licensed Retailer will be required to apply to NWL via Form H/01 "Request for an allowance to wholesale charges and/or a volumetric reduction". The Licensed Retailer needs to complete section 7 "Change in surface area draining to the sewerage system" and under section 9 "Additional Information" supply the as built drawings and design information for any qualifying Sustainable Drainage System (SuDS) feature installed on the customer's site, as well as a plan showing the area drained directly to the feature. In addition NWL also requires a copy of the operation and maintenance manual for the feature in order to determine a suitable review period.

Qualifying SuDS features which NWL recognises are listed below:

- Detention basins
- Ponds
- Subsurface storage
- Wetlands
- Filter trenches
- Bio-retention areas
- Green roofs
- Swales
- Infiltration basins
- Pervious pavements
- Soakaways
- Infiltration trenches
- Rainwater harvesting

NWL have determined that the following SuDS features do not provide significant attenuation, or flow reduction, therefore we will not grant any partial SWD allowance for them:

- Culverts
- Gullies and linear drains
- Large Diameter pipes
- Filter Strips
- Sand Filters
- Canal or Rills
- Water butts

Upon receipt of a completed H/01 form (including the as built drawings, details of the area drained to the SuDS feature and the design specification for the SuDS feature(s) installed), NWL will review its SWD charges and, if satisfied, grant a partial SWD allowance as follows:

The partial SWD allowance will be assessed in consultation with the Construction Industry Research and Information Association (CIRIA) report C753 "The SuDS Manual" which is free to download on CIRIA's website at the link detailed below:

[http://www.ciria.org/Memberships/The\\_SuDs\\_Manual\\_C753\\_Chapters.aspx](http://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx)

NWL will grant, subject to this guidance, a partial SWD allowance for SuDS features which provide significant attenuation of flow and/or a significant reduction in volume of surface water discharging to public sewer.

The information from the licenced retailer submitted under the "Other Information" section needs to be sufficiently detailed for NWL to:

1. Identify the area of the customers site drained directly to the SuDS feature
2. Identify the type of SuDS feature employed on site

NWL will assess the area of the customer's site/premises directly draining to the SuDS feature and using a benefit score which has been determined by NWL for the appropriate SuDS feature employed, calculate the partial SWD allowance. The partial SWD allowance will be calculated using two components. These components assess the reduction in volume of surface water discharged and secondly, take into account the attenuation of flow the SuDS feature offers, as detailed below.

## VOLUME REDUCTION BASED PARTIAL SWD ALLOWANCE COMPONENT

Where CIRIA have indicated that a feature has a significant reduction in volume, NWL have attributed a Volume Reduction Score for this feature of 3, or above. For each of these, NWL will apply the following weightings to the connected surface area drained to the SuDS feature;

Volume Reduction Score of 3 weighting factor = 25%

Volume Reduction Score of 4 weighting factor = 50%

Volume Reduction Score of 5 weighting factor = 75%

NWL will not grant any allowance where we have deemed the feature would score 2 or less for volume reduction.

The equivalent surface area reduction will be calculated by multiplying the chargeable area drained directly to the SuDS feature by the % weighting factor detailed above.

## FLOW ATTENUATION SWD ALLOWANCE COMPONENT

Where NWL have scored a SuDS feature as a 3 or above for flow attenuation, NWL will apply a fixed 5% weighting factor to the chargeable area drained directly to the SuDS feature.

The equivalent surface area reduction will be calculated by multiplying the connected area served by the SuDS feature by the 5% weighting factor as detailed above.

## PARTIAL SWD ALLOWANCES

The site score will be calculated by adding together the volume reduction and the flow attenuation based drainage allowances then dividing this value by the current chargeable area for surface water drainage. This is then multiplied by 100 to give a percentage figure. This Site Score (%) will determine if a partial SWD allowance is due, and if so which of seven partial SWD allowance bands it falls into, as detailed in table 1 below.

Table 1 Partial SWD allowance bandings

| SITE SCORE    | ALLOWANCE BAND     | ALLOWANCE GRANTED |
|---------------|--------------------|-------------------|
| 0% to 4.99%   | No Allowance due*  | 0%                |
| 5% to 9.99%   | Band 1             | 5%                |
| 10% to 24.99% | Band 2             | 10%               |
| 25% to 39.99% | Band 3             | 25%               |
| 40% to 54.99% | Band 4             | 40%               |
| 55% to 69.99% | Band 5             | 55%               |
| 70% to 84.99% | Band 6             | 70%               |
| 85% to 99.99% | Band 7             | 85%               |
| 100%          | Full allowance due | 100%              |
|               |                    |                   |
|               |                    |                   |

Please note: the partial SWD allowance granted will be applied to the current SWD band charge i.e. NWL will not change the charging band. Instead, the allowance granted will be applied to the SWD charge, so if a site is SWD Band 10 (2017/18 charge= £24,374.70) and it falls into allowance Band 4 (40% allowance due) the SWD charge would be £24,374.70 x 60%= £14,624.82.

Subject to a suitable operational and maintenance manual NWL will grant the allowance for up to a maximum period of 5 years on condition that the customer operates and maintains the feature in line with the manufacturers/designers recommendations. The Licensed Retailer can **re-apply** for the allowance within two months of the expiry date.

\*At NWL's discretion where a scheme's assessment fails to qualify for an allowance, NWL **may** apply a 5% Band 1 allowance if, in NWL's sole opinion the scale of the benefit or the scheme is significant and/or the local network conditions/loadings are high.

## EXAMPLE OF A PARTIAL SWD ALLOWANCE

Please see Table 2 Partial SWD Allowance - Worked Example below. In this example a customer develops SuDS features which drain 21,000m<sup>2</sup> of their site. The total surface water chargeable area component of the entire site is 75,000 m<sup>2</sup> and the highway drainage component is 100,000 m<sup>2</sup>. The customer has installed the following SuDS features:

1. Filter trenches draining 10,000 m<sup>2</sup> of the surface water chargeable component
2. Bio-retention areas draining 10,000m<sup>2</sup> of the surface water chargeable component
3. Pervious pavement draining 1,000m<sup>2</sup> of the surface water chargeable component

The partial SWD allowance would be:

- Filter trench equivalent area (10,000 x 5%) = 500m<sup>2</sup>
- Bio-retention equivalent area (10,000 x 25% plus 10,000 x 5%) = 3000m<sup>2</sup>
- Pervious pavement equivalent area (1,000 x 50% plus 1,000 x 5%) = 550m<sup>2</sup>
- Total Surface Area Equivalent= 4050 m<sup>2</sup>
- Site Score (%) = (4,050/75,000) x 100= 5.40%
- Partial SWD Allowance Band = Band 1 (for site scores between 5 and 9.99%
- Allowance Granted Band 1 = 5% reduction in Band 11 SWD component charge = £28,729.15 x 5% = **£1,436.46.**

## Table 2 PARTIAL SURFACE WATER DRAINAGE ALLOWANCE- Worked Example

Customer Name Example only

Account Reference

Property/Premise Reference

SPID

Current SWD Measure m2 **75000**

Current HD Measure m2 **100000**

Current SWD Band **11**

Current HD Band **12**

Current SWD Charge **£28,729.15** Cost does not include Highway Drainage Charge Current HD Charge **£15,479.65** Current Total Charges **£44,208.80**

### Features on Site

| Qualifying SuDS Feature        | Premises total connected area for surface water drainage | Area Draining to SuDS Feature | CIRIA Score for volume reduction | NWL % weighting for volume reduction | CIRIA score for flow attenuation | NWL % weighting for flow attenuation | Chargeable % | Equivalent Area Removed m2 |
|--------------------------------|--|-------------------------------|----------------------------------|--------------------------------------|----------------------------------|--------------------------------------|--------------|----------------------------|
| Detention Basins               | 75000  | 0                             | 1                                | n/a                                  | 4                                | 5.00%                                | 100.00%      | 0                          |
| Ponds                          | 75000  | 0                             | 1                                | n/a                                  | 4                                | 5.00%                                | 100.00%      | 0                          |
| Subsurface Storage             | 75000  | 0                             | 1                                | n/a                                  | 5                                | 5.00%                                | 100.00%      | 0                          |
| Wetlands                       | 75000  | 0                             | 1                                | n/a                                  | 4                                | 5.00%                                | 100.00%      | 0                          |
| Filter Trenches                | 75000  | 10000                         | 2                                | n/a                                  | 3                                | 5.00%                                | 95.00%       | 500                        |
| Bio-retention Areas            | 75000  | 10000                         | 3                                | 25.00%                               | 3                                | 5.00%                                | 70.00%       | 3000                       |
| Green Roofs                    | 75000  | 0                             | 3                                | 25.00%                               | 3                                | 5.00%                                | 100.00%      | 0                          |
| Swales                         | 75000  | 0                             | 3                                | 25.00%                               | 3                                | 5.00%                                | 100.00%      | 0                          |
| Infiltration Basins            | 75000  | 0                             | 4                                | 50.00%                               | 3                                | 5.00%                                | 100.00%      | 0                          |
| Pervious Pavements             | 75000  | 1000                          | 4                                | 50.00%                               | 4                                | 5.00%                                | 45.00%       | 550                        |
| Soakaways                      | 75000  | 0                             | 4                                | 50.00%                               | 4                                | 5.00%                                | 100.00%      | 0                          |
| Infiltration Trenches          | 75000  | 0                             | 5                                | 75.00%                               | 3                                | 5.00%                                | 100.00%      | 0                          |
| Rainwater Harvesting           | 75000  | 0                             | 5                                | 75.00%                               | 5                                | 5.00%                                | 100.00%      | 0                          |
| Total Surface Area Equivalent= |  |                               |                                  |                                      |                                  |                                      |              | 4050                       |

| Customers Allowance Details   |                  |
|---|------------------|
| Total Equivalent Area Removed   | 4,050            |
| Site Score = (Total Equivalent Area/Current SW Chargeable area) x 100)) | 5.40%            |
| Allowance Band Granted  | <b>Band 1</b>    |
| Allowance % applied to surface area band charge                         | 5.00%            |
| Total cost to customer prior to allowance                               | £44,208.80       |
| New Total Charges   | £42,772.34       |
| <b>Total Allowance Value</b>  | <b>£1,436.46</b> |

| Site Score    | Partial Surface Water Drainage Allowance Band | Allowance Granted |
|---------------|---|-------------------|
| 0% to 4.99%   | No Allowance due                              | 0%                |
| 5% to 9.99%   | Band 1  | 5%                |
| 10% to 24.99% | Band 2  | 10%               |
| 25% to 39.99% | Band 3  | 25%               |
| 40% to 54.99% | Band 4  | 40%               |
| 55% to 69.99% | Band 5  | 55%               |
| 70% to 84.99% | Band 6  | 70%               |
| 85% to 99.99% | Band 7  | 85%               |
| 100%          | Full allowance due                            | 100%              |

## IN SUMMARY

- Partial SWD Allowances are only available to Non-Household customers and apply to the SWD component of the tariff and **not** the highway drainage component.
- The SWD band the customers site/premises falls into will not change. Instead we would apply the allowance due to the SWD band charge.
- The maximum duration of a partial SWD allowance is 5 years and the Retailer can re-apply for the allowance up to two months prior to the expiry date. The non-household customer must operate and maintain the SuDS feature in line with the manufacturers/designers recommendations for the full duration the allowance is in place. Should NWL determine that this is not the case then the allowance will be terminated immediately.
- The maximum Partial SWD Allowance is 85% assuming all the surface water arisings are drained to a SuDS feature with a score of 5 for volume reduction and at least 3 for flow attenuation.
- The licensed retailer must supply sufficient information to enable NWL to assess the partial SWD allowance without having to attend site i.e. submit a completed H/01 form and supply the following additional information under section 9 of the form:
  - The as built drawings and design information of any SuDS features installed.
  - A plan showing the area drained directly to the SuDS feature.
  - A copy of the operation and maintenance manual for the feature so a suitable duration for the allowance can be determined.
- NWL's assessment is final, unless there is a significant change in respect of the non household customer's site.
- NWL will only back date any partial SWD allowance to the date of receipt of a materially complete H/01 form, regardless of when the SuDS feature was installed.
- As NWL have determined that the following SuDS features do not provide significant attenuation, or flow reduction, we will not grant any partial SWD allowance for them:
  - Culverts
  - Gullies and linear drains
  - Large Diameter pipes
  - Filter Strips
  - Sand Filters
  - Canal or Rills
  - Water butts

**NORTHUMBRIAN**  
**WATER** *living water*

**ESSEX & SUFFOLK**  
**WATER** *living water*

Northumbrian Water Limited  
Abbey Road  
Pity Me  
County Durham  
DH1 5FJ

Version 1 August 17

[www.nwl.co.uk](http://www.nwl.co.uk)  
[www.eswater.co.uk](http://www.eswater.co.uk)