CITY OF NEWPORT, RHODE ISLAND

Department of Utilities

Newport Stormwater Credit Manual

Stormwater Service Fee Credit Program

PRELIMINARY DRAFT FOR DISCUSSION

Subject to review, public input, and revision. Not adopted.

Draft PD-11 | October 28, 2026

> **Status.** This preliminary draft describes a proposed credit program under Section 13.13.070 of the proposed stormwater ordinance. The ordinance has not been adopted. No stormwater fee will be billed and no credit will be available unless the City Council adopts the ordinance and later funds the program and adopts a fee schedule through the annual budget (proposed Section 13.13.066). Applications are not open. The credit values, limits, and procedures in this draft are proposals under engineering, legal, and financial review and may change before the final manual is issued (Section 10). Dollar amounts in the examples use the proposed rate of $15.00 per ERU per month, which has not been adopted. Comments are welcome from October 28 through November 30, 2026, by email to ratestudy@NewportRI.gov or by mail to the Department of Utilities, 70 Halsey Street, Newport, RI 02840.

1. Purpose

A stormwater credit lowers a property's stormwater service fee when the owner installs and maintains a practice that reduces the runoff, or improves the quality of the runoff, leaving the property. The credit program rewards on site stormwater management that reduces the load on the City stormwater system.

This manual explains eligibility, which practices qualify, how a credit is calculated, how to apply and what to submit, and how to continue to receive a credit. The ordinance sets the fee methodology, the billing rules, and the limits of the credit program, and it controls over this manual. Where this manual and the City Code or State law differ, the Code and State law govern. This manual may not change the maximum credit or any other limit set by the ordinance. The draft manual and each material revision will be published for public comment before the final requirements take effect (proposed Section 13.13.070(D)).

Applicant responsibilities. The applicant measures each practice and the area it serves, completes the calculations in this manual, takes the required photographs, and certifies the application. The Department checks applications. It does not prepare or correct them.

2. Program Rules

The following rules come from the proposed ordinance. This manual applies them.

Rule	What it means	Source
Maximum credit	All credits combined may not exceed 50 percent of the parcel's stormwater fee.	13.13.070(A)
Base contribution	A credit reduces the fee but never eliminates it. Every developed parcel relies on public streets, drainage, and water quality programs, and shares in fixed program costs.	13.13.070
Required practices	A practice required by Chapter 13.11, an approved plan, a permit, or other law does not qualify solely because it meets that requirement. The ordinance allows credit for documented performance beyond the requirement, or for another measurable reduction in runoff volume, peak discharge, pollutant loading, or City cost. This draft credits performance beyond the requirement (Section 5.9). Maintained required practices earn no credit at program start and are a discussion item (Section 10).	13.13.070(B), (C); 13.11.115(B)
Separate permits	Holding a separate stormwater permit (for example, an MS4 permit) does not by itself qualify a property for credit.	13.13.070(C)
Burden on the applicant	The applicant documents eligibility, completes the calculations, and shows the drainage area each practice serves and any approval under which it was built. The Department checks the application but does not prepare or correct it.	13.13.070(G)
No double counting	Each square foot of impervious area is counted in one drainage area only, and the same benefit is counted once.	13.13.070(G)
Equal access	Credits are available to fee eligible property classes on the same terms, except as limited by law, including residential, nonresidential, tax exempt property, City property, and stormwater only accounts.	13.13.060; 13.13.070(G)
Performance	A credit continues only while the practice is in place, working, maintained, and certified on time.	13.13.070(E)
Other obligations	A credit does not relieve any obligation under Chapter 13.11 or State or federal law. A credit determination is a billing decision, not a design approval.	13.13.070(G)

3. Who May Apply

- **Owner.** The record owner of the parcel, or an agent with written authority from the owner (proposed Section 13.13.040). A tenant may apply only with the owner's written authorization.
- **Condominiums and other common interest property.** The association applies for practices that serve common areas. The credit follows the same allocation the Department uses for that property's impervious area under proposed Section 13.13.060(H): either to the association or master account, or divided equally among the verified units.
- **City property.** City parcels, including schools, are eligible on the same terms. A credit reduces the City's payment and reduces stormwater utility receipts by the same amount.

4. Qualifying Practices

4.1 Eligibility Requirements

To qualify, a practice must:

1. Be located on the parcel, or serve the parcel under a recorded agreement.
2. Receive runoff from impervious area on the parcel.
3. Be designed, sized, and installed under the Utilities Stormwater Technical Standards Manual or an approved engineered design, or, for an existing practice claimed on Form CR-1, be supported by the evidence required in Section 6.3.
4. Meet the performance requirements for its credit type in Section 5.
5. Be in place, working, maintained, and operated year round. The rain barrel participation credit (Section 5.5) is the only exception.

4.2 Practice Types

Type	What it does	Examples
Retention	Keeps runoff on the property by soaking it into the ground or storing it for use.	Rain gardens and bioretention that infiltrate, dry wells, infiltration trenches, infiltrating steps, permeable pavement with a stone storage layer, subsurface infiltration chambers, and cisterns with documented year round use and available storage (Form CR-2 only). Automatic discharge alone does not establish retention. Rooftop disconnection earns a separate allowance (Section 5.3).
Detention	Holds runoff for a short time and releases it at a controlled rate.	Detention basins, underground detention tanks or vaults with outlet controls.
Water quality treatment	Removes pollutants from runoff before it leaves the property.	Practices listed in the State stormwater rules for water quality treatment, such as filters, lined bioretention with an underdrain, and green roofs, and treatment devices approved under the State technology assessment process.
Unbound surface	An unbound vehicle surface may soak in some runoff. Performance depends on compaction, slope, materials, and soils.	Gravel, crushed stone, or shell, and pavers or cobbles set without mortar or a concrete base (Section 5.4).
Rain barrel (participation)	Captures roof runoff for reuse during the growing season.	Rain barrels totaling at least 100 gallons (Section 5.5).

4.3 What Is Not a Credit

- **Removing hard surface.** Removing pavement or roof area lowers the measured impervious area itself. It is handled as an update to the parcel's measurement, not as a credit (proposed Section 13.13.063(A)). The bill may not change until the reduction crosses a residential tier boundary or changes the parcel's rounded whole ERU count.

- **Storage without proof of retention.** Storage volume alone does not establish retention. Retention credit requires demonstrated infiltration or beneficial use within the approved drawdown period.
- **Permeable pavement by itself.** Permeable pavement is measured as impervious area (proposed Section 13.13.040). It earns retention credit only for stone storage below its lowest outlet that drains by infiltration within 24 hours, counting only rain that falls on the pavement (Section 5.2).
- **Seasonal practices.** Practices taken out of service for part of the year earn no retention credit. Rain barrels earn only the participation credit in Section 5.5, and barrel volume does not also count as retention storage. One 55 gallon barrel holds less than one tenth of an inch of runoff from 1,000 square feet of roof.
- **Trees and plantings.** Trees, gardens, and landscaping earn no credit unless they are part of a practice listed in Section 4.2.

5. Credit Schedule and Calculation

5.1 Drainage Areas

A credit is calculated for each drainage area, then combined for the parcel. A **drainage area** is the impervious area that drains to a practice, or to the first practice in a series of practices (a treatment train). Each square foot of impervious area belongs to one drainage area only. Lawn or other pervious area is not credited, but its runoff, and any runoff from off the parcel, must be accounted for when showing available storage. Storage shared by more than one parcel is allocated among them without duplication.

5.2 Credit Performance Elements

The credit values below are proposed policy values. Their engineering and financial basis remains under review (items C-5 and C-6). Retention and water quality are not added together; Section 5.6 sets how elements combine.

Element	Performance required	Credit on the drainage area
Retention (R)	Retained depth of at least 1.0 inch. Storage is only counted below the lowest outlet or overflow that empties by infiltration within 48 hours, or by a documented year round use, as shown under the Technical Standards Manual. Where a State design rule sets a shorter drawdown, that limit applies: permeable pavement must drain within 24 hours and counts only rain that falls on the pavement (250-RICR-150-10-8 § 8.22). On Form CR-1, rain garden storage is the ponding volume only and stone storage is the stone volume × 0.4. Retained depth (inches) = retained volume (cu ft) × 12 ÷ drainage area (sq ft). For practices in series, add only separate storage that receives and retains runoff from the assigned drainage area. Do not count bypassed, overlapping, or already allocated storage. Rooftop disconnection is credited separately (Section 5.3).	25 percentage points per inch of retained depth: 25% at 1.0 inch, 50% at 2.0 inches

Element	Performance required	Credit on the drainage area
Detention (D)	A design sealed by a Rhode Island licensed professional engineer showing that post development peak discharge from the drainage area does not exceed pre development peak discharge for the 10 year and 100 year, 24 hour Type III storms, under 250-RICR-150-10-8 § 8.11. The analysis also shows that runoff reaches the practice and that the 100 year storm is safely conveyed, as § 8.11 requires. Counted once per drainage area, however many detention practices are in series.	15%
Water quality (Q)	Treatment of the water quality volume (1 inch of runoff) or water quality flow from the drainage area by a practice listed in 250-RICR-150-10-8 §§ 8.19 through 8.25, or by a device approved under § 8.9(D), with current maintenance records. Green roofs qualify for this element only (§ 8.24), with a binding maintenance agreement and quarterly inspection.	10%
Unbound surface (U)	A driveway or parking area surfaced with unbound gravel, crushed stone, or shell, or with pavers or cobbles set without mortar or a concrete base, that meets Section 5.4. Applies to the parcel's combined unbound surface area, up to 1,000 sq ft.	10%
Disconnection allowance	Roof runoff directed to a qualifying lawn or planted area that meets Section 5.3. Not combined with any other element on the same roof area.	10%

5.3 Rooftop Disconnection

Roof runoff directed to a qualifying lawn or planted area earns a 10% disconnection allowance on the roof area served when all of the criteria below are met. The size limits and setbacks are drawn from the State criteria for qualifying pervious areas (250-RICR-150-10-8 § 8.18(G)). The standards and performance criteria in that State rule do not apply to single family lots of record (§ 8.3(B)). These local fee credit criteria do not waive other applicable permits or requirements.

- No more than 1,000 sq ft of roof drains to each outlet.
- The flow length, in feet, is at least the contributing roof area divided by 13.3. For 600 sq ft of roof, 600 ÷ 13.3 = 45.1 ft; use at least 46 ft.
- The receiving area is at least two times the contributing roof area. Receiving areas do not overlap and are not counted for more than one outlet.
- The receiving area is vegetated and stabilized, is not compacted or used for parking or travel, slopes no more than 5 percent, and receives sheet flow, not concentrated flow.
- Runoff soaks in at least 10 ft from the foundation, and the outlet is at least 10 ft from the nearest impervious surface.
- Runoff from at least the first 0.5 inch of rain stays on the receiving area. Larger storms overflow along a documented safe route that does not cause an adverse drainage impact to a neighbor, a street, or the City system (proposed Section 13.11.090).

- Water does not stand on the receiving area for more than 48 hours after rain.
- The downspout discharges to the receiving area year round, including winter.

A receiving area that does not meet these criteria earns no disconnection allowance. The State credit for development design also requires a soil evaluation and excludes Hydrologic Soil Group D soils and urban fill. For an existing disconnection on a one to five unit residential parcel, this draft proposes no soil evaluation and a fixed 10% allowance in place of a measured retention credit. The engineering basis for that allowance is under review (item C-6).

5.4 Unbound Surfaces

A driveway or parking area surfaced with unbound gravel, crushed stone, or shell, or with pavers or cobbles set without mortar or a concrete base, is measured as impervious area (proposed Section 13.13.040). Runoff from these surfaces depends on compaction, slope, materials, and soils. A 10% unbound surface element is proposed, subject to the following:

- The surface is not paved, sealed, oiled, or made of asphalt millings.
- All unbound surfaces on the parcel are entered once, as one combined area. The element applies to that combined area up to 1,000 sq ft per parcel (item C-7).
- No other element is counted on the same area.
- The applicant provides the surface dimensions and a photograph.

5.5 Rain Barrel Participation Credit

A parcel with rain barrels may receive a participation credit. It recognizes a small reduction in runoff. It is not a performance credit and does not set a basis for other credits that are not based on measured performance (item C-7).

- Rain barrels total at least 100 gallons, are screened, and overflow to a lawn or planted area, not to pavement.
- The barrels are in service at least from April through November.
- The applicant certifies on Form CR-1 and provides a dated photograph showing the barrels and the house number.
- One participation credit is allowed per parcel.
- The participation credit is not combined with a disconnection credit for the same roof area, and barrel volume does not also count as retention storage. The applicant compares the total parcel credit under each option, after rounding and the overall cap, and takes the higher.
- The Department would audit a sample of participation credits. As proposed, a credit revoked after audit could not be claimed again for three years; that limit is under legal review (item C-2).

Participation credit = the lesser of 0.025 ERU × the monthly rate per ERU or 5% of the monthly fee, rounded down to the cent

At the proposed rate, the full month participation amount is $0.37 for an otherwise eligible parcel with a monthly fee of at least $7.50, before the overall credit cap and any applicable proration. The amount is calculated once for the property, before any condominium or account allocation.

5.6 Credit Calculation

Required baseline benefits are subtracted first (Section 5.9). Each drainage area then earns:

Drainage area credit = min(50%, max(R, Q) + D)

That is, the greater of R or Q, plus D, up to 50%. Retention and water quality are not added together. With the drainage area, required baseline, fee, and other eligibility held constant, the credit never decreases when retention improves. An unbound surface area earns U only, and a disconnected roof area earns the disconnection allowance only.

Entry step. A practice retaining less than 1.0 inch earns no retention element. At 1.0 inch, the State water quality depth, the retention element begins at 25 percent before required baseline deductions and rises 25 percentage points per inch to 50 percent at 2.0 inches. No depth above 2.0 inches is counted.

Parcel credit percentage = sum of (drainage area credit × (drainage area ÷ total measured impervious area))

- **Total measured impervious area** is the area shown on the parcel's assessment statement.
- The monthly fee is the gross stormwater fee before credits. Use actual measured square feet, not billed ERUs × 2,400. The property credit is calculated before any allocation among condominium units or accounts. A parcel with no stormwater fee receives no credit.
- The parcel credit percentage is rounded down to a whole percent and applied to the monthly fee. Any rain barrel participation credit (Section 5.5) is then added. Total credits may not exceed 50 percent of the fee.
- **Tiered residential parcels** (one to five unit residential parcels in Tier 1, 2, or 3): the credit applies to the tier fee. A credit does not change the tier.
- **Measured parcels** (all other developed parcels, and one to five unit residential parcels above 7,555 square feet): the credit applies to the fee calculated in whole ERUs.

> **How the maximum applies.** Before any participation credit, the performance calculation reaches 50% only when all measured impervious area earns 50%. Adding a participation credit can bring a smaller performance percentage up to the 50% cap. The combined credit never exceeds half of the fee.

5.7 Examples

These examples use the proposed rate of $15.00 per ERU per month, which has not been adopted.

Example	Calculation	Result (per month)
A. Home with a rain garden. Tier 2 home, 2,000 sq ft of impervious surface, fee $15.00. A rain garden with 167 cu ft of ponding storage serves 1,000 sq ft of roof (2.0 inches). Not required by any permit.	R = 50% on 1,000 sq ft Parcel credit percentage: 50% × (1,000 ÷ 2,000) = 25% Parcel credit amount: $15.00 × 25% = $3.75 per month	Credit $3.75 Fee after credit $11.25

Example	Calculation	Result (per month)
B. Home with a partial practice. Tier 2 home, 2,000 sq ft of impervious surface, fee $15.00. A stone trench retains 1.2 inches (80 cu ft) from 800 sq ft of roof.	R = 25 percentage points × 1.2 = 30% on 800 sq ft Parcel credit percentage: 30% × (800 ÷ 2,000) = 12% Parcel credit amount: $15.00 × 12% = $1.80 per month	Credit $1.80 Fee after credit $13.20
C. Home that adds on. Tier 2 home, 2,600 sq ft of impervious surface after a 600 sq ft addition, fee $15.00. For this example, the approval requires a dry well retaining 2.0 inches from the added 600 sq ft. The owner upsizes it to also retain 2.0 inches from 900 sq ft of existing roof.	Required 600 sq ft: no credit Extra 900 sq ft retained at 2.0 inches: R = 25 percentage points × 2.0 = 50% Parcel credit percentage: 50% × (900 ÷ 2,600) = 17.3%, rounded down to 17% Parcel credit amount: $15.00 × 17% = $2.55 per month	Credit $2.55 Fee after credit $12.45
D. Commercial retrofit. 24,000 sq ft, 10 ERUs, fee $150.00. A voluntary retrofit retains 2.0 inches from 12,000 sq ft of parking. A detention basin required by a prior approval serves the other 12,000 sq ft and performs only as approved.	Voluntary retrofit: R = 50% on 12,000 sq ft Required detention: no credit Parcel credit percentage: 50% × (12,000 ÷ 24,000) = 25% Parcel credit amount: $150.00 × 25% = $37.50 per month	Credit $37.50 Fee after credit $112.50
E. Treatment train. 24,000 sq ft, 10 ERUs, fee $150.00. A voluntary water quality treatment device (Q) followed by underground detention meeting § 8.11 (D) serves 8,000 sq ft of impervious area. A second detention tank in series serves the same area and adds no credit, because detention is counted once per drainage area.	Greater of R (0%) or Q (10%) = 10%, plus D (15%) = 25% drainage area credit Parcel credit percentage: 25% × (8,000 ÷ 24,000) = 8.3%, rounded down to 8% Parcel credit amount: $150.00 × 8% = $12.00 per month	Credit $12.00 Fee after credit $138.00
F. Downspouts to a lawn. Tier 2 home, 2,400 sq ft of impervious surface, fee $15.00. Two outlets each serve 600 sq ft of roof and a separate lawn area at least 46 ft long and 1,200 sq ft in area, and all Section 5.3 criteria are met.	Disconnection allowance 10% on 1,200 sq ft (two outlets of 600 sq ft) Parcel credit percentage: 10% × (1,200 ÷ 2,400) = 5% Parcel credit amount: $15.00 × 5% = $0.75 per month	Credit $0.75 Fee after credit $14.25
G. Gravel driveway. Tier 2 home, 2,400 sq ft of impervious surface including an 800 sq ft gravel driveway, the only unbound surface on the parcel, fee $15.00.	U = 10% on 800 sq ft Parcel credit percentage: 10% × (800 ÷ 2,400) = 3.3%, rounded down to 3% Parcel credit amount: $15.00 × 3% = $0.45 per month	Credit $0.45 Fee after credit $14.55

Example	Calculation	Result (per month)
H. Rain barrels. Tier 2 home, fee $15.00, with two 55 gallon barrels (110 gallons) that overflow to the lawn, compared with the same barrels on a 10 ERU commercial parcel.	Home: lesser of 0.025 × $15.00 = $0.375 or 5% × $15.00 = $0.75; $0.375 rounded down to $0.37 Commercial (10 ERUs, fee $150.00): lesser of $0.375 or 5% × $150.00 = $7.50; rounded down to $0.37	Home: credit $0.37, fee after credit $14.63 Commercial: credit $0.37, fee after credit $149.63
I. Retention with water quality treatment. 24,000 sq ft, 10 ERUs, fee $150.00. A voluntary bioretention cell with an underdrained filter serves 8,000 sq ft. It retains 1.2 inches below the underdrain and treats the water quality volume.	R = 25 × 1.2 = 30%; Q = 10% Drainage area credit: greater of 30% or 10% = 30% (not added together) Parcel credit percentage: 30% × (8,000 ÷ 24,000) = 10% Parcel credit amount: $150.00 × 10% = $15.00 per month	Credit $15.00 Fee after credit $135.00

5.8 Assessment Statement Changes

If the parcel's measured impervious area changes, the Department recalculates the credit using the new total. Removing pavement that drained to a credited practice reduces the credited area. On a tiered parcel whose tier does not change, the credit can fall by more than the fee, so the net bill can rise. For example, removing 600 sq ft of credited pavement from a 2,400 sq ft Tier 2 parcel that had 1,200 sq ft credited at 50% lowers the credit from 25% to 16%, and the net bill rises from $11.25 to $12.60, about 12 percent. The City invites comment on this effect (Section 10).

5.9 Practices Required by a Permit or Approval

A practice required by Chapter 13.11, an approved plan, a permit, or other law earns credit only for performance beyond the requirement:

1. **Extra area.** Credit is calculated on drainage area beyond the area the approval required the practice to manage (Example C).
2. **Extra retention.** Where a practice retains more than its approval required, R = 25 percentage points × (actual depth − required depth), with each depth capped at 2.0 inches, and R is zero if the result is negative. The actual retained depth must be at least 1.0 inch; the depth above the requirement may be smaller. A practice required to retain 1.3 inches that retains 1.8 inches earns 12.5% on that area. A practice required to retain 2.0 inches earns no retention element, because 2.0 inches is the ceiling for any drainage area.
3. **Other elements.** Credit depends on additional performance, not on how an approval labels a requirement. Q is zero where the water quality benefit claimed is already provided by a required control, including required retention of 1.0 inch or more or required water quality treatment. D is zero where the approval required peak flow control for the drainage area.

Records. To prove the voluntary nature of a practice, the applicant searches City permit records, State stormwater and coastal permit records, and recorded maintenance agreements for the parcel, and certifies whether each practice was built under an approval or permit, providing any approval found. The Department will validate the practice status using its own records. A lack of

City records does not by itself establish that a practice was voluntary. If a requirement is later found, the Department will issue notice and a revised credit determination with review rights. The effective date and any recovery of prior credits are under legal review (item C-2).

6. How to Apply

6.1 When Credits Begin

- Applications open only after the ordinance authorizes the program, the final manual and forms are published, and the Department announces an opening date. Publication of this draft does not open applications.
- A credit approved on an application completed before a parcel's first stormwater bill applies from that first bill.
- Otherwise, after billing begins, an approved credit applies from the start of the billing period in which the Department received the complete application.
- No application fee is proposed.

6.2 Which Form to Use

Form	Use when
CR-1 Residential Short Form	One to five unit residential parcel, of any size, with practices serving only that parcel, no shared practice, and no engineered design. Retention practices in series may be listed on CR-1. Any parcel claiming only the unbound surface or rain barrel participation credit also uses CR-1. Use CR-2 for required baseline deductions, cisterns, shared storage, or any series that includes detention or water quality treatment.
CR-2 Standard Application	All other applications, including any detention or water quality element, any cistern, any shared practice, and any practice requiring engineered design.

6.3 Form CR-1 Contents

Item	Required
Owner and account	Owner name, property address, utility account number, and the agent's written authority if an agent applies.
Sketch	Simple sketch with dimensions showing each practice, the roof or paved area draining to it, and the overflow path.
Worksheet	The completed CR-1 worksheet (Section 6.4).

Item	Required
Infiltration evidence	Proposed evidence, subject to the final Technical Standards Manual (item C-6). Document the installed dimensions, connected storage, and all outlets and underdrains. Follow the approved protocol to show that the entire claimed storage volume fills to its defined level and then empties by infiltration. Record water levels, dates, times, rainfall, other inflows, and outlet flows. Metered fill water may corroborate the test, but does not establish storage capacity: infiltration during filling, other water use, or outlet losses can increase the recorded volume. Use verified geometry and void volume to calculate storage. The final protocol will set safe filling procedures and representative starting moisture conditions. Apply a 24 hour drawdown limit to permeable pavement and 48 hours to other infiltration practices, or a stricter applicable limit. A buried practice without an observation port cannot be claimed on CR-1. The Guide perc test is screening only.
Disconnection evidence	Roof area per outlet, flow length and receiving area, slope, setbacks, the overflow route for larger storms, and photographs of each outlet and receiving area.
Unbound surface evidence	Surface dimensions and a photograph.
Rain barrel evidence	Total barrel capacity, and a dated photograph showing the barrels, their overflow, and the house number.
Approval disclosure	Whether the practice was required by a permit or approval, with a copy if available.
Photographs	The finished practice, and the open excavation if available.
Certification	The owner, or an agent who also provides the owner's written authorization, certifies that the information is accurate and that the practice will be maintained year round (rain barrels: April through November at a minimum).

The Department checks CR-1 applications for completeness and arithmetic, compares them with aerial imagery and the photographs, and may visit the property. An incomplete application, or one with a calculation error, is returned to the applicant to complete or correct.

6.4 CR-1 Worksheet

Use one calculation group for each distinct drainage area, and list any retention practices in series within that group. Never enter the same roof or pavement area twice. This worksheet shows the proposed method; the CR-1 form will be issued with the final manual.

Line	Applicant enters
1	Enter total measured impervious area T (sq ft) from the assessment statement and the gross monthly fee F ($). For each drainage area, enter its area A (sq ft), measured in plan, not along the roof slope.

Line	Applicant enters
2	Countable storage V (cu ft). Rain garden: ponding area × depth to the lowest overflow (in) ÷ 12, using the actual ponding geometry, not excavation depth. Stone practice: length × width × stone depth (ft) × 0.4. Count only connected storage below the lowest outlet that empties by infiltration within 24 hours for permeable pavement or 48 hours for other infiltration practices, or a stricter applicable limit. For permeable pavement, count only rain falling on that pavement. Exclude soil, mulch, pavers, and bedding.
3	Retained depth d = V × 12 ÷ A (inches). Below 1.0 inch, no retention element. Above 2.0 inches, use 2.0. Do not round d up to reach a threshold.
4	Retention R = 25 × d (percent), maximum 50%.
5	Disconnection, for each outlet: roof area A (no more than 1,000 sq ft), flow length L (ft), and receiving area B (sq ft). It earns the 10% allowance on A only if L is at least A ÷ 13.3, B is at least 2 × A, receiving areas do not overlap, and all other Section 5.3 criteria are met.
6	Unbound surfaces: add every unbound surface on the parcel into one entry. G = the lesser of that combined area or 1,000 sq ft. U = 10% on G. No other element is counted on that area.
7	For each drainage area: drainage area credit (Section 5.6) × A ÷ T. Use G for the unbound entry and 10% for a disconnected roof area. The total area counted may not exceed T. Do not round individual results.
8	Add the line 7 results, cap the total at 50%, and round down once to a whole percent. Call the result P.
9	Performance credit = F × P ÷ 100. Add any participation credit (Section 5.5). Final monthly credit = the lesser of that sum or 0.50 × F, rounded down to the cent. Fee after credit = F minus the final credit.

6.5 Form CR-2 Contents

Item	Required
Owner and account	Owner name, property address, utility account number, the agent's written authority if an agent applies, and responsible party for maintenance.
Drainage area plan	Site plan showing total measured impervious area, each drainage area, and each practice and treatment train. Drainage areas may not overlap.
Performance basis	For infiltration retention: verified retained volume and depth with infiltration evidence. For detention: the sealed analysis under § 8.11. For water quality: the treatment basis under §§ 8.19 to 8.25 or § 8.9(D). For retention by cistern reuse: usable storage between operating drawdown and overflow levels, documented year round demand, operating levels, drawdown between storms, overflow routing, and evidence that claimed storage is available between events under the approved protocol. Infiltration testing is not required to demonstrate reuse alone.

Item	Required
Design documents	Approved plans or record drawings. Engineered practices require certification by a Rhode Island licensed professional engineer.
Approval disclosure	Each approval or permit under which a practice was built, and what it required.
Maintenance	Operation and maintenance plan, most recent inspection and maintenance records, and a recorded maintenance agreement where Section 8 of this manual requires one.
Certification	The owner, or an agent who also provides the owner's written authorization, signs the accuracy and maintenance certification. The certification identifies the credited practices and the owner's continuing maintenance and recertification obligations.

An owner may request an optional meeting before applying to confirm eligibility and the drainage areas.

6.6 Review and Decision

The Department checks the application for completeness and arithmetic, may inspect the practice before deciding, and returns an incomplete or incorrect application without completing or correcting it. The Department issues each credit determination as an amended assessment statement stating, for each drainage area, the area, the practice, the elements credited, and the credit; the parcel credit; the effective date; the recertification method and due date; and the procedure and deadline for requesting review (Section 9 and item C-1). The Department's target for an initial application is a determination within 30 days after it is complete. This target does not extend the deadline for a correction request. A credit determination is a billing decision. It is not a design approval and does not certify that a practice is safe or causes no adverse drainage impact; the owner remains responsible for the practice under proposed Section 13.11.090.

7. Keeping the Credit

7.1 Maintenance

The owner maintains each credited practice year round under the Technical Standards Manual and any approved operation and maintenance plan. Rain barrels are kept in service at least from April through November.

7.2 Recertification

- **Every three years.** Credits approved on Form CR-1: owner self certification with current photographs and, for infiltration practices, a drawdown observation. Credits approved on Form CR-2: an inspection report by a qualified inspector as defined in the Technical Standards Manual, or by a Rhode Island licensed professional engineer for detention, underground systems, proprietary devices, practices built under a sealed design, and where the Director requires one because of system complexity, condition, or history.

- An annual certification under proposed Section 13.11.100(D) may also serve as credit recertification when it documents the credited performance and meets the reviewer qualifications above. An annual filing alone does not verify performance beyond the required baseline.
- The Department sends a reminder at least 60 days before the due date. The credit continues while a timely recertification is under review.

7.3 Inspection

The Department may inspect a credited practice and require its records (proposed Section 13.13.070(E)). Except in an emergency, the Department gives notice and inspects at reasonable times.

7.4 Deficiencies, Suspension, and Reinstatement

1. **Notice.** If a practice is not working, not maintained, or not recertified on time, the Department will send a written notice stating the observed condition, the affected practice and drainage area, the required correction, the correction deadline, the effect on billing, and how to request review under Section 9.
2. **Correction period.** The owner has 60 days from notice to correct the deficiency. The Director may extend the deadline in writing for seasonal conditions or documented contractor availability.
3. **Suspension.** If the deficiency is not corrected by the deadline, the Department recalculates the affected credit starting with the next billing period, keeping only performance that remains independently documented. Credits for unaffected drainage areas continue.
4. **Removal.** If a practice is removed, the owner must notify the Department. The affected credit is recalculated starting with the next billing period after notice of removal or discovery. Remaining practices are evaluated without the removed practice.
5. **Reinstatement.** The credit is reinstated starting with the billing period after the Department verifies the correction. For CR-1 practices, current photographs and a drawdown observation may serve as verification.
6. **False information.** A credit obtained with false information is revoked after notice and an opportunity for review. The City proposes rebilling credited amounts back to the start of the credit, limited to three years (item C-2).

7.5 Change of Ownership

A credit stays with the parcel when ownership changes. The new owner is responsible for maintenance and recertification. When the utility account transfers, the Department notifies the new owner of the credit, its practices, and the next recertification date.

8. Maintenance Agreements

- A maintenance agreement required by law, a permit, an approval, or shared ownership remains in effect. For a practice with an existing recorded agreement, the applicant provides the agreement and identifies how it covers the credited practice, maintenance obligations, and responsible party. The Department confirms that coverage before

approving the credit. Amend the agreement if the credited scope or obligations are not covered.

- A practice that serves more than one parcel, condominium unit, or account requires a maintenance agreement on the City Solicitor's standard form, recorded in the land evidence records (proposed Section 13.13.070(F)).
- The Director may require a recorded agreement for other credited practices when long term access by the City is material.
- Subject to any agreement required by law, permit, or approval, this manual does not require a recorded agreement for a practice on a one to five unit residential parcel that serves only that parcel and involves no shared access, ownership, or obligation.
- No third party service contract is required. The responsible party named in the application keeps maintenance records. Where a device's approval or its manufacturer requires certified service, the owner provides proof of that service.

9. Review and Appeal

1. **Correction request.** An owner may file a written request asking the Director to correct a credit determination or a suspension within 30 days after the Department serves it. The request states the grounds and includes supporting evidence. The Director issues a written decision within 30 days after determining that the request is complete. The Department issues credit determinations and suspensions as amended assessment statements, so the 30 day period in proposed Section 13.13.080(C) applies (item C-1). A request filed after 30 days is not denied. It receives prospective relief only, except that an error in City data, classification, account linkage, duplicate billing, exemption status, or calculation is corrected back to the first erroneous charge, limited to charges billed within three years before the request (proposed Section 13.13.080(F)).
2. **Appeal.** An owner aggrieved by the Director's decision may file a written appeal within 30 days after service of that decision. The appeal is heard by the independent Administrative Hearing Officer under proposed Section 13.09.140 (proposed Section 13.13.080(D)).
3. **Collection.** A timely request or appeal suspends collection, penalties, interest, and lien action on the disputed portion. The undisputed portion remains due (proposed Section 13.13.080(E)).

An amount upheld becomes due 30 days after service of the final decision. Corrections are applied by credit, refund, or rebilling. Service is documented under proposed Section 13.09.140(H). These fee review provisions do not replace the separate appeal rules for a development permit or an enforcement order.

10. Discussion and Open Items

> This section identifies questions for public comment and items under review. It will be removed from the final manual.

1. **Maintained required practices.** This draft credits only performance beyond a requirement, and maintained required practices earn no credit at program start. Proposed Section 13.13.070(C) also allows credit for another measurable reduction in runoff volume, peak

discharge, pollutant loading, or City cost. The City invites comment on whether maintained required practices should earn a partial credit on that basis. The City Solicitor will advise whether that approach fits the ordinance as written (item C-3).

2. **Location based credits.** Reservoir protection and coastal resilience credits are not proposed at this time. They would require parcel level drainage area data to administer fairly.
3. **Credit values.** These are proposed starting values. The initial schedule is intended to limit revenue reductions until performance, participation, and administrative costs can be evaluated. Starting with provisional values may reduce the need for later reductions affecting owners who invested in reliance on the program. The City intends to review the values after the first two full years of billing using participation, performance, and cost data, and may propose increases where the evidence supports them. This is a proposed review commitment, not a guarantee of increased credits. Any revision must remain within the ordinance and applicable public comment requirements. The engineering basis and revenue and administrative effects remain under review (items C-5 and C-6). If the schedule is adopted, the final manual will carry this review commitment.
4. **Rain barrels.** The City invites comment on the rain barrel participation credit (Section 5.5).
5. **Gravel and other unbound surfaces.** The City invites comment on the unbound surface credit and its 1,000 sq ft per parcel cap (Section 5.4). As an alternative, the City is also considering a classification review limited to unbound surfaces designed and built for high permeability.
6. **Removing credited pavement.** The City invites comment on whether to mitigate the effect described in Section 5.8, where removing pavement that drained to a credited practice can raise the net bill on a tiered parcel.
7. **Online applications.** An online application, document upload, and recertification reminder system may be added as the program grows.

Item	Under review	Reviewer
C-1	Issuing credit determinations and suspensions as amended assessment statements so the correction period in proposed Section 13.13.080(C) applies; notice and service.	City Solicitor
C-2	Required practice records; effective dates for later discovered requirements; recovery of credits obtained with false information (proposed: three years); and the three year limit on reclaiming a participation credit after a failed audit.	City Solicitor; Utilities
C-3	Whether maintained required practices should earn a partial credit (proposed: no credit at program start).	City Solicitor; rate consultant
C-4	The combination rule in Section 5.6, the detention weight, treatment trains, and allocation of shared storage.	Jacobs; City Solicitor
C-5	Participation, revenue effect, and administrative cost, modeled on actual parcel fees by customer class, and whether credit losses are included in the proposed rate.	Rate consultant; Finance

Item	Under review	Reviewer
C-6	Engineering basis for the 1.0 inch retention entry, the 10% disconnection allowance and two to one area ratio, the 10% unbound surface factor, storage void ratios, and the owner fill test, including treatment of dense soils and fill.	Jacobs
C-7	The 1,000 sq ft unbound surface cap and the basis for the participation credit under proposed Section 13.13.070(C) and (G).	City Solicitor
C-8	Final forms and testing protocols; billing and cent rounding; account allocation; opening dates; staffing; notices; and records. Under proposed § 13.13.066, file the readiness certification before Council acts on the budget and fee schedule that commence billing. Confirm an appointed Hearing Officer, linked records and tested operating systems, and assessment service at least 30 days before the first bill. No fee accrues for a parcel before service. Document test results and responsible staff.	Utilities; Finance; City Solicitor

11. Related Documents

- Proposed Chapter 13.11, Stormwater Management for Development and Redevelopment.
- Proposed Chapter 13.13, Stormwater Management District, Utility, and Service Fee.
- Utilities Stormwater Technical Standards Manual (proposed Section 13.11.065), which will provide the testing, sizing, drawdown, siting, and maintenance requirements for practices eligible for credit. It is in preparation.
- Rhode Island Stormwater Management, Design, and Installation Rules, 250-RICR-150-10-8, including § 8.5 (definitions), § 8.18 (qualifying pervious areas), § 8.21 (infiltration practices), and § 8.24 (green roofs).
- Homeowners Guide to Stormwater Management. Educational only. It does not establish credit eligibility. Its sizing formulas are being conformed to this manual.