



Proposed Drainage Charge Discount Program

Grow Green – Landscape Professional Training

Feb 17, 2017



Presentation Outline

1. Background
2. Proposed Rules
3. Policy & Guidance
(under development)
4. Schedule
5. Q&A



Rain Garden at One Texas Center



Rain Barrels
connected to gutters

Background - Purpose

- **Drainage Charge begins 1982**
 - Response to 1981 Memorial Day flood
 - 13 lives lost
 - 35.5 million dollars in damage
- **Purpose of Drainage Charge**
 - Dedicated source of funding to address flooding, erosion, and water pollution
- **What is funded by the Drainage Charge**
 - Drainage charge is ~95% of the Watershed Protection Department (WPD) funding.
 - FY17 WPD Budget of ~\$93M
 - Operate and Maintain
 - ~1,000 miles of storm sewer
 - ~900 ponds (maintain)
 - ~7,000 ponds (inspect)
 - ~900 miles of creeks/waterways
 - Flood Warning – ATXfloods

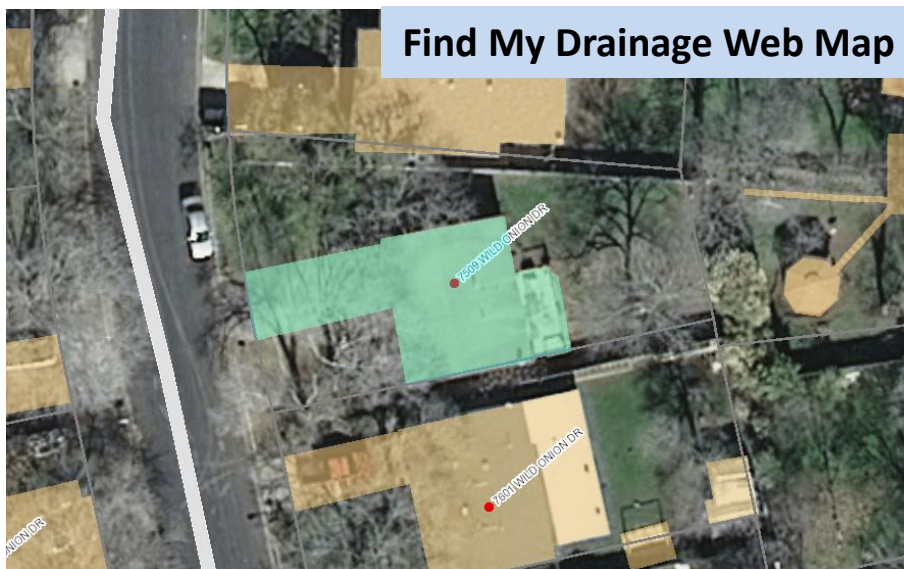


PICA 29466, Austin History Center, Austin Public Library



Background – Charge Revision

- **Goals of 2015 Drainage Charge Revision**
 - Apply to entire property, not units on property
 - Calculated same way for all properties
 - Charge proportional to impact of each property
- **Drainage Charge Methodology**
 - Charge = Base Rate x Impervious Cover (IC) x Adjustment Factor based on percent IC



Background – Why propose a discount?

- **Recognize reduction in drainage impact**
 - Storing stormwater on your property can reduce the impact of impervious cover
- **Provide a way to reduce your bill**
 - Customers have options to reduce their other utility bills, why not drainage?
- **Reduce damaging effect of stormwater**
 - While impact reduction per property may be relatively small, it can have a large cumulative effect



Background – AWU

- **Currently, AWU offers a rainwater harvesting system rebate**
 - \$0.50/gallon for non-pressurized system (rain barrels)
 - \$1.00/gallon for pressurized system (cisterns with pumps)
 - Up to ½ of equipment cost, \$5,000 maximum
- **And, a WaterWise rainscape rebate**
 - \$0.30/sq.ft., 100 sq.ft. minimum
 - \$500 maximum
- **More info at:**
<http://www.austintexas.gov/department/water-conservation-rebates>



Background – Discount Research

- **Benchmarking**

- Of 48 communities benchmarked, about 2/3 have credits, 1/3 have rebates
- Two TX Cities with recent Drainage charge changes
 - Houston – By volume, \$0.10/barrel/month
 - San Antonio – By water quality volume, up to 30% of charge, commercial only



Background – Discount Research

- **Equity and Cost of Service Assessment**
 - EPA found limited flood benefits from Green Infrastructure
 - Austin-area studies showed on-site controls had relatively small flood control benefits and high costs
 - On-site controls generally accepted to have water quality benefits, but little flood control benefits
 - Capacity may not be available in back-to-back storms
 - Cost of Service benefit to Drainage Utility expected to be very small
 - Some properties store more stormwater than legal requirements
- **Proposal**
 - Allow credits based on stormwater controls that exceed legal requirements, allowing up to 50% reduction of impervious cover.



Background – Code Changes

- Council passed Code Changes Aug 4, 2016

15-2-7-MONTHLY DRAINAGE CHARGE

- (C) The director may credit the monthly drainage charge based on voluntary installation of on-site stormwater control measures that exceed the applicable requirements of City Code, state law, or a development agreement with the City. A credit under this subsection:
- (i) may not exceed an amount equivalent to a 50% reduction in the square feet of impervious cover under the formula established in Subsection (B) of this section; and
 - (ii) must be based on criteria, established by administrative rule, that tie the amount of the credit to the overall value of voluntary stormwater control measures in reducing runoff from the benefited property.

Proposed Rules

- **Applicability / Eligibility**

- Applicants must be a current drainage utility customer or a tenant of the benefitted property.
- If any permit or approval for SCM is required, applicant must show evidence of approval.



Proposed Rules

- **Types of Controls**
 - Only SCMs currently in Drainage Criteria Manual and Environmental Criteria Manual are eligible
 - Rain Barrels and Cisterns
 - Rain Gardens
 - Detention and Water Quality Ponds
 - Retention/Irrigation Systems



Proposed Rules

Cistern



Detention Pond



Retention/Irrigation Pond



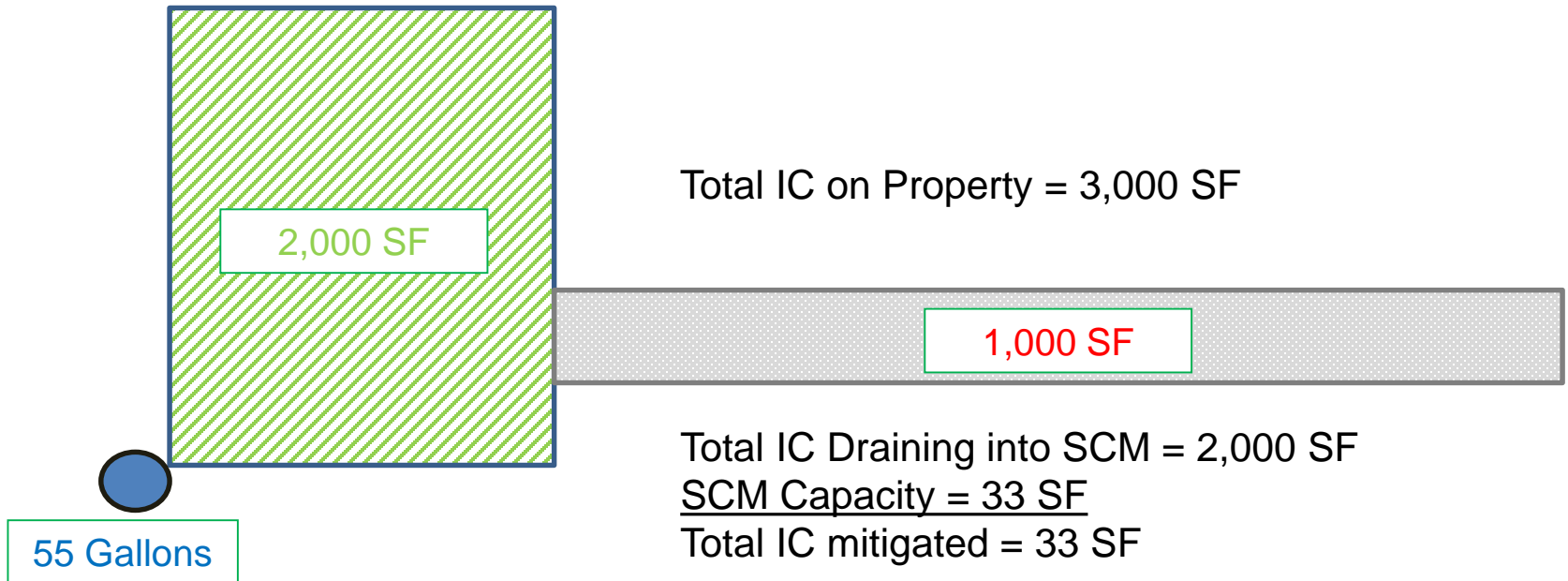
Water Quality Pond

Proposed Rules

- **Calculation**

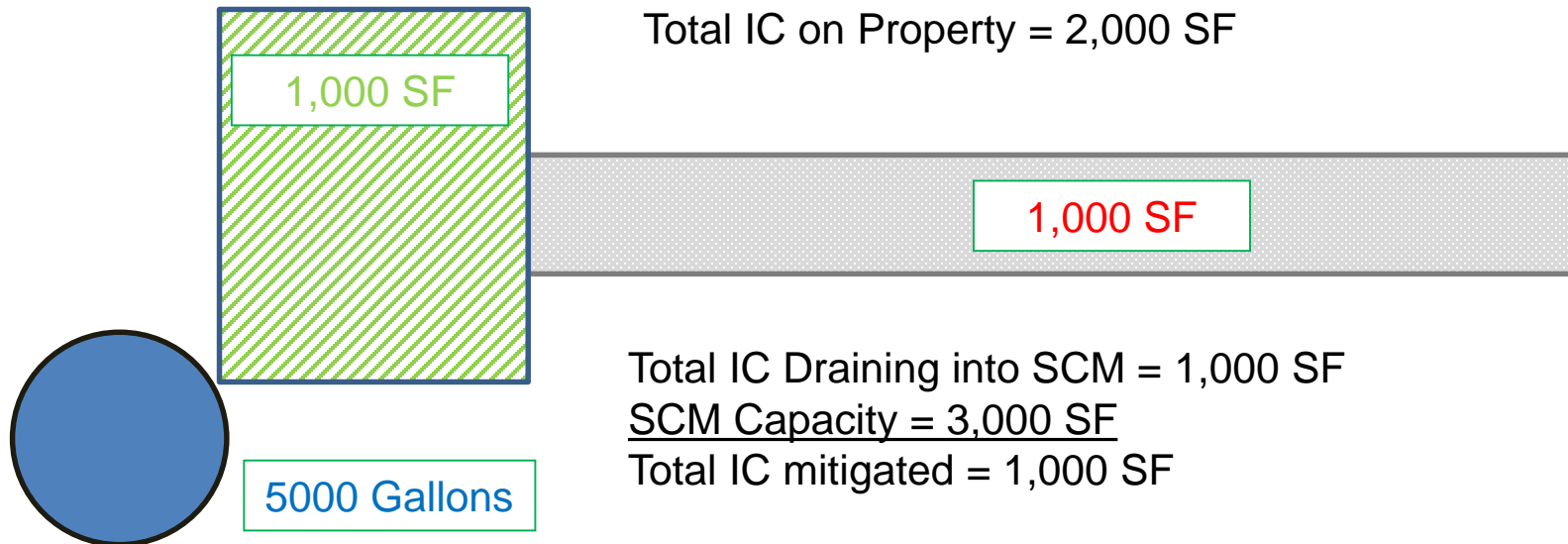
- The amount of the discount will be limited to the impervious surface area that is mitigated by the SCM.

Example: SCM too small to capture all the IC that drains to it



Proposed Rules

Example: SCM has more capacity than the IC draining to it



Proposed Rules

- **Inspection and Maintenance**
 - Customers receiving discount must service and maintain SCM in order to retain discount.
 - Information found to be inaccurate may result in loss of discount or back debit.
- **Timeline**
 - Discount is valid for two years starting on date of approval. To renew discount, customer must complete renewal process.



Clogged Rain Barrel



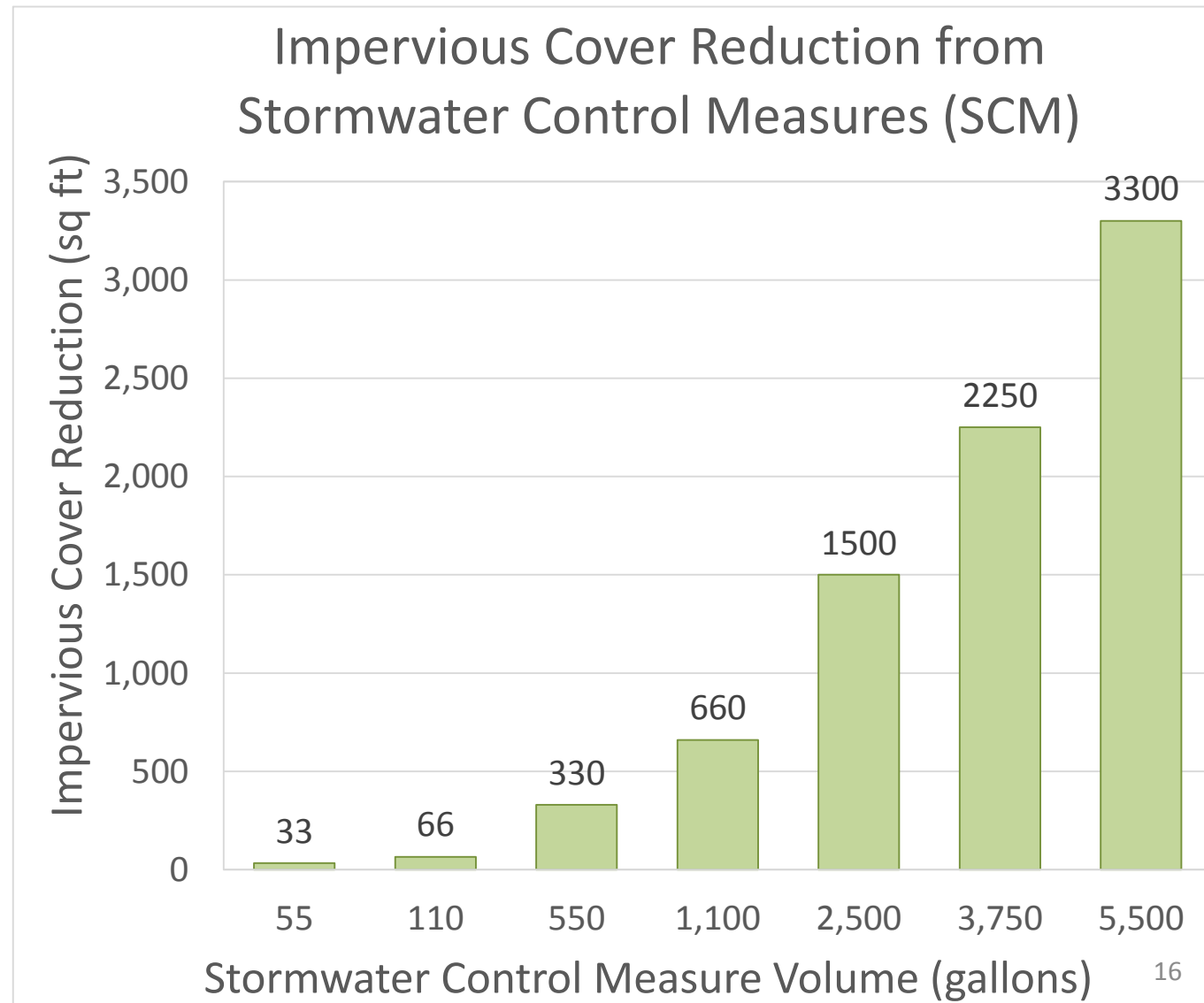
Debris in Pond



Sediment in Rain Garden

Policy & Guidance – How much discount?

- Credit based on capture volume offsetting runoff from Impervious Cover (IC)
- 0.6 sqft of IC / gallon of SCM
- Available to all land uses



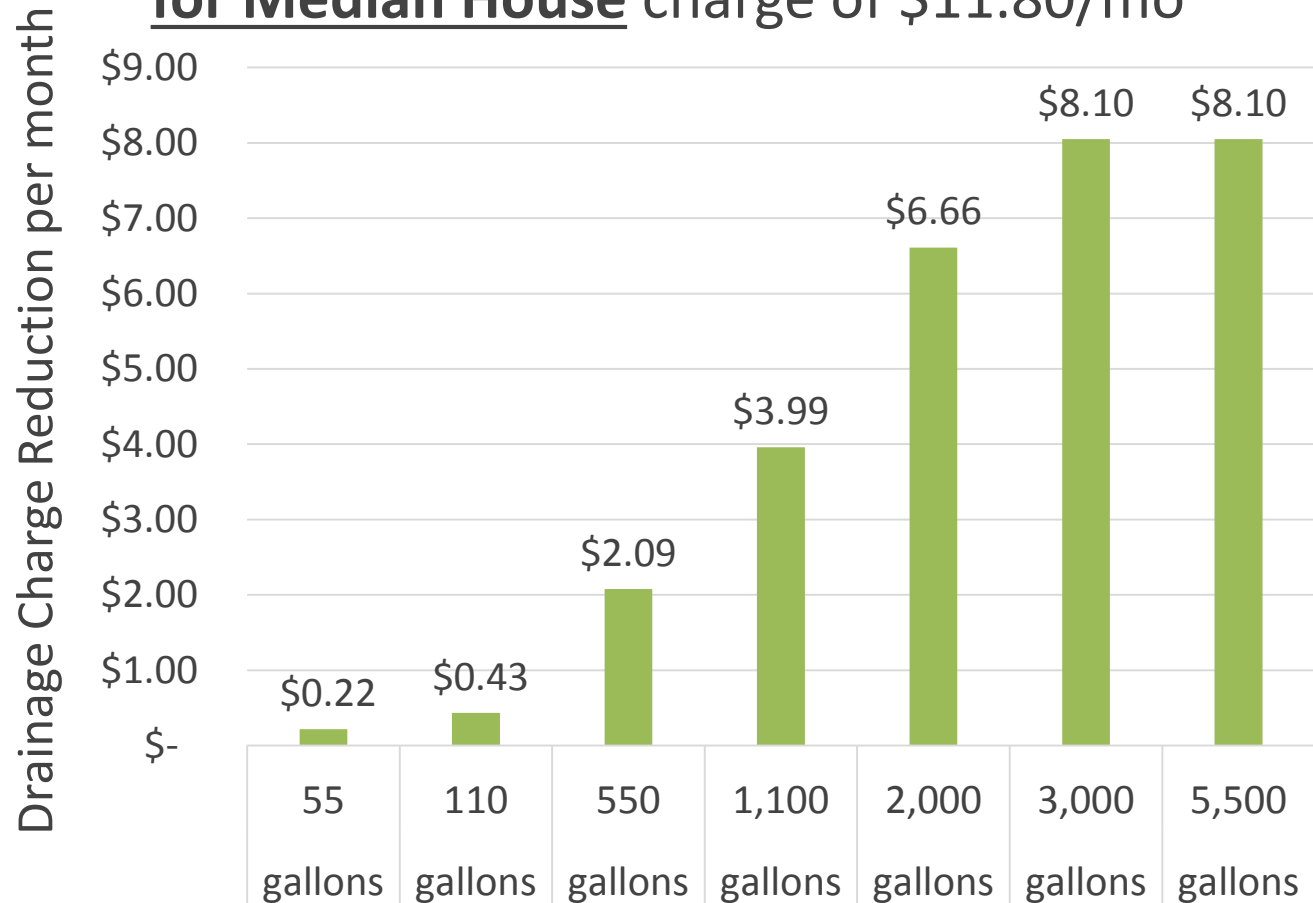
Policy & Guidance – How much discount?

Median House Examples

(3,100 sqft IC, 37% IC)

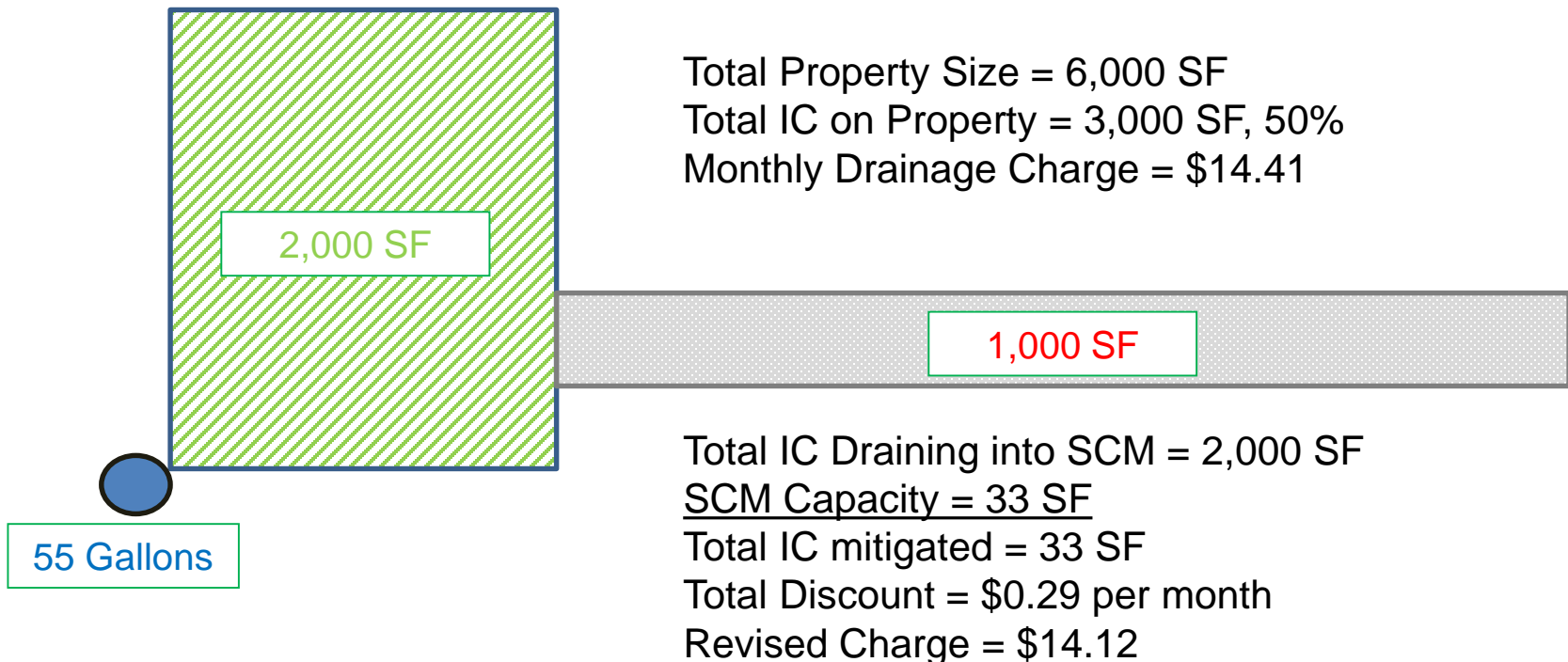
- Volume of one standard 55 gal Rain Barrel translates to \$0.22 per month savings
- 3,000 gal cistern could negate up to half the IC, thus 69% of the charge, though installation cost ~\$3,500

Incentive for On-Site Stormwater Control for Median House charge of \$11.80/mo



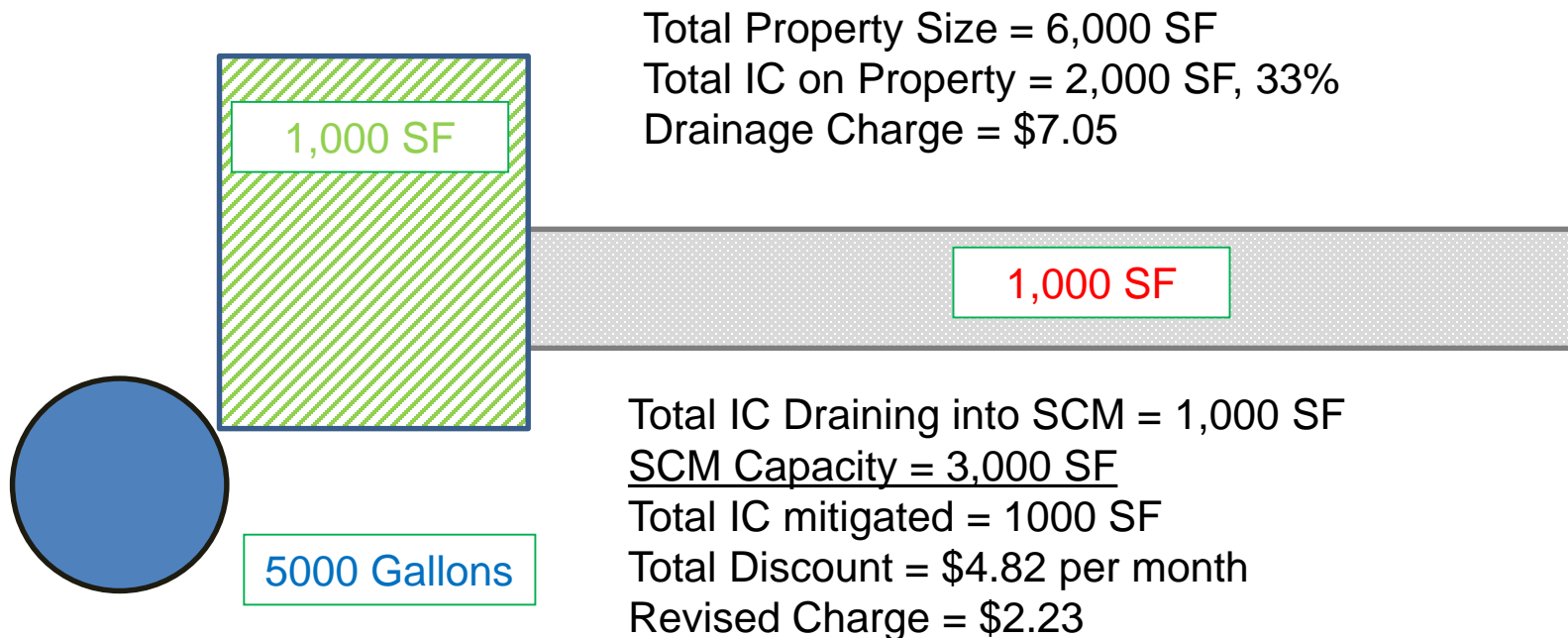
Policy & Guidance – How much discount?

Example: SCM too small to capture all the IC that drains to it



Policy & Guidance – How much discount?

Example: SCM not mitigating to capacity



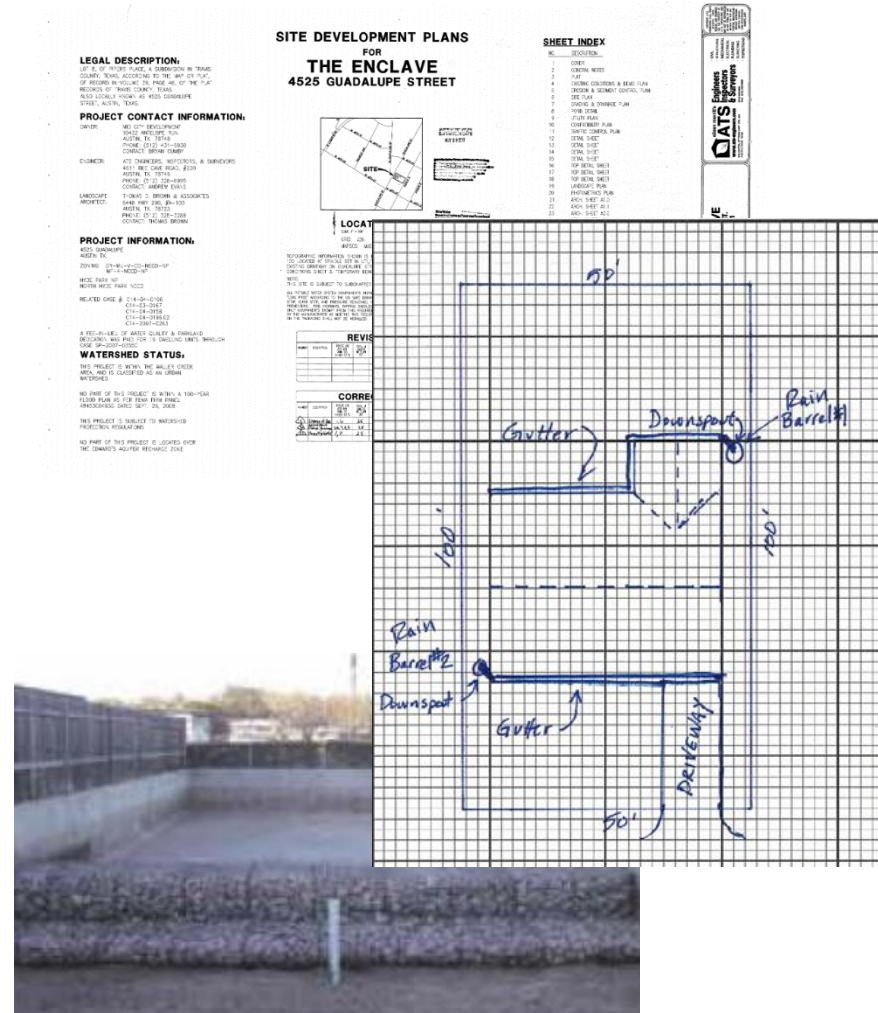
Policy & Guidance - How To Apply

- Applications can be submitted online or mailed and should include:
 - Customer Information
 - Type of SCM
 - Volume of SCM
 - Area that feeds SCM
 - Image of SCM

DRAINAGE DISCOUNT APPLICATION FORM		
APPLICANT INFORMATION		
Name: Last _____	First _____	Date _____
Utility Billing Address _____	Apartment/Unit # _____	
City _____	State _____	ZIP _____
Phone (____) _____	E-mail Address _____	
Utility Account No. _____		
Has Your SCM been approved AWU rebate program Yes No		
STORMWATER CONTROL MEASURE DETAILS		
<i>Include attached documentation (photos and SCM layout)</i>		
SCM TYPE _____	GALLONS _____	IMPERVIOUS COVER MITIGATED _____ SQUARE FEET
SCM TYPE _____	GALLONS _____	IMPERVIOUS COVER MITIGATED _____ SQUARE FEET
SCM TYPE _____	GALLONS _____	IMPERVIOUS COVER MITIGATED _____ SQUARE FEET
TOTAL _____		TOTAL _____ SQUARE FEET
DISCLAIMER AND SIGNATURE		

Policy & Guidance - How To Apply

- **Applications may also include:**
 - Proof that the SCM exceeds legal requirements for property
 - Typically for detention/WQ ponds
 - If required, evidence of permit approval
 - Sketch or plan of SCM layout may be required based on amount applied for



Policy & Guidance - Maintenance

GREEN STORMWATER INFRASTRUCTURE MAINTENANCE MANUAL



RAIN GARDENS

BIOFILTRATION

VEGETATIVE
FILTER STRIPS

Stormwater Management

Maintenance Guidelines



New developments in Austin are required to construct on-site storm water controls (ponds) to prevent flooding, erosion, and pollution of our creeks and lakes. These controls slow down stormwater to reduce stream flooding and erosion or filter water so that pollutants are trapped in the pond rather than traveling to waterways. This guide provides general maintenance guidelines to help you comply with City of Austin requirements.

Benefits of Frequent Inspection and Maintenance:

Regularly maintained control is more attractive and best serves its purpose of flood reduction and/or water quality protection. Regular maintenance will reduce the need to rebuild a control that has failed and will reduce the risk of fines for non-compliance with permit regulations. Please join us in providing a safer and healthier environment.

**earth-wise guide to
Rain Gardens**
Keeping Water on the Land

1 Find the Right Location

- Select an area on gently sloping or flat land
- Calculate the slope of your lawn (instructions on next page). The slope should be less than 10%
- If possible, pick a spot in full to partial sun. Shady locations will still work, but the options for flowering plants are more limited in the shade
- Make sure that any overflow will not cause unintended runoff to a neighbor's property or other structure
- If drainage-related problems are occurring (e.g. foundation problems, erosion or flooding), consider placing the rain garden at least 10' away from the structure
- Avoid areas with utility lines. Be sure to call 1-800-DIG-TESS (344-8377) to identify the location of underground utilities – the service is free

vgreen.org

Timeline / Next Steps

- **February 2017**
 - Public Comments due – Feb 4
 - Rule Adoption – end Feb
- **April 2017**
 - Draft Policy & Guidance Documents
- **Spring-Summer 2017**
 - Begin Accepting Applications for Discounts

Questions?

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