

## **SWATeam Recommendation**

**Name of SWATeam:** Water and Stormwater

**SWATeam Chair:** Art Schmidt

**Date Submitted to iSEE:** 5 May 2018

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### **Specific Actions/Policy Recommended (a few sentences):**

The Facilities and Services Standards for Parking and for Stormwater Systems should be revised to include a greater emphasis on sustainable design Green Stormwater Infrastructure (GSI) for stormwater management. This revision will align these standards with the newly adopted 2017 Campus Master Plan.

### **Rationale for Recommendation (a few sentences):**

The Urbana-Champaign campus includes approximately 163 acres of paved parking area. Most of this parking area was installed before runoff control rules. As a result, there is little or no mitigation of the stormwater impact of this impervious parking area on the receiving streams.

Current Stormwater Systems standards state, “The controlled release rate of stormwater runoff from a fully developed site should not exceed the rate of .018 [sic] cfs per acre for site larger than five acres and 0.9 cfs per acre for sites less than five acres.” However, these standards do not specify any consideration of water-quality impacts to the receiving water. The Stormwater Systems standards do state that, “Design shall incorporate sustainable and low impact design storm water drainage concepts and principles.” However, the only stormwater infrastructure mentioned in the Stormwater Systems standards are conventional pipes/storm inlets/manholes.

The current Stormwater Systems Standard, “pertains to any Project that will change the peak storm water runoff characteristics, including, but not limited to new buildings, renovations of existing buildings, additions to existing buildings, construction of new parking lots, and renovation of existing parking lots.” The Water and Stormwater SWATeam recommends that the phrase, “that will change the peak stormwater runoff characteristics” should be removed from this standard. While renovation/resurfacing of an existing parking lot may not change the existing peak runoff characteristics, the original construction of the lot certainly did change the runoff characteristics. Renovation provides an opportunity to mitigate the impact of that lot on the receiving waters. We feel that the possibility for inclusion of GSI should be examined for every roof and parking renovation that exceeds a reasonable threshold (e.g., repairing a portion of a damaged roof or filling potholes in a parking lot will not require consideration of GSI, but replacing an entire roof or resurfacing several thousands of sq. ft of parking would merit examination of the costs/benefits of incorporating GSI as part of the renovation).

The University will also financially benefit from a reduction in annual stormwater fees to the municipalities of Champaign and Urbana.

### **Connection to iCAP Goals (a few sentences):**

The suggested revisions to the F&S Stormwater and Parking lot standards will potentially benefit the following iCAP Goals:

1. Chapter 7, Objective 2: Design and maintain the campus landscapes in a more sustainable manner.
2. Chapter 5, Objective 6: Investigate the water quality impacts of stormwater runoff and potential ways to reduce stormwater pollutant discharges by FY18.

### **Perceived Challenges (a few sentences):**

The challenges associated with revising the stormwater standards are the time and personnel resources to develop updated standards that reflect current best practices and that achieve a balance between providing a standard that units need to follow while allowing flexibility to consider other competing factors (budget, landscape, mission, etc.) that may be impacted by inclusion of GSI. The greater challenges are associated with implementing the policy. While the benefits of GSI are to the downstream environment, the costs are allocated to the units. Hence, there is an economic disincentive to spend the extra resources required for GSI for benefits that are not realized by the units.

**Suggested unit/department to address implementation:**

Facilities &amp; Services.

**Anticipated level of budget and/or policy impact (low, medium, high):**

Cost would be relatively low. This recommendation would require time budgeted to F&S staff to research what has been done on other campuses and municipalities, to modify these to be relevant to the conditions of the University, and to write these as part of the F&S standards.

**Individual comments are required from each SWATeam member (can be brief, if member fully agrees):**

Team Member Name	Team Member's Comments
Art Schmidt (Chair)	I concur with Art's comments. I suggest using clarifying wording that draws distinctions between "sustainable and low impact design storm water drainage concepts and principle" and "green" stormwater management.
Keith Erickson	I concur.
N Rajagopalan	I concur.
Lauren Excell	We should proceed with this immediately and bring the Parking standards up to date. Implementing GSI will have great benefits for the campus and will advance the ICAP goals.
Rabin Bhattarai	Since the current parking standards is not in sync with the campus Stormwater standards, it will be helpful to update the parking standards. This will also help in achieving the ICAP goals.
John Berens	Moving forward with these recommendations will assure that the University's parking infrastructure is constantly keeping pace with modern stormwater standards.

**Comments from Consultation Group (if any; these can be anonymous):****Explanation and Background (can be supplied in an attachment):**