
ASCE March Meeting Minutes

Speaker(s): Dirk Hudson, P.E. (Advanced Drainage Systems)
Topic: Flooding: Managing Stormwater Infrastructure's Greatest Challenge
Date: Wednesday, March 9, 2022
Location: Farm Credit Bank Building
245 N. Waco Ave., Wichita, KS 67202

President Daniel Mealiff called the meeting to order at 12:00 pm and opened the meeting with announcements.

Announcements

- a. 4/20 – April Meeting will be a site visit at the Water Treatment Plant
- b. 4/21 – Trash pick-up
- c. Officer Elections will be held in May, talk to an officer if you are interested.
- d. The ASCE STEM Grant & College Scholarship programs are looking for new organizers, talk to an officer if you are interested.
- e. 6/21 – Steak Fry is planned for a TUESDAY at Botanica, but keep on the lookout for official announcements.
- f. 7/28 – Civil Engineering Conference, baseball game, golf tournament. Contact Daniel Schrant for sponsorship opportunities.
- g. REMINDER: 50 minutes = 1 CEU, <50 minutes = 0.5 CEU

Guest Speaker

Vice President Scott Lindebak introduced the guest speaker, Dirk Hudson, an Engineered Products Manager for Advanced Drainage Systems. Dirk went to University of Missouri – Kansas City for his Bachelor's and Master's degree in Civil Engineering. After college, Dirk worked for the US Army Corps of Engineers and obtained his PE license. Dirk has been with ADS for three years and enjoys working with innovative engineering firms and municipalities on projects to improve the infrastructure we use daily.



Discussion

Analyzing records of insurance claims and rebuilding costs, flooding has been found to be worse than tornados in the Kansas/Nebraska/Missouri areas in terms of costliness and casualties. Flooding causes an average of 70 – 80 fatalities in the US and \$9B in fixes every year.

Some solutions or corrective actions include implementing more pervious surfaces to areas with high flood risk. This can be done with planting more native vegetation or adding parks to urbanized environments. We can also detain water in innovative locations and be proactive with remove clogging from existing drainage systems. Underground retention could happen in unexpected areas like underneath car dealership parking lots or under city parks and have an expected service life of 75 years. Rain gardens, bioretention areas, biofilters, and porous pavement are all other proactive solutions for areas to be able to hold more water without flooding.

Hydroflow and HydroCAD modeling is the main way Advanced Drainage Systems project how the systems would work during rain events. They mainly use the rational method when it is applicable for calculations. The goal is to get ERU's (Equivalent Residual Unit) down and reduce the average quantity of wastewater generated by the local area.

Meeting Attendees

1	Shane	Albritton	19	Dirk	Hudson (speaker)
2	Michael	Armour	20	Caleb	Jurey
3	Eric	Armstrong	21	Kyle	Kerns
4	Allison	Atkinson	22	Scott	Lindebak
5	Scott	Bernhardt	23	Ky	Louanghaksaphone
6	Robert	Blackmore	24	Layla	McDaniel
7	Jake	Borchers	25	Aubrey	Mealiff
8	Scott	Canfield	26	Daniel	Mealiff
9	Steve	Degenhardt	27	Logan	Mills
10	Mark	Dolechek	28	John	Oswald
11	Paul	Flynn	29	Lynn	Packer
12	Harlan	Foracker	30	Shivraj	Patil
13	Philip	Frazier	31	Jessica	Rhein
14	Eric	Glover	32	Daniel	Shrant
15	Matthew	Gotobed	33	Brad	Shores
16	Brian	Haberly	34	Rick	Stone
17	Derek	Hake	35	Tyler	Ummel
18	Abdul	Hamada	36	Dakota	Zimmerman

Meeting adjourned by President Daniel Mealiff at 12:55 p.m.
Minutes respectfully submitted by Treasurer Layla McDaniel.

