# Michael A. Perez, Ph.D., P.E., CPESC

Assistant Professor | Civil & Environmental Engineering

# **HONORS AND AWARDS**

#### MAJOR AWARDS RECEIVED WHILE SERVING ON THE FACULTY AT AUBURN UNIVERSITY

#### Sustained Contributor Award, 2023

Awarded to the Auburn University – Stormwater Research Facility by the International Erosion Control Association to recognize distinguished service to the organization and has made outstanding contributions to improve the erosion and sediment control industry for a sustained period of time. Winners of this award have demonstrated leadership by example through a significant and long-term contribution to the erosion and sediment control industry and to the International Erosion Control Association through one or more of the following: education, government involvement, research, establishment of standards or policies or the development of technology.

## Environmental Connection Most Distinguished Technical Paper, 2023

Awarded by the International Erosion Control Association in recognition of the highest quality technical paper presented at the annual Environmental Connection conference. The awarded paper was authored by Jannell Clampitt (M.S. student), Michael A. Perez, and Wesley N. Donald, and was titled "Understanding and Improving the Hydraulic Performance of Wattles for Erosion and Sediment Control".

#### Outstanding Graduate Mentor Award, 2022

Awarded by the Auburn University Graduate Student Council to recognize graduate faculty members who go above and beyond their duty as teachers, advisers, and mentors. A committee of graduate students reviewed the nominations and picked the winners based on the strength of the nominees' letters of support.

#### Environmental Connection Most Distinguished Technical Paper, 2021

Awarded by the International Erosion Control Association in recognition of the highest quality technical paper presented at the annual Environmental Connection conference. The awarded paper was authored by J. Blake Whitman (Post-doc), Jaime Schussler (Ph.D. student), Michael A. Perez, Lan Liu (Ph.D. student) and was titled "Analyzing Flow Characteristics of Wattles Using a State-of-the-Art Hydraulic Flume".

## Environmental Connection Most Distinguished Technical Paper, 2020

Awarded by the International Erosion Control Association in recognition of the highest quality technical paper presented at the annual Environmental Connection conference. The awarded paper was authored by Lan Liu (Ph.D. student), Michael A. Perez, and J. Blake Whitman (Post-doc) and was titled "Designing Silt Fence Sediment Barriers: A Performance Based Approach".

#### Three Under 30 Young Professional Award, 2019

Inaugural recipient of this award created by the International Erosion Control Association in recognition of three outstanding young professionals under 30 years of age working in stormwater and erosion and/or sediment control projects, programs, or academics that demonstrates excellence in natural resource conservation and environmental protection. Recipients have shown a high level of environmental benefit by clearly identifying the objectives, methods used, results obtained, and details of the benefits to the environment.

# EnviroCert International Annual Service Award, 2019

Awarded by EnviroCert International, Inc. in recognition to outstanding volunteers whose unselfish and dedicated service has made significant contribution to professional stormwater education and certifications.

#### MINOR AWARDS RECEIVED WHILE SERVING ON THE FACULTY AT AUBURN UNIVERSITY

#### MDPI Water Feature Paper, 2021

A Feature Paper designation was awarded to "Using AHP and Spatial Analysis to Determine Water Surface Storage Suitability in Cambodia". Feature Papers represent the most advanced research with significant potential for high impact in the field. Feature Papers are submitted upon individual invitation or recommendation by the scientific editors and undergo peer review prior to publication. The Feature Paper can be either an original research article, a substantial novel research study that often involves several techniques or approaches, or a comprehensive review paper with concise and precise updates on the latest progress in the field that systematically reviews the most exciting advances in scientific literature. This type of paper provides an outlook on future directions of research or possible applications."

#### MDPI Water Editor's Choice , 2021

An Editor's Choice Paper designation was awarded to "Using AHP and Spatial Analysis to Determine Water Surface Storage Suitability in Cambodia". "Editor's Choice articles are based on recommendations by the scientific editors of MDPI journals from around the world. Editors select a small number of articles recently published in the journal that they believe will be particularly interesting to authors, or important in this field. The aim is to provide a snapshot of some of the most exciting work published in the various research areas of the journal."

#### Auburn University New Faculty Scholar, 2019

Awarded by the Auburn University Biggio Center for the Enhancement of Teaching & Learning to select promising new faculty members to participate in a year-long series of workshops to improve research and education capabilities.

#### SELECTED AWARDS RECEIVED PRIOR TO FACULTY APPOINTMENT AT AUBURN UNIVERSITY

#### Environmental Excellence Award, 2019

Awarded by the International Erosion Control Association to the Auburn University - Erosion and Sediment Control Testing Facility for environmental stewardship within the construction industry by developing improved erosion and sediment control and stormwater technologies and practices, advancing knowledge through research and development, product evaluation and training.

# Proclamation of Recognition, 2016

Ceremonial document awarded by the elected officials of the City of West Miami, FL honoring local citizens in their contributions and achievements.

#### Environmental Connection Most Distinguished Technical Paper, 2016

Awarded by the International Erosion Control Association in recognition of the highest quality technical paper presented at the annual Environmental Connection conference. The awarded paper was authored Michael Perez, Wesley Zech, Xing Fang, and Jose Vasconcelos and was titled "Large-Scale Performance Enhancement Study of Sediment Basin Technology".

## Distinguished Engineering Graduate Student Seminar Series Award, 2015

Awarded by the Auburn University Council of Engineering Graduate Students in recognition of excellence in the presentation of outstanding graduate student research. The series awards graduate students with great presentation skills that are also able to effectively communicate their difficult research topic to a wide audience. The award is presented biannually to three graduate students in recognition of their of outstanding oral and technical presentation skills, as well as for their contributions to their field of research through conference presentations, seminars and invited speeches.

# Outstanding Master's Student Award, 2015

Awarded by the Auburn University Graduate School in recognition of the top 10 Master's students from across campus.

### Outstanding e-Portfolio Award – Honorable Mention, 2015

Awarded by the Auburn University Office of University Writing

# Julia and Albert Smith Graduate Fellowship, 2014

Awarded by Auburn University's Samuel Ginn College of Engineering.

#### Brasfield and Gorrie Fellowship, 2014

Awarded by Auburn University's Samuel Ginn College of Engineering.

#### Brasfield and Gorrie Fellowship, 2012

Awarded by Auburn University's Samuel Ginn College of Engineering.

# Student Engineer of the Year, 2012

Awarded by the Tallahassee, FL branch of the American Society of Civil Engineers.

#### Academic Leadership Award, 2012

Awarded by Florida State University for exemplary leadership contributions to the Florida State University community.

## Student Star, 2011

Selected for designation by Florida State University in recognition of achieving distinction in academic area or following significant service to the university. All students are either nominated by their academic dean or through the Office of the Vice President of Student Affairs.

#### SELECTED HONOR SOCIETY MEMBERSHIPS

- Tau Beta Pi Engineering Honor Society
- Chi Epsilon Civil Engineering Honor Society
- FAMU-FSU College of Engienering Civil Engineering Honor Society
- Florida State University Seminole Torchbearer Leadership Society
- Golden Key International Honor Society
- Sigma Alpha Lambda Honor Society
- Phi Eta Sigma Honor Society

# **SCHOLARLY CONTRIBUTIONS**

## 2. Research | Creative Work

#### a. Books.

1. Doran, E., Turochy, E., **Perez, M.A. (15%)**, Poleacovschi, C., and Yuen, T. (2023), <u>Book Chapter: Beyond Ethnic Identity: The Intersectional Experience of Latinx Students in Engineering with Stereotype Threats</u>, Stereotype Threats (2023). [in press].

## b. Article-length publications.

Note: 1. authorship order is in descending level of contribution; graduate students are typically listed as lead author.

- 2. \*indicates Auburn University student contributions.
- 3. †indicates Iowa State University student contributions.

Table 2 provides a summary of the impact factors and 5-year impact factors for journals that my refereed publications have been published in over the years.

No. of Impact 5-yr Journal ISSN Papers [A] Factor [B] Impact Factor Transportation Research Record 0361-1981 12 2.02 1.21 J. of Irrigation and Drainage Eng. 0733-9437 10 1.42 1.53 Water 2073-4441 7 3.53 2.75 J. of Environmental Quality 0047-2425 3 2.75 3.87 J. of Hydrologic Eng. 1084-0699 3 2.44 1.82 Climate and Development 1756-5529 4.65 4.74 1 1424-8220 3.85 3.24 Sensors 1 J. Sustain. Water Built Environ. 2379-6111 0.54 0.58 1 CivilEng 2673-4109 N/A 1 N/A **Total Number of Referred Journal Articles** 39

Table 2: Journal Impact Factors for Refereed Publications

Note: [A] includes publications currently in press.

- 39. Sharpe, C.D.\*, **Perez, M.A.** (30%), and Donald, W.N. (2023), *Evaluation of Surface Skimmer Flow Rates and Size Selection*, Transportation Research Record. [in press]
- 38. Kazaz, B.K.\*, **Perez, M.A.** (30%), Donald, W.N., Fang, X., and Shaw, J.N. (2023), <u>Optimum Dosage and Product Selection Guidance for Flocculant Usage in Construction Stormwater Treatment</u>, Transportation Research Record. [in press]
- 37. Roche, B.G.\*, **Perez, M.A.** (30%), Donald, W.N., and Whitman, J.B. (2023), <u>Efficacy of Undisturbed Vegetated Buffers in Capturing Suspended Sediment</u>, Transportation Research Record. [in press]
- 36. Clampitt, J.E.\*, **Perez, M.A.** (30%), Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., (2023) <u>Hydraulic</u> <u>Evaluation of Wattle Encasement Materials</u>, Transportation Research) Record. [in press]
- 35. Manning, C.\*, Faulkner, B., Donald, W.N., and **Perez, M.A.** (10%) (2023), <u>Comparison of Erosion Control Products using an ASTM D6459 Rainfall Simulator: Insights and Suggestions</u>, ASCE J. of Irrigation and Drainage Eng. [in press]
- 34. McEachran, A.R.<sup>†</sup>, Dickey, L.C.<sup>†</sup>, Rehmann, C.R., Isenhart, T.M., Groh, T.A., **Perez, M.A.** (10%), and Rutherford (2022), *Groundwater Flow in Saturated Riparian Buffers and Implications for Nitrate Removal*, Journal of Environmental Quality [DOI: 10.1002/jeq2.20428].
- 33. Schussler, J.C.\*, **Perez, M.A**. (40%), Cetin, B., and Whitman, J.B. (2022), *Field-Monitoring Sediment Basin Performance during Highway Construction*, Water. 14(23), 3858. [DOI: 10.3390/w14233858]

<sup>[</sup>B] Impact Factors reported by Clarivate Journal Citation Reports, 2021.

- 32. Taylor, J.<sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (10%) (2022), <u>Evaluating Climate Change Adaptation Barriers of Critical Infrastructure in Rural Alaska</u>, Climate and Development. [DOI: 10.1080/17565529.2022.2123698].
- 31. Manning, C.\*, **Perez, M.A.** (33%), and Donald, W.N. (2022), <u>Assessment of Polyacrylamide Concentration in Construction Stormwater Runoff using an ASTM D6459 Rainfall Simulator</u>, Transportation Research Record [DOI: 10.1177/03611981221111157].
- 30. Schussler, J.C.\*, **Perez, M.A.** (25%), Donald, W.N., Whitman, J.B., Zech, W.C., Fang, X., and Fagan, B.G. (2022). <u>A Decade of Research in Review: The Auburn University Stormwater Research Facility</u>, Transportation Research Record. [DOI: 10.1177/03611981221076449].
- 29. Liu, L.\*, and **Perez, M.A.** (50%). (2022). <u>Development and Evaluation of Lamella Settlers combined with Electrocoagulation for Treating Suspended Sediment</u>, J. of Irrigation and Drainage Eng. 148, 6 [DOI: 10.1061/(ASCE)IR.1943-4774.0001680].
- 28. Kazaz, B.\*, **Perez, M.A.** (30%), Donald, W.N., Fang, X., and Shaw, J.N. (2022). <u>Detection of Residual Flocculant Concentrations in Construction Stormwater Runoff,</u> Transportation Research Record. [DOI: 10.1177/03611981221077985].
- 27. Kazaz, B.\*, Schussler, J.C.\*, Dickey, L.C.†, and **Perez, M.A.** (33%). (2022). <u>Soil Loss Risk Analysis for Construction Activities</u>, Transportation Research Record. [DOI: 10.1177/03611981221075027].
- 26. Dickey, L.C.<sup>†</sup>, McEachran, A.R.<sup>†</sup>, Rutherford, C.J., Rehman, C.R., **Perez, M.A.** (10%), Groh, T.A., and Isenhart, T.M. (2021). *Slope Stability of Streambanks at Saturated Riparian Buffer Sites*, Journal of Environmental Quality 50: 1430-1439. [DOI: 10.1002/jeq2.20281].
- 25. Liu, L.\*, **Perez, M.A.** (40%), Whitman, J.B., Donald, W.N., and Zech, W.C. (2021). <u>SILTspread: A Performance-Based Approach for the Design and Installation of Silt Fence Sediment Barriers</u>, Irrigation and Drainage Eng., 147, 10 [DOI: 10.1061/(ASCE)IR.1943-4774.0001608]
- 24. Kazaz, B.Z.\*, Poddar, S.†, Arabi, S.†, **Perez, M.A.** (25%), Sharma, A., and Whitman, J.B. (2021), <u>Deep Learning-Based Object Detection for Unmanned Aerial Systems-Based Inspections of Construction Stormwater Practices. Sensors, 21, 2834. [DOI: 10.3390/s21082834]</u>
- 23. Whitman, J.B., Deshpande, A., Zech, W.C., and **Perez, M.A.** (10%) (2021), <u>Construction Site Utilization Planning:</u>
  <u>A Process based upon Industry Best Practices</u>, CivilEng, Special Edition: Advances in Civil Engineering 2(2), 309-324. [DOI: 10.3390/civileng2020017].
- 22. Whitman, J.B., Schussler, J.C. \*, **Perez, M.A.** (35%), and Liu, L\*. (2021). <u>Hydraulic Performance Evaluation of Wattles used for Erosion and Sediment Control</u>. Irrigation and Drainage Engineering. [DOI: 10.1061/(ASCE)IR.1943- 4774.0001586]
- 21. Kazaz, B.\*, **Perez, M.A.** (40%), and Donald, W.N. (2021). <u>A State-of-the-Practice Review on the use of Flocculants for Construction Stormwater Management in the United States</u>, Transportation Research Record. [DOI: 10.1177/0361198121995192].
- 20. Schussler, J.C. \*, Kazaz, B. \*, **Perez, M.A.** (30%), Cetin, B., and Whitman, J.B. (2021). *Field Evaluation of Wattle and Silt Fence Ditch Checks*, Transportation Research Record (2021). [DOI: 10.1177/0361198121992073].
- 19. Ward, M. <sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (25%). (2021). <u>Using AHP and Spatial Analysis to Determine Water Surface Storage Suitability in Cambodia<sup>1</sup></u>, Water 19(3), 367 (2021). [DOI: 10.3390/w13030367].
- 18. Whitman, J.B., **Perez, M.A.** (30%), Zech, W.C., and Donald, W.N. (2021). <u>Practical Silt Fence Design Enhancements for Effective Dewatering and Stability</u>, J. of Irrigation and Drainage Engineering. 147(1): 04020039. [DOI: 10.1061/(ASCE)IR.1943-4774.0001521].

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<sup>&</sup>lt;sup>1</sup> Awarded "Featured Paper" and "Editor's Choice" by publisher.

- 17. McEachran, A. †, Dickey, L. †, Rehmann, C., **Perez, M.A.** (15%), Rutherford, C., Goth, T., and Isenhart, T. (2020), *Improving the Effectiveness of Saturated Riparian Buffers for Removing Nitrate from Subsurface Drainage*, J. of Environmental Quality 49(6), pp. 1624-1632. [DOI: 10.1002/jeq2.20160].
- 16. Liu, L. \*, **Perez, M.A.** (40%), and Whitman, J.B. (2020). *Evaluation of Lamella Settlers for Treating Suspended Sediment*, Water 12(10), 2705. [DOI: 10.3390/w12102705].
- 15. **Perez, M.A.** (70%), Zech, W.C., Donald, W.N., Turochy, R.E., and Fagan, B.G. (2019). <u>Transferring Innovative Erosion and Sediment Control Research Results into Industry Practice</u>, Water 11(12), 2549, [DOI: 10.3390/w11122549].
- 14. Ricks, M.D. \*, Horne, M.A., Faulkner, B. \*, Zech, W.C., Fang, X., Donald, W.N., and **Perez, M.A.** (10%). (2019). <u>Design of a Pressurized Rainfall Simulator for Evaluating Performance of Erosion Control Practices</u>, Water 11(11), 2386, [DOI: 10.3390/w11112386].
- 13. Basham, D.L., Zech, W.C., Donald, W.N., and **Perez, M.A.** (10%) (2019) <u>Design and Construction of a Full-Scale</u>
  <u>Testing Apparatus for Evaluating the Performance of Catch Basin Inserts, ASCE J. of Sustainable Water in the Built Environment, [DOI: 10.1061/JSWBAY.0000868].</u>
- 12. **Perez, M.A.** (80%), Zech, W.C., Vasconcelos, J.G., and Fang X. (2019). <u>Large-Scale Performance Testing of Temporary Sediment Basin Treatments and High-Rate Lamella Settlers</u>, Water, [DOI: 10.3390/w11020316].
- 11. Bugg, R.A., Donald, W.N., Zech, W.C., and **Perez, M.A.** (10%) (2017). <u>Performance Evaluations of Three Silt Fence Practices Using a Full-Scale Testing Apparatus</u>, Water, [DOI: 10.3390/w9070502].
- 10. Bugg, R.A., Donald, W.N., Zech, W.C., and **Perez, M.A** (15%) (2017). <u>Improvements in Standardized Testing for Evaluating Sediment Barrier Performance: Design of a Full-Scale Testing Apparatus, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001194].</u>
- 9. **Perez, M.A.** (80%), Zech, W.C., Donald, W.N., and Fang, X. (2016). <u>SEDspread: A Sediment Basin Design Tool for Construction Sites</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001099].
- 8. **Perez, M.A.** (75%), Zech, W.C., Fang, X, and Vasconcelos, J. (2016). <u>Methodology and Development of a Large-Scale Sediment Basin for Performance Testing</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR.1943-4774.0001052].
- 7. Donald, W.N., Zech, W.C., Fang, X., and **Perez M.A.** (10%). (2016). <u>A Hydraulic Method to Evaluate the Performance of Ditch Check Practices and Products</u>, ASCE J. of Hydrologic Eng., [DOI: 10.1061/(ASCE)HE.1943-5584.0001311].
- 6. **Perez, M.A.** (75%), Zech, W.C., Donald, W.N. and Fang, X. (2016). <u>Installation Enhancements to Common Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques</u>, Transportation Research Record: Journal of the Transportation Research Board, No. 2571, pp. 151-161. [DOI: 10.3141/2521-16].
- Perez, M.A. (75%), Zech, W.C., Donald, W.N., and Fang, X. (2016). <u>Design Methodology for the Selection of Temporary Erosion and Sediment Control Practices based on Regional Hydrological Conditions</u>, ASCE J. of Hydrologic Eng. [DOI: 10.1061/(ASCE)HE.1943-5584.0001328].
- 4. Donald, W.N., Zech, W.C., **Perez, M.A.** (10%), and Fang, X., (2015). *Evaluation and Modification of Wire Backed,*<u>Nonwoven Filter Fabric Silt Fence for use as a Ditch Check</u>, ASCE J. of Irrigation and Drainage Eng., [DOI: 10.1061/(ASCE)IR. 1943-4774.0000959].
- 3. **Perez, M.A.** (80%), Zech, W.C., and Donald, W.N. (2015). <u>Using Unmanned Aerial Vehicles (UAVs) to Conduct Site Inspections of Erosion and Sediment Control Practices and Track Project Progression</u>, Transportation Research Record: Journal of the Transportation Research Board, No. 2528, pp. 38-48. [DOI: 10.3141/2528-05].
- 2. **Perez, M.A.** (50%), Butler, C.G., and Fang, X. (2015). <u>Compute Critical and Normal Depths of Arch and Elliptical Pipes</u>, ASCE J. of Irrigation and Drainage Eng. [DOI: 10.1061/(ASCE)IR.1943-4774.0000884].

1. **Perez, M.A.** (75%), Zech, W.C., Donald, W.N. and Fang, X. (2014). <u>Methodology Development for Evaluating Inlet Protection Practices (IPPs) Using Large-Scale Testing Techniques</u>, ASCE J. of Hydrologic Eng. [DOI: 10.1061/(ASCE)HE.1943-5584.0001019].

# Refereed journal articles under review (2 total):

- 2. Turochy, E.\*, Ballesteros, L.M., **Perez, M.A.**, Yuen, T., Estes, K., Poleacovschi, C., and Doran, E., <u>Stereotypes and Stereotype Threats Experienced by Latinx Undergraduate Engineering Students</u>, Submitted to: Journal of Engineering Education.
- 1. Taylor, J.<sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (10%), <u>Climate Change Adaptation Among Indigenous Peoples: A Systematic Review of 20 Years of Empirical Research</u>, Submitted to: Climatic Change.

## Refereed conference proceedings

- 51. Jibon, M., Mahedi, M., Yang, B., Cetin, B., Ceylan, H., Bollinger, P.E., and **Perez, M.A** (5%), <u>Sustainable use of Concrete Grinding Residue as a Stabilizer for Roadway Shoulder Materials</u>, ASCE International Conference on Transportation and Development. Jun. 16, 2023.
- 50. Kazaz, B.K.\*, **Perez, M.A** (35%), Donald, W.N., Fang, X., and Shaw, J.N., <u>Optimum Dosage and Product Selection</u>
  <u>Guidance for Flocculant Usage in Construction Stormwater Treatment</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 49. Clampitt, J.E.\*, **Perez, M.A** (35%), Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., <u>Understanding and Improving the Hydraulic Performance of Wattles for Erosion and Sediment Control</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 48. Roche, B.G.\*, **Perez, M.A** (35%), Donald, W.N., and Whitman, J.B., <u>Modeling Vegetated Buffer Sediment Load Reduction Using RUSLE2</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 47. Armstrong, M.\*, **Perez, M.A** (35%), and Donald, W.N., <u>Optimization of Sediment Basin Configurations</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 46. Etheridge, J.\*, **Perez, M.A** (35%), Donald, W.N., and Fang, X., <u>Construction and Calibration of Large-Scale Rainfall Simulators</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 45. Schussler, J.C.\*, **Perez, M.A** (35%), Donald, W.N., and Fang, X., <u>Let's Settle It: What Does It Take for an In-channel Sediment Basin to Be Effective?</u>, Proceedings of the 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 5-8, 2023.
- 44. Clampitt, J.E.\*, **Perez, M.A** (35%), Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., <u>Hydraulic Evaluation of Wattle Encasement Materials</u>, Transportation Research Board 102nd Annual Meeting Compendium of Papers (Online), Extended Abstract. Jan. 8-12, 2023.
- 43. Roche, B.G.\*, **Perez, M.A** (35%), Donald, W.N., and Whitman, J.B., <u>Efficacy of Undisturbed Vegetated Buffers in Capturing Suspended Sediment</u>, Transportation Research Board 102nd Annual Meeting Compendium of Papers (Online), Extended Abstract. Jan. 8-12, 2023.
- 42. Kazaz, B.K.\*, **Perez, M.A** (35%), Donald, W.N., Fang, X., and Shaw, J.N., <u>Optimum Dosage and Product Selection</u>
  <u>Guidance for Flocculant Usage in Construction Stormwater Treatment</u>, Transportation Research Board 102nd
  Annual Meeting Compendium of Papers (Online), Extended Abstract. Jan. 8-12, 2023.

- 41. Sharpe, C.D.\*, **Perez, M.A** (35%), and Donald, W.N., *Evaluation of Surface Skimmer Flow Rates and Size Selection*, Transportation Research Board 102nd Annual Meeting Compendium of Papers (Online), Extended Abstract. Jan. 8-12, 2023.
- 40. Clampitt, J.E.\*, **Perez, M.A** (20%), Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., *Enhancing the Hydraulic Performance of Wattles for Erosion and Sediment Control*, Proceedings of the 2023 Alabama Water Resources Conference. Sep. 7-9, 2022.
- 39. Clampitt, J.E.\*, Ballesteros, L., Poleacovschi, C., and **Perez, M.A** (20%), <u>The Effects of Stereotypes on Engineering Identities Among Latinx Undergraduate Engineering Students</u>, Proceedings of the 2022 American Society of Engineering Education Southeast Conference. Mar. 13-15, 2022.
- 38. Schussler, J.C.\*, **Perez, M.A** (40%), Donald, W.N., Whitman, J.B., Zech, W.C., and Fagan, B.G., <u>A Decade of Research at the Auburn University Stormwater Research Facility</u>, Proceedings of the 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 16-18, 2022.
- 37. Kazaz, B.\*, **Perez, M.A** (40%), Donald, W.N., Fang, X., and Shaw, J., <u>Flocculant Dosage Guidance for Construction</u>
  <u>Stormwater Treatment</u>, Proceedings of the 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 16-18, 2022.
- 36. Schussler, J.C.\*, **Perez, M.A** (40%), Donald, W.N., and Fang, X., <u>Performance Tracking of an in-Channel Sediment Basin during Large-Scale Testing</u>, Proceedings of the 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Feb. 16-18, 2022.
- 35. Manning, C.\*, **Perez, M.A** (30%), and Donald, W.N., <u>Assessment of Polyacrylamide Concentration Using an ASTM D6459 Rainfall Simulator</u>, Transportation Research Board 101st Annual Meeting Compendium of Papers (Online), TRB Paper No. 22-02201 Extended Abstract. Jan. 9-12, 2022.
- 34. Kazaz, B.\*, **Perez, M.A** (40%), Donald, W.N., Fang, X., and Shaw, J., <u>Detection of Residual Flocculant Concentrations in Construction Stormwater Runoff</u>, Transportation Research Board 101st Annual Meeting Compendium of Papers (Online), TRB Paper No. 22-02331 Extended Abstract. Jan. 9-12, 2022.
- 33. Schussler, J.C.\*, **Perez, M.A** (40%), Donald, W.N., Whitman, J.B., Zech, W.C., and Fagan, B.G., <u>A Decade of Research in Review: The Auburn University Stormwater Research Facility</u>, Transportation Research Board 101st Annual Meeting Compendium of Papers (Online), TRB Paper No. 22-03429 Extended Abstract. Jan. 9-12, 2022.
- 32. Schussler, J.C.\*, and **Perez, M.A** (40%), <u>Cost Analysis of Ditch Check Practices Used in Highway Construction</u>, Transportation Research Board 101st Annual Meeting Compendium of Papers (Online), TRB Paper No. 22-02941 Extended Abstract. Jan. 9-12, 2022.
- 31. Kazaz, B.\*, Schussler, J.C.\*, Dickey, L.C.†, and **Perez, M.A** (20%), <u>Soil Loss Risk Analysis for Construction Activities</u>, Transportation Research Board 101st Annual Meeting Compendium of Papers (Online), TRB Paper No. 22-02360 Extended Abstract. Jan. 9-12, 2022.
- 30. Turochy, E.\*, **Perez, M.A** (20%), Poleacovschi, C., and Doran, E., T<u>ypes of Stereotype Threats that Latinx Students Experience in Undergraduate Engineering Education</u>, Undergraduate Engineering Education (Research) Paper presented at 2021 ASEE Virtual Annual Conference Content Access, Virtual Conference. Jul. 22, 2021.
- 29. Bollinger, P.E.<sup>†</sup>, **Perez, M.A** (20%)., Cetin, B., and Ceylan, H., *Evaluation of Concrete Grinding Residue as a Soil Amendment for Erosion Control*, Proceedings of the 2021 International Foundations Congress & Equipment Expo. Virtual, May 9-13, 2021.
- 28. Schussler, J.C.\*, **Perez, M.A.** (30%), Whitman, J.B., and Cetin, B., <u>Performance and Cost Analysis of Various Ditch Check Installation Techniques Based on a Field Study in Tama County, IA</u>, Proceedings of the 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference, Erosion and Sediment Control Session. Virtual, Feb. 25, 2021.

- 27. Kazaz, B.\*, **Perez, M.A.** (30%), and Whitman, J.B., <u>Deep Learning-Based Aerial Stormwater Inspections</u>, Proceedings of the 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference, Erosion and Sediment Control Session. Virtual, Feb. 25, 2021.
- 26. Liu, L.\*, and **Perez, M.A.** (50%), <u>Investigation of Lamella Settlers and Electrocoagulation for Capturing Suspended Sediment</u>, Proceedings of the 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference, Erosion and Sediment Control Session. Virtual, Feb. 22-25, 2021.
- 25. Whitman, J.B., Schussler, J.C.\*, **Perez, M.A.** (25%), and Liu, L.\*, <u>Analyzing Flow Characteristics of Wattles Using a State-of-the-Art Hydraulic Flume</u>, Proceedings of the 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference, Erosion and Sediment Control Session. Virtual, Feb. 23, 2021.
- 24. Schussler, J.C.\*, **Perez, M.A.** (30%), Whitman, J.B., and Cetin, B., <u>Sediment Basin Performance in Highway Construction Applications</u>, Transportation Research Board 100th Annual Meeting Compendium of Papers, TRB Paper No. 21-02486 Extended Abstract. Virtual, Jan. 27, 2021.
- 23. Liu, L.\*, **Perez, M.A.** (40%), Whitman, J.B., Donald, W.N., and Zech, W.C., <u>SILTspread: A Performance-Based Approach for the Design and Installation of Silt Fence Sediment Barriers</u>, Transportation Research Board 100th Annual Meeting Compendium of Papers (Online), TRB Paper No. 21-01975 Extended Abstract. Virtual, Jan. 27, 2021.
- 22. Taylor, J.<sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (10%), <u>Infrastructure Adaptation to Climate Change: Institutional Support in Rural Alaska</u>, Proceedings of the 18th Annual Engineering Project Organization Conference. Virtual, Oct. 21-23, 2020.
- 21. Ward, M.<sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (10%). <u>A Spatial Approach to Determining Water Harvesting Sites in Cambodia</u>, Proceedings of the 2020 ASCE Construction Research Congress, Tempe, AZ. Mar. 8-10, 2020.
- 20. Schussler, J.C.\*, **Perez, M.A.** (30%), and Cetin, B. *Performance Monitoring of Temporary Sediment Control Basins*, Proceedings of the Geo-Congress 2020, Minneapolis, MN. Feb. 25-28, 2020.
- 19. Dickey, L.<sup>†</sup>, McEachran, A.R. <sup>†</sup>, Rutherford, C., **Perez, M.A.** (10%), Rehmann, C.R., Isenhart, T., Jaynes, D., and Groh, T., <u>Slope Stability Analysis of a Saturated Riparian Buffer: A Case Study</u>, Proceedings of the Geo-Congress 2020, Minneapolis, MN. Feb. 25-28, 2020.
- 18. Schussler, J.C.\*, **Perez, M.A.** (30%), and Cetin, B., <u>Erosion and Sediment Control Improvements during Earthwork Construction</u>, Proceedings of the 20th Annual International Erosion Control Association (IECA) Environmental Connection 20 Conference, Erosion and Sediment Control Session, Raleigh, NC. Feb. 23-26, 2020.
- 17. Liu, L.\*, **Perez, M.A.** (50%), and Whitman, J.B., <u>Designing Silt Fence Sediment Barriers: A Performance Based Approach</u>, Proceedings of the 20th Annual International Erosion Control Association (IECA) Environmental Connection 20 Conference, Erosion and Sediment Control Session. Feb. 23-26, 2020.
- 16. Dickey, L.C.<sup>†</sup>, McEachran, A.R.<sup>†</sup>, Rutherford, C., **Perez, M.A.** (10%), Rehmann, C.R., Groh, T., Isenhart, T., and Jaynes, D., *Slope Stability Analysis of Saturated Riparian Buffers*, Proceedings of the 20th Annual International Erosion Control Association (IECA) Environmental Connection 20 Conference, Raleigh, NC. Feb. 23-26, 2020.
- 15. Whitman, J.B., Schussler, J.C.\*, **Perez, M.A.** (30%), and Liu, L.\*, <u>Hydraulic Performance Evaluation of Wattles used</u> for Erosion and Sediment Control, Transportation Research Board 99<sup>th</sup> Annual Meeting Compendium of Papers (Online), TRB Paper No. 20-00097 Extended Abstract, Washington, D.C. Jan. 12-16, 2020.
- 14. Taylor, J.<sup>†</sup>, Poleacovschi, C., and **Perez, M.A.** (10%), <u>Alaska Native Responses to Climate Change: The Role of Community Values in Housing Adaptation</u>, Proceedings of the 17th Annual Engineering Project Organization Conference. Jun. 26, 2019.
- 13. **Perez, M.A.** (75%), Zech, W.C., Donald, W.N. and Fang, X. <u>Sizing Sediment Basins for Site-Specific Conditions</u>, Proceedings of the 18<sup>th</sup> Annual International Erosion Control Association (IECA) Conference, Erosion & Sediment Control Session, Long Beach, CA. Feb. 13, 2018.

- 12. Basham, D.L., Zech, W.C., Donald, W.N., and **Perez, M.A.** (10%). <u>Design and Construction of a Catch Basin Insert Testing Apparatus for Performance Evaluation</u>, Proceedings of the 18<sup>th</sup> Annual International Erosion Control Association (IECA) Conference, Erosion & Sediment Control Session, Long Beach, CA. Feb. 13, 2018.
- 11. **Perez, M.A.** (75%), Zech, W.C., and Fang, X. <u>SEDspread: A Sediment Basin Design Tool for Construction Sites,</u>
  Proceedings of the 17<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 17
  Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.
- 10. **Perez, M.A.** (75%), Zech, W.C., Fang, X., and Vasconcelos, J. <u>Large-Scale Performance Evaluations of High Rate Lamella Settlers in Sediment Basin Applications</u>, Proceedings of the 17<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.
- Bugg, R.A., Zech, W.C., Donald, W.N., and Perez, M.A. (10%). <u>Performance Evaluation of Sediment Barriers for Construction Applications using Full-Scale Testing Methods</u>, Proceedings of the 17<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 24, 2017.
- 8. Horne, M.A., Zech, W.C., Donald, W.N., and **Perez, M.A.** (10%). <u>Construction of a Rainfall Simulator for Field-Scale Testing of Erosion Control Products,</u> Proceedings of the 17<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 17 Conference, Erosion & Sediment Control Session, Atlanta, GA. Feb. 22, 2017.
- 7. **Perez, M.A.** (75%), Zech, W.C., Fang, X., and Vasconcelos, J. <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u>, Proceedings of the 16<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 16 Conference, Erosion & Sediment Control Session, San Antonio, TX. Feb. 16-19, 2016.
- 6. **Perez, M.A.** (75%), Zech, W.C., Donald, W.N., and Fang, X. <u>Enhanced Inlet Protection Practices Developed through Large-Scale Testing</u>, Proceedings of the 2<sup>nd</sup> Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15-16, 2015.
- 5. **Perez, M.A.** (80%), Zech, W.C., and Donald, W.N., <u>Drones: The Future of Erosion and Sediment Control Site Inspections</u>, Proceedings of the 2<sup>nd</sup> Annual U.S. EPA Region 5 International Erosion Control Association (IECA) Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session, Atlanta, GA. June 15-16, 2015.
- Perez, M.A. (75%), Zech, W.C., Donald, W.N., and Fang, X. <u>Enhancement of Inlet Protection Practice (IPP) Installations using Large-Scale Testing Techniques</u>, Proceedings of the 15<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- 3. **Perez, M.A.** (80%), Zech, W.C., and Donald, W.N. <u>"Drones": Revolutionizing Erosion and Sediment Control Site Inspections</u>, Proceedings of the 15<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- Donald, W.N., Zech, W.C., Fang, X., and Perez, M.A. (15%) <u>A Hydraulic Performance Evaluation Method for Ditch Checks</u>, Proceedings of the 15<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 15 Conference, Erosion & Sediment Control (TS-6) Session, Portland, OR. Feb. 15-18, 2015.
- 1. **Perez, M.A.** (75%), Zech, W.C., Donald, W.N., and Fang, X. *Evaluation of Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques*, Proceedings of the 14<sup>th</sup> Annual International Erosion Control Association (IECA) Environmental Connection 14 Conference, Erosion & Sediment Control (TS-6) Session, Nashville, TN. Feb. 25-28, 2014.

## Technical / Final reports submitted to funding agencies (8 total):

- 8. Bollinger, E.B., Jibon, M. Mahedi, M., Yang, B., Cetin, B. Ceylan, H., and **Perez, M.A.** (10%) (2023). *Use of Concrete Grinding Residue as a Soil Amendment*, to Iowa Department of Transportation, Iowa Highway Research Board, and Recycled Materials Resource Center, Ames, IA 50010.
- 7. Rehman, C., Ikuma, K., and **Perez, M.A.** (5%) (2022). <u>Environmental Field Evaluation of Potassium Acetate</u>, to Minnesota Department of Transportation, St. Paul, MN 55155.
- 6. Schussler, J.C., **Perez, M.A.** (35%), Donald, W.N., and Fang, X. (2022). *Evaluation of Sediment Basin Performance using Large-Scale Testing Techniques [lowa DOT Project 20-SPR2-001]*, to lowa Department of Transportation, Highway Research Center, Auburn, AL 36849.
- 5. Rehmann, C.R., **Perez, M.A.** (25%), and Dickey, L.C. (2022). <u>Groundwater System Impacts on the US 63 Railway Underpass near Waterloo, Iowa [Iowa DOT Project NHSX-063-6(88)-3H-07]</u>, to Iowa Department of Transportation, Institute for Transportation, Ames, IA 50010.
- 4. **Perez, M.A.** (35%), Cetin, B., Schussler, J.C., and Whitman, J.B. (2020). Field Monitoring of Erosion and Sediment Control Practices and Development of Additional lowa DOT Design Manual Guidance [lowa DOT Project 18-SPR1-001], to lowa Department of Transportation, Institute for Transportation and Highway Research Center, Ames, IA 50010.
- 3. Vasconcelos, J.G., **Perez, M.A.** (75%), Wang, J., Zech, W.C., and Fang, X. (2017). <u>Final Report: Evaluation of High-Rate Settling Technology for Sediment Control in Roadway Construction Sites</u>, to Alabama Department of Transportation, Highway Research Center, Auburn, AL 36849.
- 2. **Perez, M.A.** (75%), Zech, W.C., and Fang, X. (2016). <u>Final Report: Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques [ALDOT Project 930-853R]</u>, to Alabama Department of Transportation, Highway Research Center, Auburn, AL 36849.
- 1. **Perez, M.A.** (75%), Fang, X., Zech, W.C., and Vasconcelos, J.G. (2015). <u>Research Report: Design and Construction of a Large-Scale Sediment Basin and Preliminary Testing Results,</u> to Highway Research Center, Auburn, AL 36849.

#### Theses and Dissertations:

- 3. **Perez, M.A.** *Improvements in the Design and Application of Erosion and Sediment Control Technologies for the Construction Industry.* Doctorate of Philosophy Dissertation, Auburn University, Auburn, AL.
- 2. **Perez, M.A.** Evaluation of Inlet Protection Practices (IPPs) Using Large-Scale Testing Techniques. Master of Science Thesis, Auburn University, Auburn, AL.
- 1. **Perez, M.A.** *The Effects of Silver Nanoparticles on Wastewater Treatment and Escherichia Coli Growth*. Bachelor of Science Honors Thesis, Florida State University, Tallahassee, FL.

## c. Papers or lectures.

# Invited Lectures (89 total invitations – 25 national & international / 44 state & regional / 20 local):

Note: 1. \*indicates student contributions.

2. †indicates presenter.

#### National & International level lectures (25 invitations, 1 keynote):

- 25. **Perez, M.A.** †, <u>ALDOT's Implementation of Enhanced Erosion & Sediment Control Practices</u>, American Association of State Highway Transportation Officials' Technical Committee on Hydrology & Hydraulics Annual Meeting. Virtual, Jul. 28, 2021.
- 24. **Perez, M.A.** †, Donald, W.N., Zech, W.C., Whitman, J.B., and Fang, X., *Innovations in Construction Stormwater Management*, International Society for Photogrammetry and Remote Sensing: Summer School on Smart City. Beijing, China (Hybrid), Jul. 20, 2021.
- 23. Taylor, J. \*†, Poleacovschi, C., and **Perez, M.A.**, <u>Drivers of Infrastructure Adaptation to Climate Change: Multi-level Stakeholder Analysis in Rural Alaska</u>, UArctic Congress. Virtual, Jun. 10-17, 2021.
- 22. Schussler, J.C. \*†, and **Perez, M.A.**, <u>A Performance-Based Design and Installation Standard for Temporary Sediment Basins</u>, International Erosion Control Association Webinar Series. Virtual, Mar. 24, 2021.
- 21. McLaughlin, R.A., † Perez, M.A., and McCaleb, M. <u>"Fireside Chat" What are the Best BMPs on the Construction Site?</u>, 21st Annual International Erosion Control Association Environmental Connection Conference. Virtual, Feb. 25, 2021.
- 20. Donald, W.N. †, and **Perez, M.A.**, "Curb (& Gutter) Your Enthusiasm" A Discussion on During- and Postconstruction Roadside Inlet Pollutant Controls, 21st Annual International Erosion Control Association Environmental Connection Conference, Round Table Session. Virtual, Feb. 25, 2021.
- 19. **Perez, M.A.** †, and McLaughlin, R.A., <u>The "Perfect" Sediment Basin</u>, 21st Annual International Erosion Control Association Environmental Connection Conference, Round Table Session. Virtual, Feb. 25, 2021.
- 18. Ceylan, H. †, Bollinger, P. \*, Cetin, B., and **Perez, M.A.**, <u>Effects of Beneficial Use of Concrete Grinding Residue on Transportation Infrastructure</u>, International Society for Concrete Pavements Annual Meeting. Virtual, Dec. 10, 2020.
- 17. Taylor, J. \*†, Poleacovschi, C., and **Perez, M.A.**, <u>Infrastructure Adaptation to Climate Change: Institutional Support</u> in Rural Alaska, 18th Annual Engineering Project Organization Conference. Virtual, Oct. 21-23, 2020
- 16. McLaughlin, R. <sup>†</sup>, and **Perez, M.A.** <sup>†</sup>, *Designing the Perfect Sediment Basin*, International Erosion Control Association. Denver, CO, Feb. 21, 2019.
- 15. **Perez, M.A.** †, Zech, W.C., Donald, W.N., and Fang, X., <u>Designing Effective Sediment Basins using Spreadsheets</u>, International Erosion Control Association Webinar Series. Online Webinar, Dec. 12, 2018.
- 14. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Sediment Basin Design and Research in the United States</u>, International Erosion Control Association, New Zealand Institute of Highway Technology Conference. Christchurch, New Zealand, Aug. 29, 2018.
- 13. **Perez, M.A.** <sup>†</sup>, and Fagan, B.G. <sup>†</sup>, <u>Mythbusters: the Stormwater Episode</u>, 18th Annual International Erosion Control Association Conference. Long Beach, CA, Feb. 12, 2018.
- 12. Zech, W.C. †, Donald, W.N., **Perez, M.A.**, and Fang, X., *Evaluating Erosion and Sediment Controls for Stormwater Pollution Prevention Plans*, FHWA Local Public Agencies (LPA) Peer Exchange Webinar. Online Webinar, Apr. 19, 2017.
- 11. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u>, International Erosion Control Association Webinar Series. Online Webinar, Oct. 18, 2016.

- 10. Zech, W.C. <sup>†</sup>, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Evaluating Storm Water Control for SWPPPs</u>, 2016 AASHTO Subcommittee on Construction Annual Conference. Big Sky, MT, Aug. 18, 2016.
- 9. Zech, W.C., Donald, W.N., Fang, X <sup>†</sup>, and **Perez, M.A.**, <u>Evaluation and Enhancements of Stormwater Runoff</u>
  <u>Control Measures using Large-Scale Testing Techniques</u>, International Low Impact Development Conference.
  Beijing, China, Jun. 29, 2016.
- 8. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>21st Century Technology: Aerial Inspections Using Unmanned Aerial Vehicles</u> <sup>2</sup>, Maryland Recycling Network and Solid Waste Association of North America Mid-Atlantic Chapter Annual Conference. Ellicott City, MD, Jun. 22, 2016.
- 7. **Perez, M.A.** †, Zech, W.C., and Donald, W.N., <u>Designing Effective Sediment Basins</u>, International Erosion Control Association Webinar Series. Online Webinar, Jan. 20, 2016.
- 6. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>Keynote Speaker: The Use of Unmanned Aerial Systems (a.k.a. Drones) in Construction Site Erosion and Sediment Control Inspections</u>, 17th Annual U.S. Environmental Protection Agency Region 6 Stormwater Conference. Hot Springs, AR, Oct. 22, 2015.
- 5. Zech, W.C., Donald, W.N., and **Perez, M.A.** †, *Evaluation and Enhancements of Runoff Control Measures using Large-Scale Techniques*, 17th Annual U.S. Environmental Protection Agency Region 6 Stormwater Conference.
  Hot Springs, AR, Oct. 21, 2015.
- 4. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>'It's a Bird, it's a Plane, it's a Drone!': The Future of Erosion and Sediment Control Site Inspections</u>, International Erosion Control Association Webinar Series. Online Webinar, Oct. 21, 2015.
- 3. Zech, W.C. †, Donald, W.N., and **Perez, M.A.**, <u>Evaluation and Enhancements of Runoff Control Measures using Large-Scale Testing Techniques</u>, International Erosion Control Association Roadshow. Bella Vista, AR, Aug. 27, 2015.
- 2. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>'Drones': Revolutionizing Site Inspections</u>, Forester University Master Class Series. Online Webinar, May. 28, 2015.
- 1. **Perez, M.A.**, Zech, W.C. <sup>†</sup>, Donald, W.N., and Fang, X., *Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques*, International Erosion Control Association Webinar Series. Online Webinar, May. 20, 2015.

# State & regional level lectures (44 invitations):

- 44. **Perez, M.A.**<sup>†</sup>, Schussler, J.C. \*, Armstrong, M.\*, Donald, W.N., and Fang, X., <u>Updates from the Auburn University Stormwater Research Facility</u>, 2023 Alabama Transportation Conference. Montgomery, AL, Feb. 6, 2023.
- 43. **Perez, M.A.**<sup>†</sup>, Clampitt, J.C., and Armstrong, M., *Use of Flocculants on Construction Sites, Clear Water Alabama Seminar and Field Day.* Fairhope, AL, Sep. 21-22, 2022.
- 42. **Perez, M.A.**<sup>†</sup>, Donald, W.N., and Fang, X., <u>Auburn University Stormwater Research Facility Updates, Clear Water Alabama Seminar and Field Day</u>. Fairhope, AL, Sep. 21-22, 2022.
- 41. **Perez, M.A.**<sup>†</sup>, Schussler, J.C.<sup>\*</sup>, Donald, W.N., and Fang, X., *Evaluation of In-Channel Sediment Basin Performance Using Large Scale Testing Techniques,* Mid-Continent Transportation Research Symposium. Ames, IA, Sep. 14, 2022.
- 40. **Perez, M.A.**<sup>†</sup>, Schussler, J.C.<sup>\*</sup>, Donald, W.N., and Fang, X., *Field Monitoring of Erosion and Sediment Control Practices and Development of Additional Iowa DOT Design Manual Guidance*, Mid-Continent Transportation Research Symposium. Ames, IA, Sep. 14, 2022.
- 39. Donald, W.N.<sup>†</sup>, **Perez, M.A.**, and Fang, X., <u>Research Update from the Auburn University Stormwater Research Facility</u>, Alabama Water Resources Conference. Orange Beach, AL, Sep. 8, 2022.

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<sup>&</sup>lt;sup>2</sup> Invited keynote presentation.

- 38. Clampitt, J.E.<sup>†\*</sup>, **Perez, M.A.**, Whitman, J.B., and Donald, W.N., *Enhancing the Hydraulic Performance of Wattles for Erosion and Sediment Control*, Alabama Water Resources Conference. Orange Beach, AL, Sep. 8, 2022.
- 37. **Perez, M.A.**<sup>†</sup>, Donald, W.N., and Fang, X., <u>Construction Stormwater Research at Auburn University</u>, Joint Meeting of the Alabama Section American Society of Civil Engineers and Alabama Chapter of American Public Works Association. Orange Beach, AL, Jul. 14, 2022.
- 36. Whitman, J.B.<sup>†</sup>, **Perez, M.A.**, Zech, W.C., and Donald, W.N., <u>Innovative Stormwater Treatment Practices</u>

  <u>Developed Through Large-Scale Testing Efforts</u>, Kentucky Muddy Water Blues Field Day Conference. Bowling Green, KY, Mar. 23, 2022.
- 35. Clampitt, J.E.<sup>†\*</sup>, Ballesteros, L, Poleacovschi, C., **Perez, M.A.**, <u>The Effects of Stereotypes on Engineering Identities</u>
  <u>Among Latinx Undergraduate Engineering Students</u>, 2022 American Society of Engineering Education
  Southeast Section Conference. Charleston, SC, Mar. 14, 2022.
- 34. **Perez, M.A.**<sup>†</sup>, Donald, W.N., Schussler, J.C.<sup>\*</sup>, and Kazaz, B.<sup>\*</sup>, <u>Advancing Construction Stormwater Management</u>, 2022 Georgia Institute of Transportation Engineers / American Society of Highway Engineers Transportation Winter Workshop. Columbus, GA, Mar. 6, 2022.
- 33. **Perez, M.A.**<sup>†</sup>, Kazaz, B.<sup>\*</sup>, Donald, W.N., Fang, X., and Shaw, J., <u>Guidance Development for Use of Flocculants in Construction Stormwater Management</u>, 2022 Alabama Transportation Conference. Montgomery, AL, Feb. 10, 2022.
- 32. **Perez, M.A.**<sup>†</sup>, and Liu, L.\*, *New IECA Design Standards for Silt Fence Sediment Barriers and Sediment Basins*, iStorm: lowa Stormwater Conference. Virtual, Oct. 27, 2021.
- 31. Donald, W.N.<sup>†</sup>, and **Perez, M.A.**, <u>Auburn University Erosion and Sediment Control Test Facility Update</u>, Clear Water Alabama 2021 Seminar and Field Day. Cullman, AL, Sep. 15, 2021.
- 30. Kazaz, B.<sup>+\*</sup>, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J., <u>Use of Flocculants in Construction Stormwater</u> *Management*, 2021 Annual Alabama Water Resources Conference. Orange Beach, AL, Sep. 8, 2021.
- 29. Kazaz, B.<sup>+\*</sup>, **Perez, M.A.**, and Whitman, J.B., <u>Deep Learning-Based Aerial Stormwater Inspections</u>, Municipal Wet Weather Stormwater Conference. Huntsville, AL, Jun. 7, 2021.
- 28. Kazaz, B.<sup>†\*</sup>, and **Perez, M.A.**, <u>Utilizing Drones in SESC, Soil Erosion and Stormwater Webinar Series</u>, Kane-DuPage Soil & Water Conservation District. Virtual, Feb. 11, 2021.
- 27. Kazaz, B.<sup>†\*</sup>, and **Perez, M.A.**, <u>Utilizing Drones in SESC</u>, Soil Erosion and Stormwater Webinar Series, Kane-DuPage Soil & Water Conservation District. Virtual, Feb. 11, 2021.
- 26. Donald, W.N., and **Perez, M.A.**, <u>Auburn University Erosion and Sediment Control Test Facility Update</u>, Clear Water Alabama Seminar. Virtual, Oct. 29, 2020.
- 25. **Perez, M.A.,** Liu, L., Donald, W.N., Whitman, J.B., and Zech, W.C., <u>Designing Silt Fence to Address Specific Site</u> Conditions and Storm Events, Clear Water Alabama Seminar. Virtual, Oct. 29, 2020.
- 24. Whitman, J.B. †, **Perez, M.A.**, Zech, W.C., and Donald, W.N., <u>Innovative Stormwater Treatment Practices</u>
  <u>Developed through Large-Scale Testing Efforts</u>, Tennessee Stormwater Association Annual Conference, Virtual Conference. Virtual, Oct. 21, 2020.
- 23. **Perez, M.A.** †, Donald, W.N., Zech, W.C., and Fang, X., <u>Ten Years of Research at the AU-Erosion and Sediment Control Testing Facility</u>, 63rd Annual Alabama Transportation Conference. Montgomery, AL, Feb. 12, 2020.
- 22. Schussler, J.C. <sup>†\*</sup>, **Perez, M.A.**, and Cetin, B., *Field Monitoring during Earthwork Construction*, Iowa Stormwater Summit. Ankeny, IA, Dec. 5, 2019.
- 21. Schussler, J.C. <sup>†\*</sup>, Kazaz, B. <sup>†\*</sup>, **Perez, M.A.**, and Cetin, B., <u>Performance Evaluation of Erosion and Sediment Control Practices during Highway Construction</u>, International Erosion Control Association Great Rivers Chapter Annual Conference. Omaha, NE, Nov. 5, 2019.
- 20. Dickey, L.C.<sup>†\*</sup>, McEachran, A.R.<sup>\*</sup>, Rutherford, C., **Perez, M.A.**, Rehmann, C.R., Groh, T., Isenhart, T., and Jaynes, D., *Slope Stability Analysis of Saturated Riparian Buffers*, 19th Annual Drainage Research Forum. Brookings, SD, Nov. 5, 2019.

- 19. Perez, M.A.<sup>†</sup>, Wattle Inlet Protection Barriers, Clear Water Alabama 2019 Seminar. Prattville, AL, Oct. 24, 2019.
- 18. **Perez, M.A.**<sup>†</sup>, and Donald, W.N., <u>Capabilities of the Auburn University Erosion and Sediment Control Testing</u>
  <u>Facility</u>, DOT EPA Region 7 Peer Exchange. Online Presentation, Sep. 11, 2019.
- 17. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., Fang, X., and Whitman, J., *Innovations in Erosion and Sediment Control Practices*, ASCE Iowa Section Annual Meeting. Cedar Rapids, IA, Apr. 11, 2019.
- 16. **Perez, M.A.**<sup>†</sup>, <u>Innovations in Erosion and Sediment Control Practices</u>, <u>Iowa County Engineers Association Annual Conference</u>. Des Moines, IA, Dec. 13, 2018.
- 15. **Perez, M.A.**<sup>†</sup>, *What can we do to Better Manage Stormwater?*, Local Governmental Collaborative Stormwater Education Events. Clive, IA, Jun. 13, 2018.
- 14. **Perez, M.A.** †, <u>Sediment Basins & Dewatering Practices</u>, Iowa Stormwater Education Partnership Webinar Series. Online Webinar, Jun. 6, 2019.
- 13. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Donald, W.N., Vasconcelos, J.G., and Fang, X., <u>A New Passive Treatment Method for Temporary Sediment Basins</u>, International Erosion Control Association Great Connections Conference. Dubuque, IA, Apr. 24, 2018.
- 12. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Donald, W.N., Fang, X., and Whitman, J.B., <u>Innovative Stormwater Treatment Practices</u>

  <u>Developed through Large-Scale Testing Efforts</u>, Iowa Water Conference. Ames, IA, Mar. 22, 2018.
- 11. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Donald, W.N., Fang, X., <u>Advances in Erosion and Sediment Control Practices and Drones for Stormwater Management Inspections</u>, Iowa Stormwater Summit. Ankeny, IA, Dec. 12, 2017.
- 10. Donald, W.N. <sup>†</sup>, Zech, W.C., **Perez, M.A.**, and Fang, X., <u>Erosion and Sediment Control Research at the AU-ESCTF</u>, Clear Water Alabama 2017 Seminar. Mobile, AL, Nov. 1, 2017.
- 9. **Perez, M.A.** †, Zech, W.C.., Donald, W.N., Fang, X., <u>Evaluation and Enhancement of Construction Stormwater</u> <u>Controls using Large-Scale Testing Techniques</u>, Mid-Continent Transportation Research Symposium. Ames, IA, Aug. 17, 2017.
- 8. Whitman, J.B., Zech, W.C. <sup>†</sup>, Donald, W.N., Bugg, R.A., and **Perez, M.A.**, <u>Performance Evaluation of Three Silt Fences Using a Full-Scale Testing Apparatus</u>, Soil and Water Conservation Society Annual Meeting. Birmingham, AL, Jun. 9, 2017.
- 7. Zech, W.C., Donald, W.N. †, **Perez, M.A.**, and Bugg, R.A., <u>Large Scale Runoff & Erosion Control Practices</u>, ASCE Alabama Section Winter Meeting. Birmingham, AL, Mar. 2, 2017.
- 6. **Perez, M.A.** <sup>†</sup>, Bugg, R.A. <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>AU-ESCTF Research Updates</u>, Clear Water Alabama 2016 Seminar. Madison, AL, Aug. 24, 2016.
- 5. **Perez, M.A.**, Zech, W.C. †, and Donald, W.N., <u>Introduction of Excel Based Tool SEDspread</u>, Alabama Stormwater Symposium. Auburn, AL, May. 11, 2016.
- 4. **Perez, M.A.**, Zech, W.C., and Donald, W.N. †, <u>The Use of Unmanned Aerial Systems in Construction Site Erosion and Sediment Control Inspections</u>, Alabama Stormwater Symposium. Auburn, AL, May. 11, 2016.
- 3. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>Drone Technology Presentation & Demonstration</u>, Clear Water Alabama 2015 Seminar. Tuscaloosa, AL, Sep. 3, 2015.
- 2. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., <u>Using Unmanned Aerial Vehicles (UAVs) to Conduct Site Inspections of Erosion and Sediment Control</u>, 58th Annual Alabama Department of Transportation Conference, Advanced Technologies Technical Session. Montgomery, AL, Feb. 10, 2015.
- 1. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Donald, W.N., and Fang, X., <u>Inlet Protection Practice Evaluations and Improvements</u>, Innovative Erosion & Sediment Control Research & Field Day, Alabama Technology Transfer Center Seminar. Auburn, AL, May. 29-30, 2014.

## Local level lectures (20 invitations)

- 20. **Perez, M.A.** †, Donald, W.N., and Fang, X., <u>Advances in Construction Stormwater Management</u>, American Society of Civil Engineers, Montgomery Branch Meeting. Montgomery, AL, Dec. 16, 2022.
- 19. **Perez, M.A.** †, Donald, W.N., and Fang, X., <u>Advances in Construction Stormwater Management</u>, American Society of Civil Engineers, Dothan Branch Meeting. Dothan, AL, Oct. 12, 2022.
- 18. **Perez, M.A.** †, Donald, W.N., Zech, W.C., Whitman, J.B., and Fang, X., <u>Advances in Construction Stormwater</u> <u>Management</u>, American Society of Civil Engineers Mobile Branch Monthly Meeting. Virtual, May. 12, 2021.
- 17. **Perez, M.A.** †, Donald, W.N., Zech, W.C., Whitman, J.B., and Fang, X., *Innovations in Construction Stormwater Management*, Marquette University Environmental and Water Resources Seminar. Virtual, Feb. 17, 2021.
- 16. **Perez, M.A.** †, *Innovations in Construction Stormwater Management*, Marquette University Dept. of Civil and Environmental Engineering Seminar Series. Virtual, Feb. 17, 2021.
- 15. Kazaz, B. \*†, and **Perez, M.A.**, <u>Deep Learning-Based Aerial Stormwater Inspections</u>, Auburn University Council for Engineering Graduate Students Finish in Five Thesis Competition, Auburn, AL, Nov. 5, 2020.
- 14. Schussler, J.C. <sup>†\*</sup>, and **Perez, M.A.**, *Impact of Stormwater Ordinance on Runoff Control*, City of Clive, IA City Council Meeting. Clive, IA, Apr. 23, 2020.
- 13. **Perez, M.A.** †, *Erosion and Sediment Control Research*, Auburn University College of Engineering Interdisciplinary Research Colloquium. Auburn, AL, Nov. 12, 2019.
- 12. **Perez, M.A.** <sup>†</sup>, and Ramirez, V.V. <sup>†</sup>, *Navigating Professional Opportunities*, University of Virginia Engineering Systems and Environment Graduate Student Council Colloquium: The Young Professional Series. Charlottesville, VA, Nov. 8, 2019.
- 11. **Perez, M.A.** <sup>†</sup>, <u>Stormwater Research Capabilities</u>, Auburn University Civil Engineering Advisory Council Meeting. Auburn, AL, Sep. 11, 2019.
- 10. **Perez, M.A.** †, <u>Stormwater Studio Research Update</u>, Iowa Water Resources Coordinating Council Meeting. Altoona, IA, May. 30, 2019.
- 9. **Perez, M.A.** †, <u>Stormwater Studio Research Update</u>, Iowa State University Construction Engineering Industry Advisory Council. Ames, IA, Apr. 26, 2019.
- 8. **Perez, M.A.** †, Zech, W.C., Donald, W.N., Vasconcelos, J.G., Fang, X., and Whitman, J.B., <u>Innovative Stormwater</u> <u>Treatment Practices Developed Through Large-Scale Testing Efforts</u>, Fox Engineering Lunch & Learn. Ames, IA, Oct. 3, 2018.
- 7. **Perez, M.A.** †, Zech, W.C., Vasconcelos, J.G., and Fang, X., <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u>, ASCE Central lowa Younger Member Group Lunch and Learn. Des Moines, IA, Dec. 12, 2017.
- 6. **Perez, M.A.** †, Zech, W.C., Donald, W.N., and Fang, X., <u>SEDspread: Construction Site Sediment Basin Design Tool</u>, USDA-NRCS Lunch and Learn. Auburn, AL, Sep. 22, 2016.
- 5. Donald, W.N<sup>+</sup>., Zech, W.C., **Perez, M.A.**, and Fang, X., *Evaluation and Enhancement of Runoff Control Practices using Large-Scale Testing Techniques*, ALDOT and City of Mobile MS4 Lunch and Learn for Contractors, Engineers, and Construction Professionals. Mobile, AL, Jul. 25, 2016.
- 4. **Perez, M.A.** <sup>†</sup>, Zech, W.C., and Donald, W.N., *Drones for Construction Site Inspections*, Ft. Benning Chapter of the Society of American Military Engineers Meeting, . Columbus, GA, Jan. 21, 2016.
- 3. **Perez, M.A.** †, <u>Application of Unmanned Aerial Systems in Construction Site Erosion and Sediment Control</u> *Inspections*, Distinguished Engineering Graduate Student Seminar. Auburn, AL, Nov. 5, 2015.

- Zech, W.C. †, Donald, W.N., and Perez, M.A., <u>Current and Ongoing Research: Auburn University Erosion & Sediment Control Testing Facility</u>, Dothan Chapter of the American Society of Civil Engineers Meeting. Dothan, AL, Sep. 2, 2015.
- 1. **Perez, M.A.** †, <u>Auburn University Civil Engineering Graduate School and Current Research</u>, Florida State University Florida A&M University College of Engineering, American Society of Civil Engineers-Florida Engineering Society Student Chapter. Tallahassee, FL, Oct. 16, 2014.

## Papers presented at professional meetings (67 total):

Note: 1. \*indicates student contributions.

- 2. †indicates presenter.
- 67. Roche, B.G.\*†, **Perez, M.A.**, Donald, W.N., and Whitman, J.B., <u>Modeling Vegetated Buffer Sediment Load Reduction Using RUSLE2</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 8, 2023.
- 66. Clampitt, J.E.\*†, **Perez, M.A.**, Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., <u>Understanding and Improving the Hydraulic Performance of Wattles for Erosion and Sediment Control</u><sup>3</sup>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 65. Kazaz, B.K.\*†, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J.N., *Evaluation of Agitation and Mixing Requirements of Flocculants for Construction Stormwater Treatment*, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 64. Armstrong, M.\*†, **Perez, M.A.**, and Donald, W.N., *Optimization of Sediment Basin Configurations*, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 6, 2023.
- 63. Etheridge, J.\*†, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Construction and Calibration of Large-Scale Rainfall Simulators</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 6, 2023.
- 62. Schussler, J.C.\*\*, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Let's Settle It: What Does It Take for an In-channel Sediment Basin to Be Effective?</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 6, 2023.
- 61. Clampitt, J.E.\*†, **Perez, M.A.**, Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., <u>Hydraulic Evaluation of Wattle Encasement Materials</u>, Transportation Research Board 102nd Annual Meeting. Washington, D.C., Jan. 9, 2023.
- 60. Roche, B.G.\*†, **Perez, M.A.**, Donald, W.N., and Whitman, J.B., <u>Efficacy of Undisturbed Vegetated Buffers in Capturing Suspended Sediment</u>, Transportation Research Board 102nd Annual Meeting. Washington, D.C., Jan. 9, 2023.
- 59. Kazaz, B.K.\*, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J.N., *Optimum Dosage and Product Selection Guidance for Flocculant Usage in Construction Stormwater Treatment*, Transportation Research Board 102nd Annual Meeting. Washington, D.C., Jan. 9, 2023.
- 58. Sharpe, C.D.\*, **Perez, M.A.**, and Donald, W.N., <u>Evaluation of Surface Skimmer Flow Rates and Size Selection</u>, Transportation Research Board 102nd Annual Meeting. Washington, D.C., Jan. 9, 2023.

<sup>3</sup> Most Distinguished Technical Paper Award, 23<sup>rd</sup> Annual International Erosion Control Association Conference

- 57. Clampitt, J.E.\*†, **Perez, M.A.**, Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., *Enhancing the Hydraulic Performance of Wattles for Erosion and Sediment Control*, 2023 Alabama Water Resources

  Conference. Orange Beach, AL, Sep. 8, 2022.
- 56. Clampitt, J.E.\*+, Ballesteros, L, Poleacovschi, C., **Perez, M.A.**, <u>The Effects of Stereotypes on Engineering Identities Among Latinx Undergraduate Engineering Students</u>, 2022 American Society of Engineering Education Southeast Section Conference. Charleston, SC, Mar. 14, 2022.
- 55. Schussler, J.C.\*†, **Perez, M.A.**†, Donald, W.N., Whitman, J.B., Zech, W.C., and Fagan, B.G., *A Decade of Research at the Auburn University Stormwater Research Facility*, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 54. Kazaz, B.\*\*, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J., <u>Flocculant Dosage Guidance for Construction Stormwater Treatment</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 53. Schussler, J.C.\*\*, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Performance Tracking of an in-Channel Sediment Basin during Large-Scale Testing</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 52. Manning, C.\*, **Perez, M.A.**<sup>†</sup>, and Donald, W.N., <u>Assessment of Polyacrylamide Concentration Using an ASTM D6459 Rainfall Simulator</u>, Transportation Research Board 101st Annual Meeting, TRB Paper No. 22-02201, Poster Session 1139: Advances in Construction and Post-Construction Stormwater Management. Washington, DC, Jan. 10, 2022.
- 51. Kazaz, B.\*†, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J., <u>Detection of Residual Flocculant Concentrations in Construction Stormwater Runoff</u>, Transportation Research Board 101st Annual Meeting, TRB Paper No. 22-02331, Lectern Session 1079: Adapting Stormwater Infrastructure for a Changing World. Washington, DC, Jan. 10, 2022.
- 50. Schussler, J.C.\*†, **Perez, M.A.**, Donald, W.N., Whitman, J.B., Zech, W.C., and Fagan, B.G., <u>A Decade of Research in Review: The Auburn University Stormwater Research Facility</u>, Transportation Research Board 101st Annual Meeting, TRB Paper No. 22-03429, Poster Session 1139: Advances in Construction and Post-Construction Stormwater Management. Washington, DC, Jan. 10, 2022.
- 49. Schussler, J.C.,\*† and **Perez, M.A.**, <u>Cost Analysis of Ditch Check Practices Used in Highway Construction</u>, Transportation Research Board 101st Annual Meeting, TRB Paper No. 22-02941, Poster Session 1139: Advances in Construction and Post-Construction Stormwater Management. Washington, DC, Jan. 10, 2022.
- 48. Kazaz, B.\*†, Schussler, J.C.\*, Dickey, L.C.\*, and **Perez, M.A.**, <u>Soil Loss Risk Analysis for Construction Activities</u>, Transportation Research Board 101st Annual Meeting, TRB Paper No. 22-02360, Poster Session 1139: Advances in Construction and Post-Construction Stormwater Management. Washington, DC, Jan. 10, 2022.
- 47. Turochy, E.\*, Clampitt, J.\*†, **Perez, M.A.**, Poleacovschi, C., Doran, E., and Yuen, T., <u>Stereotypes and Stereotype</u>

  <u>Threats Experienced by Latinx Undergraduate Engineering Students</u>, American Society for Engineering Education Annual Meeting. Virtual, Jul. 26, 2021.
- 46. Schussler, J.C. \*†, **Perez, M.A.**, Whitman, J.B., and Cetin, B., <u>Performance and Cost Analysis of Various Ditch Check Installation Techniques Based on a Field Study in Tama County, IA</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 25, 2021.
- 45. Kazaz, B.\*†, **Perez, M.A.**, and Whitman, J.B., <u>Deep Learning-Based Aerial Stormwater Inspections</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 25, 2021.
- 44. Liu, L.\*+, and **Perez, M.A.**, <u>Investigation of Lamella Settlers and Electrocoagulation for Capturing Suspended Sediment</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 22-25, 2021.

- 43. Whitman, J.B.<sup>†</sup>, Schussler, J.C.<sup>\*</sup>, **Perez, M.A.**, and Liu, L.<sup>\*</sup>, <u>Analyzing Flow Characteristics of Wattles Using a State-of-the-Art Hydraulic Flume</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 23, 2021.
- 42. Kazaz, B.\*†, **Perez, M.A.**, and Donald, W.N., <u>A State-of-the-Practice Review on the use of Flocculants for Construction Stormwater Management in the United States</u>, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-02141, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 41. Schussler, J.C.\*†, Kazaz, B.\*, **Perez, M.A.**, Cetin, B., and Whitman, J.B., *Field Evaluation of Wattle and Silt Fence Ditch Checks*, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-02487, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 40. Schussler, J.C. \*†, **Perez, M.A.**, Whitman, J.B., and Cetin, B., <u>Performance and Cost Analysis of Various Ditch Check Installation Techniques Based on a Field Study in Tama County, IA</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 25, 2021.
- 39. Kazaz, B. \*†, **Perez, M.A.**, and Whitman, J.B., <u>Deep Learning-Based Aerial Stormwater Inspections</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 25, 2021.
- 38. Liu, L. \*†, and **Perez, M.A.**, <u>Investigation of Lamella Settlers and Electrocoagulation for Capturing Suspended Sediment</u>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 22-25, 2021.
- 37. Whitman, J.B., Schussler, J.C. \*, **Perez, M.A.**, and Liu, L., <u>Analyzing Flow Characteristics of Wattles Using a State-of-the-Art Hydraulic Flume</u><sup>4</sup>, 21st Annual International Erosion Control Association (IECA) Environmental Connection 21 Conference. Virtual, Feb. 23, 2021.
- 36. Kazaz, B. \*†, **Perez, M.A.**, and Donald, W.N., <u>A State-of-the-Practice Review on the use of Flocculants for Construction Stormwater Management in the United States</u>, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-02141, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 35. Schussler, J.C. \*\*, Kazaz, B. \*, **Perez, M.A.**, Cetin, B., and Whitman, J.B., *Field Evaluation of Wattle and Silt Fence Ditch Checks*, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-02487, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 34. Ward, M.\*, Poleacovschi, C.†, and **Perez, M.A.**, <u>A Spatial Approach to Determining Water Harvesting Sites in Cambodia</u>, American Society of Civil Engineers Construction Research Congress, Poster Session. Tempe, AZ, Mar. 9, 2020.
- 33. Schussler, J.C.\*, **Perez, M.A.**, and Cetin, B.†, <u>Performance Monitoring of Temporary Sediment Control Basins</u>, ASCE Geo-Congress 2020, Poster Session. Minneapolis, MN, Feb. 26, 2020.
- 32. Schussler, J.C.<sup>†\*</sup>, **Perez, M.A.**, and Cetin, B., <u>Erosion and Sediment Control Improvements During Earthwork Construction</u>, 20th Annual International Erosion Control Association Conference. Raleigh, NC, Feb. 26, 2020.
- 31. Dickey, L.C.<sup>†\*</sup>, McEachran, A.R.<sup>†\*</sup>, **Perez, M.A.**, Rutherford, C., Rehmann, C.R., Groh, T., Isenhart, T., and Jaynes, D., <u>Slope Stability Analysis of Saturated Riparian Buffers, 20th Annual International Erosion Control Association</u> Conference. Raleigh, NC, Feb. 26, 2020.
- 30. Liu, L.<sup>†\*</sup>, and **Perez, M.A.**<sup>†</sup>, *Designing Silt Fence Sediment Barriers: A Performance Based Approach*<sup>5</sup>, 20th Annual International Erosion Control Association Conference. Raleigh, NC, Feb. 25, 2020.

<sup>&</sup>lt;sup>4</sup> Most Distinguished Technical Paper Award, 21st Annual International Erosion Control Association Conference

<sup>&</sup>lt;sup>5</sup> Most Distinguished Technical Paper Award, 20<sup>th</sup> Annual International Erosion Control Association Conference

- 29. Whitman, J.B.<sup>†</sup>, Schussler, J.C.<sup>\*</sup>, **Perez, M.A.**, and Liu, L.<sup>\*</sup>, *Hydraulic Performance Evaluation of Wattles used for Erosion and Sediment Control*, Transportation Research Board 99th Annual Meeting, TRB Paper No. 20-00097, Lectern Session, 1589: Current Practices in Highway Stormwater Management. Washington, D.C., Jan. 14, 2020.
- 28. Taylor, J.<sup>†\*</sup>, Poleacovschi, C., and **Perez, M.A.**, <u>Drivers and Barriers of Infrastructure Adaptation: An Analysis of Stakeholder Perspectives Working with Rural Alaska Communities</u>, American Geophysical Union Fall Meeting 2019. San Francisco, CA, Dec. 09, 2019.
- 27. Taylor, J.<sup>†\*</sup>, Poleacovschi, C., and **Perez, M.A.**, <u>Alaska Native Responses to Climate Change: The Role of Community Values in Housing Adaptation</u>, 17th Annual Engineering Project Organization Conference. Vail, CO, Jun. 26, 2019.
- 26. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N. and Fang, X., <u>Sizing Sediment Basins for Site-Specific Conditions, 18th Annual International Erosion Control Association Conference</u>, Erosion & Sediment Control Session. Long Beach, CA, Feb. 13, 2018.
- 25. Basham, D.L.<sup>†</sup>, Zech, W.C., Donald, W.N., and **Perez, M.A.**, <u>Design and Construction of a Catch Basin Insert</u>
  <u>Testing Apparatus for Performance Evaluation</u>, 18th Annual International Erosion Control Association
  Conference, Stormwater Quality Session. Long Beach, CA, Feb. 13, 2018.
- 24. Basham, D.L.<sup>†</sup>, Zech, W.C., Donald, W.N., and **Perez, M.A.**, <u>Design and Construction of a Catch Basin Insert Testing Apparatus for Performance Evaluation</u>, Transportation Research Board 97th Annual Meeting, , TRB Paper No.: 18-01527, Lectern Session 208, Managing Highway Stormwater Runoff. Washington, D.C., Jan. 8, 2018.
- 23. Horne, M.A.<sup>†</sup>, Zech, W.C., Donald, W.N., and **Perez, M.A.**, <u>Design and Construction of a Pressurized Rainfall Simulator for Performance-Based Testing of Erosion Control Practices</u>, Transportation Research Board 97th Annual Meeting, TRB Paper No.: 18-01268, Lectern Session 208, Managing Highway Stormwater Runoff. Washington, D.C., Jan. 8, 2018.
- 22. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Vasconcelos, J.G., and Fang, X., <u>Large-Scale Performance Testing of Temporary Sediment Basin Treatments and High-Rate Lamella Settlers</u>, Transportation Research Board 97th Annual Meeting, TRB Paper No.: 18-00486, Lectern Session 208, Managing Highway Stormwater Runoff. Washington, D.C., Jan. 8, 2018.
- 21. **Perez, M.A.**<sup>+</sup>, Zech, W.C., and Fang, X., <u>SEDspread: A Sediment Basin Design Tool for Construction Sites</u>, 17th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. Atlanta, GA., Feb. 21-24, 2017.
- 20. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Fang, X., and Vasconcelos, J., <u>Large-Scale Performance Evaluations of High-Rate Lamella Settlers in Sediment Basin Applications</u>, 17th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. Atlanta, GA, Feb. 21-24, 2017.
- 19. Bugg, R.A.<sup>†</sup>, Zech, W.C., Donald, W.N., and **Perez, M.A.**, <u>Performance Evaluation of Sediment Barriers for Construction Applications using Full-Scale Testing Methods</u>, 17th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. Atlanta, GA, Feb. 21-24, 2017.
- 18. Bugg, R.A.<sup>†</sup>, Zech, W.C., Donald, W.N., and **Perez, M.A.**, <u>Performance Evaluation of Three Silt Fences Using a Full-Scale Testing Apparatus</u>, Transportation Research Board 96th Annual Meeting, TRB Paper No.: 17-06419, Lectern Session 708, Solutions for Improved Water Quality. Washington, D.C., Jan. 10, 2017.
- 17. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., Turochy, R.E., and Fagan, B.G. <sup>†</sup>, <u>Transferring Innovative Research Results into Industry Practice at the Auburn University Erosion and Sediment Control Testing Facility, Transportation Research Board 96th Annual Meeting, TRB Paper No.: 17-00013, Technology Transfer Committee. Washington, D.C., Jan. 9, 2017.</u>

- 16. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Large-Scale Performance Enhancement Study of Sediment Basin Technology</u><sup>6</sup>, Erosion & Sediment Control Session, 16th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. San Antonio, TX, Feb. 16-19, 2016.
- 15. **Perez, M.A.**, Zech, W.C.<sup>†</sup>, Donald, W.N., and Fang, X., <u>Performance Comparisons of Construction Inlet Protection Practices. Erosion & Sediment Control Session</u>, 16th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. San Antonio, TX, Feb. 16-19, 2016.
- 14. **Perez, M.A.** <sup>†</sup>, Zech, W.C., Fang, X., and Vasconcelos, J.G., <u>Methodology and Development of Large-Scale Sediment Basin for Performance Testing</u>, Transportation Research Board 95th Annual Meeting, TRB Paper No.: 16-0012, Lectern Session, 686: Solutions to Improved Highway Runoff Water Quality. Washington, D.C., Jan. 12, 2016.
- 13. **Perez, M.A.** <sup>†</sup>, Zech, W.C. <sup>†</sup>, Donald, W.N., and Fang, X., <u>Development of SEDspread: Robust Construction Site Sediment Basin Design Tool</u>, Transportation Research Board 95th Annual Meeting, TRB Paper No.: 16-2559, Poster Session, 586: Soil Erodibility and Sediment Basins and Barriers. Washington, D.C., Jan. 12, 2016.
- 12. Bugg, R.A., Zech, W.C.<sup>†</sup>, Donald, W.N., and **Perez, M.A.**, <u>Design and Construction of a Large-Scale Test apparatus</u> for <u>Sediment Barrier Performance Evaluations</u>, Transportation Research Board 95th Annual Meeting, TRB Paper No.: 16-2360, Poster Session, 586: Soil Erodibility and Sediment Basins and Barriers. Washington, D.C., Jan. 12, 2016.
- 11. **Perez, M.A.**, Zech, W.C.<sup>†</sup>, Donald, W.N., and Fang, X., <u>Enhanced Inlet Protection Practices Developed through Large-Scale Testing</u>, 2nd Annual U.S. EPA Region 5 International Erosion Control Association Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session. Atlanta, GA, Jun. 15, 2015.
- 10. **Perez, M.A.**<sup>†</sup>., Zech, W.C., and Donald, W.N., <u>Drones: The Future of Erosion and Sediment Control Site Inspections</u>, 2nd Annual U.S. EPA Region 5 International Erosion Control Association Southeast Chapter Municipal Wet Weather Stormwater Conference, Erosion & Sediment Control Session. Atlanta, GA, Jun. 15, 2015.
- 9. **Perez, M.A.**, Zech, W.C.<sup>†</sup>, Donald, W.N., and Fang, X., <u>Evaluation of Inlet Protection Practice (IPP) Installations</u> <u>using Large-Scale Testing Techniques</u><sup>7</sup>, 15th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control (TS-6) Session. Portland, OR, Feb. 18, 2015.
- 8. Donald, W.N.<sup>†</sup>, Zech, W.C., Fang, X., and **Perez, M.A.**, <u>Using Hydraulic Performance to Characterize Ditch Check Practices</u>, 15th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control (TS-6) Session. Portland, OR, Feb. 16, 18, 2015.
- 7. **Perez, M.A.**<sup>†</sup>, Zech, W.C., and Donald, W.N., "Drones": Revolutionizing Erosion and Sediment Control Site Inspections, 15th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control (TS-6) Session. Portland, OR, Feb. 16, 2015.
- 6. Donald, W.N., Zech, W.C. †, Fang, X., and **Perez, M.A.**, *Evaluation and Modification of Wire Backed, Nonwoven Filter Fabric Silt Fence for use as a Ditch Check*, Transportation Research Board 94th Annual Meeting, TRB Paper No.: 15-1646, Lectern Session, 610: Water Quality Technology Improvements and Research. Washington, D.C., Jan. 13, 2015.
- 5. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., and Fang, X., <u>Installation Enhancements to Common Inlet Protection Practices (IPPs) using Large-Scale Testing Techniques</u>, Transportation Research Board 94th Annual Meeting, TRB Paper No.: 15-1607, Lectern Session, 610: Water Quality Technology Improvements and Research. Washington, D.C., Jan. 13, 2015.

<sup>&</sup>lt;sup>6</sup> Most Distinguished Technical Paper Award, 16<sup>th</sup> Annual International Erosion Control Association Conference

 $<sup>^7</sup>$  Presenter of the Year Award,  $16^{
m th}$  Annual International Erosion Control Association Conference student poster session.

- 4. **Perez, M.A.**, Zech, W.C.<sup>†</sup>, Donald, W.N., and Fang, X., <u>A Geographic Information System (GIS) Approach for Calculating Runoff Characteristics for Erosion and Sediment Control Practices</u>, Transportation Research Board 94th Annual Meeting, TRB Paper No.: 15-0647, Lectern Session, 495: Hydraulics Research for Runoff, Scour, and Erosion, Washington, D.C., Jan. 13, 2015.
- 3. **Perez, M.A.**<sup>†</sup>, Zech, W.C., and Donald, W.N., <u>Using Unmanned Aerial Vehicles (UAVs) to Conduct Site Inspections of Erosion and Sediment Control Practices and Track Project Progression</u>, Transportation Research Board 94th Annual Meeting, TRB Paper No.: 15-4472, Lectern Session, 332: Extracting Information from Images: Technology Innovations in Sensing and Detection. Washington, D.C., Jan. 12, 2015.
- 2. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., and Fang, X., <u>Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques</u>, 14th Annual International Erosion Control Association Environmental Connection Conference, Erosion & Sediment Control Session. Nashville, TN, Feb. 27, 2014.
- 1. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., <u>Methodology Development for Evaluating Inlet Protection Practices</u>
  (IPPs) Using Large-Scale Testing Techniques, Transportation Research Board 93rd Annual Meeting, Paper No.:
  14-4644, Lectern Session 816: Hydraulic Analysis of Scour for Bridge and Inlet Protection Applications.
  Washington, D.C., Jan. 15, 2014.

#### Poster presentations without paper.

Note: 1. \*indicates student contributions.

- 2. †indicates presenter.
- 54. Clampitt, J.E.\*†, **Perez, M.A.**, Whitman, J.B., Donald, W.N., LaMondia, J.J., and Craig, A.J., <u>Materials Matter for Wattle Hydrologic Performance</u><sup>§</sup>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 53. Armstrong, M.\*†, **Perez, M.A.**, and Donald, W.N., <u>Optimization of Sediment Basin Configurations</u><sup>9</sup>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 52. Roche, B.G.\*†, **Perez, M.A.**, Donald, W.N., and Whitman, J.B., <u>Efficacy of Undisturbed Vegetated Buffers in Capturing Suspended Sediment Through RUSLE2 Modeling</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 51. Etheridge, J.\*†, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Construction and Calibration of Large-Scale Rainfall Simulators</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 50. Austin, P.\*†, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Designing and Evaluating Infiltration Swales for Retaining and Infiltrating Roadway Stormwater Runoff</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 49. Ramirez, D.\*†, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>Evaluating Engineered Media for Infiltration Swales</u>, 2023 Annual International Erosion Control Association Environmental Connection Conference and Expo. Kansas City, Mo, Feb. 7, 2023.
- 48. Armstrong, M.\*†, Schussler, J.C.\*, **Perez, M.A.**, and Donald, W.N., *Enhancement of Rock Check Dams using Large-Scale Testing Techniques*, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 47. Clampitt, J.E.\*†, **Perez, M.A.**, Whitman, J.B., and Craig, A.J., <u>Evaluation of Wattle Performance based on Encasement and Fill Density</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.

<sup>&</sup>lt;sup>8</sup> 1st Place Award, 23<sup>rd</sup> Annual International Erosion Control Association Conference student poster session.

<sup>&</sup>lt;sup>9</sup> 2<sup>nd</sup> Place Award, 23<sup>rd</sup> Annual International Erosion Control Association Conference student poster session.

- 46. Etheridge, J.\*†, **Perez, M.A.**, and Donald, W.N., <u>Construction Methods for Large-Scale Rainfall Simulators</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 45. Kazaz, B.\*†, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J., <u>Detection of Residual Flocculant Concentrations in Construction Stormwater Runoff</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 44. Roche, B.G.\*†, **Perez, M.A.**, Donald, W.N., and Whitman, J.B., <u>Full-Scale Performance Evaluation of Slash Mulch Berms as a Sediment Barrier Practice</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 43. Sharpe, C.\*†, **Perez, M.A.**, and Donald, W.N., <u>Skimmer Flow Rate Testing and Size Selection</u>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 42. Schussler, J.C.\*†, **Perez, M.A.**, Donald, W.N., and Fang, X., <u>In-Channel Sediment Basins: Innovative or Ineffective?</u>

  <u>A Large-Scale Research Study at the Auburn University Stormwater Research Facility</u><sup>10</sup>, 2022 Annual International Erosion Control Association Environmental Connection Conference and Expo. Minneapolis, MN, Feb. 17, 2022.
- 41. Kazaz, B.\*\*, **Perez, M.A.**, Donald, W.N., Fang, X., and Shaw, J., *Use of Flocculants*, Samuel Ginn College of Engineering Graduate Engineering Research Showcase. Auburn, AL, Oct. 28, 2021.
- 40. Schussler, J.C.\*\*, **Perez, M.A.**, Donald, W.N., and Fang, X., *Finding Sediment Basin Solutions through Large-Scale Testing*, 2021 Annual Alabama Water Resources Conference. Orange Beach, AL, Sep. 8, 2021.
- 39. Taylor, J.\*†, Poleacovschi, C., and **Perez, M.A.**, <u>Drivers of Infrastructure Adaptation: Institutional Stakeholder</u>
  <u>Analysis in Alaska</u>, Disaster and Resilience 2021 Summit. Virtual, Jun. 16-18, 2021.
- 38. Kazaz, B.\*†, **Perez, M.A.**, Donald, W.N., Fang, X. and Shaw, J., <u>A Nationwide Survey on Flocculant Usage in Construction Stormwater Management</u><sup>11</sup>, 21st Annual International Erosion Control Association Environmental Connection Conference, Poster Session. Virtual, Feb. 23, 2021.
- 37. Manning, C.\*†, **Perez, M.A.**, and Donald, W.N., <u>Assessment of Polyacrylamide Concentration in Construction Stormwater Runoff</u>, 21st Annual International Erosion Control Association Environmental Connection Conference, Poster Session. Virtual, Feb. 23, 2021.
- 36. Schussler, J.C.\*†, **Perez, M.A.**, Whitman, J.B., and Cetin, B., <u>Solution or Source? A Field Assessment of Sediment Basins in Tama County, IA</u><sup>12</sup>, 21st Annual International Erosion Control Association Environmental Connection Conference, Poster Session. Virtual, Feb. 23, 2021.
- 35. Schussler, J.C.\*†, **Perez, M.A.**, Whitman, J.B., and Cetin, B., <u>Sediment Basin Performance in Highway Construction</u>
  <u>Applications</u>, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-02486, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 34. Liu, L.\*†, **Perez, M.A.**, Whitman, J.B., Donald, W.N., and Zech, W.C., <u>SILTspread: A Performance-Based Approach</u> for the Design and Installation of Silt Fence Sediment Barriers, Transportation Research Board 100th Annual Meeting, TRB Paper No. 21-01975, Poster Session, 1272: Highway Stormwater Management. Virtual, Jan. 27, 2021.
- 33. Taylor, J.\*†, Poleacovschi, C., and **Perez, M.A.**, <u>Climate Change Adaptation of Infrastructure: Drivers and Barriers of Stakeholders Working in Rural Alaska<sup>13</sup></u>, Engineering Project Organization Conference. Virtual, Oct. 21, 2020.

<sup>&</sup>lt;sup>10</sup> 2nd Place Award, 22nd Annual International Erosion Control Association Conference student poster session.

<sup>&</sup>lt;sup>11</sup> 2nd Place Award, 21st Annual International Erosion Control Association Conference student poster session.

<sup>&</sup>lt;sup>12</sup> 3<sup>rd</sup> Place Award, 21<sup>st</sup> Annual International Erosion Control Association Conference student poster session.

- 32. Taylor, J.\*†, Poleacovschi, C., and **Perez, M.A.**, <u>Climate Change Adaptation of Infrastructure: Drivers and Barriers of Stakeholders Working in Rural Alaska</u>, Iowa State University Construction Engineering Industry Advisory Council Poster Conference. Virtual, Oct. 16, 2020.
- 31. Turochy, E.\*†, **Perez, M.A.**, Poleacovschi, C., Doran, E., Yuen, T., and Abraham, T., <u>How do Stereotypes Effect Latinx Performance in Undergraduate Education</u>?, American Society of Engineering Education Southeast Chapter Annual Conference. Auburn, AL, Mar. 9, 2020.
- 30. Faulkner, B.A.<sup>†</sup>\*, Donald, W.N., Zech, W.C., **Perez, M.A.**, and Fang, X., <u>How to use a Rainfall Simulator to Calculate Erosion Control Performance</u>, 20th Annual International Erosion Control Association Conference, Poster Session. Raleigh, NC, Feb. 26, 2020.
- 29. Kazaz, B.<sup>†\*</sup>, **Perez, M.A.**, *Using UAVs to Improve Construction Stormwater Inspections*, 20th Annual International Erosion Control Association Conference, Poster Session. Raleigh, NC, Feb. 26, 2020.
- 28. Schussler, J.C.<sup>†\*</sup>, **Perez, M.A.**, Cetin, B., and Whitman, J.B., <u>Performance Evaluation of Wood Chip Wattles and Silt Fence Ditch Checks through Field Monitoring</u>, 20th Annual International Erosion Control Association Conference, Poster Session. Raleigh, NC, Feb. 26, 2020.
- 27. McEachran, A.<sup>†\*</sup>, Dickey, L.\*, Rehmann, C., **Perez, M.A.**, Rutherford, C., and Groh, T., <u>Improving the Design of Saturated Buffers for Nitrate Removal</u>, 20th Annual International Erosion Control Association Conference, Poster Session. Raleigh, NC, Feb. 26, 2020.
- 26. Liu, L.<sup>†\*</sup>, **Perez, M.A.**, and Whitman, J.B., <u>Optimizing Lamella Settlers for Treating Suspended Sediment</u><sup>14</sup>, 20th Annual International Erosion Control Association Conference, Poster Session. Raleigh, NC, Feb. 26, 2020.
- 25. Schussler, J.C.\*†, **Perez, M.A.**, and Cetin, B., <u>Erosion and Sediment Control Improvements through Field Evaluation</u>, Midwest Transportation Conference, Poster Session. Ames, IA, Aug. 21, 2019.
- 24. Boulter, J.\*†, and **Perez, M.A.**, <u>Integration of 3D Printing into Engineering Curriculum</u>, Iowa State University Honors Poster Presentation Event. Ames, IA, May. 1, 2019.
- 23. Lan, L\*\*, **Perez, M.A.**, <u>Development of an Electrocoagulated Lamella Settler System</u>, 13th Annual Iowa Water Conference, Poster Session. Ames, IA, Mar. 12, 2019.
- 22. Dickey, L.\*†, McEachran, A.†, Rutherford, C., **Perez, M.A.**, Rehmann, C., Isenhart, T., and Jaynes, D., *Evaluation of Slope Stability at Saturated Buffer Sites*, 13th Annual Iowa Water Conference, Poster Session. Ames, IA, Mar. 12, 2019.
- 21. Schussler, J.C.\*†, **Perez, M.A.**, and Cetin, B., <u>Erosion and Sediment Control Improvements through Field Evaluations</u><sup>15</sup>, 13th Annual Iowa Water Conference, Poster Session. Ames, IA, Mar. 12, 2019.
- 20. McEachran, A.\*†, Dickey, L.†, Rehmann, C., **Perez, M.A.**, Rutherford, C., Isenhart, T., and Jaynes, D., *Evaluation of Saturated Buffers as a Conservation Practice for Treating Subsurface Drainage*, 13th Annual Iowa Water Conference, Poster Session. Ames, IA, Mar. 12, 2019.
- 19. Schussler, J.C.<sup>†\*</sup>, **Perez, M.A.**, and Cetin, B., <u>Field Evaluation of Erosion and Sediment Control Practices</u>, 19th Annual International Erosion Control Association Conference, Poster Session. Denver, CO, Feb. 21, 2019.
- 18. Dickey, L.<sup>†\*</sup>, McEachran, A., Rutherford, C., **Perez, M.A.**, Rehmann, C., Isenhart, T., and Jaynes, D., <u>Saturated Buffers: Treating Agricultural Subsurface Drainage</u>, 19th Annual International Erosion Control Association Conference, Poster Session. Denver, CO, Feb. 21, 2019.
- 17. Liu, L.<sup>†\*</sup>, and **Perez, M.A.**, <u>Development of an Electrocoagulated Lamella Settler System</u>, 19th Annual International Erosion Control Association Conference, Poster Session. Denver, CO, Feb. 21, 2019.

<sup>&</sup>lt;sup>13</sup>Best Poster Award, 2020 Engineering Project Organization Society Annual Conference.

<sup>&</sup>lt;sup>14</sup> 2nd Place Award, 20th Annual International Erosion Control Association Conference student poster session.

<sup>&</sup>lt;sup>15</sup> 2<sup>nd</sup> Place Award, 13<sup>th</sup> Annual Iowa Water Conference poster session.

- 16. Schussler, J.C.<sup>†\*</sup>, **Perez, M.A.**, and Cetin, B., <u>Erosion and Sediment Control Improvements through Field Evaluations</u>, 19th Annual International Erosion Control Association Conference, Poster Session. Denver, CO, Feb. 21, 2019.
- 15. Dokala, C.\*†, and **Perez, M.A.**, <u>Comparison of DOT Erosion and Sediment Control Product Approval Processes for Qualified Product Lists</u>, Iowa State University CCEE Annual Research Showcase, IA, Jan. 24, 2019.
- 14. Lan, L\*\*, **Perez, M.A.**, <u>Development of an Electrocoagulated Lamella Settler System</u>, Iowa State University CCEE Poster Competition. Ames, IA, Jan. 24, 2019.
- 13. Schussler, J.C.\*†, **Perez, M.A.**, and Cetin, B., <u>Erosion and Sediment Control Improvements through Field Evaluations</u> 16, Iowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 12. Guyll, B.\*\*, **Perez, M.A.**, <u>Effectiveness of Varying Bioreactor Media in the Prevention of Clothianidin Leaching</u>, lowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 11. McEachran, A.\*\*, Dickey, L.\*, Rehmann, C., **Perez, M.A.**, Rutherford, C., Isenhart, T., and Jaynes, D., *Evaluation of Saturated Buffers as a Conservation Practice for Treating Subsurface Drainage*, Iowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 10. Kazaz, B.\*\*, **Perez, M.A.**, *Groundwater Level at the U.S. 63 Overpass Construction Site in Waterloo, IA*, Iowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 9. Dickey, L.\*†, McEachran, A.†, Rutherford, C., **Perez, M.A.**, Rehmann, C., Isenhart, T., and Jaynes, D., <u>Saturated Buffers: Treating Agricultural Subsurface Drainage</u>, Iowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 8. Schaffer, H.\*†, and **Perez, M.A.**, <u>Evaluation Methods for Pervious Concrete Maintenance</u>, Iowa State University CCEE Annual Research Showcase. Ames, IA, Jan. 24, 2019.
- 7. Ruther, A.<sup>†\*</sup>, and **Perez, M.A.**, <u>Water Temperature Influence on the Rate of Turbidity Decay in Stormwater Detention Practices</u>, 18th Annual International Erosion Control Association Conference, Poster Session. Long Beach, CA, Feb. 13, 2018.
- 6. Bohle, C.<sup>†\*</sup>, and **Perez, M.A.**, <u>Structural Evaluation of Silt Fence Steel Posts</u>, 18th Annual International Erosion Control Association Conference, Poster Session. Long Beach, CA, Feb. 13, 2018.
- 5. **Perez, M.A.**<sup>†</sup>, Zech, W.C., Donald, W.N., and Fang, X., <u>SEDspread: A Hydrologically Robust Construction Site</u>
  <u>Sediment Basin Design Tool</u><sup>17</sup>, 16th Annual International Erosion Control Association Environmental Connection Conference, Poster Session. San Antonio, TX, Feb. 16-19, 2016.
- 4. **Perez, M.A.**<sup>†</sup>, Zech, W.C., and Donald, W.N., <u>Unmanned Aerial Vehicles for use in Construction & Stormwater Site Inspections</u>, 15th Annual International Erosion Control Association Environmental Connection Conference, Poster Session. Portland, OR, Feb. 16-18, 2015.
- 3. **Perez, M.A.**<sup>†</sup>, Zech, W.C., and Fang, X., <u>Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques</u> 18, 14th Annual International Erosion Control Association Environmental Connection Conference, Poster Session. Nashville, TN, Feb. 27, 2014.
- 2. **Perez, M.A.\***, Zech, W.C., and Donald, W.N., *Unmanned Aerial Vehicles for use in Construction & Stormwater Site Inspections*, Graduate Engineering Research Showcase, Poster Session. Auburn, AL, Feb. 24, 2013.
- 1. **Perez, M.A.**<sup>†</sup>, Zech, W.C., and Fang, X., <u>Evaluation of Inlet Protection Practices using Large-Scale Testing Techniques</u>, 13th Annual International Erosion Control Association Environmental Connection Conference, Poster Session. San Diego, CA, Feb. 10-13, 2013.

<sup>&</sup>lt;sup>16</sup> 1<sup>st</sup> Place Award, Iowa State University CCEE Annual Research Showcase.

<sup>&</sup>lt;sup>17</sup> 1st Place Award, 16th Annual International Erosion Control Association Conference student poster session.

<sup>&</sup>lt;sup>18</sup> 2<sup>nd</sup> Place Award, 14<sup>th</sup> Annual International Erosion Control Association Conference student poster session.

#### 4. Service

## a. University service.

## 1. University service.

Co-Advisor, EPA Rainworks Student Competition, student org. (2020)

## 2. College/School service.

- Participated in Graduate Recruitment Event (2020)
- Participated in E-Day recruiting activities for the Department of Civil Engineering (2013-2016, 2022)

# 3. Department service.

- Faculty Advisor, American Society of Civil Engineers Student Chapter (2021- present)
- Faculty Advisor, ASCE Gulf Coast Student Symposium Planning Committee (2021 present)
- Developed & Delivered Graduate Program Recruitment Seminar (2021)
- Member, Graduate Program Committee (2019 present)
- Member, Alabama Transportation Conference Planning Committee (2019 present)
- Member, OutCELL Coordination Committee (2019 present)
- Seminar Coordination:
  - "Infrastructure is Not New: 2000 year-old lessons from Roman Engineering", Bill Hunt, Ph.D., North Carolina State University (2022)
  - "Great Builders", Paul Giroux, Kiewit (2021)

## Service prior to joining faculty at Auburn University

- Faculty Mentor, Engineers for a Sustainable World Student Organization, student org. (2017-2018)
- Faculty Mentor, Agricultural and Bio systems Engineering Senior Design Team (Spring Fall 2018)
- Member, CCEE Senior Dinner Coordination Committee (2018)
- Work group member, CCEE International Collaboration (2018-2019)
- ConE Academic Advisor: 8 students, instructional / advising support (2018-2019)
- Coach, Associated Schools of Construction Student Competitions, Nebraska City, NE (Nov. 24-27, 2018)
- Coordinator/Presenter: CCEE Graduate Student Recruitment Presentations (2) (2018-2019)
- Developed and delivered two online lectures for CE 594, instructional / advising support (2018)
- Mentored ASCE Student Chapter with Boone County Project, student org. (2018)
- Committee Member: CCEE #CyGrad Graduate Student Recruitment (2017-2019)
- Contributor: CE 595A Construction Engineering Seminar, instructional / advising support (2018-2019)
- ConE-Architecture Educational Collaboration Workgroup (2018-2019)

## b. Professional service.

#### **International Erosion Control Association**

- Committee Chair, Standards & Practices Committee (2017 present)
- Annual Conference Reviewer (2017-present)
- Committee Member, Great Connections Conference Planning Committee (2017-2018)
- Vice President, Southeast Chapter (2017)
- State Representative (Alabama), Southeast Chapter (2015-2017)

### **Transportation Research Board**

- Committee Chair, AKD50 Standing Committee on Hydrology, Hydraulics, and Stormwater (2021-present)
- Subcommittee Chair, Subcommittee on Stormwater, AKD50 Committee on Hydrology, Hydraulics, and Stormwater (2020-present)
- Committee Communications Chair, Stormwater Committee, AFB65 (2017-2020)

## **American Society of Civil Engineers**

- Faculty Advisor, ASCE Auburn University Student Chapter (2021-present)
- Committee Member, ASCE Alabama Section Infrastructure Report Card: Stormwater Category (2022)
- Committee Member, ASCE Management Practices for Controlling Erosion and Sediment Standards (2018present)

#### Other

- Planning Committee, 2022 National Hydraulic Engineering Conference (2021-2022)
- Committee Member, Alabama Erosion and Sediment Control Program Partnership Steering Committee (2020-present)
- Secretary and Committee Member, Associated General Contractors of Iowa Foundation (2018-2019)

## Editorial and review service for manuscripts

- Editorial Board Member Topic Editor, MDPI Water<sup>19</sup> (2021—present)
- Reviewer, Sustainability (2019-present)
- Reviewer, Transportation Research Board Stormwater Committee, AFB65 (2017-present)
- Reviewer, ASCE Journal of Irrigation and Drainage Engineering (2017-present)
- Reviewer, Journal of Water Management Modeling (2017-present)

#### Grant review activities

- Panel Member, National Cooperative Research Program (NCHRP) Synthesis 20-05/Topic 53-05, "Practices for Bioretention Stormwater Control Measures" (2021-2022)
- Panel Member, Airport Cooperative Research Program (ACRP) S10-15 on "Metrics to Evaluate Airport Performance with the Integration of UAS" (2018-2019).

#### Outreach Service

- Participated as a "Water Scientist" for High School student interview, Iowa Water Center essay competition, participant, Dec. 14, 2018
- Civil Engineering Mixology Night at the Science Center of Iowa (ASCE), judge, volunteer, Jul. 6, 2018
- Ready, Set, Build!, judge, volunteer, Nov. 4, 2017

## c. Professional Society Memberships.

- American Society of Engineering Education (2020-present)
- Voted into Membership, ASCE Construction Research Congress (2018-present)
- Excellence in Civil Engineering Education (ExCEEd) Fellow (2018-present)
- International Erosion Control Association (2013-present)
- American Society of Civil Engineers (2010-present)

 $<sup>^{19}</sup>$  Invited to a two-year appointment to serve on editorial board as the Topic Editor by Editor-in-Chief.