**A person smiling at the camera

Description automatically generated**Hannah Sperfslage

### **Education**

IOWA STATE UNIVERSITY

BS Global Resource Systems & Environmental Studies,

Minor: Biology, Iowa State University, 2021

### **Skills**

Language Proficiencies: Spanish (limited working proficiencies)

ArcGIS/ArcGIS Online

ESRI software

### **Certifications and Affiliations**

Certified Transfer Station Operator

### **Professional Experience**

Ms. Hannah Sperfslage is a Staff Professional who assists and performs project work focused on Sustainable Materials Management (SMM). Ms. Sperfslage has assisted clients across the Midwest in evaluating their current solid waste management programs and services. She has over two years of experience that includes providing training materials, overseeing waste and recycling characterization studies, analyzing solid waste facilities, completing permit renewals, and performing comprehensive planning activities.

Hannah is passionate about engaging with clients to create a collaborative space to encourage waste diversion and better waste management practices. This includes holding stakeholder and community engagement sessions to present current operations, communicate results and plans. Ms. Sperfslage has also performed various analyses on findings of material characterization studies for items such as economic, recoverability, and emissions evaluations to capture a holistic view of waste management practices.

**Relevant Project Experience**

**Iowa Solid Waste Management Plans**

Ms. Sperfslage has completed or is currently involved in 6 comprehensive plans in various locations in Iowa. Solid waste comprehensive planning is required by the Iowa Department of Natural Resources to be completed by each Planning Area every 5 years. The activities associated with comprehensive planning include evaluating satisfaction of current programs through community surveys, utilizing historical data, facilitating public meetings to perform vision casting and strategic planning, and presenting recommendations. These comprehensive plans engage municipalities, counties, and solid waste agencies to track historical progress, select program priorities, and provide implementation timelines that include tasks and waste diversion impacts.

**Recycling Facility Study, Iowa**

In the state of Iowa, recycling facilities that accept and process recycling are not permitted. The Iowa Department of Natural Resources contracted with SCS Engineers to perform a Recycling Facility Study to obtain information regarding recycling activities such as materials accepted, contamination rates, identify locations material is accumulated and/or processed, etc.

Ms. Sperfslage contacted and engaged with all identified facilities to obtain complete results. She also performed the data analysis on the survey results involving consolidating all survey information to capture a general understanding of recycling in Iowa that includes tons of material accumulated and processed, average contamination rates, and common materials accepted and processed. Additionally, Ms. Sperfslage assisted in the creation of an interaction map of identified facilities with high-level recycling information to be utilized on the DNR’s website.

**Landfill Material Analysis, Iowa**

The Iowa Department of Natural Resources retained SCS Engineers to complete a landfill material analysis based on information from the 2022 Iowa Statewide Material Characterization Study. This analysis was to replicate similar analyses performed as a part of the 2017 Iowa Statewide Waste Characterization Study.

Ms. Sperfslage performed the analyses for this project including recoverability of disposed materials, greenhouse gas emissions reduction, potential job creation through recycling and reuse of materials, and estimated revenue of disposed materials. These analyses were executed in a manner to provide comparability to 2017 and utilize information to identify opportunities for new or expanded diversion programs and aid in development of recycling markets.

**Goodwill of the Heartland Material Characterization Study, Cedar Rapids, Iowa**

The Goodwill of the Heartland (Goodwill) in Cedar Rapids, Iowa contracted with SCS Engineers to sort and characterize unsold donations from four retail stores. SCS evaluated a total of 13 samples over two days. The data was analyzed to determine opportunities for new markets and to develop a baseline for future characterization studies for Goodwill.

Ms. Sperfslage was the Site Manager and trained personnel to identify each material, performed the weighing of each category, and captured ample visuals for training material. Additionally, Ms. Sperfslage performed the data analysis and report writing from the composition of material physically sorted and on visual furniture data from each facility.

**StopWaste Waste, Recyclables, and Organics Characterization Study, Alameda County, California**

Alameda County Waste Management Authority retained SCS Engineers to execute a multi-season waste, recyclables, and organics characterization study to determine opportunities for diversion, measure contamination in recycling and organics collection, and compare to historical characterization studies.

Ms. Sperfslage served as the Sorting Manager for the first week of the characterization, training both internal and external employees on over 70 material categories and procedures for collection and weighing of samples.

**City of Huntsville, Alabama Waste and Recyclable Materials Characterization, Huntsville, Alabama**

The Huntsville Solid Waste Disposal Authority contracted with SCS Engineers to conduct a waste and recyclable material characterization to determine the impact of existing diversion initiatives, facilitate new program and policy decisions to expand material diversion and assess contamination in the community’s curbside collection program. This project physically sorted 50 municipal solid waste (MSW) samples from the City, 5 MSW samples from Redstone Arsenal (U.S. Army Post), and 10 recyclable materials. Additionally, 50 construction and demolition debris samples were visually characterized.

Ms. Sperfslage served as the Sorting Manager for the physical sorts of MSW and recyclable material. She trained field personnel to identify each material and performed the weighing of each category. Ms. Sperfslage also performed the data analysis, which included calculating the BTUs of each material category.

**City of Lincoln, Nebraska Waste Characterization Study, Lincoln, Nebraska**

The City of Lincoln, Nebraska appointed SCS Engineers to execute a waste characterization study at the municipally owned landfill in Lincoln. The Study was 1 weeklong and comprised of a visual bulky waste characterization and a physical MSW characterization. The objective of the study was to provide the Client data in which programs and legislation can be reviewed for effectiveness. Furthermore, the study was performed in a manner to aid in comparability to previous waste characterization studies.

Ms. Sperfslage served as the Site Manager for the weeklong characterization, overseeing the quality assurance of collected data and the safety of all members involved. She managed the collection, sort, and weighing of all 50 physically sorted samples. Ms. Sperfslage continued to contribute to the project with data analysis and final report writing.

**Iowa Statewide Material Characterization Study, Iowa**

The Iowa Department of Natural Resources retained SCS Engineers to perform the 2022 Iowa Statewide Material Characterization Study. This study is completed regularly to develop a better understanding of the types and quantities of waste materials disposed. The 2022 study included 10 host facilities across the state of Iowa and resulted in a total of 501 MSW samples manually characterized and 486 construction/demolition debris visually screened. MSW samples included waste from residential, institutional, commercial, and industrial generators.

Ms. Sperfslage was the Site Manager who led field activities at all 10 host facilities, overseeing physical and visual sorts, confirming the safety of field personnel, coordinating with staff of each host facility, and facilitating quality control of data collection. MSW samples were physically sorted into 84 material components. Ms. Sperfslage trained field personnel to identify each material category and recorded the weights of each sample. Upon conclusion of the fieldwork, Hannah completed data analysis and drafted the final report.

**City of Salina, Kansas Waste and Recyclable Materials Characterization, Salina, Kansas**

The City of Salina, Kansas (City) retained SCS Engineers to perform waste and recyclable material characterization sorts to comprehend the composition of waste and recyclables being disposed of. This project physically sorted 50 municipal solid waste samples, 25 recyclable material samples, and performed visual observations for 25 construction and demolition samples.

Ms. Sperfslage aided in the physical sorting of 50 MSW samples and 25 recyclable samples. She provided team leadership skills to the sort team, as well as knowledgeable answers to questions on materials being sorted.