WSP

MERCEDES H. STROEVE
Hazard Mitigation & Emergency Management Planner

Years with the firm

1 year (2023)

Years total

3 years (in hazard mitigation)

Trainings

HMTAP

Emergency Management Training, IAEM

CEQA

Applications

Esri ArcGIS (ArcMap, Dashboard, Desktop, Model Builder, Notebooks, Online, Pro, HAZUS)

Python (Jupyter Labs, Visual Studio, IDLE, Anaconda)

Adobe Creative Suite (Acrobat, Illustrator, InDesign, Photoshop),

Microsoft Office Suite,

SharePoint

Languages

English

Office location

Denver, CO

CAREER SUMMARY

Mercedes Stroeve is a seasoned environmental professional with 10 years of experience in mitigating the cause and impacts of climate change. She brings a blend of interpersonal and technical skills with expertise in GIS mapping, Python coding, research, policy analysis, and fostering community and government partnerships. Specializing as a Hazard Mitigation and Emergency Management (HMEM) Planner, she contributes to HMEM initiatives from crafting community profiles, assessing social vulnerabilities, conducting inventories of local plans and policies, and devising strategic mitigation efforts.

Mercedes holds a master's in urban planning from the University of Southern California with a specialization in Planning for Climate Change and Sustainability. Her research during the program focused on resiliency to climate change, emergency management, and data analytics. Notable projects in her portfolio showcase the depth of her skills and commitment to addressing complex urban planning challenges.

Prior to pursuing her graduate program, Mercedes was based in Seattle, Washington, where she established a robust network of community and environmental planners. Her diverse background includes transportation demand management, environmental policy, land conservation, and hazard mitigation. Through the breadth of her experience in different professions, she has deepened her understanding of the complex intersectionality of social, economic, and environmental challenges that affect our communities.

EDUCATION

Masters, Urban Planning – Concentration in Planning for Climate Change & Sustainability, University of Southern California — 2023

Graduate Certificate in Sustainable Policy & Planning

BA, Community, Environment, and Planning, University of Washington — 2016

PROFESSIONAL EXPERIENCE

Hazard Mitigation & Emergency Management Planner, WSP

Denver, CO, 09/2023 – Present

— **Plan: State of Utah Enhanced State Hazard Mitigation Plan**
Undertook a thorough state-wide assessment, analyzing county and regional hazard mitigation plans. I Identified prevalent developmental trends encompassing land use changes, infrastructure development, population growth, and economic activities. Considering growth projections, I meticulously examined intersections with hazard zones to pinpoint potential points of vulnerability. I Integrated these vulnerabilities into Hazard Identification and Risk Assessment (HIRA) chapters and capability assessments, effectively identifying policy gaps and proposing practical mitigation strategies.

— **Plan: State of Montana Regional Hazard Mitigation Plans (Eastern Region, MT)**
Developed county community profiles assessing social vulnerabilities, identifying capabilities through inventorying local plans and policies, and strategizing mitigation efforts such as adopting IBC building codes, develop regional partnerships, and prioritize resiliency development.

— **Plan: South Dakota State Hazard Mitigation Plan**
Perform a state-wide capability assessment for 66 counties and 9 Tribes that include identifying supportive policies, programs, administrative, and technical capabilities. I cross reference local mitigation actions to related state mitigation actions that can offer support.

— **Python data processing automation**
Pioneered the creation of a Python-based data processing automation system, significantly improving time management and organizational efficiency. This automation streamlined the transformation of raw data, implementing advanced data cleaning and filtering techniques and providing strategic insights into population structure and vulnerabilities. Within the code, applied statistical methods and visualization tools are leveraged to identify outliers to better inform decision-making.

Master of Urban Planning Student, University of Southern California Sol Price School of Public Policy

Los Angeles, CA, 08/2021 to 05/2023

— **Report: California's Emergency Policy, Planning, and Management for People with Disabilities**
Authored a comprehensive 25-page report analyzing California's emergency management legislation, 2019 Assembly Bill 477 and Senate Bill 99, evaluating its effectiveness in safeguarding individuals with disabilities. The report employs a two-step methodology: (1) benchmarking the Emergency Operations Plan (EOP) against established standards from the Americans with Disabilities Act, CDC, and FEMA; (2) evaluating General Plan Safety Elements determining if disability components from the EOP are present. Using San Diego County as a study area, I determined AB 477 helped the 2022 San Diego County Emergency Operations Plan (EOP) become more inclusive to the disability community. However, the General Plan Safety Elements within the county jurisdiction showed a lack of coordination and information-sharing with the EOP. I recommended policy amendments to SB 99 to improve the coordination between the network of emergency management plans and ensure representation for people with disabilities to secure this population during a natural hazard event.

— **Report: Environmental Analysis and Design Proposal for Taylor Yard G2 Parcel**
Conducted environmental analysis and remediation for Taylor Yard G2 Site along the Los Angeles River addressing concerns for soil contamination, flooding, and liquefaction. This report examines the G2 Site's history of environmental injustices, identifies climate change related hazards and health impacts, and offers mitigation and adaptation solutions. The site design proposal incorporates environmental features, network connectivity, community input, and neighborhood identity to create a holistic and accessible experience in the space.

— **Report: Geospatial Package - Community Forest Grant Program**
Developed a geospatial package using Python to perform data cleaning and reformatting, and Model Builder in ArcGIS Pro to conduct geoprocessing analysis. This geospatial package is intended to be used as a scripting tool by others to identify available lots for tree planting and urban forestation in low-income neighborhoods. I framed my process around the criteria provided in the CAL FIRE's Urban and Community Forestry Grant Program. The goal of the program is to provide funding to projects in low-income communities in California that also lack greenspace. This funding can be used toward the "purchase of vacant, undeveloped, or underutilized neighborhoods" that will become a local greenspace.

Program Associate, Mountains to Sound Greenway Trust

Seattle, WA, 12/2018 to 07/2021

— **Plan: Mountains to Sound Greenway National Heritage Area (NHA) Management Plan**
This NHA Management Plan outlines the narratives and stories that define the Mountains to Sound Greenway NHA and lays out a plan for the interpretation and preservation of its resources. I worked with the Greenway Trust Executive Director and Deputy Director to establish a team of advisors, stakeholders outreach plan, and tribal relations plan. I cultivated relationships with communities that have historically not been at the table and had the privilege of consulting with the Salish and Coast Salish Tribal governments (the Tulalip Tribes, Snoqualmie Indian Tribe, Muckleshoot Indian Tribe, Yakama Nation, and Confederated Tribes of the Colville Reservation) to tell the story of the landscape through their lens and preferred platform. Embarking on a collective narrative from multiple tribal lenses and marginalized communities has instilled in me the practice of building new partnerships at the speed of trust. Leveraging these partnerships, I organized and facilitated multiple affinity group listening sessions, via Zoom and MURAL, an online whiteboard collaborative tool, with 40+ participants from historical, environmental, and cultural groups. Gathering their input, I co-developed an inventory of cultural and natural resources, strategies for preserving those resources, and an interpretive plan.

— **Geospatial analysis**
Managed the Greenway Trust GIS database, tracking land acquisitions, ownership, and new biking and hiking trail development. I used spatial data visualizations to tell the story of the Greenway Trust and environmental affiliates collective progress towards habitat connectivity, land conservation, mobility network expansion, and outdoor recreation opportunities. I also identified gaps in these endeavors and developed priority actions to address them. These visualizations were invaluable when presenting to legislators and grant sources to show the impact of their funds.

— **Policy advocacy**
Established policy and funding priorities in collaborating with a coalition of environmental groups and land management agencies that support the Greenway Trust programs. I developed one-pagers highlighting the positive impact and revenue generated by the prioritized programs and distributed it to coalition partners when lobbying US Congress and Washington State Legislators. The programs that we successfully advocated for include the Land and Water Conservation Fund (LWCF), Washington's No Child Left Inside, the Washington Wildlife Recreation Program, and Floodplains by Design by the Washington State Department of Ecology.

Transportation Specialist, Commute Seattle

Seattle, WA, 3/2017 to 12/2018

— **Contract: King County Metro, Business Programs for Transportation Benefits**
Acted as the primary coordinator for the marketing, sales, and operations of the ORCA Business Passport Program contract with King County Metro (KCM). This program is a cost-effective, comprehensive, annual transportation pass service that is offered to all employees as an incentive to reduce the business' drive-alone rate to work. I oversaw the $140k biennial sales and marketing contract with KCM, aimed at significantly increasing the market share of the ORCA Passport Program. I also maintained a diverse client base of more than 200 companies, delivering exceptional customer service both over the phone and in-person. I offered valuable support including comprehensive cost benefit breakdowns, step-by-step guidance on the enrollment process, and tools for seamless program

implementation. I exceeded the annual contract deliverable of selling 1500 ORCA passes to businesses by nearly 130%, showcasing exceptional sales and negotiation skills.

— **Contract: Seattle Public Health, Low-Income Transit Pass Enrollment**
Took the lead on a Washington State Department of Transportation grant-funded contract with Seattle Public Health to drive enrollment of hotel workers in the Seattle Central Business District onto ORCA LIFT. This transit pass offers discounted fares to individuals with low-income. Throughout both contracts, I diligently compiled quarterly invoice packages and program reports to showcase the sales and marketing ROI. Drawing from the insights gained during the ORCA LIFT outreach, I successfully negotiated the KCM contract to include alternative transit benefit programs that better serve the hospitality industry such as restaurants and the hotels who employ minimum wage workers. I exceeded the 2-year Seattle Public Health contract goal within 3 months by organizing 8 transportation fairs to educate and enroll hotel workers in the ORCA LIFT low-income fare program.

— **Data Analysis**
Proficiently compiled comprehensive quarterly reports for KCM partners, revealing valuable insights into the ORCA Business Passport shared market across various neighborhoods, industries, and company sizes. By meticulously analyzing the data and combining it with qualitative input from customer engagements, I successfully identified key drivers that significantly influenced our closing sales. Moreover, I adeptly pinpointed program outliers and proactively devised targeted solutions to enhance the overall equity and accessibility of our services at Commute Seattle. My data analysis revealed a notable underrepresentation in the hospitality and service industries, which often employ low-income individuals, prompting me to strategize tailored approaches to increase enrollment within these sectors.

— **Community outreach**
Took the initiative to reshape my role to better advocate for small businesses and businesses in the hospitality and service industry. This included moving away from our traditional marketing methods and taking a more community-based outreach approach. This involved forging strategic partnerships with local Chambers of Commerce and Business Improvement Associations to effectively communicate the advantages of transit benefit options. By working through these channels that small businesses already trust and prioritize, I learned about their shared barriers enabling me to connect them with transit benefits that best meet their needs.

Research Assistant, University of Washington Institute of Hazard Mitigation Planning and Research

— **Plan: Whatcom County Hazard Mitigation Plan**
Developed hazard profiles for vulnerable cities within Whatcom County, addressing specific challenges such as sea level rise in Sandy Point, coastal bluff collapse in Point Whitehorn, and various hazards around the Nooksack River in Ferndale. Utilizing federal, state, and local GIS data, I identified the overlay of hazards with land use zones and regulations and analyzed policy gaps in the Growth Management Act (GMA) and the Critical Areas Ordinance (CAO). To address concerns of hazard impacts, I devised capable adaptation approaches that included accommodating and adjusting to hazards, installing protection, or retreating from hazardous zones. I integrated tools such as community revenue, grants, regulations, and warning systems to ensure the viability of these approaches.

— **Report: Planning Through Storytelling: A Sea Level Rise Case Study**
Employed scenario planning as a powerful tool to simplify complex planning language, effectively communicating a range of future outcomes related to sea level rise. This approach helped stakeholders understand the risks and costs associated with mitigation and inaction, thus enabling homeowners and government agencies to assess their hazard-risk to mitigation-cost ratio. The combined analysis led to the formulation of pragmatic adaptation measures that allowed the community to adjust to hazards, implement protective measures, or consider retreat when necessary.

— **Report: City of Bellingham Hazard Mitigation Planning**
Using the City of Bellingham as a case study to look at how hazards, zoning, and land use tools interact. I identify hazards in Bellingham's that overlay with undeveloped parcels to identify which parcels are at risk of multiple hazards. The results of my analysis revealed that a significant portion of these high-risk areas lie outside the boundaries of cities, urban growth boundaries, and urban growth boundary reserves. To prevent urban development from encroaching into these vulnerable regions, I propose the implementation of purchase of development rights and strategic rezoning efforts.