



**Response for Request for  
Proposals for Environmental  
Consulting Services for the  
City of Commerce City**

October 30, 2020



Dear Dominic Martinelli and City of Commerce City Evaluation Team,

On behalf of Lotus Engineering and Sustainability, LLC (Lotus), I am pleased to submit the enclosed proposal to provide Environmental Consulting Services to the City of Commerce City (the City).

Since 2012, Lotus has delivered progressive sustainability solutions for public and private sector clients throughout the United States. We have supported dozens of municipalities of all sizes with their sustainability initiatives through policy and program development and administration; training and outreach; energy efficiency and renewable energy strategy creation; climate action planning; and stakeholder engagement. Alongside this work, we have completed dozens of greenhouse gas (GHG) inventories that are transparent, defensible, thorough, and replicable.

We have been involved with the development of plans, policies, and programs, and we have also implemented the actual plans and programs developed by ourselves and others. This provides us key insight to understand how programs and policies actually function when implemented. We will help develop policy recommendations and strategies that result in improved community health outcomes, environmental impacts, and overall community resiliency. Additionally, we will apply our expertise towards the development of a vision of organizational sustainability across all City functions. This effort will not only direct the City toward a more sustainable and vibrant future, but also engage community leaders, City staff, and the City's networks of stakeholders and residents.

With offices across the state we understand the varying needs of Colorado communities such as urban growth, community preservation, climate leadership, and community engagement. Our team will bring a variety of skillsets to the City: sustainability, finance, policymaking, engineering, spatial analysis, sustainable design, and urban planning. We believe that this cross-set of skills delivers a comprehensive and holistic approach to all our work as we can approach problems from multiple ways of thinking. Two of our team members at Lotus have worked in local governments, and we are familiar with the associated resource constraints -- it is our job to help you excel.

Lotus will be supported by Pinyon Environmental Inc. (Pinyon) to provide additional depth with air and water quality expertise. Pinyon is a Woman-Owned Small Business (WOSB) firm with 26 years of experience supporting private and government clients with environmental consulting expertise. Their staff includes 70 air quality specialists, water quality specialists, engineers, planners, biologists, geologists, hydrologists, and cultural resources professionals. They have completed multiple ground and surface water projects in Colorado. In addition, Pinyon has substantial experience with the evaluation of oil and gas pollutants and strong relationships with local agencies. Pinyon will support this project with personnel from their Lakewood, Colorado office.

Additionally, Lotus has teamed with AMBG Consulting to ensure that equity is built into the process and outcomes of Commerce City's environmental sustainability work. AMBG's bilingual team will utilize their existing network (as well as the City's) to ensure that all community members are meaningfully engaged throughout the development of the plan and that the final deliverables are crafted through an equity lens. Their work will ensure that all City residents have actionable and accessible ways to work towards a more healthy, just community.

We know how important this work is and how important that it is done well. We would be honored to help the City complete its sustainability, environmental planning, and policy work.

Sincerely,



**Hillary Dobos**

Principal and Co-Owner

Lotus Engineering and Sustainability

A: 1627 Vine St, Denver CO 80206

E: [hillary@lotussustainability.com](mailto:hillary@lotussustainability.com)

P: 303.550.6498



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## STATEMENT OF QUALIFICATIONS

**1. Respondent Name:** Lotus Engineering and Sustainability, LLC.

**2. Trade Name:** Lotus Engineering and Sustainability, LLC.

**3. Form of Entity:** Limited Liability Corporation

**4. Business Address:** 1627 Vine Street, Denver, CO 80206

**5. Primary Contact:** Hillary Dobos

Phone Number: (303) 550-6498

Email: [hillary@lotussustainability.com](mailto:hillary@lotussustainability.com)

**6. Year Organized:** 2012

**7. Where Organized:** Boulder, Colorado

**8. How many years has Respondent engaged in the environmental consulting and air quality monitoring business under its present name? Please state the names and dates of any previous business names.**

We have operated under the same name (Lotus Engineering and Sustainability, LLC.) since our founding in 2012. We have not operated under any other names prior to that date.

**9. Has Respondent been terminated from a contract or project in the last five years? Explain.**

Our team has not been terminated from a project or contract in the last five years or prior to that.

**10. Has Respondent been party to litigation related to its working in the last five years? Explain.**

Our team has not been involved in litigation relating to a project or contract in the last five years or prior to that.

**11. Please identify the number of staff available to work under the contract:**

Four (4) expert consultants; one of which is a Professional Engineer.

**12. Can Respondent provide 24-hour "on-call" emergency coverage?**

Our team does not generally provide 24-hour coverage as the nature of our work generally does not involve any sort of 'emergency' situations. If 24-hour coverage is required, Pinyon Environmental will provide those services (see below).

**13. On-Call Response Time:** N/A

**14. Has Respondent reviewed the draft contract including all insurance requirements?**

Yes

List any exceptions: None

## REFERENCES

### City of Las Cruces GHG Inventory and GHG Reduction Strategies

Contact Name: Lisa LaRocque, Sustainability Officer  
Business Name: City of Las Cruces, NM  
Business Address: 700 N Main St, Las Cruces, NM 88001  
Contact Phone: 575-541-2177  
Contact Email: [llarocque@las-cruces.org](mailto:llarocque@las-cruces.org)

**Work Description:** Lotus recently completed the City of Las Cruces' 2018 GHG inventory and supported the development of Greenhouse Gas (GHG) strategies to reduce emissions to 80 percent of 2018 levels by 2050. This work included the development of both a community and municipal inventory, in-person and remote stakeholder facilitation for two workshops to select GHG reduction strategies with a focus on equity and resilience, high-level modeling of strategy impacts, and drafting the final plan. Emily Artale was the project manager for this project.

### City and County of Denver 80x50 Climate Action Plan

Contact Name: Elizabeth Babcock, Manager Climate Action Team  
Business Name: City and County of Denver  
Business Address: 101 W Colfax Ave, Suite 800 Denver, CO 80202  
Contact Phone: 720-865-5385  
Contact Email: [Elizabeth.babcock@denvergov.org](mailto:Elizabeth.babcock@denvergov.org)

**Work Description:** The City and County of Denver's [80x50 Climate Action Plan](#) establishes a path to reduce community-wide GHG emissions by 80 percent by the year 2050. Lotus led the development of Denver's 80x50 Plan by conducting a review of processes and plans already established by the City; conducting a needs assessment; working with a diverse network of over 80 stakeholders and community experts in the fields of energy and transportation to identify the most relevant and impactful strategies for Denver to pursue; modeling the impacts of stakeholder-identified emissions reduction strategies; and drafting a CAP that will support the City in achieving its goals. Hillary Dobos was the project manager for this project.

Lotus has additionally completed follow-up work for the City to model the impacts of additional strategies that the City is considering pursuing, is continuing to support Denver through annual GHG emissions inventories and other work as requested, and is leading the development of an aggressive building electrification implementation plan.

### Town of Erie, Colorado Sustainability Master Plan

Contact Name: Todd Fessenden, Public Works Director, Town of Erie  
Business Name: Town of Erie, CO  
Business Address: 645 Holbrook St, PO Box 750, Erie, CO 80516  
Contact Phone: 303-926-2895  
Contact Email: [tfessenden@erieco.gov](mailto:tfessenden@erieco.gov)

**Work Description:** Lotus worked with the Town of Erie to create the Town's first [Sustainability Master Plan](#). The process included in-depth research; informational interviews with staff, community members, and partner agencies; a series of advisory board meetings; stakeholder workshops; and community outreach at community events and a project open house. The result was an actionable plan for strategies that the Town



and its partners can implement over the coming five years to enhance sustainability as the community grows. Strategies and actions addressed both internal (i.e., organizational) and community-wide sustainability. This Plan will serve as a decision-making tool and includes information on potential funding sources, partners, and actions that the Town can pursue in the areas of energy, recycling, transportation, and education and outreach. Julia Ferguson was the project manager for this project.

## RATES

Please note, all Lotus team member rates are the same regardless of the timing (i.e., regular/night/weekend/holiday).

Position	Rate
Co-Owner and Principal	\$130/hour
Senior Associate	\$105/hour
Research Associate	\$85/hour
Associate	\$70/hour

Travel time is billed at half of the relevant staff member's normal hourly rate. Mileage expenses will be commensurate with the relevant Internal Revenue Service mileage reimbursement rate (i.e., \$0.575/mile in 2020). Other travel expenses (e.g., lodging) are not expected for this project, but should they occur, there will be no mark-up in expenses.

Materials related to the project will be expensed at cost (i.e., no mark-up is applied).

No environmental charges or other expenses are anticipated.



## STATEMENT OF QUALIFICATIONS

- 1. Respondent Name:** Pinyon Environmental, Inc.
- 2. Trade Name:** Pinyon Environmental, Inc.
- 3. Form of Entity:** S Corporation
- 4. Business Address:** 3222 South Vance Street, Suite 200, Lakewood, CO 80227
- 5. Primary Contact:** Scott Epstein  
Phone Number: (303) 980-5200  
Email: [epstein@pinyon-env.com](mailto:epstein@pinyon-env.com)

**6. Year Organized:** 1993

**7. Where Organized:** Lakewood, Colorado

**8. How many years has Respondent engaged in the environmental consulting and air quality monitoring business under its present name? Please state the names and dates of any previous business names.**

Pinyon has operated over the past 10 years as Pinyon Environmental, Inc. and 17 years prior to that as Pinyon Environmental Engineering Resources, Inc.

**9. Has Respondent been terminated from a contract or project in the last five years? Explain.**

No.

**10. Has Respondent been part to litigation related to its working in the last five years? Explain.**

No.

**11. Please identify the number of staff available to work under the contract:**

Pinyon has approximately 70 staff members prepared to support this contract. Approximately 20 of those staff members specialize in either air or water quality. The project team will have access to any and all Pinyon staff so that the appropriate technical experts will be engaged to meet the project objectives.

**12. Can Respondent provide 24-hour "on-call" emergency coverage?**

Our team does not generally provide 24-hour coverage as the nature of our work generally does not involve any sort of 'emergency' situations. If 24-hour coverage is required, we will work with the City to ensure necessary coverage is provided.

**13. On-Call Response Time:**

Pinyon's response time to Commerce City is approximately one hour for personnel. Additional time may be required if a response requires specialty equipment.

**14. Has Respondent reviewed the draft contract including all insurance requirements?**  
Yes

**List any exceptions:** None

# REFERENCES

## Antero Resources Corporation - Air Quality Compliance

Contact Name: Jena Resnick  
Business Name: Antero Resources Corporation  
Business Address: 1615 Wynkoop St. Denver, CO 80202  
Contact Phone: 303-818-1957  
Contact Email: [jresnick@anteroresources.com](mailto:jresnick@anteroresources.com)

**Work Description:** The Pinyon Team assists with all air quality related permitting and compliance for Antero’s upstream and midstream oil and gas assets. Completed and ongoing tasks include annual criteria, hazardous, GHG emissions assessments, and database management for all of these values. The Pinyon Team also manages all new facility and facility modification air permits, along with all regulatory applicability determinations that go into the permit applications. Emissions are also interpolated to generate annual trends for emissions sources, company-wide totals, and per-well metrics. The project uses these assessments as a baseline evaluation for which GHG goals for future field development were created and for continued participation in voluntary nation-wide and international GHG programs. Additionally, the Pinyon Team has completed dispersion modeling when needed for oil and gas facility permit applications, including screening and refined modeling.

## City and County of Denver, 33rd Street Outfall Project

Contact Name: Steve Choi, P.E.  
Business Name: City and County of Denver  
Business Address: 2000 W 3rd Avenue, Denver, CO 80223  
Contact Phone: 303-446-3648  
Contact Email: [Steve.Choi@denver.org](mailto:Steve.Choi@denver.org)

**Work Description:** The 33rd Street Outfall is located in the heart of the Denver’s River North Arts District (RiNo). The outfall services approximately a 2000-acre watershed and is designed for a five year storm event. The project objectives included improving the South Platte River visibility and access, adding active spaces, and incorporating green design to improve water quality. Working with multiple teaming partners, Pinyon supported evaluations of environmental conditions and potential impacts to surface water on the project. During the project planning phase, it was recognized that the outfall was an opportunity to implement a visible water quality strategy for the everyday “Urban Drool.” Ms. Sydney Shell, now working for Pinyon, designed the outfall to incorporate energy dissipators, water quality pools, water quality wetlands, and native grass infiltration area. Wetland plants were incorporated to remove pollutants and enhance the aesthetic of the concrete structure. A native grass buffer at the bottom of the outfall helps slow and infiltrate water prior to returning to the South Platte River. The outfall was also designed to achieve a no rise floodplain certification. Ms. Shell was responsible for the design alternatives, site and structural grading, planting plan, overall aesthetics, and construction observation.





## Eagle River Water and Sanitation District – Ongoing Water Quality, Compliance, Regulatory, and Technical Support

Contact Name: Siri Roman, PE, Director of Operations  
Business Name: Eagle River Water & Sanitation District  
Business Address: 846 Forest Road, Vail, CO 81657  
Contact Phone: 970-476-7480  
Contact Email: [sroman@erwsd.org](mailto:sroman@erwsd.org)

**Work Description:** Pinyon provides continued water quality, compliance, regulatory, and technical support to the Eagle River Water and Sanitation District (District) for on-going support that spans a period of over 10 years. During the last decade, several water quality investigations and reports have been completed for the District to support a range of water resource planning decisions. One example is the Gore Creek Water Quality Improvement Plan that was developed to guide the design and implementation of measures to improve Gore Creek water quality and stream health. This effort included the compilation of historical water quality, biological, spatial and drainage infrastructure information; data analysis to identify biological stressors and pollution loading sources; and identification of projects and strategies to improve water quality. Project tasks included research and development of approaches to improve riparian corridor quality, stream habitat, stormwater management controls and maintenance programs, and to reduce pollutant loading associated with land use activities and urban runoff. The project required developing and implementing a pilot stormwater sampling plan for identifying and characterizing pollutants associated with different land use activities; conducting an impervious surface analysis using GIS; and performing a stream habitat assessment. The effort required extensive stakeholder collaboration, outreach and coordination. Data collected and interpreted through this effort continues to be used by stakeholders for multiple scientific, permitting, planning, and management purposes.

## RATES

Pinyon’s rates typically range from approximately \$85/hr to \$190/hr depending on the technical complexity of the work. Pinyon’s scientist and specialist rates are most likely to be used on this project and those include the following:

Position	Rate	Position	Rate
Scientist III	\$190/hour	Field Scientist I	\$107/hour
Project Manager I	\$163/hour	Field Scientist	\$99/hour
Scientist II	\$150/hour	Field Specialist I	\$92/hour
Scientist I	\$125/hour	CAD/GIS Specialist	\$89/hour
Scientist	\$115/hour	Field Specialist	\$85/hour
CAD/GIS Specialist I	\$115/hour	Administration	\$64/hour

Travel time is billed at the same rate as the staff member’s normal hourly rate. Mileage expenses will be consistent with the relevant Internal Revenue Service mileage reimbursement rate (i.e., \$0.575/mile in 2020). Other travel expenses (e.g., lodging) are not expected.

Materials, laboratory analysis, or environmental equipment needing to be purchased, contracted, or rented will be expensed at cost + 5%.



## STATEMENT OF QUALIFICATIONS

1. **Respondent Name:** AMBG Consulting, LLC.
2. **Trade Name:** AMBG Consulting, LLC.
3. **Form of Entity:** Limited Liability Corporation
4. **Business Address:** 12935 E 48th Avenue, Denver, CO 80239
5. **Primary Contact:** Abby Bohannon  
Phone Number: (720) 771-4133  
Email: [abby@ambgconsulting.com](mailto:abby@ambgconsulting.com)

6. **Year Organized:** 2019

7. **Where Organized:** Denver, Colorado

8. **How many years has Respondent engaged in the environmental consulting and air quality monitoring business under its present name? Please state the names and dates of any previous business names.**

AMBG has not engaged in environmental consulting or air quality monitoring, but will offer support with community engagement and incorporating equitable practices throughout this process.

9. **Has Respondent been terminated from a contract or project in the last five years? Explain.**

No, AMBG has successfully carried out all projects and contracts and never been terminated.

10. **Has Respondent been part to litigation related to its working in the last five years? Explain.**

No, AMBG has never been party to litigation related to its working in the past 5 years.

11. **Please identify the number of staff available to work under the contract:**

Our team has two (2) staff committed to working on this project; one with a background in bilingual community organizer and one community and public health professional.

12. **Can Respondent provide 24-hour “on-call” emergency coverage?**

Our team does not generally provide 24-hour coverage as the nature of our work generally does not involve any sort of ‘emergency’ situations. If 24-hour coverage is required, we will work with the City to ensure necessary coverage is provided.

13. **On-Call Response Time:** N/A

14. **Has Respondent reviewed the draft contract including all insurance requirements?**  
Yes

**List any exceptions:** None

## REFERENCES

### **Longmont, Colorado: Equitable Carbon-Free Transportation Roadmap (in Progress)**

Contact Name: Lisa Knoblauch, Sustainability Program Manager

Business Name: City of Longmont

Business Address: 350 Kimbark St, Longmont, CO 80501

Contact Phone: 303-651-8403

Contact Email: [Lisa.Knoblauch@longmontcolorado.gov](mailto:Lisa.Knoblauch@longmontcolorado.gov)

**Work Description:** AMBG Consulting identified and engaged key stakeholders in Longmont, Colorado to participate in crafting a Carbon-Free Transportation Roadmap, with a focus on populations most impacted by transportation plans (e.g., the Latinx community, low-income residents, people with disabilities, and older adults). As part of these efforts, AMBG consultants developed creative community outreach materials to understand community members' perspectives and ensure community voices were equitably engaged in developing the roadmap. Community outreach and engagement activities included an online questionnaire, key informant interviews, intercept interviews, and focus groups, which informed AMBG's final recommendations to help the City of Longmont drastically reduce fuel consumption while furthering equitable practices.

### **Housing Guide for Public Health Professionals (June 2020)**

Contact Name: Kate Jankovsky

Business Name: Colorado Department of Public Health & Environment

Business Address: 4300 Cherry Creek S Dr, Denver, CO 80246

Contact Phone: 303-692-2947

Contact Email: [kate.jankovsky@state.co.us](mailto:kate.jankovsky@state.co.us)

**Work Description:** In June of 2020, AMBG consulting collaborated with the Colorado Department of Public Health & Environment, affordable housing advocates, community members, and local public health agencies in Morgan, Montezuma, Mesa, Denver, Kiowa, and Prowers counties to develop a Housing Guide for Public Health Professionals. This guide was created with the goal of helping public health entities understand systems and policies that impact housing and how to support investments in quality, affordable, and stable housing from a public health perspective. The findings were also crafted with an equity lens to help public health entities understand how solutions may disproportionately burden low-income individuals and communities of color, and how an equitable approach is needed to ensure affordable, accessible, safe, and stable housing is available.

### **Landscape Assessment of Community Organizers (January 2020)**

Contact Name: Felisa Gonzales, Evaluation and Learning Manager

Business Name: The Colorado Trust

Business Address: 1600 Sherman St, Denver, CO 80203

Contact Phone: 303-539-3110

Contact Email: [Felisa@coloradotrusted.org](mailto:Felisa@coloradotrusted.org)





**Work Description:** In the fall of 2019, AMBG conducted a statewide community organizing scan to better understand the priority issues of community organizing groups or organizations, their approaches to community organizing, and the unique challenges they face. The final deliverable (a written report) highlighted the perspectives and expressed needs of community organizers across Colorado and can serve as a resource to local, regional, and national funding organizations, or others who are interested in learning more about the organizing landscape in Colorado. To complete the scan, the AMBG team collected quantitative and qualitative data from an online survey, key informant interviews, and a focus group. To identify organizing groups or organizations, the consultants used a social media outreach strategy, their personal and professional networks, and a snowball sampling method.

## RATES

AMBG's rates vary based on the service being provided; please see the table below.

Service	Rate
Community Engagement & Outreach	\$65/hour
Facilitation Services	\$80/hour
Spanish Language Translation/Interpretation	\$65/hour
Content Creation	\$65/hour
Administrative	\$50/hour











## Additional Relevant Information

### FIRM PROFILES

#### Lotus Engineering and Sustainability

Lotus is a women-owned sustainability consulting firm. We merge the technical and pragmatic approaches of engineering and finance with the holistic and innovative approaches of planning and sustainability; we are systems thinkers at heart.

We have supported dozens of public sector clients with their climate action and adaptation plans, GHG emissions accounting, communications and engagement, program design and management, and market and policy analyses. This broad knowledge base is complemented by our ability to communicate technical issues to different stakeholder groups through visually appealing reports, graphics, data visualizations, and GIS mapping.

Our key specializations include:

- ▶ **Climate action and adaptation planning.** Through research and reporting, communications, stakeholder engagement, and data analysis and modeling we help communities identify what they need to do to integrate sustainability into their long-term planning and programming.
- ▶ **Program development and implementation.** We have helped with all facets of sustainability programs: we have developed, managed, raised funding, facilitated, implemented, and managed reporting. Through our work, we have developed a strong understanding of the various constraints our client's encounter (i.e., reporting requirements, time and budgetary constraints, etc.) when implementing a program. In return, we thrive at aligning the constraints and opportunities until the most productive, efficient, and strategic configuration arises.
- ▶ **Market and policy analysis.** As neutral advisors, we have conducted research and recommended the best tools, methods, and/or strategies to accelerate the adoption and success of various climate action and adaptation projects and programs in both the public and private sectors.
- ▶ **Communications and engagement.** One of our greatest strengths is the ability to take technical information and translate it into information that can be easily understood by decision-makers and the general public. We have utilized various outreach platforms including websites, open houses, surveys, case studies, blogs, social media, and reports to promote climate action plans to a vast list of stakeholders (internal and external). We excel at facilitating diverse groups of stakeholders, both in-person and virtually, and leading conversations that drive to consensus and result in decisions that can make real change.

#### Pinyon Environmental

Lauren Evans founded Pinyon in 1993 on the belief that consulting companies should provide quality services with a focus on each client's individual needs and requirements. She passionately believes to this day that professional services should be delivered in a cost-efficient manner. It was her leadership that helped the organization embrace excellence at every level and pass it on to clients by providing high-quality services. The company continues to be dedicated to these goals, making Pinyon Environmental, Inc. a well-respected environmental consulting firm that it is in the industry today.

Pinyon has over 27 years of experience dedicated to providing environmental services in the Rocky Mountain Region. Our technical professionals, now numbering over 70, are some of the finest environmental scientists and engineers in the industry. Each is genuine in his or her desire to help clients achieve environmental compliance. Core beliefs and founding principles have kept the Pinyon mission on track to this very day, assisting clients with cost-effective and fit-to-need environmental solutions, and making Pinyon one of premier environmental firms in the region.

### AMBG Consulting

AMBG Consulting was founded in 2019 with the belief that those who are most impacted by funding and planning decisions should be the key stakeholders informing and making those decisions. Consultants at AMBG bring experience in community outreach, engagement, and organizing, as well as capacity building, strategic planning, data collection, and evaluation. Their work is informed by professional training in public health, psychology, sociology, and urban and regional planning. Based in Denver, Colorado, AMBG has partnered with an array of clients, including local municipalities, county and state health departments, grassroots organizations, foundations, and nonprofits. AMBG consultants tailor their outreach and evaluation services to ensure data collection and planning efforts are comprehensive, inclusive, and equitable, prioritizing authentic community engagement and highlighting community voice.

## OUR TEAM'S RELEVANT EXPERIENCE

Our project team brings significant experience in sustainability and climate action planning; GHG reduction goal setting; emissions strategy modeling; policy analysis; community outreach and engagement (including weaving equity and environmental justice into processes and outcomes); stakeholder facilitation (remote and in-person); and air and water quality monitoring, measurement, and management. We excel at helping clients look at their environmental and social initiatives through various lenses including planning, engineering, public relations, financial, political, and environmental. We understand the primary (and secondary) barriers and challenges to wide-scale adoption of sustainability policies and can navigate these barriers through thoughtful and effective communication, data-driven decision making, equitable evaluation practices, and informed research.

### Greenhouse Gas Accounting, Baseline, and Modeling Expertise

- ▶ We have completed and evaluated over *40 customized GHG emissions inventories* for public and private sector clients using a range of protocols and methodologies. Most of these inventories utilize the Global Protocol for Community-Scale GHG Inventories (GPC).
- ▶ We have *conducted QA/QC* on a variety of data sets, including current and past GHG data, with a concentration on accuracy and transparency. This has led to the *revision of several GHG inventories*.
- ▶ We have *modeled the GHG emission reduction potential* of various climate action strategies and compared those strategies against key community values. Also, we have *estimated initial and ongoing costs and time commitments* for programs and policies.





- ▶ We are *diligent about collecting accurate data*. We are well versed in data capture and tracking limitations, and we understand the barriers to creating a single, unified approach to GHG accounting. Through our expertise, we can come up with *creative, transparent approaches* to collect accurate data. This will ensure that future GHG inventories will be able to be completed internally. Also, when collecting data, we are *highly organized* and will have all questions for the entity prepared before outreach to *ensure minimal repeated data requests*.

## Sustainability Policy and Planning Expertise

- ▶ We have completed many *climate action and adaptation planning projects for municipal clients*, most notably: [Summit County, Colorado](#); [the City and County of Denver, Colorado](#); [Eagle County, Colorado](#); and the [City of Las Cruces, New Mexico](#). We focus on helping communities take action by ensuring that *robust implementation planning* is part of the climate action plan.
- ▶ We have helped *clients set GHG emission reduction targets* and, if that target is already set, identify strategies that are *actionable* and will ultimately achieve those reductions and align with guiding principles.
- ▶ When developing sustainability and climate action plans, we encourage our clients to broaden the lens through which they view success and *consider how their sustainability strategies need to benefit the entire community and align with guiding principles*. This often leads to discussions on larger policy changes, including those related to equity, and ensures larger community buy-in and acceptance.
- ▶ We have led the development of sustainability-related policies for local government and have also helped to develop and manage the programs that result from those policies. We *understand how to navigate the complex regulatory barriers, financial barriers*, and educational and communication barriers to ensure that the sustainability programs we manage are successful.
- ▶ Pinyon has five *Envision Framework Certified Sustainability Professionals* who provide tracking and technical support for sustainable construction, primarily for infrastructure projects. We assist clients with training and understanding of how various project choices impact sustainable practices for infrastructure projects and when desired, assist with obtaining project certification. On multiple construction projects, Pinyon has *tracked sustainability measures and assisted clients with compliance commitments and tracking*. The projects include tracking of landfill diversion quantities, water efficiencies, and reuse of materials such as brick and wood on a large land development project. Pinyon is also currently assisting on two Colorado projects with tracking of sustainability commitments and progress towards Envision certification including a pedestrian mall and a road construction project.

## Air Quality Expertise

- ▶ Pinyon has the technical expertise to create *specific, defensible, and science-based* air quality guidance documents. For example, our team has been completing the screening and refined dispersion modeling including analysis of monitoring station location and recorded data. These analyses have been completed at the permitting, EA, and EIS level for over 15 years.

- ▶ Pinyon has prepared *comprehensive emission inventories for permit applications, EAs, and EIS*, giving us a strong understanding of emission impacts from all phases of oil and gas facilities and other sources. For example, our team has created emission inventories for an oil and gas EIS that presents construction, drilling, and completion emissions, and *operations emissions for approximately 30 years for the full lifecycle of the wellsite facility*.
- ▶ Our team is successful at working with both regulatory agencies and private industry. Specifically, Pinyon has been working with *oil and gas operators throughout Colorado and other states for a combined 20 years*. Our teams' oil and gas experience includes a deep understanding of regulations, along with consistent tracking of proposed and new regulations and requirements, especially in Colorado. We can use this industry experience to assist the City in meeting their objectives.
- ▶ Pinyon has submitted *hundreds of reports required by local, state, and federal agencies* in different required electronic and hard copy formats. Reports, along with the raw and supporting datasets are archived in *a clear, organized folder structure for ease of client and agency review*. For example, our team's work on health risk assessments for different exposure levels and operating scenarios required iterations of modeling and emissions calculations each requiring their own submittal and agency review.

## Water Quality Expertise

- ▶ Pinyon has long-standing contracts with the City and County of Denver and the City of Westminster to provide environmental support of a variety of different environmental consulting specialties including *sampling, data analysis, evaluation, permitting, and water quality support*.
- ▶ Pinyon is also a trusted advisor to Eagle River Water and Sanitation District, providing extensive *support to address water quality standards and environmental challenges*. Pinyon's local government clients also include the City of Aurora and Boulder County where Pinyon has completed more than 20 projects for each of those clients since 2008.
- ▶ Pinyon maintains *strong relationships with the local environmental regulatory agencies and commissions* including the Colorado Department of Public Health and Environment and the Colorado Water Quality Control Commission, where Pinyon's Lauren Evans formerly served as a commission member.
- ▶ Pinyon routinely assists clients with *sampling, analysis, and development of strategies* to either remediate groundwater or decrease impacts of surface flows to receiving waters. Pinyon's expertise includes *multi-disciplined projects requiring collaboration with a variety of stakeholders* to achieve key objectives. Their team has extensive experience with both groundwater and surface water sampling and data analysis. Pinyon personnel utilize EPA sampling protocols for both surface water and groundwater sampling methodologies.
- ▶ Pinyon's team advises clients regarding water quality through *both engineering controls and administrative procedures to achieve water quality objectives*. In addition, the team routinely deals with drilling projects, soil logging, and classification of geologic samples, work on brownfield sites, preparation of Voluntary Cleanup Plans for brownfield sites, and the preparation of management plans associated with potentially impacted soil and groundwater. Examples of Pinyon's water quality improvement projects include:

- ▶ Evaluations and recommendations for Boulder County relating to potential mine tailings impacts on road construction projects.
- ▶ Evaluation of water quality including a bathymetric survey for the City and County of Denver's Heron Pond project.
- ▶ Pinyon has been a consultant for the Arizona Department of Environmental Quality for approximately six years and routinely evaluates and recommends remediation strategies to achieve improved groundwater quality.
- ▶ Design and construction of a water treatment system to address naturally occurring metals in groundwater at an apartment complex in Denver.
- ▶ Recommendations for additional vegetative buffer areas and modified procedures to manage run-off on a Regional Transportation District light rail construction project.
- ▶ Evaluation and management of groundwater and surface water interconnectivity on the Cherry Creek outfall project.

## Stakeholder Engagement Expertise

- ▶ Building partnerships is paramount to our advising services. We can help *foster existing relationships*, facilitate challenging conversations if needed, and strengthen partnerships for future endeavors.
- ▶ We know that there are countless ways to approach stakeholder engagement and that the most impactful *approach will vary by audience and subject matter*; our team has experience with a wide variety of stakeholder engagement techniques and skills and we will work to find the solutions that are most appropriate for your project.
- ▶ We are *nimble and flexible* and will never apply a one-size-fits-all approach to the stakeholder process; rather, we will *adapt our strategies as needed* to improve the process and ensure data collection and planning efforts are comprehensive, inclusive, and equitable. This includes using a mix of methods to engage community members, regardless of their language preference, ethnicity, race, age, socioeconomic status, ability, or comfort with technology. We aim to identify and eliminate barriers to engagement, highlighting community voice, and *meet people where they are at* throughout the process.
- ▶ We design stakeholder engagement processes to be *engaging and fun*. Whether it is through conducting community outreach at *community events and festivals*, planning workshops that include a range of *activities for different personality types*, or supporting online feedback mechanisms through websites, survey tools, and data visualization projects, we know that a community of *stakeholders that enjoy being engaged* are more likely to continue to be involved in the process and bought into the results.
- ▶ We build capacity to ensure that *materials are accessible and readily understood* and *stakeholders can be informed decisionmakers* in their communities.
- ▶ We believe that plans, projects, and programs must be *responsive to the needs and concerns of the community* and stakeholders to be successful. We create space in our stakeholder processes for *transparency, open communication, and dialogue* that will ensure that the end result is representative of the clients' needs, goals, and values.



## Communications and Outreach Expertise

- ▶ Sustainability communication is critical to success. We know that for this information to be effective, it must be understood by the public. We have a data visualization expert who can create *meaningful graphics using Python, RStudio, and Adobe Illustrator* and has years of *mapping and spatial analysis experience using ArcGIS and ArcGIS StoryMaps*.
- ▶ We realize that there are different lenses with which to vet climate action strategies. We work with our clients to *identify key community values that support the entire triple bottom line philosophy* and use those to help prioritize which actions are most meaningful to the community (i.e., these may include social equity, air quality, cost to implement, etc.) in addition to those actions that will have the largest impact on reducing GHG emissions.
- ▶ We are forward-thinking and understand how difficult it can be to share this information with a non-technical and/or public audience. *We work with our clients to brainstorm effective communication platforms in addition to traditional, formatted reports* that may include websites, simplified handouts with data visualizations, informational videos, infographics, interactive PDFs, story maps, and other methods of storytelling.

## Justice, Equity, and Inclusion Expertise

- ▶ AMBG worked with residents and the City of Longmont to *craft recommendations for how the City could move towards carbon neutrality while ensuring all Longmont residents have equitable access to carbon-reduced technology*, in part to level the playing field and reduce the climate burden on low-income earners, communities of color, and older adults. This plan is in the final stages, to be released in November 2020.
- ▶ AMBG worked with the Colorado Trust to conduct a *statewide needs assessment of community organizers* and crafted recommendations for how funders could support these entities. Many organizers highlighted their commitment to working with communities who face systemic challenges around food access, housing, healthcare, and clean air and water; *several of the recommendations were focused on reimagining grantmaking using an equity lens* to better equip communities working with these challenges.
- ▶ AMBG is currently working on Elevate the Peak: a project commissioned by the Palmer Land Trust to *bring a variety of stakeholders interested in land conservation and recreation together*. The primary focus of this project is to engage a diverse audience of land managers, recreators, and conservation activists from the BIPOC, Latinx, LGBTQ+ and disability communities, and other community members to *craft a collective vision that ensures the final plan is representative and inclusive* of viewpoints across the Pikes Peak region.
- ▶ Lotus worked with the Colorado Energy Office on the *Low-Income Community Solar Demonstration Project* to *design a community solar project for income-qualified households*. This included research, understanding and defining energy burden, and countless interviews with low- to moderate-income (LMI) household and advocacy organizations.

- ▶ Lotus successfully identified energy costs as a contributing factor to household energy burden and *developed the Gunnison Valley – Home Energy Advancement Team program*, an LMI energy efficiency program to make significant energy and safety improvements in homes.
- ▶ Lotus worked with *Boulder Housing Partners* to *develop a comprehensive public outreach campaign* to inform LMI residents, the majority of whom were Spanish speaking, about energy conservation. The program was presented in both English and Spanish and was designed to use intrinsic and extrinsic rewards to motivate changes in behavior.
- ▶ Lotus is working with the City and County of Denver to develop a *beneficial electrification implementation plan with a strong emphasis on the transition for LMI households*, with a goal of 40 percent people of color representation. We are addressing non-market rate versus market-rate incentives and policies, stranded assets, mobile home, and multi-family building typologies and technologies, and specific LMI messaging.

## Municipal Governance Expertise

- ▶ We have *deep municipality experience*. Two members of the Lotus team, Hillary and Julia, have worked for local governments and have direct experience guiding sustainability programming and policy development at the local level.
- ▶ We understand the sometimes-conflicting nature of organizational priorities, the processes that are necessary to follow to move this work forward, and, importantly, how to *weave sustainability and climate action throughout municipal priorities and decision-making processes* to ensure that goals are met.
- ▶ More broadly, the majority of our full team’s work at Lotus is with local governments; *supporting municipalities and local governments is our passion* and what drives our daily work.

## A Note on Engaging Stakeholders and the Public Remotely

Gathering feedback and engaging our clients' stakeholder communities and the public in a way that encourages buy-in and supports effective project implementation is a top priority for Lotus. While traditionally we have relied on in-person events and meetings to gather feedback and engage stakeholders, we are also skilled at facilitating remote engagement activities that empower your community to be involved in this process while meeting stakeholders where they are.

There is increasing demand for and interest in these types of remote engagement activities as communities across the country react to and manage the COVID-19 impacts on their local regions. Lotus has both the tools and knowledge needed to ensure that your remote facilitation and public outreach efforts continue to be engaging, relevant, and impactful; to do this we can use a variety of tools such as virtual workshops with multiple breakout rooms, online virtual whiteboarding, engaging presentations, and outreach materials, and survey and feedback tools that allow stakeholders to provide input both during meetings and at other times throughout the project. We understand that remote engagement means that you often have to change the approach to both informing stakeholders and the community of the work being done and gather feedback on results, and we will work with you to prioritize the engagement goals and deliver facilitation and engagement services that ensure your project is successful.





## Work Samples

Several work samples can be retrieved online:

- ▶ [City and County of Denver, Colorado 80x50 Stakeholder Report.](#)
- ▶ [Town of Erie, Colorado Sustainability Plan.](#)
- ▶ [Summit County, Colorado Climate Action Plan.](#)
- ▶ [Colorado Energy Office Rebuild, Re-energize, and Recover Colorado.](#)
- ▶ [Colorado Energy Office Low-Income Community Solar Demonstration Project.](#)
- ▶ [Routt County, Colorado Greenhouse Gas Emissions Inventory and Forecast.](#)
- ▶ [Landscape Assessment of Community Organizing in Colorado.](#)
- ▶ [Guide to Affordable Housing Advocacy for Public Health Professionals.](#)
- ▶ [Advocacy-based Latinx Leadership Development Opportunities in Larimer County: Efforts, Gaps, and Best Practices.](#)

Several more recent deliverables may be available by request; some reports from this year have not yet been published online. Also, we have created many customized tools for our clients including GHG emission inventories and modeling tools. Snapshots can be provided upon request.

## PROJECT OBJECTIVE

The City recognizes the role local communities play in supporting the long-term health of community members and contributing to improved health, safety, and environmental outcomes locally and regionally. We understand that the City's goals are to work with a qualified consultant team to:

- ▶ Develop policy recommendations and strategies to improve community health outcomes, environmental impacts, and community resiliency.
- ▶ Develop a vision of organizational sustainability across all City functions and departments.
- ▶ Provide air quality monitoring services, technical expertise, and policy recommendations pertaining to local air quality regulations.
- ▶ Assess air pollution risks within the community, monitor these sources, and develop adaptation and mitigation strategies to improve air quality outcomes in the community.
- ▶ Provide water quality monitoring services, technical expertise, and policy recommendations as it pertains to water quality and watershed improvement strategies at the sub-watershed level.

Further, the City wishes these efforts to occur in coordination with the City's current Comprehensive Plan update. It is our team's stance that considerations of community health, equity, and environmental justice should be woven throughout the process of this work, as well as the outcomes, to ensure that all community members can access the benefits that will come from this work including improved community health, safety, and environmental outcomes.

We believe that the team that we have assembled for this proposal, including experts in sustainability, environmental management and monitoring (air and water), and community health and equity, is the most qualified team to complete this work for the City.

This work will lean on insight and guidance from City staff, informed and key stakeholders from within the community, and a robust and equitable public engagement process. We will work with the City to focus our attention on metrics that pose the greatest risk or impact to the community, have the greatest potential for change, align most closely with the community's values and vision, and are within the City's sphere of influence. The final deliverables and policy recommendations will provide long-term guidance to the community without rigidity. Understanding that Commerce City will continue to grow and change, this work will provide a framework that is flexible and can adapt easily as needed.

## PROPOSED PROJECT APPROACH

Our team has prepared the scope of work listed below, which we believe is the most effective approach to achieving Commerce City's goals and will benefit the entire community. However, we also understand that the final scope of work may be revised based on conversations with City staff. We are open to further collaboration. This effort will be a true partnership with the City; we see our team as an extension of your staff, bringing in specialized expertise and resources, while also providing a neutral face for the project.

Please note, based on the responses to questions submitted relevant to the RFP, we understand that Commerce City has budgeted for this work to be completed within six months. While many of the scope items can be completed within that time frame, in our experience there are some items in the scope that often take additional time beyond six months to complete. Specifically, an evaluation of water quality in a sufficient number of locations, and considering seasonal variations and precipitation inputs, may require that this portion of the work be implemented in a phased approach. Initial phases include establishing an evaluation plan and review of existing, while secondary stages would include additional data collection, and the final stages would likely involve policy recommendations, strategic design, and specific action items to improve water quality; this entire process may take longer than six months. Additionally, we believe that a robust stakeholder and public engagement process needs to be flexible to scheduling constraints and the needs of the community, and some of these activities may not fit within a six-month timeline.

Therefore, we present to the City a phased scope of work based on the needs identified in the RFP. We have detailed the approach and related costs for the first phase of work, which we believe can be completed within six months. We have identified and provided cost estimates for the work that would follow under a Phase II or Phase III. We would be happy to discuss alternative approaches to the project approach and schedule to better meet the needs of Commerce City. The general tasks of the proposed project scope and which phase they fall in are as follows:

Task	Phase I	Phase II	Phase III
Task 1: Project Kick-Off and Work Plan	X		
Task 2: Develop a 2020 GHG Inventory	X		
Task 3: Develop a Vision of Organizational Sustainability	X		
Task 4: Develop Strategies and Policies for Community-Wide Sustainability and Health	X	X	
Task 5: Recommend Sustainability and GHG Reduction Strategies and Policies		X	
Task 6: Air Quality Services	X	X	X
Task 7: Water Quality Services	X	X	X
Project Management	Ongoing		

Within each task description below we have detailed the specific work that we believe can occur within each Phase; this can be modified, as needed, based on conversations with the City.

### Task 1: Project Kick-Off and Work Plan

Task 1 will ensure that the City and the Consultant team are in agreement on the process, timeline, and outcomes of the subsequent work. All of Task 1 will occur within Phase I.

Specific subtasks include:

- ▶ Host a kick-off meeting with the project team and City staff. During the meeting, we will discuss the City’s goals and intended outcomes of this work, the scope of work and approach, the timeline (including any internal City deadlines that the project team should be aware of, as well as clarification on which work falls under Phase 1 versus Phase 2), and the development of a work plan. Please note, this meeting is likely to occur virtually due to COVID-related precautions.
- ▶ Develop a project work plan that will provide greater detail on subsequent tasks, subtasks, deadlines, and other pertinent items. The Consultant team will develop this document internally and following that will provide it to the City for one review and feedback.
- ▶ Finalize the project work plan.

#### Deliverables

- ✓ Virtual project kick-off meeting.
- ✓ Draft and Final Work Plan.

### Task 2: Develop a 2020 GHG Inventory

#### Task 2A: 2020 GPC-Compliant GHG Inventory

Task 2A includes the creation of a 2020 BASIC<sup>1</sup> GPC-compliant GHG inventory for the community and accompanying documentation. All of Task 2 will occur within Phase I.

<sup>1</sup> A GPC inventory can be implemented at two levels: BASIC and BASIC+. We budgeted for a BASIC inventory based on the City’s response to questions.



Specific subtasks include:

- ▶ Meet with City staff to kick-off the inventory and discuss specific needs related to this task.
- ▶ Customize the Lotus-derived data management and emission calculation spreadsheet for Commerce City. Key aspects of this tool include a summary of data sources; emission factors; emission calculations; and an emission summary. The tool is designed to be transparent and easily updated in-house for future years.
  - ▶ Non-GPC emission sources, such as avoided emissions from recycling and renewable energy, will also be included as information-only items.
  - ▶ A tab will be included that provides benchmarks for comparable communities.
- ▶ Conduct QA/QC review on collected data to ensure that it aligns with best practices and industry knowledge.
- ▶ Calculate emissions and complete the 2020 GPC-compliant inventory.
- ▶ Review all findings with the City.
- ▶ Calculate key metrics for future comparison including, but not limited to, emissions by sector, emissions by source, emissions per capita, energy use intensity by building sector, residential electricity, and natural gas use per capita.

### ***Deliverables***

- ✓ Virtual inventory kickoff meeting.
- ✓ GHG inventory tool customized for community emissions.
- ✓ A 2020 GPC-compliant BASIC GHG inventory for community emissions with inputs and all accompanying data sources, including emails and original reports and spreadsheets.
- ✓ Zipped folder with all research and data.

### **Task 2B: Model Business-As-Usual GHG Emissions through 2050**

In Task 2B, Lotus will forecast GHG emissions for Commerce City using a business-as-usual (BAU) projection that incorporates emission reductions and potentials for growth from known projects and data, including utility commitments, state-level goals and policies, and relevant incentives, programs, and initiatives that are likely to impact Commerce City. Lotus will model BAU emissions from the current inventory year until 2050, considering changes in exogenous factors such as population, emission factors, vehicle travel, new construction, etc. These modeled projections will show emissions on an annual basis. This model can be updated by the City at a later date.

Specific subtasks include:

- ▶ Assess the quality and impact of historic data. We recommend including medium to high-quality data and sources that make up a significant portion of GHG emissions.
- ▶ Model BAU emissions until 2050.

- ▶ Estimate the timing and degree of impact from key technologies and economic sensitivities to the BAU scenario.
- ▶ Provide a numerical and visual analysis of the changes from the baseline year to 2050.
- ▶ Prepare a short memorandum explaining potential emissions trends.

### **Deliverables**

- ✓ BAU model.
- ✓ Zipped folder with all research and data.
- ✓ Memo describing emissions trends.

### **Task 3: Develop a Vision for Organizational Sustainability**

Task 3 will include engaging the City’s internal stakeholders (i.e., City staff, Department heads, key decision-makers) to identify the key components of a vision for organizational sustainability and the energy efficiency, waste reduction, and water use strategies as it pertains to municipal facilities and operations (i.e., buildings, infrastructure, equipment, and fleet). All of Task 3 will occur within Phase I.

Specific subtasks include:

- ▶ Meet with the City’s designated project representative to identify the City staff that should be involved in these conversations, as well as other logistics (i.e., scheduling, meeting space [in-person or virtual], etc.).
- ▶ Review current City policies and guidelines that relate to organizational sustainability and organizational processes. Gather information on how organizational sustainability is addressed in similar and neighboring communities.
- ▶ Host up to six informational interviews with City staff and leadership to determine what is currently being done to incorporate sustainability into the City’s work and processes, where there is a desire to do more, and what the key barriers are to weaving sustainability further into the organizational processes.
- ▶ Host two focus group conversations with City staff to determine:
  - ▶ How staff sees the City incorporating sustainability into current work and processes.
  - ▶ The values that currently drive the City organization.
  - ▶ The opportunities that staff see to incorporate sustainability into the organizational vision.

*Note, these conversations are intended to gather feedback from staff at all levels of the City organization; we will look to the City to identify staff that should be invited to participate. If the City would prefer to gather feedback from all staff, an alternative approach would be to survey City staff to gather the same information.*

- ▶ Develop an initial list of policies and strategies for organizational sustainability based on the research and conversations with the City’s representatives. Develop up to three potential vision statements on organizational sustainability for the City to consider adopting.



- ▶ Meet with the City's project representative and leadership to share the results of the informational interviews and focus group conversations, as well as gather feedback on the initial list of policies, strategies, and vision statements for organizational sustainability.
- ▶ Incorporate the City's feedback to develop the final list of organizational sustainability policies and strategies, as well as the final vision statement for organizational sustainability.
- ▶ Develop an Organizational Sustainability Vision, Policies, and Strategies memo detailing the policy recommendations and strategies for sustainability within municipal facilities and operations. Note we will provide the memo to the City for one round of edits.

### **Deliverables**

- ✓ One internal sustainability kick-off meeting.
- ✓ Up to six informational interviews.
- ✓ Two focus group meetings (alternative: one City staff survey).
- ✓ One meeting with City leadership to vet initial policies, strategies, and vision.
- ✓ DRAFT and FINAL Organizational Sustainability Vision, Policies, and Strategies Memo.

## **Task 4: Develop Strategies and Policies for Community-Wide Sustainability and Health**

We suggest allowing Task 4 to extend beyond the initial six months that Commerce City has allotted for this project. The timeline for this task is heavily dependent on the availability of stakeholders and the ability to gather public feedback; we anticipate that roughly 75 percent of this work will occur in Phase I and the remaining 25 percent will occur in Phase II.

### **Task 4A: Engage Key Stakeholders**

Task 4A will include engaging City staff and the City's key stakeholders to determine the most applicable, relevant, and realistic policies and strategies for the City to improve community-wide health and environmental outcomes.

Specific subtasks include:

- ▶ Meet with the designated City project representative and other relevant staff to determine the individuals and organizations that should be represented in conversations regarding community health and environmental issues. Please note, we welcome the City's ideas on relevant parties to include, and also look forward to presenting the City with a list of recommended stakeholders, community advocates and organizers, and technical experts that may be relevant to include. We will also discuss the logistics of stakeholder engagement (i.e., timing, scheduling, location [virtual or in-person]) during this meeting.
- ▶ To engage the members of the public, community organizations, non-profits, and special districts, the consulting team will also establish a subset of the Stakeholder group that functions as an equity and environmental justice Advisory Board.

- ▶ These Advisory Board members will be selected following this kickoff meeting and consist of representatives from community organizations and nonprofits (e.g., Cultivando, Tri-County Public Health Department, Adams County Food Bank, Boys and Girls Club, Community Enterprise) and special districts (to be determined by the City).
- ▶ Host monthly Advisory Board meetings. These meetings will include a review of data collected throughout the project, help in formulating the final set of policy recommendations, forming implementation strategies, and shaping educational campaigns to ensure that they are inclusive of the needs of community stakeholders.
  - ▶ Due to concerns around COVID-19, Advisory Board meetings will be facilitated via Zoom, and participants will be provided a stipend as an appreciation of their time and effort.
- ▶ Conduct detailed research regarding community and environmental health and sustainability strategies that are being pursued in Commerce City's peer and neighboring communities. Additionally, we will conduct a detailed analysis of the City's current policies and programs that relate to community and environmental health and sustainability.
- ▶ Host up to eight informational interviews with key City and technical experts to understand the current challenges, barriers, opportunities, and goals in the community regarding improving community health and environmental outcomes.
- ▶ Host two iterative workshops with stakeholders and the Advisory Board to review community health priorities identified in the 2018 Community Health Assessment and develop a list of potential policies and strategies aimed at improving community health and environmental outcomes.
  - ▶ The first workshop will be focused on understanding the shared values and visions among participants regarding community and environmental health and sustainability, as well as the barriers and opportunities to improve community health and environmental health. Additionally, at this workshop we will share with stakeholders initial findings from the community engagement process (i.e., the community questionnaire in Task 4B).
  - ▶ The second workshop will include idea generation and brainstorming regarding specific policies and strategies Commerce City can consider adopting. We will share further results from the community outreach and engagement process (Task 4B) to ensure that the strategies and policies identified for Commerce City are relevant and desired by the community. Note, we assume these workshops will occur virtually due to COVID precautions. If it is possible and safe to meet in person at the time of the workshop, we will do so.
- ▶ Develop a matrix of initial strategies and policy recommendations for Commerce City to consider based on stakeholder and public feedback. The matrix will include initial details on the strategies and policies, including potential cost, complexity (i.e., staff time to implement), potential to reduce GHG emissions, and alignment with the City and stakeholders' values.
- ▶ Draft a brief memo detailing the process that was used to develop this initial list for City staff review (note, we will make one round of edits based on the City's feedback).

## **Deliverables**

- ✓ Virtual stakeholder engagement kick-off meeting.
- ✓ Up to eight informational interviews.
- ✓ Monthly advisory board meetings
- ✓ Two Stakeholder workshops.
- ✓ Initial community health and environmental sustainability strategies and policies list.
- ✓ Memo regarding the process to develop the initial community health and environmental sustainability strategies and policies.

## **Task 4B: Engage the Commerce City Community**

Specific subtasks include:

- ▶ To ensure that individuals with time constraints are able to provide input, an online questionnaire will be created (in both English and Spanish). This questionnaire will seek to understand how individuals in Commerce City are currently interacting with the built environment around them (air quality, opportunities for physical activity, environmental conditions, access to healthy living opportunities) as well as gathering feedback on what they would like to see changed or protected.
  - ▶ Throughout the project, the team will assess the data to ensure those participating are representative of the demographics of the greater Commerce City community.
- ▶ To ensure data are representative, the consulting team will conduct direct focal outreach efforts with individuals and organizations who identify as belonging to underrepresented or marginalized communities, invite them to participate in the questionnaire, and conduct up to 15 1:1 key stakeholder or intercept interviews with these individuals, offering them a gift card as an appreciation for their time.
- ▶ Host three virtual community meetings (at different times, to accommodate different schedules) to further engage residents of Commerce City; provide an alternative venue for feedback and comments; review findings from the initial data collection and questionnaire; and increase the visibility of and transparency into the project.
- ▶ Create engaging outreach materials to direct participants to the online questionnaire and raise awareness about the community meetings. The consultant team will lead the distribution of outreach materials in partnership with the City and the Advisory Board.
  - ▶ The Advisory Board, Commerce City, and other stakeholders will play a role in distributing these materials amongst their networks before the launch of the questionnaire and community meetings. Other methods to circulate these materials may include, but are not limited to: Facebook Live events, radio spotlights on English and Spanish radio stations (e.g., 1150AM), newsletters, a press release, bus stop advertisements or mailers, Next Door postings, and

flying at community events. To assist with potential technology issues, our team will start the Advisory Board meetings and monthly community meetings early to troubleshoot any issues with Zoom or otherwise, ensure that call-in information is available for individuals who might be more comfortable using a cellular phone and provide contact information for individuals who would rather voice their opinions via email.

- ▶ Note, we have not budgeted for any paid media advertisements; if the City wishes to utilize these, we will need to discuss at a later date.
- ▶ Advisory council meetings, community meetings, and any workshops planned throughout the process will include Spanish interpretation services as needed to ensure monolingual Spanish speakers have equal access to providing feedback throughout the process. Community meetings in particular will likely follow a Focus Group format, but other methods may be used, (e.g., World Cafe, Participatory Budgeting, or Citizen Science) depending on the identified needs of participants and the perceived benefit towards crafting policy recommendations, implementation strategies, and educational campaigns. If linguistic needs are identified other than Spanish, the Consulting Team will partner with the Denver-based Community Language Cooperative.
- ▶ The data collected from questionnaires and interviews will be analyzed through an equitable evaluation process, where the needs of individuals who identify as part of underrepresented or marginalized communities are at the forefront of the recommended strategies. This will come from a distillation of quantitative data collected through the questionnaire, as well as qualitative data collected through the community meetings, Advisory Board recommendations, and interviews.
- ▶ The combination of the Advisory Board input and data collected will be used to craft recommendations for a community education campaign: identifying areas of focus, determining what channels might be best for sharing the education campaign, and deciding how data will be collected to evaluate the effectiveness of the educational campaign.

### ***Deliverables***

- ✓ Three community meetings.
- ✓ Online questionnaire.
- ✓ Social media materials (e.g., Facebook, Instagram, NextDoor).
- ✓ Marketing event materials (e.g., Facebook Live, radio spotlights, newsletters, a press release, bus stop advertisements or mailers, and printed flyers).
- ✓ Data from the questionnaire.
- ✓ Findings from the interviews.
- ✓ Policy recommendations, implementation strategies, and educational campaign recommendations will be included in the deliverables for Task 4A and Task 5.

### **Task 5: Recommend Sustainability and GHG Emission Reduction Policies**

Task 5 includes the development of the final list of sustainability and GHG emission reduction strategies that Commerce City can pursue to enhance community health and environmental sustainability outcomes. Task 5 will occur during Phase II.



## Task 5A: Model GHG Emissions Reduction Strategies

Task 5A will include modeling the key GHG emission reduction strategies identified by the community and the City's stakeholders. We present a consultant supplemented GHG emission reduction modeling effort, where we utilize the list of strategies developed by stakeholders and the community, along with Lotus' previous work, experience, and research, to present recommendations on strategy targets.

Specific subtasks for modeling emission reduction pathways:

- ▶ Collect data on community, utility, and state-level trends, goals, and incentives that may impact emissions over the coming years.
- ▶ Conduct a high-level modeling effort to determine GHG emission impacts from the City's list of potential strategies. Reduction potentials will be linked to the 2020 community-wide GHG inventory and will include the BAU GHG emissions scenarios. Initially, Lotus will select targets related to the modeled strategies (i.e., participation levels, etc.).
- ▶ Meet with City staff and key stakeholders to share the results of the modeling effort. Discuss whether the targets selected are appropriate for the community and adjust as needed.

### **Deliverables**

- ✓ GHG emission reduction model and supporting documentation.
- ✓ Review with City staff.

## Task 5B: Recommend Policies

Specific subtasks include:

- ▶ Host one workshop with City staff and leadership to review the initial list of community health and environmental sustainability strategies and policies developed through the work in Task 4. We will share with participants the initial strategies and policies list, including the results of the GHG emission reduction model work and how the strategies and policies relate to broader City and stakeholder goals and values. During this conversation, we will ask City staff to evaluate these strategies and policies and provide feedback on the relevant strategies for the City to pursue, the priority level of selected strategies and policies, and other relevant feedback.
  - ▶ Note, we assume this workshop will occur virtually due to COVID precautions. If it is possible to meet in-person at the time of this workshop, we are happy to support that.
- ▶ Develop a final list of policies and strategies to improve community health and environmental health and sustainability outcomes.
- ▶ Analyze the cost estimates for the selected policies and strategies.
- ▶ Draft a report detailing the final recommended policies and strategies. Note we will provide this report as a Word document to the City for one round of revisions.

- ▶ Incorporate the City's feedback into a final report. Format the final report to be attractive and engaging for the reader.

### **Deliverables**

- ✓ One workshop with City staff and leadership to finalize the list of community health and environmental health and sustainability strategies.
- ✓ Cost analysis of selected strategies.
- ✓ Draft report on the selected policies and strategies.
- ✓ Final formatted report on the selected policies and strategies.

### **Task 6: Air Quality**

Task 6 includes air quality tasks that will build upon Commerce City's previous efforts to strengthen air quality requirements, better inform the City of air quality technologies and strategies and continue to improve air quality in and around the City.

Please note, while a GHG inventory was included in the deliverables under air quality in the RFP, this deliverable has been pulled into a stand-alone task (see Task 2, above).

The specific aspects of air quality monitoring needed to support this work will be identified throughout the process of completing Phase I deliverables, and understanding Commerce City's needs and goals; specific monitoring identified during Phase I would be completed during Phase II and Phase III of the project. This budget presented related to this work does not include the procurement, installation, and operation of air quality monitors during Phase III.

Specific air quality subtasks include:

- ▶ An inventory of community-wide air quality impacts of concern. This inventory will include a compilation of emissions from existing air permits itemized by industry within and near Commerce City. Evaluated pollutants will include oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), particulate matter (PM), fine particulate matter (PM<sub>2.5</sub>), and methane (CH<sub>4</sub>). The inventory will highlight pollutants with emissions levels that are high compared to established State of Colorado permitting levels (i.e., minor, major, permit exempt), and recent Regulation 7 amendment requirements as well as clusters of emission sources that could present concerning localized impacts to residents.
  - ▶ The community-wide air quality impacts of concern inventory will be a compilation of emission sources with existing permit applications and will not include new emission calculations. Additionally, the inventory will include sources that are within Commerce City, and within a 5 mile radius of city limits to capture sources that could potentially be impacting the city.
- ▶ A community-wide air quality monitoring plan that considers the inventory developed in the first subtask by identifying those areas of concern and recommending where monitors should be located and what pollutants should be monitored. The monitor locations and pollutants will be chosen based on EPA, CDPHE, and other regulatory agency guidelines with consideration for the need to use the data in later quantitative analyses.

- ▶ The air quality monitoring plan is expected to go through CDPHE review, and the timing of finalization of the plan will be dependent on agency timing. Any other plans or guidance documents that need agency or stakeholder consultation may be impacted similarly.
- ▶ An air quality monitoring plan will be developed, but it is assumed that air quality monitoring, including the procurement of equipment installation and operation, would take place under a separate Phase of this project. The quantity of monitors, types of equipment, monitoring durations, etc. will be determined during Phase I and II of the air quality tasks to be appropriately scoped for Phase III.
- ▶ An air quality guidance report to identify specific strategies for reducing hazardous air pollutants (HAPs), particulate matter (PM), GHGs, and other significant health concern substances that are identified. This subtask will take into consideration work done on the previous subtasks to focus on the pollutants and/or geographic areas that may need improvement based on qualitative analysis and before any new monitoring.
- ▶ Development of Commerce City-specific thresholds for air quality significance, and screening for future projects and plans. The levels of emissions that potential projects and plans would compare to added air quality requirements and or mitigation will be developed with close consideration of Federal and State standards and health concerns. Levels of emissions that require analysis will be established for criteria pollutants and relevant HAPs. Additionally, screening thresholds can be accomplished for ozone precursors to address the concern for ozone. For example, the EPA tool Modeled Emission Rates for Precursors (MERPS) could be utilized. Inclusion of a non-standard program/analysis like this would be discussed with the City prior to including it in these plans.
- ▶ Air quality modeling guidelines will be developed for projects that exceed the screening standards identified in the previous subtask. Modeling standards will include screening modeling with the current EPA accepted screen models, such as SCREEN3. The guidelines will indicate relevant parameters to input into SCREEN3 that may be different from EPA guidance. The modeling guidelines will give direction on using refined modeling, such as AERMOD, if screening thresholds established in previous subtasks are exceeded.
- ▶ An oil and gas air quality plan submittal standards document, that incorporate existing operating agreements, to set a standard for required oil and gas air quality plan documents. The document would include plan specifics such as guidance/requirements on targeted compounds, regulatory thresholds, sampling methodology, sampling duration, and sampling location.

### ***Phase I Deliverables***

- ✓ A report presenting the inventory of community-wide impacts and concerns.
- ✓ A community-wide air quality monitoring plan.
- ✓ A report presenting thresholds for significance and screening, with detailed information on why thresholds were set at certain levels.
- ✓ An oil and gas air quality plan submittal standard to be used by industry, with all parameters identified in the RFP.

## ***Phase II Deliverables***

- ✓ Air quality guidance document presenting how to reduce emissions.
- ✓ An air quality modeling guidelines document.
- ✓ Develop air quality policy recommendations in accordance with the same processes identified in Task 5 above.

## ***Phase III Deliverables***

- ✓ Air quality monitoring identified through the completion of Phase I deliverables and coordination with the City.

## **Task 7: Water Quality**

Task 7 includes the development of policies and plans associated with improving the water quality of rivers and streams in Commerce City. In order to develop a water quality improvement plan, it will be necessary to engage stakeholders to review contributions from several potential input sources that may affect water quality in the rivers and streams in the Commerce City area. In addition, it will be critical to understand upstream water quality to evaluate controlled inputs versus uncontrolled inputs that impact these water bodies.

Our team recognizes that Commerce City has ambitious goals to improve water quality in a manner that will facilitate economic growth and prosperity for all citizens of Commerce City. While we believe that we have included the elements that the city requested, the scope of work includes a broad list of services and it may be more economically feasible for our team to enter into discussions with the City to understand which of the Phase I tasks described in our proposal will provide the most beneficial and economical results. While an alternative approach may not directly address all elements in this scope, it may prove more beneficial to the City in the long-term to focus efforts on specific programs. Pinyon recommends that the evaluation of existing data be completed to understand data gaps. A water quality monitoring plan will then be completed to address those data gaps. Based on the additional data collected, Pinyon will then assist the city to understand which programs will provide the most favorable impact on local surface and groundwater. This may potentially reduce the number of plans and policies that need to be developed in the short-term, in favor of focusing efforts on areas of greatest impact during the initial stages of this contract and deferring lesser impactful strategies to a later date.

Data useful to developing a water quality improvement program are numerous; however, through discussions with Commerce City, it will be possible to narrow down the potential data collection efforts to those elements that are most critical to the success of the program. Due to potential budget limitations and the time required to collect data relevant to developing policy recommendations, the water quality program efforts may require a phased approach. Based on our experience with similar work, the phased approach would include the following:

- ▶ Task 7A: Develop low impact development (LID) stormwater infrastructure guidelines and Best Management Practices (BMPs).



- ▶ Development of LID guidelines for First, Second, and Third Creeks will utilize drawings or fact sheets that are publicly available from other entities and new detailed drawings will not be developed for this effort.
- ▶ The development of policy recommendations will inform the development of a design manual; preparation of a design manual is not included.
- ▶ Task 7B: Develop land use policy recommendations.
  - ▶ These will be desktop analyses with technical memorandums to document recommendations. Fieldwork is not included.
- ▶ Task 7C: Identify significant nonpoint and point sources.
  - ▶ These will be desktop analyses with technical memorandums to document recommendations. Fieldwork is not included.
- ▶ Task 7D: Develop long-term management strategies for the Creek Corridors.
  - ▶ The development of long-term management for creek corridors could require very specific data collection or evaluation requirements. Costs reflected in the budget will support the development of a base plan that may require additional fine-tuning (not included in costs) based on data analysis.
  - ▶ This will be a desktop evaluation; Pinyon will utilize data available from South Adams County Water & Sanitation District, Mile High Flood District, and USGS to develop initial strategies. Costs reflected in the budget for this task will support the development of a base plan that may require additional fine-tuning (not included in costs) based on data analysis.
- ▶ Task 7E: Identify capital and green infrastructure projects.
- ▶ Task 7F: Develop a water quality management plan.

### Phase I (i.e., first six months):

Ideally the Phase I tasks would include the following elements. Upon award, the project team will discuss priorities with the City to understand which elements are more critical to success and focus efforts in areas where the greatest impact can be realized. Specific subtasks relating to Phase I include:

- ▶ Evaluate whether the stream segments in Commerce City are included on the Water Quality Control Commission's 303(d) list for impaired waters.
- ▶ Inspect permitted and non-permitted discharges to surface water bodies.
- ▶ Evaluate currently available water quality data.
- ▶ Gather geospatial data including land uses, storm drainage infrastructure, rivers, streams, riparian buffer zones, and point-source discharges and develop maps for future analysis and recommendations.
- ▶ Evaluation of potential groundwater inputs affecting surface water.
- ▶ Mapping of wetlands and vegetation features.

If sufficient data is not available to formulate opinions and recommendations regarding Phase I tasks, Pinyon will discuss the options to implement Phase II data collection to help formulate a more substantial background for input to the plans.

Phase I Tasks have been presented consistent with the requirements in the RFP; however, tasks may be more efficiently completed in an alternative order. Discussions with the City will be used to finalize the best approach. Completion of the entirety of this scope may not be cost-effective for the City; however, it may be more cost-effective to choose select Phase I tasks that will achieve the most value and focus efforts on those tasks in the short-term.

### **Phase II Tasks (approximately six-month period):**

- ▶ Collection of data and analysis to support improvements and refinements to the water quality monitoring plan.
- ▶ Evaluation of upstream quality.
- ▶ Evaluation of precipitation-induced water quality contribution, particularly related to suspended solids that affect surface water clarity and color.
- ▶ Collect water chemistry data at various locations in the receiving streams and under varying conditions (seasonal, or precipitation vs. non-precipitation) including but not limited to chemical concentrations, pH, temperature, metals, suspended solids, and nutrients.
- ▶ Collect biological data (if needed) including aquatic life and wetlands areas.
- ▶ Deliverables for this task will include the analytical data reports, a summary report of the data will be completed in Phase III.

### **Phase III Tasks (approximately four months):**

- ▶ Reporting and implementation.
- ▶ Incorporation of stream habitat and riparian improvement and protection measures.
- ▶ Establishment of maintenance programs for BMPs.
- ▶ Establish a periodic monitoring program to evaluate the effectiveness of water quality improvement efforts.
- ▶ The deliverable for this task will include the final report which will include a summary of the data collected, policy recommendations, and infrastructure upgrade recommendations.

### **Phase I Deliverables**

- ✓ Memorandum presenting LID Stormwater Infrastructure Guidelines.
- ✓ Memorandum presenting land use policy recommendations.
- ✓ GIS map designating locations of sources.
- ✓ Memorandum outlining long-term management for the three creek corridors.
- ✓ A memorandum presenting potential capital and green infrastructure projects and rough order of magnitude costs.
- ✓ Water quality monitoring plan.

## Phase II Deliverables

- ✓ Laboratory reports of water quality data.

## Phase III Deliverables

- ✓ Final report summarizing data and final policy recommendations.

## Project Management

Our team includes many exceptional Project Managers; Lotus is the prime for this project and will coordinate all project management efforts among the partnering teams. We will maintain complete and accurate records with respect to the services performed.

Specific subtasks:

- ▶ Regular check-in emails.
- ▶ Monthly phone call with the City.
- ▶ Monthly invoice reporting.

## Deliverable

- ✓ Monthly invoice reports.

## PROJECT TEAM

Team resumes are included in *Appendix A*.

### Primary Project Representative

**Julia Newman**, Lotus Senior Associate, *will be the project manager and lead*. Julia is known for her expertise in stakeholder facilitation and engagement, sustainability program and plan development and implementation, urban planning, policy development, public speaking, and data and analytics skills. Julia has led the development and implementation of sustainability plans and programs for local government, and prior to joining the Lotus team, Julia managed sustainability programs for Adams County (CO). Her work led to investments in energy efficiency and renewable energy that saved over \$100,000 a year, increased participation in community recycling programs, increased regional collaboration on sustainability policy, and the development of code updates, policies, and communications which led to the County receiving funding and support for programs from local and federal agencies.

Since joining Lotus Julia has led or supported the development of climate action and sustainability plans for many of our recent clients (including leading stakeholder engagement efforts), for Routt County (CO), the City of Las Cruces (NM), the Town of Erie (CO), and Summit County (CO). Julia's work with Lotus includes program implementation for energy efficiency programs and program development and evaluation for multiple public sector clients. Julia has also worked on or led numerous GHG emissions inventories, including those for Boulder and Summit County and the Cities of Boulder (CO), Denver (CO), Longmont (CO), Lafayette (CO), Westminster (CO), and Adams 12 Five Star Schools.

She is a certified Project Management Professional and has worked extensively in the public and non-profit sectors. She earned her Master's in Urban Planning with a focus on sustainable planning at Cleveland State University and her B.S. in Political Science at the University of Cincinnati.

## Lotus Project Team

Lotus consists of four team members and our small size allows us to be nimble and agile. We are the company leaders. We are the ones who develop the scope of work, manage the project, conduct the work, and interact with clients. We are your team, and this ensures continuity and high-quality work products. We are experienced project managers, and we are highly organized to ensure that the right steps are taken in the right order and the end goals are achieved effectively and efficiently.

**Hillary Dobos**, Principal and Co-Owner of Lotus, *will provide facilitation support and will be a task lead*. Hillary is known for her GHG accounting; project and program management; market and regulatory/policy creation and analysis; facilitation; communications (internal and external); and report writing. Hillary managed our recent project with Routt County, as well as our projects with Boulder County (CO), Summit County (CO), and Denver's CAP, which included similar scopes of work to this project. Additionally, Hillary has supported or led efforts with the City of Boulder (CO), Park City (UT), and the City of Lafayette (CO) and multiple private sector clients ranging from local banks, to utilities, to Fortune 100 companies. Hillary has served on various local and national boards focused on waste, conservation, energy efficiency, C-PACE, and renewable energy. Hillary earned her B.A. in Art History and Economics from Bowdoin College and her MBA from the University of Colorado at Boulder.

**Emily Artale**, Principal Engineer and Co-Owner of Lotus, *will provide research, analysis, and writing support*. As a professional engineer and program manager, Emily develops, facilitates, and implements programs that help solve energy efficiency and sustainability challenges. Emily has worked with public-sector clients to develop GHG emission inventories and analyze the reduction potential of GHG reduction strategies. Emily has performed GHG forecasting and GHG modeling for Cities of Denver (CO), Lakewood (CO), Westminster (CO), Longmont (CO), Las Cruces (NM), and the Counties of Summit (CO) and Boulder (CO). She has also led or participated in every CAP developed by Lotus. Emily is known for her critical thinking, technical review, data analysis, communications, and public speaking. Emily received her B.S. and M.S. degrees in civil/environmental engineering from the University of Colorado at Boulder.

**Rachel Meier**, Lotus Research Associate, *will provide research and writing support, data visualization, and modeling support for this project*. During her time with Lotus, Rachel has supported the completion of several GHG emissions inventories and forecasts. Additionally, she has helped provide critical research and writing in support of CAPs, sustainability strategies, and policy and program development projects. Before joining Lotus, Rachel supported sustainability and conservation efforts in the non-profit sector. Rachel earned a Masters of the Environment (MENV) in Sustainability Planning and Management from the University of Colorado at Boulder and a B.A. in Environmental Studies and Geography from Gustavus Adolphus College.



Additionally, Lotus works with *third-party contractors* to ensure our clients have access to high-quality and engaging reports, graphics, animations, and communications pieces. Our contractors are known for their versatility with graphic design, communications and marketing collateral, and print production.

## Pinyon Project Team

*Dustin Collins*, a Pinyon air quality Senior Scientist, *will provide strategy development for air quality improvement evaluation, monitoring, and policy development.* Dustin has more than 15 years of air quality experience, which includes emission inventories, impact modeling, GHG calculations and reporting, permitting, and compliance assistance and tracking. Mr. Collins has served as an air quality team lead, project manager, and lead scientist for numerous air quality projects throughout the Rocky Mountain Region. His experience in air quality includes private and public clients in the oil and gas, transportation, and commercial industries. Mr. Collins has extensive experience in the preparation of air quality resource sections and emission calculations for projects requiring NEPA documentation, including Environmental Impact Statements (EIS) and Environmental Assessments (EA). He has completed this permitting for both minor and major sources in both attainment and nonattainment areas.

*Kaitlin Meszaros*, a Pinyon air quality Scientist, *will provide support for the development of an air quality monitoring plan and assist with the coordination of data collection efforts.* She has completed dispersion modeling, developed multiple emission inventories, and managed air compliance for oil and gas facilities and aggregate and mining facilities throughout the United States. Her experience extends to minor source reporting, near-field dispersion modeling, regulatory compliance including NSPS, NESHAP, MACT, and NSR. Ms. Meszaros has extensive knowledge of EPA's GHG program management completing numerous reports, monitoring plans, and data collection plans annually. Additionally, she has been the technical lead for air dispersion modeling efforts including running AERMOD and associated programs such as AERMET and AERMAP and analyzing model results.

*Caroline Byus*, a Pinyon water quality Senior Scientist, *will provide strategy development for water quality improvement evaluation, monitoring, and policy development.* Ms. Byus has 27 years of combined experience in water & wastewater and environmental consulting. Her background includes work in the Water Quality and Compliance Laboratory Divisions for the Eagle River Water & Sanitation District where she gained expertise in method development, quality control and assurance, state and federal water quality regulations, and environmental compliance monitoring program development and implementation. Caroline has extensive expertise with environmental permitting, watershed planning, and water quality studies and investigations associated with a variety of aquatic health, nutrients, temperature, stormwater, and urban stream impairment projects. She helps clients address complex water quality and compliance problems and finds solutions through listening, evaluating alternatives, and developing practical and cost-effective solutions.

*Scott Fanello*, a Pinyon Environmental Engineer, *will provide support for the development of a water quality monitoring plan and assist with the coordination of data collection efforts.* Scott is experienced with monitoring surface water and designing stormwater treatment



systems. He assists in field services on projects related to non-point source monitoring, groundwater monitoring, stormwater, and industrial wastewater treatment. He has also performed water monitoring (both chemical and biological) and produced hydrologic modeling and analysis. Scott has conducted field investigations at contaminated sites including collecting soil and groundwater samples, comparing them against state and federal standards, and helping clients draft and execute plans to remediate sites in Colorado, Wyoming, and Utah.

## AMBG Project Team

**Abby Bohannon**, Inclusivity and Healthy Community Planner, will be *leading the stakeholder outreach and community engagement efforts, as well as bringing her expertise in public health to ensure the final deliverable focuses on community health promotion*. Abby has a professional background in social work and holds Master's degrees in Urban and Regional Planning and Public Health from the University of Colorado. She is the Co-Owner of Denver-based AMBG Consulting, which partners with funders, municipalities, and public and private firms to connect health and the built environment through an equity and justice-centered approach. During her time at AMBG Consulting, Abby has created outreach strategies that prioritize engagement with populations most impacted by decision-making and data collection processes to identify community needs and work with stakeholders to meet them. With over a decade of experience engaging and supporting a variety of stakeholders from various cultural and geographic backgrounds, Bohannon is adept at facilitating emotionally charged conversations and bringing diverse voices into the room.

**Mayra Gonzáles**, Bilingual Community Organizer and Co-Owner of AMBG Consulting, will take the lead on *ensuring that the outreach efforts are equitable, linguistically inclusive, and culturally relevant*. A community advocate since 2007, Mayra Gonzáles' work at AMBG focuses on building capacity in communities of color around the issues of housing, multimodal transportation, food access, and economic development. Gonzáles has increased her capacity as a relationship builder and convener between diverse, underserved communities and nonprofit organizations, foundations, agencies, and corporations working to serve them. She has served as an organizer, facilitator, manager, and educator, all through an equity lens. Gonzáles also works directly with resident leaders to build capacity in the field of housing by creating a culturally responsive curriculum. Gonzáles holds a Master's in Urban and Regional Planning from the University of Colorado Denver, and strongly believes it is crucial for everyone at the table to have the same level of understanding as a starting point for building inclusive and equitable policies and advancing organizational strategies.

# Schedule

As noted in the scope of work, we anticipate that to provide the full list of services requested in the RFP, our team will require longer than the six months the City has budgeted for this project. Therefore, we have proposed a phased approach to completing this work. The below table details the timeline associated with the tasks in this project.

Please note that we would love to do this work with the City and are happy to discuss alternative approaches to completing this scope of work within the City’s timeline to better meet the City’s needs and goals.

Task	Phase I						Phase II						Phase III			
	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
<b>Project Kick-Off and Work Plan</b>	[Blue bar]															
<b>Task 2: Develop a 2020 GHG Inventory</b>	[Blue bar]															
Task 2A: 2020 Inventory	[Orange bar]															
Task 2B: BAU							[Orange bar]									
<b>Task 3: Develop a Vision for Organizational Sustainability</b>	[Blue bar]															
<b>Task 4: Develop Community-wide Strategies</b>	[Blue bar]						[Blue bar]									
Task 4A: Stakeholder Engagement	[Orange bar]						[Orange bar]									
Task 4B: Public Engagement	[Orange bar]						[Orange bar]									
<b>Task 5: Recommend Policies</b>							[Blue bar]									
Task 5A: Model GHG Reduction							[Orange bar]									
Task 5B: Recommend Policies							[Orange bar]									
<b>Task 6: Air Quality</b>	[Blue bar]						[Blue bar]						[Blue bar]			
<b>Task 7: Water Quality</b>	[Blue bar]						[Blue bar]						[Blue bar]			
<b>Project Management</b>	[Blue bar]						[Blue bar]						[Blue bar]			

Figure 1. Proposed Project Schedule.

## Cost of Services

As noted above, we have proposed a phased approach to completing this work. The table below details costs associated with the tasks in Phase I of this project, as well as anticipated costs related to work that is recommended to occur in later phases.

### NOTABLE BUDGET ASSUMPTIONS

- ▶ This budget assumes all meetings and workshops will occur virtually (i.e., no travel time or costs have been included). Additionally, we have included \$6,000 in the budget for Task 4 to support stipends for Advisory Board members and community members who participate in this process.
- ▶ Final costs for the Phase II and Phase III water quality analytical assessment and air quality services shown in the budget table as estimates only. Costs will be evaluated, and an updated cost estimate can be provided after completion of Phase I work. The current costs are estimated and may not be representative of the final requirements.
- ▶ Phase III costs for water quality assume up to 20 hours of support to the City for the implementation of programs.
- ▶ Phase III costs for air quality cannot yet be determined as they are heavily dependent upon monitoring needs and goals.
- ▶ Each air quality subtask will be done in the sequential order presented in the proposal so that data findings will be available and used in each subsequent task. If the task order is changed, re-distribution of costs among tasks may be required.

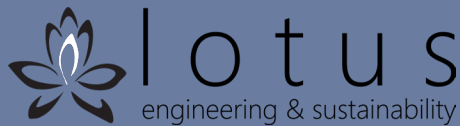
Task	Phase I Total Costs	Phase II Total Costs	Phase III Total Costs
Project Kick-Off and Work Plan	\$3,860.00	-	-
Task 2: Develop a 2020 GHG Inventory	\$11,405.00	-	-
Task 3: Develop a Vision for Organizational Sustainability	\$16,181.25	-	-
Task 4: Develop Community-wide Strategies	\$41,704.50	\$13,901.50	-
Task 5: Recommend Policies	-	\$22,500.00	-
Task 6: Air Quality	\$66,720.40	\$28,954.80	*
Task 7: Water Quality	\$63,151.24	\$39,149.88	\$19,189.80
Project Management	\$5,955.47	\$5,955.47	\$3,970.31
<b>Summary</b>	<b>\$208,977.86</b>	<b>\$110,461.65</b>	<b>\$23,160.11</b>

\*Air quality monitoring costs for Phase III will be developed in collaboration with Commerce City during Phases I and II.

Table 1. Estimated Labor Costs by Task and Phase.



**JULIA NEWMAN**  
Senior Associate



URBAN PLANNER  
INNOVATIVE LEADER  
PROGRAM / PROJECT  
MANAGER  
RELATIONSHIP BUILDER

Julia has managed sustainability projects and programs for local governments and the nonprofit sector for over 10 years. Julia brings expertise in sustainability plan development and implementation, communication, and capacity building across organizations and regions. Her projects have resulted in operational savings, improvements in sustainability metrics and increased citizen engagement.



## EXPERIENCE

LOTUS ENGINEERING & SUSTAINABILITY, LLC.  
Denver, CO  
Senior Associate, 2017-Present

Provides high-quality consulting services on all areas of sustainability to a diverse set of clients.

- Leads stakeholder engagement and community outreach for the development of community sustainability, climate action, and adaptation plans, programs, and policies.
- Performs detailed analysis on carbon emissions, greenhouse gas inventories, and emissions modeling.
- Advises clients on sustainability planning, programming, and implementation through effective stakeholder engagement processes and thorough technical, financial and project analysis.
- Authors technical documentation related to sustainability analyses and reporting.
- Communicates sustainability strategy development to broad audiences and provides technical expertise for the implementation of sustainability goals and strategies.
- Secured funding and managed program implementation for community-based energy efficiency programs.

ADAMS COUNTY GOVERNMENT  
Brighton, CO  
Sustainability Coordinator, 2014-2017

Developed, managed and implemented the County's comprehensive Sustainability Program. Drafted and coordinated the adoption of sustainability policies related to energy use, waste and other priorities. Led the coordination across departments to revise code and development regulations in support of sustainability and renewable energy development. Identified and managed the implementation of energy efficiency and renewable energy projects and programs, generating over \$100k in annual savings. Obtained grant funding and technical support for sustainability projects in transportation and renewable energy. Collaborated with and advised local governments and special district partners on sustainability projects and programs across jurisdictions.

GREEN CORPS  
Cleveland, OH  
Program Manager, 2013-2014

Managed all aspects of program development, implementation and expansion for a nonprofit. Managed budgeting and fundraising activities to achieve programmatic growth for a program with an annual a budget of \$650K. Facilitated the acquisition and sustainable management of new land for urban farms. Led development and implementation of both staff professional development and a dedicated sustainability and environmental science curriculum for high school students.

## SKILLS

Project/program management  
Data analysis  
Grant writing  
Policy creation and implementation  
Presentations and reports  
Stakeholder engagement and facilitation

## BOARDS

Solar United Neighbors Advisory Board  
2019-Present  
City of Northglenn Citizen Sustainability  
Council  
2018-Present

## EDUCATION

Cleveland State University  
*Levin College of Urban Affairs*  
Masters of Urban Planning, Design  
and Development, 2010  
University of Cincinnati  
B.A., Political Science, 2008

## CERTIFICATIONS

Project Management Professional (PMP)  
National Renewable Energy Lab (NREL)  
Energy Executives Graduate

## EXPERIENCE

### GREEN CORPS

*Cleveland, OH*

Buckeye Community Manager, 2011-2013

Site Manager, 2009-2011

Oversaw all aspects of urban farms on former brownfield sites, as well as the development of community engagement programs for sustainability. Developed a new environmental and sustainability education program for community residents; increased community participation by 45%. Created collaborative relationships with funding partners and community agencies to increase the impact of educational programs. Practiced sustainable land cultivation and management techniques to increase production on urban farm sites and surpass weekly sales goals.

### CLEVELAND STATE UNIVERSITY

*Cleveland, OH*

Sustainability and Community Engagement Assistant, 2008-2010

Researched and reported on variety of sustainability policy issues and impacts on private business. Conducted detailed research and authored reports on sustainable business practices; focus areas included sustainable materials management, waste reduction and sustainable packaging and transit. Planned, coordinated and directed campus and community events on sustainability policy and sustainable business development. Trained staff, faculty and students in sustainable materials management and sustainability policy development and analysis.



## GET IN TOUCH

[www.lotussustainability.com](http://www.lotussustainability.com) 

[julia@lotussustainability.com](mailto:julia@lotussustainability.com) 

216.346.7478 

## INTERESTS

 Gardening

 Cooking

 Hiking





HILLARY DOBOS

Lotus Co-Owner & Principal



FACILITATOR

ENTREPRENEUR

CREATIVE LEADER / PROBLEM SOLVER

PROGRAM MANAGER

Hillary has managed programs and projects for the public and private sector for almost 15 years. Hillary is known for her management skills, meeting and stakeholder facilitation, market and regulatory/policy creation and analysis, and communications (internal and external), and project and program management.



## EXPERIENCE

### LOTUS ENGINEERING & SUSTAINABILITY, LLC.

Denver, CO

Co-Owner and Principal, 2012–present

Provides leadership support to Lotus team

- Advises clients on sustainability, providing support to over 25 organizations.
- Leads climate action planning with local governments.
- Guides companies and public sector entities in accounting for greenhouse gas emissions, setting reduction goals and prioritizing mitigation strategies.
- Coaches government sustainability teams in creating successful programs.
- Advises organizations in identifying sustainability priorities, setting goals and achieving objectives.
- Creates technical reports on market trends, policy, and finance.

### COLORADO ENERGY OFFICE

Denver, CO

Senior Program Manager, Various Programs, 2010-2012

*Energy Performance Contracting*

Managed the award-winning EPC program. Directed program that secured investments in energy, water, and fleet efficiency upgrades and renewable energy. Led program in supporting \$40 million in projects in 2012 and \$60 million in 2013, securing Colorado’s position as a top-five state for EPC investment. Educated contractors in the EPC process and ensured that they maintained the highest levels of quality. Advised Energy Service Companies, fostering a successful EPC community.

#### *Greening Government*

Led state government agencies in reducing resource use, thus saving state funds. Devised and implemented reductions in energy, water, paper, and petroleum use.

Assisted in creating and executing State Environmental Preferable Purchasing Policy. Developed, implemented, funded, and assessed state sustainability programs and developed future reduction goals and metrics. Tracked, calculated, and reported water and energy use in 2000+ state buildings, petroleum use in the 6000+ vehicle fleet, and State Government’s greenhouse gas footprint.

#### *Colorado Carbon Fund*

Spearheaded all aspects of fund including fundraising and program development. Developed program to successful spin out of the Energy Office into a self-sufficient nonprofit in 2012. Increased demand for carbon offsets through calculating greenhouse gas emissions for dozens of companies and public sector clients, devising marketing campaigns and developing strategic partnerships. Monitored regional and national policy issues for implications on the state.

## SKILLS

Project/program management  
Report writing  
Communications  
Policy creation and analysis  
Facilitation

## EDUCATION

University of Colorado  
*Leeds School of Business*  
MBA, Sustainability and Project Management, 2010  
Bowdoin College  
B.A., Economics and Art History, 2004

## CERTIFICATIONS

Environmental Law and Regulation  
University of Washington


## BOARDS

New Energy Improvement District Board,  
2019-present  
Pollution Prevention Advisory Board  
Governor Appointed, 2011-2019  
The Nature Conservancy  
Elected to Young Professional Board,  
2012-2018  
Colorado Carbon Fund Board of Directors  
Member, 2012-2014  
National Energy Service Coalition Board  
Elected State Representative, 2012-2013  
Colorado Energy Service Coalition Board  
Elected Public Chair, 2012-2013  
Colorado Greening Government Council  
Director, 2011-2013



## GET IN TOUCH

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303.800.5541 

## EXPERIENCE

### NATIONAL RENEWABLE ENERGY LABORATORY

*Golden, CO*

Project Engineer, 2009-2010

Researched and reported on variety of energy, policy and economic issues. Analyzed cap-and-trade, carbon tax, and renewable energy policy as well as market and technology assessments through data collections, literature reviews, industry reviews, and writing spearhead analysis. Co-authored and supported various NREL publications. Assisted in developing a detailed pro-forma levelizing cost of energy models for various solar technologies and financing structures.

### CASCADIA CONSULTING GROUP, INC

*Seattle, WA*

Associate, Research and Analysis, 2005-2007

Devised, implemented and managed waste and recycling plans. Led projects ranging from \$100k to over \$2 million for governments and companies including NYC, Home Depot, U.S. Army, Pentagon, Delaware, and Starbucks.

### AMERICORPS

School Partnerships Liaison, 2004-2005

Led key aspects of developing IslandWood School through promoting the program to teachers, parents and students, including many inner-city schools.

## INTERESTS



Traveling with family



World Cup soccer



Reading



## EMILY ARTALE

Lotus Founder, Co-Owner and  
Principal Engineer



ENGINEER  
ENTREPRENEUR  
PROGRAM MANAGER  
ACTION-ORIENTED LEADER

Emily brings nearly 15 years of experience combining technical and pragmatic engineering with holistic and innovative problem-solving to the sustainability field. Her expertise in development, management, and analysis has resulted in measurable cost and greenhouse gas savings for her clients.



## EXPERIENCE

### LOTUS ENGINEERING & SUSTAINABILITY, LLC.

*Crested Butte, CO*

Founder, Co-Owner and Principal Engineer, 2012–present  
Founded sustainability consulting firm

- Advises clients on sustainability issues, having provided expertise to over 30 organizations.
- Leads climate action planning process.
- Leads clients to integrate environmental justice issues with all sustainability strategies.
- Develops robust decision-analysis tools and models for GHG accounting, GHG scenario forecasting and community solar analyses.
- Evaluates energy projects, including renewable energy projects for local municipalities.
- Completes GPC-compliant GHG emission inventories for public agencies.
- Leads occupant engagement behavior impact modeling efforts.
- Develops, manages climate mitigation effort for Las Cruces, New Mexico focused on highlighting community values.
- Led the Colorado Energy Office's Demonstration Project for Low-Income Solar.
- Led City and County of Denver's 80x50 facilitation and strategy development process.
- Developed, managed Gunnison's GV-HEAT program, an income-qualified energy efficiency rebate program.

### TRIDENT ENERGY SERVICES, INC.

*Longmont, CO*

Engineer, 2009-2012

Launched energy efficiency programs. Spearheaded the Main Street Efficiency Initiative, leading 50 businesses in achieving an average annual energy savings of 15 percent. Co-developed the Energy Management Assistance Program, improving the energy efficiency of local governments and schools. Executed energy audits and utility bill analyses.

### NATURAL CAPITALISM SOLUTIONS

*Longmont, CO*

Project Manager, 2008-2010

Advised clients on executing sustainable practices. Worked with businesses and governments to implement sustainable practices in the areas of agriculture, manufacturing and energy. Co-authored paper with Hunter Lovins for the United Nations on lifting Asian countries out of poverty using sustainable manufacturing.

## SKILLS

Critical Thinking  
Technical review  
Communications  
Data analysis  
Public speaking

## EDUCATION

University of Colorado at Boulder  
M.S., Civil & Environmental Engineering,  
2005  
B.S., Environmental Engineering, 2002

## CERTIFICATIONS

LEED AP  
Professional Engineer  
Certified Energy Manager

## EXPERIENCE

**BROWN AND CALDWELL**  
*Golden, CO*  
Project Manager, 2006-2008

Analyzed technical environmental data. Performed permitting and compliance activities for Denver-Metro local governmental agencies. Assisted with greenhouse gas emission inventory verification for major airline. Developed Excel-based tools used to calculate water pollutant levels and air emission values. Assistant coordinator for watershed groups.

**CAMERON-COLE, LLC.**  
*Boulder, CO*  
Engineer, 2005-2006

Devised technical solutions for large clients. Managed Clean Water Act and related groundwater and storm water discharge permitting and compliance for large companies. Assisted in designing industrial wastewater treatment plant improvements. Performed greenhouse gas emission inventories for Fortune 500 companies.



## GET IN TOUCH

[www.lotussustainability.com](http://www.lotussustainability.com) 

[emily@lotussustainability.com](mailto:emily@lotussustainability.com) 

303.709.9948 

## INTERESTS

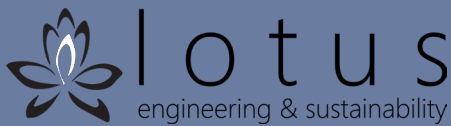
 Mountain biking

 Cooking

 Snowboarding



RACHEL MEIER  
Research Associate



ANALYST  
DATA VISUALIZER  
GEOGRAPHER  
ORGANIZER

Rachel is the newest member of the Lotus team. She brings years of experience writing reports and performing spatial analysis and data visualization to federal, state, and non-profit organizations. Rachel is known for her creative thinking, detail-oriented nature, passion for learning and strong organization skills.



## EXPERIENCE

### LOTUS ENGINEERING & SUSTAINABILITY, LLC.

Denver, CO

Research Associate, 2019-Present

Supports sustainability projects for a diverse array of public- and private-sector entities.

- Assists with greenhouse gas inventories and research in support of projects.
- Performs document and report reviews as a part of Lotus' quality assurance process.
- Creates data visualizations and public-facing communications materials for clients.
- Authors and creates documents and other products to support Lotus business development efforts.

### THE NATURE CONSERVANCY

Santa Fe, NM

GIS Specialist, 2018-2019

Provided cartography and spatial analysis support for all chapter programs in the New Mexico chapter. Performed spatial analysis to support all programs including urban heat island analysis, electric vehicle charging station planning, and riparian habitat mapping. Developed a UAV program for monitoring conservation easements, preserves, and forest restoration efforts. Maintained and populated data and record databases, GIS library and manual files.

Boulder, CO

Intern, Climate Action through Conservation Project, 2016-2017

Led the spatial analysis team in developing a methodology for NGOs to use geospatial analysis and statistical data to model carbon stocks. Established an organizational system which helped maximize database management. Produced new maps, tables and other graphical outputs in ArcMap and Microsoft Excel to generate focus areas for future carbon sequestration efforts by TNC. Collaborated with colleagues to create a report outlining policy suggestions for TNC staff supported by spatial analyses.

### COLORADO ENERGY OFFICE

Denver, CO

Student Project Lead, REV West Charging Station Analysis Project, 2017

Determined optimal locations for electric vehicle fast charging stations using QGIS, informing future construction of the REV charging corridor on Colorado's highways. Created maps and tables that will be used in the identification of funders for the fast charging stations throughout the corridor. Presented to the CEO project team on where to construct the stations, easing EV drivers' range anxiety, and increasing EV sales in CO and throughout the West.



## SKILLS

Data analysis  
Data visualization  
Spatial analysis and cartography  
Report writing  
Grant writing

## EDUCATION

University of Colorado-Boulder  
Masters of the Environment (MENV),  
2017

Gustavus Adolphus College  
B.A., Environmental Studies &  
Geography, 2016

## EXPERIENCE

NATIONAL WEATHER SERVICE, TWIN CITIES FORECAST  
OFFICE

*Chanhassen, MN*

Student Intern, Landslide Mitigation Project, 2015

Conducted research and statistical analysis of historical rainfall totals to quantify a metric for predicting potential future landslides. Collaborated with state, local, research universities and NGOs to produce a joint report given to Minnesota Governor Mark Dayton, affecting future policies addressing actions taken to mitigate landslide damage across the state of Minnesota.



## GET IN TOUCH

[www.lotussustainability.com](http://www.lotussustainability.com)



[rachel@lotussustainability.com](mailto:rachel@lotussustainability.com)



612.558.6296



## INTERESTS



Live music



Cooking & Baking



Hiking



**Dustin Collins**

**Technical Group Manager - Air Quality and Noise**

**PROFESSIONAL EXPERIENCE**

Mr. Collins has more than 15 years of air quality experience, which includes emission inventories, impact modeling, permitting, and compliance assistance and tracking. Prior to joining Pinyon, he served as an air quality team lead, project manager, and lead scientist for numerous air quality projects throughout the Rocky Mountain Region. His experience in air quality includes private and public clients in the oil and gas, transportation, and commercial industries. Mr. Collins has extensive experience in the preparation of air quality resource sections and emission calculations for projects requiring National Environmental Policy Act (NEPA) documentation, including Environmental Impact Statements (EISs), and Environmental Assessments (EAs). He has completed State air permitting projects in Colorado, Utah, Kansas, North Dakota, Wyoming, Texas, Ohio, West Virginia, and others. He has completed this permitting for both minor and major sources in both attainment and nonattainment areas.

**PROJECT EXPERIENCE**

**Northern Integrated Supply Project | Northern Colorado Water Conservancy District | Larimer and Weld Counties, Colorado.**

Mr. Collins is the air quality technical lead on this \$1.2 billion water infrastructure project in Northern Colorado. The project will construct two new reservoirs and approximately 80 miles of new pipelines to supply 15 Northern Front Range water providers with 40,000 acre-feet of new, reliable water supplies. Mr. Collins developed the Air Quality Management Plan to demonstrate compliance with Larimer County Land Use Code requirements. In addition, Mr. Collins is providing technical environmental assistance to Northern Water during the Larimer County Planning Commission public hearings.

**ADOT I-11 Environmental Impact Statement (EIS) | ADOT | Pima, Pinal, Maricopa, and Santa Cruz Counties.**

Mr. Collins is the air quality technical lead for the construction of the proposed Interstate 11 Corridor. As the lead, Mr. Collins has conducted qualitative NEPA analyses comparing environmental impacts of the proposed build corridor alternatives. He has also responded to federal agency comments of the Programmatic EIS regarding affected environment, alternative differences in traffic volumes, and potential changes in local air quality.

**Newfield Exploration | Greater Monument Butte Environmental Impact Statement Air Analyses | Uintah County, Utah**

Mr. Collins provided air quality analyses for a large-scale and very complex 5,750 well oil and gas EIS project. Tasks include near-field modeling for all NAAQS standards, CALPUFF far-field modeling with visibility and deposition analysis, NEPA air quality resource section reporting, and year-by-year emissions analysis that includes emission reductions of ozone precursors NOx and VOC. Mr. Collins

**AREAS OF EXPERTISE**

- Air Quality Assessment
- Air Permitting
- Air Modeling
- Emissions Inventories
- Agency Coordination
- NEPA
- Environmental Constraints Analysis
- Alternatives Analysis
- Environmental Assessments
- Environmental Impact Statements
- Findings of No Significant Impact
- Records of Decision
- Public Outreach and Participation
- Cumulative and Indirect Impact Assessments
- Compliance Audits
- Record Keeping and Reporting

**YEARS EXPERIENCE**

15

**YEARS WITH PINYON**

< 1 year

**EDUCATION**

BS, Environmental Economics and Policy, Michigan State University

helped the project work through ozone concerns and mitigation requirements in the Uinta Basin, and reach a Record of Decision in 2016.

**Greater Mooses Tooth 2 Oil and Gas SEIS Air Impact Analysis | Bureau of Land Management | North Slope of Alaska** Mr. Collins was the project manager and an air quality technical lead for the Greater Mooses Tooth (GMT) 2 Supplemental Environmental Impact Statement (SEIS) Air Impact Analysis. The study includes the development of emission inventories for the proposed action and alternatives, near-field modeling including analysis of cumulative sources, far-field modeling to display how the development would stay within far-field standards, and an air resource section development for the NEPA document. Mr. Collins serves as the primary interface between the team and the BLM to ensure tasks are completed efficiently, accurately, and on time for this sensitive project.

**Greenhouse Gas Subpart W Reporting | Various Clients | Colorado, Wyoming, Texas, more** Mr. Collins has been project manager and assisted with completion of numerous greenhouse gas reports for clients in the oil and gas industry. Each report includes extensive calculations to quantify actual greenhouse gas emissions from large data sets from operational and state records. Emissions are calculated on a basin-wide basis and include the organization of hundreds of facilities' production data, maintenance records, and gas meter reports. Mr. Collins has served as project manager and technical advisor, along with senior reviewer of reports before submittal.

**CARMMS 2.0 | Bureau of Land Management | Colorado** Mr. Collins was the project manager for the Colorado Air Resources Management Modeling Study (CARMMS) 2.0. The study developed baseline and future year emission inventories which were input into a photochemical grid modeling (PGM) platform to show impacts. Mr. Collins managed project teams to be sure tasks were done in accordance with BLM preferences, and met schedule and budget requirements



## **Kaitlin Meszaros** Air Quality Specialist

### **AREAS OF EXPERTISE**

Air Permitting  
Emissions Inventories  
Regulatory Compliance  
Dispersion Modeling  
NEPA  
Greenhouse Gas Reporting

**YEARS EXPERIENCE**  
6.5

**YEARS WITH PINYON**  
<1 year

**EDUCATION**  
MS, Climate Science and Solutions, Northern Arizona University  
BS, Mechanical Engineering, minor in Mathematics, Fairfield University

### **PROFESSIONAL EXPERIENCE**

Ms. Meszaros has over six years of professional experience in air quality compliance and permitting. She has completed dispersion modeling, developed multiple emission inventories, and managed air compliance for oil and gas facilities and aggregate and mining facilities throughout the United States. Her experience extends for minor source reporting, near-field dispersion modeling, regulatory compliance including NSPS, NESHAP, MACT, and NSR. Ms. Meszaros has extensive knowledge on EPA's GHG program management completing numerous reports, monitoring plans, and data collection plans annually. Additionally, she has been the technical lead for air dispersion modeling efforts including running AERMOD and associated programs such as AERMET and AERMAP and analyzing model results.

### **PROJECT EXPERIENCE**

**Air Quality Compliance Services | Antero Resources Corporation | West Virginia and Ohio.** Ms. Meszaros assists Antero Resources with their upstream and midstream oil and gas facilities as well as their water treatment facilities in the realm of permitting, compliance demonstrations, federal and state reporting, as well as greenhouse gas reporting. Tasks include emissions calculations, permit application development, facility planning for permit compliance demonstrations, dispersion modeling, regulatory applicability analyses, and direct communications with Antero management and operations.

**Air Quality Services | Confidential Client | Colorado.** Ms. Meszaros assisted an upstream oil and gas operator with their air quality permitting, compliance tracking, and overall air program needs in the Denver-Julesburg (DJ) Basin. Tasks included permitting of new and modified facilities, self-certifications to demonstrate permit compliance, development and review of state and federal reports including Regulation 7 semiannual and annual spreadsheets and NSPS OOOOa reports, and STEM plan development and assessments. More recently, Ms. Meszaros consulted on new site development planning for impending nonattainment reclassification of their operating area such as operational techniques to avoid major source classification and reduction in site-wide emissions.

**Greenhouse Gas Reporting | Various Clients | Various States.** Ms. Meszaros is the technical lead and manager of various oil and gas operators', both upstream and midstream, greenhouse gas reporting to the EPA. Ms. Meszaros created extensive, organized calculation workbooks to categorize different emissions sources as required by Subpart C, W, and NN of 40 CFR Part 98. These calculation workbooks take operational, production, and state records for a reporting year to report emissions and supplemental data to EPA. Furthermore, Ms. Meszaros acts as agents for the operators submitting the reports to EPA, responding to EPA comments on reports, and creating monitoring plans for proper data collection and management for reporting facilities.

**Greater Mooses Tooth 2 Air Impact Analysis | Bureau of Land Management | Alaska.** Ms. Meszaros was the near-field dispersion modeler and air quality staff for the Greater Mooses Tooth (GMT) 2 air impact analysis. Ms. Meszaros was tasked with the development of emissions inventories for the proposed action and alternatives, near-field modeling of criteria pollutants and hazardous air pollutants including cumulative sources, and report writing for air quality section of the NEPA document. Ms. Meszaros hosted a project presentation for the air quality technical group including the EPA, ADEC, USFWS, and BLM and assisted the BLM with response to public comments on the NEPA document.

**CARMMS 2.0 | Bureau of Land Management | Colorado.** Ms. Meszaros was part of a technical team tasked with the development of baseline and future year emissions inventories for the Royal Gorge field office in Colorado. The emissions inventories were used for categorization of different oil and gas sources within and planned for the state of Colorado on federal and non-federal lands and ultimately input into a photochemical grid model to show impacts.

**Health Risk Assessment | NASSCO | San Diego, California.** Ms. Meszaros was a lead dispersion modeler and report writer for a health risk assessment for a ship building yard in San Diego. The assessment including evaluation of reported emissions to SDAPCD, dispersion modeling of the facility and its emissions sources, acute, chronic, and cancer risk modeling using HARP, and writing a report including modeling methodology, sensitive receptor analysis, and results. The assessment including analysis of the sources with the highest contribution to potential public risk and consultation with NASSCO on avenues to reduce emissions and impacts.

**Denver Federal Center APENs Study | General Services Administration | Colorado.** Ms. Meszaros is the air quality compliance lead for the Pinyon team for the Denver Federal Center. Ms. Meszaros has worked directly with Federal Center employees to ensure records are being kept demonstrating continued compliance with their construction permit for emergency generators and boilers. Ms. Meszaros created a tool for comprehensive recordkeeping, tracking deadlines for state and federal reports, and monthly and rolling 12-month emissions totals. Other tasks related to the project also include the self-certification and permitting strategy evaluation of potential future modifications.





# TALENT

**Caroline Byus**

**Senior Environmental Scientist**

**AREAS OF EXPERTISE**

- Project Management
- Source Water Studies
- Watershed Planning
- Permitting
- Regulatory Compliance

**YEARS EXPERIENCE**

27

**YEARS WITH PINYON**

>1

**EDUCATION**

- MS, GIS University of Colorado, Denver
- BS, Biology, University of Connecticut

**PROFESSIONAL EXPERIENCE**

Ms. Byus has 27 years of combined experience in water & wastewater and environmental consulting. Her background includes work in the Water Quality and Compliance Laboratory Divisions for the Eagle River Water & Sanitation District where she gained expertise in method development, quality control and assurance, state and federal water quality regulations, and environmental compliance monitoring program development and implementation. As an environmental consultant with Leonard Rice Engineers and Pinyon Environmental, her expertise and experience has broadened in the areas of project management, environmental permitting, watershed planning, and water quality studies and investigations associated with a variety of aquatic health, nutrients, temperature, stormwater, and urban stream impairment projects. She enjoys helping clients address complex water quality and compliance problems and finds solutions through listening, evaluating all available and relevant alternatives, and ensuring that strategies are most practical for the client’s unique needs from operational and cost-effective perspectives.

**PROJECT EXPERIENCE**

**Nutrient Stream Modeling/Assimilative Capacity Study | City of Santa Fe | Santa Fe, New Mexico - Project Manager** of a Qual2kw stream modeling study to assess the City of Santa Fe’s effluent impacts on nutrient stream concentrations in the Santa Fe River below the Paseo Real Wastewater Treatment Plant. The study was designed to support the both the City of Santa Fe and the New Mexico Environment Department in development of a temporary standard and future TMDL to meet New Mexico’s nutrient narrative standards. The project included development of a sampling and analysis plan to collect comprehensive data for several synoptic sampling events in the Santa Fe River. LRE conducted flow measurements, water quality sampling, periphyton sampling, and continuous data collection during “critical conditions”, which occur during summer months. Data review and analysis were conducted to summarize findings, inform calibration and validation of the QUAL2Kw model, and recommend a regulatory strategy.

**Eagle River Basin Stream Temperature Study and Site-Specific Temperature Standards | Eagle, Colorado - Project Manager** of a long-term stream temperature monitoring study (2007–present) conducted in Gore Creek and the Eagle River designed, in part, to assess stream temperature conditions and underlying appropriateness of temperature water quality standards adopted by the Water Quality Control Commission (WQCC) in 2008 and evaluation of implementation of those standards. Temperature data from over 20 monitoring sites have been analyzed to determine temperature loads from point and nonpoint sources (anthropogenic impacts). Data were used to develop a Use Attainability Analysis that supported successful adoption of site-specific temperature standards in Segments 8 and 9 of the Eagle River watershed during the 2014 Regulation No. 33 WQCC Rulemaking Hearing.

**Cherry Creek Basin Septic System Nutrient Loading Study | Greenwood Village, Colorado - Project Manager.** Managed, developed, and executed an assessment to estimate nutrient (nitrogen and phosphorus) loading from septic systems to surface waters in the Cherry Creek basin. A GIS model was used to estimate nutrient load reduction (through attenuation) based on soil properties, drainage classes, and septic system distance to surface waters.

**Gore Creek and Eagle River Water Chemistry and Biological Health Study | Eagle, Colorado - Project Manager.** Provide ongoing management and technical support for water quality investigations and analysis concerning water chemistry and biological impacts in Gore Creek and the Eagle River. Work involves design, preparation, and implementation of sampling and analysis plans for water chemistry, periphyton and macroinvertebrates; development of a water quality database management system; analysis of water quality and biological sampling data; and presentation of study results to various public entities. A portion of the work was conducted in consultation with the Colorado Water Quality Control Division in conjunction with the State's program to adopt water quality standards for total phosphorus and total nitrogen. Results of the study were used in the State of Colorado WQCC Nutrient Regulations Rulemaking Hearing.

**Gore Creek Water Quality Improvement Plan | Vail, Colorado - Project Manager.** The project included development of a plan to guide the design and implementation of measures to improve Gore Creek stream health as indicated by macroinvertebrate community metrics. This effort included the compilation of historical water quality, biological, spatial and drainage infrastructure information; data analysis to identify biological stressors and pollution loading sources; and identification of projects and strategies to improve water quality. Project tasks included research and development of approaches to improve riparian corridor quality, stormwater management controls and maintenance programs, stream habitat, and to reduce pollutant loading associated with land use activities and urban runoff. The project also required developing and implementing a pilot stormwater sampling plan for identifying and characterizing pollutants associated with different land use activities; conducting an impervious surface analysis using GIS; and performing a stream habitat assessment. The effort required extensive stakeholder collaboration, outreach and coordination. Data collected and interpreted through this effort continues to be used today by stakeholders for multiple scientific, permitting, planning, and management purposes.

**Gore Creek and Eagle River Stream Modeling for Watershed-based Nutrient Management:** Project Manager for the Eagle River Water and Sanitation District's stream nutrient modeling project designed to evaluate nutrient dynamics in the Eagle River watershed and inform wastewater treatment optimization alternatives and watershed-based nutrient management control strategies for meeting Colorado's nutrient regulations. Work involved populating, calibrating, and validating the Qual2Kw stream water quality model for segments of Gore Creek and the Eagle River that are receiving waters for the District's three wastewater treatment facilities. The project also involved developing an approach for evaluating nutrient trading between the facilities to support management strategies that considered water quality targets, wastewater treatment capital costs, and long-term nutrient reduction goals.

## PERMITTING EXPERIENCE

### **Eagle River Water and Sanitation District, Colorado: Project Manager.**

Provide ongoing water quality, technical support, and permitting assistance related to various projects including CDPS permitting for the Vail, Avon, and Edwards WWTFs. The latter seeks to integrate the facilities' permits in a way that considers watershed-based permitting approaches that support operational efficiency between the facilities and cost-effective strategies for ensuring compliance with water quality standards.

### **Mt. Crested Butte Water and Sanitation District (MCBWS), Colorado: Project Manager.**

Provide ongoing water quality, permitting, compliance, and regulatory technical support including development of a copper translator study and development of a water quality sampling and analysis program designed to support various regulatory needs and challenges associated with an effluent-dominated receiving stream.

**Town of Erie, Colorado: Project Manager** Provide ongoing water quality, environmental and CDPS permitting, discharge permitting, and regulatory assistance to the Town of Erie for various projects.

## WATER QUALITY FORUM AND RULEMAKING HEARING PARTICIPATION

**Water Quality Forum Workgroup Participation:** On behalf of multiple clients, participate(d) in the Permit Issues Forum, 303(d) Listing Methodology, Basic Standards, Regulation 22, Regulation 61, and Temperature Technical Advisory Committee Workgroups. Served as co- coordinator of the 303 (d) Listing Methodology Workgroup in 2017 and 2018 and Regulation 22 Design Capacity / Design Flow Sub-workgroup (2018 to 2019).

### **Nutrient (Regulation Nos. 31 and 85) Rulemaking Hearing Participation:**

With Leonard Rice associates, participated in the Water Quality Control Division's (WQCD) workgroup processes for development of nutrient regulations. Prepared language and supporting data analysis for incorporation of water quality trading and alternative effluent limits regulatory language into the Nutrients Control Regulation No. 85. Prepared Responsive Prehearing and Rebuttal Statements and provided expert testimony on behalf of the Eagle River Water and Sanitation District.

**303(d) (Regulation No.93) RMH Participation:** Work closely with the WQCD on aquatic life, sediment, temperature, and other listing proposals for Eagle River Basin segments. Participate in stakeholder workgroups and RMHs to refine the listing methodology.

**Regulation No. 33 Upper Colorado Basin Rulemaking Hearing:** Participate in hearing processes for multiple water quality issues, prepared Use Attainability Analysis, Responsive Prehearing and Rebuttal Statements, and expert testimony on behalf of the Eagle River Water & Sanitation District.



**Scott L. Fanello**  
Environmental Engineer

**AREAS OF EXPERTISE**

- Construction Dewatering and Remediation Permits
- Stormwater Management Plans
- Stormwater Inspections
- SPCC Plans
- Project Management
- Project Control
- Phase II ESAs
- Site Assessments
- Remediation of Contaminated Sites
- Obtaining NFAs for Contaminated Sites in Utah, Wyoming, and Colorado
- Industrial Wastewater Treatment, Monitoring, and Compliance
- Hydrologic Modeling
- Groundwater Treatment, Monitoring, and Compliance
- GIS

**YEARS EXPERIENCE**

10

**YEARS WITH PINYON**

7

**EDUCATION**

B.S., Biology, Chemistry  
Minor, George Mason University

M.S., Civil Engineering,  
emphasis on Environmental Engineering, Virginia Tech

**PROFESSIONAL EXPERIENCE**

Mr. Fanello has helped clients obtain construction dewatering and remediation permits for linear (utility and transportation) construction projects. In addition, he has helped clients obtain Substitute Water Supply Plans (SWSP) for projects with dewatering operations that were more cost effective to be treated off-site thus triggering water rights laws. He has helped clients with regular sampling of permits, discharge monitoring report (DMR) submittals, and helped them navigate audits from state regulators to keep projects in compliance with state environmental regulations.

Mr. Fanello has conducted field investigations at contaminated sites including installing borings and monitoring wells as part of Phase II investigations, collected soil and groundwater samples, compared them against state and federal standards and helped clients draft and execute plans to remediate sites in Colorado, Wyoming, and Utah to the point of receiving No Further Action letters from the project's representative states.

Mr. Fanello is experienced in monitoring surface water and designing storm water treatment systems. He assists in field services on projects related to non-point source monitoring, groundwater monitoring, stormwater, and industrial wastewater treatment. He has also performed water monitoring (both chemical and biological), and produced hydrologic modeling and analysis.

**PROJECT EXPERIENCE**

**Surface Water Sampling, Willow Creek and Poudre River Watersheds, Northern Water.** Mr. Fanello assisted Northern Water with surface water sampling in the Willow Creek Watershed for their Windy Gap Firming Project. Flow measurements were captured and calculated, field parameters were collected with a YSI sonde, and water samples were collected using equal widths sampling protocol. The samples were process for metals and nutrients analysis based on Northern Water's Standard Operating Procedures (SOP) which are based on the USGS National Field Manual for the Collection of Water-Quality Data.

Mr. Fanello later acted as project manager and coordinating and trained sampling teams for the Willow Creek project. A second project sampling the Poudre River Watershed was later added and Mr. Fanello acted as project manager, coordinating the sampling, and compiling the data for submittal.

**Surface Water Sampling, Duck Pond, Denver Zoo.** Mr. Fanello assisted the Denver Zoo by collected surface water samples at Duck Pond. A Secchi disk was used to evaluate water clarity and water column samples were collected for field parameters using a YSI sonde and a horizontal water sampler.

## REGISTRATIONS

Engineer-in-Training,  
Colorado, Individual  
Number 68235

## CERTIFICATIONS

Respirator Fit Test  
CDOT TECS

40 Hour OSHA  
HAZWOPER, 8-hour  
refresher, Colorado

CDOT SMWP Preparer

Colorado Oil and Public  
Safety Listed Consultant  
6377

Industrial Wastewater  
Operator Class C #13927

**Conduit 16 and Conduit 18, Dewatering and Remediation Permits for Construction, HDR and Denver Water.** Mr. Fanello has assisted Denver Water with obtaining dewatering permits and remediation permits (for sites with contaminated groundwater). He has helped them research their project sites and negotiate with the State Health Department to evaluate sampling requirements for each job site based on historical contamination. Mr. Fanello coordinated wells drilling and installation to collect soil samples as well as help them monitor their dewatering process, fill out and submit DMRs, trained them on the new online NetDMR system, and helped them navigate audits from state regulators. He has helped them secure Substitute Water Supply Plans when it was more cost-effective to remove the water and treat it offsite. Doing that triggers water rights laws that demand the water be replaced which is what the SWSP helps facilitate.

**Stormwater Discharge System | Denver Zoological Gardens | Denver, Colorado.** Mr. Fanello operated a UV disinfection system to clean water from the Flamingo Pond at the Denver Zoo so that it could be discharged into stormwater system during high precipitation events. He created an operations manual for the system and trained zoo staff in the proper use of the system.

**Non-Permitted Discharge Sampling and Reporting | East Canon City Prison Complex | Canon City, Colorado.** Mr. Fanello helped complete soil sampling and reporting for the East Canon City Prison Complex (ECCPC) in response to a non-permitted sewage discharge that occurred at the facility in the fall of 2011. Mr. Fanello collected the samples and had them analyzed for fecal coliforms and salmonella. The results were summarized in a letter sent to CDPHE as part of the ECCPC waste water spill cleanup plan. The ECCPC was granted a "no further action" status for the non-permitted discharge by the Colorado Department of Public Health and Environment.

**Lehow Lake Revegetation Project | Denver Water | Denver, Colorado.** Mr. Fanello used ArcGIS to analyze a vegetation survey for Denver Water that proved they achieved their revegetation goals for upland and riparian habitats at Lehow Lake.

**Autosampler and Cell Notification for Sampling at Remote Locations.** At some facilities with industrial stormwater permits, regular sampling is required. These facilities are often remote and frequently have no active staff. To help one of our clients with this problem, Mr. Fanello set up an automatic sampler with the following features:

- Water sensor which will trigger a sampling event when water is present in the outfall;
- Peristaltic pump with 20 foot head capacity and PVC sample pickup hoses with debris strainers that automatically collects a water sample required by Colorado stormwater permits for non-extractive industries;
- Satellite telemetry alert system that called the client's cell phone when a sample had been taken;
- 40 Watt solar panel, controller, and battery to keep the systems charged and operational

**Front Range Regional Trail, Larimer County**

Pinyon is a subconsultant to AVI Professional Corporation on the proposed 12,000 linear foot trail project. Mr. Fanello assisted Larimer County with the completion of the stormwater management plan narrative and erosion control plans in compliance with Larimer County regulations and the state permit for stormwater discharges associated with construction activity.

**Former Dry Cleaners Remediation, Montview Plaza, Aurora, Colorado**

Mr. Fanello is currently assisting with monitoring and groundwater remediation for Montview Plaza in Aurora, Colorado. Historical releases of PCE occurred at the site due to the activities of a former dry cleaners. Mr. Fanello has conducted groundwater monitoring, coordinated monitoring and training for other Pinyon staff member at the site, provided oversight for indoor injection well installation, and coordinated injections for both indoor and outdoor monitoring wells. In addition, Mr. Fanello has helped with reporting the results of groundwater injections and monitoring to the CDPHE. The site uses whey injections for remediation. Pinyon has local sources of whey which is purchased at a fraction of the cost of commercial injection substrates, saving the client hundreds of thousands of dollars in remediation costs. After injections and five monitoring events, Mr. Fanello utilized a plume analysis program called MAROS to analyze the results of the remediation. Although additional injections will be required, Mr. Fanello was able to target specific areas of the plume making additional remediation more efficient and reducing the overall time to cleanup.

**Former Uniform Cleaning Facility | Cintas | Denver, Colorado.** Mr. Fanello assisted with the design and installation of a remediation system to inject emulsified vegetable oil and cheese whey into tetrachloroethene-impacted groundwater. The system was designed to allow the injected media to be pumped from outside the building to buried injection points inside the building. The treatment system installation work was completed with dust control containments assembled to eliminate dust migration to artist studios located within the building.

**Stormwater Management Plan, US 85 Sedalia to Daniels Park, HDR, CDOT** – Mr. Fanello assisted CDOT with the completion of the stormwater management plan narrative and erosion control plans in compliance with CDOT construction standards and the state permit for stormwater discharges associated with construction activity. This project consists of reconstruction and widening of US 85 from Sedalia to Daniels Park, and includes roadway widening with a lane addition, curb and gutter, retaining walls, and replacing drainage structures. Due to the complex nature of the project and the presence of significant historic resources close to the project area, the ongoing project has required several rounds of consultation with CDOT staff and engineering consultants.

**Colorado Department of Transportation Water Quality Program Services.** Mr. Fanello provided expertise and assistance for the Colorado Department of Transportation (CDOT) State-wide Water Quality Program Services contract. MS4 permit compliance areas include the Illicit Discharges Program (also known as Illicit Discharge Detection and Elimination (IDDE), and Stormwater Outfall Reconnaissance Inventory Program. Mr. Fanello worked with



Scott L. Fanello  
Environmental Engineer

CDOT and CH2M Hill to define CDOT stormwater outfalls and mapping criteria in order to meet MS4 goals of outfall mapping in Phase I and Phase II municipalities. Stormwater outfall mapping was performed, using Trimble GPS units, on state highways throughout the state. Mr. Fanello also has provided inspection services and completion of maintenance manuals for permanent water quality features in CDOT Region I. Furthermore, Mr. Fanello assisted CDOT in drafting their Program Description Document (PDD) for Construction as required by their MS4 permit.

## Professional Experience

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Owner/Public Health and Built Environment Consultant • AMBG Consulting • August 2019-present

- Lead professional consulting services focused on community engagement, capacity building, facilitation, research and evaluation, implementation, and strategic planning at the intersection of public health and the built environment
- Manage projects, partnership agreements, website, and operations of AMBG Consulting, LLC

Healthy Community Design Specialist • Colorado Department of Public Health & Environment • August 2018- May 2019

- Co-created and facilitated a pilot Environmental Health Assessment in Chaffee County, Colorado
- Identified prevalence and incidence rates in Colorado counties through collaboration with local stakeholders
- Advised Local Public Health Agency staff on conducting community health needs assessments, implementing culturally responsive strategies and creating changes in the built environment to promote healthy behaviors
- Designed and developed a Health and the Built Environment educational resource guide using the Adobe Creative Suite

Urban and Regional Planning Research Assistant • University of Colorado • 2018-2019

- Collected data on 41 health and housing indicators at the census tract level; mapped variables using ArcGIS to test correlation and statistical significance between health indicators and locations of mobile home parks in Houston, Texas
- Created an interview guide, conducted interviews with key informants, and analyzed qualitative and quantitative data

Epidemiology Research Assistant • University of Colorado & Denver Urban Gardens • 2017-2018

- Developed the process evaluation framework & qualitative surveys for the Community Activation for Prevention Study
- Recruited 160 study participants through in-person and telephone outreach
- Conducted approximately 80 health visits to collect qualitative and quantitative data

Student Contractor, Community Health Assessment, Baca County Public Health Department • University of Colorado • 2017

- Facilitated focus groups, key informant interviews, and a nominal group technique in accordance with guidelines provided by the Colorado Community Health Assessment and Planning System
- Developed a deductive coding framework to organize and evaluate qualitative data

Drop-in Services/Artist Mentorship Program Supervisor • New Avenues for Youth, Portland Oregon • 2011-2015

- Developed and facilitated educational and engaging programming using Trauma-Informed and Assertive Engagement models for youth from different social and cultural backgrounds including LGBTQ+ youth, Latinx, and youth experiencing homelessness
- Managed daily operations of the program, supervised 10 staff, and coordinated volunteers for the program

## Education

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Master of Public Health: Community & Behavioral Health (GPA 3.8)

University of Colorado, Anschutz Medical Campus • May 2019

Master of Urban and Regional Planning (GPA 3.8)

University of Colorado, College of Architecture & Planning • May 2019

Bachelor of Science: Psychology (GPA 3.6)

Portland State University • May 2010

## Additional Training and Certifications

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Trauma Informed Care 101 and 201 • Trauma Informed Care Oregon • Portland, Oregon • 2014

Diversity, Equity, and Inclusion Training • Center for Equity and Inclusion • Portland, Oregon • 2015

## Education

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Masters of Urban and Regional Planning (MURP), May 2019  
University of Colorado Denver, Denver, CO (3.8 GPA)

Bachelor of Arts and Science (B.A), May 2014  
University of Colorado Denver, Denver, CO (3.5 GPA)  
Major: Sociology  
Minors: Social Justice and Women and Gender Studies

## Professional Experience

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Owner/Community Engagement Specialist August 2019 – Present  
AMBG Consulting -Denver, CO

- Lead professional consulting services which include but are not limited to community engagement, facilitation, research and evaluation, strategy and implementation planning
- Leverage relationships with other consultants, community groups, local nonprofits, foundations, government agencies, and for-profit agencies
- Create and lead all internal financial, legal and structural business systems

FreshLo Walkable Loop Project Manager, January 2019 – Present  
Montbello Organizing Committee (MOC)–Denver, CO

- Lead FreshLo Walkable Loop design, planning and implement efforts to improve access to fresh healthy food, community resources and destinations while incorporating active living efforts
- Manage organizational partnerships and community relations by working with FreshLo Walkable Loop partners, stakeholders and Montbello residents
- Support land acquisition, financing, and development efforts of the FreshLo Cultural Hub, a grocery store anchored mixed-use development through the identification of financial resources for residential and commercial needs. Build the understanding of land use and zoning policies of the board and staff

Spanish Language Interpreter, March 2016 – Present  
Community Language Cooperative (CLC)–Denver, CO

- Interpret for monolingual Spanish speakers at community and organization gatherings pertaining to community opportunities or issues in areas of health, transportation, housing, community organizing and neighborhood planning
- Engage in group discussions to ensure monolingual Spanish speakers and English speakers can effectively communicate while maintaining neutrality to the topic being discussed

Housing Consultant, March 2018 – May 2019  
Colorado Nonprofit Development Center (CNDC)–Fort Morgan, CO

- Developed culturally responsive, context specific curriculum to deepen the Fort Morgan Cultures United for Progress (FMCUP) Resident Team's critical understandings of community planning processes, land use and zoning code, comprehensive plan and real estate finance to understand the different aspects impacting the availability of adequate and affordable housing in the city of Fort Morgan
- Built relationships with resident leaders, nonprofit organizations, business leaders, government officials and staff to facilitate conversations around Fort Morgan's housing needs

Community Organizer, March 2015 – August 2016  
Montbello Organizing Committee (MOC)–Denver, CO

- Worked with MOC Leadership Team and Task Teams to develop strategies for community development around the issues of Transportation, Retail and Economic Development and Community Enhancement  
Drafted official documents and created bilingual fact sheets, flyers, and brochures for MOC outreach efforts





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