

# **CARBON COUNTY COMMISSIONERS AGENDA**

**DATE:** December 5, 2024 (Thursday)

**8:30 a.m. PLEDGE OF ALLEGIANCE**

**8:35 a.m. PUBLIC COMMENT PERIOD** – On matters within the Commissioners’ jurisdiction

**9:00 a.m. EMPLOYEE TIME STATUS REVIEW**

**9:30 a.m. DPHHS TASK ORDER - COMMUNITY HEALTH IMPROVEMENT PLAN AND ORGANIZATIONAL STRATEGIC PLAN**

**10:00 a.m. COUNTY ATTORNEY**

**10:30 a.m. CONSENT AGENDA**

**PARK & GALLATIN COUNTY MEMORANDUM OF UNDERSTANDING – WILDFIRE RISK AND HAZARD ANALYSIS**

**VIBRANT PLANET PROPOSAL – TRANS-COUNTY WILDFIRE RISK MODELING**

**11:00 a.m. COUNTY FIRE WARDEN JOB DESCRIPTION APPROVAL AND HIRING AUTHORIZATION**

**GIS COORDINATOR JOB DESCRIPTION APPROVAL AND HIRING AUTHORIZATION**

**11:30 a.m. APPOINT JUSTICE OF THE PEACE**

**TASK ORDER AMENDMENT ONE  
TASK ORDER FOR  
ORGANIZATIONAL STRATEGIC PLAN  
CONTRACT HHS-PHSD-00001489  
TASK ORDER 24-07-1-01-116-0**

This Task Order Amendment is entered into between the Montana Department of Public Health and Human Services, ("Department"), P.O. Box 4210, Helena, Montana, 59620, Phone Number (406) 444-5623, Fax Number (406) 444-1970, and Carbon County ("Contractor"), Federal ID Number 81-6001339, UEI SB27NJFF6XT9, and 10 S. Oakes, Red Lodge, MT 59068.

Effective 12/1/2024 this Task Order is amended as follows. Existing language has been struck; amended language underlined.

**SECTION 2. PURPOSE**, will be amended as follows:

The purpose of this Task Order is to fund a Community Health Improvement Plan and Organizational Strategic Plan for Carbon County.

**SECTION 3. TERMS OF TASK ORDER**, will be amended as follows:

A. The term of this Task Order for the purpose of delivery of services is from January 1, 2024, through ~~December 31, 2024~~ November 30, 2025.

B. Remains unchanged.

**SECTION 4. SERVICES TO BE PROVIDED AND SCOPE OF WORK**, will be amended as follows:

A. The Contractor agrees to provide the following services:

1 through 3 Remain unchanged.

4. Share the results of the community health improvement plan and organizational strategic plan, with Department of Public Health and Human Services due ~~December 31, 2024~~ November 30, 2025.

5. Organizational Strategic Plan:

a. Assemble a diverse stakeholder group for the strategic planning process and have regular meetings. Contractors must submit a membership list of partners participating in the strategic planning process, meeting agendas, and meeting minutes. Your local board of health must be engaged in the process. Provide meeting agendas, attendance lists, minutes, and/or key issues or finding that developed from the meeting; submit with activity report. Provide a description of the process used to identify health issues and assets. Progress will be tracked with activity reports.

b. Develop and adopt a strategic plan that includes: a) mission, vision, and guiding principles/values, b) strategic priorities, c) goals and objectives with measurable and time-framed targets, d) identification of factors that may impact community health or the health department, e) assessment of the health department's strengths and weaknesses, f) link to the community health improvement plan (if completed), g) link to quality improvement plan (if completed). Contractor must submit the completed

strategic plan to the Department. Upon completion of the community health assessment, the Contractor must share the results with stakeholders, partners, and the public.

- c. Progress of deliverable completion will be tracked with activity reports for payments.
- d. Participate in telephone calls with the Local and Tribal Support Program **monthly** during the grant period.
- e. Complete a post grant survey detailing lessons learned and processes that could be replicated across Montana.
- f. Share the results of the organizational strategic plan with Department of Public Health and Human Services due November 30, 2025

B. The Department agrees to do the following:

1, 2 and 4 Remain unchanged.

- 3. Provide technical assistance in community health improvement planning and organizational strategic plan.

**SECTION 5. CONSIDERATION, PAYMENTS, AND PROGRESS PAYMENTS,** will be amended as follows:

A. In consideration of the services provided through this Task Order, the Department will pay the Contractor a total of ~~\$10,000~~ \$20,000 as follows:

1 through 3 Remain unchanged.

- 4. The first payment in the amount of \$2,000 will be made up signing and returning the task order for the startup funds.
- 5. The second payment in the amount of \$ 2,000 will be made after 3 months upon review and approval of the activity report and work plan (March 1, 2025).
- 6. The third payment in the amount of \$2,000 will be made 6 months upon review and approval of the activity report and work plan (June 1, 2025)
- 7. A fourth payment in the amount of \$2,000 will be made 9 months upon review and approval of the activity report and work plan (September 1, 2025)
- 8. The final payment in the amount of \$2,000 will be made upon review and approval of the task order deliverables (November 30, 2025).

B. All invoiced must be received by the Department no later than 30 days following the Task Order end date of ~~December 31, 2024~~ November 30, 2025. Invoices received after 60 days will not be paid by the Department.

C. Remains unchanged.

**SECTION 6. SOURCE OF FUNDS AND FUNDING CONDITIONS,** will be amended as follows:

The sources of the funding for this Task Order are ~~\$10,000~~ \$20,000 from federal grant: CDC Strengthening Public Health Infrastructure, Workforce and Data Systems, ALN 93.967.

**SECTION 7. CFR 200 REQUIREMENTS**

The following information may be required pursuant to 2 CFR 200: as outlined in Attachment A.

**SECTION 14. SCOPE OF TASK ORDER**

This Task Order Amendment One consists of 4 numbered pages, and Amendment A.

All of the provisions of the Master Contract are incorporated into and are controlling as to this Task Order. In the case of a material conflict, a dispute, or confusing language between this Task Order and Master Contract the Master Contract shall control. This Task Order does not stand alone. If Master Contract lapses, so does this Task Order. The original Task Order will be retained by the Department. A copy of the original has the same force and effect for all purposes as the original. This is the entire Task Order between the parties.

**AUTHORITY TO EXECUTE**

Each of the parties represents and warrants that this Task Order Amendment is entered into and executed by the person so authorized to bind the party to the provisions of this Task Order Amendment, Task Order, and the Master Contract.

IN WITNESS THEREOF, the parties through their authorized agents have executed this Task Order Amendment on the dates set out below:

Remainder of Page Intentionally Left Blank



**MONTANA DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES**

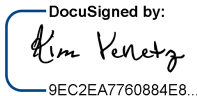
BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Stacy Campbell, Division Administrator

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
David Gerard,  
Public Health & Community Affairs Executive Director

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Charles T. Brereton, Director

**MONTANA DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES PUBLIC HEALTH & SAFETY DIVISION**

Approved as to form:

BY:  \_\_\_\_\_ Date: 11/22/2024  
Contracts Officer

**CONTRACTOR, CARBON COUNTY**

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Carbon County Commissioner

**ATTACHMENT A**

**COMPLIANCE WITH LAWS/WARRANTIES AMENDMENT ONE**

The following information may be required pursuant to 2 CFR 200.

<b>1) Recipient name:</b>	Carbon County	Carbon County
<b>2) Recipient Unique Entity Identifier:</b>	SB27NJFF6XT9	SB27NJFF6XT9
<b>3) Unique Federal Award Identification Number (FAIN):</b>	NE11OE00073	NE11OE00073
<b>4) Federal award date:</b>	12/6/2023	TBD
<b>5) Period of Performance Start and End Date:</b>	12/1/2022 to 11/30/2027	12/1/2022 to 11/30/2027
<b>6) Budget Period Start and End Date:</b>	12/1/2024 to 11/30/2025	12/1/2024 to 11/30/2025
<b>7) Amount of Federal Funds Obligated by this Action:</b>	-	\$10,000
<b>8) Total Amount of Federal Funds Obligated:</b>	\$10,000	\$10,000
<b>9) Total Approved Cost Sharing, where applicable:</b>	NA	NA
<b>10) Total Amount of Federal Award including approved Cost Sharing:</b>	\$1,054,522	-
<b>11) Budget Approved by the Federal Agency:</b>	CDC Rhonda Latimer, GMO	CDC Rhonda Latimer, GMO
<b>12) Federal Award Description:</b>	Strengthening Public Health Infrastructure, Workforce, and Data Systems in Montana	Strengthening Public Health Infrastructure, Workforce, and Data Systems in Montana
<b>13) Name 13.1 Federal Awarding Agency: 13.2 Pass Through &amp; Contact Information:</b>	CDC DPHHS PHSIO/Kerry Pride 406-600-1594	CDC DPHHS PHSIO/Kerry Pride 406-600-1594
<b>14) Assistance Listing Number and Title:</b>	93.967 / CDC's Collaboration with Academia to Strengthen Public Health	93.967 / CDC's Collaboration with Academia to Strengthen Public Health
<b>15) Identification of whether the Award is R&amp;D:</b>	No	No
<b>16) Indirect cost rate of the Federal Award:</b>	NA	NA

**Memorandum of Understanding**  
**Between**  
**Park County, MT and the Carbon County, MT**

This memorandum of understanding (“MOU”) is between Park County, a political subdivision of the State of Montana (“Park County”) and Carbon County, a political subdivision of the State of Montana (“Carbon County”).

1. **Purpose:** The purpose of this MOU is to pay for a wildfire risk and hazard analysis covering Park, Gallatin, Stillwater, and Carbon counties.
2. **Authority:** This MOU is authorized by MCA 7-11-104.
3. **Term:** This MOU is effective upon signature of both parties and terminates on September 30, 2026.
4. **Services to be Provided:** Park County will contract with Vibrant Planet, a public benefit corporation with headquarters in Truckee, CA, (“Vibrant Planet”) to conduct a wildfire risk and hazard analysis covering Park, Gallatin, Stillwater, and Carbon counties that includes an inventory, analysis, and projection of wildfire data and identifies highly valued resources and assets at risk. The analysis will be carried out in accordance with the scope of work described in the document entitled “Vibrant Planet Proposal presented to Park, Gallatin, Stillwater, and Carbon Counties” with a project name “Trans-County Wildfire Risk Assessment” and dated November 14, 2024.
5. **Fees and Compensation:** Park County will pay Vibrant Planet \$150,000 to conduct the wildfire risk and hazard analysis described in the scope of work described in the document entitled “Vibrant Planet Proposal presented to Park, Gallatin, Stillwater, and Carbon Counties” with a project name “Trans-County Wildfire Risk Assessment” and dated November 14, 2024. Carbon County will pay Park County \$26,666.67 to reimburse Park County for the Carbon County portion of the wildfire risk and hazard analysis.
6. **Administrators:** The Park County administrator for this MOU is Kristen Galbraith, Director of Grants and Special Projects. The Carbon County administrator for this MOU is Tom Kohley, Carbon County Fire Warden.
7. **Termination:** Either party shall have the right to terminate this MOU at any time, for any reason, subject to 90 days written notice of intent to terminate this MOU.
8. **Amendments:** Any amendments or modifications of this MOU must be in writing, made by mutual consent of both parties, and signed by both parties.

9. **Disputes:** It is mutually agreed that the performance or breach of this MOU and its interpretation shall be governed by the laws of the State of Montana. In the event of litigation concerning the terms of this MOU, venue shall be in the Montana Sixth Judicial District, Park County.

10. **Liability:** Carbon County and Park County agree to mutually indemnify and hold each other harmless against claims against either party as a result of any or all actions, claims, damages and losses (including attorney's fees) that may arise out of or in relation to any negligent or intentional acts, errors, omissions of the other party. The parties further agree that each party shall not be held liable for any special, consequential, indirect, or incidental damages as a result of this MOU.

11. **Entire Agreement:** This MOU is the entire agreement between the parties. No alteration, amendment, modification, or addition shall be binding unless reduced to writing and signed by both the parties.

12. **Authorized Representatives:** By signature below, each party certifies that the individuals listed below as representatives of the party are authorized to act on their respective behalf.

\_\_\_\_\_  
Clint Tinsley, Commission Chairman  
Park County

\_\_\_\_\_  
Date

\_\_\_\_\_  
Scott Miller, Commission Presiding  
Officer, Carbon County

\_\_\_\_\_  
Date



# VIBRANT PLANET PROPOSAL

**Presented to**

**Park, Gallatin, Stillwater, and Carbon Counties**

Project Name: Trans-County Wildfire Risk Assessment  
11/14/2024

Zander Bonorris  
[zander@vibrantplanet.net](mailto:zander@vibrantplanet.net)  
415-342-9911

Joe Scott  
[joe.scott@vibrantplanet.net](mailto:joe.scott@vibrantplanet.net)  
406-549-2340

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[Vibrant Planet](#) is a hybrid organization comprised of a 501(c)(3) - VP Data Commons - which stewards resilience-focused data for the public good, and a mission-driven Public Benefit Corporation (PBC) which is building a decision support solution to increase the efficacy and efficiency of risk management and adaptive planning for wildland resiliency, watershed and ecological health, public safety, and community and grid resilience.

### Overview

Vibrant Planet aims to dramatically increase the pace and scale of adaptive, ecological wildland restoration with data-driven analytics, supported by applied science, and which enables rapid, high-quality decisions and actions.

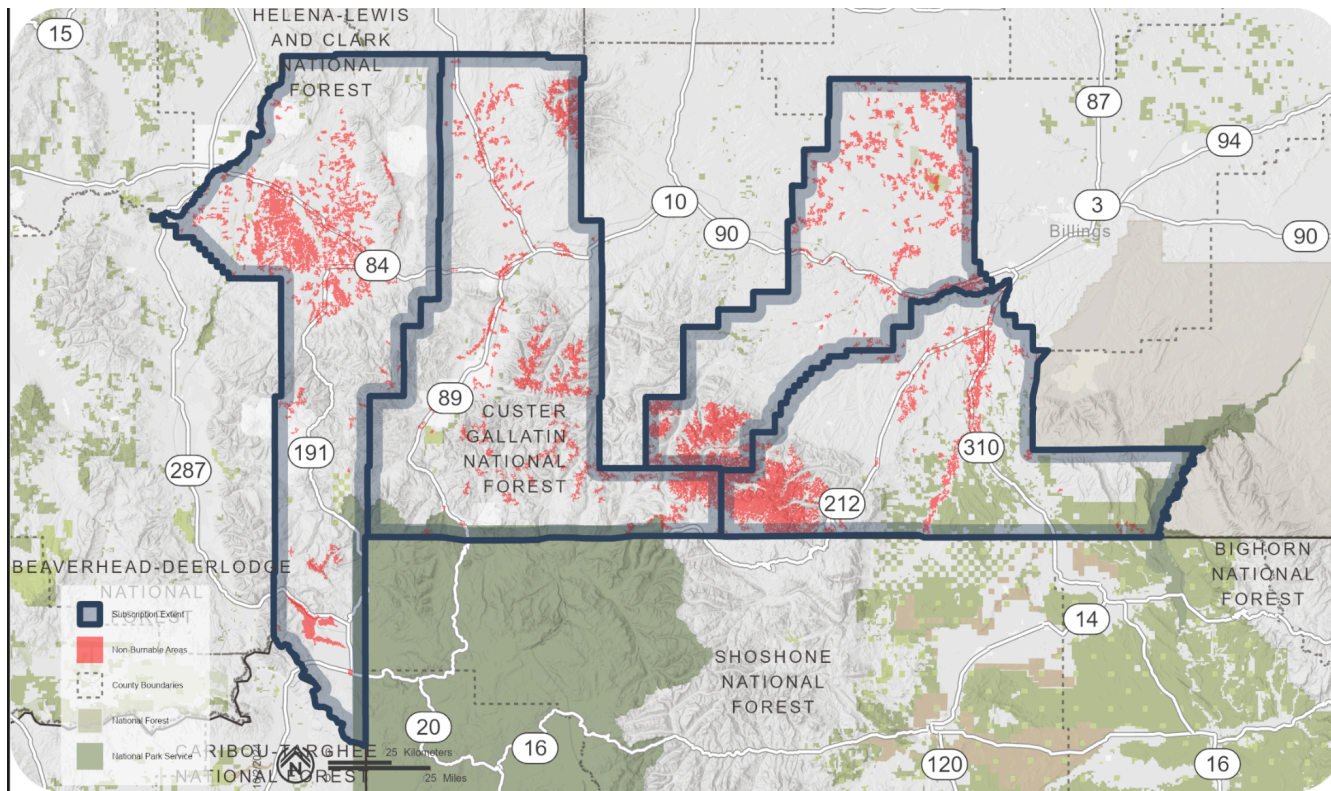
### Summary of Capabilities

- Vibrant Planet utilizes high-resolution biophysical and anthropogenic data, unified in a comprehensive geodatabase to enable assessment of wildlands and community risk, as well as resilience opportunities through treatment interventions.
- Collaborators can use the geodatabase to create and compare coordinated risk assessments, enabling well-informed decisions around funding across complex and multi-jurisdictional landscapes.
- Vibrant Planet's high resolution vegetation data can be refreshed, and hazards remodeled each year, to meet the requirements of land management on a dynamic landscape, allowing treatment progress and unplanned disturbances to be regularly monitored and treatment plans updated/reprioritized as needed.

- Vibrant Planet has developed a standard set of community and utility level wildland fire risk layers from best-available public data. Each identified layer in the standard set would consist of the risk data, calibrated or clipped to the area of interest.
- Pyrologix, a subsidiary of Vibrant Planet, has a wealth of experience designing, leading, and implementing Quantitative Wildfire Risk Assessments for local, state and federal government agencies, as well as for NGOs and private entities.

## Area of Interest

This proposal provides cost estimates for the boundaries of the counties of Park, Gallatin, Carbon and Stillwater, which in total make up just under 6m acres.





## Statement of work

Vibrant Planet and Pyrologix (VP&P) will together conduct a wildfire hazard and risk assessment for the four-county Area of Interest following the approach described in GTR-315. The work will be performed under the following tasks/deliverables:

### 1. Landscape information and no-action fuelscape

Vibrant Planet and Pyrologix will produce a no-action fuelscape based on the "WildWest" fuelscape (produced by Pyrologix for the Strategic Analytics Branch of the USFS Fire and Aviation Management) by "healing" recently treated or burned areas for 10 years. This approach allows the QWRA to be used as a pre-planning tool for years to come. The idea being that recent disturbances and treatments have low hazard, now but in the future they will become higher hazard areas. In that way, disturbances in the last ten years are recovered and users can understand more holistically the no action risk over time.

For Task 1, Vibrant Planet and Pyrologix will deliver the following products:

- Landscape information ESRI geodatabase
  - Fuelscape rasters
  - General Land Ownership classes
  - Vegetation Types
  - Fuel types
  - Structure-importance density
  - Ignition frequency-density grid
  - Perimeters of recent large fires (last ten years)

### 2. FSim modeling

Vibrant Planet and Pyrologix will use the FSim Large Fire Simulation System to calibrate to the trans-county region, to a Holt-forecast estimate of contemporary wildfire occurrence. FSim simulates the growth and behavior of hundreds of thousands of fire events influenced by historical fire occurrence, weather, terrain, and fuel conditions. Effects of large fire suppression on fire duration and size are also simulated. FSim is computationally intensive and requires extensive, rigorous calibration to achieve reasonable burn probability results. In general, calibration involves ensuring that modeled fire growth aligns with trends in historical fire growth in terms of number of large fires, large fire size, and number of acres burned annually. For these runs, we will calibrate to the Holt forecast for the year 2025 so that any long-term trends in fire occurrence are accounted for.



VP&P will produce the following FSim-related datasets:

- FSim ESRI geodatabase
  - 120-m resolution Burn Probability Raster

### 3. WildEST modeling

WildEST is a proprietary scripted geospatial modeling process developed and implemented by Pyrologix that simulates fire behavior characteristics. WildEST performs deterministic FlamMap simulations under 216 various weather conditions - a combination of three moisture conditions, nine wind speeds, and eight wind directions. WildEST also generates additional calculations that incorporate non-heading spread directions. These results are then weighted according to Weather Type Probabilities (WTPs) that not only take into account historical occurrences, but also incorporate higher weighting for high-spread conditions. The WildEST run will be based on the new no-action fuelscapes and the Holt-forecast burn probability raster.

Vibrant Planet and Pyrologix will produce the following WildEST outputs for an extent covering all four counties:

- WildEST ESRI geodatabase
  - 30-m Burn Probability (from the 120-m BP produced in the item above)
  - NVC-FLPs (for NVC calcs)
  - Flame Length – Season-long average
  - Fire Intensity Scale – 95<sup>th</sup> percentile fireline intensity
  - Ember production and load
  - Sources of Ember Load to Buildings
  - Damage Potential and Structure Exposure Score
  - Fire operations
    - i. Suppression Difficulty index
    - ii. Probability of >4 ft flame lengths (the limit of manual control)
    - iii. Probability of >8 ft flame lengths (the limit of mechanical control)

### 4. Characterization of Highly Valued Resources and Assets

VP&P will produce spatial and tabular data characterizing Highly Valued Resources and Assets (HVRA) from multiple sources collated, vetted, and mapped. VP&P will then host a 2-hour online HVRA Relative Importance workshop during which the

counties will collectively decide upon relative importance weights for each HVRA. One set of weights will be used across all four counties.

Vibrant Planet and Pyrologix will produce the following HVRA data:

- HVRA ESRI geodatabase
  - PEOPLE
    - Structures – custom Montana dataset that includes building type. We will use the Montana Wildfire Risk Assessment ratings for each building type to give weight to each building type
    - Roads – critical egress roads
    - Emergency service facilities
    - Historical structures
  - INFRA
    - Electric power generation and transmission infrastructure
    - Communication infrastructure
    - Ski area infrastructure
  - WATER
    - Surface drinking water sediment contributing area for public water supplies
  - TIMBER
    - Managed Timberlands (all lands)
- Table of Response Functions and Relative Importance weights

#### 5. NVC calculations and PDF reports

Vibrant Planet and Pyrologix will perform NVC calculations on the characterized HVRAs using the Relative Importance weighting produced above. Results will include a printable PDF map for each layer. Each PDF would include:

- A narrative description of the data layer, including any statistical analysis pertinent to the layer
- A map of the data layer for the given area, including a legend, and
- A tabular and/or graphical summary of the data layer, where appropriate.

Vibrant planet will deliver:

- A printable PDF map for each HVRA
- A simple report describing the inputs and methods used in the assessment

- Wildfire Risk ESRI geodatabase
  - PEOPLE
  - INFRA
  - WATER
  - TIMBER
  - Total overall risk, incorporating a single set of weightings determined by the customer

## Investment Summary

The following table details the price for this initiative. Should there be a desire to include additional data elements in the QWRA analysis, that would require additional scoping and likely would spur additional costs. Please refer to the Supplemental Technical Report: Base Delivery (included in the email that this proposal was sent in), which outlines the available HVRAs and response functions that would be available off-the-shelf for this analysis.

<b>Investment Summary &amp; Cost Justification</b>	
<b>Deliverable Fees</b>	<b>Gallatin, Park, Stillwater, and Carbon Trans-County Landscape</b>
Task 1 - No-action fuelscape	<b>\$15k</b>
Task 2 - FSim modeling	<b>\$40k</b>
Task 3 - WildEST modeling	<b>\$40k</b>
Task 4 - Characterization of Highly Valued Resources and Assets	<b>\$15k</b>
Task 5 - NVC calculations and PDF reports	<b>\$40k</b>
<b>Total</b>	<b>\$150k</b>

## Invoicing Schedule

Invoices will be sent per the following schedule:

- Cost for each task to be invoiced upon completion and delivery of that task.

## Appendix:

The full suite of Vibrant Planet analytics and products is also available, which can serve dynamic QWRA production, project planning, and implementation needs:

- Annual vegetation, fuel, and wildfire modeling input updates to account for disturbance and treatment effects that can significantly alter risk
- Plan projects across boundary and priorities with budget realities, leveraging local costs of treatments/prescriptions
- Produce outcome focused (performance) metrics comparing the pre and post action wildfire hazard and risk to values of importance on the landscape: making more compelling plans and grant proposals
- Export projects, metrics, graphs, and relevant data into templated documents for CWPPs, HMPs, grant proposals, and more
- Produce automated progress reports to show the public/constituents the status of projects
- Host educational information, details of planned projects, metrics, wildfire hazard information (along with Structure Exposure Score), and more, on a Vibrant Planet hosted microsite to support living, dynamic, planning and information for the public

## Outcome Focused (Performance) Metrics: Comparing pre and post treatment effects on wildfire behavior and more

Vibrant Planet will be rolling out automated **outcome focused (performance) metrics**, that demonstrate the value of planned projects through the lens of pre and post treatment metrics, such as, but not limited to: reduction in wildfire intensity, probability, hazard, rate of spread, likelihood of fire outside the limits of manual or mechanical control within the WUI, ratios and counts of structures with high structure exposure score, and more.

Wildfire Hazard and Risk Impact <span style="float: right;">↓</span>			
	No Action	Post Action	Difference
Wildfire Hazard	1.005	0.54	0.465 (-46%)
Characteristic Flame Length (mean, in feet)	15	9	6 (-40%)
Burn Probability	6.7%	6%	-10%
Expected Annual Acres Burned	648	421	227 (-35%)
Expected Acres Burned Over the Next 10 Years (Acres)	6,482	4,213	2,269 (-35%)
Rate of Spread (chain per hour)	22.2	21	-5%
Combined Wildfire Risk to Ecosystem Services	3,489	2,198	1,291 (-37%)

*Outcome Focused (Performance) Metrics that are available within Vibrant Planet Platforms*

**vibrant planet** | ktimmer@placer.ca.gov | Placer County

Proposal  
**Foresthill + Public Survey**

SELECT CONFIGURE

Metrics  
Copy explaining that all metrics will be available in the  
lorem ipsum dolor sit amet consectetur lorem ipsum d

Propose

Impact Overview

**Restorative ROI Efficiency**

% Max ROI

% Acres

— RROI CDF ○ All Projects ● Project 1 ● Project 2

**Post Management Analytics**

Burn probability

Characteristic flame length

Wildfire hazard

Risk per Objective XXX XXX XXX

# Acres expected to burn over the next 10 years XXX XXX XXX

**Download**

PDF Map

Add a title to the map

Add a description to the map

Adjust the desired position and zoom of the exported map using the preview box below. Geo referenced PDF document will be letter size (8.5X11 inches) and will include a header with your collaborative logo.

mapbox

CANCEL DOWNLOAD

Management Unit Statistics

Data Layers

*The proposal stage of the Vibrant Planet Platform, allowing users to combine projects/scenarios into one overarching proposal, with performance metrics*



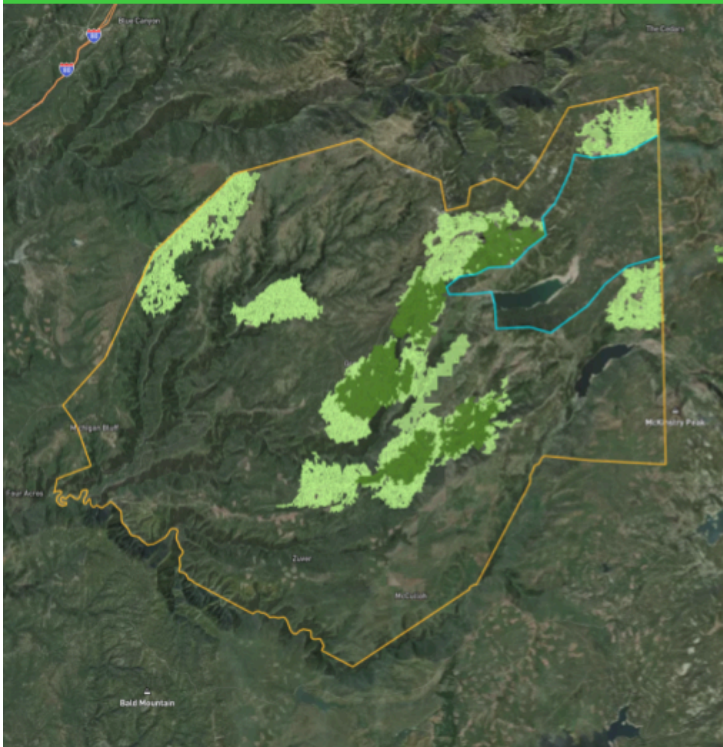
# Community Wildfire Resilience Roadmap



PREPARED FOR  
Placer County,  
California



PREPARED BY  
Vibrant Planet  
Powered by Pyrologix



On the back of an unanimous Board approval to finalize the framework for Countywide forest health and wildfire resilience, the next step is to quantify the outcomes of the planned project roadmap, to tell the why of the work, generate buy-in and raise implementation funds.

While the plan codifies 650k acres of planned work, costing ~\$1.6B, work will be sequenced. This roadmap demonstrates how impactful some of the first acres treated will be in generating wildfire resilience.

Project Area Acres	<b>30,433</b>
Planning Area Acres	<b>195,705</b>

*A recent "Community Wildfire Resilience Roadmap" delivered to Placer County - soon to be automated in Vibrant Planet tooling*



## REPORT CARD

	Before treatment	After treatment
<b>Number of Structures Highly Exposed to Wildfire</b> Across the planning area 7% of structures are moved into lower levels of exposure as a result of this treatment, shifting 10 structures from the highest exposure score to a lower exposure score.	144	134
<b>Planning Area Hazard Class Reduction</b> Hazard classification, based on the highest two categories, Highest and High, across the planning area were reduced to a lower category for a total of 19,874 acres, 25% of the planning area.	68,050	48,175
<b>Mean Flame Length</b> The treatments implemented are predicted to alter the mean length of flames across the planning area from 15 ft to 13.5 ft, a 10% reduction.	15	13.5
<b>Project Area Burn Probability</b> The mean likelihood of a large fire occurring in the next 10 years within the project footprint was reduced by 2.9 percentage points, from 10.3% to 7.4%.	10.3%	7.4%
<b>Planning Area Burn Probability</b> The mean likelihood of a large fire occurring in the next 10 years across the planning area was reduced, through project implementation, from 6.7% to 6%.	6.7%	6%
<b>Mean Rate of Spread</b> The average speed of wildfire across the analysis area; measured as 20 chains per hour before, and 18.6 chains per hour after treatment. This equates to a 5% slowing of fire, further promoting better suppression outcomes.	22.2	21

Outcome focused metrics based on preliminary modeling using a mosaic of treated intensity with adjusted burn probability across the Placer

*Actual outcome focused metrics delivered to Placer County, CA to quantify, in a variety of ways, the benefits of planned forest health treatment projects finalized using the Vibrant Planet Platform.*

The screenshot displays the Vibrant Planet software interface. At the top, the logo and name 'vibrant planet' are visible on the left, and the user email 'ktimmer@placer.ca.gov | Placer County' is on the right. The main workspace is titled 'Proposal Foresthill + Public Survey' and is divided into 'SELECT' and 'CONFIGURE' tabs. A sidebar on the left contains a 'Metrics' section with a placeholder text and an 'Impact Overview' section. Below this, there are two data visualization panels: 'Restorative ROI Efficiency' featuring a line graph with data points for 'RROI CDF', 'All Projects', 'Project 1', and 'Project 2'; and 'Post Treatment Analytics' with a list of metrics including 'Burn probability', 'Characteristic flame length', 'Wildfire hazard', and 'Risk per Objective'. A 'Download' dialog box is open in the center, offering to export a 'PDF Map'. It includes input fields for 'Add a title to the map' and 'Add a description to the map', a preview of the map with a red-shaded hazard area, and 'CANCEL' and 'DOWNLOAD' buttons. The background map shows a satellite view of a mountainous region with a large red-shaded area representing a wildfire hazard. A 'Data Layers' panel is visible at the bottom right.

*An example of the proposal export functionality: in this case exporting the comprehensive wildfire hazard map along with outcome focused metrics*

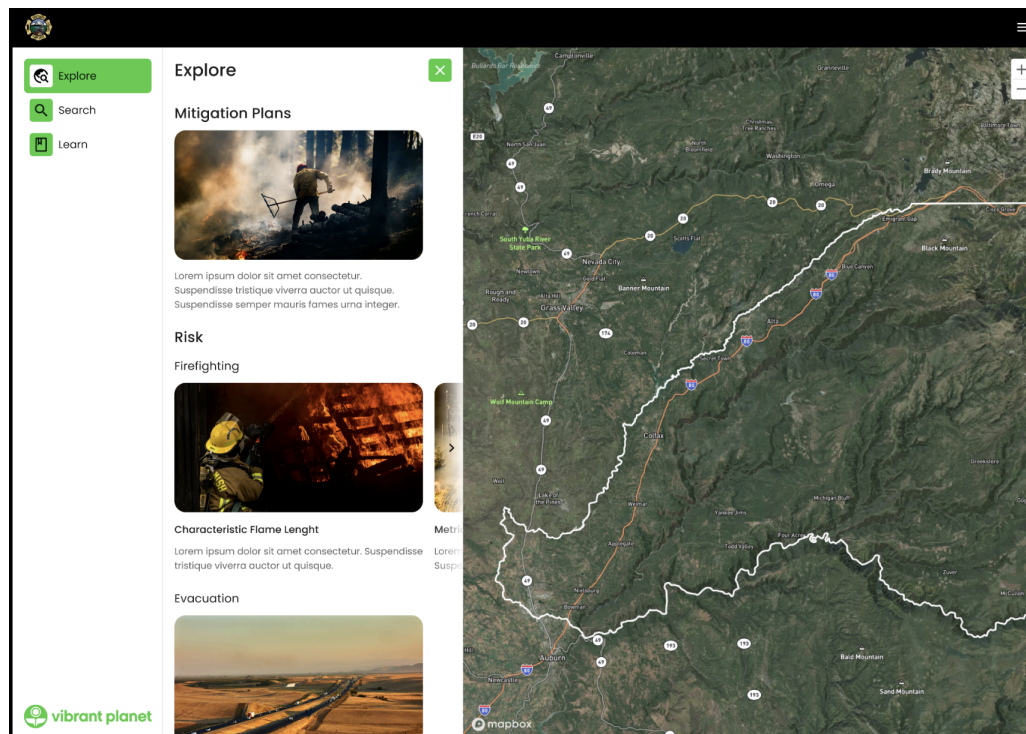
The screenshot displays the Vibrant Planet web application interface. On the left, a sidebar contains navigation icons for home, edit, propose, and settings. The main content area is titled "Proposal Foresthill + Public Survey" and features a tabbed interface with "EXPORT" selected. Below the tabs, an "Export" section provides instructions and a list of exportable items: "GIS Files", "CWPP Template", "QWRA Template" (which is selected), "Grant Proposal Template", and "Progress Report". Each item includes a radio button, a name, a "Microsoft Word Template" button, and a placeholder text block. A blue "EXPORT" button is located at the bottom right of this section.

On the right, a preview window titled "Previewing CWPP Complete" shows a report cover page. The cover features the City of Alameda State of California seal, the title "Quantitative Wildfire Risk Assessment", the subtitle "Acme County", and the date "August 26, 2024". It also includes the Vibrant Planet logo and the text "Generated by:". Below the cover, a "Table of Contents" section is visible.

An example of how the export capability from the Vibrant Planet Platform will function: whether the end document is a CWPP, GIS files, a progress report with outcome focused metrics, grant proposal, etc.

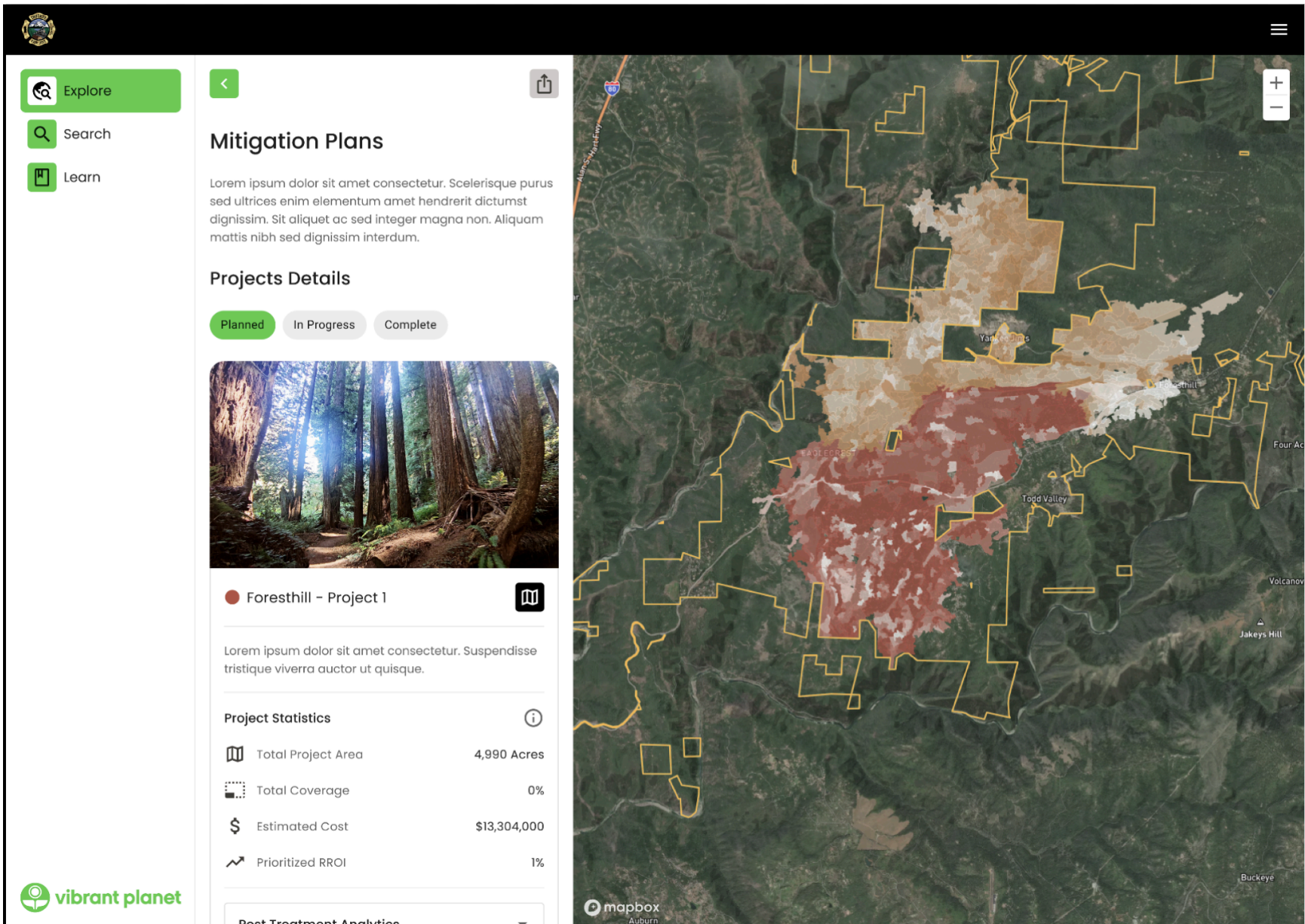
## Product Feature #2: Microsite Landing Page for Published Plans, Documents, and Community Information

- As an accompaniment to the new outcome focused metrics and exportable content from the Vibrant Planet Platform, Vibrant Planet is building microsite functionality which will allow communities to host data, plans, and more on a public-facing microsite.
- By popular demand, Vibrant Planet has recognized the need to support our partners in their efforts to be transparent and clearly communicate to the public and constituents the work that they have planned to ultimately reduce wildfire risk to people, properties, the watershed, and more.
- Thanks to a new suite of outcome focused metrics, we anticipate that communities will have unprecedented access to information about what cross-boundary partners are doing to reduce wildfire risk, while simultaneously having a better understanding of what measures can be implemented at the parcel-level to more holistically reduce the threat of wildfire.
- Microsite functionality is anticipated to arrive mid-2025 (quote available upon request).



*Microsite (early stage design): A place for the public to explore, search, and learn about what mitigation work is planned*





*A sampling of the type of information that the public could interact with on the Microsite, in this case related to planned hazardous fuels reduction projects. Outcome focused metrics will be featured in a digestible format for public-consumption.*

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



**POSITION:** County Fire Warden / Rural Fire Chief

**DEPARTMENT:** \_\_\_\_\_

**REPORTS TO:** Administrative Officer

**SALARY:**

**SCHEDULE:** 30 hours per week

- Full-Time (40 hours)     Part-Time Benefit Eligible (30-39 hours)     Part-Time (≤29 hours)
- Permanent     Seasonal     Temporary     Grant-Funded     Short-Term
- Exempt     Non-Exempt

### PURPOSE OF THE JOB:

- 1) Coordinate and implement the Montana State - County Cooperative Fire Control plan between the Montana Department of Natural Resources and Conservation (DNRC) and Carbon County;
- 2) Support the County's rural fire districts (RFDs) with wildfire planning, preparation, training, administration and grant support;
- 3) Promote wildfire preparedness, prevention, mitigation and planning in Carbon County;
- 4) Maintain situational awareness of fire danger, occurrences and resources in the area and relay that information to county officials, RFDs and the public.

### ESSENTIAL FUNCTIONS:

- Serve as a liaison between local, state, and federal agencies to coordinate training and wildland fire prevention, detection, suppression, investigation, and mitigation as defined in MCA 7-33-2215
- Fulfill the wildfire-related duties of Rural Fire Chief as defined in MCA 7-33-2001
- Pursue and manage state and federal grants to support the Fire Warden's mission
- Review, revise and implement the Montana State - County Cooperative Fire Control plan in cooperation with the DNRC
- Support fire radio communications by maintaining the county communications plan and programming radios for RFDs
- Monitor fire conditions in the County and recommended to Commissioners if/when fire restrictions are needed
- Maintain the County's website and fire signs to reflect the current fire danger in the area
- Assume the role of incident commander on local fires when needed
- Review subdivision proposals in terms of fire risk and if fire protection standards have been addressed; Recommend mitigation strategies to meet any deficiencies of proposed subdivision

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



- Support funding of position by participating in external activities such as RFD severity staffing, Incident Management Team support, Emergency Management Assistance Compact deployments and DNRC assignments as allowed by County Administrator
- Manage all elements of the County's burn permit system
- Update the County's Community Wildfire Protection Plan (CWPP) on a regular cycle
- Enter, maintain and summarize county fire occurrence records within the Interagency Fire Occurrence Reporting Modules (inFORM) database
- Provide qualified RFD and County road crew personnel with official department ID cards
- Assist RFDs with lamResponding accounts and record management
- Prepare and execute the DNRC-County Option 3 agreement and Incident Rental Agreements on an annual basis
- Complete DNRC reimbursement requests for County equipment and personnel used on fires when applicable
- Provide the Carbon County Fire Response Team (i.e., road crew) with annual wildfire refresher training and ensure they have necessary PPE and supplies for fire duty
- Coordinate with county-designated Public Information Officer (PIO) and Disaster & Emergency Services (DES) coordinator during incidents
- Prepare and manage an annual operating budget

### **OTHER DUTIES AND RESPONSIBILITIES:**

- Participate in interagency fire restriction meetings
- Work with local Emergency Manager to secure resources for fire incidents
- Coordinate with the Sheriff's Office, Emergency Manager and County Search & Rescue to deploy GIS field applications to support evacuations and damage assessment inventories
- Assist with GIS data collection and maintenance of fire-related map layers such as rural dry hydrants, Wildland Urban Interface (WUI) boundaries, fire response areas, etc.
- Assist in securing surplus military equipment from federal and State sources to support emergency response and recovery operations
- Assist rural fire districts with essential administration and reporting duties
- Develop and maintain mutual aid agreements with federal, state and local cooperators relative to wildland fire
- Maintain a current fire apparatus inventory for all RFDs including DRNC Coop engines
- Conduct home risk assessments if requested
- Maintain fire danger signs within the County
- Participate in the County's Public Safety Radio Committee
- Investigate the cause of wildland fires in coordination with the Sheriff's Office
- Other duties as assigned.

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



### KNOWLEDGE AND SKILLS:

#### Required:

- Bachelor's degree from an accredited college or university with coursework in the field of fire service, natural resources, earth sciences or related degree or an associate's degree with three years of experience in a profession related to fire service or 6 years of experience in a profession related to fire service.
- Knowledge of the National Incident Management System and Incident Command System
- Proficiency at operating computers, mobile devices and applications
- Knowledge of public safety radios
- Knowledge of applicable Local, State and Federal laws and regulations related to fire service
- Possession of a current valid Montana driver's license
- Physical fit to perform job duties
- Ability to work without direct supervision
- Ability to work well with the public and have good public relations skills
- Dependable, trustworthy and responsible

#### Preferred:

- Competency in the use of computer and Web applications including:
  - ArcGIS Pro, ArcGIS Online and ESRI related products and solutions
  - InFORM Inspector
  - lamResponding
  - Interra Situation Analyst
  - Bendix King Radio RES and Lightning
  - Microsoft 360 and Teams
  - Montana burn permit system
- Knowledge of county subdivision regulations and laws
- Knowledge of Montana Code Annotated Title 7, Chapter 33
- Ability to remain calm and to work well with others in stressful situations

### FISCAL RESPONSIBILITY:

Prepare annual budget for the County Fire Warden. Apply for, monitor, and process reports for various grant programs. Prepare and submit reimbursement requests for fire response.

### EXTENT OF PUBLIC CONTACT:

Extensive contact with the public, other county staff, and other agencies.



# CARBON COUNTY MONTANA

## JOB DESCRIPTION



### WORKING CONDITIONS AND ENVIRONMENT:

#### Physical Activity:

- Repetitive Motion:  Never  Occasionally  Frequently  Continually  
(repeating movements of arms, hands and wrists)
- Talking:  Never  Occasionally  Frequently  Continually  
(express or exchange ideas verbally)
- Hearing:  Never  Occasionally  Frequently  Continually  
(perceive sound by ear)
- Seeing:  Never  Occasionally  Frequently  Continually  
(obtain impressions through the eye)

#### Activity Level:

- Sedentary  
(occasionally lift/carry up to 10 pounds or push/pull small objects; sits most of the time; infrequent to occasional walking/standing)
- Light  
(frequently lift/carry/push/pull up to 10 pounds and/or occasionally lift/carry/push/pull up to 20 pounds; frequent walking/standing or sitting most of the time while using arms/legs to push/pull)
- Medium  
(occasionally lift/carry/push/pull 20-50 pounds and/or frequently lift/carry/push/pull 10-20 pounds and/or continuously lift/carry/push/pull 10-20 pounds; occasional to frequent walking/standing)
- Heavy  
(occasionally lift/carry/push/pull 50-100 pounds and/or frequently lift/carry/push/pull 20-50 pounds and/or continuous lift/carry/push/pull 10-20 pounds; occasional to frequent walking/standing)
- Very Heavy  
(occasionally lift/carry/push/pull 100+ pounds and/or frequently lift/carry/push/pull 50+ pounds and/or continuous lift/carry/push/pull of 20+ pounds; occasionally to frequent walking/standing)

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This job description in no way states or implies that these are the only duties to be performed by this employee. The employee will be required to follow any other instructions and to perform any other duties upon the request of the supervisor or other governing entity.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

# CARBON COUNTY MONTANA JOB DESCRIPTION



## **FOR OFFICE USE ONLY**

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JOB DESCRIPTION:  APPROVED  DENIED

SALARY SCHEDULE:  ADMIN  CLERK  DISPATCH  NURSE  ROAD  SHERIFF

\_\_\_\_\_  
Presiding Officer Signature

\_\_\_\_\_  
Date

COMMENTS:

# Hiring Authorization Form

Department: Fire Warden / County Rural Fire Chief

Reason for Vacancy: Division of GIS/Fire Warden Position in two

Position Name: Fire Warden / County Rural Fire Chief

Job Description:  New Date Approved \_\_\_\_\_

Existing with Changes Date Approved: \_\_\_\_\_

Existing no Changes

Hours Per Week: 32

Regular Schedule:

Hiring Method:  Internal Posting: Letters of Interest  Publicly Noticed: Employment Applications

Interview Committee: 1. Tom Kohley

2.

3.

\*\*\*\*\*

## APPROVAL:

\_\_\_\_\_

Human Resources      Date

\_\_\_\_\_

Commissioner      Date

\_\_\_\_\_

Department Head      Date

\_\_\_\_\_

Commissioner      Date

\_\_\_\_\_

Commissioner      Date

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



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**POSITION:** Geographic Information Systems (GIS) Coordinator

**DEPARTMENT:** GIS

**REPORTS TO:** Administrative Officer

**SALARY:**

**SCHEDULE:**

- Full-Time (40 hours)     Part-Time Benefit Eligible (30-39 hours)     Part-Time (≤29 hours)
- Permanent     Seasonal     Temporary     Grant-Funded     Short-Term
- Exempt     Non-Exempt

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### PURPOSE OF THE JOB:

1. Design, develop and maintain spatial geodatabases for county operations using local, state and national standards;
2. Serve as the addressing authority for the County and its incorporated municipalities;
3. Provide GIS support to county departments in the form of paper maps, Web and field map applications and training;
4. Leverage geospatial technologies to support and enhance local government services to the public.

### ESSENTIAL FUNCTIONS:

- Support the County's Development Permit Process by assigning addresses to new developments and preparing road approach permit applications for Commissioner approval
- Support the Sheriff's Office by providing scheduled GIS data updates for their Computer Aided Dispatch (CAD) system
- Work with the State Library to bring the county into compliance with NG9-1-1 standards
- Build and maintain purpose-specific Web map applications for the public
- Provide addressing support for County personnel, property owners, postmasters, couriers, realtors, banks, title companies, utilities and other authorities
- Develop spatial geodatabases for the County following local, state and national standards (e.g., NENA Standard for NG9-1-1 GIS Data Model)
- Maintain the Master Street Address Guide (MSAG) for the county
- Provide GIS/mapping support for DES and Fire during emergencies
- Develop and implement address standards, policies and ordinances
- Work with the incorporated municipalities of Bearcreek, Bridger, Joliet, Fromberg and Red Lodge to maintain standardized addressing within each community

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



- Utilize Global Navigation Satellite System (GNSS) map applications to collect and ground truth data in the field
- Assist the Election Administrator by maintaining consistency between the County's GIS and the State's Elect MT and MT Vote systems
- Coordinate with local US Postal Service offices to ensure consistency between addressing systems
- Provide addressing data to Montana State Library; Google Maps, and others to keep other systems populated with current and accurate addressing information
- Manipulate, modify and utilize computer applications including GIS, database, presentation, Internet and related systems and tools to enhance the integration of data, increase efficiency, and deliver information and technical assistance to users in a timely and effective manner
- Compile, attribute, edit, and maintain data in geographic and operational databases and use queries and GIS applications to generate reports and maps, and to ensure and enhance data quality. Ensures data and data processing procedures adhere to standards, policies, and other guidelines
- Prepare and manage an annual operating budget
- Apply for and manage grants to support geospatial operations for the County

### **OTHER DUTIES AND RESPONSIBILITIES:**

- Produce address placards for new address assignments
- Manage and renew GIS licensing with Environmental Systems Research Institute (ESRI)
- Participate in US Census Bureau programs to share County GIS data
- Review and update State gas tax maps to maximize contribution of tax to County
- Deploy Web applications in addition to providing spatial data and maps to entities outside local government when needed and on a cost-recovery basis
- Attend conferences, workshops, and training to gather information and receive instruction on new technology and to coordinate efforts with external partners
- Support the enforcement of County codes when necessary especially in the areas of addressing and signage
- Produce a current road map for the County and make it available for purchase
- Maintain large format printers and ensure there are adequate supplies for printing
- Other duties as assigned.

### **KNOWLEDGE AND SKILLS:**

#### Required:

- Bachelor's degree from an accredited college or university with coursework in Geographic Information Systems, Computer Science, Civil Engineering or a closely related field, and two (2) years GIS system development and support experience. Equivalencies include an associate's

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



degree in GIS, computers, or a related field and four (4) years GIS system experience; or a high school diploma or GED and six (6) years of experience.

- Knowledge of the principles and practices of computer science and information systems including the principles, practices, terminology, and trends in GIS and related technologies; database systems and their design; computer operating systems; geographic information applications, analysis, and the relationships between different types of spatial data; cartographic principles and spatial analysis; project management; and contract administration
- Knowledge of ArcGIS Pro, ArcGIS Online and related ESRI solutions
- Proficiency at operating computers, GNSS receivers, and other office equipment
- Possession of a current valid Montana driver's license
- Physically fit to perform job duties
- Ability to work without direct supervision
- Ability to work well with the public and have good public relations skills
- Ability to maintain confidentiality
- Dependable, trustworthy and responsible

### Preferred:

- Competency in the use of computer and Web applications including:
  - ElectMt.gov
  - Montana Cadastral System
  - Microsoft 360 Suite
- Knowledge of applicable Local, State and Federal laws and regulations

### FISCAL RESPONSIBILITY:

Prepare annual budget for the County Fire Warden. Apply for, monitor, and process reports for various grant programs.

### EXTENT OF PUBLIC CONTACT:

Extensive contact with the public, other county staff, and other agencies.

### WORKING CONDITIONS AND ENVIRONMENT:

Physical Activity:

Repetitive Motion:  Never  Occasionally  Frequently  Continually  
(repeating movements of arms, hands and wrists)

Talking:  Never  Occasionally  Frequently  Continually  
(express or exchange ideas verbally)

Hearing:  Never  Occasionally  Frequently  Continually

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



(perceive sound by ear)

Seeing:  Never  Occasionally  Frequently  Continually

(obtain impressions through the eye)

### Activity Level:

Sedentary

(occasionally lift/carry up to 10 pounds or push/pull small objects; sits most of the time; infrequent to occasional walking/standing)

Light

(frequently lift/carry/push/pull up to 10 pounds and/or occasionally lift/carry/push/pull up to 20 pounds; frequent walking/standing or sitting most of the time while using arms/legs to push/pull)

Medium

(occasionally lift/carry/push/pull 20-50 pounds and/or frequently lift/carry/push/pull 10-20 pounds and/or continuously lift/carry/push/pull 10-20 pounds; occasional to frequent walking/standing)

Heavy

(occasionally lift/carry/push/pull 50-100 pounds and/or frequently lift/carry/push/pull 20-50 pounds and/or continuous lift/carry/push/pull 10-20 pounds; occasional to frequent walking/standing)

Very Heavy

(occasionally lift/carry/push/pull 100+ pounds and/or frequently lift/carry/push/pull 50+ pounds and/or continuous lift/carry/push/pull of 20+ pounds; occasional to frequent walking/standing)

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This job description in no way states or implies that these are the only duties to be performed by this employee. The employee will be required to follow any other instructions and to perform any other duties upon the request of the supervisor or other governing entity.

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Supervisor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

# CARBON COUNTY MONTANA

## JOB DESCRIPTION



### **FOR OFFICE USE ONLY**

---

JOB DESCRIPTION:  APPROVED  DENIED

SALARY SCHEDULE:  ADMIN  CLERK  DISPATCH  NURSE  ROAD  SHERIFF

\_\_\_\_\_  
Presiding Officer Signature

\_\_\_\_\_  
Date

COMMENTS:



# Hiring Authorization Form

Department: GIS/ Rural Addressing Coordinator

Reason for Vacancy: Division of GIS/Fire Warden Position in two

Position Name: GIS / Rural Addressing Coordinator

Job Description:  New Date Approved \_\_\_\_\_

Existing with Changes Date Approved: \_\_\_\_\_

Existing no Changes

Hours Per Week: 40

Regular Schedule: Monday – Thursday 7:00-5:30

Hiring Method:  Internal Posting: Letters of Interest  Publicly Noticed: Employment Applications

Interview Committee: Tom Kohley

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## APPROVAL:

\_\_\_\_\_  
Human Resources      Date

\_\_\_\_\_  
Commissioner      Date

\_\_\_\_\_  
Department Head      Date

\_\_\_\_\_  
Commissioner      Date

\_\_\_\_\_  
Commissioner      Date