

RESOLUTION NUMBER 2021-033

A RESOLUTION TO AMEND THE MISSOULA COUNTY ZONING REGULATIONS AS SHOWN IN THE ATTACHED EXHIBIT TO ADD TWO DEFINITIONS – CRYPTOCURRENCY MINING AND RENEWABLE ENERGY – AND CREATE A ZONING OVERLAY IN SECTION 5.05 REGULATING CRYPTOCURRENCY MINING; AND, TO APPLY THE CRYPTOCURRENCY MINING ZONING OVERLAY DISTRICT COUNTYWIDE IN THE UNINCORPORATED AREAS OF THE COUNTY.

WHEREAS, §76-2-201 M.C.A. authorizes the Board of County Commissioners to adopt zoning regulations for all or parts of the jurisdictional area; and,

WHEREAS, the Board of County Commissioners did adopt zoning regulations for Missoula County through the passage of County Resolution #1976-113 and most recently amended by County Resolution #2017-039; and,

WHEREAS, §76-2-202 M.C.A. provides for the establishment and revision of zoning districts; and,

WHEREAS, the 2016 Missoula County Growth Policy includes several guiding principles that are particularly relevant to the growth and impacts of cryptocurrency mining operations:

- Local government should strive to make decisions that are environmentally sound, fiscally responsible, and supportive of healthy communities over the long term.
- The right to a clean and healthful environment is fundamentally important. Missoula County's natural and cultural resources make this place unique; they should be conserved, enhanced and enjoyed.
- Local government decision-making should consider the impacts of and adaptation to climate change in policy and regulatory decisions.
- Economic measures should focus on long term economic development that is fiscally-responsible and does not unduly compromise quality of life or the natural environment.
- Missoula County will strive to protect public health, safety, and welfare in a fiscally-responsible manner; and,

WHEREAS, Objective 4.1 of the 2016 Missoula County Growth Policy is to reduce Missoula County's contribution to climate change; and,

WHEREAS, in order to reduce the county's contribution to climate change, Missoula County has committed to a goal of carbon neutrality in county government operations by 2035, and to a goal of 100% clean electricity for the Missoula urban area by 2030; and,

WHEREAS, the large and increasing energy consumption of cryptocurrency mining operations results in increased greenhouse gas emissions that cause climate change; and,

WHEREAS, Missoula County is already suffering the impacts of climate change especially in the form of more frequent and intense wildfires and wildfire smoke; and,

WHEREAS, the Intergovernmental Panel on Climate Change (IPCC) in its 2018 Special Report on Global Warming of 1.5°C, which was written by 91 scientists from 40 countries and based on more than 6,000 scientific studies, found that human activities have already caused the Earth to warm by 1°C, and that allowing warming to exceed 1.5°C degrees will result in massive impacts on ecosystems, human health, and economic and social well-being; and,

WHEREAS, the Montana Climate Assessment determined that impacts of climate change in Northwest Montana, including Missoula County, will include reduced low-elevation snowpack, earlier spring snowmelt, hotter summers, and more frequent and intense wildfires and floods, and that these impacts will be more severe if global greenhouse gas emissions are not reduced sharply in the near future; and,

WHEREAS, the region's low electricity rates and cool climate have made Missoula County attractive for locating cryptocurrency mining operations; and,

WHEREAS, equipment at cryptocurrency mining facilities has the potential to create noise pollution that negatively impacts nearby residents, businesses, and wildlife; and,

WHEREAS, electronic waste from cryptocurrency mining operations contains heavy metals and carcinogens that have the potential to damage human health, water quality, and air quality if not handled correctly; and,

WHEREAS, the impacts of cryptocurrency mining may adversely affect life, health, property and the environment; and,

WHEREAS, a notice of public hearing was advertised in the *Missoulian* on December 27, 2020 and January 3, 2021; and,

WHEREAS, the Missoula Consolidated Planning Board held a public hearing January 19, 2021, and voted 7-2 to recommend approval of the proposed amendments and application of the zoning district in the unincorporated portion of Missoula County; and,

WHEREAS, a hearing was held by the County Commissioners of Missoula County on February 11, 2021, in order to give the public an opportunity to be heard regarding the proposed zoning amendments and zoning action; and,

WHEREAS, the County Commissioners adopted Resolution #2021-016 stating their intention to adopt the proposed zoning amendments and apply them countywide; and

WHEREAS, a protest period was held for thirty (30) days after the first publication of Resolution #2021-016 on February 14, 2021; and,

WHEREAS, no protest petitions were filed by persons who own real property within the district.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Missoula County that the cryptocurrency mining zoning regulations as shown in the attached exhibit be applied countywide in the unincorporated portion of Missoula County.

PASSED AND ADOPTED THIS 25TH DAY OF March 2021

ATTEST:

BOARD OF COUNTY COMMISSIONERS
MISSOULA COUNTY

Tyler Gerrant
Tyler Gerrant, Clerk and Recorder

David Strohmaier
David Strohmaier, Chair

APPROVED AS TO FORM AND CONTENT:

Juanita Vero
Juanita Vero, Commissioner

John Hart
John Hart, Deputy County Attorney

Not available for signature
Josh Slotnick, Commissioner



Cryptocurrency Mining Zoning Regulations

March 2021

1. Definitions added to **SECTION 1.04 DEFINITIONS**

a. Cryptocurrency Mining

The operation of specialized computer equipment for the purpose of mining one or more blockchain-based cryptocurrencies, such as Bitcoin. This activity, which is also termed “proof of work,” involves the solving of algorithms as part of the development and maintenance of a blockchain which is a type of distributed ledger maintained on a peer-to-peer network. Typical physical characteristics of cryptocurrency mining include specialized computer hardware for mining operations as well as equipment to cool the hardware and operating space. For the purposes of the associated regulations, cryptocurrency mining does not include the exchange of cryptocurrency or any other type of virtual currency nor does it encompass the use, creation, or maintenance of all types of peer-to-peer distributed ledgers.

b. Renewable Energy

Renewable energy includes the following:

- a. Solar energy;
- b. Wind energy;
- c. Geothermal energy;
- d. Water power in the case of a hydroelectric project that does not require a new appropriation, diversion, or impoundment of water and that has a nameplate rating of 10 megawatts or less, or is an expansion of an existing hydroelectric project;
- e. Landfill or farm-based methane gas;
- f. Gas produced from the treatment of wastewater;
- g. Low-emission, non-toxic biomass energy based on dedicated energy crops, animal wastes, or solid organic fuels from wood, forest, or field residues, except that the term does not include wood pieces that have been treated with chemical preservatives such as creosote, pentachlorophenol, or copper-chrome arsenic; and,
- h. Hydrogen derived from any of the sources listed above for use in fuel cells.

2. Zoning Overlay District regulations added as a new section to **Missoula County Zoning Regulations, Chapter 5, Section 5.05**

SECTION 5.05 CRYPTOCURRENCY MINING ZONING OVERLAY DISTRICT

A. Intent

This overlay zone establishes locations where cryptocurrency mining operations may be sited in Missoula County and conditions that must be met in order to protect the public health, safety, and general welfare of county residents. The intent of this zoning overlay is to mitigate the negative effects of proof-of-work blockchain processing used in cryptocurrency mining operations. This includes, but is not necessarily limited to, very high energy usage, noise pollution, and the disposal of electronic waste. The high energy consumption of cryptocurrency mining operations runs counter to Missoula County's objective to reduce its contribution to climate change. Equipment at these facilities has the potential to create noise pollution that negatively impacts nearby residents, businesses, and wildlife. In addition, electronic waste from cryptocurrency mining operations contains heavy metals and carcinogens that have the potential to damage human health, and air and water quality if not handled correctly.

B. Applicability

All land under jurisdiction of Missoula County, including unzoned lands and excluding incorporated portions of the county.

C. Conditions

Cryptocurrency mining operations must meet all of the following conditions.

1. Cryptocurrency mining facilities may locate only in C-I1 (Light Industrial) or C-I2 (Heavy Industrial) districts.
2. Cryptocurrency mining facilities shall be reviewed as a conditional use in compliance with Section 4.05, except if adjacent to a residential district (excluding roads and other rights -of -way) or within 500' of residential property boundary when they shall be reviewed as a special exception.
3. These facilities shall be required to develop or purchase sufficient new renewable energy to offset 100 percent of the electricity consumed by the cryptocurrency mining operation. To meet this condition, the cryptocurrency mining operation must be able to establish that their actions will introduce new renewable energy onto the electrical grid beyond what would have been developed otherwise.
4. Verification must be provided that all electronic waste generated at the cryptocurrency mining operation will be handled by a DEQ-licensed electronic waste recycling firm.

D. Nonconforming Cryptocurrency Mining Use

This section shall supersede and replace Section 7.05 of these regulations.

Attachment to Final Resolution,
March 2021

A lawful cryptocurrency mining use existing on the effective date of this zoning overlay which would not be allowed under the terms of these regulations may continue so long as it remains otherwise lawful, subject to the following conditions:

1. Existing structures devoted to nonconforming cryptocurrency mining operations shall not be enlarged, extended, constructed, reconstructed, moved, or structurally altered except to change the complete use of the structure to a use that conforms with these regulations.
2. Non-conforming cryptocurrency mining operations may be expanded or extended to unoccupied portions of the building or to other buildings only if the expanded or extended portion of the operation conforms with these regulations.
3. Any nonconforming cryptocurrency mining operation may be replaced by the same use only in compliance with these regulations.
4. If a nonconforming cryptocurrency mining operation is discontinued or abandoned for one hundred eighty (180) days or a nonconforming cryptocurrency mining operation is replaced by a conforming use at any time, the structure shall thereafter be used in conformance with these regulations.
5. Removal or destruction of a structure occupied by a nonconforming use shall eliminate the nonconforming status of the use.
6. Any structure occupied by a nonconforming cryptocurrency mining use that is destroyed by any means such that the cost of reconstruction amounts to more than fifty percent (50%) of the total building replacement cost (exclusive of building foundation) shall thereafter be used in conformance with these regulations.