

RESOLUTION NO. 2019-026**A RESOLUTION ESTABLISHING A COUNTY-WIDE CRYPTOCURRENCY MINING INTERIM ZONING OVERLAY DISTRICT IN MISSOULA COUNTY, MONTANA, TO BE EFFECTIVE IMMEDIATELY FOR A PERIOD OF ONE YEAR.**

WHEREAS, Montana Code Annotated §76-2-201 authorizes the Board of County Commissioners to adopt zoning regulations; and,

WHEREAS, the Board of County Commissioners did adopt zoning regulations for Missoula County through passage of County Resolution No. 76-113, as amended; and,

WHEREAS, Montana Code Annotated §76-2-206 provides for the establishment of an interim zoning district or regulation as an emergency measure in order to protect public health, safety, morals, and general welfare in its jurisdictional area; and,

WHEREAS, the Board of County Commissioners concludes that an emergency exists relative to impacts from cryptocurrency mining and that the county therefore has an obligation to take action to protect public health, safety, morals, and general welfare; and,

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

WHEREAS, Missoula County has initiated an investigation relative to cryptocurrency mining impacts; and,

WHEREAS, Missoula County needs time to further study the impacts of cryptocurrency mining operations to determine zoning regulations necessary to adequately address the siting and permitting process for cryptocurrency mining operations; and,

WHEREAS, cryptocurrency is a digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds; and,

WHEREAS, cryptocurrency mining is a continuous process where computers work to solve algorithms to maintain and build an algorithmic chain, or blockchain, and in exchange are granted cryptocurrency; and,

WHEREAS, typical physical characteristics of cryptocurrency mining include specialized computer hardware, high electricity use, and the use of equipment to cool the hardware; and,

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

WHEREAS, the 2016 Missoula County Growth Policy includes several guiding principles that are particularly relevant to the county's consideration of 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:

4.1 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, a single transaction in Bitcoin, the largest cryptocurrency, consumes thousands of times more energy than a conventional credit card transaction, and the estimated total electricity consumption of cryptocurrency mining in Missoula County is equivalent to one-third

of residential electricity consumption in the county, and will rise to the level of 100% of residential electricity consumption in the county if planned expansions are carried out; and,

WHEREAS, the large and increasing energy consumption of cryptocurrency mining operations results in increased greenhouse gas emissions that cause climate change; 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, 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, 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, a notice of public hearing was advertised in the Missoulian on March 17 and 31, 2019, for adoption of a resolution to enact interim zoning regulations pertaining to cryptocurrency mining; and,

WHEREAS, a hearing was held by the County Commissioners of Missoula County on April 4, 2019, in order to give the public an opportunity to be heard regarding the proposed interim zoning regulation; and,

WHEREAS, the Missoula Board of County Commissioners conducted three other public hearings - on June 14 and September 27, 2018, and March 14, 2019 - in order to receive public comment on cryptocurrency mining and discuss impacts and options for mitigation; and,

WHEREAS, the Board of County Commissioners finds that it is in the best interests of the County and its citizens to impose interim zoning controls for a period of one year to provide more time to investigate this issue further to evaluate the best alternatives for the community.

NOW, THEREFORE BE IT RESOLVED, that the Missoula County Board of County Commissioners authorizes interim zoning to create a county-wide Cryptocurrency Mining Zoning Overlay District in the manner shown in the proposed zoning regulations (Attachment A), effective immediately and for a duration of one year, which may be extended for one additional year upon approval of the County Commissioners:

SEVERABILITY. If a court of competent jurisdiction declares any provision in this resolution to be contrary to law, such declaration shall not affect the validity of the other provisions of this resolution.

PASSED AND ADOPTED THIS 4TH DAY OF APRIL 2019

ATTEST:



 Tyler Gernant, Clerk and Recorder



BOARD OF COUNTY COMMISSIONERS
 MISSOULA COUNTY



 Nicole Rowley, Chair



 Josh Slotnick, Commissioner



 David Strohmaier, Commissioner

ATTACHMENT A
Cryptocurrency Mining Zoning Overlay District

These interim zoning regulations amend the Missoula County Zoning Regulations, with an effective date of April 4, 2019, and expiring on April 3, 2020, unless extended by the Board of County Commissioners after a public hearing.

Definitions added to SECTION 1.04 DEFINITIONS:

Cryptocurrency Mining

The operation of specialized computer equipment for the purpose of mining one or more blockchain-based cryptocurrencies, such as Bitcoin. This activity typically 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.

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.

**Zoning Overlay District regulations added as a new section to Chapter 5:
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, morals, and general welfare of county residents. The high energy consumption of cryptocurrency mining operations runs counter to Missoula County's objective to reduce its contribution to climate change. Equipment at cryptocurrency mining 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, water quality, and air 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. Effective Dates

This interim zoning overlay district is effective beginning April 4, 2019 and shall continue to April 3, 2020.

D. Cryptocurrency Mining Overlay Zone

There is hereby established a zoning overlay district whose boundaries are the boundaries of Missoula County in which a person may construct or operate a cryptocurrency mining operation subject to the conditions in subsection E.

E. Conditions

Cryptocurrency mining operations must meet all of the following conditions.

1. Cryptocurrency mining facilities may locate only in C-II (Light Industrial) or C-12 (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.

F. Nonconforming Cryptocurrency Mining Use

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

A lawful cryptocurrency mining use existing on the effective date of this interim 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.