After mining, the stream should mimic a natural stream environment.

Important points to keep in mind

- The stream channel cannot be relocated or modified in any way.
- For wet streams, excavation must occur above water level; in dry streams, excavation must occur above the lowest undisturbed elevation of the stream bottom.
- A10-foot buffer is required between the excavation area and edge of flowing water line.
- An adequate buffer is required between the base of high bank and excavation area.
- A 25-foot undisturbed buffer is required landward from the high bank.
- Eighty-five percent of minable material must be less than 3 inches in diameter.
- Do not remove woody vegetation larger than 1.5 inches measured 4.5 feet from ground level.
- No fuel, oil or waste may be stored within stream high banks to prevent runoff into the stream.
- Water must be crossed as perpendicular to the direction of the stream flow as possible.
- Stream must be free from stockpiles.
- Gravel screening and sorting operations must be conducted beyond the high bank.

Contact Us

If you have questions or concerns about sand and gravel mining, please contact:

Missouri Department of Natural Resources
Missouri Geological Survey
Land Reclamation Program
Phone: 573-751-4041
Fax: 573-368-2317
PO Box 176, Jefferson City, MO 65102

To learn more about the services and information, visit:

dnr.mo.gov/geology/lrp

If you would like assistance or have questions, please contact the Land Reclamation Program at 573-751-4041, or by email at mining@dnr.mo.gov

The mission of the Land Reclamation Program is to ensure the beneficial restoration of mined lands and to protect public health, safety and the environment from the adverse effects of mining in the state of Missouri.

Missouri Geological Survey Director:
Joe Gillman

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Missouri Geological Survey

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SAND AND GRAVEL MINING

Missouri Geological Survey

Land Reclamation Program

Industrial and Metallic Minerals

MISSOURI DEPARTMENT OF NATURAL RESOURCES
Missouri Geological Survey

Frequently Asked Questions

Why can't I put the stream back in the channel it used to be? Why can't I change the stream to make it easier to remove gravel?

The continued success of a stream being mined hinges on minimal changes to the stream. Therefore, removing loosely packed gravel from the surface of the gravel bar, also known as bar skimming, is important to ensure the stream banks, stream bed, and the flowing water are not disturbed.

Streams can easily be damaged by careless removal of sand and gravel. If done incorrectly, sand and gravel mining can cause rapid erosion of the stream banks, resulting in the loss of land and an imbalance to the entire stream system.

Modifications to a stream channel may require authorization from the Army Corps of Engineers.

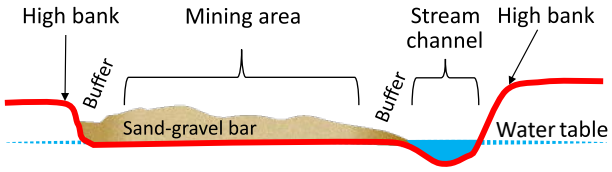
Dry Ozarks stream bed being properly mined in a naturally occuring gravel deposit.

Improper mining method of stockpiling gravel in a flowing stream, mining below waterline, and building a dam.

Using creek rock to reinforce an eroding bank is not advised. This rock is rounded and easily moved by water. The next high flow event will carry the gravel downstream and leave a less stable bank.

Missouri streams are an important source of sand and gravel for many construction activities.

Typical gravel bar with high bank, gravel mining area, stream channel, and high bank along the water.



Why can't I mine below the water, from bank to bank?

Mining below the water level will send forward channel erosion (head cuts) upstream, thus significantly increasing erosion of the stream bank, resulting in soil loss. Similarly, when the toe of the bank is disturbed by mining or stockpiles, the stability of the bank is compromised, resulting in increased erosion.

Why can't I leave stockpiles in the stream overnight?

Changing the contours of the stream by having stockpiles or swales will change the dynamics of how water flows through that stretch of stream. The goal is to mine sand and gravel while leaving minimal impacts to the stream environment.