

**Legislation History (61st Legislature)**

**Senate Bill 297 [Sen. Cliff Larsen, D-Missoula]:**

**Establishes a sand and gravel mapping program and enables the Montana Bureau of Mines and Geology to evaluate and report on sand and gravel resources in Montana. 82-2-701, MCA**

**82-2-701.** Sand and gravel deposit program -- investigation -- purpose -- prioritization. (1) The Montana bureau of mines and geology shall establish a sand and gravel deposit program for the purpose of investigating sand and gravel deposits in areas of the state where conflicts between development and sand and gravel operations are high.

(2) In prioritizing areas for investigation, the bureau of mines and geology shall consider the largest counties, according to the most recent census data, and counties with the most opencut mining permits and subdivision applications, according to the department of environmental quality.

(3) The bureau of mines and geology may start an investigation when it has sufficient funds to conduct an investigation.

(4) Within 1 year of starting an investigation, the bureau of mines and geology shall present the results of the investigation in the form of maps and text to:

- (a) the counties included in the investigation;
- (b) the education and local government interim committee; and
- (c) the environmental quality council.

History: En. Sec. 1, Ch. 276, L. 2009.

**82-2-702.** Authority to accept gifts, grants, and reimbursements. The Montana bureau of mines and geology may accept gifts, grants, and reimbursements to be used for the purposes of 82-2-701.

History: En. Sec. 2, Ch. 276, L. 2009.

\*\*\*\*\*

**House Bill 486 [Rep. Gary MacLaren, R-Victor]:**

**amends MCA 76-1-601 to include "sand & gravel resources" in growth policies that will be written and established by individual counties in Montana.**

**IN THE NEWS – leading to the 61st Legislature (2009)**  
**(MT Environmental Information Center; meic.org)**

*Judge stays two controversial Gallatin County gravel pit permits (Aug. 19, 2008)*

*Judge to reconsider gravel pit ruling (by Daniel Person, Bozeman Chronicle Staff Writer, July 29, 2008)*

*Gravel mining pits neighbor against company (by Jennifer McKee, Gazette State Bureau, July 28, 2008)*

*Lolo gravel pit: Plans thwarted - County votes to zone area residential (by Chelsi Moy of the Missoulian, June 1, 2008)*

*Legislature asked to revisit open-cut mining permit laws (Great Falls Tribune, May 14, 2008)*

*DEQ issues gravel permits without assessment (Great Falls Tribune, May 7, 2008)*

*Between rocks and a hard place (by Jodi Hausen, Bozeman Chronicle Staff Writer, Feb, 24, 2008)*

**Recent MBMG Activities (2009-present)**

GIS data “coverages” or maps with gravel-bearing geologic units and known gravel pits

Counties Served Directly

Missoula,  
Madison,  
McCone,  
Dawson,  
Ravalli, and  
Rosebud

Counties served with focus on state lands

Sheridan,  
Roosevelt,  
Richland, and  
Wibaux

\*\*\*\*\*

**Mineral Materials (MinMat)**

Earth construction materials that are not considered locatable under Federal mining laws or leasable under the Federal mineral leasing laws. The materials include common varieties of rock or stone, sand and gravel, pumice aggregate, pumicite, cinders, and soil materials suitable for compacted earth structures, landscaping, and other uses. USDA-USFS provided funding to develop a GPS-based process to inventory and map resources on Federal lands.

\*\*\*\*\*

**Data Preservation Program**

Acquired collection of air photographs, maps, and other information for 25 sand and gravel sites in SW Montana.

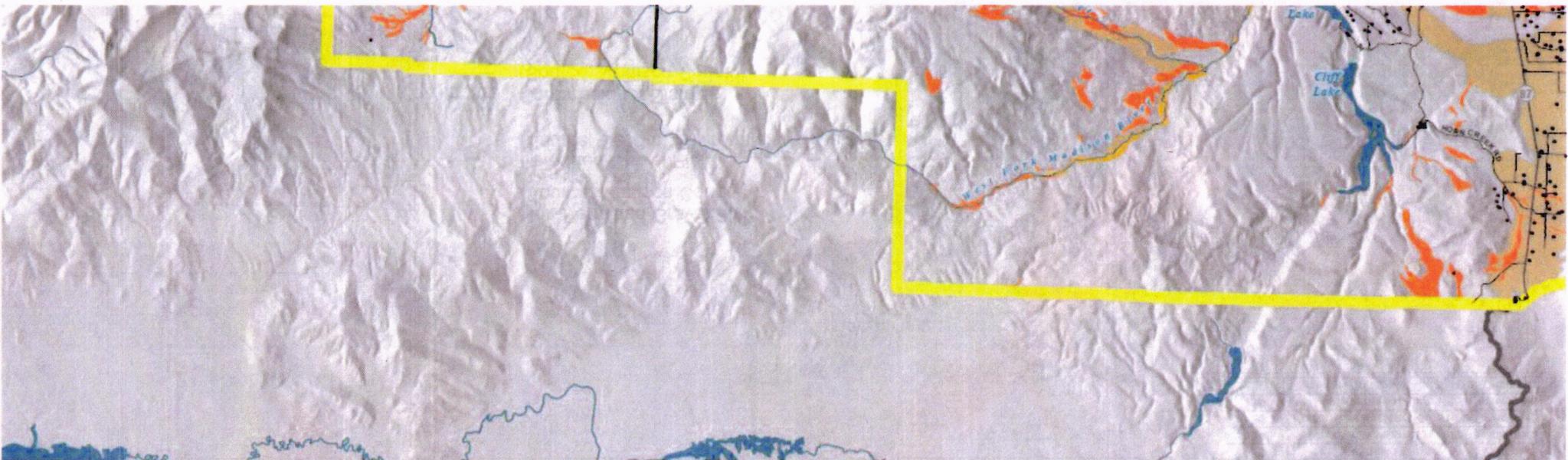
\*\*\*\*\*

**Other information available**

The gravel pit database: 2941 data points derived from those indicated on topo maps, published geologic maps, and local information

The MBMG Abandoned Inactive Mines (AIM) database: ~8,000 records (sites), 960 sites that indicate potential for gravel (includes quarries)

\*\*\*\*\*



**Geologic Units that may Provide a Source for Sand and Gravel (Source: Montana Bureau of Mines and Geology (MBMG))**

The best available geology maps and locations of existing gravel pits were used to help Susan M. Vuke, Associate Research Geologist at MBMG, determine which geologic units might be a potential source for sand and gravel. Please see the Map of Geology Data Coverage to see areas where there was not sufficient data for this analysis.

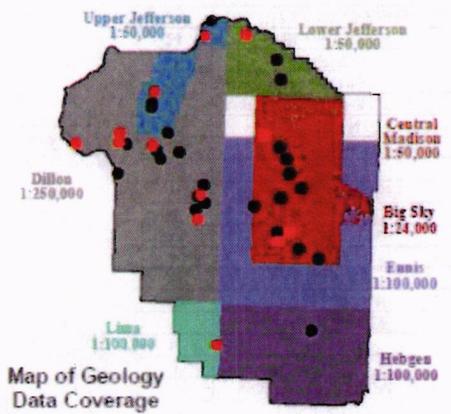
ty)

 Relatively high potential as a source for sand and gravel. Includes Qal for all geology maps; Qat for Lower Jefferson, Central Madison, and Hebgen; Qgr for Central Madison, Hebgen, and Ennis; Qgrc for Central Madison; Qatc for Hebgen and Ennis; and Qa for Dillon.

 Relatively moderate potential as a source for sand and gravel. May be covered by fine-grained floodplain deposits. Includes Qat for Upper Jefferson; Qalo for Lower Jefferson and Central Madison; Qgr for Lower Jefferson; QTjc for Lower Jefferson; Qfp for Hebgen; QTbf for Ennis; and QTg for Dillon.

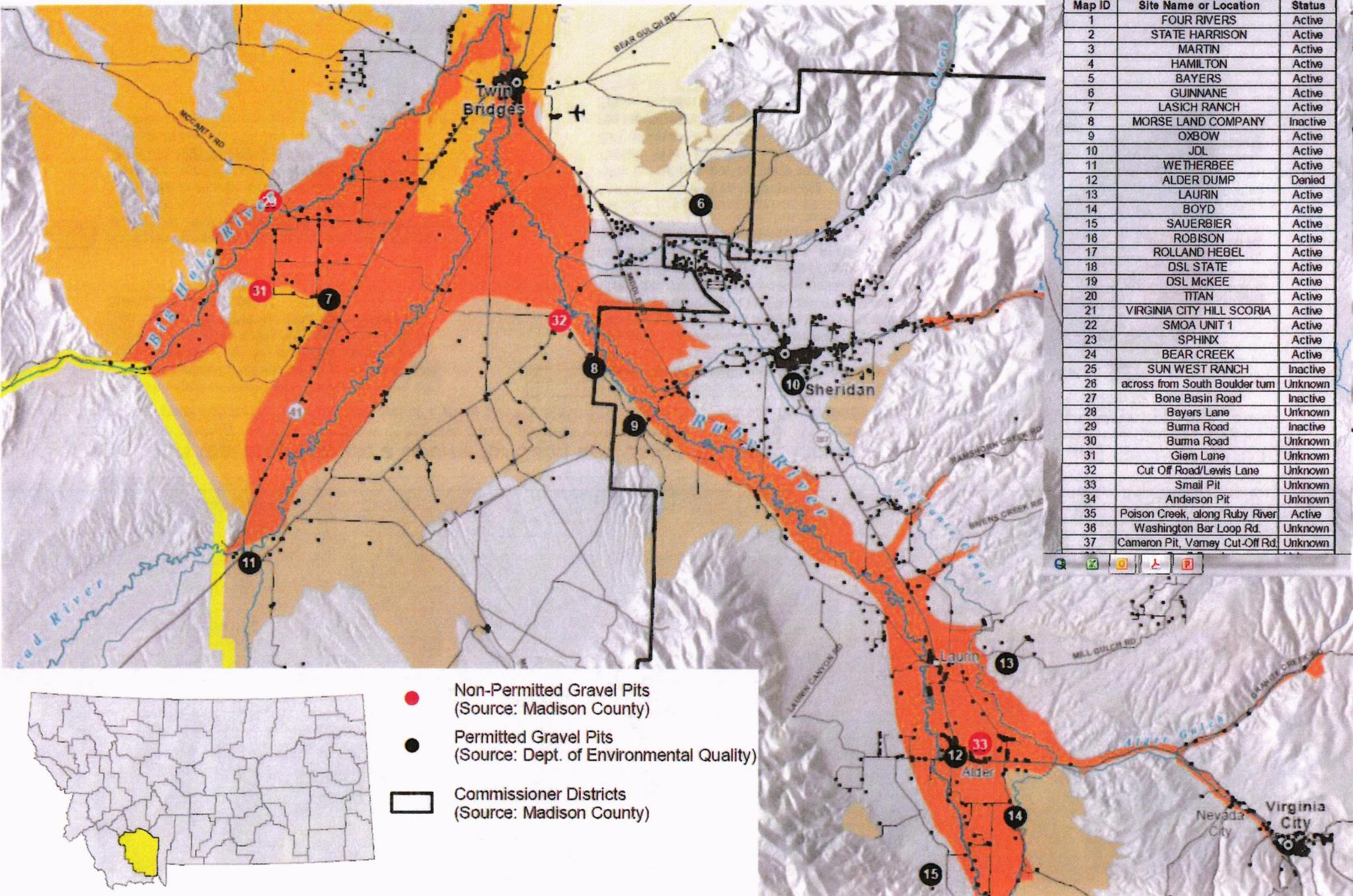
 Relatively low potential as a source for sand and gravel. These are alluvial fan deposits. Much of the extent of these deposits would not be a good resource, but deposits from streams that cut through the fans could have potential as a gravel resource. May be suitable for paving county roads, but not for major paving projects. Includes Qaf for Upper Jefferson, Central Madison, and Lima; Qafo for Upper Jefferson; and Qaf1, Qaf2, Qafc1, and Qafc2 for Central Madison.

 Variable potential as a source for sand and gravel. May not be a good source overall, but includes local areas that may be good sources. Includes Tbb in Upper Jefferson; Tanc, Tmva, Qaf, and Qgt for Lower Jefferson; Qgt, Qd, QTdu, and QTd for Big Sky; Qaf1, Qaf2, and Qgt for Hebgen; Qafc for Ennis; Tsc for Lima; and Tbz for Dillon.

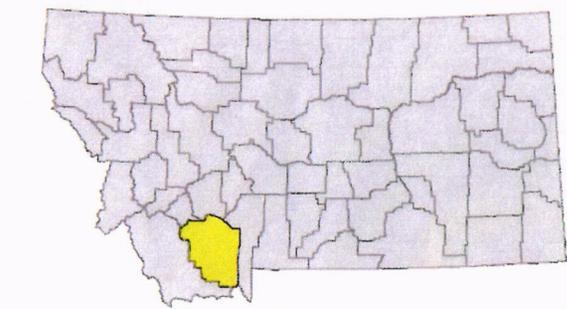


Map of Geology Data Coverage

Gravel Pits		
Map ID	Site Name or Location	Status
1	FOUR RIVERS	Active
2	STATE HARRISON	Active
3	MARTIN	Active
4	HAMILTON	Active
5	BAYERS	Active
6	GUINNANE	Active
7	LASICH RANCH	Active
8	MORSE LAND COMPANY	Inactive
9	OXBOW	Active
10	JDL	Active
11	WETHERBEE	Active
12	ALDER DUMP	Denied
13	LAURIN	Active
14	BOYD	Active
15	SAUERBIER	Active
16	ROBISON	Active
17	ROLLAND HEBEL	Active
18	DSL STATE	Active
19	DSL McKEE	Active
20	TITAN	Active
21	VIRGINIA CITY HILL SCORIA	Active
22	SMOA UNIT 1	Active
23	SPHINX	Active
24	BEAR CREEK	Active
25	SUN WEST RANCH	Inactive
26	across from South Boulder turn	Unknown
27	Bone Basin Road	Inactive
28	Bayers Lane	Unknown
29	Burma Road	Inactive
30	Burma Road	Unknown
31	Giem Lane	Unknown
32	Cut Off Road/Lewis Lane	Unknown
33	Smail Pit	Unknown
34	Anderson Pit	Unknown
35	Poison Creek, along Ruby River	Active
36	Washington Bar Loop Rd.	Unknown
37	Cameron Pit, Vamey Cut-Off Rd.	Unknown



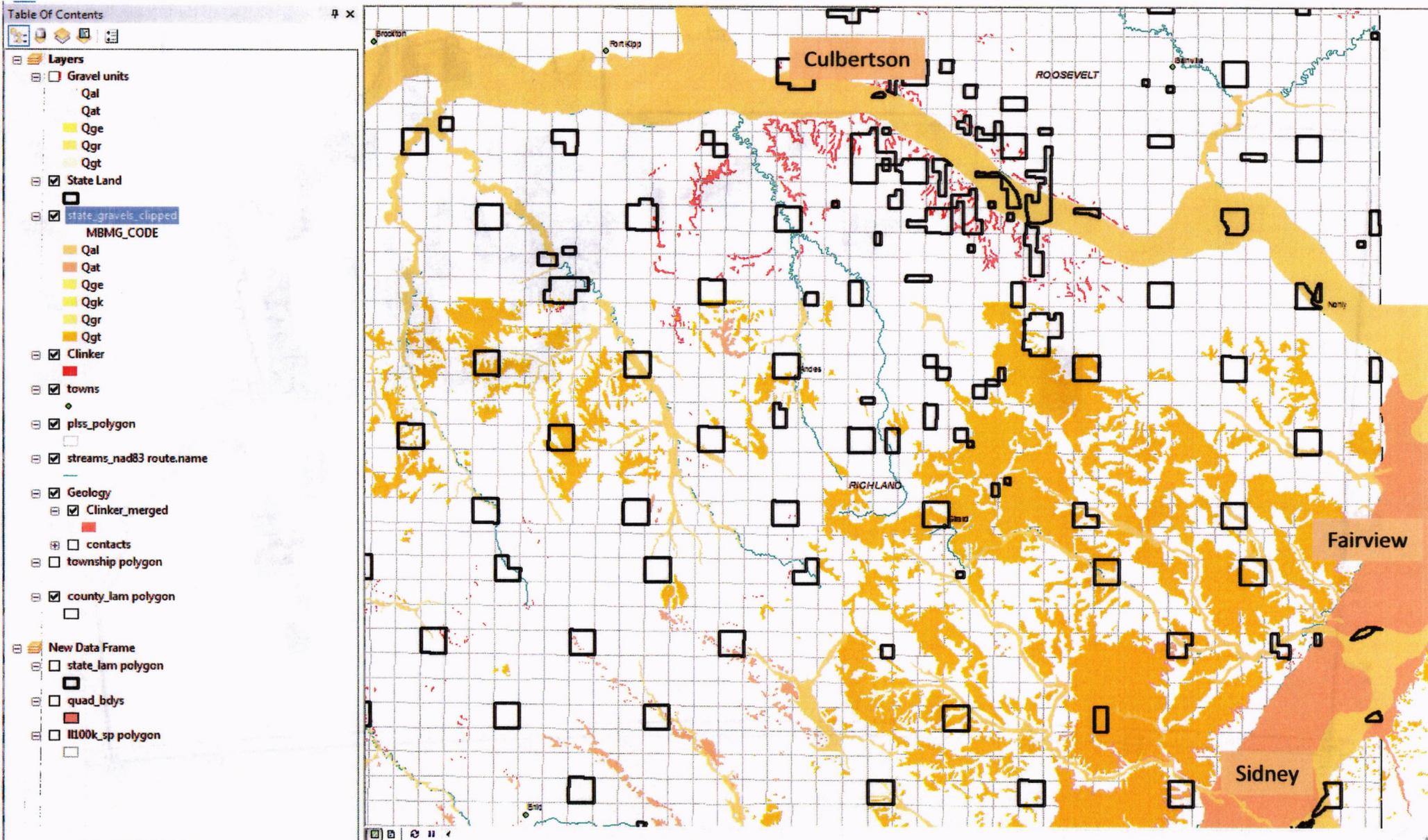
- Non-Permitted Gravel Pits (Source: Madison County)
- Permitted Gravel Pits (Source: Dept. of Environmental Quality)
- Commissioner Districts (Source: Madison County)

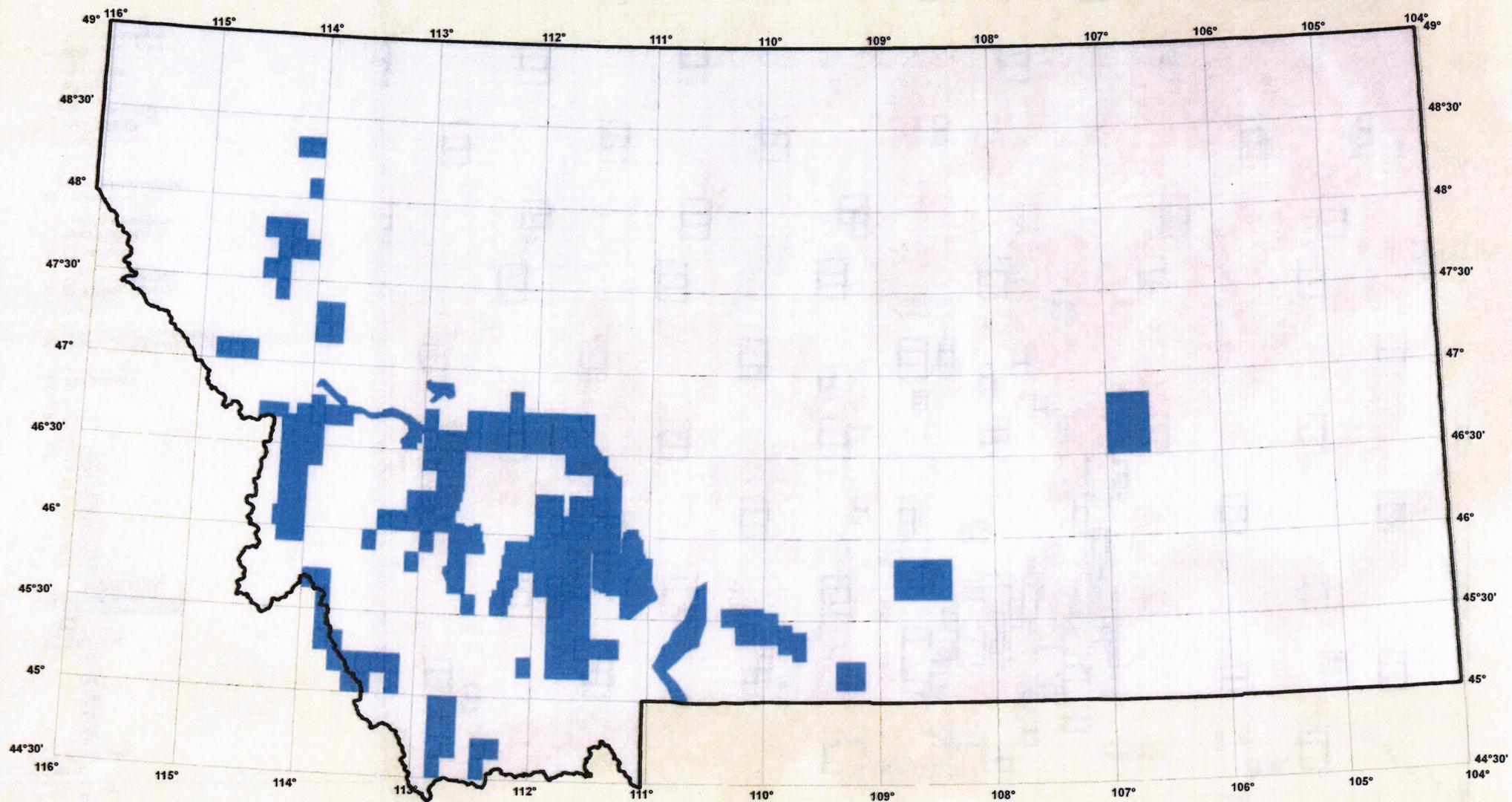


All boundaries are approximate and cannot be used for legal purposes. The data shown on this map is not the official record and may not be accurate or complete. This map is composed of various data layers at various scales appropriate for viewing at a scale of 1:150,000. This map was created for general planning purposes and is not intended to be used for individual properties.

map produced by Madison County

# MBMG sand & gravel program – typical products: DATA





Montana Geologic Maps  
1:100,000 scale (light blue)  
1:24,000 scale (dark blue) – more detail for smaller areas

