

To be inserted following "Chapter 8: Natural Resources"; existing "Chapter 9: Implementation Strategy" will become Chapter 10, and subsequent chapters will follow suit.

CHAPTER 9: SAND & GRAVEL RESOURCES

Introduction

Sand and gravel are important natural resources found throughout Flathead County. ~~The area is not known for having large quantities of sand, but the geologic makeup of the Flathead valley has resulted in the presence of gravel resources throughout Flathead County. Even though there are large amounts of gravel, sand is limited.~~ Gravel resources provide the foundation upon which our infrastructure is built, defining where, how and to what extent development occurs. Our roads, bridges and highways are all constructed using gravel; the houses we live in, buildings we work in and sidewalks we walk on utilize the resource as well. Access to local gravel resources reduces costs associated with transportation and processing fees, thereby reducing the overall cost of development. The potential for local extraction of sand and gravel resources also affects the overall economic climate by providing jobs and serving local construction industries. Because of this, an awareness of where sand and gravel resources are currently located and what types of activities (extraction, processing, and transportation) are occurring today is important to the residents of Flathead County. As we develop/zone over gravel resources, they cease to exist.... Consequences of letting this happen.

In 2009, a senator from Flathead County sponsored a legislative bill ([Senate Bill No. 411](#) [Senate Bill No. 486](#)) requiring consideration of sand and gravel resources in the content of any County Growth Policy. Changes resulting from this proposal during the 2009 Legislative session now require all Growth Policies to include a description of sand and gravel resources within a county's respective jurisdiction. As part of the Growth Policy Update for the year 2012, this chapter has been added to address these additional requirements and comply with Section 76-1-601 MCA.

Mapping the location and extent of these resources will not only serve to inform future land use planning but will ensure the continued availability and accessibility of sand and gravel for future growth and development needs of Flathead County. Due to the limited data available, this chapter is not intended to be an evaluation of existing materials or a directive on where future sand and gravel extraction should necessarily occur. Pursuant to Section 76-1-601(3)(viii) MCA, this chapters intends to identify existing [sand and gravel resources](#) located within the planning jurisdiction of Flathead County, and to develop corresponding goal(s) and policies that may aide in future data collection and planning efforts involving sand and gravel resources.

Goal

G.44 *To be drafted by Planning Board...*
Refer to goals and policies in land use chapter, natural resources, etc.

Goal 12, Policies 12.1 through 12.8

Policies

P.44.1 *To be drafted by Planning Board...*

Goals and policies found in "Chapter 10: Neighborhood Plans" will require re-numbering accordingly.

PART 1: History of Sand & Gravel Resources and Extraction in Flathead County

The importance of sand and gravel resources in Flathead County has led to a great deal of discussion, zoning amendments, and even law suits regarding the evaluation of gravel extraction, and extractive industry in general, through the Flathead County Zoning Regulations (FCZR). The zoning regulations identify "gravel extraction" and "extractive industry" as two distinct yet similar uses conditionally permitted in select, zoned areas of the County. Although the Planning and Zoning Office has no regulatory reviewing authority over the types of uses in unzoned areas of the County, any extractive industry resulting in the removal of more than 10,000 cubic yards of material proposed in these areas is still required to obtain a permit through the Department of Environmental Quality Opencut Mining Program (pursuant to the Opencut Mining Act, 82-4-401 et seq., MCA).

Certain areas of the County address gravel resources and extractive industry more often than others, due in part to the zoning in place but also based upon the location and availability of gravel resources in particular geographic locations. The West Valley area is one such location; although only a handful of the MDEQ permitted gravel extraction operations are recognized by the County as being active (refer to Map 9.1), the prevalence of residential and agricultural uses has historically resulted in continued conflict over the years. State-recognized conflict between gravel extraction & residential uses – not permitted in residential areas. WV lawsuit determining 'residential' use – include or not?

Important

Can you quantify gravel needs of the County? – Marc to talk to Rod re: permits, level of extraction.

Check with DOT (?) on general estimates – how much pit run necessary to construct 1 mi. of road? Somehow quantify gravel need for development.

- -Really depends on how road is constructed, so many variables

Location of gravel pits – spread out over the County, reduces transportation costs to complete improvements

Economic importance, employment figures, current industries in the valley.

****Add general overview on gravel extraction/extractive industry text amendment, 2010.**

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Another area of the County in which gravel resources and extractive industry is prevalent is the North Fork of the Flathead River. The North Fork area is both rural and remote, accessible by a gravel road that runs for over forty miles north of the City of Columbia Falls. Mining and extraction has been a controversial issue affecting the region since its discovery (in what year – generally?), as the North Fork is part of the transboundary region spanning Canada and the state of Montana and serves as the western boundary of Glacier National Park, designated a World Heritage Site and Biosphere Reserve by the United Nations Education Scientific and Cultural Organization (UNESCO). After years of discussion, deliberation and negotiation, a Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy was signed between the Province of British Columbia and the State of Montana on February 18th, 2010. The Memorandum serves to permanently prohibit coal and hardrock mining as well as oil and gas development in the North Fork region. The governments involved have been working since this adoption to secure and retire existing land leases for gas, coal and mining activities, in an effort to return the ecosystem back to its natural state.

PART 2: Existing Sand & Gravel Resources

Gravel resources are commonly found in river valleys where the water table is high, and in alluvial floodplains along streams and glacial deposits.¹ These areas are generally acknowledged as environmentally sensitive, and are typically designated as floodplain, wetland, or riparian areas having characteristics of prime habitat or sensitive classification. Because gravel extraction must occur where the gravel is located, the potential for conflict is heightened due to the environmentally sensitive nature of these areas and the methods and machinery used to extract the resource.

In the spring of 2010, at the direction of a sub-committee of the Flathead County Planning Board, planning staff researched and compiled available data on surficial soil classifications from the Montana Bureau of Mines and Geology (MTBMG), open cut permits issued through the Montana Department of Environmental Quality (MT DEQ) and the status of existing gravel operations based upon data collected and maintained by the Flathead County GIS Department (through [2006 2010](#)); the end result is the Flathead County Gravel Resources Map included in this chapter (see Map 9.1).

The map identifies the location of known gravel pits throughout Flathead County and provides their operation status – active, inactive, reclaimed or unknown - as of [2006 2010](#). [Of the 142 open cut mining operations permitted in the valley, 130 are currently active, 11 are inactive and 1 has been reclaimed.](#) These locations are overlaid atop the surficial soils data provided by the Bureau of Mines and Geology, showing the types of soil classification units prevalent throughout the Flathead Valley. The map also includes data points identifying each operation having obtained an open cut permit through the state Department of Environmental Quality; these permit locations typically correspond to a mapped gravel pit location.

¹ Sand & Gravel Operations in Montana; www.montanagravel.org

Address the presence of pits does not necessarily mean that when there are no pits in an area, there are no resources... link to reduction in transport costs.

PART 4: Planning for Future Sand and Gravel Extraction

- Does the Board want to tackle this or stick with the basics...?
- Goals and policies relating to sand and gravel resources – pg. 12 of original GP, G.12, Policy 12.1-12.8 – cross reference these or recopy, instead of new ones

TABLE 9.1
Permits for Open Cut Mining Operations in Flathead County - 2010

DRAFT

PERMIT NUMBER	OPERATOR	SITE NAME	OPERATING STATUS
	JOHNSTON, JERRY	MARION	ACTIVE
	KNIFE RIVER	WILCOX	ACTIVE
	WILKE, LAURENCE	WILKE	ACTIVE
00602-1	T-BEND CONSTRUCTION	THORNBERRY	ACTIVE
	JTL GROUP INC DBA MCELROY AND WILKEN	RIVER PIT PRE LAW	ACTIVE
TUR-001	TURNER, WAYNE	TURNER	ACTIVE
	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	ASHLEYCREEK	ACTIVE
HAN-001	NEIL HANSON	AREA19	ACTIVE
BRO-001	PAMELA BROWN	OLD SOMMERS	ACTIVE
SGL-001	SPOKLE GRANT	SPOKLE	ACTIVE
	SHELLINGER CONSTRUCTION COMPANY	LINDSEY LANE	ACTIVE
SCI-046	SHELLINGER CONSTRUCTION COMPANY	SULLIVAN	ACTIVE
00138	ANDERSON, LLOYD	ANDERSON	ACTIVE
SCI-030	SHELLINGER CONSTRUCTION COMPANY	HETLAND2	ACTIVE
SCI-001	SCHLEGEL AND SONS CONTRACTOR INC	WISE	ACTIVE
00293-PIT#6	FLATHEAD COUNTY ROAD DEPARTMENT	GUDGEL	ACTIVE
MLE-002	MANY LAKES EAST	BRIST	ACTIVE
JTL-024	JTL GROUP INC	KLEINHANS	ACTIVE
00293-PIT#4	FLATHEAD COUNTY ROAD DEPARTMENT	FOX	ACTIVE
00190-1	NEIL DOTEN	DOTEN	ACTIVE
PTS-01	POTTS, LYLE	POTTS	ACTIVE
GLL-002	GRIZZLY LOGGING AND LUMBER LLC DBA GRIZZLY	WELCOMESPRINGS	ACTIVE
KJR-002	KLEMPER, JOE AND RON	KLEMPER2	ACTIVE
00477	NORVELL-EVART, LINDA	SIDERIUS	ACTIVE
00309-4	MISSION VALLEY CONCRETE	SULLIVAN	ACTIVE
WDR-001	WOODRING, ERIC	MARION	ACTIVE
00293-PIT#19	FLATHEAD COUNTY ROAD DEPARTMENT	WISHERT	ACTIVE
00381	MCELROY AND WILKEN INC	WILCOX	ACTIVE
DSL-001	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	WHITEFISH LAKE	ACTIVE
00052	CITY OF WHITEFISH	WHITEFISH CITY	ACTIVE
C20-012	FLATHEAD COUNTY ROAD DEPARTMENT	WALSH	ACTIVE
00140	WAGONERS SAND AND GRAVEL	RV PARK	ACTIVE
WSG-002	WAGONERS SAND AND GRAVEL	RIVER	ACTIVE
MUR-001	MURPHYS EXCAVATING INC	WAGAR	ACTIVE
SCI-067	SHELLINGER CONSTRUCTION COMPANY	TUTVEDT2	ACTIVE
TUT-001	TUTVEDT, BRUCH AND LINDA	TUTVEDT1	ACTIVE
RUS-001	RUSSELL, KIMBERLY J	TUCKER	ACTIVE
SWZ-001	SCHWARZ CONSTRUCTION	TRUMBLE CREEK ROAD	ACTIVE
HSG-013	HELENA SAND AND GRAVEL INC	TRACHT	ACTIVE
DNR-010	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	SKUNKMEADOWS	ACTIVE
BEA-001	BEASLEY, JOE	SILVERSTONE	ACTIVE
HNK-002	NORMAK K HANSON	SICKLERSHALE2	ACTIVE
HNK-001	NORMAN K HANSON	SICKLERSHALE	ACTIVE
00293-PIT#16	FLATHEAD COUNTY ROAD DEPARTMENT	SHEEPHERDER	ACTIVE
	WHITE ROCK AGGREGATE LLC	SANDON	ACTIVE
ACE-001	AC ENTERPRISES	KLSANDBOX	ACTIVE
00340	ROBINSON SAND AND GRAVEL	ROBINSON	ACTIVE
KNI-021	KNIFE RIVER	RIVERPIT1	ACTIVE
KNI-018	KNIFE RIVER	OLD STEEL BRIDGE	ACTIVE
SCI-020	SHELLINGER CONSTRUCTION COMPANY	PESCHEL2	ACTIVE
OLS-001	OLSEN, RUSSELL	PAVECO	ACTIVE
00554	MCELROY AND WILKEN INC	PACK	ACTIVE
00293-PIT #12	FLATHEAD COUNTY ROAD DEPARTMENT	OLD STEEL BRIDGE	ACTIVE
SWI-001	SWIFT CREEK CABINS LLC	MUIR	ACTIVE
KNI-026	MOTICHKA	MOTICHKA	ACTIVE
KNI-017	KNIFE RIVER	MOHL	ACTIVE
00293-PIT#10	FLATHEAD COUNTY ROAD DEPARTMENT	MILLS	ACTIVE
RCI-039	RIVERSIDE CONTRACTING INC	MCHENRY	ACTIVE
00149-1212A	DEPARTMENT OF TRANSPORTATION	MARION	ACTIVE
00541-1	LHC INC	LHC	ACTIVE
LSG-001	LASALLE SAND AND GRAVEL	LASALLE	ACTIVE
KJR-001	KLEMPER, JOE AND RON	KLEMPER	ACTIVE
KEL-001	KELLER, LES	KELLER	ACTIVE
SCI-048	SHELLINGER CONSTRUCTION COMPANY	JELLISON	ACTIVE
GBE-002	GOOSE BAY EQUIPMENT INC	JANDRON	ACTIVE
THI-001	TUNGSTEN HOLDINGS INC	ISLANDLAKE	ACTIVE
00293-PIT#7	FLATHEAD COUNTY ROAD DEPARTMENT	INGRAHAM	ACTIVE
0051	PACK AND COMPANY/NUPAC	HUTTON	ACTIVE
USF-001	US FISH AND WILDLIFE SERVICE	HORSE RANCH	ACTIVE
JCS-001	JIM CLARK AND SON CONTRACTING	HOLCOMB	ACTIVE

KNI-020	KNIFE RIVER	HODGSON	ACTIVE
SCI-033	SHELLINGER CONSTRUCTION COMPANY	HILLTOP WEST	ACTIVE
00106	HAMILTON, HOWARD	HAMILTON1A	ACTIVE
	PLUM CREEK NORTHWEST LUMBER INC	COLUMBIA HEIGHTS	ACTIVE
WAG-001	WAGAR, JOE	GOPHER	ACTIVE
GBE-001	GOOSE BAY EQUIPMENT	GOOSE	ACTIVE
STW-01	STW PARTNERSHIP	STW	ACTIVE
GHR-001	GLACIER HORSE RANCH	GLACIE RANCH	ACTIVE
STP-001	SILVERTIP PROPERTIES	EVERS CREEK	ACTIVE
SRL-002	SPOKJIE, ROBERT L	EVANS	ACTIVE
DNR-013	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	EASTMARTN	ACTIVE
THL-001	TAMARACK HOLDINGS, LLC	DONSBACH	ACTIVE
00335	DOANE, DON	DOANE	ACTIVE
THO-001	THORNBERRY, RON AND ESTER	DAIRY	ACTIVE
SCI-056	SHELLINGER CONSTRUCTION COMPANY	SCHMIDT COLUMBIA HEIGHTS	ACTIVE
CFI-001	COLUMBIA FALLS INDUSTRIAL PARK	CFIP	ACTIVE
00293-1	FLATHEAD COUNTY ROAD DEPARTMENT	BUSCH	ACTIVE
BSH-001	BRASH PROJECTS LLC	BRUNNER	ACTIVE
00149-1201A	DEPARTMENT OF TRANSPORTATION	BRAS	ACTIVE
HHD-001	HAMILTON, HOWARD D	BLUEMOON	ACTIVE
00149-F1-2(3)	DEPARTMENT OF TRANSPORTATION	HUNGRYHORSE	ACTIVE
SLG-002	SPOKJIE, GRANT	COLUMBIA FALLS	ACTIVE
CFI-002	COLUMBIA FALLS INDUSTRIAL PARK	FOURTHSTREET	ACTIVE
FHS-001	FH STOLTZE LAND LUMBER COMPANY	FOURMILE	ACTIVE
KRU-001	KRUEGER, GARY	KRUEGER	ACTIVE
DSL-003	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	CHICKENCREEK	ACTIVE
CLA-001	CLARK, ED A	ED CLARK	ACTIVE
DSL-004	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	EWING	ACTIVE
PUM-027	PUMCO INC	KEMPF	ACTIVE
LHC-001	LHC INC	TUTVEDT3	ACTIVE
00293-PIT#11	FLATHEAD COUNTY ROAD DEPARTMENT	NELSON	ACTIVE
00293-PIT#1	FLATHEAD COUNTY ROAD DEPARTMENT	CORAM	ACTIVE
LBC-001	LEIGHTY BROS CONSTRUCTION LLC	FOXHILLS	RECLAIMED
	WHITE ROCK AGGREGATE LLC	HOMANN	ACTIVE
PCT-002	PLUM CREEK TIMBERLANDS LP	WEST MCGREGOR	ACTIVE
T&C-001	CHARLAND, STEVE R	SMITHVALLEY	ACTIVE
DSL-005	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	ANCHORFLATS	ACTIVE
DSL-006	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	SHORTSMEADOW	ACTIVE
DNR-009	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	EAST SWIFT	ACTIVE
DNR-014	DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	156MILE	ACTIVE
00275	PLUM CREEK TIMBERLANDS LP	71MILE	ACTIVE
00275-5	PLUM CREEK TIMBERLANDS LP	PIT #9	ACTIVE
00149-1212B	MARION HILLTOP	MARION HILLTOP	ACTIVE
00293-PIT#23	FLATHEAD COUNTY ROAD DEPARTMENT	KINNIKINICK	ACTIVE
00149-1202B	DEPARTMENT OF TRANSPORTATION	COLUMBIA HEIGHTS	ACTIVE
00149-1205A	DEPARTMENT OF TRANSPORTATION	FOX	ACTIVE
00149-F12(8)81	DEPARTMENT OF TRANSPORTATION	STATE	ACTIVE
00149-SMP159977	DEPARTMENT OF TRANSPORTATION	OLNEY	ACTIVE
	SHELLINGER CONSTRUCTION COMPANY	BLASDEL	ACTIVE
	SHELLINGER CONSTRUCTION COMPANY	AVERILL	ACTIVE
ESL-001	ESLICK, PAUL	CORNELIUSON	ACTIVE
	KNIFE RIVER	NORTH VALLEY	ACTIVE
SCI-068	SHELLINGER CONSTRUCTION COMPANY	CARLSON	ACTIVE
	UNPERMITTED PIT	TOPSOIL1	INACTIVE
	UNPERMITTED PIT	WESTFAL	INACTIVE
	UNPERMITTED PIT	UNK6	INACTIVE
	UNPERMITTED PIT	SMITH	INACTIVE
	UNPERMITTED PIT	ROLLAND ANDREWS	INACTIVE
	UNPERMITTED PIT	REGAS	INACTIVE
	UNPERMITTED PIT	OLDPIT	INACTIVE
	UNPERMITTED PIT	OLD6	INACTIVE
	UNPERMITTED PIT	POLEBRIDGE	INACTIVE
	UNPERMITTED PIT	OLD PIT	INACTIVE
	UNPERMITTED PIT	COONHOLLOW	INACTIVE
GLL-003	GRIZZLY LOGGING & LUMBER DBA GRIZZLY GRAVEL PRODUCTS	GLAZIER	ACTIVE
SUD-001	SUDAN INC	FERNDALE	ACTIVE
STU-001	STUPACK, JAMES	KUHNS	ACTIVE
00149-ERF072(2)US	DEPARTMENT OF TRANSPORTATION	WEST GLACIER	ACTIVE
SRO-001	STREET, ROBIN	WHITEFISH RIVER	ACTIVE
CRE-003	CRESTON TOPSOIL	LORENTZEN	ACTIVE
00149-F1-2(3)	DEPARTMENT OF TRANSPORTATION	KRALL	ACTIVE
00149-F102(3)148	DEPARTMENT OF TRANSPORTATION	OHNSTAD AND BORMLEY	ACTIVE

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