

*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. 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.

In 2009, a senator from Flathead County sponsored a legislative bill (Senate Bill No. 411 486) 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.

**Comment [b1]:** Bill died in committee? Need to verify adoption or take reference to bill out.

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 ~~to~~ future sand and gravel extraction should necessarily occur. Pursuant to Section 76-1-601(3)(viii) MCA, this chapter intends to identify existing ~~and~~ gravel resources located within the planning jurisdiction of Flathead County, and to develop e corresponding goal(s) and policies that may aid in future data collection and planning efforts involving sand and gravel resources.

### Goal

G.44 *To be drafted by Planning Board...*

### 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 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?

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.

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

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

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 18<sup>th</sup>, 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 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.<sup>1</sup> 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 ~~the a sub-committee of the~~ Flathead County Planning Board ~~Sub Committee A~~, 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); 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 (~~need to find out if/when this information will be updated by GIS~~). 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.

Possible graph/table showing existing gravel pit operations (active, inactive, reclaimed, unknown) – get current figures from GIS if database has been updated?

Make sure MT DEQ permit data is current?

## **PART 3: Existing Sand Resources**

- \*—Map separately?
- \*—Combine with gravel resource section above?

Identify lack of sand resources in Flathead County - introduction

## **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

<sup>1</sup> Sand & Gravel Operations in Montana; www.montanagravel.org

DRAFT