

Grassy Mountain Gold Project

Socioeconomics and Environmental Justice

Analysis - Draft Outline

EXECUTIVE SUMMARY

CHAPTER 1 INTRODUCTION

1.1 Geographic Scope

The geographic scope of the analysis is the area in which potential direct and indirect socioeconomic and environmental justice (EJ) effects could occur: Malheur County (*see Chapter 2.4.5 for other potential EJ populations being considered by the State Environmental Task Force*). For analyses of some socioeconomic and EJ factors, information will be provided for cities and smaller communities within the county, using census tract data and/or block group data. See Figures 1 and 2 at the end of this outline.

1.2 Temporal Scope

The temporal scope of the analysis is the timeframe in which potential direct and indirect socioeconomic and environmental justice effects could occur. For this Project, the temporal scope is the life of the Project, including reclamation and closure activities, which is estimated to be approximately 41 years. This may include 1 year of pre-production and construction, 7.25 years of mining and processing, 3 years of site reclamation and closure, and 30 years of post-closure monitoring.

1.3 Data Sources include:

- Preliminary Pre-Feasibility Study and Technical Report for the Grassy Mountain Gold and Silver Project, 2018
- Calico Socioeconomics and Environmental Justice baseline studies 2015 and 2018
- Calico Final Mine Plan of Operations
- US Census
- U.S. Environmental Protection Agency (EPA) (EJSCREEN tool)
- Oregon Bureau of Labor and Industries
- Oregon Employment Department
- Oregon Department of Education
- Oregon Department of Revenue
- Oregon Department of Geology and Mineral Industries
- Oregon Housing and Community Services
- Oregon State Parks
- Malheur County
- Cities of Vale and Ontario
- School Districts and colleges

- Fire Districts and Police/Sheriff's Departments
- Healthcare facilities and Hospitals

1.4 Technical Approach

Firstly, data is collected on baseline conditions to provide a detailed understanding of the existing conditions and trends in the study area.

Next, the expected economic and social benefits and disadvantages of the Project are identified using various data sources including public presentations by Applicant officials, the proposed Plan of Operations, Pre-Feasibility Study, and Consolidated Permit Application. The number of jobs and associated wage rates, estimated annual local investment rates, expected tax revenues and other potential economic and social consequences of the proposed Project are added to the baseline conditions to identify advantages and disadvantages of construction, operation, and closure of the mine on local communities and the region.

The economic effects (on income and employment) from the project are estimated using the RIMS II multipliers for Malheur County. These provide the direct, indirect, and induced effects from changes in spending. Direct effects comprise initial investment or spending on equipment, labor, materials, services, and supplies obtained for the project. Indirect effects are the changes in inter-industry purchases and sales of goods and services as they respond to new demands of directly affected industries. Induced effects typically reflect changes in spending from households as income increases or decreases due to changes in production.

Significance criteria are developed to evaluate the importance of the effects (positive and negative) on social and economic values. Examples of significance criteria may include the following if:

- There would be a direct project-related change in any sector of the local economy, such as a major change in employment or output.
- The project would result in an indirect increase in population that would exceed the capacity of affected communities to provide adequate housing, education, or emergency response.
- The project's indirect effects on public sector revenue and/or expenditures would likely compromise the ability of the local governments to maintain public services and facilities at established service levels.

To determine if the project is inconsistent with the Environmental Justice policy (Executive Order 12898), two situations need to occur at the same time: 1) there must be an EJ population (minority, low-income or under-represented); and 2) that population must receive a disproportionately high and adverse environmental or human health impact. EJ populations are identified through census information, data from the EPA EJ Screen, and a comparison of local populations in the study area to the larger regional population. The determination of disproportionate effects considers:

- An adverse impact that is predominately borne by environmental justice communities (low income, minority, tribal, underrepresented, or other sensitive populations).
- An adverse impact that would be experienced by these communities in a way that is appreciably more severe or greater in magnitude than would be experienced by the general population.

CHAPTER 2 DEMOGRAPHIC AND ECONOMIC BASELINE PROFILE

2.1 Demographic and Social Characteristics

2.1.1 Population

This section will describe the current population and estimated future population for Malheur County (e.g., 20 year planning horizon).

2.1.2 Race and Ethnicity

Race and ethnicity by total numbers and percentage for the county will be compared with state totals.

2.1.3 Housing

Housing levels in the county and cities will include housing units broken into occupied, vacant, and rental categories and will include vacancy rates.

2.1.4 Public Safety

Public services include law enforcement, fire protection, emergency medical response, and disaster response. Describe public safety services and whether these have additional capacity. There are several ways to do this: 1) contact the public service providers directly; or 2) calculate capacity using information on size of facility.

2.1.4.1 Law Enforcement

2.1.4.2 Fire Protection

2.1.4.3 Emergency Medical Services

2.1.4.4 Disaster Response

2.1.5 Community Facilities and Services

This section will describe the various community facilities and services listed below and if possible, the current demand for services and the existing capacity to serve additional demand. Contact the services for information or evaluate capacity using sizes of facilities.

2.1.5.1 Health Care

2.1.5.2 Education (including consideration of monetary support for outdoor programs)

2.1.5.3 Parks and Recreation

2.1.5.4 Water and Wastewater

2.1.5.5 Solid Waste

2.1.5.6 Energy

2.2 Regional Economy

2.2.1 Economic Setting

The general economy in the region and the contribution of mining to the eastern Oregon economy will be described in this section.

2.2.2 Income and Poverty

Income levels in the county will be compared to the state and include per capita personal income, median household income and average annual wages by industry. Poverty levels and homelessness will also be addressed. *Note: Malheur County has high poverty rate (29% as opposed to 16% Oregon).*

2.2.3 Education and Employment

County and state employment will be presented and include the total labor force, employed and unemployed, and the unemployment rate. This section will show the average employment by industry in total numbers and percent of the workforce for the county. Also, education attainment for Malheur County residents.

2.2.4 Major Industries

Major employers in the county and cities will be described.

2.3 Public Finances

Public finances for the county and cities will be presented, including mill rates and annual net tax base revenue.

2.3.1 Revenue and Expenditures

Sources of revenue discussed include: Cash on hand, property (ad valorem) tax, grants, intergovernmental transfers, charges for services, investment earnings, annual net tax base revenue, sale of equipment, and other income. Expenditures include social services, roads and bridges, public safety.

2.4 Environmental Justice

2.4.1 Race, Ethnicity, and Minority Communities

2.4.2 Poverty and Low Income Communities

2.4.3 Tribal Communities

2.4.4 Traditionally Underrepresented Communities

Recommend targeted outreach to local populations – some of these communities consist of only a few houses, some Hispanic. These will likely be some of the underrepresented communities most likely due to remoteness and/or cultural/language barriers.

2.4.5 Other Sensitive Populations

Note: State Environmental Justice Task Force is considering other sensitive populations for this project, including the prison population at the state facility in Ontario in eastern Oregon, and high Hispanic and unemployed populations in western Idaho (e.g., Meridian, Weiser, west side of Boise). Await information from Environmental Task Force who will make decision.

CHAPTER 3 IMPACTS AND MITIGATION MEASURES

3.1 Employment and Income

The results of using the IMPLAN II multipliers for income and employment will be presented.

3.2 Population

Projected changes in population related to the project.

3.3 Housing

Impacts of project on housing availability and changes in demand for housing.

3.4 Public Revenue

Effects of project on public revenue for the county and cities.

3.5 Public Safety

Impacts on demand for public safety services and effect on capacity of these services.

3.6 Community Facilities and Services

Impacts on demand for community facilities and services and effect on capacity of these services.

3.7 Environmental Justice

3.7.1 Race, Ethnicity, and Minority Communities

3.7.2 Poverty and Low Income Communities

3.7.3 Tribal Communities

3.7.4 Traditionally Underrepresented Communities

3.7.5 Other Sensitive Populations

CHAPTER 4 REFERENCES

FIGURES

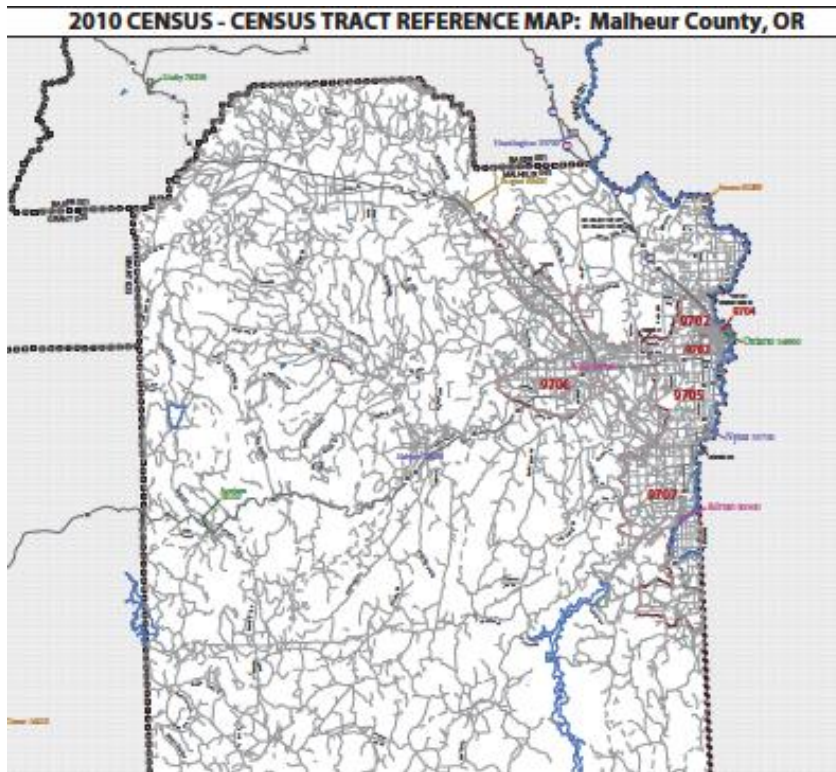


Figure 1 Census Tract Map Example

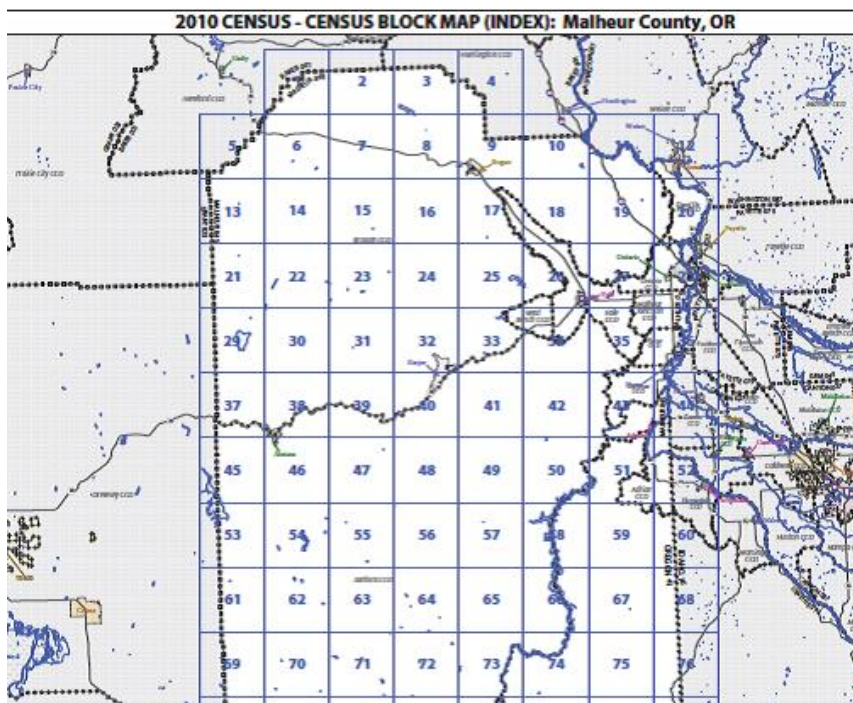


Figure 2 Block Group Map Example