

MATERIALS

A. GOAL

Utilize materials (sand, gravel, building stone, limestone) within the Moose Range in a manner which does not adversely effect the fish and wildlife habitat or the scenic values.

B. MANAGEMENT STRATEGY

At the present time, the major demand for materials in the vicinity of the Moose Range is for gravel for maintenance and reconstruction of the Glenn Highway. The major material sources are existing pits outside the Moose Range. However, it is expected that there will be some demand for materials within the Moose Range for logging or mining roads, trail maintenance, and local use. It is intended that applicants be allowed to use the source that is most economical for their purpose so long as that use is consistent with the following guidelines.

C. GUIDELINES

1. LOCATION OF MATERIALS SOURCES

a. Preferred Order. The preferred order of the sources for the extraction of sand and gravel is:

- (1) Private lands.
- (2) Existing upland pits outside the Moose Range (unless extraction from these sources has a negative impact on the views from the Glenn Highway).
- (3) Matanuska River Floodplain.
- (4) Upland areas of the Moose Range.
- (5) Inactive floodplain sites in the Moose Range.
- (6) Active floodplain sites in the Moose Range.

The public and agencies are encouraged to seek the most preferred source that is economic and feasible.

b. Floodplain Sites. Floodplain sites within the Moose Range may become the preferred material source. They may be combined with a fisheries enhancement project at the request of ADF&G. These sources require ADF&G approval.

c. Alleviate Flooding. DNR will work with the Army Corp of Engineers to help alleviate flooding due to removal of materials.

MATERIALS

- d. Sites Within Water Sources. Material sites located within stream, lake, or wetland buffers will be considered on a case-by-case basis with the concurrence of ADF&G. ADF&G shall review and approve any proposal to remove material from stream beds and floodplains within the Moose Range boundaries (see Map 8 on page 47).
- e. Sites Within Historic Trail Buffers. Material sites may not be located within the buffer of the Chickaloon-Knik-Nelchina and Chickaloon River Trails except for the purpose of maintaining the trail. The material site shall not be visible from the historic trail.
- f. Sites Within Scenic Areas. Material sites may not be allowed in high value scenic areas from the Glenn Highway, as shown on Map 10 on page 199.

2. SCREENING

A natural, topographic or embankment screen sufficient to shield the material sites and equipment from the view of motorists traveling along the Glenn Highway, Buffalo Mine road, Jonesville Mine Road, and Chickaloon River Road will be maintained where prudent and feasible.

3. ACCESS

The cleared area for an access road to a material site will be limited to 40 feet in width and the road shall be constructed with sufficient curvature to prevent direct view of the open excavation by the traveling public.

4. STREAM CROSSINGS

Where stream crossings are required for material site access roads, adequate bridges or culverts will be required to allow for high water flows and fish passage. An ADF&G Title 16 permit is required for anadromous fish streams (see Map 3 on page 23).

5. VEGETATION REMOVAL

- a. Utilization of Timber. If there is sufficient volume, standing timber in areas to be excavated for a material site or access road should be offered to the public. Trees less than 5 inches in diameter and brush should be buried or clipped and stockpiled within the site and later used for site rehabilitation.
- b. When and Where. Vegetation may be stripped no more than one year before pit development. The area of vegetation removal will be for the immediate areas of the excavation, access, sites for overburden storage, material stockpiles and equipment.

6. REHABILITATION

- a. Overburden. Stripped overburden will be stockpiled within the boundaries of each site. Upon completion of material excavation, the overburden which was temporarily stockpiled will be spread as evenly as possible across the floor and sides of the pit.
- b. Revegetation of Sites. Material sites will be rehabilitated and revegetated to a plant species primarily beneficial to moose and approved by ADF&G. The expense of the rehabilitation will be borne by the developer of the pit.
- c. Slope Requirements. The sites will be excavated leaving side slopes of 3:1 or flatter, and all excavated surfaces dressed to relatively smooth contours for rehabilitation.
- d. ADF&G Approval. Material site rehabilitation plans must be approved by ADF&G. Sites adjacent to the Glenn Highway will not be enhanced to promote wildlife habitat for public safety reasons. Consideration should be given to rehabilitating these sites for long-term use as recreation facilities, e.g. roadside parking areas.

7. SITE MANAGEMENT

- a. Material Stockpiles. Material stockpiles will be located within the excavated pit when there is adequate room to store them there.
- b. Equipment. Screen decks, crushers and hot mix plants should be located within the pit when feasible. Hot mix plants should not be allowed near waters with fisheries values.
- c. Site Expansion. Excavated slopes suitable for future site expansion will be excavated leaving interim slopes of 4:1 or flatter but will not be rehabilitated until site expansion is completed. Plans for expansion of material sites must be reviewed by DNR and ADF&G for compatibility with public use, scenic views and wildlife habitat.
- d. Fuel Storage Facilities. Stationary fuel storage facilities must not be placed within the annual floodplain of a watercourse, closer than 100 feet to a waterbody and should be located outside of stream/lakeshore buffers. These must be contained or confined in a manner which would prevent any spillage from entering an adjacent waterbody.

MATERIALS

- e. Fueling Activities. Fueling activities shall not be conducted within 100 feet of any lake, river, stream, or drainage system, or on an annual floodplain of a watercourse. Such activities shall occur outside of stream/lakeshore buffers.
- f. Fuel Spills. Absorbent material in sufficient quantity to handle operational spills must be on hand at all times for use in the event of fuel spill. The mining plan may require this is the operation is of sufficient size and duration.
- g. Permanent Structures. Permanent structures are prohibited.

8. BEST MANAGEMENT PRACTICES

ADF&G will utilize its manual, Best Management Practices for Placer Mining in issuing its own Title 16 permits and in its review of and development of recommendations for the plans of operations and miscellaneous land use permits for materials extraction. Any recommendation by ADF&G for rejection or modification of a miscellaneous land use permit or a plan of operations for materials extraction will be based on the Best Management Practices. (This document is available from the ADF&G Habitat Division in Anchorage, Palmer or Fairbanks, local libraries, DOMG in Anchorage and DLWM Anchorage and Wasilla offices for anyone interested in referencing the document while designing a mining plan of operations.)

9. WATER QUALITY

Drainage should be retained within the working site, with no turbid water allowed to enter adjacent streams from upland pit sites. Subsequent release of water must meet water quality standards of the Alaska Department of Environmental Quality.

10. WATER BODIES AND RIPARIAN HABITAT

- a. Water Body Requirements. There shall be no gravel removed below the active water table or within 50 feet of a waterbody unless material extraction is part of a fishery enhancement project and approved as an exception to Group I and II stream buffer requirements (see page 98). Fifty feet is a minimum; a greater distance may be specified where necessary due to site conditions. Vegetation will not be disturbed within this buffer zone unless approved by ADF&G.

- b. Shallow, Even Removal. Gravel shall be removed in shallow, even lifts so as not to create any pits or depressions which could entrap fish after periods of high water.
- c. ADF&G Guidelines. Material sites used for fisheries enhancement will be done in accordance with ADF&G guidelines.

11. PUBLIC REVIEW

- a. Subject to Public Review. Any material site greater than one acre in size shall go through the public review process.
- b. Exempt From Public Review. Use authorizations of 25,000 cubic yards or less per year from existing material sites will not go through public or agency review.

12. BUILDING STONE

Applications to quarry building stone in commercial quantities within the Moose Range will be considered on a case-by-case basis. Rock quarry operations will be subject to the applicable guidelines in this chapter.