



US Army Corps  
of Engineers ®  
Seattle District

# Best Management Practices For Road Construction



Federal Regulations 33 CFR 323.4(a)(6) state that the construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained in accordance with best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized does not require a Department of the Army permit.

## Best Management Practices:

- (i) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the United States shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions
- (ii) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the United States
- (iii) The road fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows
- (iv) The fill shall be properly stabilized and maintained during and following construction to prevent erosion
- (v) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within waters of the United States (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself
- (vi) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the United States shall be kept to a minimum
- (vii) The design, construction and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body
- (viii) Borrow material shall be taken from upland sources whenever feasible

- (ix) The discharge shall not take, or jeopardize the continued existence of a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species
- (x) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exists
- (xi) The discharge shall not be located in the proximity of a public water supply intake
- (xii) The discharge shall not occur in areas of concentrated shellfish production
- (xiii) The discharge shall not occur in a component of the National Wild and Scenic River System
- (xiv) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts
- (xv) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

**Endangered Species Act Definition of the term “Take”  
in regards to a species listed as Threatened or Endangered**

“Take” means to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.

“Harm” is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

“Harass” is further defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

Take only applies to individuals of a species, not to a species habitat or to designated critical habitat.