

Secondary (Indirect) Adverse Impacts

§ 230.11 (h): Secondary Effects are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material . . .

Secondary (Indirect) Adverse Impacts

Secondary impacts are those impacts outside the footprint of the fill that arise from and are associated with the direct discharge of dredged or fill material. Some examples:

- Fragmentation of wildlife habitat
- Interruption of travel corridors for wildlife (especially for seasonal pools)
- Altered hydrologic regime
- Effects of operation and maintenance activities (e.g., water quality impacts from road salt; invasive species)

Secondary (Indirect) Adverse Impacts

§230.10 (c): No discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the Waters of the U.S. . . .

Under these Guidelines, effects contributing to significant degradation, considered individually or collectively, include significant adverse effects of the discharge of pollutants on:

- (1) human health or welfare . . . ;
- (2) life stages of aquatic life and other wildlife dependent on aquatic ecosystems, including the transfer, concentration, and spread of pollutants or their byproducts outside of the disposal site through biological, physical and chemical processes;
- (3) aquatic ecosystem diversity, productivity and stability;
- (4) recreational, aesthetic, and economic values.