FACTSHEET

Streambank Stabilization

Department of Fisheries and Oceans

CONDITIONS WHERE APPLICABLE

Streambank stabilization is appropriate where:

- An area of streambank is undergoing "natural" erosion and causing deposition of sediments in spawning and rearing habitat downstream.
- An area of streambank has been disrupted or destroyed during the conduct of a work or undertaking and the area in question requires "rebuilding".

Stream bank stabilization using rip rap and hydroseed.

CONSIDERATIONS

- Rip rap, the usual material type employed for riverbank stabilization, should be clean, free of fine materials, and of sufficient size to resist displacement during peak flood events.
- Stream banks to be stabilized or rebuilt should be shaped so that they are at a stable slope.
- Gabion baskets can be used as an alternative to rip rap where bank slopes are not at a stable angle of repose.
- Streambank stabilization should not result in a decrease in the cross sectional width of streams.

Rebuilt stream banks - rip rap, sod and natural vegetation.

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IMPLEMENTATION PROCEDURES

- Rip rap or gabion basket placement should be carried out in the dry (e.g. using cofferdams consisting of double walls of sand bags with plastic placed between the walls to isolate streambank areas from streamflow) The planting of trees (e.g. alders, willows) and other vegetation (for example grass, small shrubs, etc.) on streambanks can enhance stabilization measures.

- Stabilization materials used should be placed from the toe of the bank slope to a height on the streambanks equal to the anticipated high water level or to the top of the bank slope, as appropriate.

- The effectiveness of streambank stabilization can be increased if the top of bank slopes are seeded, sodded, or hydroseeded in conjunction with the placement of rock, rip rap, or gabions.

- In river sections where the stream channel meanders particular care should be exercised in stabilizing the outside bends of meanders since such areas are subject to increased erosion pressures.

MAINTENANCE

- Once stream banks have been properly restored maintenance is not often required.

ABANDONMENT

- Excess materials left over from stream bank rehabilitation and cofferdam materials, etc. should be disposed of at an approved dump site.

This Fact Sheet does not constitute DFO approval; other mitigative strategies may be required. The proponent is advised to contact all other appropriate regulatory agencies.

For more information contact the nearest Department of Fisheries and Oceans office.

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