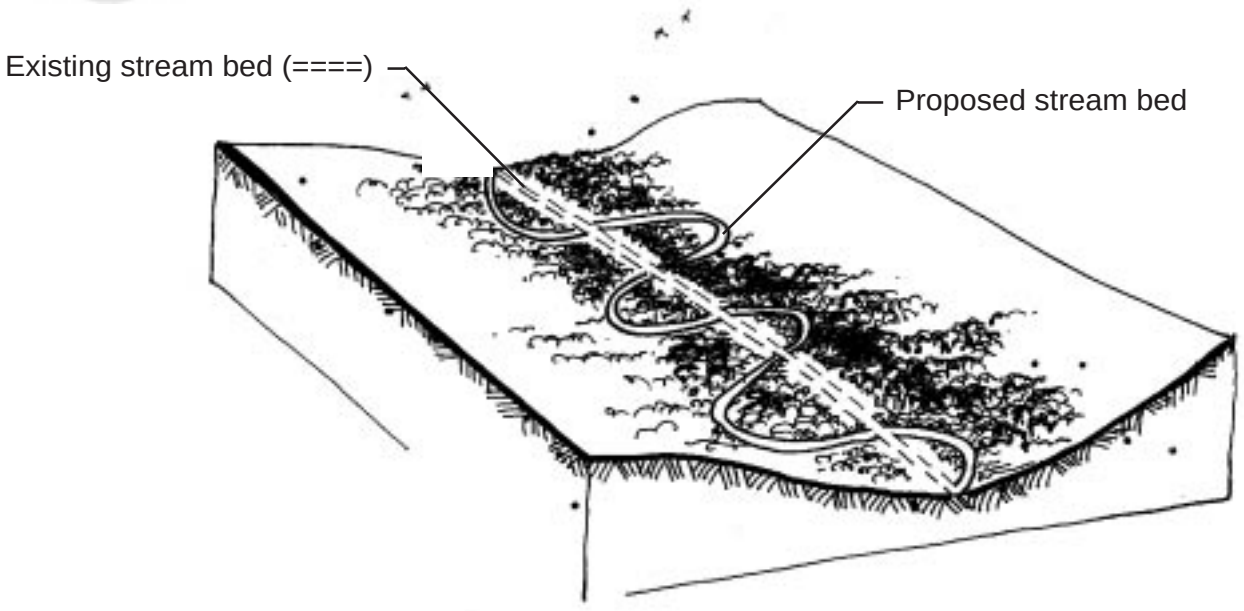
PRIMARY USE: Improve habitat for aquatic plants and animals by restoring natural alignment, channel capacity and meander relationships.
ADDITIONAL USES: Minimize bank erosion.

STREAM MEANDER RESTORATION

What is it? This technique is a means of transforming a straightened stream in a manner which emphasizes a channel size and meander relationships in accordance with expected flow, sediment regimes, and geomorphology of the area.

Purpose

Meandering channels offer more physical stability and physical habitat diversity than are typically found in a straightened stream corridor.



Stream Meander Restoration
Perspective View

Limitations

Meander reinstatement requires adequate space. Since adjacent land uses may constrain meander alignment, this technique may not be feasible in watersheds which are experiencing development and change in land use. The practice may be both costly and time consuming.

Materials

Will vary with each project requirements.

Installation

Timing of installation to minimize the risks in reestablishing protective streambank vegetation and to minimize impacts to stream and corridor biota is a key consideration. Risks of interim instability are inherent in this type of instream construction activity and should only be undertaken after careful planning and design.

Source: Stream Corridor Restoration Handbook, USDA.