

## **Species Protective Measures for Streambank Stabilization Projects**

**The project design will ensure its stability and effectiveness post construction. The following are examples of measures that may be implemented to accomplish this:**

1. Underlay stone with geotextile filter fabric, gravel filter blanket, or equivalent best available technology.
2. Rock should be dense, durable, equidimensional (not flat or thin), angular, and clean.
3. Rock size is dependent upon bank slope and water velocity. Larger rock should be used at the base and face of the slope.
4. Minimize bank slope to the extent practicable to minimize erosion.
5. Riprap should be keyed into the stream bed to ensure its stability and effectiveness.
6. When practical, do not operate motorized equipment in the water. Work from the top of the bank.
7. Restore damaged areas, particularly bare erodible soils, to pre-work conditions.
8. Dispose of excavated materials in upland area to prevent sediment transport to streams.
9. Bioengineering solutions can be considered as a means to minimize riprap use.