Adding Wood to Streams in NH

Natural Resources Conservation Service
Stream Habitat Improvement 395

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Why do this?
Re-engage floodplain
Capture sediments
Wildlife habitat
Nutrient uptake
Slow water velocity
Create a more ‘natural’ system
Spring Salamander
Dusky salamander
Two lined salamander
Wood In Streams

Candidate streams
- <15 ft wide
- Land ownership
- Bedrock controlled (not silty)
- Lacking wood
- 1st and 2nd order
- Perennial ideal

Candidate streams
- Narrows
- Shaded
- Bends
- Trees to drop
- Low gradient <5%
NRCS Projects Require A Forest Management Plan
Landowner owns both sides of stream Or NRCS agreement with both Dept. of Environmental Services Permit
What is downstream?
Bridges and culverts
Stop 300 ft upstream
Use bends in stream to catch wood

What is downstream/upstream
Choosing trees
Low value/crooked trees
Not on bank of stream
Maintain shade
Slow decay rate (hemlock)
Leave high stumps
4” dbh min but larger best

Secure the wood
Perpendicular (ish) “B-oriented”
Pinned between trees
Heavy log on top
Behind boulders
Not halfway across/loose
Place at bends
NRCS Guidance

Ecology, stream evaluation, tips

So, how much wood to add?

Per 100 ft length at least 4 pieces of large wood that create 2-4 locations of these critical habitats.

For example, if there is already one nice pool formed by secure wood, then you may add wood in 2-3 locations. If there are none, it makes sense to add more wood to eventually create these pools, riffles and cascades.

Every 300 feet place a larger ‘strainer’ to catch loose pieces
Pick the tree
Placing wood in stream
Wood In Streams October 2018

Example Single Tree in B-orientation

Example Large-Wood Installation

Live tree acting as "pump" to disperse energy of water

Cross-section View

Cross-section View

Live Standing Tree

Live Standing Tree

touching water at low flow is ideal
Important to consider

Secure the wood

Consider downstream

Pick suitable trees

Protect buffer

Protect habitat (timing)