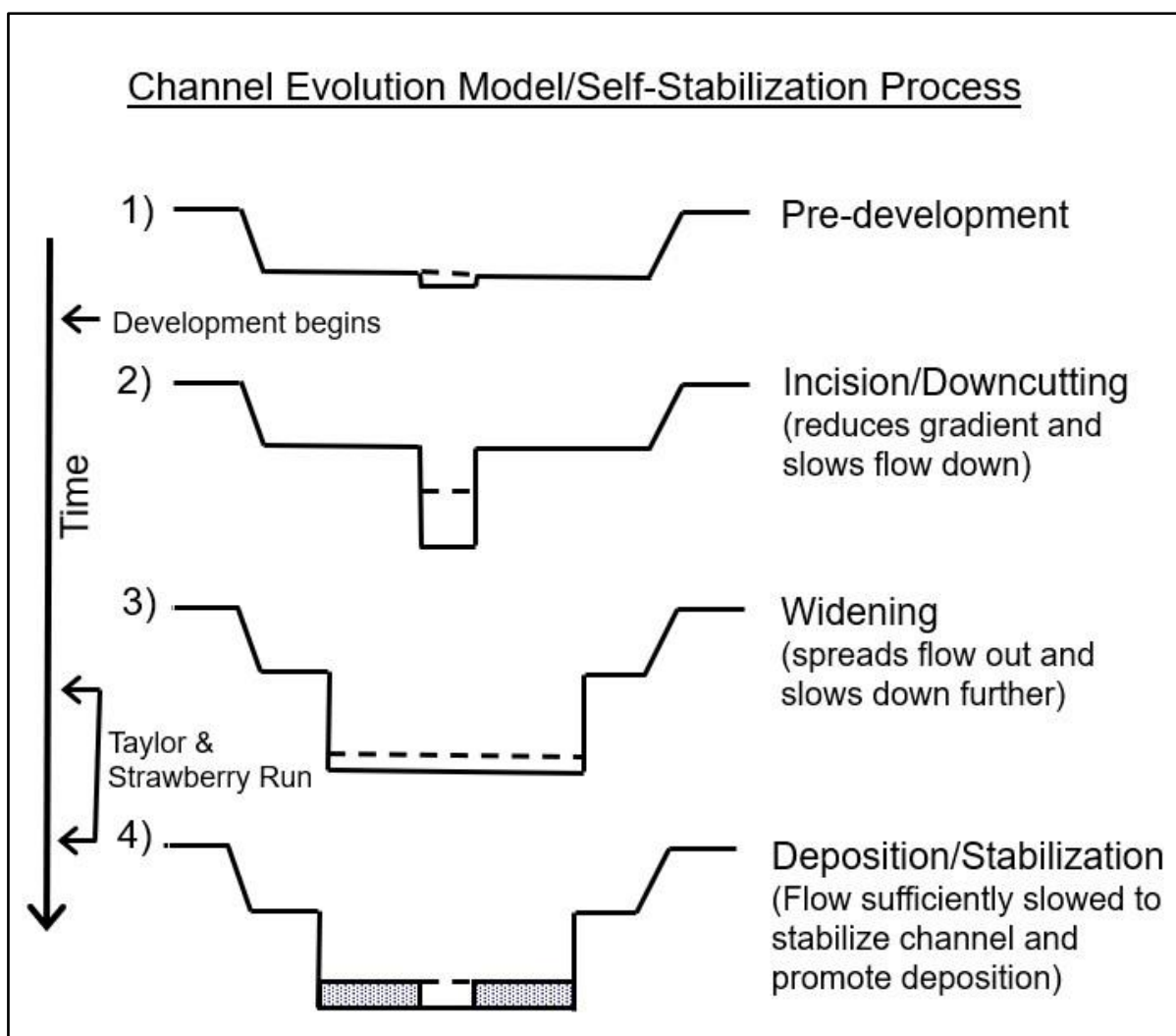


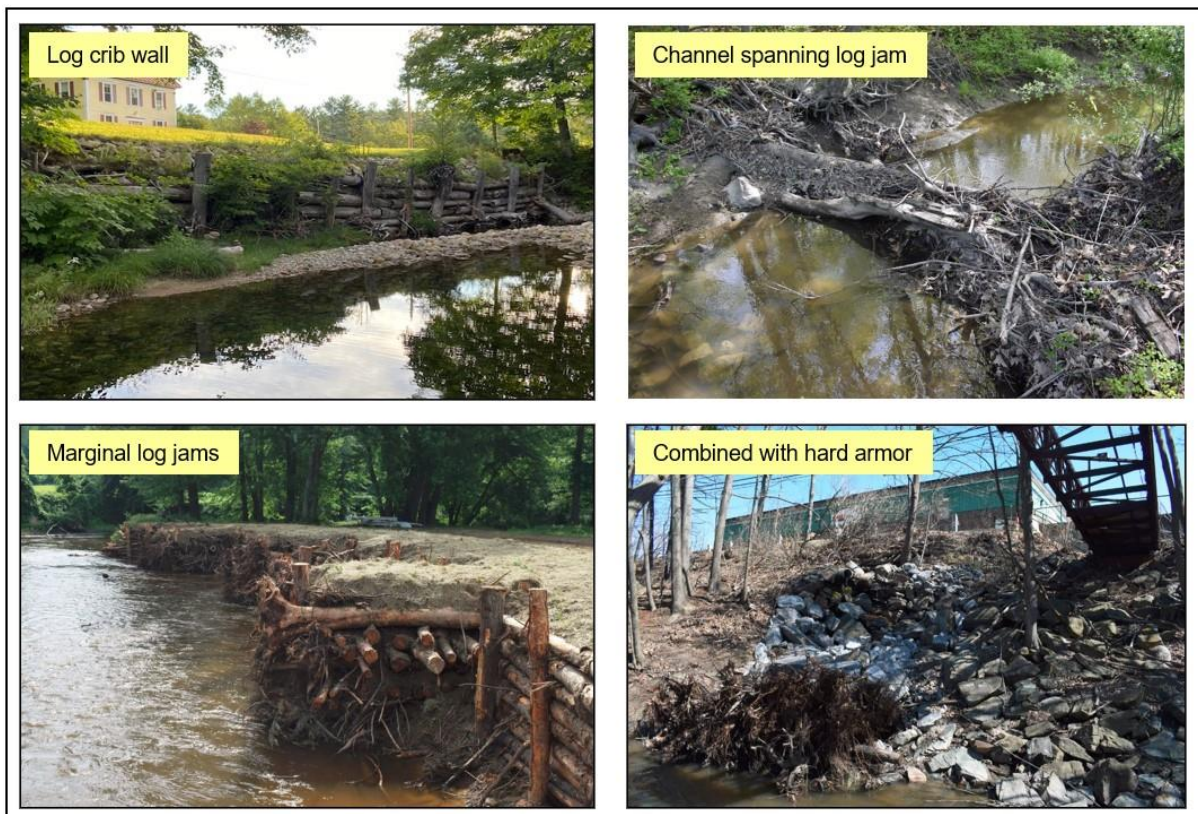
Summary of No Action/"Do Nothing" Alternative

- Streams are always adjusting towards a stable condition – external forces destabilize streams
- Excess runoff and direct channelization associated with urban development increase the erosive force and destabilize the stream
- The resulting channel downcutting and bank erosion reflect the stream's self-stabilization process as both of these channel responses reduce the stream's erosive force
- The stream is unlikely to downcut further & bank erosion will diminish over time if nothing is done
- Large wood falling into the stream is resulting in considerable localized sediment deposition – the last stage of the self-stabilization process
- Armor placed in the channel in the past has "frozen" the self-stabilization process and may be exacerbating erosion immediately downstream
- The No Action alternative may not be feasible for the entire length of the streams, but is applicable where no infrastructure or private property is threatened and would allow the natural self-stabilization process to continue



Summary of Large Wood Alternative

- Adding wood will mimic natural processes and accelerate the self-stabilization process
- Adding wood is consistent with the stream's natural self-stabilization process
- Log jams across the channel could reduce erosive forces/stream energy and store sediment rather than transport downstream to Chesapeake Bay so should be eligible for credits
- Log crib walls and log jams could be used to protect the exposed sanitary sewer lines and stabilize banks where other infrastructure and private property is at risk
- Many of the log structures could potentially be constructed with minimal heavy machinery and thus greatly reduce tree impacts and project cost if suitable anchoring technique is identified
- Large wood is used in restoration projects nationwide and promoted by the US Army Corps of Engineers
- Large wood alternative could be combined with bioengineering and hard armoring techniques where infrastructure is present
- Use of rot-resistant tree species (e.g., white oak, black locust) can extend functional life of structures and provide a bridge in time for sufficient upland runoff controls to be implemented that will reduce erosive forces over time



Large wood techniques that could potentially be used on and specially tailored for Taylor Run