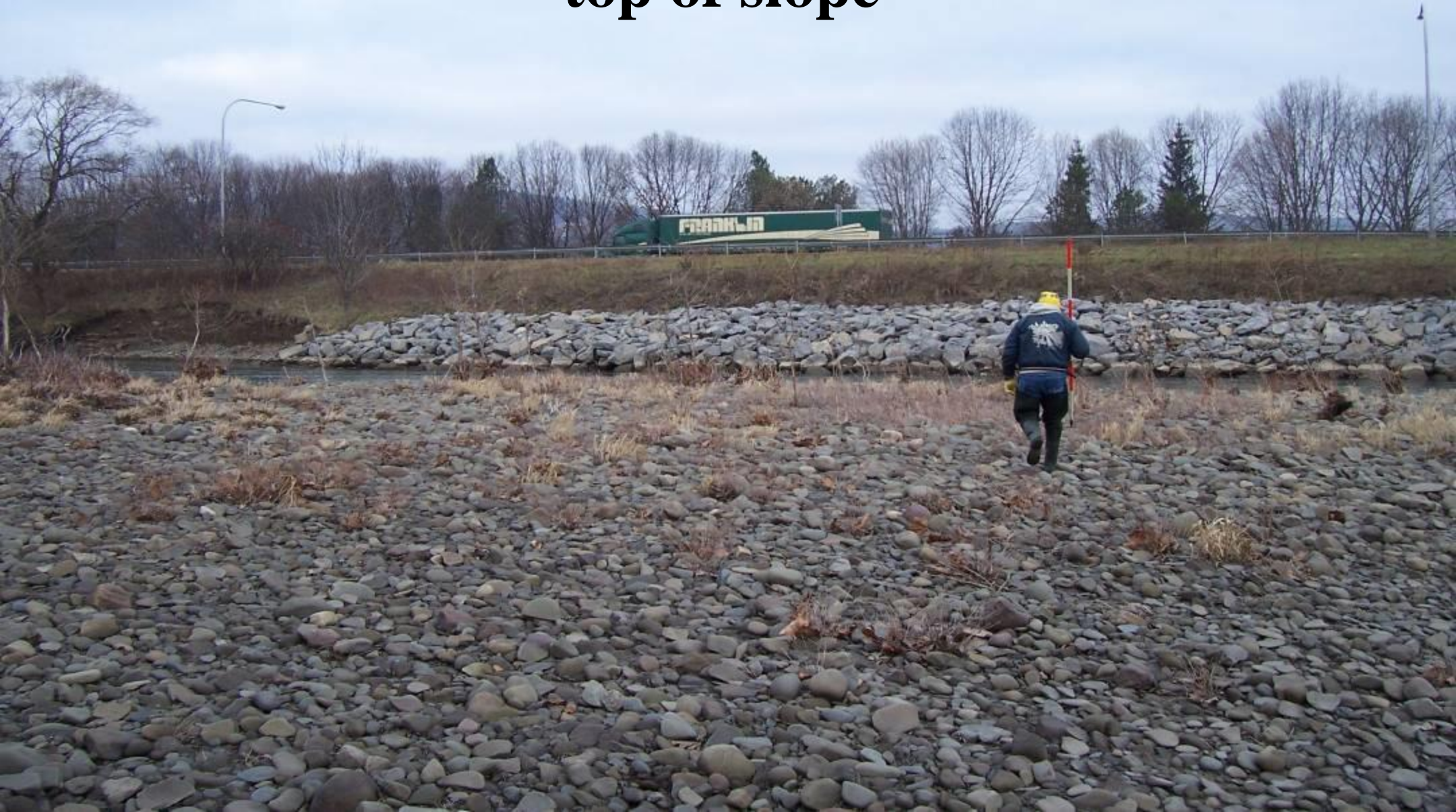


When should you fix a stream????



Let's look closer at this one

Susquehanna River with Interstate 88 at top of slope



**McKinstry Creek existing planform,
three bends and 2 crossings over 540 ft
of length. Only one good habitat pool.
Note 300 ft long straight stretch.**



**McKinstry Creek near
Delevan, NY, 5-18-2006,
flow left to right**

New channel planform (blue line)



Looking DS, Elton Creek, Freedom, NY. Floodplain on both sides has been filled, stream straightened. At 30 ft wide no habitat pools, when stream is 20 ft wide 2 ft deep pools with 40-50 trout per pool!!



What should we do???
(Elton Creek, Freedom, NY)
Looking Downstream

Photo by Maureen
Mayer

**What do we do here????
(North Carolina)**






**What about here??
(North Carolina)**



What about this stream?? (West Virginia)

- 
- Straightened
 - Incised
 - Over - widened
 - Very little pool-riffle-pool
 - Very little wood in stream or high quality aquatic habitat (cover, depth, etc)
 - Single row of ageing veg as riparian corridor

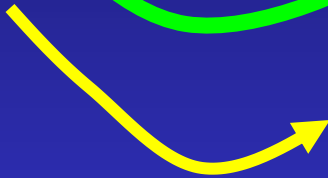
Same Stream (West Virginia)

Same Stream (West Virginia)
Lots of room in the valley



Transform old channel into connected wetland cells

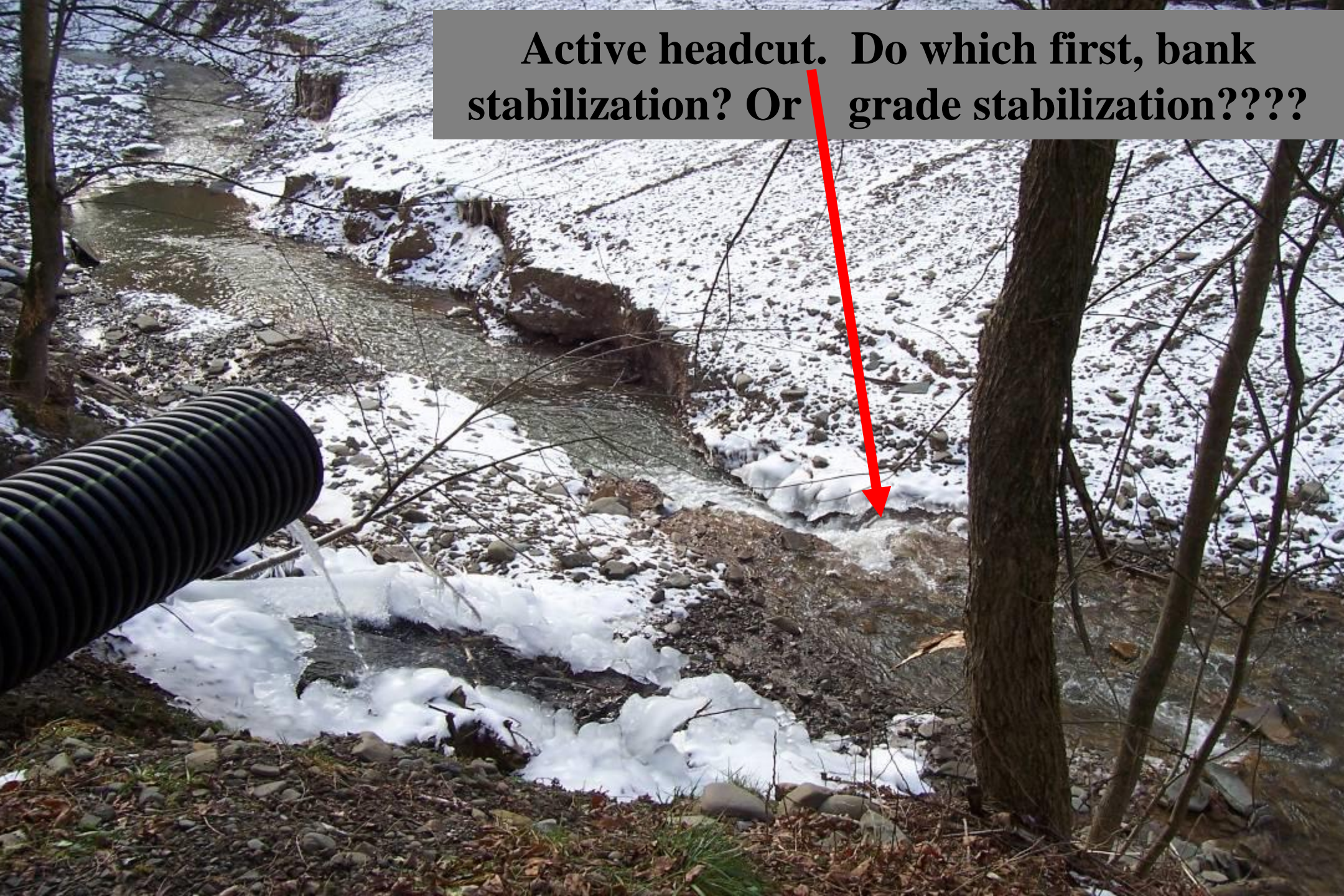
**Abandon channel,
start fresh!!**



**New stream channel
with all bells & whistles**

- Use dirt from new channel to create wetland cells in old channel (maximize diversity)
- Use some old veg for LWD in new channel
- Plant all riparian areas (shade, wildlife, pollinators)
- Maximize all stream functions

Active headcut. Do which first, bank stabilization? Or grade stabilization????



**This is where the
headcut has been**



**Stream cutting into a
tall unstable bank**



**Bob's Creek.
Where to start??**



House here



**What about
this one??**



In stream restoration “you have to
have that brain thing going on !!

QUESTIONS????