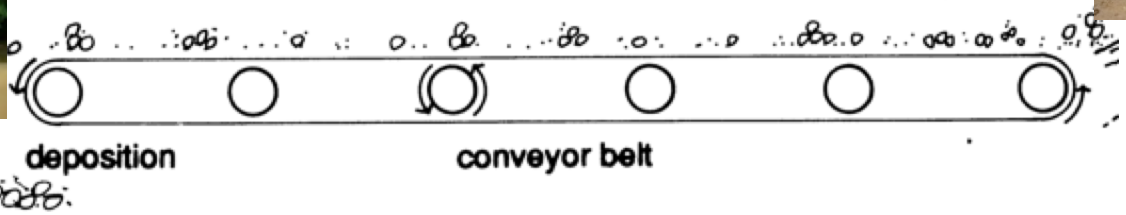
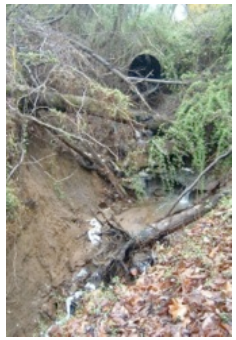
Conveyor and Source of Sediment

Hockely Branch is the tributary of Clements Creek

Our Broken Stream Systems Function as Major Sources & Conveyors of Sediment, Phosphorus, Nitrogen

Zone of
Erosion/Transport





Zone of Deposition

Adapted from Kondolf, M. (1997). Environmental Management, 21, 533-551.

Freeze/Thaw cycle during the winter chisels off pieces of the incised banks

Bank Pins installed in Clements Creek in February 2014 show 1-1.5” of erosion by March/April 2014

Illustrates that the area downstream of the confluence is not only a sediment transporter, but also a sediment source

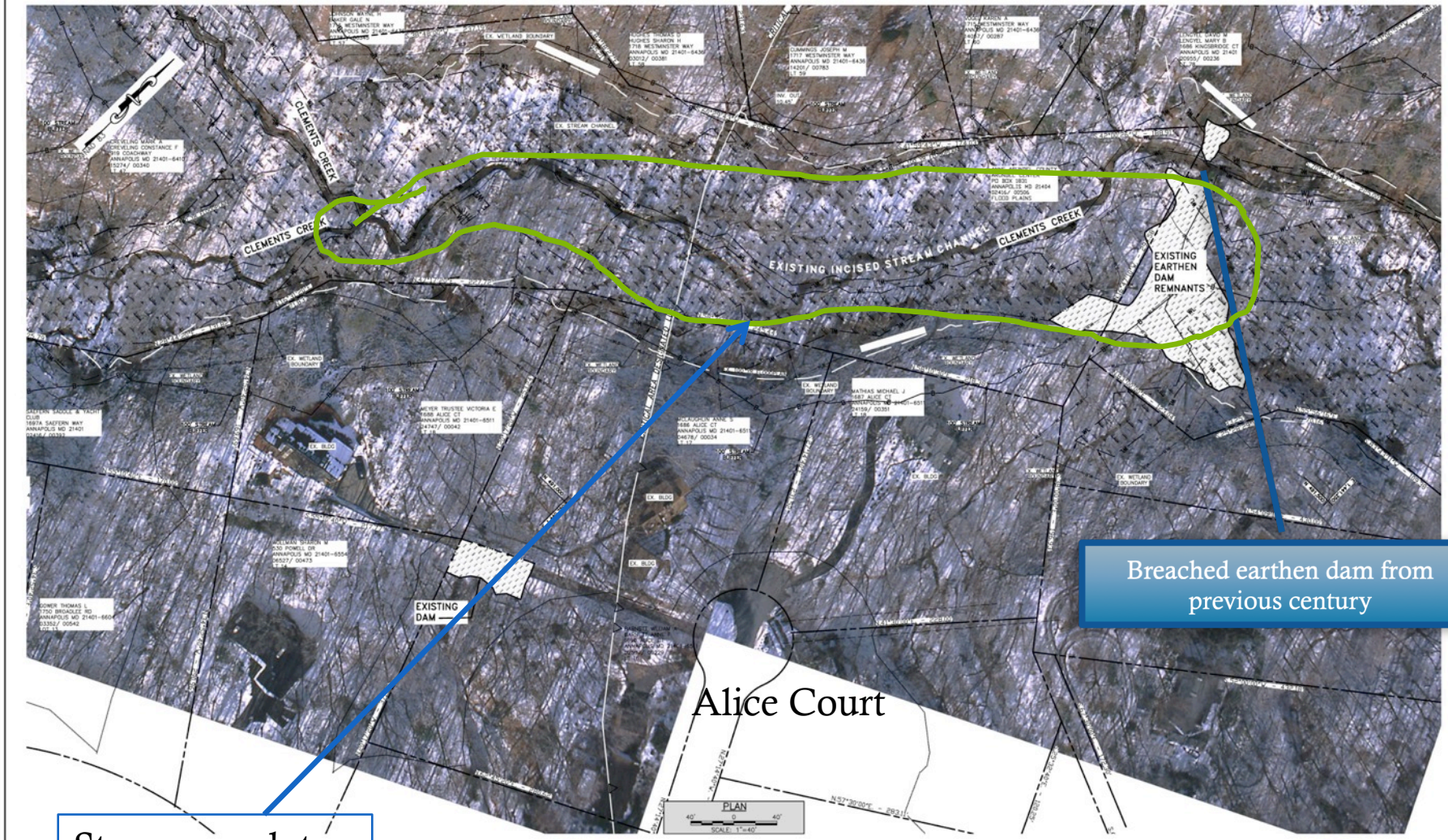
Spring and summer storms scour the banks, washing the freeze thaw debris downstream to be deposited downstream (March 30, 2014).

The sediment does not stop at the headwaters near the marina –the finer grains of sediment flow further out into the creek and mainstem of the Severn


Downstream Effect of Channel Erosion in Severn Streams

Current Conditions

Hockley Branch tributary to Clements Creek



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SEVERN RIVERKEEPER

May 2, 2013

AERIAL MAP

CLEMENTS CREEK CONFLUENCE
FLOODPLAIN RECONNECTION PROJECT