#### **Stream Detective Key: Contents**

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## **Stream Detective Key: Page 1**

Evidence of other water levels: What are other levels the river has been? What is the highest? Lines on river banks or rocks like bathtub Dead leaves, grass, twigs etc., caught in **Logs left high on rocks** Plants that used to be underwater rings, showing evidence of higher water bush or tree branches **levels** ©Dru! via Flickr.com Stream blocking: How has the stream been changed by dams, rocks, or logs that have blocked the stream? Have pools or rapids formed? Fallen logs carried by high water caught Humans built a cement chunk that made Rocks in the stream made a rapid on boulders made a dam. a dam

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## **Stream Detective Key: Page 2**

**Evidence of past water flow:** Areas of sand and stone formed underwater in the stream. Where has stream water flowed fast or slow here in the past?

Sand (rocks between 1-2mm) left by slow moving water

Gravel (rocks between 2-6mm)
left by medium moving water

Cobble (rocks between 6-20mm) left by fast moving water

Boulders (rocks over 20mm) left by very fast moving water

Undercut river bank created by fast or very fast moving water











**Living trees**: What are living trees doing to the stream banks?

Tree roots holding soil and rocks together.

Tree pushing rock crack apart where rocks may fall into stream.





Roots or layers showing: Where is the stream changing and cutting away at the stream banks?

Tree roots showing. Tree roots grow underground. If you see tree roots, that means it used to be the river bank, but soil covering the roots has been washed away.

Rock layers showing. The stream has washed soil away, showing old rock layers. What do the rock layers tell you about what used to be here?





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Measure those rocks!

## **Stream Detective Key: Page 3**

Rocks: What can you tell about what is happening with rocks in and around the stream?

Rounded rocks = Have been traveling in the stream a long time. Sharp edges have worn off as they tumble in currents.

Sharp-edged rocks Have not been in the stream very long.

 $\begin{array}{ll} {\rm Rock\ fall} = {\rm where\ rocks\ have\ fallen\ from\ somewhere\ uphill} \\ \end{array}$ 

Rock Crack = where rock is cracking and might be because:

- The rock there is weak.
- Movements of huge chunks of rock have caused stress
- Repeated freezing and thawing (only in places with lots of freezing and thawing during the year.









Sculpted bedrock: How is bedrock being shaped by fast water carrying rocks?

Softer rock has been weathered and eroded away by fast water carrying rocks, leaving behind harder rock "bumps."

Softer rock has been weathered and eroded by fast water carrying rocks, leaving behind different smooth shapes.

Pothole (or "Candy Dish"). Rocks have been swirled around by water currents, wearing holes in rock over many years.







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