Next Time: TEST 2

- Chapters 7, 8, 9, and 10, but NOT Ch. 11
- Prepare by Completing Quizzes, Answering Questions at end of chapters
- Last Name Begins with A-L come at 9:55; M-Z 10:30!
- Bring #2H Pencils, NCS 30423 Answer Sheet

Floods & Flood Frequency
Schultz House
Johnstown, Pennsylvania
1889

Flood Terms
- Flood = Flow Rises Above Stream Banks & on to Floodplain (Nearly Level Surface next to Channel)
- Stage = Height of Water (Above Arbitrary Datum)
- Discharge = Volume/Time (cfs, cms)
- Recurrence Interval
  - Average Time Between Events of a Given Size or larger
Flood Frequency

- **Recurrence Interval: Like Rolling Dice**
- **100 year flood - BAD TERM**
- **1 percent flood - Better**

Study this on Pages 248-249, Box 10.2, 10th Edition
Harpers Ferry, 1870, ~ 60 Deaths
One of Many Communities with Long History of Floods

Harpers Ferry, 1889

Harpers Ferry, 1936
The Floodplain is Part of the River

We should not be surprised when, sooner or later, the river exerts authority over its entire domain!

How much did water rise in <10 hours?
The November 1985 Flood: Why Students Should Bring Raincoats on Kite's Field Trips

November 2, 1985
Pt. Marion, 5 Nov 1985
(Before the Police Tried to Bust the Geomorphologists)

Pt. Marion, PA, 5 November 1985

Corps of Engineers Burning Flood Debris from Lake Lynn (= Cheat Lake). White Rectangles: Refrigerators, etc.
Welcome to Albright

Albright, WV, Aerial View

Albright, WV, 7 Nov 1985
Albright Church ★

Trailer Frame on Albright Power Plant Bridge

Cheat Narrows: Squirrel Rock Did Not Move
Mattress in Tree Near Squirrel Rock

Asphalt Slabs, St. George

Household Debris in St. George Ditch
Bent Steel I-Beam, Petersburg

Photo by Doug Lofon

Riverton EMS Building

Germany Valley, 1985 Flood Damage
Rt. 28/55, Near Champe Rocks: Before

Lewis Creek, 10 Nov 1985

Macomber: Spring 1986
Next Flood Tragedy in the Making
Anybody know story behind this "bridge?"

The Floodplain is Part of the River

We should not be surprised when, sooner or later, the river exerts authority over its entire domain!

Flood Problems are People Problems

- Ignorance of Rivers and Streams
- Poor (Selective?) Memory of Historic Floods
- Arrogance of Our Ability to Overcome Nature
- Greed to Exploit Floodplain Property
- Lack of Zoning and Planning

Sooner or later, the river exerts authority over its entire domain!
Ch. 11 After Test 2
Ground Water or Ground-water or Groundwater

Hydrology: Study of Water
(Implies Surface Water)

Hydrogeology = Ground-Water Hydrology

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