

RRRC Planning Workshop 2014: Living Lands Workshop Series

Planning for Floods



Planning for Floods

- Identify flood prone areas
- Minimize risk to life and property
- Stream gauges
- Flood Insurance Rate Maps
- Online tools for flood observation & warning

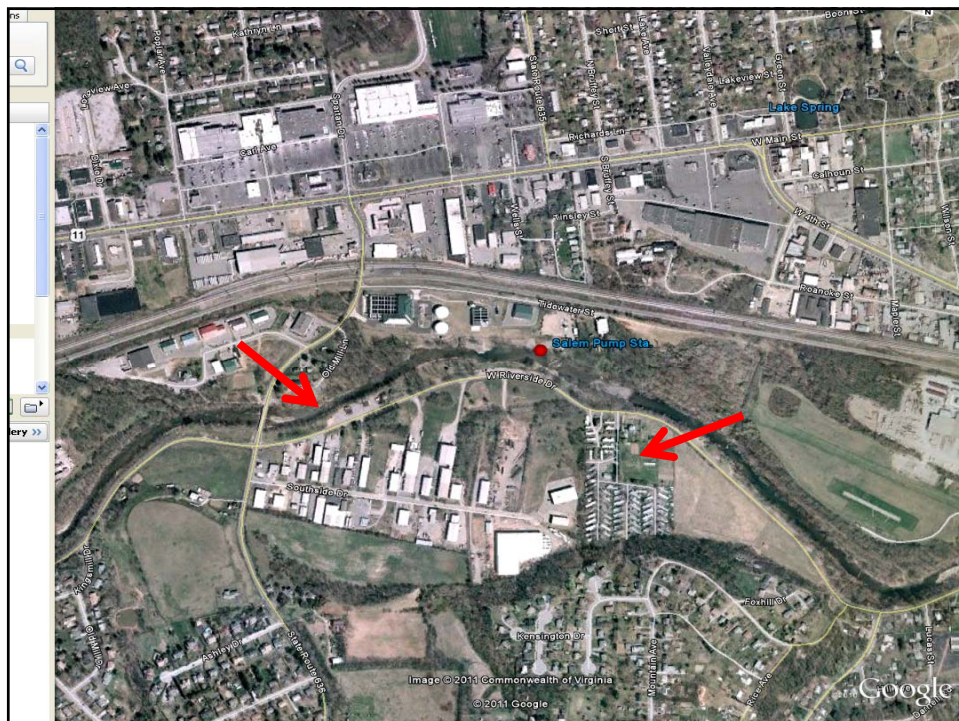
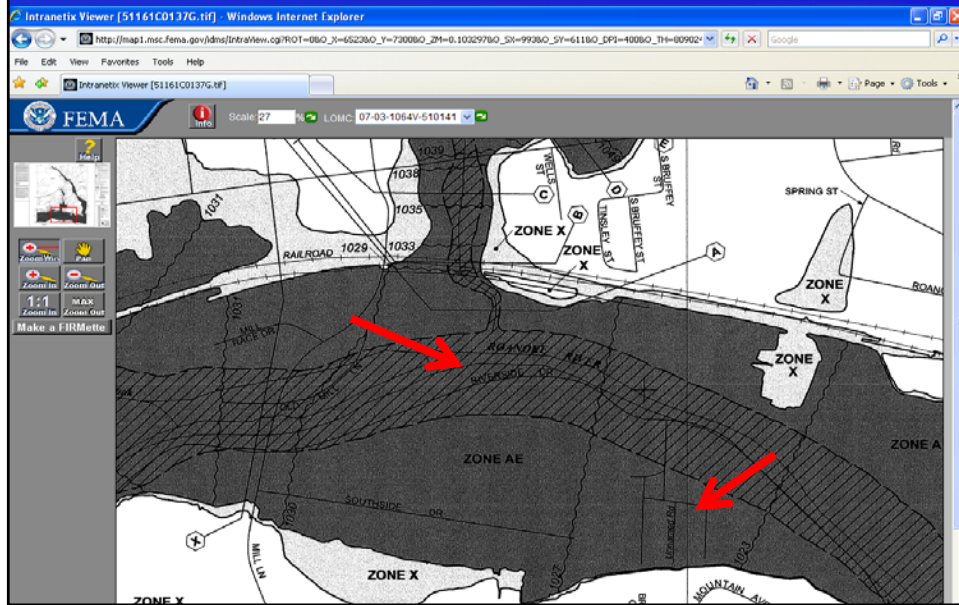
Gauge Stations



Staff Gauges

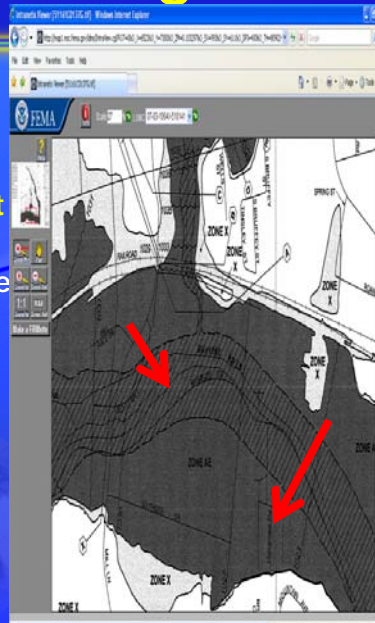


Salem City FIRM

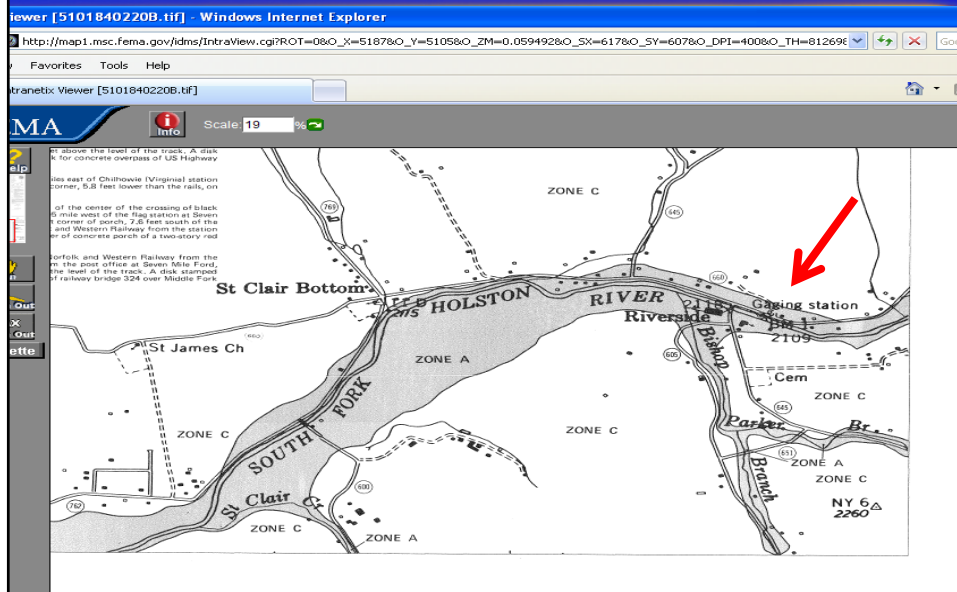


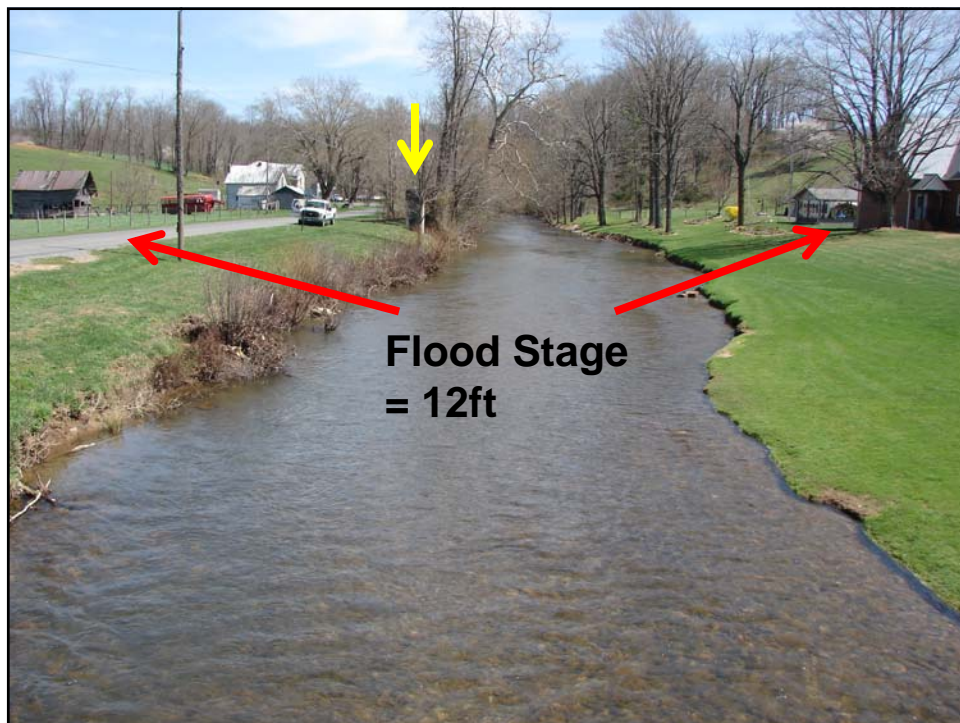
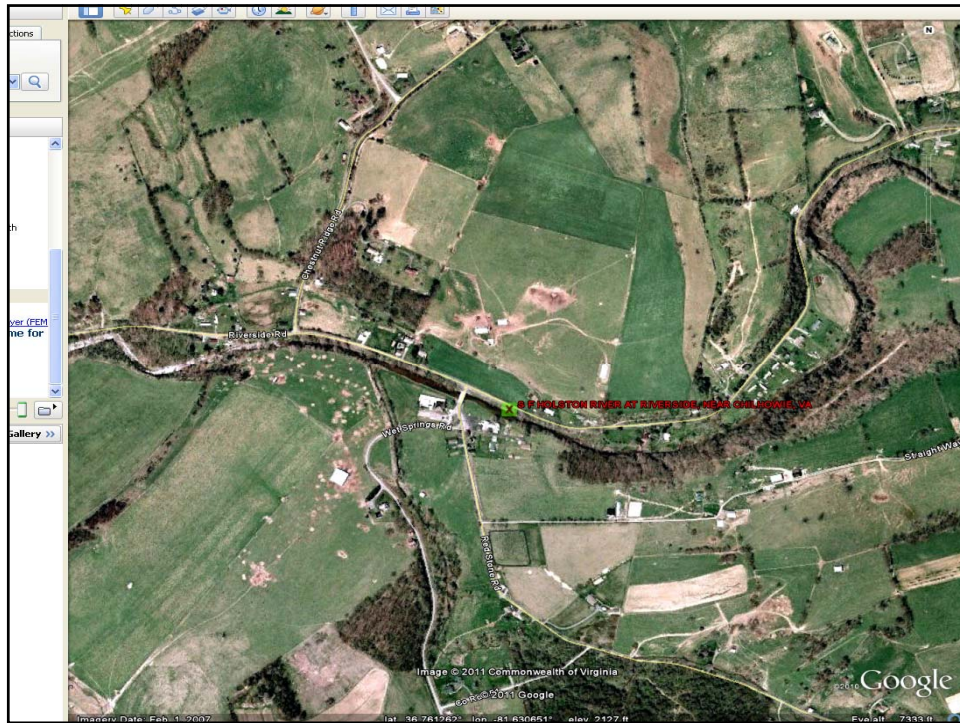
Salem City Flood Stages

- Flood Stage = **7ft** (exceeded each year since 1992)
- 100-Yr Floodplain Elevation = **16ft**
- Flood of record = 17.7ft (USGS site ~ 4 miles upstream)
- Inundation of River Rd & Mill Lane Bridge @ **8ft**



Smyth County FIRM

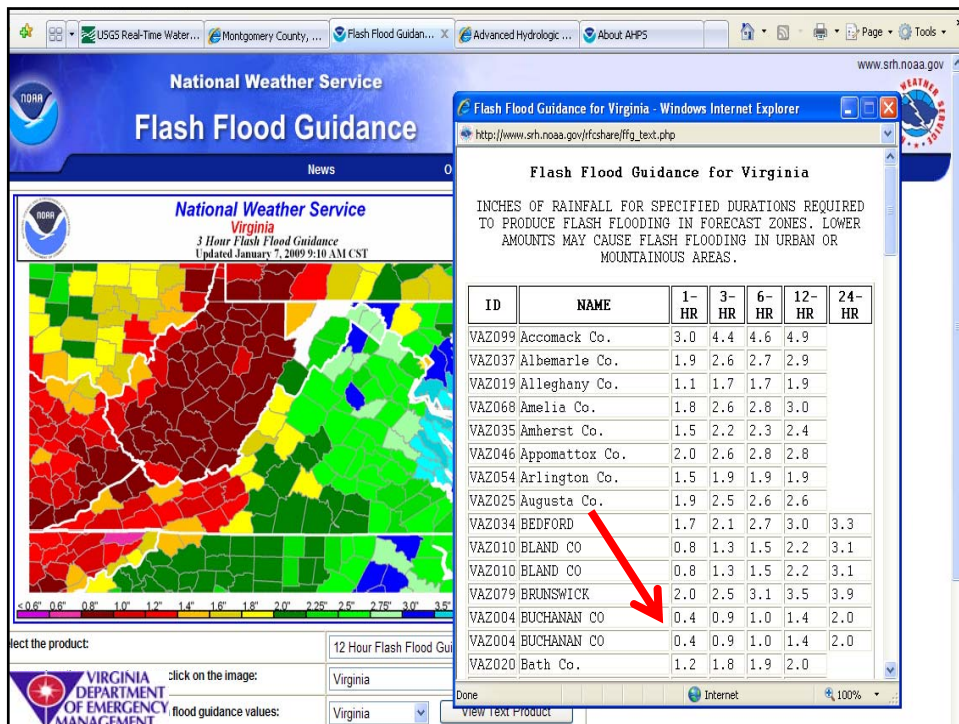


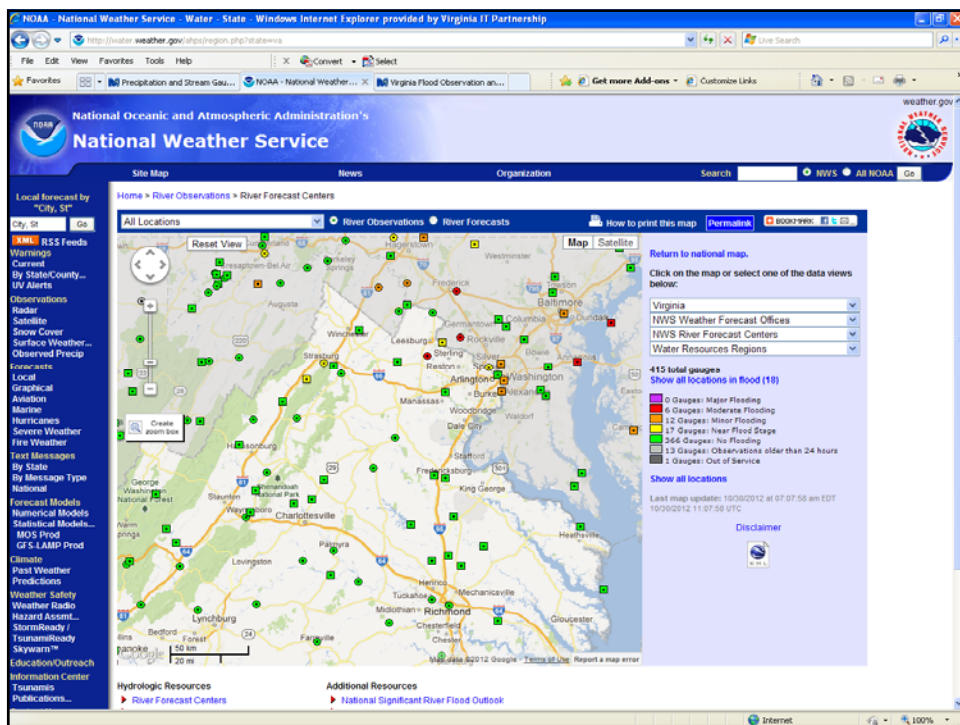
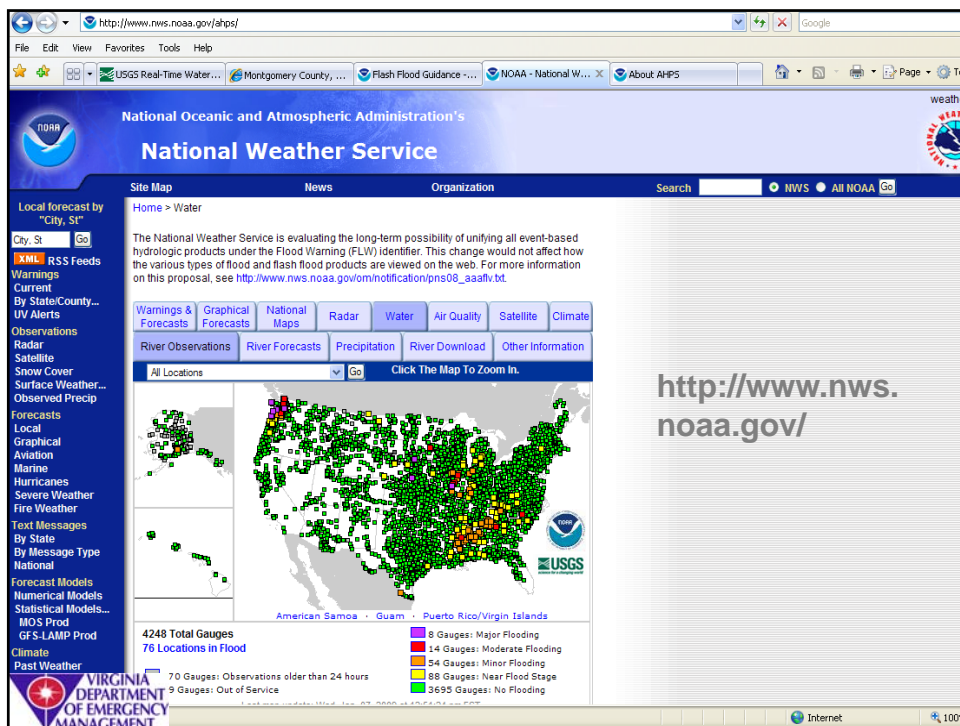


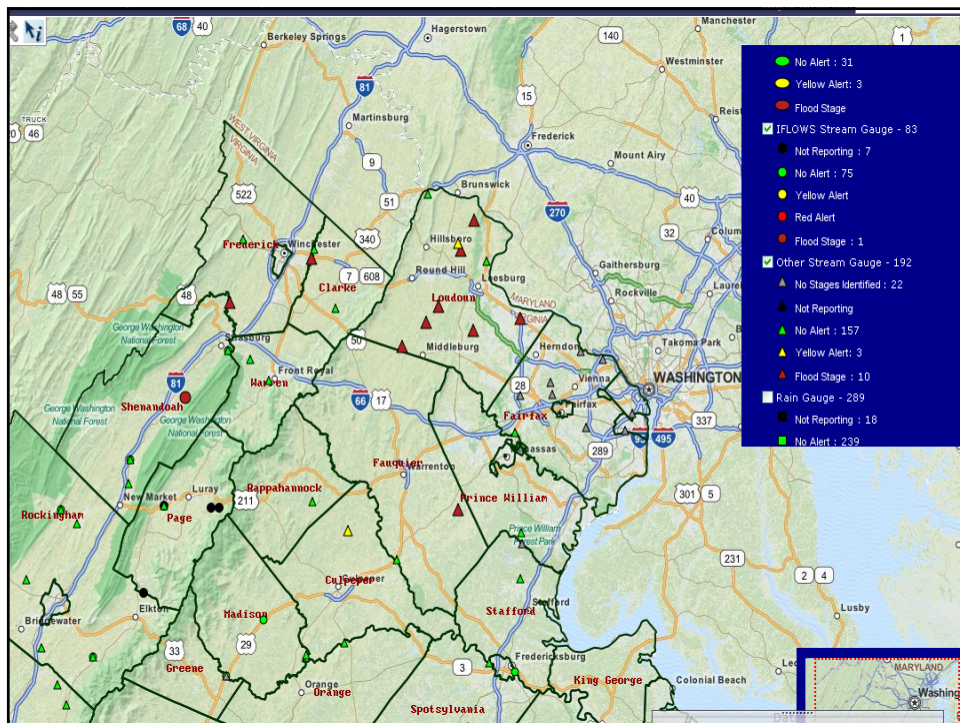
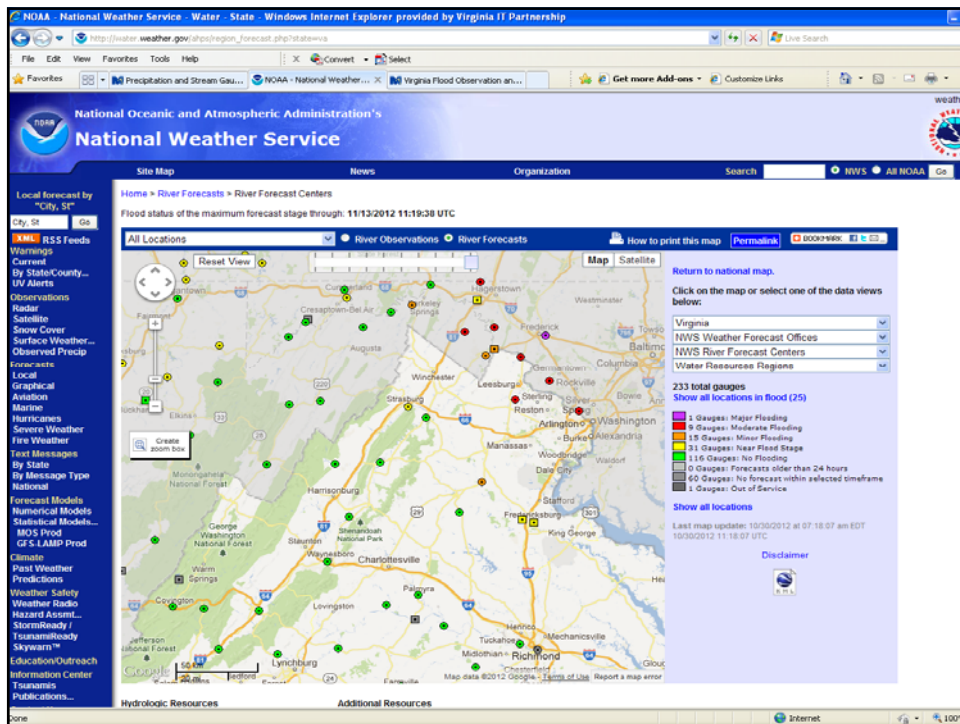


Smyth County Chilhowie

- 12ft flood stage at gauge
- 7ft flood stage 1.2 miles upstream
- Flood of record = 10.2ft (occurred 1x in 102 years of data collection)
- At or above 7ft flood stage 18x (avg = 5.5 years)







Precipitation and Stream Gauges in Henry Co.

Gauge Name	Precipitation Gauges							Stream Gauges			
	15 Min	30 Min	1 Hr	3 Hrs	6 Hrs	12 Hrs	24 Hrs	Current	Yellow Alert	Red Alert	Flood Stage
Blackberry Bridge	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.88 in.	3.52 in.	3.76 in.	5.9 ft	4.0 ft	5.0 ft	6.0 ft
Blackberry Creek	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.64 in.	2.80 in.	3.04 in.				
Chestnut Knob	0.00 in.	0.00 in.	0.00 in.	0.00 in.	1.28 in.	5.52 in.	5.92 in.				
Hydro Electric Plant	0.00 in.	0.00 in.	0.00 in.	0.00 in.	1.44 in.	5.44 in.	5.73 in.	696.4 ft	696.5 ft	697.2 ft	697.5 ft
Jones Creek	0.00 in.	0.00 in.	0.00 in.	0.00 in.	2.12 in.	7.31 in.	7.74 in.				
Lower Smith	0.00 in.	0.00 in.	0.00 in.	0.12 in.	0.24 in.	0.28 in.	0.32 in.				
Marrowbone Res.	0.00 in.	0.00 in.	0.00 in.	0.00 in.	1.40 in.	6.99 in.	7.51 in.				
Meadows Church	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.04 in.	0.12 in.	0.20 in.				
Mt Hermon Church	0.00 in.	0.00 in.	0.00 in.	0.04 in.	0.08 in.	0.08 in.	0.16 in.				
Prillman	0.00 in.	0.00 in.	0.00 in.	0.00 in.	1.00 in.	3.24 in.	3.40 in.				
Providence Chrc	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.76 in.	3.68 in.	3.88 in.				
Rangeley Branch	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.92 in.	3.88 in.	4.16 in.				
Saville	0.00 in.	0.00 in.	0.00 in.	0.00 in.	0.28 in.	0.84 in.	1.08 in.				
North Mayo River Near Spencer								6.48 ft	6.0 ft		8.0 ft
Smith River At Bassett								5.29 ft	8.0 ft		13.7 ft
Smith River At Martinsville								9.89 ft	10.0 ft		

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Precipitation and Stream Gauges in Highland Co.

Flood Planning

- Land use authority to protect natural resources & guide development
- Protect life, property, resources & economy
- Geographic Information Systems: incorporation of digital flood insurance rate maps
- Develop flood observation & warning capability

Questions

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