

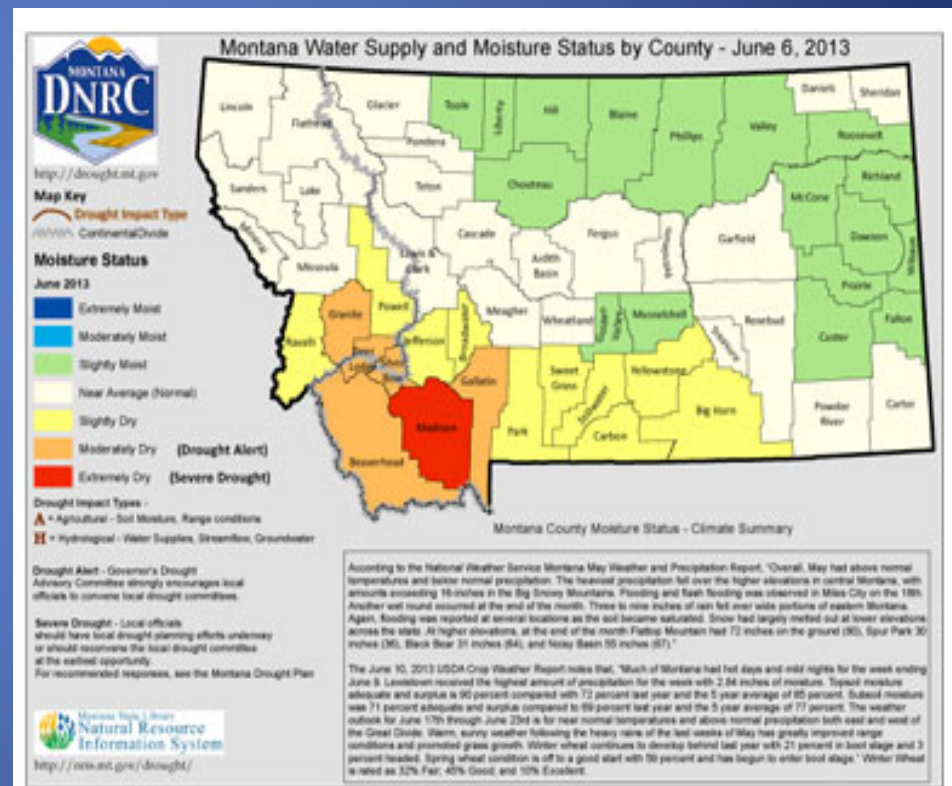
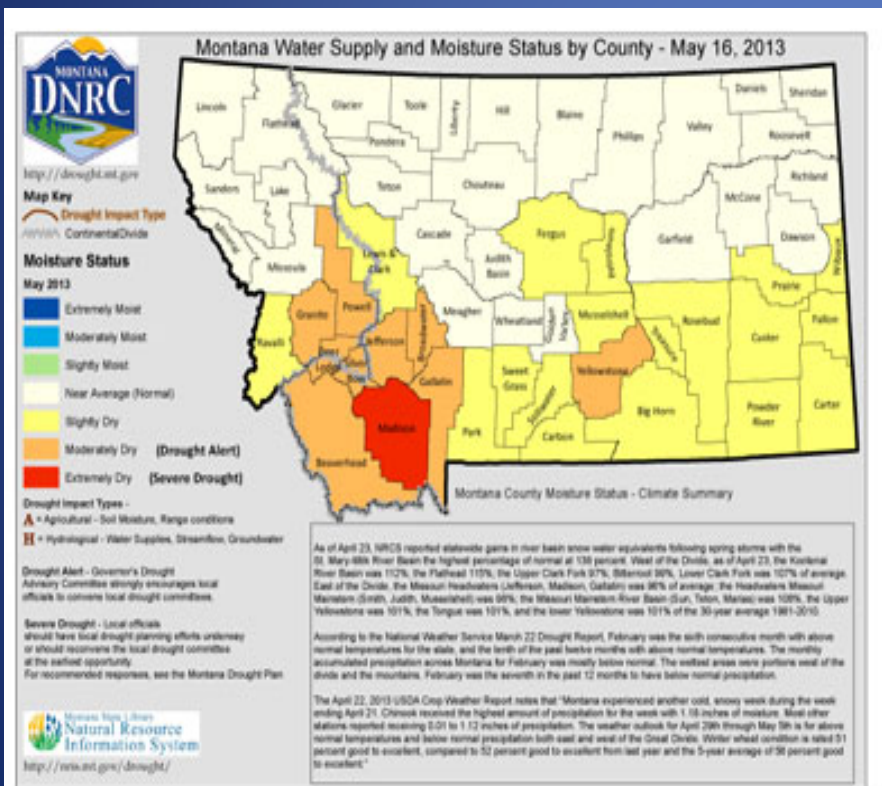
Water Supply and Climate Update
Governor's Drought & Water Supply
Advisory Committee

Tim Davis and Jess Aber
DNRC Water Resources
June 18, 2013

West steady – SE, NE, Hi-Line improve No declines

May 16

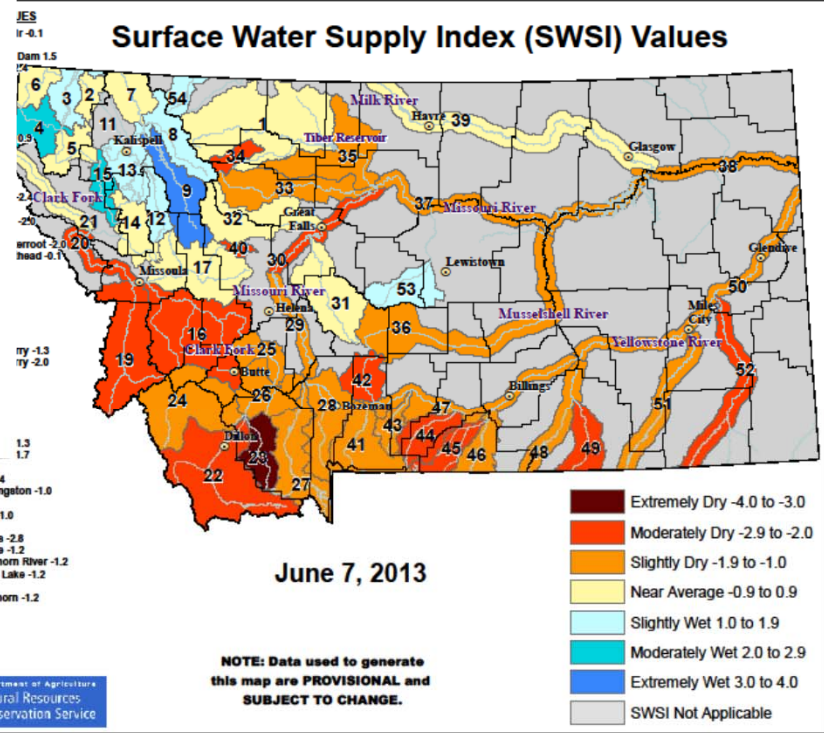
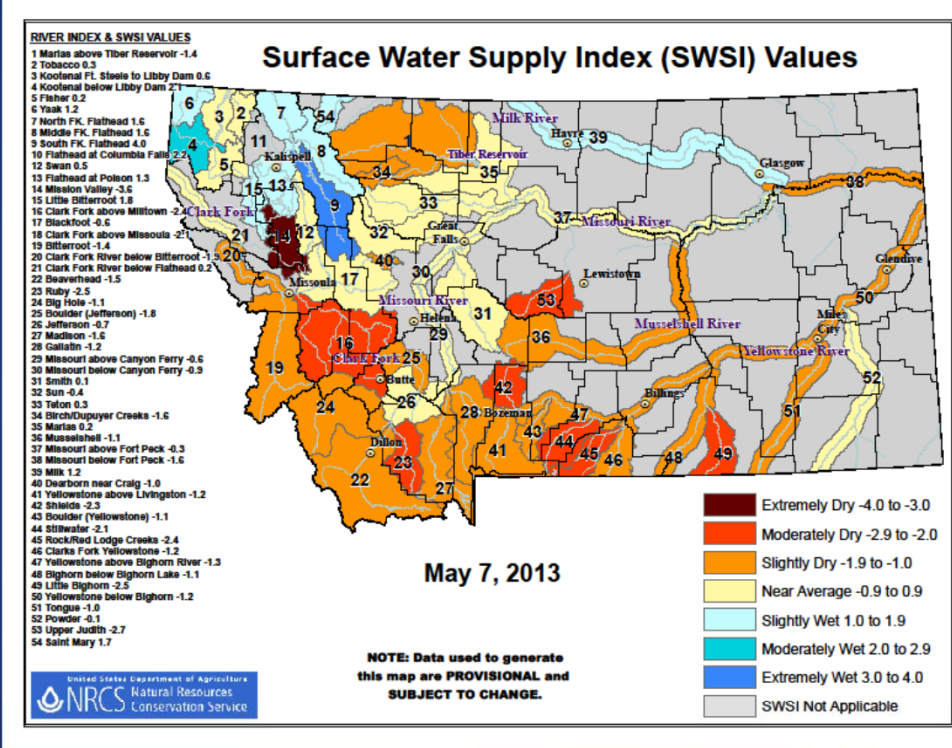
June 6



Improved Counties

- Most of Hi-Line
- Most of far east side
- Powell
- Jefferson
- Broadwater
- Fergus
- Petroleum
- Yellowstone
- Golden Valley
- Musselshell
- Rosebud/Treasure

Surface Water Supply Index May to June



SWSI River Basins

Moderately Dry or worse

West Side

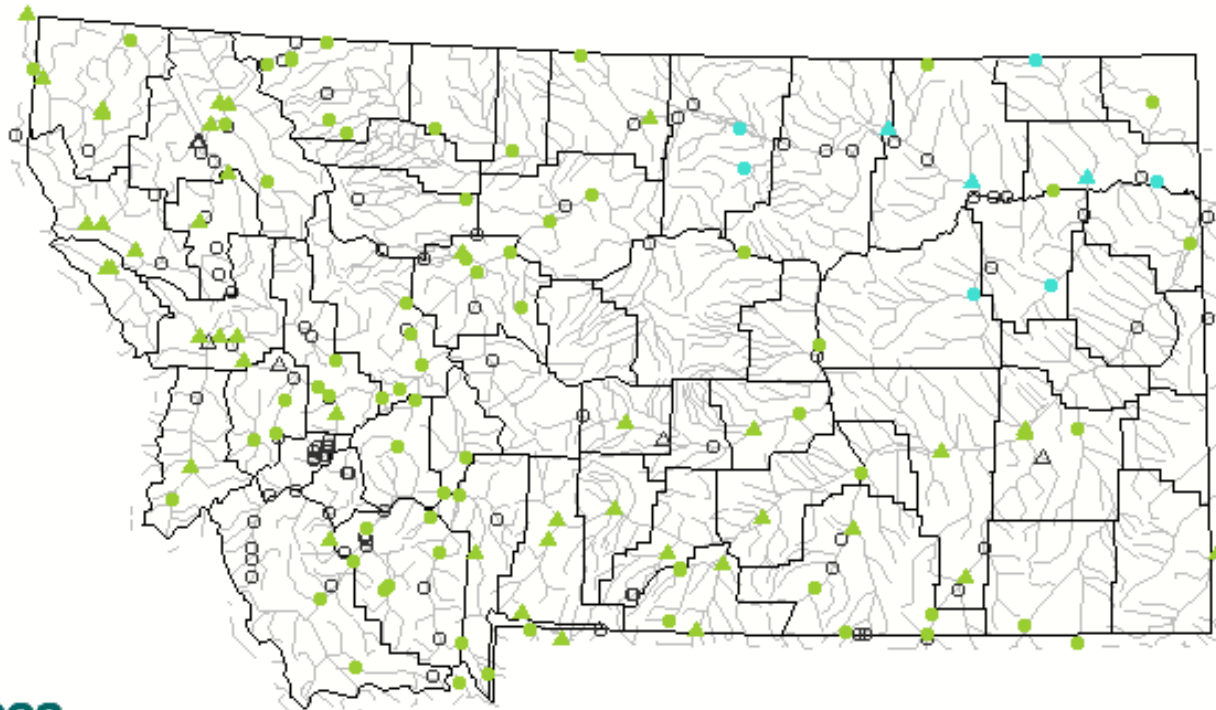
Clark Fk. Bel. Bitterroot
Bitterroot
Clark Fk. above Milltown
Flint / Rock Creeks








East Side

Beaverhead
Ruby (Extremely)
Shields
Stillwater/Rock/Red Lodge
Little Bighorn
Powder
Birch/Dupuyer Creeks
Missouri bel. Canyon Ferry
Powder

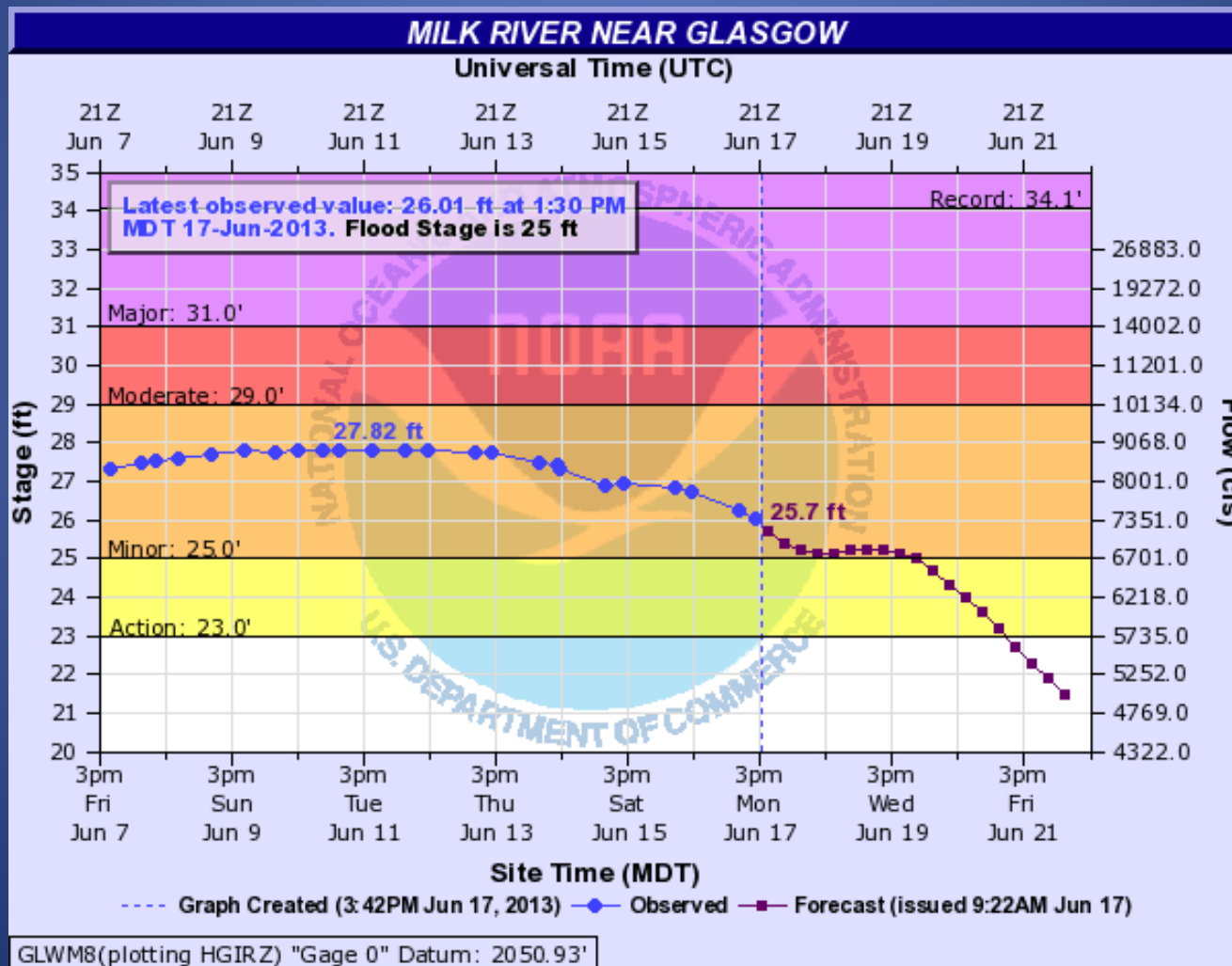
June 17th Flood and High Flow conditions

Monday, June 17, 2013 16:31ET



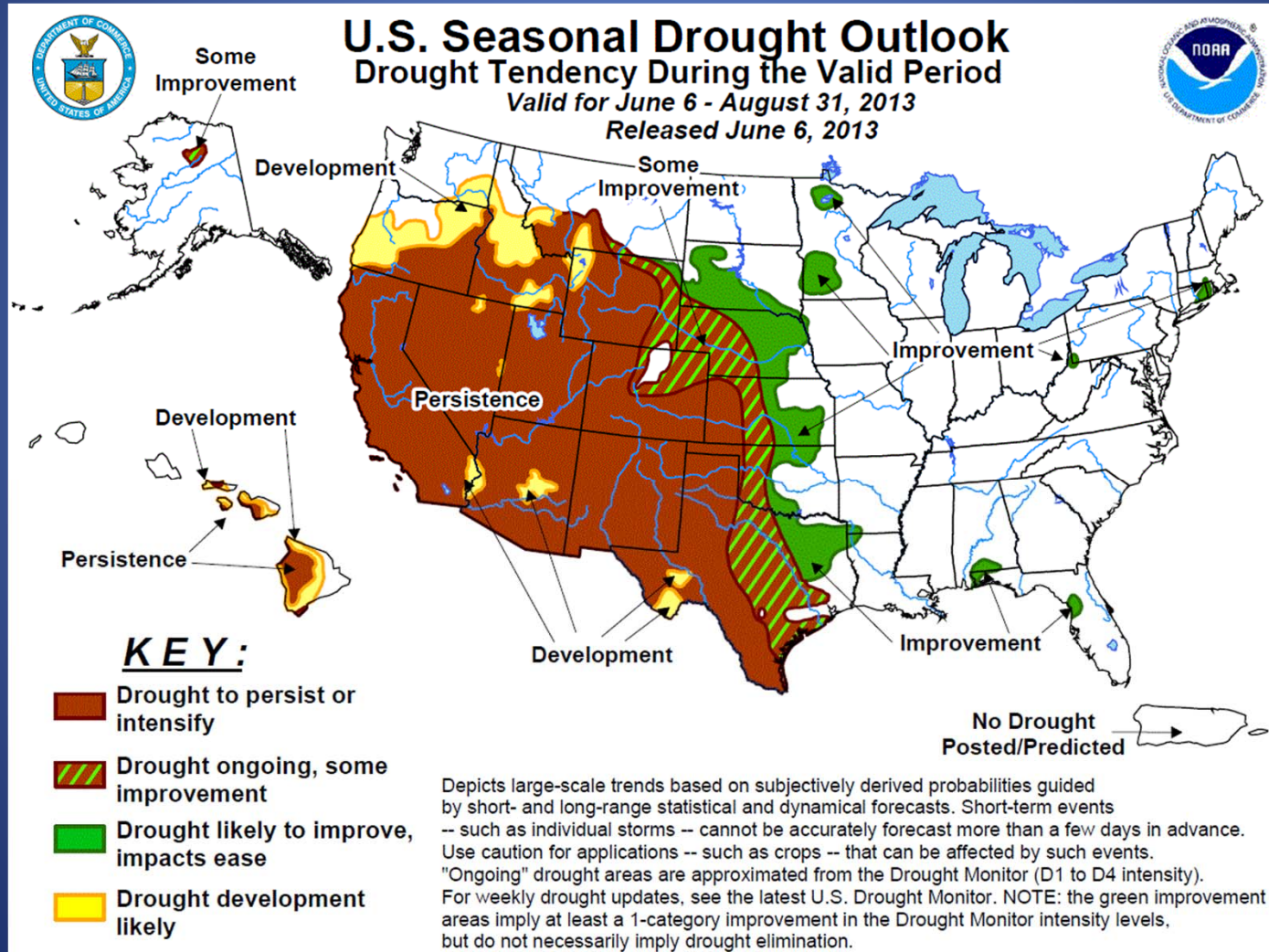
Explanation - Percentile classes				
				
<95	95-98	>= 99	River above flood stage	Not ranked
 Streamgage with flood stage		 Streamgage without flood stage		

AHPS – Milk River near Glasgow



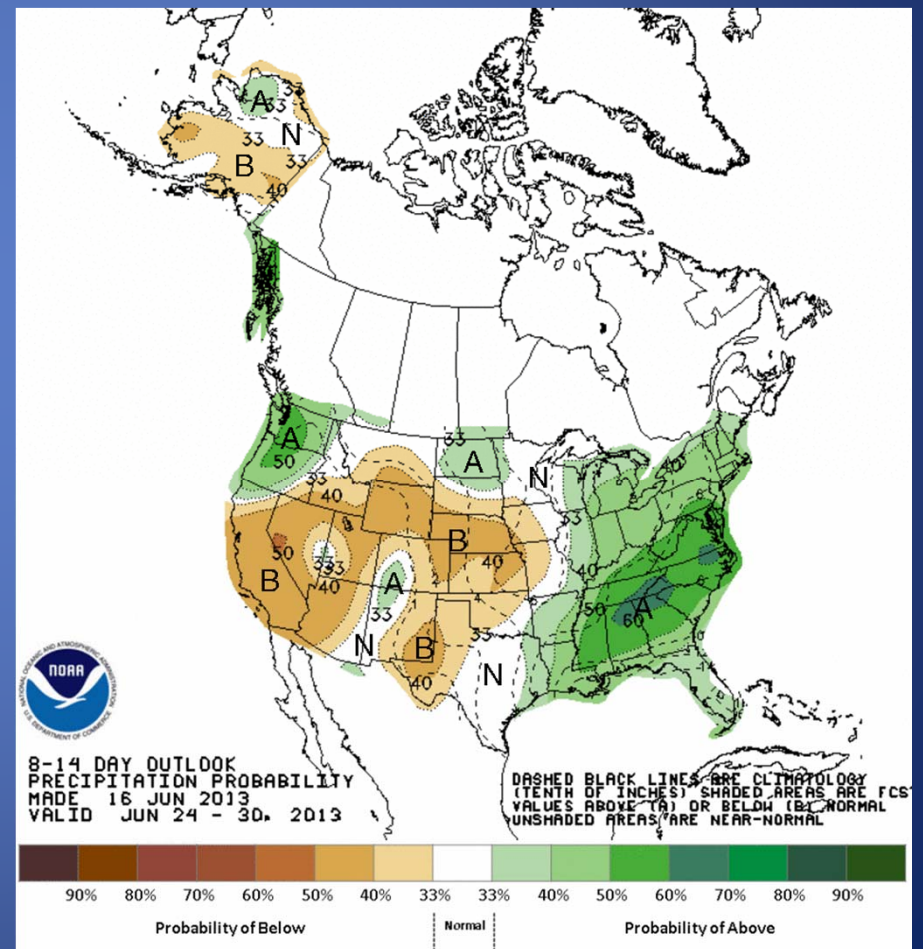
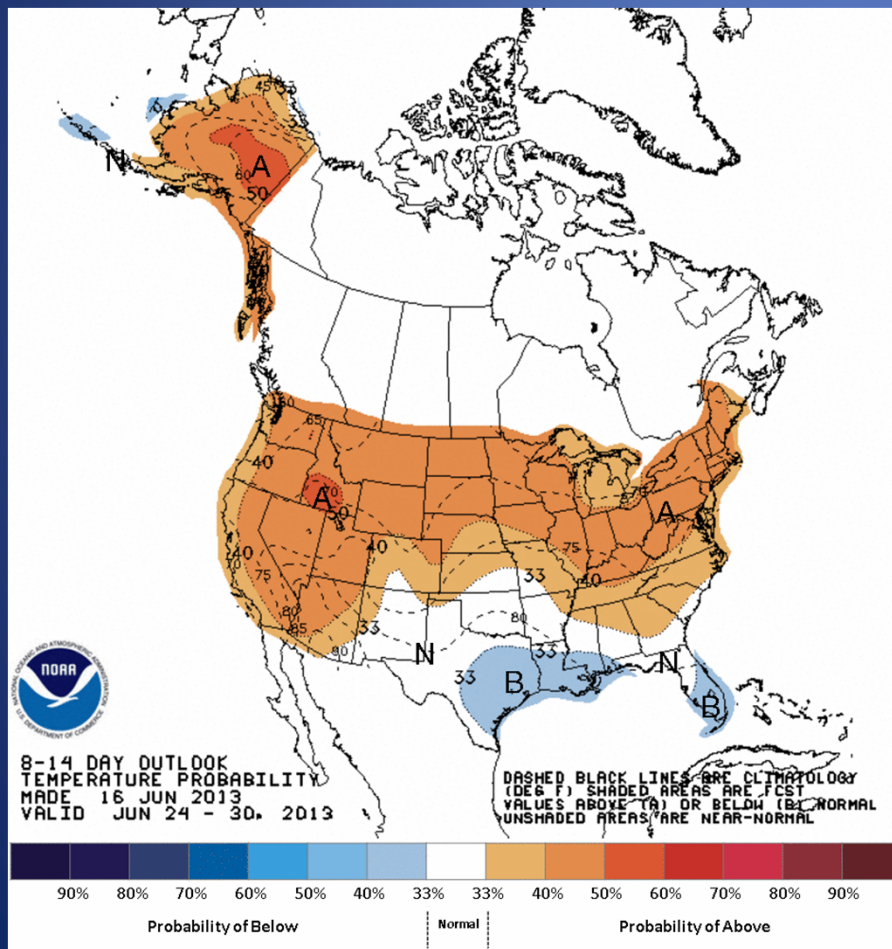
U.S. Drought Monitor Outlook

June 6, 2013



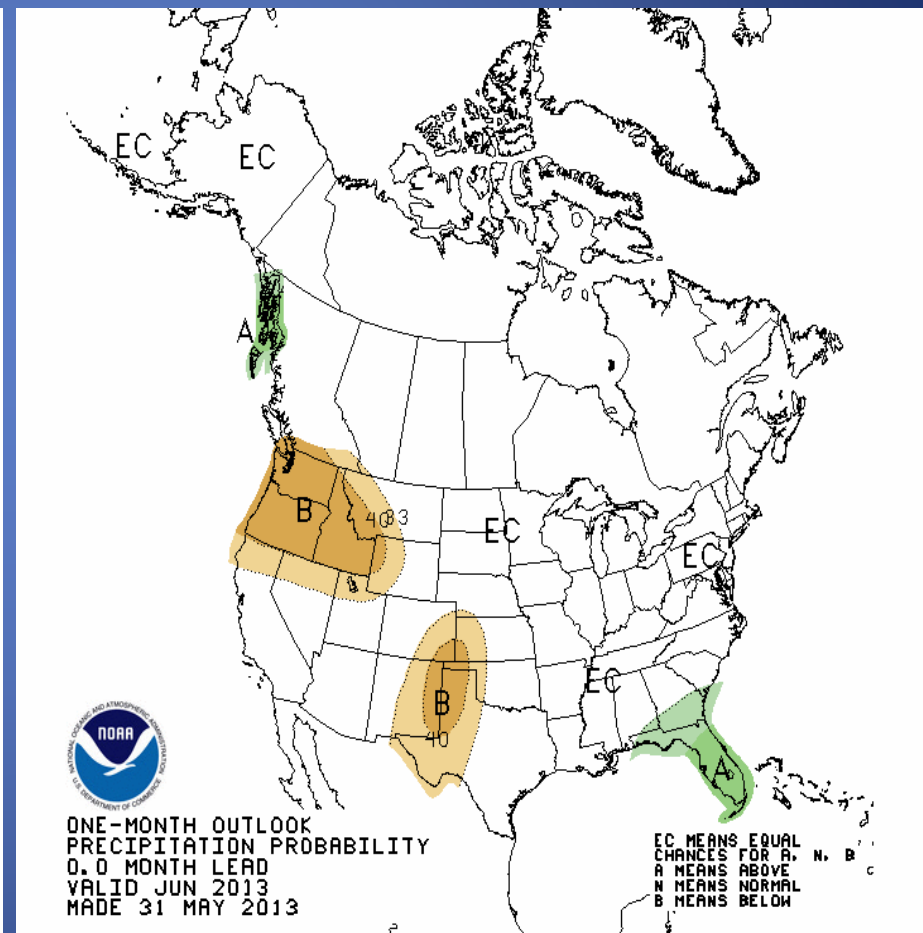
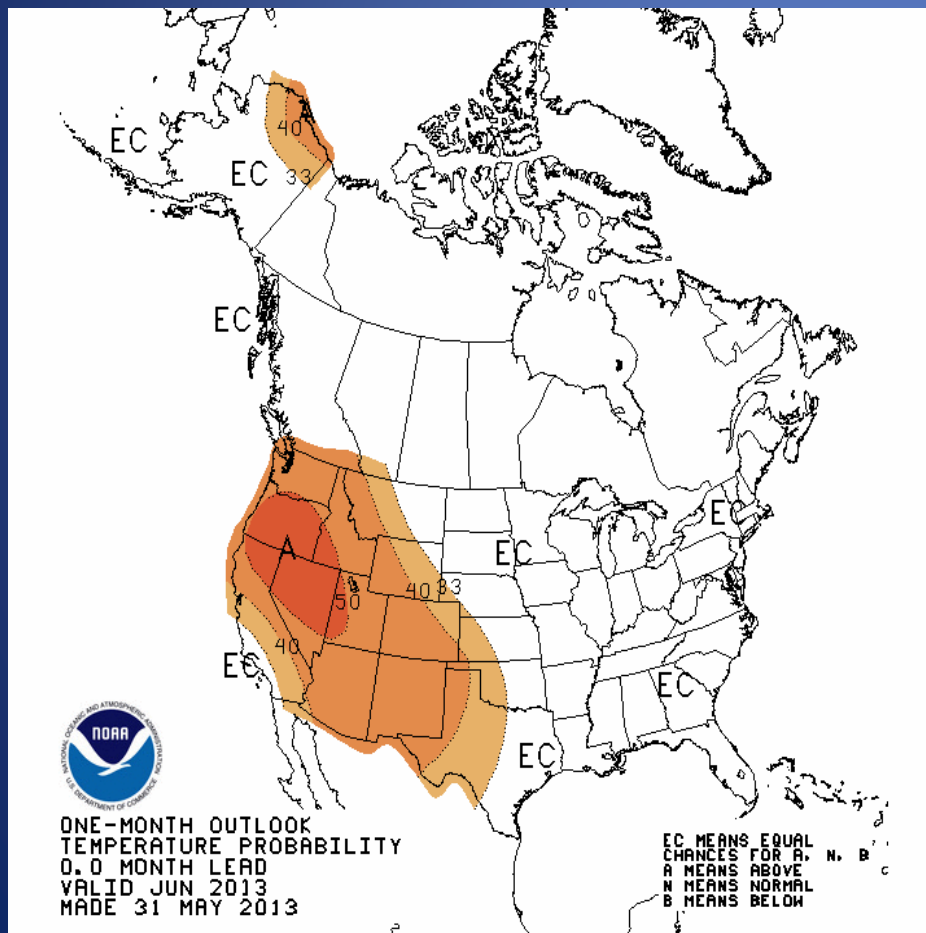
Climate Outlooks made 6/16

8- to 14-day outlook for 6/24 to 6/30

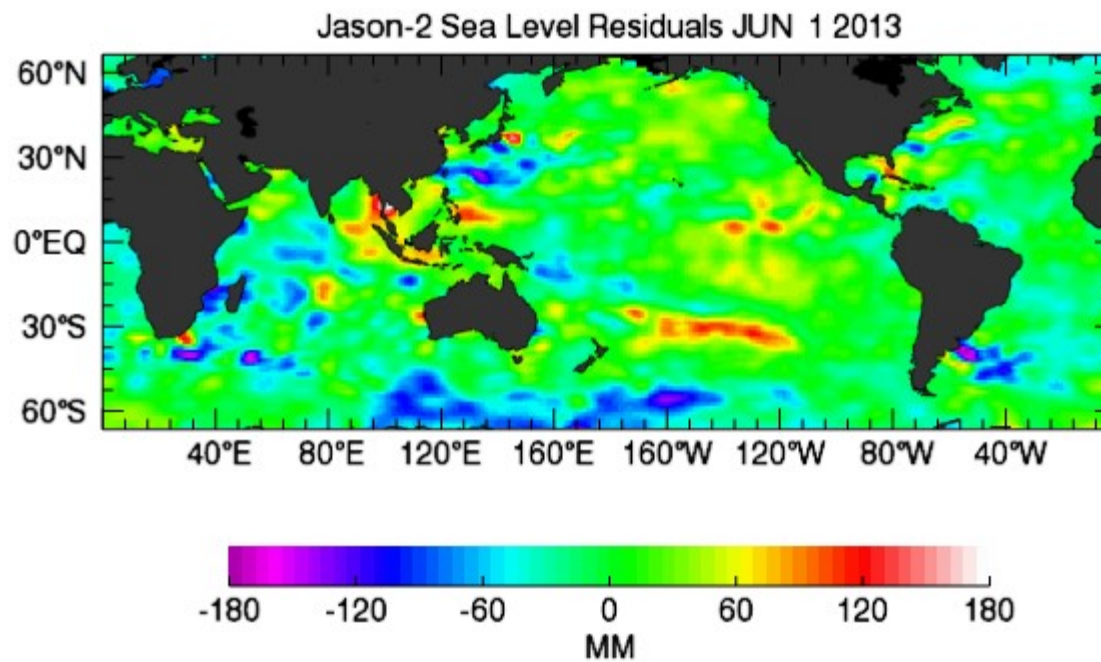


One month June outlook for temperatures and precipitation

Made May 31



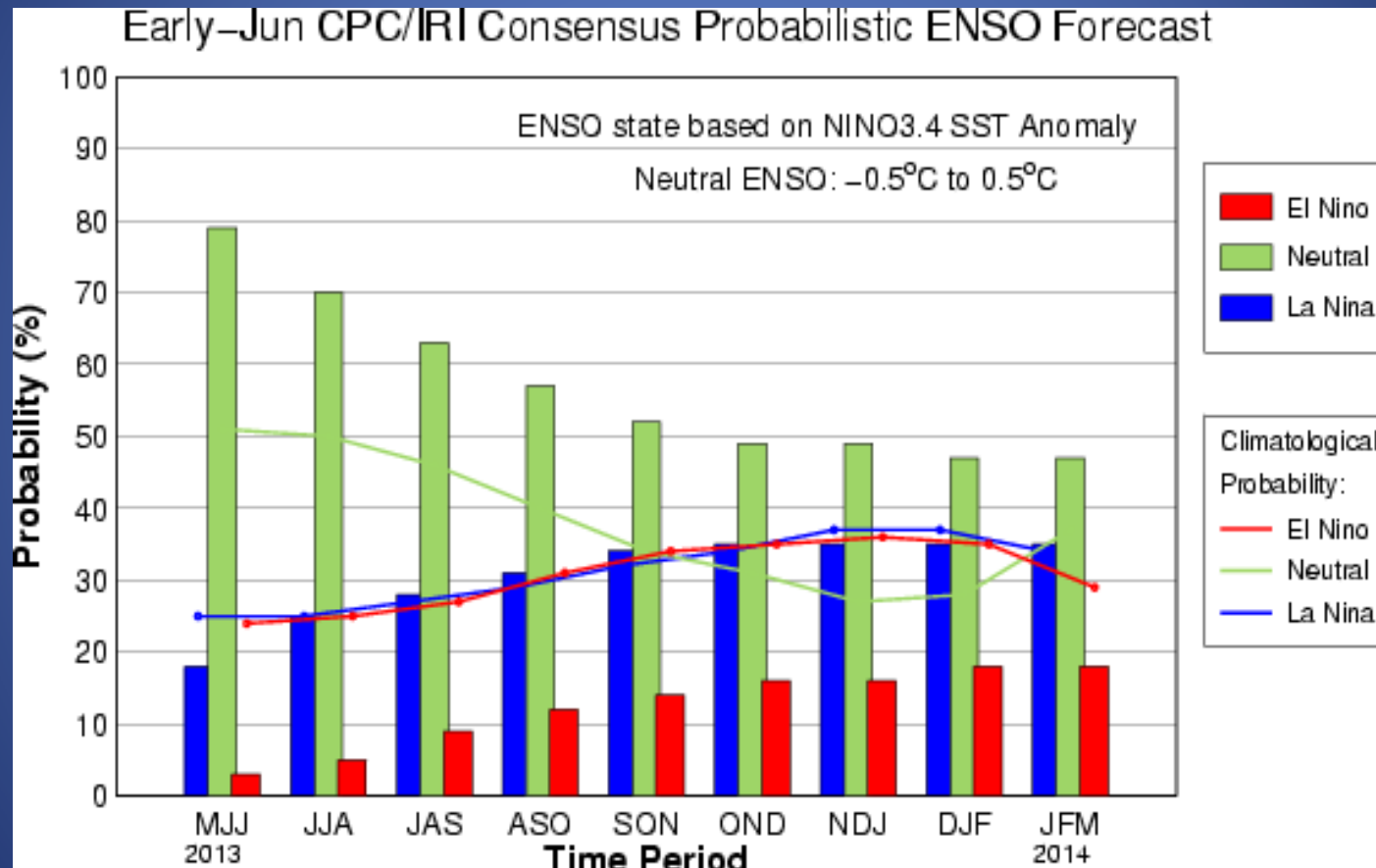
ENSO Status - Neutral



El Niño / Southern Oscillation (ENSO) fall/spring – 2 El Ninos; 4 Ninas; 2 Neutral

- 2006-2007 El Niño
- 2007-2008 La Niña
- 2008-2009 La Niña
- 2009-2010 El Niño
- 2010-2011 La Niña
- 2011- 2012 La Niña
- 2012-2013 Neutral
- 2013-2014 Neutral / La Nina

ENSO Outlook 2013-2014



The Potential for Drought 2013

- West of Divide – Moderate to High
Water use in – Bitterroot, Upper Clark Fork, Clark Fork Basins bel. Missoula and Bitterroot, NW good snowpack and flow prospects good
- East of Divide – Moderate to High – SW, SC MT
Beaverhead, Missouri, Jefferson, Big Hole, Ruby,
Strong points – Recent rainfall for reservoir inflows, carryover storage, and soil moisture

NWS Summary 6/13

- Continue to see some widespread precipitation
Moving through our climatologically wettest months
Southwest Montana still drier than average
- Drought improvement noted across portions of central, south central and southeast Montana
- Expansion of drought in south central and in southern portions west of the divide possible over next few months
- Areas along Milk River and tributaries will continue to see threat of flooding as precipitation in area continues

“It is important to remember that low streamflow and wildfire are to be expected in any given summer in Montana.”

The End

Questions?