United States Department of Agriculture
Forest Service
Manti-La Sal National Forest

Moab/Monticello Ranger District
62 East 100 North
P.O. Box 386
Moab, UT 84532
Phone # (435) 259-7155
Fax # (435) 259-7737

File Code: 2210/2230
Date: June 12, 2013

Wm. E. Palmer Ranch
c/o Clayton Palmer
1020 East Flourmill Rd
Blanding, Utah 84511

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Dear Mr. Palmer:

This letter will serve as your Annual Operating Instructions (AOI) for the Verdure C&H Allotment for the 2013 grazing season. This AOI is made part of your Term Grazing Permit consistent with Part 1, item 3 and Part 2, item 8(a). A failure to follow these instructions is a violation of your permit. The AOI complies with the standards and guidelines found in the Forest Plan. **Please read your instructions thoroughly.** A copy of these instructions is also being sent to Ellis Palmer.

AUTHORIZED USE FOR 2013

Allotment	Numbers	Kind	Class	Season	Permittee	Non-use	
						Resource protection	Personal convenience
Verdure	20	Cattle	Cow/Calf	06/21 to 09/13	Wm. E. Palmer Ranch	X	
Verdure	2	Cattle	Yearling	06/21 to 09/13	Wm. E. Palmer Ranch		
Verdure	1	Cattle	Bull	06/21 to 09/13	Wm. E. Palmer Ranch		

GRAZING SYSTEM AND SCHEDULE

The Verdure allotment has no designated pastures, yet you should prevent your cattle from overusing particular areas with the use of management tools such as riding, hauling water and salting.

Permitted pack and saddle stock authorized on the allotment for livestock management will not exceed four head.

Management Response to Drought Conditions

You are running less pairs due to current below normal snow pack, precipitation and soil moisture conditions and because current forecasts are predicting a continuation of drought conditions into this summer (*see enclosed documents concerning current conditions and forecasts)*. In addition to a lower stocking rate, you have agreed that you will increase the

amount of riding done on the allotment to keep cattle dispersed and also be hauling water in the southeast part of the allotment. Management may need to be adjusted depending upon actual conditions on the ground. Livestock may need to be removed from the allotment earlier than planned if drought conditions worsen.

Your allotment should be inspected for range readiness to determine forage growth and fence and water improvement conditions. Situations may develop during the grazing season which requires changes to these instructions. If this becomes necessary, or if you cannot comply with some part of these instructions, contact the District Ranger and obtain approval before initiating changes or deviating from these instructions.

PROPER GRAZING-USE INDICATORS

Utilization standards are tools used in achieving or moving towards desired rangeland conditions. Utilization standards are not the desired conditions or management objectives themselves, they are indicators. Desired conditions and objectives are discussed in the 1986 Forest Plan and/or the Allotment Management Plan.

Desired goals in the 1986 Forest Plan include:

- Bring livestock obligation in line with rangeland carrying capacity
- Maintain upward or stable trends in vegetation and soil condition.

Management Objectives in the 1998 Verdure AMP include:

- Maintain upwards or stable trend in vegetation and soil condition for both uplands and riparian areas.
- Maintain or improve conditions regarding soil compaction, site disturbance, vegetative cover and stream bank stability.

The 1990 Forest Plan Amendment for Range Proper-Use Criteria states proper use as ranging from 40-65% use of upland key species depending on the grazing system applied and from 30-60% use of riparian key species depending season of use. This amendment kept the existing provision that proper use criteria are to be established on an allotment by allotment basis and as given in the AMP and AOIs.

For the Verdure allotment proper use criteria in 2013 are:

Upland Areas:	**Use of Key Species**
Spring/Summer	**40-45%**
Fall	**50-55%**

Riparian Areas:	**Use of Key Species**
Spring (Early and rapid growth)	**50-60%**
Summer (Moderate growth)	**45-50%**
Fall (Slow growth)	**30-40% or 4-5 inches stubble or regrowth**

There is a difference between where percentage utilized is applied and where stubble height is applied to determine proper use in riparian areas. Percent utilized is used for plant species that are within the larger riparian area (the area that is influenced by the stream and the water table) but not along the greenline. The greenline is the first perennial vegetation on or near the stream's edge that is at least one foot wide. Stubble height measurements are used to determine proper use along the greenline. The plant species considered are typically water loving species (hydric species) such as sedges.

It is your responsibility as the permittee to recognize when proper use has been reached and promptly move all cattle as necessary. If you need some assistance, or methods and tools for determining proper use, please contact Tina Marian.

When proper use has been reached in the unit being grazed, your cattle are to be herded to the next scheduled unit. **When proper use is reached in the last unit grazed, all cattle are to be removed from the allotment, <u>even if this date is prior to the end of your grazing season.</u>** Cattle found on the Allotment before or after the permitted grazing season will be billed at the unauthorized use rate and permit non-compliance actions will be initiated.

You should be aware that Forest Service policy provides that "an authorized officer may require the permittee to monitor and report information on compliance with the grazing permit, allotment management plan and annual operation instructions as a term and condition of your permit."

To facilitate livestock moves, gates may be opened a few days prior to the scheduled move date only when moving into an adjacent pasture. Gates must be closed and the grazed pasture entirely cleaned of livestock no later than five days following the scheduled move date. Grazed pastures must be kept clean of livestock following the pasture move.

<u>IMPROVEMENTS</u>

Since 2006, the Forest Service has entered into structural improvement agreements with each permittee which will continue for this season. The purpose of these agreements and the following inspections is to document how and if range structural improvements are being maintained.

Thank you for completing and sending in photos of your 2012 fence maintenance agreement.

FENCE AGREEMENT: Since 2006, all fences on the permit have been part of an agreement; however we will continue doing agreements so as to keep documentation of maintenance current. For 2013, please document the maintenance done and condition of the south west boundary fence as shown on the attached map. This fence was in excellent condition when last inspected in 2007.

When you complete your fence agreement you must fill out and sign the Improvement Agreement Form (pink) that is found in your folder. I suggest that you provide photographs of before and after conditions to assist in documenting compliance with maintenance requirements.

I also encourage you to contact Tina when you complete your maintenance so she can schedule a timely inspection.

If you fail to bring the above agreed improvements up to standard by **September 23rd , 2013** you will not be allowed to stock the allotment in 2014until the agreement is fulfilled.

Range improvements are essential in ensuring that livestock are well distributed and that Forest standards and guides are met.

- Improvements are to be maintained to standard prior to livestock entering the pasture and that failure to do so is a violation of their permit and action will be taken when violations are documented.
- If improvements have not been maintained, then develop a schedule to bring them up to standard.
- Until all improvements are functional it is not appropriate to authorize full numbers or season of use, unless assurances can be made that utilization standards will not be exceeded.

The maintenance of all structural improvements listed under part 3 of your Term Grazing Permit, Special Terms and Conditions: *Construction and Maintenance of Structural Improvements* is a requirement and should be completed prior to your entry onto the allotment. The allotment permittee or permittees are responsible for the maintenance of all structural range improvements on this allotment. For allotments managed by an Association or Herd Manager specific maintenance responsibilities may be assigned to individual permittees by the Association President or Herd Manager.

If you wish to use forest products (trees and oak brush) from the National Forest to maintain your fences/spring exclosures on your allotment, you must receive authorization from either the Moab or Monticello Office prior to cutting.

NEPA and PLANNED PROJECTS

The timber stewardship contract within the Blue Mtn Ranch area will continue this fall. The fence damage on your allotment that occurred this past winter should have been fixed. Please notify Tina Marian if this was not done.

MISCELLANEOUS

Refer to Special Terms and Conditions in Part 3 of Term Grazing Permit for specific instructions pertaining to maintenance standards for range stock water developments, range fences, corrals, and herding standards.

All permitted livestock must be branded with your registered brand as documented in your Term Permit before they enter the National Forest.

Place salt blocks away from water, roads, meadows and other open areas so as to draw livestock into areas that receive light utilization. When livestock leave a pasture move the salt out of the pasture as well.

You will furnish sufficient riders or herders to achieve proper distribution of livestock.

Certified Weed Free Hay must be used if you do any supplemental feeding of horses on the allotment while gathering or moving cattle.

If you find the need to use mechanical clearing (tractors, bulldozers etc.) of fence lines or to clean ponds or other water improvements, you must have proper archeological clearance and permission from the District Ranger.

Enclosed in your AOI folder you will find an Actual Use Record sheet. As your 2013 grazing season progresses, please fill out this form in detail and return it promptly at the end of the grazing season. There are also extra sheets included in the folder where you are encouraged to document management on your allotment.

PAYMENT OF FEES

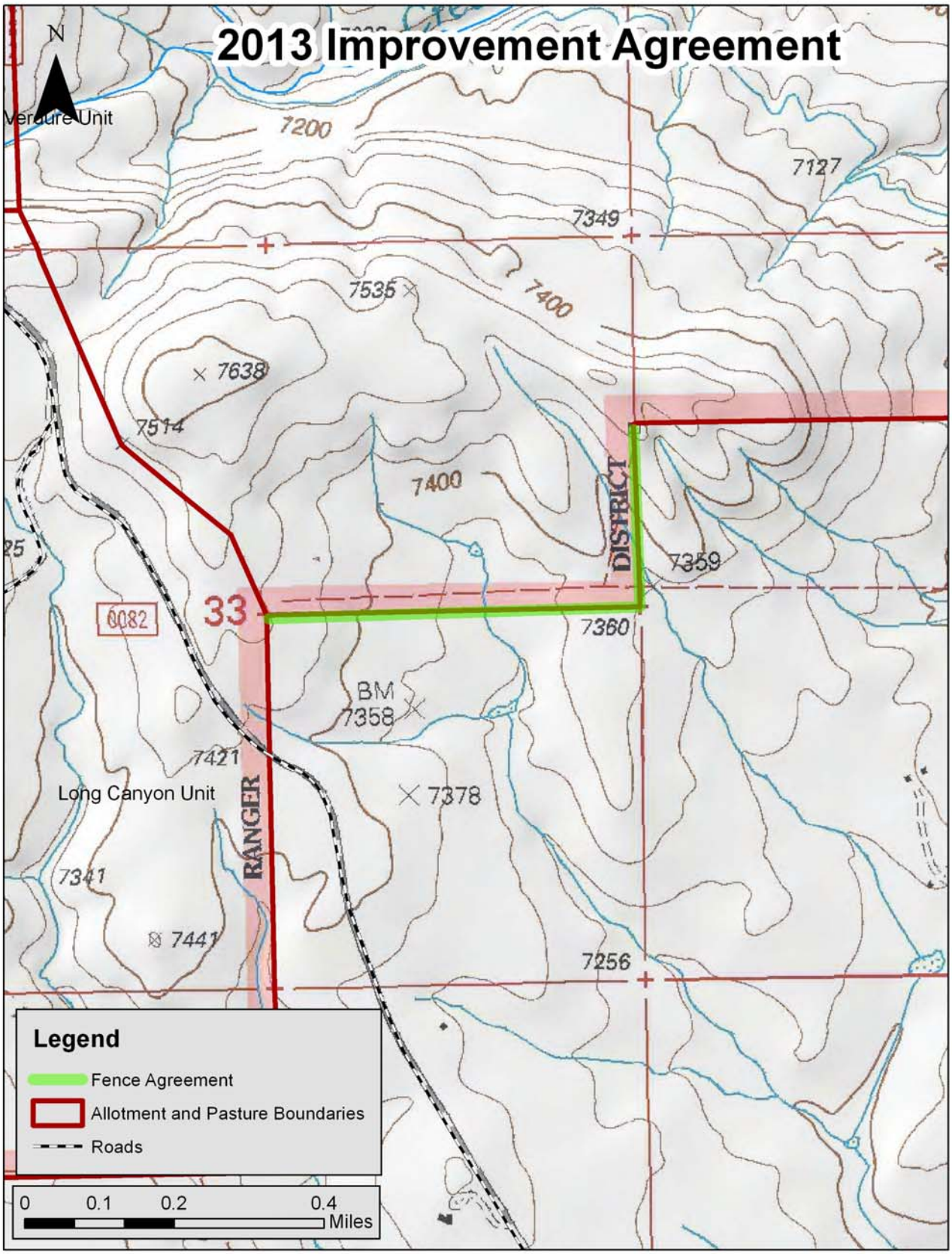
The permittee will not allow owned or controlled livestock to be on Forest Service-administered lands unless the fees specified in the Bill for Collection are paid and confirmation of payment through the "lock box" process is received prior to livestock entering NFS lands.

I am looking forward to working with you this summer. Please call Tina Marian (435-636-3368) if you have any questions or if we can be of assistance.

Sincerely,

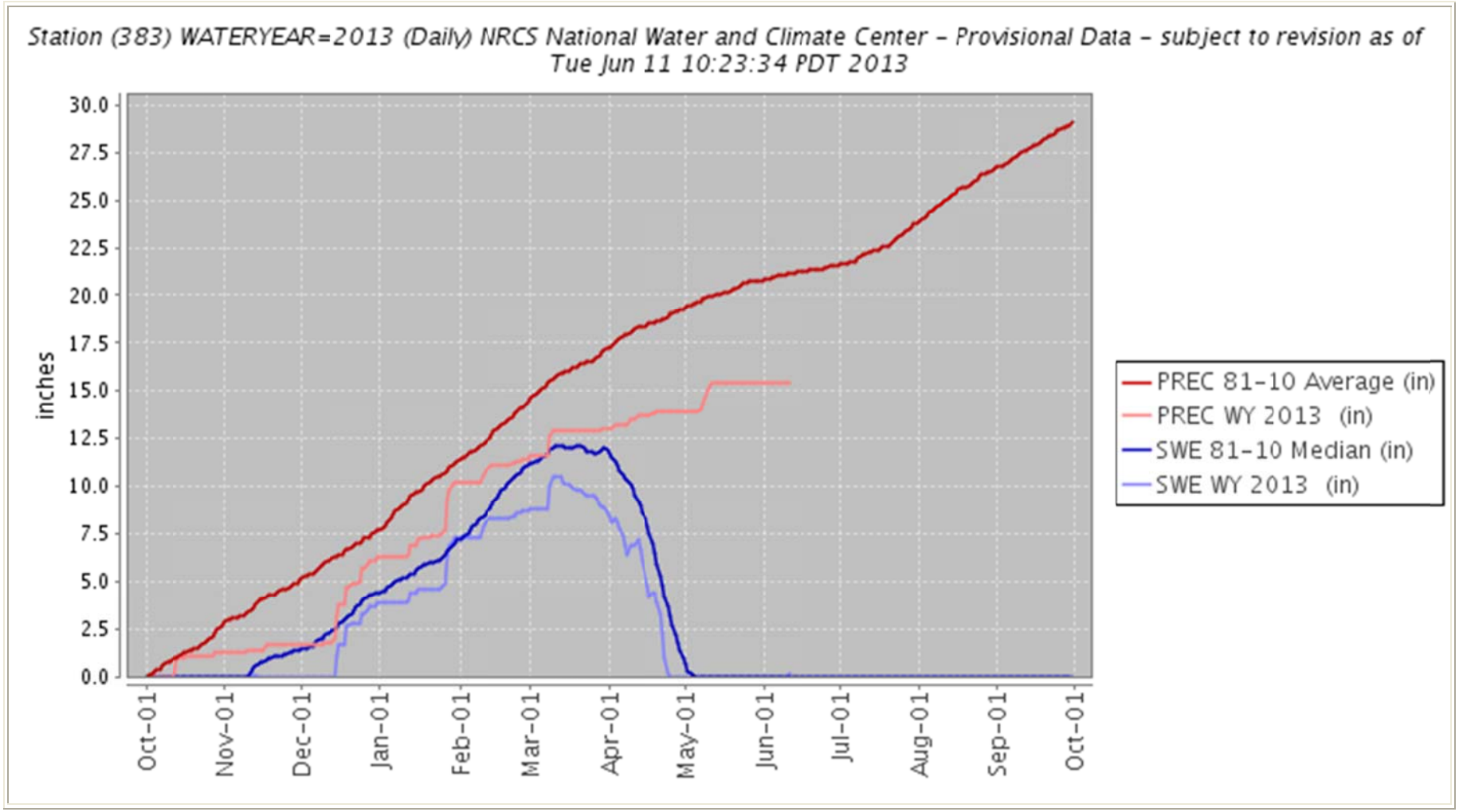
Tina Marian

for MICHAEL DIEM
District Ranger


2013 Improvement Agreement
N
Verdure Unit
7200
7127
7349
7535
7400
7638
7514
7400
DISTRICT
7359
33
6082
7360
BM
7358
7421
Long Canyon Unit
RANGER
7378
7341
7441
7256
Legend
Fence Agreement
Allotment and Pasture Boundaries
Roads
0
0.1
0.2
0.4
Miles

Utah (PST) SNOTEL Site CAMP JACKSON (383) (09M02S) Daily series for wateryear=2013

NRCS National Water and Climate Center - Provisional Data - subject to revision as of 2013-June-11. Notes on dates - Daily sensors (e.g. TAVG.D-1) report a summary value for the previous day. Hourly sensors (e.g. TAVG.H-1) report a summary value for the previous hour. Instantaneous sensors (e.g. TOBS.I-1) report a single observation on the hour.



Utah Climate and Water Report

June 2013

Spooky SCAN Site, Kane County with Fifty-Mile Mountain in background; April 2013

Photo by Kent Sutcliffe

Scale in cm

Utah Climate and Water Report

The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from the United States Geological Survey, reservoir data from the Bureau of Reclamation, and other sources), geography including high elevation United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Snowpack Telemetry (SNOTEL) data, and agriculturally important data from the USDA-NRCS Soil Climate Analysis Network (SCAN). Data on precipitation, soil moisture, soil temperature, reservoir storage, and streamflow are analyzed and presented. These data analyses can be used to increase irrigation efficiency and agricultural production. As with all data and analyses, there are limitations due to data quality, quantity, and spatial application.

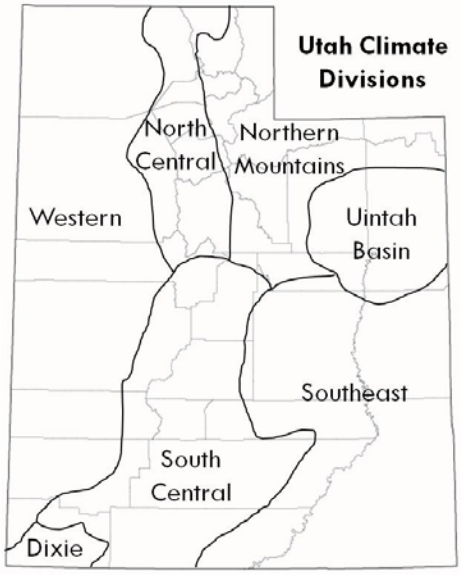
The U.S. Department of Agriculture (USDA) prohibits discrimination against its customers. If you believe you experienced discrimination when obtaining services from USDA, participating in a USDA program, or participating in a program that receives financial assistance from USDA, you may file a complaint with USDA. Information about how to file a discrimination complaint is available from the Office of the Assistant Secretary for Civil Rights. USDA prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, complete, sign, and mail a program discrimination complaint form, available at any USDA office location or online at www.ascr.usda.gov, or write to: USDA Office of the Assistant Secretary for Civil Rights 1400 Independence Avenue, SW. Washington, DC 20250-9410 Or call toll free at (866) 632-9992 (voice) to obtain additional information, the appropriate office or to request documents. Individuals who are deaf, hard of hearing, or have speech disabilities may contact USDA through the Federal Relay service at (800) 877-8339 or (800) 845-6136 (in Spanish). USDA is an equal opportunity provider, employer, and lender. Persons with disabilities who require alternative means for communication of program information (e.g., Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

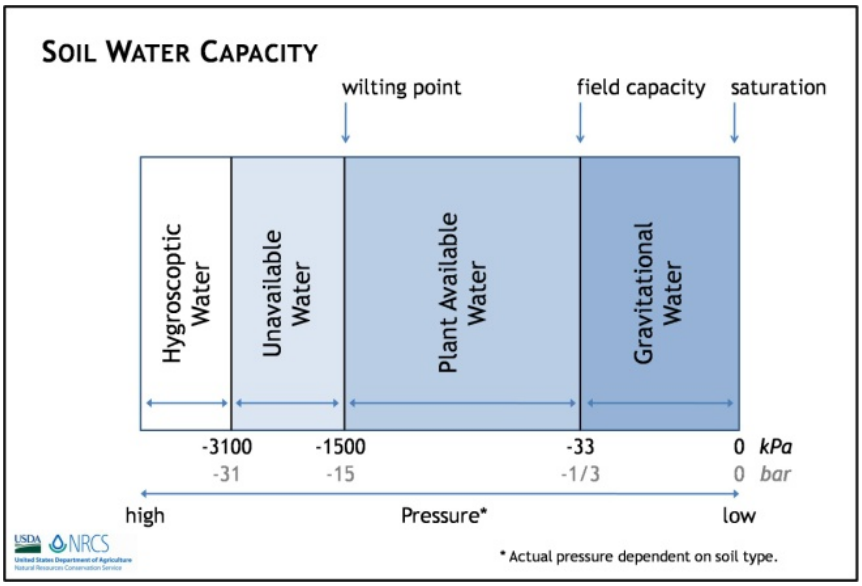
Climate and Water Information

Soil Climate Analysis Network

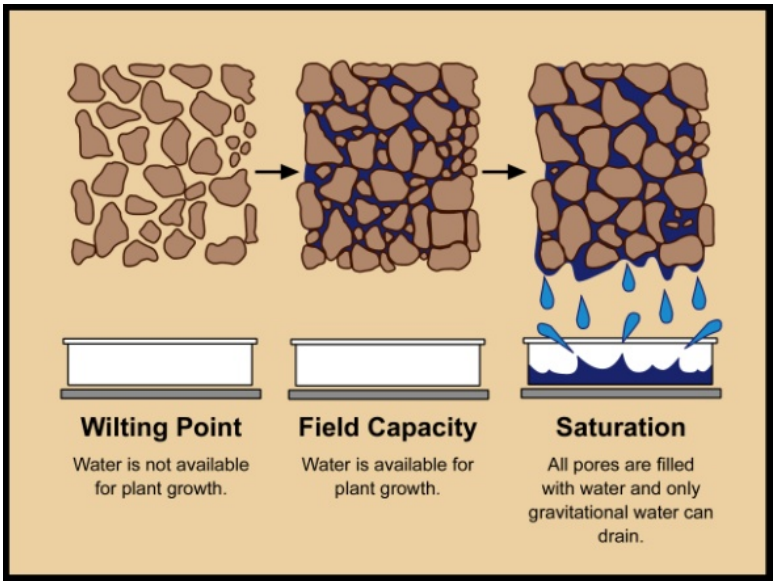
Soil Climate Analysis Network (SCAN) stations are primarily located on low- to mid-elevation, agriculturally important landscapes that maintain representative soils. Elevations range from 3,000 to 7,000 ft. The SCAN network provides real-time soil moisture and temperature data coupled with additional climate information for use in natural resource planning, drought assessment, water resource management, and resource inventory. Stations are situated on non-irrigated, native soils, are remotely located, and collect hourly atmospheric and soils data that are available to the public online.

In order to summarize SCAN data, the 35 sites in Utah are grouped by climate divisions (North Central, Northern Mountains, Uintah Basin, Southeast, South Central, Dixie, and Western).





Explanation of soil water capacity definitions. Field capacity (FC) and wilting point (WP) are calculated in the laboratory for each soil horizon. The amount of water held between field capacity and wilting point is plant available.



Visual explanation of soil water capacity definitions.

http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

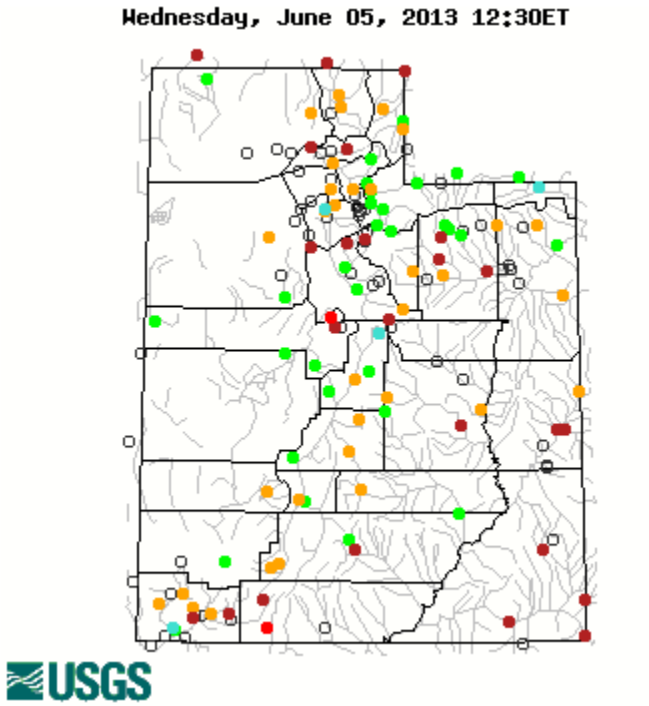
Utah Hydrologic Summary

June 1, 2013

Current Conditions

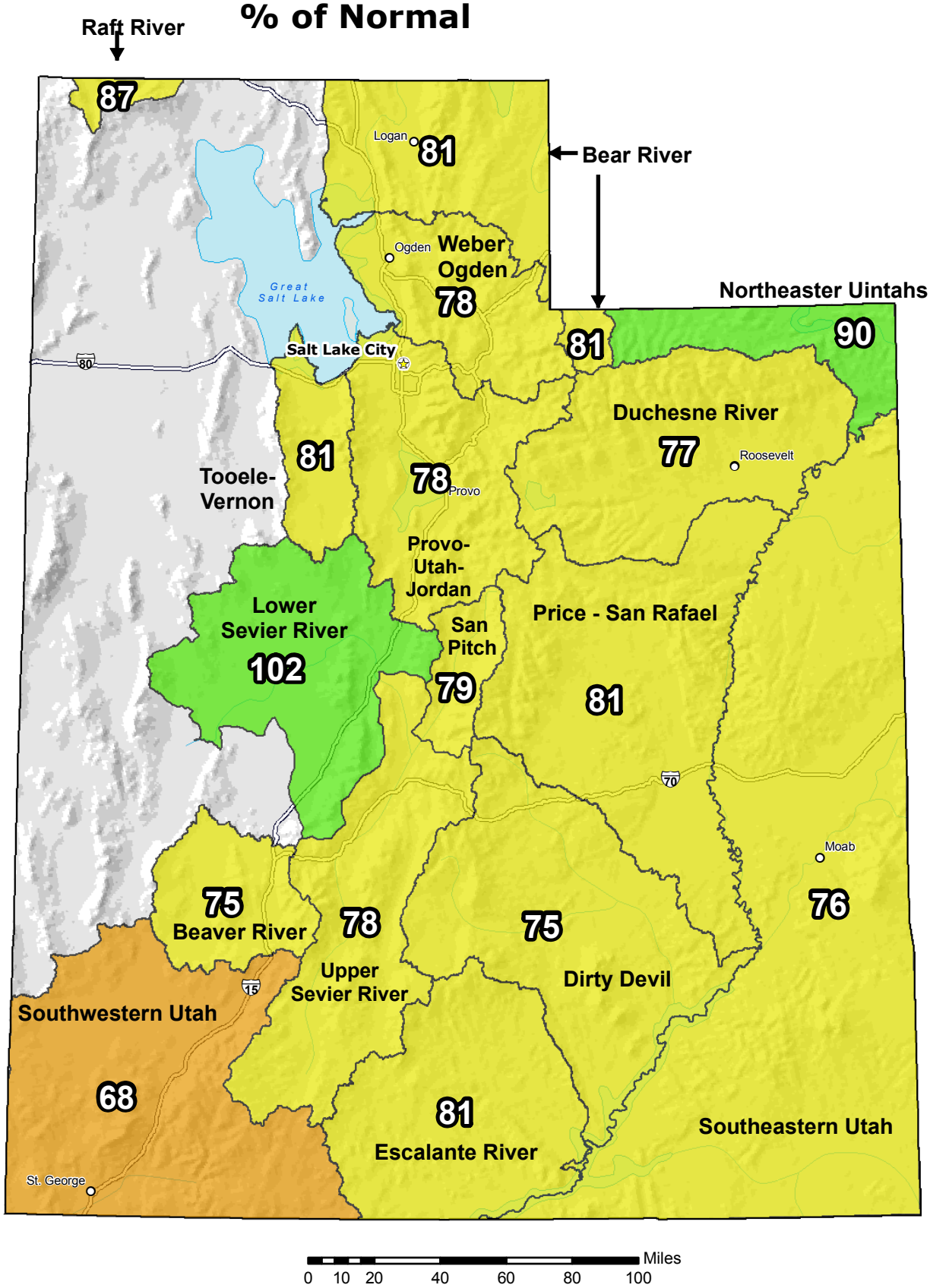
Current runoff, as shown in the USGS graphic below, is mostly below to much below average for non-regulated stream flow across many areas of Utah. Most rivers are in recession and flows will be at summer base flows quickly. Snow packs have melted out over the entire state at this point. Much of this year's snowmelt has gone to recharge soil moisture which is currently average in the north and dry in the south. Southeastern Utah is exceptionally dry and this is reflected in the observed streamflows. May precipitation was below average statewide, in the north (60%-80%) and in the south (70%-90%). Reservoir storage is 15% less than last year, near 73% of capacity across the state. This is up just 1% from May's figure of 72% of capacity ***indicating that we have used much of this year's runoff as it came into the reservoirs***. Reservoir storage in some areas such as the San Pitch (0%), Southeast Utah (56%), and the Enterprise area (24%) are very low. Poor runoff conditions will and already have had impacts on agriculture across the state with water allocation cuts. The National Climate Prediction Center forecasts for the area suggest warmer conditions for the next 3 months. Based on all available water supply data, (reservoir storage, observed streamflow, climate forecasts, etc) agriculture producers and others will have to determine how best to manage current water supplies in order to minimize risk and maximize production in what is now back to back water limited years.

Current Utah Stream Flow - Courtesy US Geological Survey



Utah
SNOTEL Water Year (Oct 1) to Date Precipitation
% of Normal

Jun 06, 2013



Water Year (Oct 1) to Date Precipitation Basin-wide Percent of 1981-2010 Average

- unavailable *
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >=150%

* *Data unavailable at time of posting or measurement is not representative at this time of year*

Provisional Data Subject to Revision

The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon http://www.wcc.nrcs.usda.gov/gis/
Based on data from http://www.wcc.nrcs.usda.gov/reports/
Science contact: Jim.Marron@por.usda.gov 503 414 3047

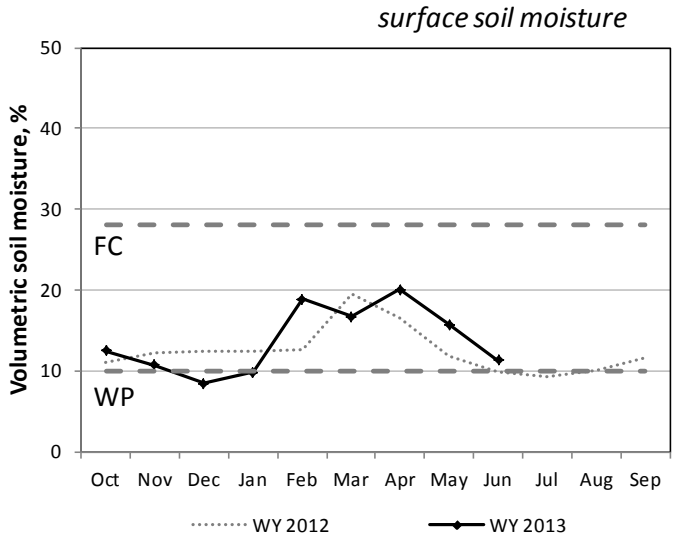
Southeast

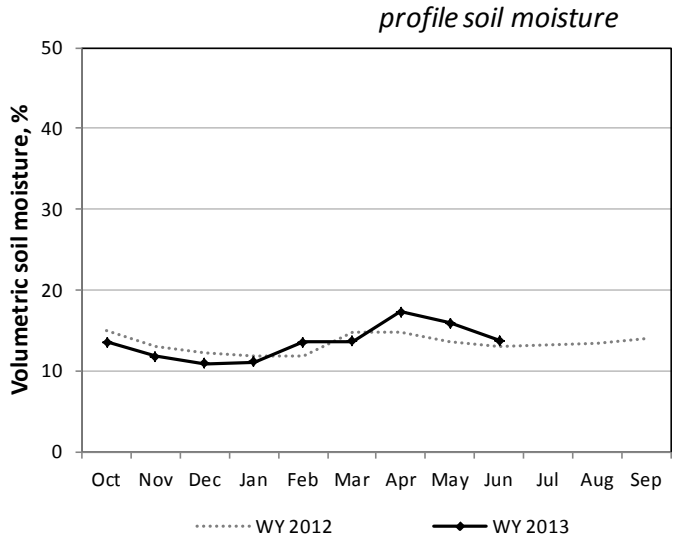
Soil Climate Analysis Network (SCAN)

Site name	Precip to Date*	Monthly Precip	Soil Moisture					Soil Temperature				
			2"	4"	8"	20"	40"	2"	4"	8"	20"	40"
	in.	*in.*	*volume %*					*°F*				
SOUTHEAST												
Price	4.7	0.4	1	11	18	17	20	60	66	67	63	60
Green River	2.8	1.0	6	9	10	6	9	68	71	73	70	66
Harm's Way	4.1	1.0	8	0	16	17	8	65	59	65	60	56
West Summit	3.0	0.3	6	11	15	17	18	60	64	65	59	55
Eastland	3.5	0.5	9	12	12	30	33	58	60	62	57	55
Alkali Mesa	4.5	0.3	6	7	16	19	14	64	64	66	62	59
McCracken Mesa	5.0	0.3	7	13	18	20	14	65	71	73	66	63

* Precipitation since October 1 (beginning of the water year). Monthly Precip is the amount of precipitation accumulated in the past month. SCAN sites utilize tipping bucket rain gauges which do not accurately measure precipitation in the form of snowfall. Soil moisture and temperature values reflect conditions measured on the first of the month.

Southeast





Surface soil moisture is the weighted mean of the water content measured at depths of 2, 4, and 8 inches. **FC** is the mean field capacity, **WP** is the mean permanent wilting point for the soil surface (0 to 12 inches) at SCAN sites within the region, and **WY** is the water year lasting October through September. *Profile soil moisture* is the weighted mean of water content measured at depths of 2, 4, 8, 20, and 40 inches.

Additional data available at the SCAN website, including: hourly air temperature, relative humidity, wind speed, wind direction, barometric pressure, precipitation, solar radiation, soil temperature, and soil moisture.

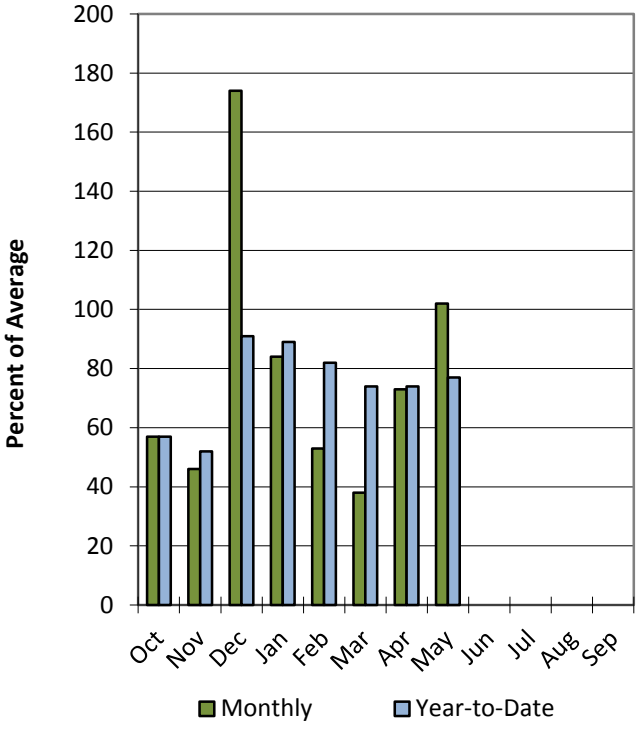
http://www.wcc.nrcs.usda.gov/scan/Utah/utah.html

Southeastern Utah Basin

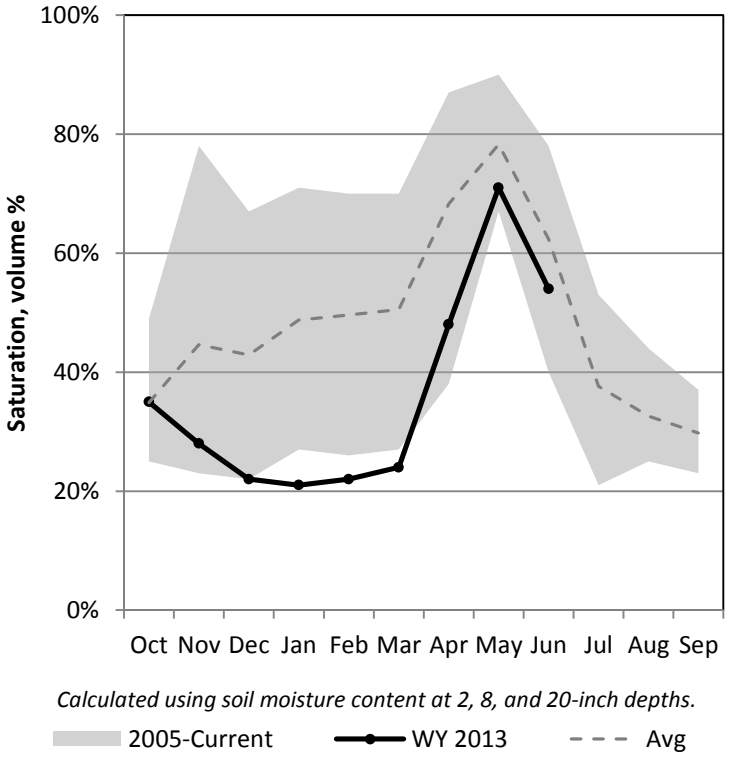
6/1/2013

Precipitation in May was near average at 102%, which brings the seasonal accumulation (Oct-May) to 77% of average. Soil moisture is at 54% compared to 41% last year. Reservoir storage is at 26% of capacity, compared to 52% last year. The water availibility index for Moab is 4%.

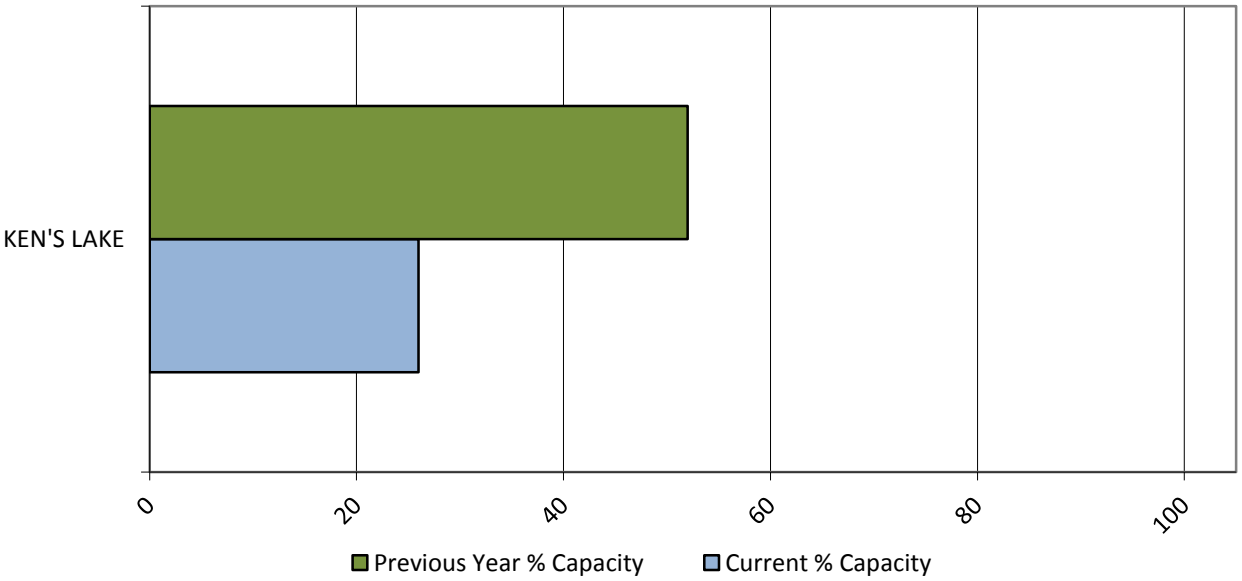
Precipitation



Soil Moisture



Reservoir Storage

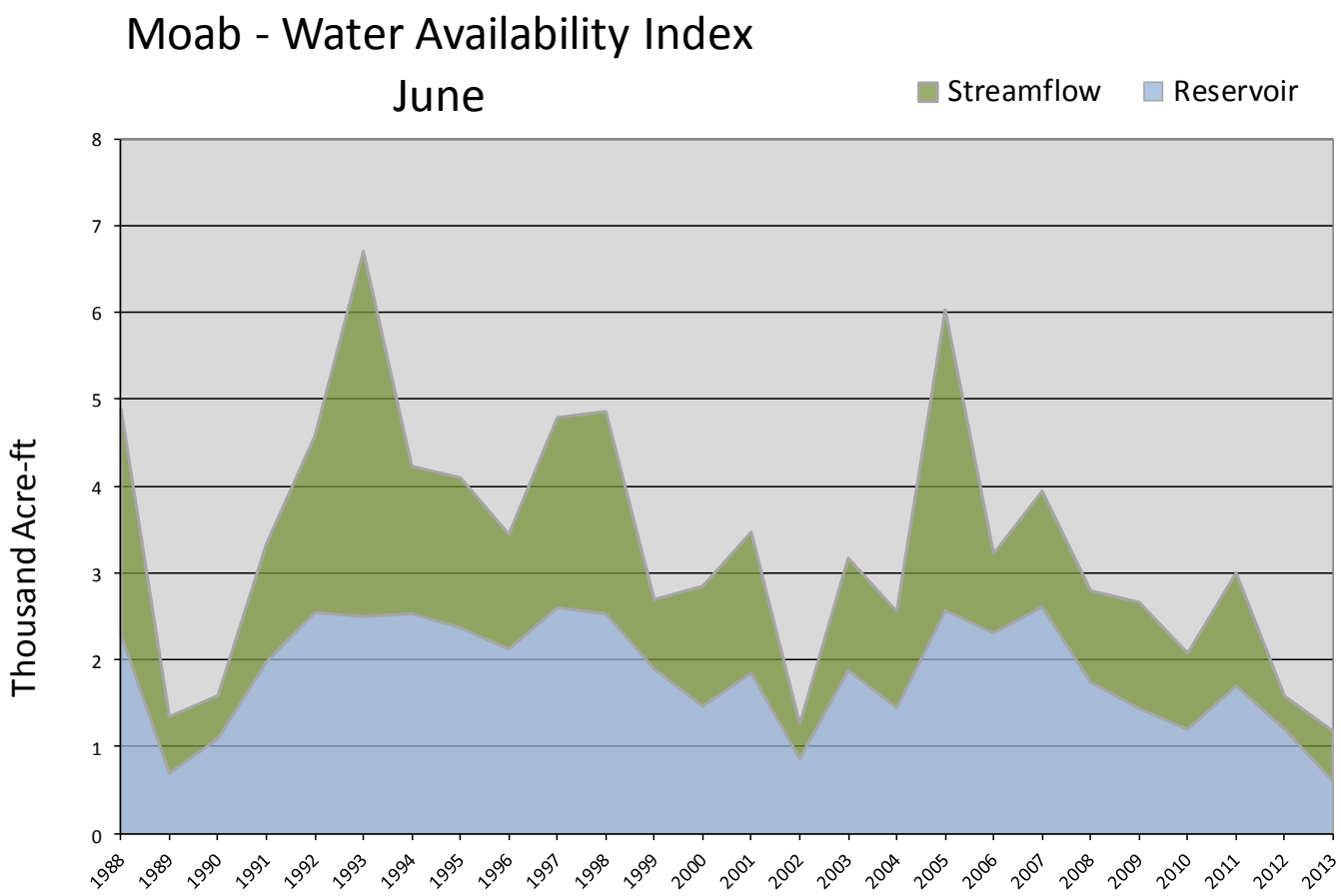


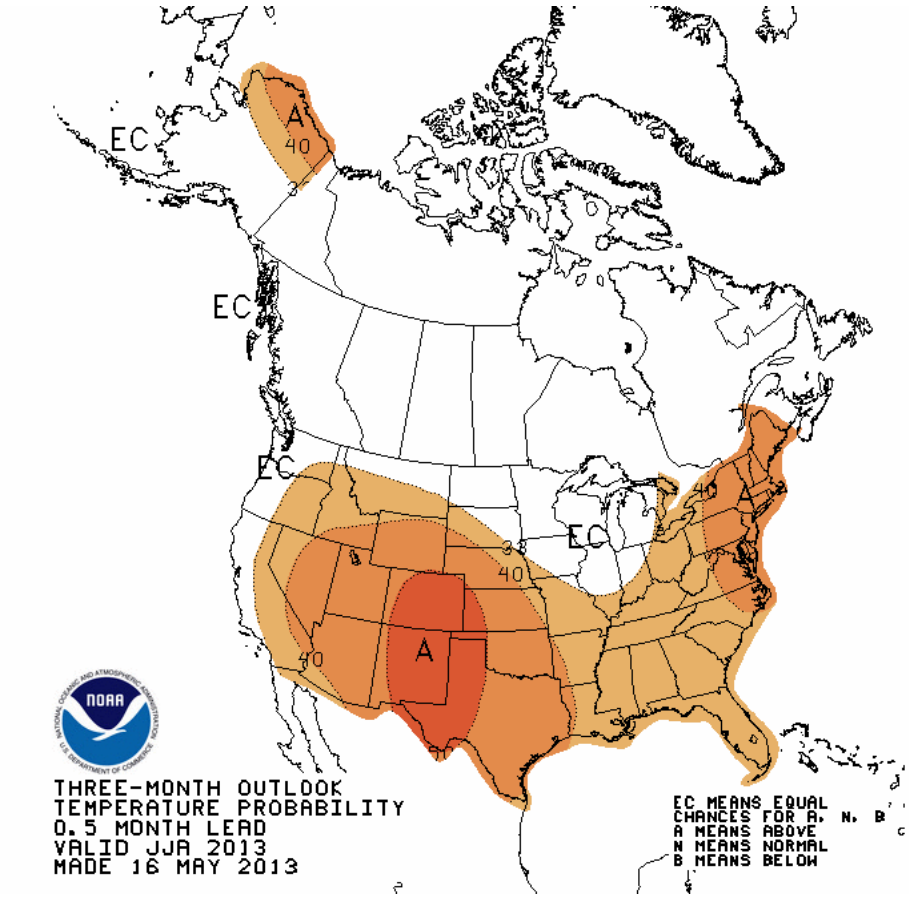
June 1, 2013

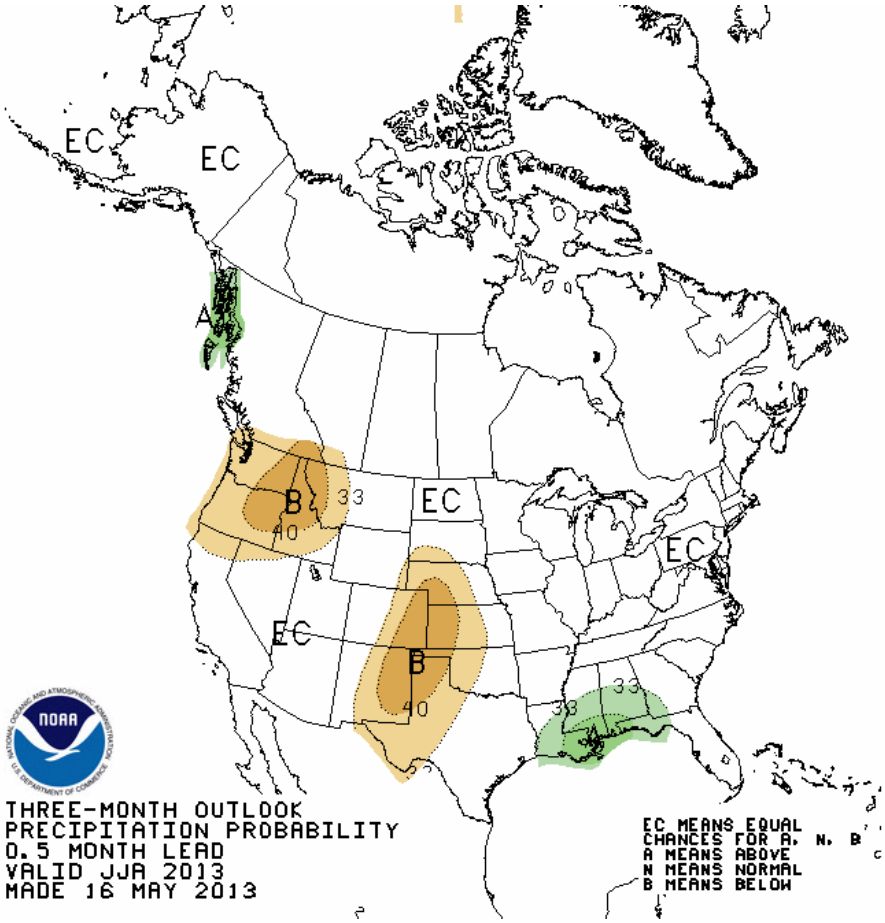
Water Availability Index

Basin or Region	May EOM* Ken's Lake Reservoir	May accumulated flow Mill Creek at Sheley (*observed*)	Reservoir + Streamflow	WAI#	Percentile	Years with similar WAI
	*KAF^*	*KAF*	*KAF*		*%*	
Moab	**0.6**	**0.6**	**1.2**	**-3.86**	**4**	**02, 89**

**EOM, end of month; # WAI, water availability index; ^KAF, thousand acre-feet.*




EC
A
40
EC
EC
EC
40
A
33
40
A
40
THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID JJA 2013
MADE 16 MAY 2013
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW


EC
EC
A
B
33
40
EC
EC
EC
B
40
33
33
THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID JJA 2013
MADE 16 MAY 2013
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

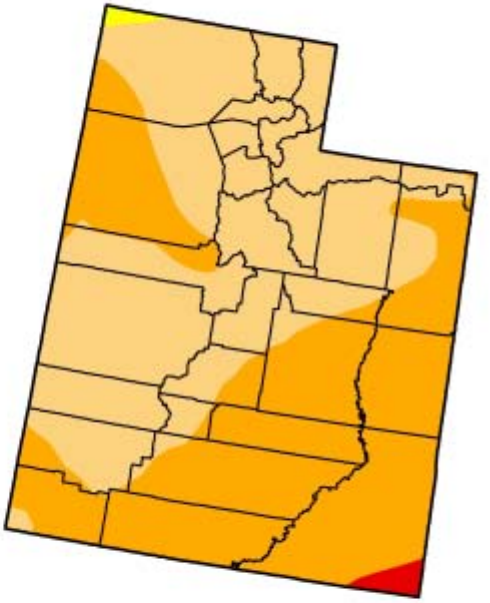
U.S. Drought Monitor

June 4, 2013
Valid 7 a.m. EST

Utah

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.60	47.83	0.81	0.00
Last Week (05/28/2013 map)	0.00	100.00	99.46	50.24	1.53	0.00
3 Months Ago (03/05/2013 map)	0.00	100.00	96.26	51.59	1.53	0.00
Start of Calendar Year (01/01/2013 map)	0.00	100.00	99.99	66.47	21.34	0.00
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	83.18	22.53	0.00
One Year Ago (05/29/2012 map)	1.05	98.95	85.57	41.24	0.00	0.00



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

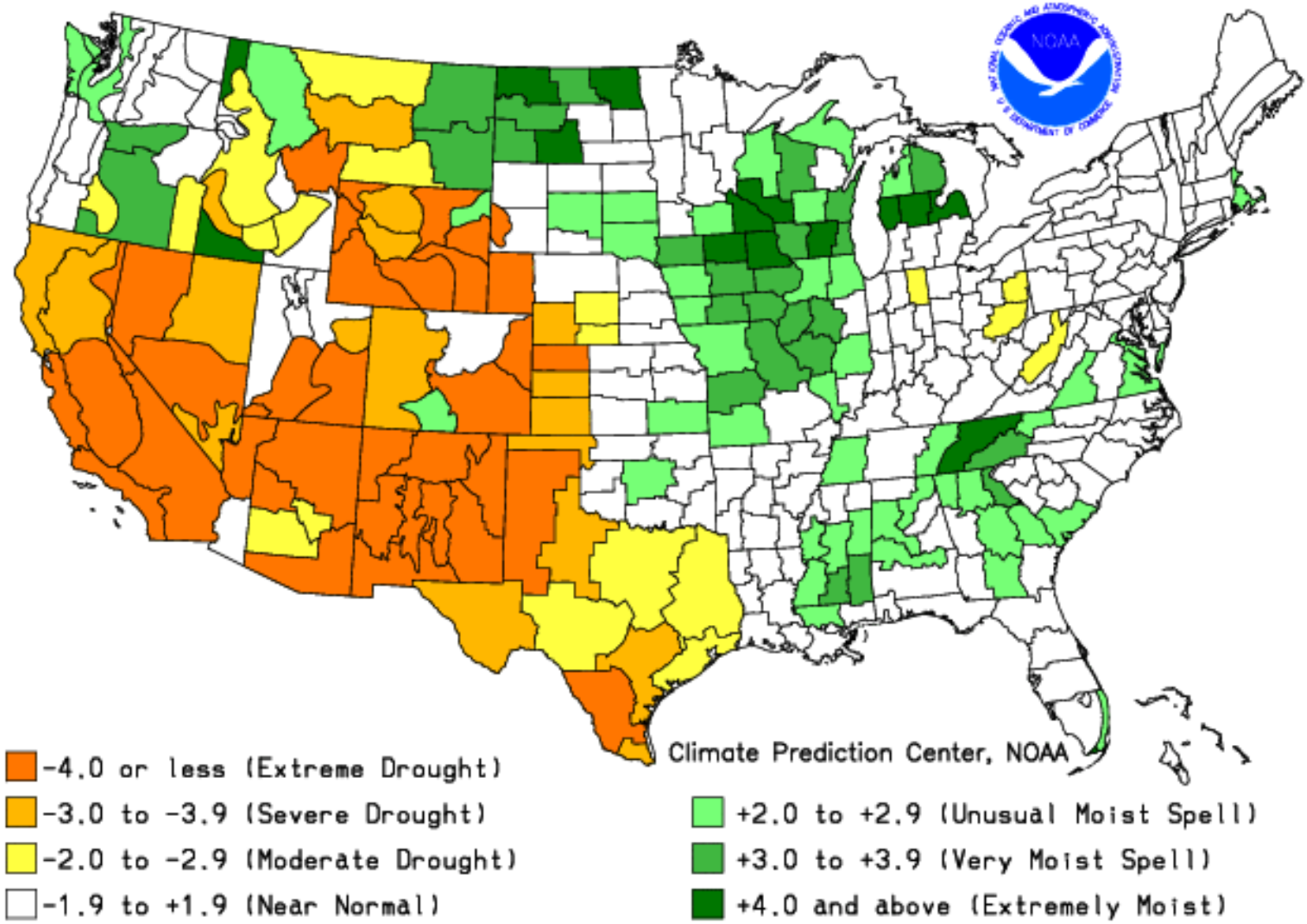
http://droughtmonitor.unl.edu

Released Thursday, June 6, 2013
David Simeral, Western Regional Climate Center

Drought Severity Index by Division

Weekly Value for Period Ending JUN 8, 2013

Long Term Palmer

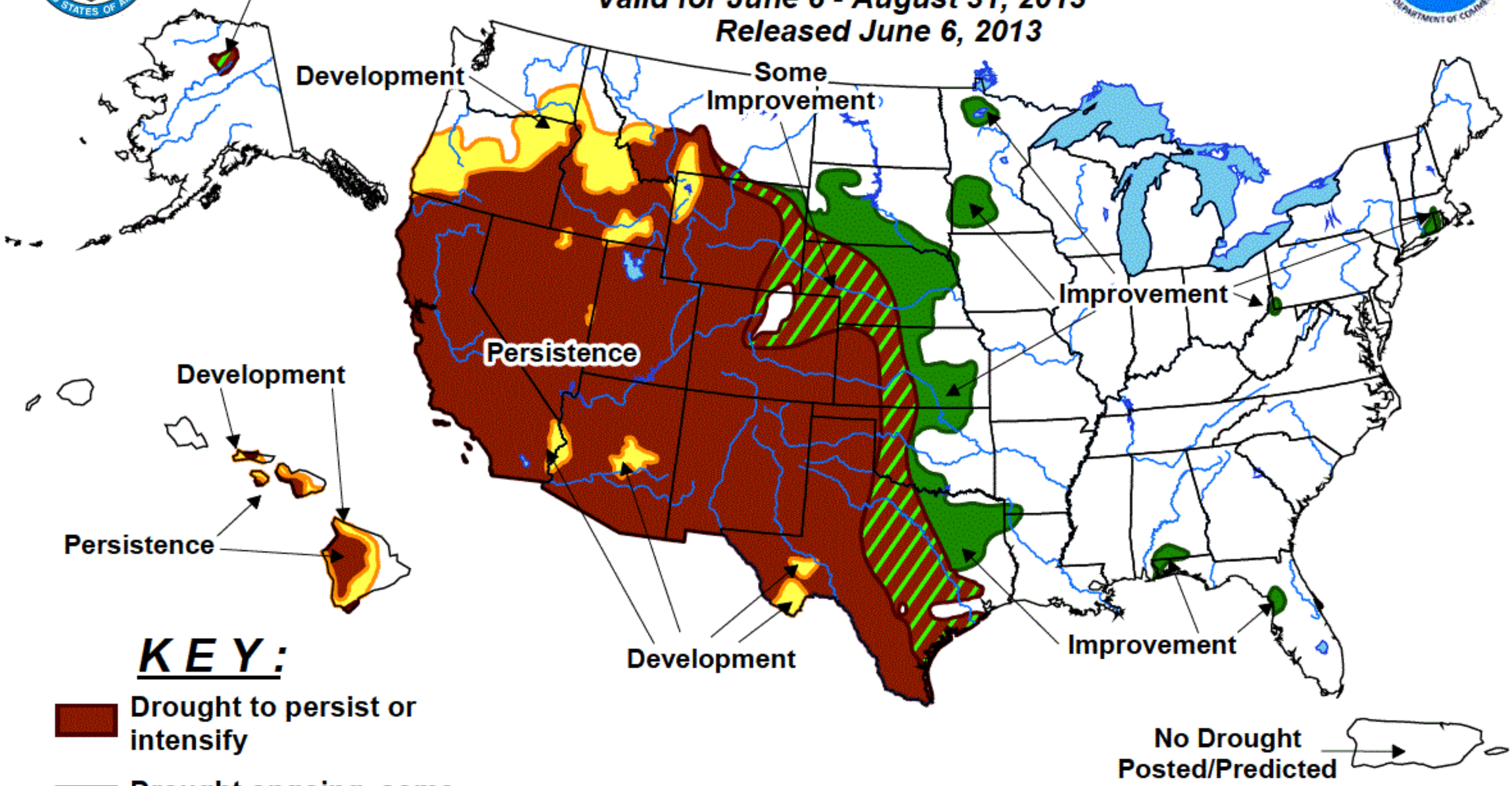


U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for June 6 - August 31, 2013

Released June 6, 2013



KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance. Use caution for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4 intensity). For weekly drought updates, see the latest U.S. Drought Monitor. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.