

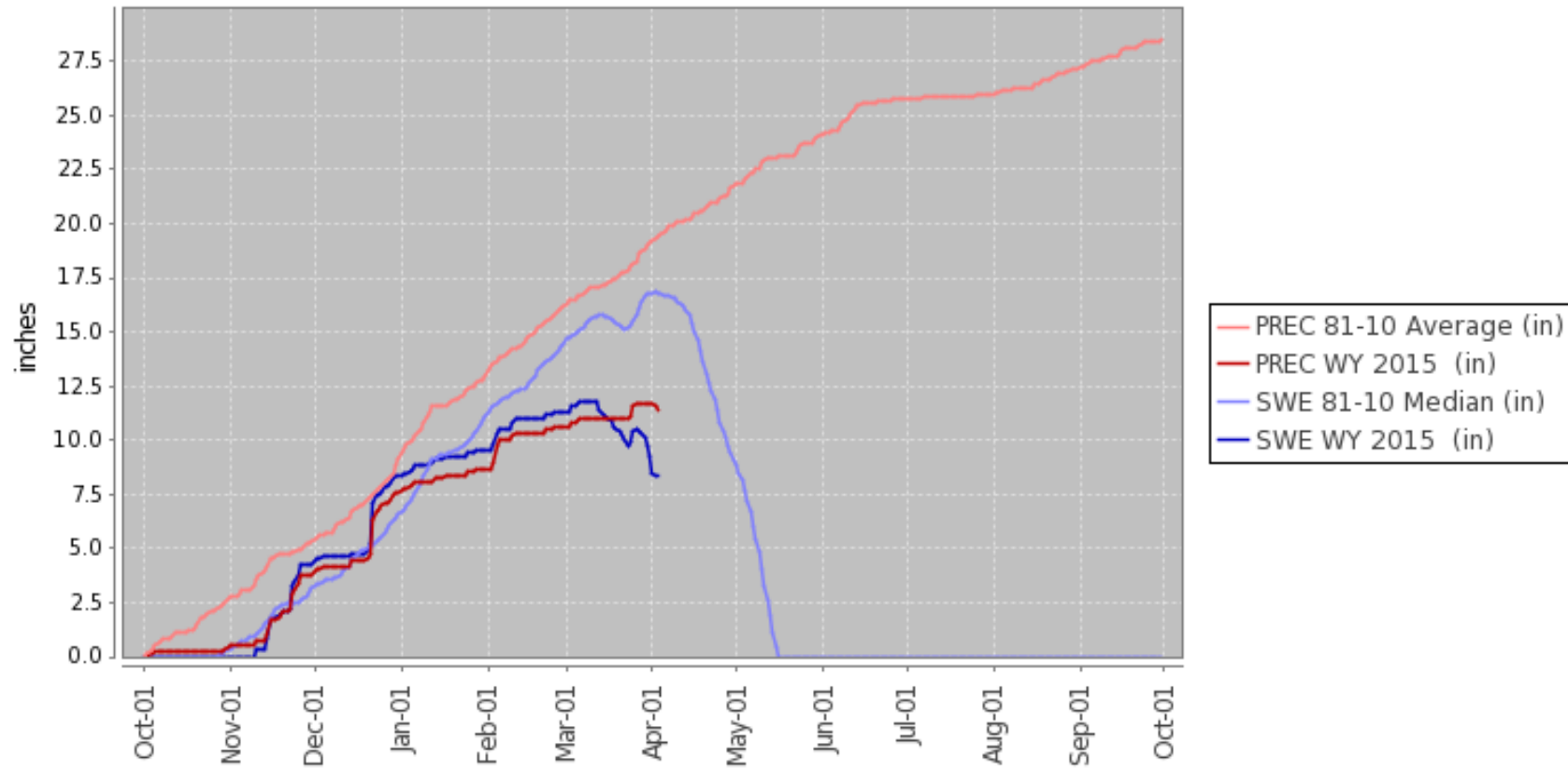
CHWA 2015 Annual Meeting

2015 Water Outlook and Management Policies and Plans

2015 Water Outlook

- ▶ The water outlook for 2015 is one of concern. NRCS Hydrologist, Randy Julander, has stated this is the 3rd worst Utah water year on record, behind 1932 and 1977.
- ▶ The Logan River flows at this time are similar to the flows last year at the end of July.

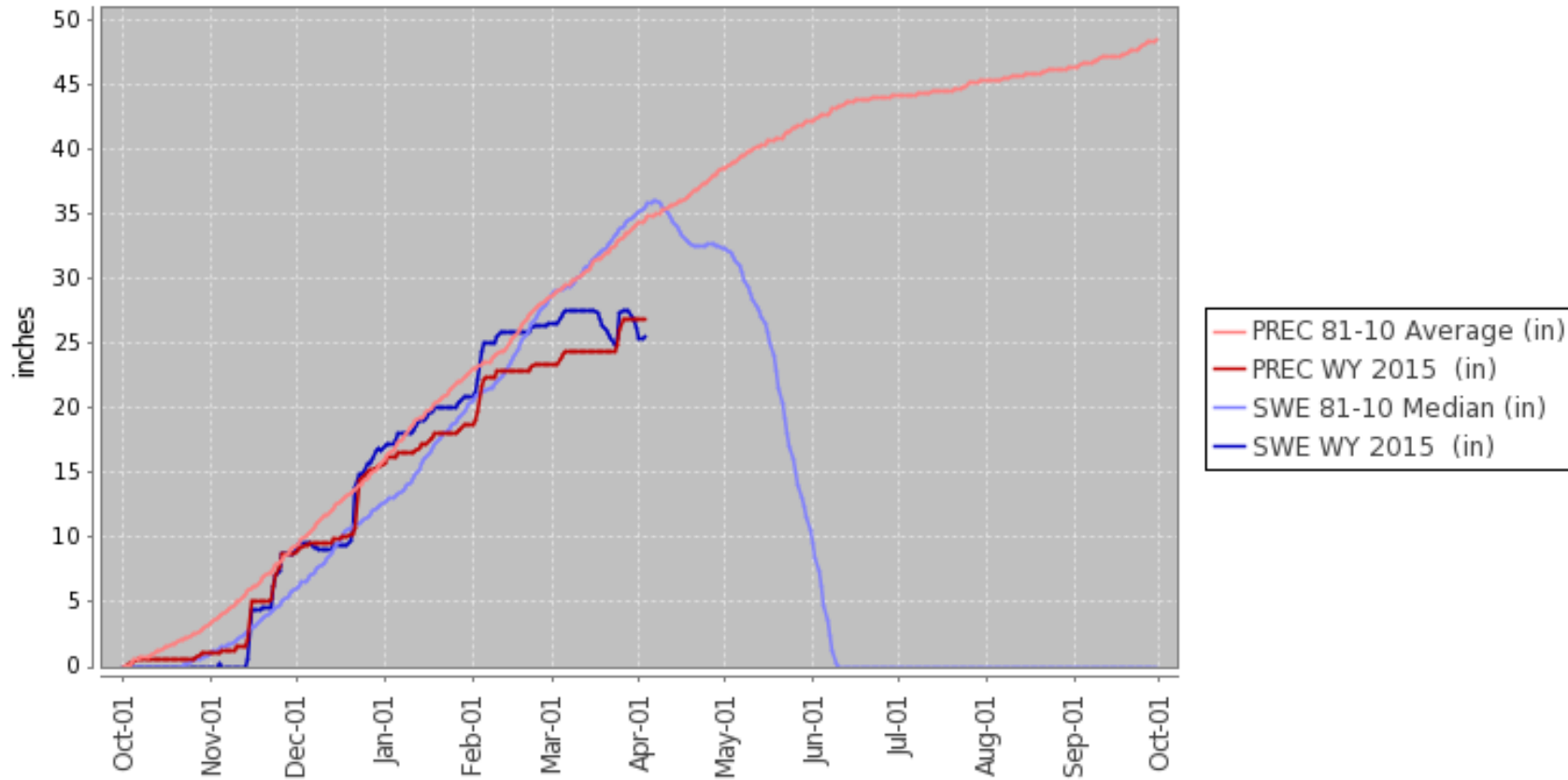
Station (1013) WATERYEAR=2015 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision
Fri Apr 03 10:51:06 PDT 2015



Temple Fork Snotel Site

Approximately 48% of average Snow Water Equivalent (SWE)

Station (823) WATERYEAR=2015 (Daily) NRCS National Water and Climate Center - Provisional Data - subject to revision Fri Apr 03 10:41:25 PDT 2015

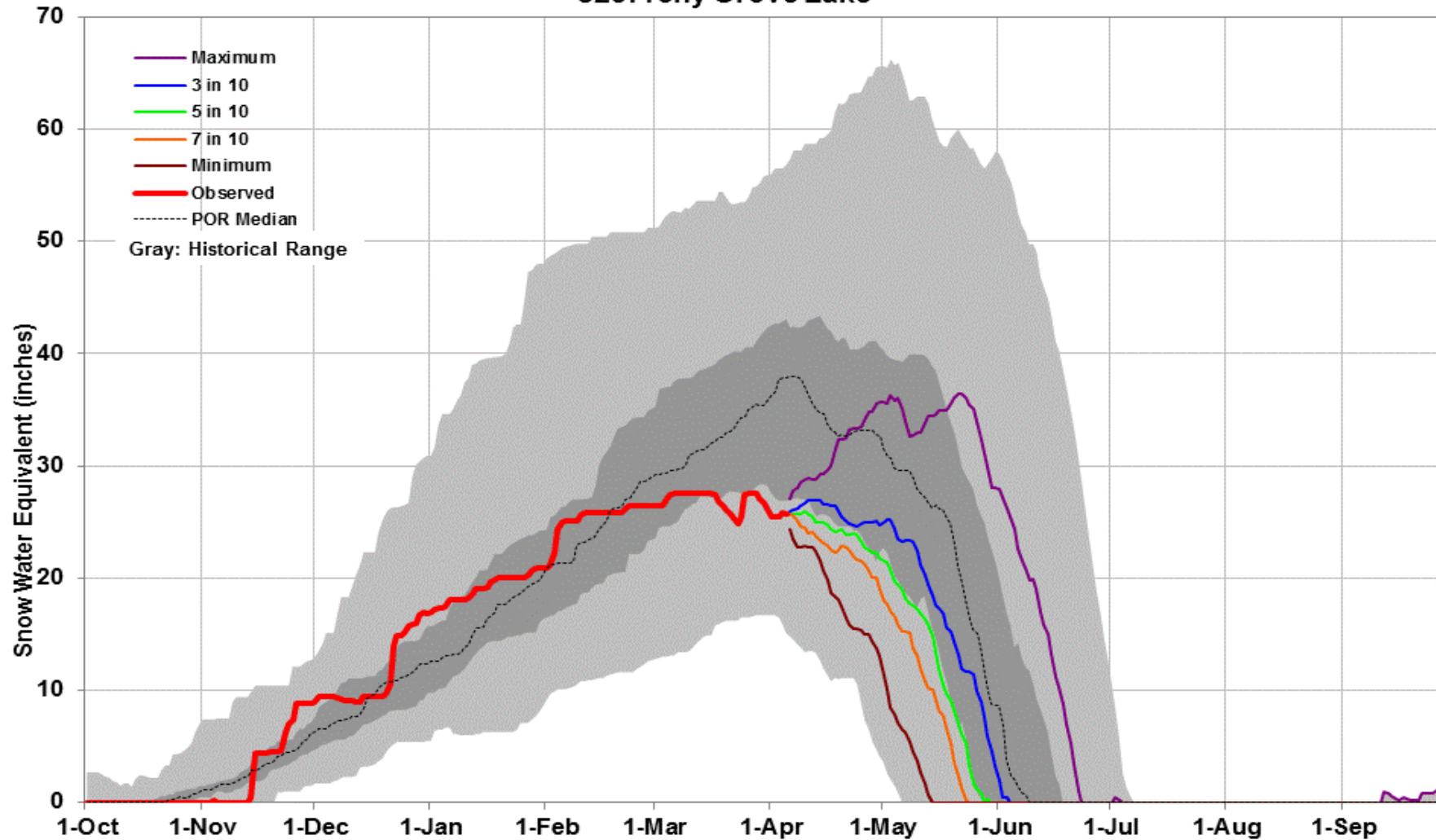


Tony Grove Lake Snotel Site

Approximately 70% of average Snow Water Equivalent (SWE)

823: Tony Grove Lake

Created: 08:43 PM Apr 05, 2015



Tony Grove Lake Snotel Forecast

Currently the forecast is for the Tony Grove Lake Snowpack to be gone one month earlier than average. (Somewhere between the magenta and orange lines).

CHWA Water Management Plan

- ▶ It will be important that the water is managed well this year to provide all shareholders with enough water for critical irrigation needs.
- ▶ For this and other reasons, every headgate or turnout must have a designated Responsible User and have supplied the Water Managers with a completed form, map showing the areas the water is used and a list of the shareholders using the water.
- ▶ Headgates or Turnouts without a designated Responsible User and completed documents will remain closed and locked until the Water Managers receive the completed documents (form, map, & list of shareholders).
- ▶ A good example of a completed Responsible User form with supporting documents is Upper Canal Headgate 100.
- ▶ The Water Managers will work directly with the designated Responsible Users to schedule the times each headgate can water. It will be the Responsible User's obligation to pass this information to the shareholders on their headgates.

Water Management Plan (cont.)

- ▶ The Water Managers' goals are to see that each headgate is delivered the water it is entitled to and to maintain a consistent flow in the canals. All shareholders are required to cooperate with the Water Managers to see that all shareholders receive their allotted water.
- ▶ Some shares owned by Cities are used as exchanges for culinary water to serve their citizens. It is important to CHWA and the Cities that flows are consistent day and night in order to meet these critical exchanges.
- ▶ CHWA does not have reservoirs to store its water. As that is the case, once the water passes the headgates it is gone. For this reason, the Water Managers will require residential landscape irrigation to be done during daylight hours.
- ▶ The Restoration Project installed ramp flumes (water measuring stations) near city boundaries to monitor flows, the water use in each city, and the storm water flows from each city. Last year the shareholders on the upper canal in North Logan used 2-3 times their allotted water. This year the upper canal in North Logan will be monitored closely to see that shareholders downstream receive their water.

Water Management Plan (cont.)

- ▶ As this will be a dry year, please do not waste water by leaving headgates or turnouts open when not irrigating during allotted times.
- ▶ If all shareholders will irrigate efficiently and use only what they are allotted, there will be water available even in dry years to maintain some crops and critical landscaping. (Turf grass is not considered critical landscaping).
- ▶ There are websites at the end of the presentation that will provide information to help with watering efficiently.
- ▶ The Cache County Extension Horticulturalist will be providing a free irrigation auditing program this year. This audit can help with developing the appropriate schedules for irrigation.
- ▶ “If things get REALLY desperate, getting the message out that just 1/2” of irrigation per month will keep Kentucky bluegrass alive. It will definitely go dormant at that irrigation rate, but it will survive and recover in the fall.”
Kelly Kopp, State Extension Turf Grass Specialist.

LOGAN RIVER WATER AVAILABLE TO CHWA SHARES BASED UPON KIMBALL DECREE

CHWA Shares = 7279

River Flow CFS	CHWA Flow CFS	Deliverable Flow CFS	CHWA One Share CFS	CHWA One Share GPM	Available Ga/Share/Day
100	43.1	34.48	0.0047	2.12	3059.29
110	47.8	38.24	0.0053	2.36	3392.90
120	52.5	42.00	0.0058	2.59	3726.51
130	57.4	45.92	0.0063	2.83	4074.32
140	62.1	49.68	0.0068	3.06	4407.93
150	66.9	53.52	0.0074	3.30	4748.64
160	71.7	57.36	0.0079	3.53	5089.35
170	76.4	61.12	0.0084	3.77	5422.96
180	81.3	65.04	0.0089	4.01	5770.77
190	86.0	68.80	0.0095	4.24	6104.38
200	90.8	72.64	0.0100	4.48	6445.09
210	95.6	76.48	0.0105	4.71	6785.80
220	100.3	80.24	0.0110	4.94	7119.41
230	105.4	84.32	0.0116	5.20	7481.42
240	109.9	87.92	0.0121	5.42	7800.83
250	114.7	91.76	0.0126	5.65	8141.54
260	119.3	95.44	0.0131	5.88	8468.05
270	122.3	97.84	0.0134	6.03	8681.00
280	127.0	101.60	0.0140	6.26	9014.61
290	127.0	101.60	0.0140	6.26	9014.61
300	141.6	113.28	0.0156	6.98	10050.93

Restrictions Begin

Maximum Flow 110 cfs

Websites for additional information on Efficient Water Use

- ▶ USU Weather Station with ET Data: <http://weather.usu.edu/htm/digital-data-summary>
- ▶ USU Extension Drought Website for Landscape Irrigation: <http://extension.usu.edu/drought/htm/landscape>
- ▶ CHWA River Diversion Flows: http://waterdata.usgs.gov/ut/nwis/uv?cb_00060=on&cb_00065=on&format=html&period=1&site_no=10108400
- ▶ Logan River Flows*:
http://waterdata.usgs.gov/nwis/uv?cb_00060=on&cb_00065=on&format=html&period=1&site_no=10109000
- ▶ * The Logan River Flow Station is downstream of the CHWA River Diversion Station. For total Logan River Flow the 2 stations are added together.
- ▶ Tony Grove Lake Snowpack Graph: <http://www.wcc.nrcs.usda.gov/nwcc/view?intervalType=View+Current+&report=WYGRAPH×eries=Daily&format=plot&interval=WATERYEAR&sitenum=823&wateryear=2013>