

Yellowstone River Compact Commission
Technical Committee Discussions
Sheridan County Courthouse, 2nd floor
Sheridan, WY
April 25, 2005

Begin 1:30 pm

1. Introductions

Everyone in attendance introduced themselves. A list of attendees is attached.

2. Recap of Commission meeting December 6, 2004

A Technical meeting was not held in December, 2004; information about water supply forecasting was deferred until this meeting.

3. Hydrological information from various sources:

US Geological Survey

Wayne Berkas handed out graphs of the various streamgages in the Tongue and Powder River basins. Water Year 2004 was the 2nd lowest in the period of record for Tongue River at Stateline at Decker. The Powder River at Locate gage was the lowest water year ever recorded.

Kirk Miller provided a graph for the Tongue River at Dayton. Water Year 2004 annual mean was the lowest of record. Water year 2002 and 2001 are the 2nd and 3rd lowest on record. On the Bighorn side of the mountains, the Kane gage on the mainstem of the Bighorn River is also setting record lows. The Shoshone River basin is also quite dry this year.

It was requested if additional gages could be reviewed for upcoming years and if a graph of annual flow over the period of record could be displayed.

Natural Resources Conservation Service

Roy Kaiser provided verification information for Water Year 2004 and Water Year 2005 forecast data for the Tongue River. Roy discussed the soil moisture model that is incorporated into the forecasts. NRCS plans call for additional probes to be added at

SNOTEL sites in the next couple of years. Runoff in 2005 may be a slight improvement over last year due to slightly improved soil moistures. Forecast amounts continue to decrease as precipitation continues to be below average.

It was noted that Lee Hackleman has taken the Snow Survey coordinator position in Wyoming, taking David Taylor's old job.

National Weather Service

Keith Meier had several graphs of past precipitation and temperature deviations over the past several months.

Jim Fahey presented a powerpoint show of the flood forecasting responsibilities of the NWS in the Riverton office.

4. Forecasts and runoff estimates

Included in the discussions under item #3.

5. Reservoir operations and storage information in both states

Jodee Pring and Mike Whitaker showed the reservoir information from the Powder-Tongue Water Planning document for the following facilities. All of this information can be located at <http://waterplan.state.wy.us>. The reservoir information is under Task 2.F. on that website.

Park Reservoir—Big Goose
Big Horn—Cross Creek
Cloud Peak—South Piney Creek—used in connection with Willow Park
Cross Creek Reservoir
Dome Lake No. 1 Reservoir
Healy Reservoir
Kearney Lake
Lake DeSmet
Muddy Guard No. 2
Sawmill
Tie Hack
Twin Lakes
Willow Park

Tongue River Reservoir Operations (MT): Kevin Smith
DNRC owns several water projects across the state and contracts are written to water users for storage water delivery. Tongue River Reservoir's total capacity is 79,080 AF and 40,000 AF in contracts have been negotiated, 20,000 AF is dedicated to the Northern Cheyenne tribe; the remainder is minimum and dead pool. The delivery period for storage water is May 1 to Sept. 30. Users usually don't call for water until July, but

this past year needed it in May. Decreed water users are specified in the 1914 Tongue River court decree. The priority date for the original reservoir is 1938. The enlargement for the Northern Cheyenne is considered a 1900 water right per the settlement document. The original capacity of the reservoir was 59,064 AF. The Settlement agreement subordinated the additional storage to existing uses. Full tribal development has not yet occurred, but some lease of that water is made to non-Indians. If the releases out of the Reservoir are below 50 cfs, stock access can be limited. This past year releases were decreased to 70 cfs to try and increase storage during the winter months. During times of more normal hydrology, the reservoir would be drafted during the winter to make room for flood control. In 2003, the reservoir filled and spilled. Tongue River Water Users operate to have the Reservoir full on July 4th. Tongue River water users have broken the river into 6 segments for delivery purposes and assessing conveyance losses. The river commissioners report every two weeks to the District court the amount of the decreed rights and the storage rights. The MT DNRC webpage shows release amounts as well as storage. Fish, Wildlife and Parks have an assigned instream flow (ISF) right with a priority date of 1978. If flows drop below the 90% percentile that the ISF is based upon, then the state is to release inflows. They are not obligated to draft storage to meet the release for ISF.

6. Report of meeting highlights and recommendations to Commission meeting 4/26/05

Sue and Keith re-capped the summary to be presented to the full commission meeting.

7. Set next meeting - Nov. 29 at 1:00p for technical meeting and Nov. 30 at 8:00a for Commission meeting
8. Other items??

Jack Stults commented that we have not gone the next step with taking the water supply information and trying to relate that to how many water rights will get filled and who will get turned off. We are seeing record low flows in the last 4 to 5 years. When we experience these low flows, the question is whether the small amount of water that is available is being distributed equitably.

Bill asked if the pre-1950 rights have been mapped and whether we know the locations in both states of all the pre-1950's. Pat described that very few post 1950 rights are in Wyoming's Tabulated Adjudicated Water Rights. Discussion was held of the small amount of early 1880 rights that are on in these water tight years.

Submitted by Sue Lowry 6/6/05

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List of attendees

<u>Name</u>	<u>Representing</u>	<u>Email</u>
Jodee Pring	WY State Engineer's Office	jpring@seo.wyo.gov
Mike Whitaker	WY State Engineers Office	mwhita@seo.wyo.gov
Loren Smith	WY State Engineers Office	lsmith@seo.wyo.gov
Carmine Loguidice	WY State Engineers Office	clogui@seo.wyo.gov
Roy Kaiser	NRCS – MT	roy.kaiser@mt.usda.gov
Jim Fahey	NWS/NOAA – Riverton, WY	james.fahey@noaa.gov
Joe Sullivan	NWS/NOAA – Riverton, WY	joe.sullivan@noaa.gov
Keith Meier	NWS/NOAA – Billings, MT	keith.meier@noaa.gov
Sarah Bond	MT Attorney General's Office	sbond@state.mt.us
Jack Stults	Montana Commissioner	jstults@mt.gov
Kevin Smith	MT DNRC	ksmith@mt.gov
Wayne Berkas	USGS – MT	wrberkas@usgs.gov
Christian Levine	MT DEQ	clevine@mt.gov
Kirk Miller	USGS – WY	kmiller@usgs.gov
Pat Tyrrell	Wyoming Commissioner	ptyrre@seo.wyo.gov
Bill Horak	USGS – Federal representative	wfhorak@usgs.gov
Jim Robinson	MT DNRC – WRD	jrobinson@state.mt.us
Keith Kerbel	MT DNRC – WRD	kkerbel@mt.gov
Art Hayes, Sr.	Tongue River Water Users	browncattle@rangeweb.net
Sue Lowry	WY State Engineers Office	slowry@seo.wyo.gov