

The state of the Arkansas

State Engineer's Annual Meeting
April 20, 2016

Steve Witte – Division 2 Engineer



COLORADO
Division of Water Resources
Department of Natural Resources

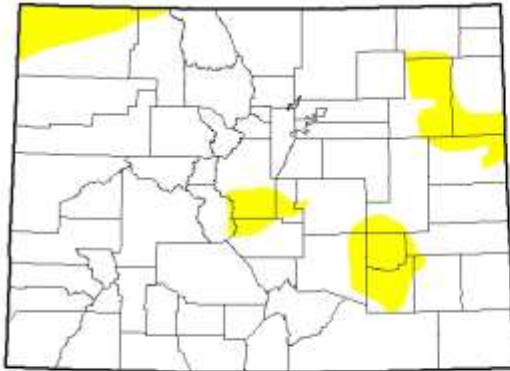
Topics

- Water Supply
- Regulatory Activities
- Water Court Involvement
- Efforts to Improve Administration

Water Supply

Drought Returns to SE Colorado

U.S. Drought Monitor Colorado



January 12, 2016
(Released Thursday, Jan. 14, 2016)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	89.99	10.02	0.00	0.00	0.00	0.00
Last Week 1/5/2016	90.02	9.98	0.00	0.00	0.00	0.00
3 Months Ago 10/12/2015	65.61	34.39	0.00	0.00	0.00	0.00
Start of Calendar Year 01/01/2016	90.02	9.98	0.00	0.00	0.00	0.00
Start of Water Year 10/01/2015	71.49	28.51	0.00	0.00	0.00	0.00
One Year Ago 01/12/2015	68.87	30.13	21.28	12.28	0.00	0.00

Intensity:



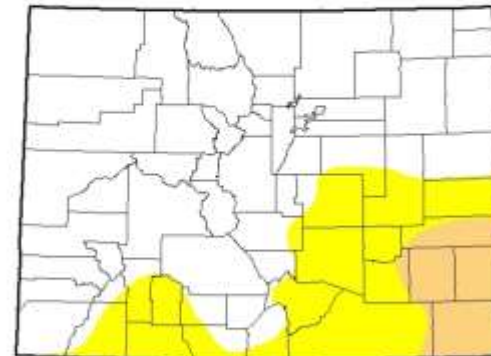
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Brian Fuchs
National Drought Mitigation Center



<http://droughtmonitor.unl.edu/>

U.S. Drought Monitor Colorado



April 5, 2016
(Released Thursday, Apr. 7, 2016)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	71.81	28.99	7.36	0.00	0.00	0.00
Last Week 3/29/2016	80.55	19.45	4.36	0.00	0.00	0.00
3 Months Ago 1/05/2016	80.02	9.98	0.00	0.00	0.00	0.00
Start of Calendar Year 01/01/2016	80.02	9.98	0.00	0.00	0.00	0.00
Start of Water Year 10/01/2015	71.49	28.51	0.00	0.00	0.00	0.00
One Year Ago 04/05/2015	25.43	74.61	81.74	30.72	0.00	0.00

Intensity:



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

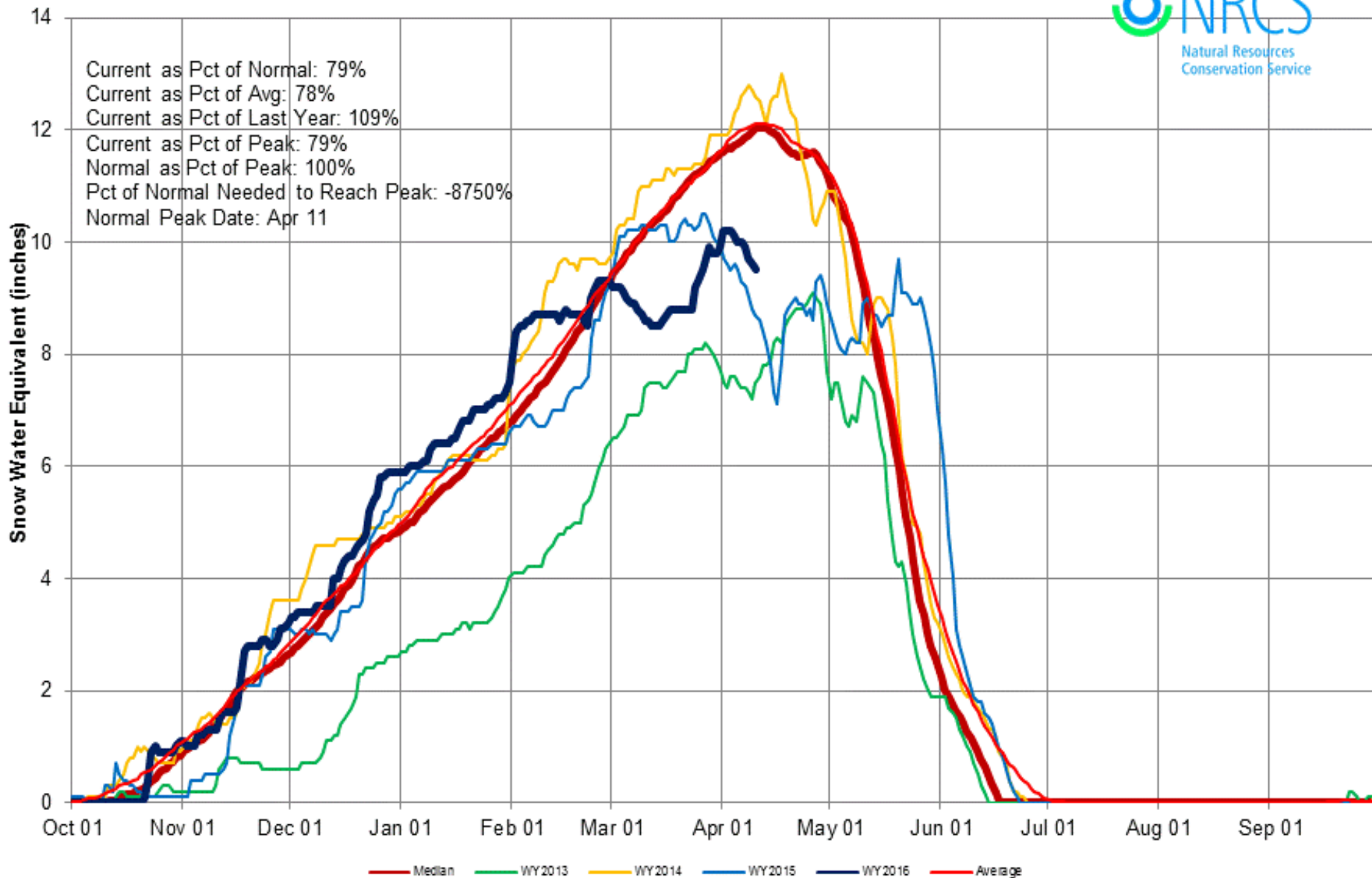
Author:
Richard Tinker
OPC/NDA/WHSNCEP



<http://droughtmonitor.unl.edu/>

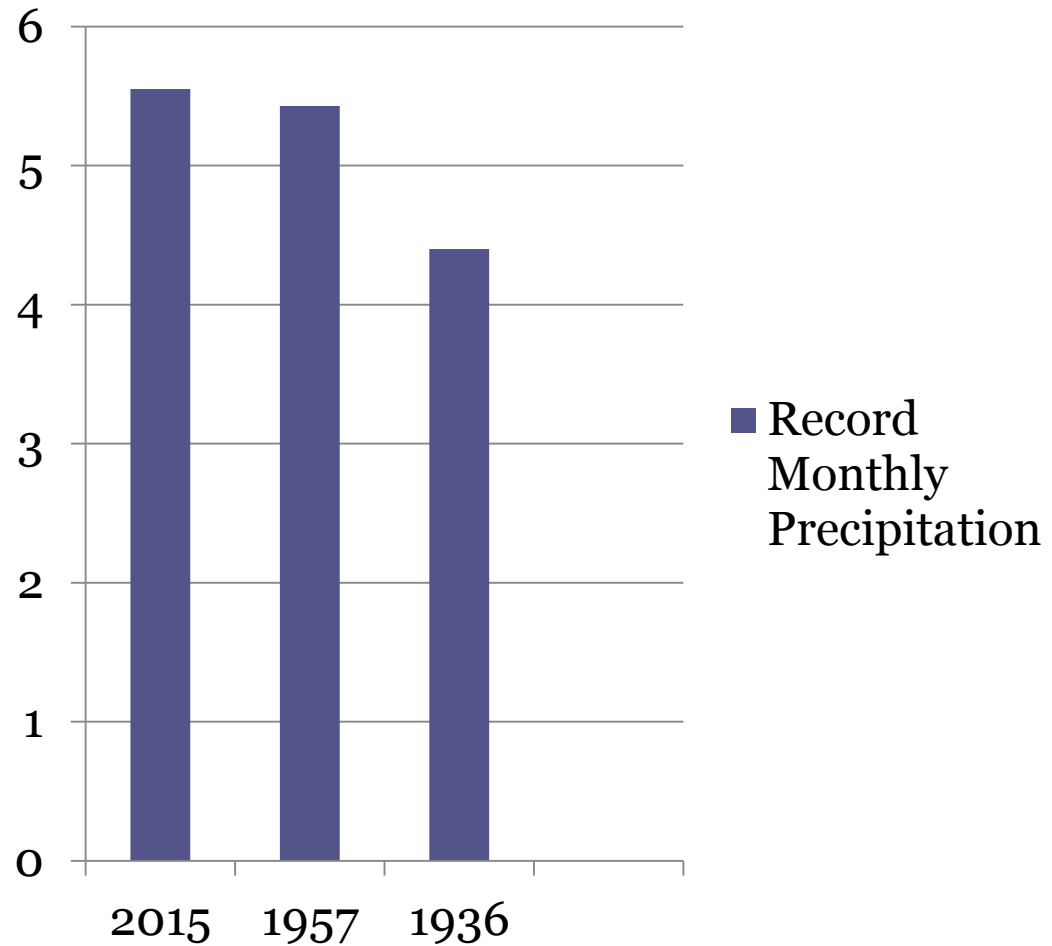
Arkansas River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of Apr 10, 2016



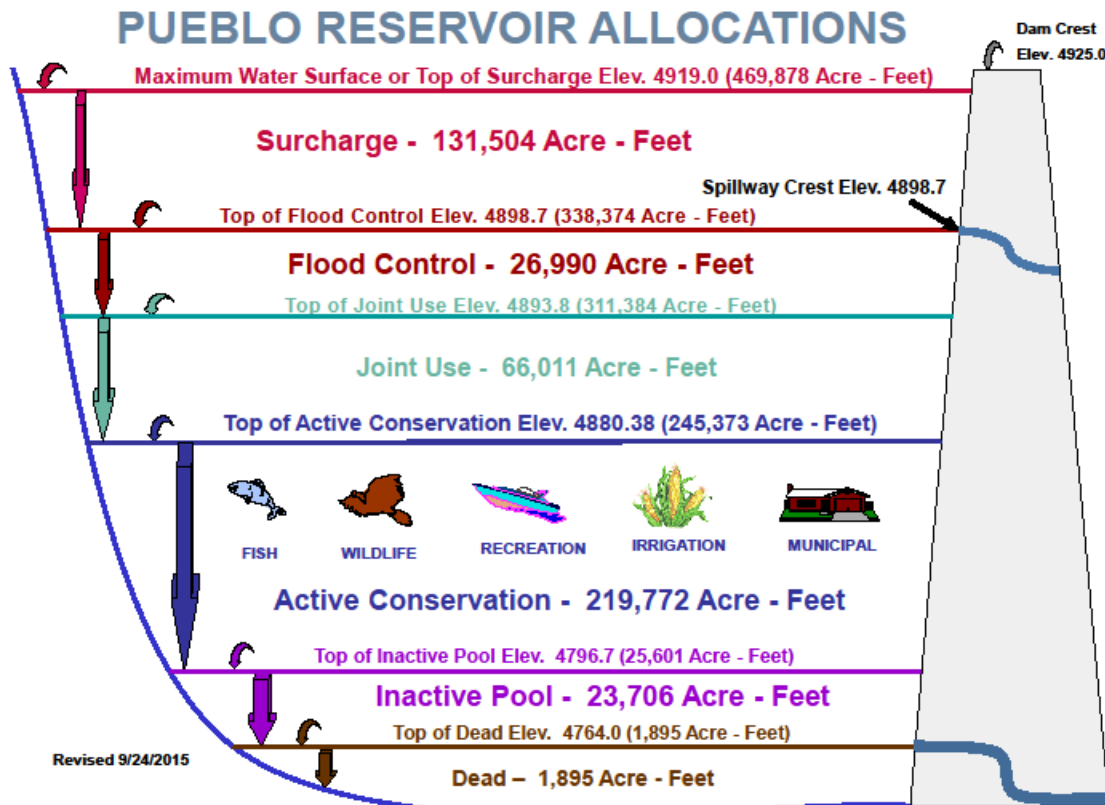
- **Miracle May 2015!**

Record Monthly Precipitation





• Pueblo Spill Risk Averted*



Essential Facts

Max Content $3/2 = 272,000$

Post 4/15 Limit = 245,373

17,700 I&W released
 (2600 to JM Perm Pool)

7,302 Winter Water released

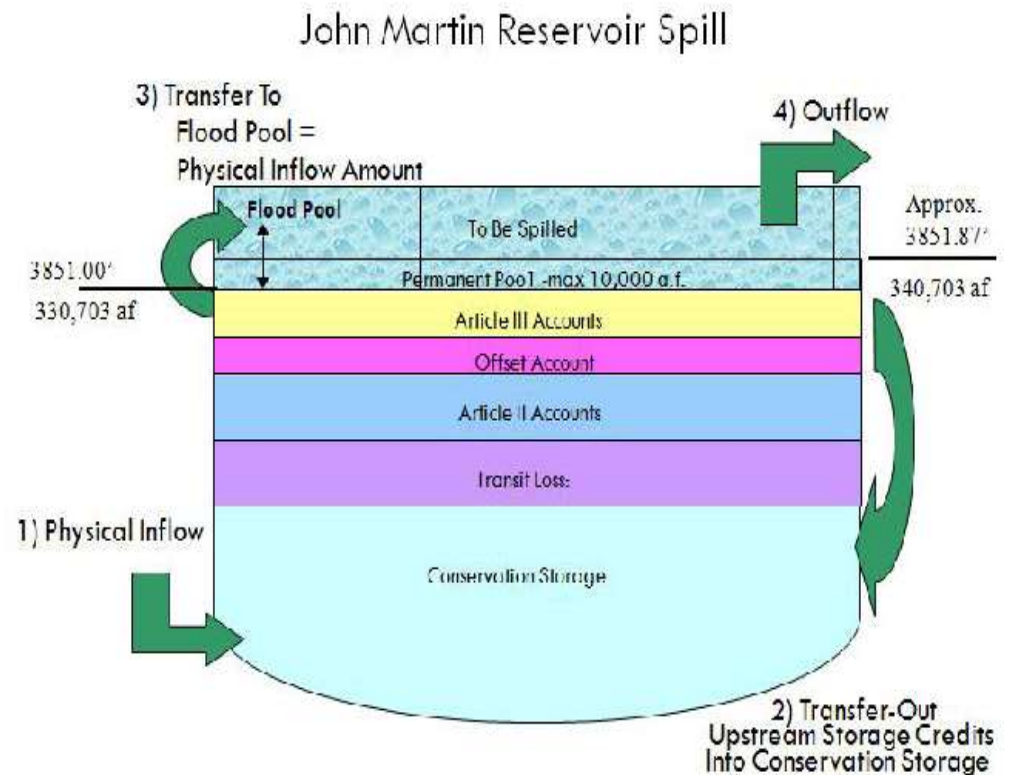
66,000 Winter Water remains

John Martin Reservoir

Perm Pool	7,729
Undistributed	22,333
Article III	33,388
Kansas	87,786
Transit Loss	1,680
Offset Acct.	6,291
Colorado	75,218
Total	234,425

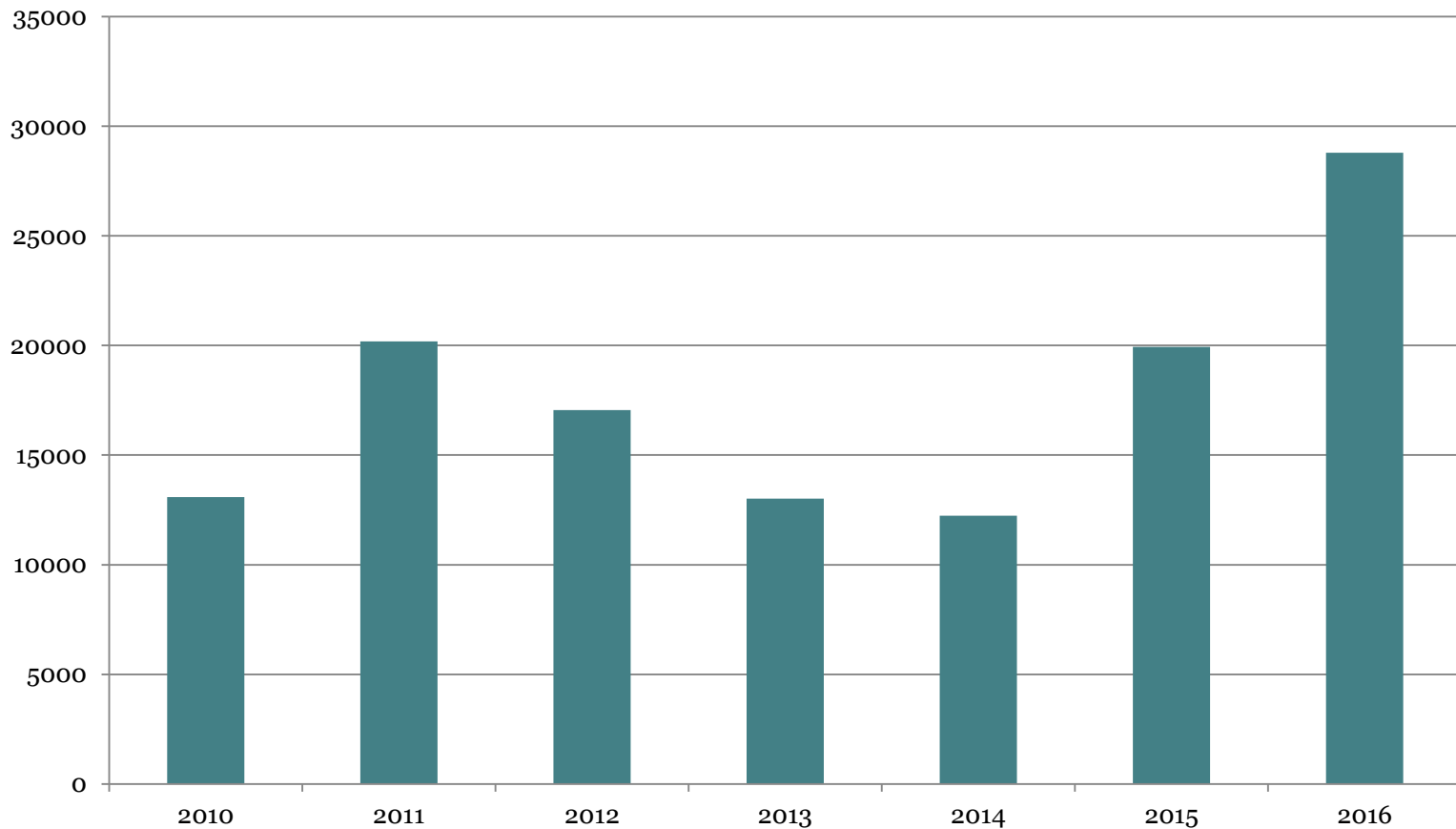
Conservation 330,703

Avail. Capacity 104,004

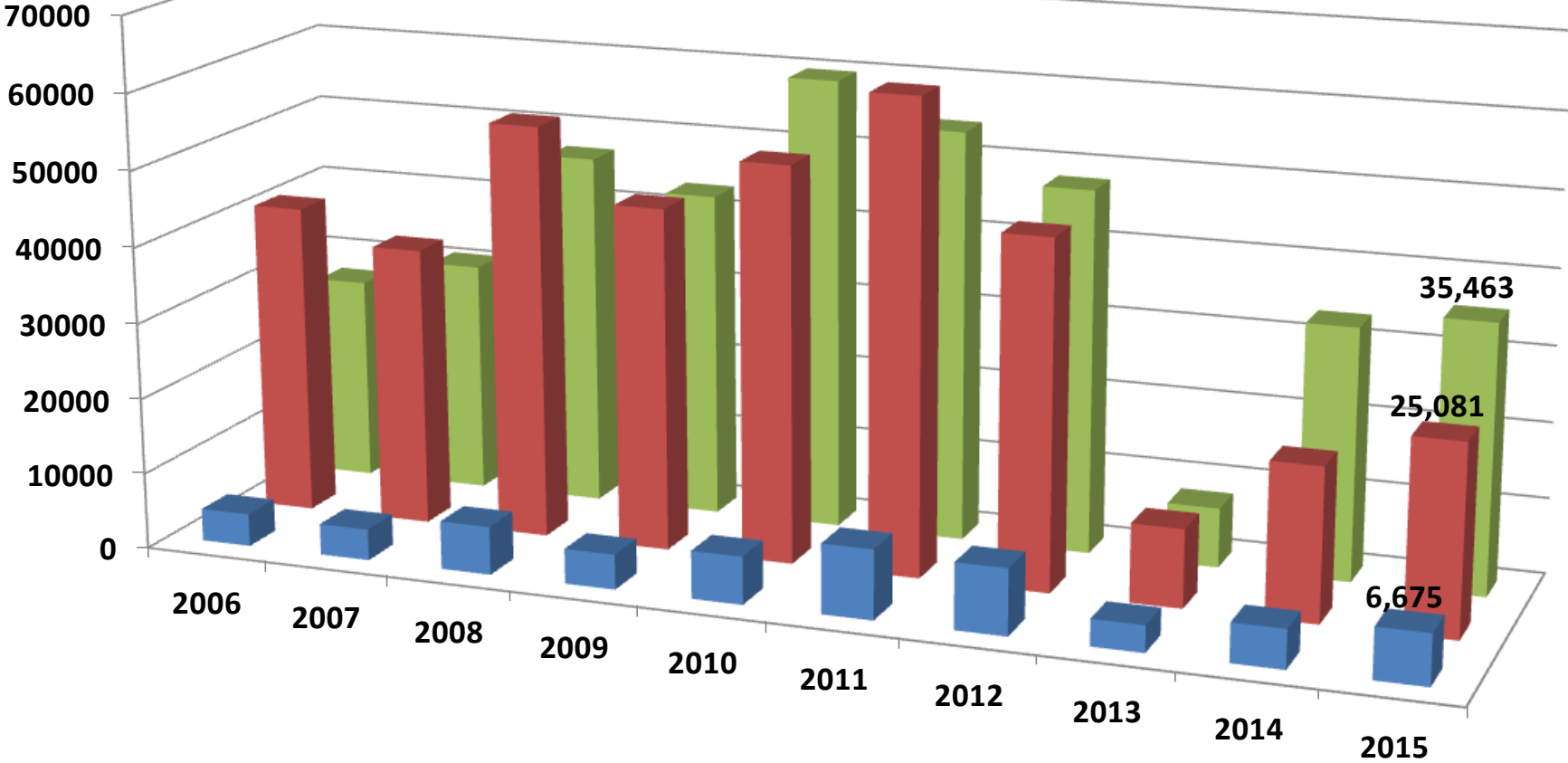


Trinidad Reservoir

Trinidad April 1 Content



Rule 14 Well Pumping



AGUA CWPDA LAWMA

8,418 32,060 47,600

Ten-year Accounting of Depletions and Accretions to Usable Stateline Flow
(Current Calibration)
2005-2015

Year of Ten-year Cycle	Year	HIM Results	Offset Account Credits				Net Credit	Total
			Delivery to Kansas	Evap Credit	Gross Credit	Applied to Post85 Depl		
Removed	1997	9942	2074	0	2074	542	1532	8410
Removed	1998	2703	0	0	0	663	-663	3366
Removed	1999	-4500	0	0	0	45	-45	-4455
Removed	2000	2022	1277	17	1294	964	330	1692
Removed	2001	12116	1714	62	1776	352	1424	10692
Removed	2002	8525	2098	22	2120	222	1898	6627
Removed	2003	3299	0	0	0	210	-210	3509
Removed	2004	-3442	6565	1850	8415	260	8155	-11597
Removed	2005	-2039	11220	93	11313	607	10706	-12745
1	2006	-1493	8507	0	8507	619	7888	-9381
2	2007	-301	6650	0	6650	1025	5625	-5926
3	2008	-2198	11617	0	11617	1288	10329	-12527
4	2009	-148	5511	0	5511	1256	4255	-4403
5	2010	410	10241	0	10241	1548	8693	-8283
6	2011	1841	6436	0	6436	1717	4719	-2878
7	2012	4044	0	0	0	1479	-1479	5523
8	2013	2594	0	0	0	1505	-1505	4099
9	2014	4332	2728	0	2728	1635	1093	3239
10	2015	3000	2695	0	2695	2603	92	2908
10yr Total		12081	54385	0	54385	14675	39710	-27629
	Shortfall for 2016							0

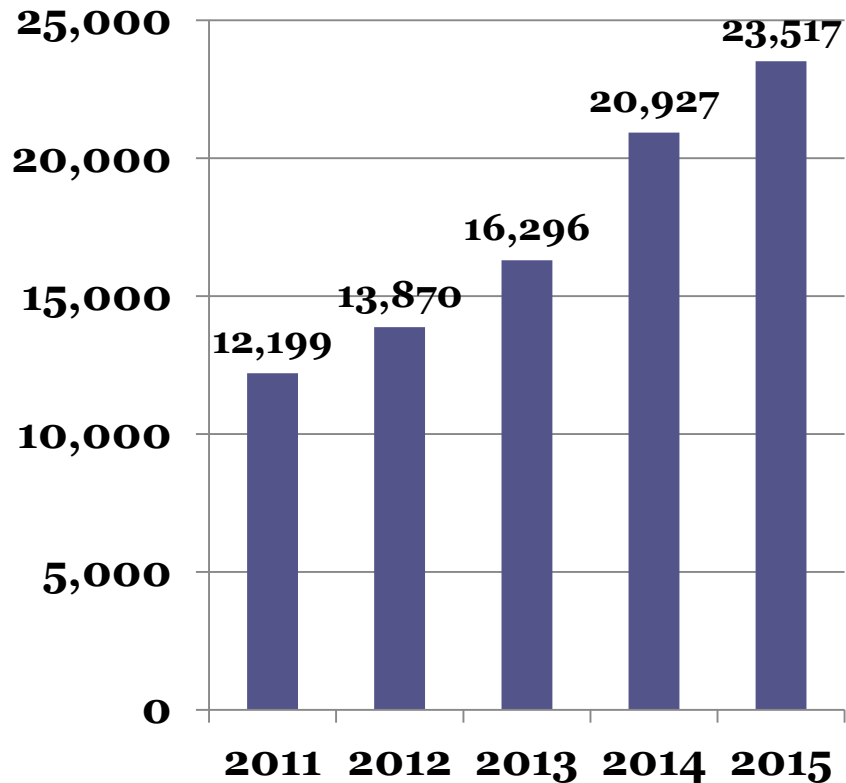
2006-2015
27,629 – 10 yr
credit



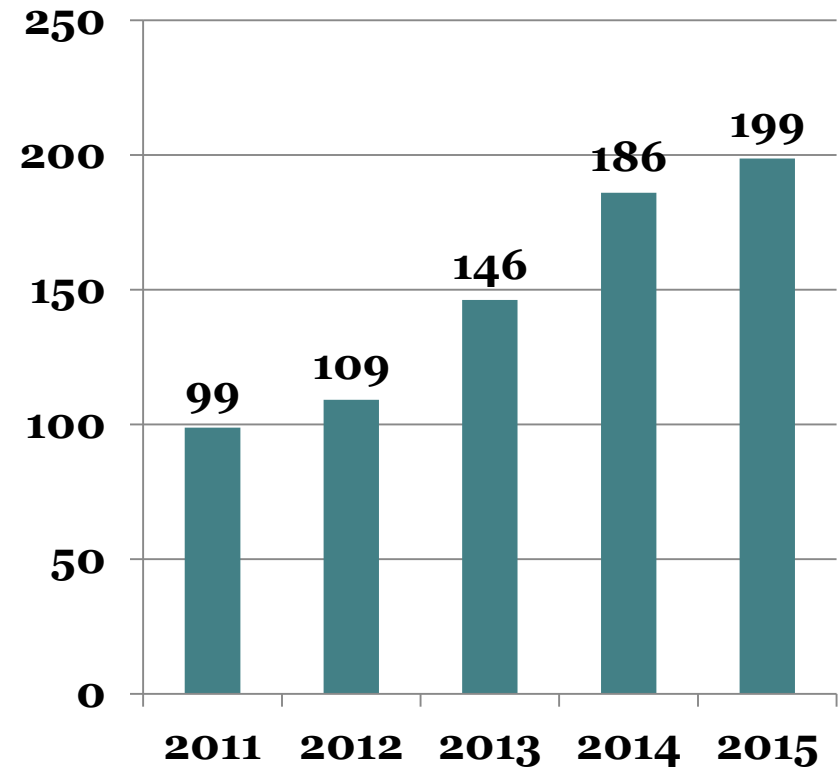
NOTES: 1. In the columns with values in red, a positive value is a depletion and a negative value is an accretion.
In the columns with values in black, a positive value is a credit/accretion and a negative value is a depletion

Surface Water Improvement Rules

**ACRES IN SPRINKLER
IRRIGATION BY DITCHES
BY YEAR**



**ACRES IN DRIP
IRRIGATION BY DITCHES
BY YEAR**



Regulatory Activities

For some, the temptation to cheat was just too great.



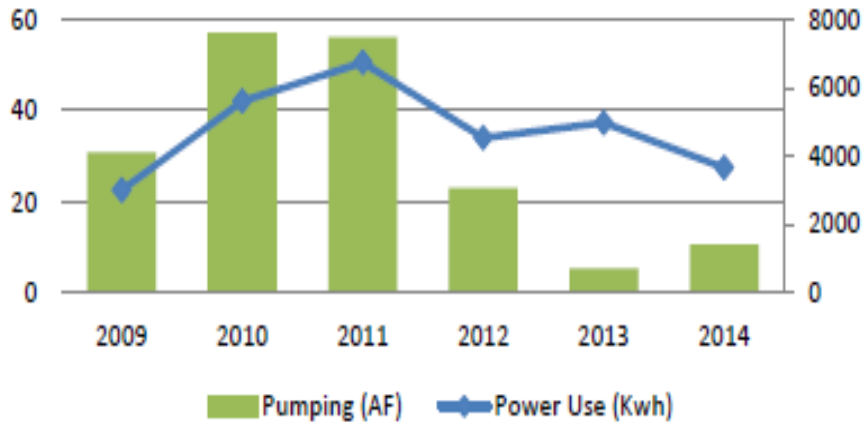


Evidence Relied Upon

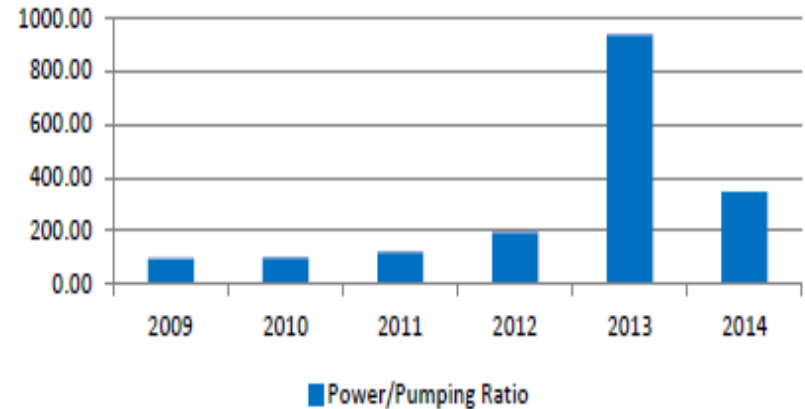


Evidence Relied Upon

Power Use and Reported Pumping



Ratio of Power Use/Reported Pumping



The end result

- Physical evidence
 - Photograph taken by a third party
 - Readily accessible rebar
 - Rust stains
 - Damaged impellers
- Unexplained increase in power consumption relative to reported pumping
- Testimony of a former irrigator
- Admission of guilt
- An injunction
- Penalties of \$15,400
- Reimbursement of costs and fees \$28,500
- \$43,900 total is less than the amount that might have been awarded at trial, but nonetheless a significant deterrent against future violations

Riss Reservoirs





Cucharas #5

- Partially failed in 1987
- Classified as High Hazard
 - Crest @ g.h. = 135
 - Silt @ g.h. = 84
 - Cap. @ spill = 7400 af
 - 100 yr Q = 120,000 cfs
 - Cap. @ crest = 70,000 af
- Dam breach order issued 2/19/15 with 6/30/15 deadline
- Complaint to enforce order filed
- Trial set for August 2016
- Disputes ordered to mediation

Water Court Involvement

Role of the State and Division Engineers in Water Court Process

- Legislature charged State and Division Engineers with duty of advising the Court on every water court application
- Requires DE to consult with Referee and file a summary report
- Provides that the State Engineer
 - May file Statements of Opposition and in Protest or Support of Referee
 - Shall file report* and appear if case is re-referred.



Division 2 Stats - Water Court for 2015

- Cases filed - 97
- Consultation Reports filed - 112
- Statements of Opposition filed – 1
- Starting Case load - 50
- Cases resolved by stipulation – 21
- 12/31/15 Case load – 30
- Current Case load - 25

Some things are changing

Division 2

- Joint renewed effort to reduce case backlog
- Increased effort to solicit input on each application from field staff and SEO staff
- Draft Consultation Reports sent to Referee in advance of consult
- Renewed effort to comprehensively raise concerns in consultation reports
- Avoid S.O. in most cases
- Monitor Referee Rulings & intervene as necessary

Statewide

- Introspection and public outreach on the proper role of DWR in court process
- Attempting to define criteria or guidance for Divisions regarding when to file S.O.
 - Compact Issues?
 - Large Quantities?
 - Administerability?
 - Matters affecting Integrity of Prior Appropriation Doctrine?

Some things are changing

Why?

- Pushback from Litigation Success?
 - 09SA352 – Upper Yampa WCD
 - SB13-041; 1 Fill = Absolute
 - 05SA120-121 – “Jones Ditch”
 - SB13-074; Legacy Ditch Bill
 - 14SA12 – Sedalia
 - SB15-183; One Quantification
- Philosophic stance on proper role of government?
- ????????

Take-aways

- Consultation Reports now warrant greater attention
- Don't rely on the SEO to defend your interests in court
- Long established legal principles are increasingly at risk in the current political environment

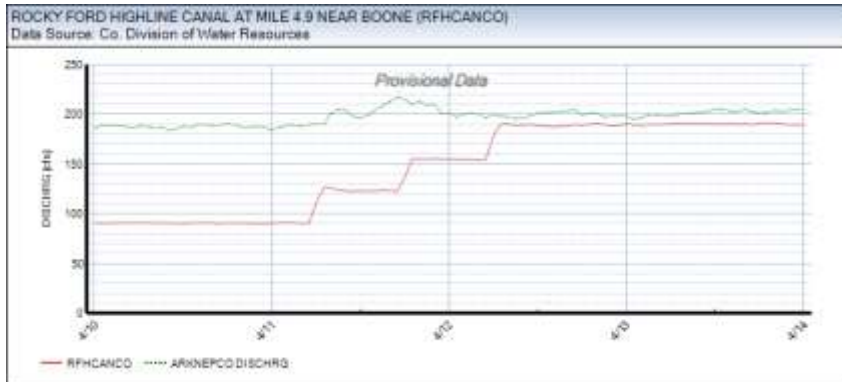
Some things that may affect your future

- Work of the Supreme Court's Water Court Rules Committee
 - Water 101 Revisited – CLE 5/13/16
 - New Rule 12 – Abandonment Procedures Rule
 - Water Court / SEO Conference

Administration & Innovation

Efforts to do what we do...better

- Staged deliveries of reservoir releases
- Advanced water control devices



Infrastructure to move water from A to B



Fort Lyon's Horse Creek Flume

Bigger and Better things to come:

- Southern Delivery System
- Arkansas Valley Conduit

Continued Development of Regulatory Programs for the Marijuana / Hemp Industry in Division 2

- We limit regulatory efforts to licensed grow facilities
- Developing relationships with County permitting officials
- 2015 Written Instruction
- Currently w/ SE Instruction 15-1:
 - 32 Water Haul growers
 - 16 Mixed Source growers
 - 21 SWSPs approved
 - 5 SWSPs pending
- AGUA has reached its allocation limit (308 af @ \$1100/af)
- PBWW leases available 800 af, 10 af min. for 10 yr term @ \$1000/af



Alternative Transfer Methods



Catlin Pilot Lease-Fallowing Project

- Co-Applicants
 - Lower Arkansas Valley Super Ditch Company
 - Lower Arkansas Valley Water Conservancy District
- 5 Catlin Canal farms totaling 902 acres and 1,047 shares
 - Acres: 235 fallow / 902 total
 - Shares: 252 fallow / 1,047 total
- Municipalities:
 - Fowler = 100 AF
 - Fountain = 154 AF
 - Security = 154 AF
 - Total = 408 AF

Under Development...

- Huerfano County Water Storage Collaborative Program
- Huerfano Infrastructure Improvement Project
- Purgatoire Infrastructure Improvement Project
- Exchange / Release Transparency Initiative
- Upper Arkansas Multi-use Project
- ARCA SEC to Consider other Permanent Pool Sources & Multi-use Account in John Martin Res.
- Fountain Cr. Flood Control Eval. (Compact issue)
- ARKDSS is coming!

Thanks to the people of DWR and the people we attempt to serve, I believe the state of the Arkansas is in good hands and will remain so, so long as a spirit of cooperation and good will is preserved.

Best Regards,
Steve