

Annual Report - 2015



COLORADO

Division of Water Resources

Department of Natural Resources

Division 1, South Platte River Basin

- *Miracle May* of 2015, precipitation at 300% of normal
- Free river conditions over most of the year
- Well Measurement Rules became effective 12/31/2015

Horsetooth Reservoir

Division 2, Arkansas River Basin

- Miracle May provided 5.5 inches of precipitation in Pueblo alone
- Pueblo Reservoir Spill averted
- Surface Water Improvement Rules in effect



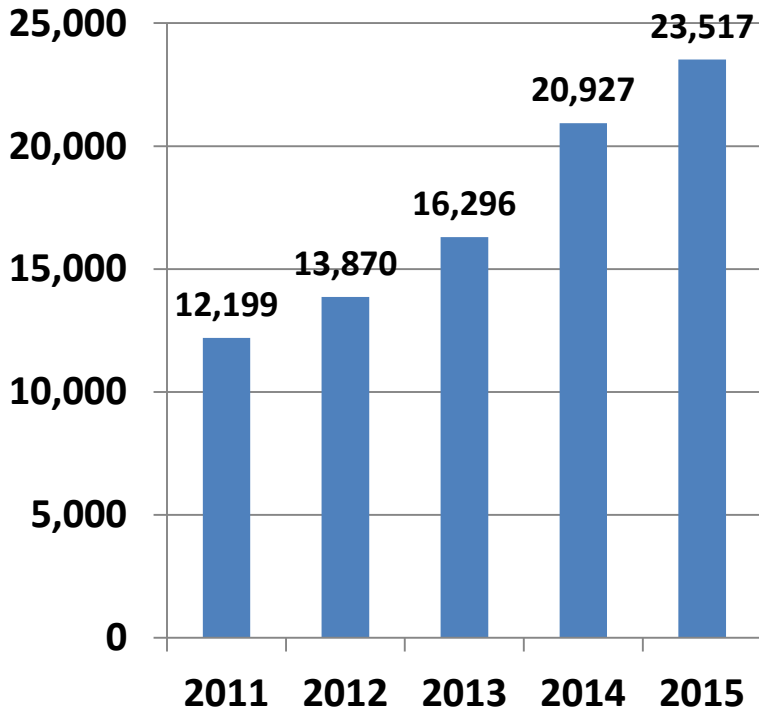
Commercial Marijuana grow facility



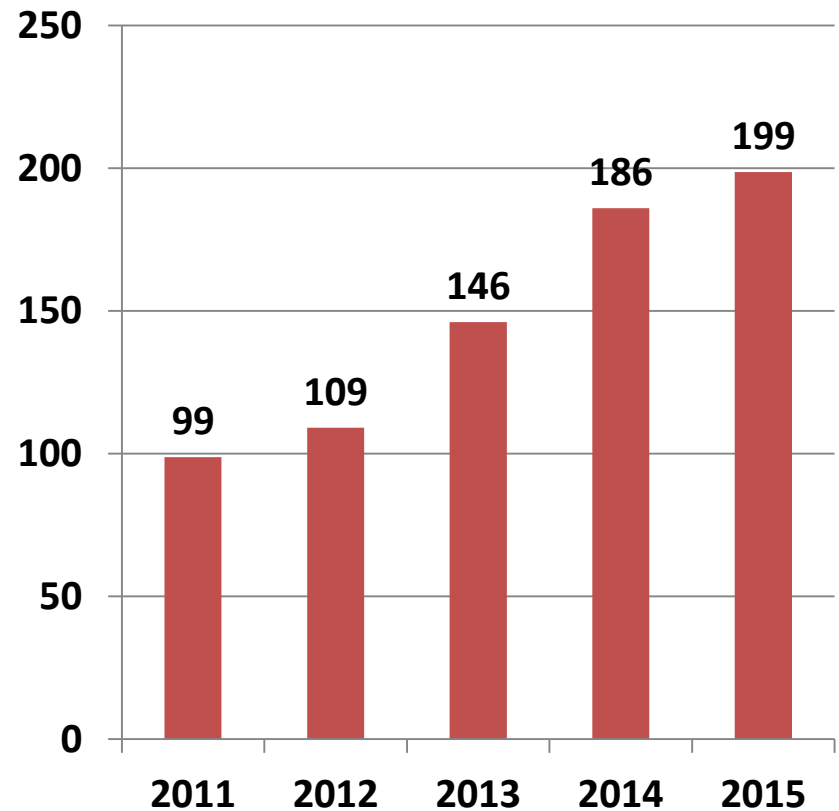
Pueblo Storage, Winter Water Storage Program

Surface Water Improvement Rules

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



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



Division 3, Rio Grande Basin

- Seven straight years of below average snowpack
- Ground Water Use Rules filed 9/23/15 with 8 week trial scheduled for Jan. 2018
- Texas v New Mexico & Colorado - Special Master assigned by U.S. Supreme Court



Division 4, Gunnison River Basin



Black Canyon of the Gunnison River

- Record low snowpack (70%) saved by Miracle May & monsoon rains of July & August
- 7 new satellite telemetry gages installed
- New water commissioner field office in Cedaredge

Division 5, Colorado River Basin

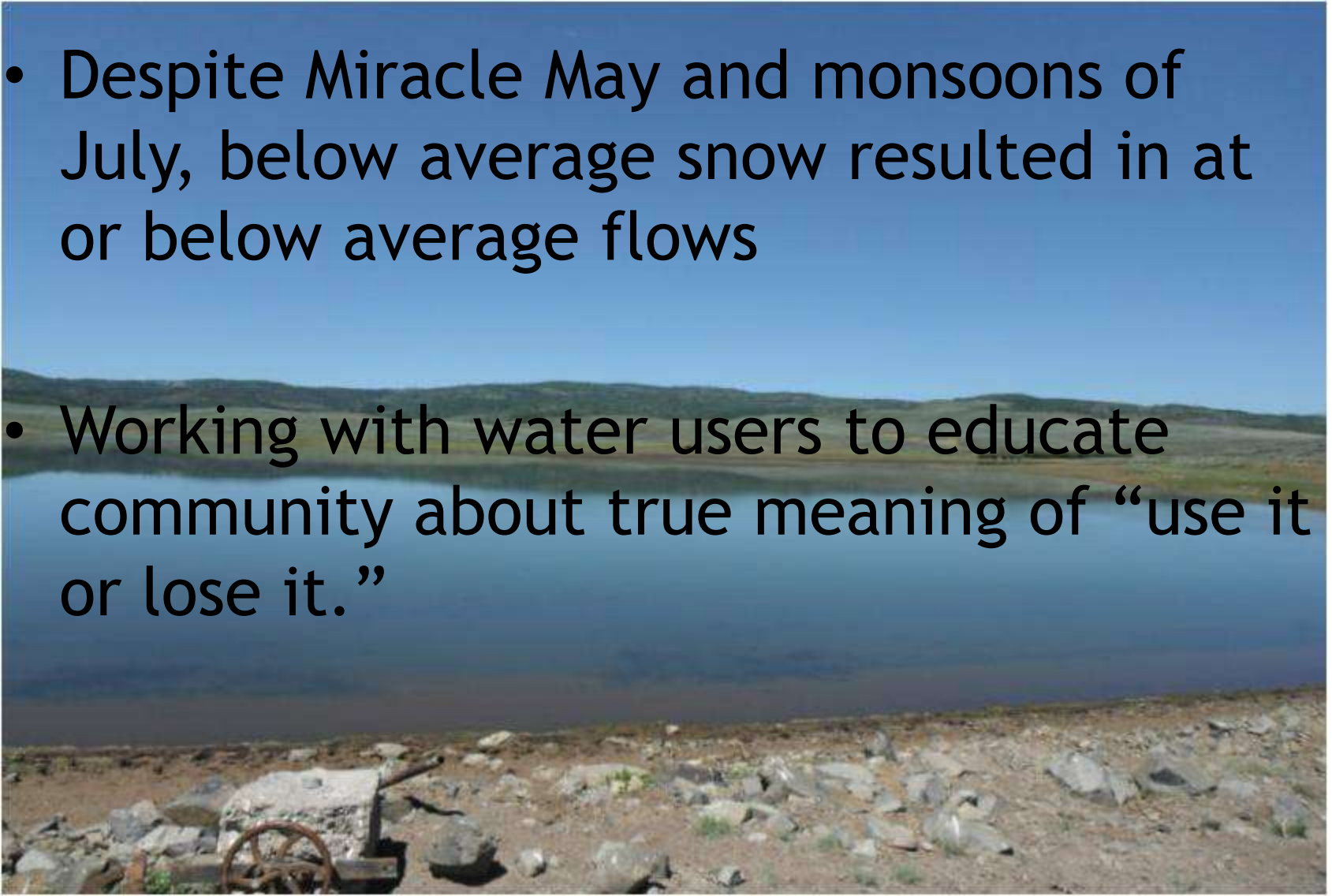
- Modest snowpack once again enhanced by May precipitation
- Result - less diversions to Front Range & full reservoirs in basin
- Annual volumetric flow for 2015 ranked 28th for Colorado River near Cameo gage in 82 years of record



Lake Granby spill

Division 6, Yampa & White River Basins

- Despite *Miracle May* and monsoons of July, below average snow resulted in at or below average flows
- Working with water users to educate community about true meaning of “use it or lose it.”



Division 7, San Juan, Animas-La Plata Basins

- Once again, below average snow pack saved by *Miracle May*!
- City of Durango RICD constructed and in use
- Long Hollow Reservoir first year of operations
- Gold King mine spill



Durango - RICD

Republican River Compact

- Compact Compliance Pipeline delivered 10,760 a.f. in 2015
- Rock Ck. & Medicine Ck. Pipelines (NE)
- Harlan County Reservoir Accounts
- WaterSmart study completed for NE
- Amended Metering Rules (CO)

Rio Grande Compact (in Colorado)

- Model approved
- Final meetings of SLV Advisory Committee
- Rules promulgated and filed September 2015
- 30 Statements of Opposition, some in support, some opposed

Animas-La Plata Compact

- Protocol on administration of ALP water rights
- Retained jurisdiction on Tribal decrees
- Diligence filing by SWCD on ALP with lots of opposition - mediation resulted in stipulated decree



ALP Pumping Plant

Upper Colorado River Compact



Colorado River near Utah Border

- Consumptive Use Methods Study - remote sensing methods
- Increased number of weather stations under Memorandum of Understanding with Bureau of Rec, NM, CO, WY & UT funding
- System Conservation Pilot Projects to generate storage in Lake Powell
- 2015 - 10 projects

Dam Safety Branch

Dam Inspections

Hazard Classification	WY 2012	WY 2013	WY 2014	WY 2015
High	237	286	331	323
Significant	137	156	181	154
Low	161	143	167	156
Totals	538	589	679	633

2015 % of Inspections Due

95% of High

96% of Significant

68 % of Low



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Dam Safety Branch

Design Review

DESIGN REVIEW AND CONSTRUCTION PROJECT
ACTIVITY SUMMARY for WY 14-15

DESIGN REVIEW ACTIVITY	NO. (14-15)	NO. (13-15)	ESTIMATED DOLLAR VALUE
Received	63	49	\$60,993,069
Approved	57	45	\$30,412,218
Construction Started	31	34	\$22,716,258
Construction Completed	31	34	\$31,172,677
As-Builts Accepted	31	32	\$23,986,883
Total Projects	126	116	\$115,461,715

Dam Safety Branch

Emergency Action Plan Updating

EAP Age Inventory All In-State Dams Comparison of last 2 years				
EAP AGE	2/5/2015	% of Total	4/16/2016	% of Total
Less than 5 Yrs old (2016-2012)	330	46%	442	63%
5 to 10 years old (2011-2007)	185	26%	119	17%
10 to 15 years old (2006-2002)	72	10%	62	9%
15 to 20 years old (2001-1997)	45	6%	25	4%
Older than 20 years (> 1996)	67	9%	38	5%
Currently NO EAP	25	3%	21	3%
TOTALS	724	100%	707	100%

- 35% High, 22% Sig updated



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Dam Safety Branch

2014-2015 Dam Safety Incidents

ID	Dam Name	County	Date	Description
1
2
3
4
5
6
7
8
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10
11
12
13
14
15
16
17
18
19
20
21
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- 39 Incidents
 - 16 High Hazard
 - 7 Significant Hazard
 - 16 Low Hazard
- 11 DSEs, 1 Chief
- 7 EAP activations



Water Supply Branch

- Reviewed and acted on 241 Substitute Supply Plans and 61 plans related to gravel pits
- Acted on 150 subdivision referrals per 30-28-136(1) and provided 318 consultations to county planning offices
- In Designated Basins, issued 17 final permits, 141 determinations of water rights, 73 change application approvals and 2 replacement plans
- Statewide, acted on 5,171 well permit applications, 1,012 monitoring hole notices, 8,950 changes in ownership/address, 3,524 well construction and test reports and 1,670 pump installation reports.

Hydrographic Branch

- Gages displayed on DWR Surface Water Conditions website: 1,139
- Gages with real-time data operated by DWR Hydro Program: 609
- Streamflow measurements made: 4,385
- Streamflow records reviewed and published: 237



Hydrogeologic Services



- Staff assistance: 258 aquifer determinations, 15 aquifer hydraulic properties examinations, 6 geothermal permitting reviews
- 107 variances to well construction rules
- Ground water monitoring of 1,236 wells statewide
- 857 well inspections
- 27 complaint violation reviews
- 9 nontributary determinations
- Provide major assistance in Gilcrest-Lasalle and Sterling high ground water investigation

Modeling & Decision Support Systems

- Filed Rio Grande DSS Groundwater Model with Div. 3 Water Court
- Arkansas River H-I Model changes approved and submitted to U.S. Supreme Court
- Finalized Lease Fallow Tool
- Developed new modeling criteria for pond seepage
- Updated South Platte DSS ground water model
- Creating South Platte DSS surface and water rights model

Please visit the Division of Water Resources
web site at: water.state.co for more
information on our programs and services