

Correction

# Correction: Hervás-Gámez, Carmen and Delgado-Ramos, Fernando. Are the Modern Drought Management Plans Modern Enough? The Guadalquivir River Basin Case in Spain. *Water* 2020, 12, 49

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The authors wish to make the following corrections to this paper [1].

We have found an inadvertent error in the initial reservoir storage volume taken in the modeling work. This has had a knock-on effect on the simulation results presented in Table 6 and Figures 6 and 7, along with the description of the results provided in the main text of our article [1]. We have therefore updated these, as described below.

The authors would like to apologize for any inconvenience caused by these changes.

The authors wish to replace the old Table 6 shown in this paper [1]:

**Table 6.** Volume (hm<sup>3</sup>) of water used and efficiency in satisfying the water demands.

Hydrological. Year	S-I: Using the 2018 GRB DMP							S-II: Using AQUAFOR (Mean Streamflow Forecast)						
	UWSD				IWD			UV	IWD					
	SW	GW	Total	Deficit	SW	Deficit	SW	GW	Total	Deficit	SW	Deficit		
2004/05	35.46	2.06	37.52	0	25.90	0	37.52	0	37.52	0	25.90	0		
2005/06	25.14	12.38	37.52	0	9.16	16.74	22.14	15.38	37.52	0	25.90	0		
2006/07	24.14	13.38	37.52	0	19.21	6.70	25.27	12.26	37.52	0	23.67	2.23		
2007/08	25.14	12.38	37.52	0	10.28	15.63	17.14	20.39	37.52	0	14.74	11.16		
2008/09	25.14	12.38	37.52	0	25.90	0	37.52	0	37.52	0	25.90	0		
Total	135.02	52.60	187.62	0	90.45	39.06	139.59	48.03	187.62	0	116.13	13.39		
Mean	27.00	10.52	37.52	0	18.09	7.81 30% *	27.92	9.61	37.52	0	23.23	2.68 10% *		
Comparison B/A (%)							3%	-9%	0%		28%	-66%		

\* Mean annual water deficit for the IWD in relation to the total annual IWD of 25.904 hm<sup>3</sup> as established in the Guadalquivir RBMP 2015–2021. IWD: irrigation water demand; UWSD: urban water supply-demand.

with the following corrected Table 6:



Hydrological Year	S-I: Using the 2018 GRB DMP							S-II: Using AQUAFOR (Mean Streamflow Forecast)						
	UWSD				IWD			UV	IWD					
	SW	GW	Total	Deficit	SW	Deficit	SW	GW	Total	Deficit	SW	Deficit		
2004/05	35.46	2.06	37.52	0	25.90	0.00	37.52	0.00	37.52	0	25.90	0.00		
2005/06	25.14	12.38	37.52	0	9.16	16.74	22.14	15.38	37.52	0	21.44	4.46		
2006/07	23.14	14.38	37.52	0	14.88	11.02	19.14	18.39	37.52	0	14.74	11.16		
2007/08	19.14	18.39	37.52	0	11.39	14.51	18.14	19.39	37.52	0	14.74	11.16		
2008/09	26.14	11.38	37.52	0	25.90	0.00	37.52	0.00	37.52	0	25.90	0.00		
Total	129.02	58.60	187.62	0	87.25	42.27	134.46	53.16	187.62	0	102.73	26.79		
Mean	25.80	11.72	37.52	0	17.45	8.45 (33% *)	26.89	10.63	37.52	0	20.55	5.36 (21%) *		
Comparison B/A (%)						. ,	4%	-9%	0%		18%	-37%		

**Table 6.** Volume (hm<sup>3</sup>) of water used and efficiency in satisfying the water demands.

\* Mean annual water deficit for the IWD in relation to the total annual IWD of 25.904 hm<sup>3</sup> as established in the Guadalquivir RBMP 2015–2021. IWD: irrigation water demand; UWSD: urban water supply-demand.

On page 27, the second paragraph shown in this paper [1]: "Indeed, the water deficits of the system are considerably reduced (up to 66% for the IWD), and the use of strategic GW resources is minimized (up to 9%). There is no water deficit for the UWSD in the whole drought period for S-I and S-II. The IWD benefits from a mean annual water deficit of 10% for S-II in comparison with 30% for S-I" should be replaced with the following corrected paragraph: "Indeed, the water deficits of the system are considerably reduced (up to 37% for the IWD), and the use of strategic GW resources is minimized (up to 9%). There is no water deficit for the UWSD in the whole drought period for S-I and S-II. The IWD benefits from a mean annual water deficit of 21% for S-II in comparison with 33% for S-I".

The authors wish to replace the old Figure 6 shown in this paper [1]:

60

40

20

0

Oct Nov

Pre- Alert

SW volume used

28.9 28.0 27.5 26.7

lan

Dec

- - Projected Reservoir Vol (Day 1)

26.2 27.0 26.4 26.2

May

Ap

Mar

GW volume used

(c)

Feb

Alert

24.2

Jul

Emergency

Water deficit

---- Obs. Monthly Streamflow

---

21.2

Aug

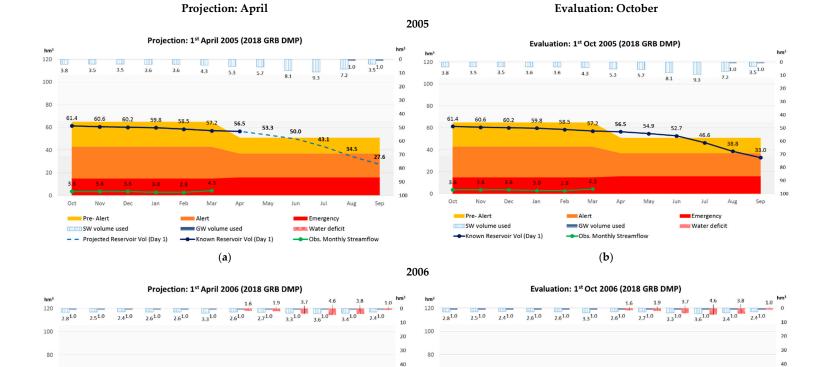


Figure 6. Cont.

60

40

20

0

Oct Nov

Pre- Alert

SW volume used

-Known Reservoir Vol (Day 1)

28.9

28.0

Dec

27.5 26.7 26.2 27.0

Alert

Feb

Mar

GW volume used

-Obs. Monthly Streamflow

(d)

Apr

May

50

60

70

80

90

100

Sep

50

60

70

80

90

100

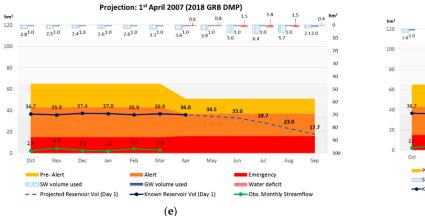
36.4 35.5 33.8

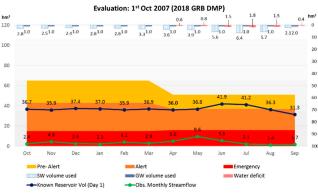
Jul

Emergency

Water deficit

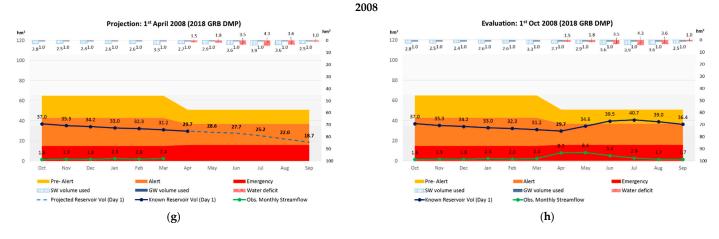
Aug Sep





(**f**)







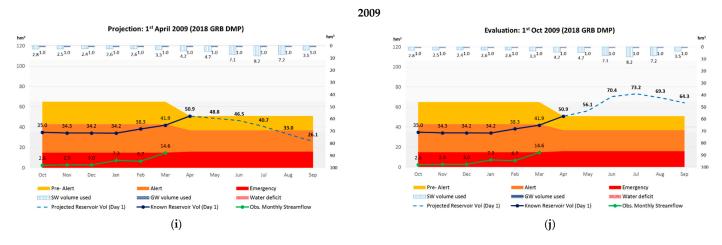
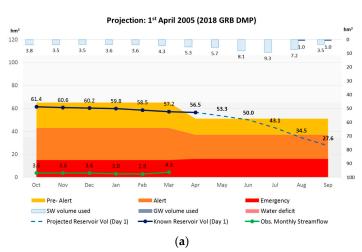
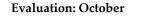


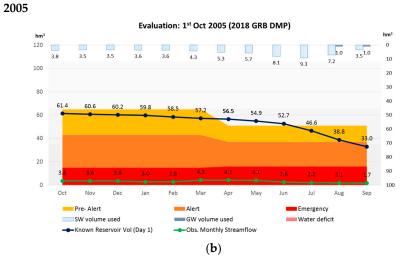
Figure 6. 2018 GRB DMP: Measures taken in April (a,c,e,g,i) and evaluation of the real situation made in October (b,d,f,h,j).

with the following corrected Figure 6:



#### Projection: April





Projection: 1st April 2006 (2018 GRB DMP) 1.0 hm<sup>3</sup> hm<sup>3</sup> 3.7 4.6 3.8 1.6 1.9 3.3<sup>1.0</sup> 3.6<sup>1.0</sup> 120 3.41.0 0 2.6<sup>1.0</sup> 3.3<sup>1.0</sup> 2.6<sup>1.0</sup> 2.7<sup>1.0</sup> 2.81.0 2.41.0 2.61.0 2.51.0 2.41.0 10 100 20 30 80 40 60 50 60 40 30. 28.0 27.5 26.7 26.2 **27.0** 28.9 70 26.4 26.2 24.2 21.2 80 20 90 0 100 Oct Aug Nov Dec Jan Feb Mar Apr May Jul Sep Jun Pre- Alert Alert Emergency SW volume used GW volume used Water deficit ---- Obs. Monthly Streamflow - - Projected Reservoir Vol (Day 1) (c)

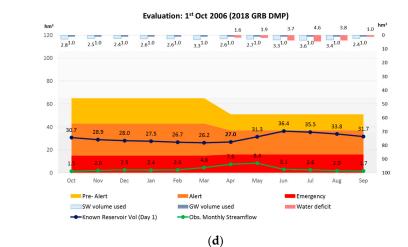
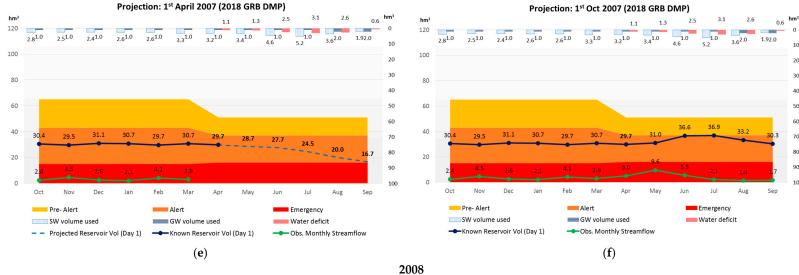
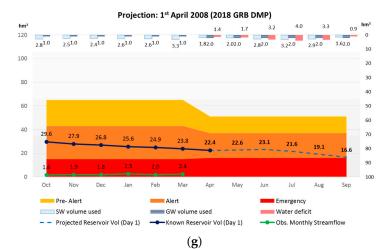


Figure 6. Cont.





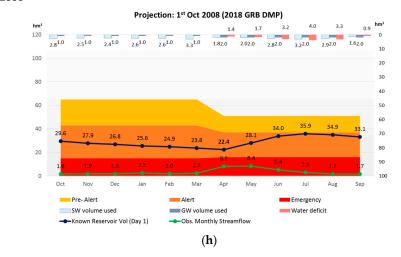


Figure 6. Cont.

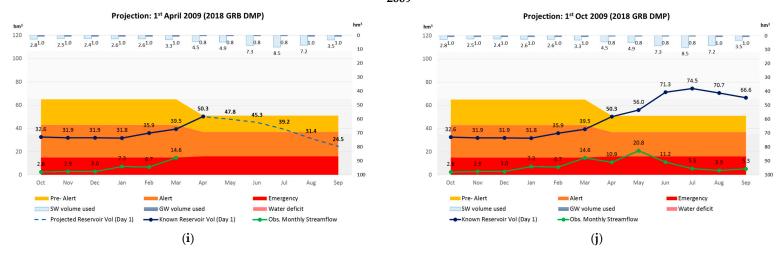
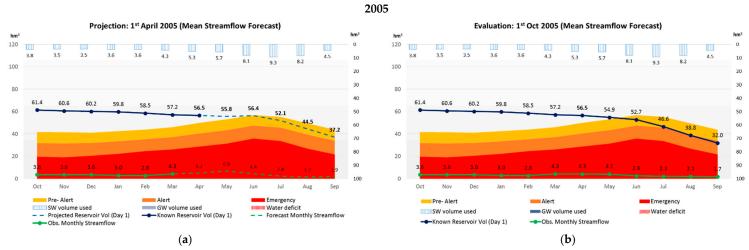


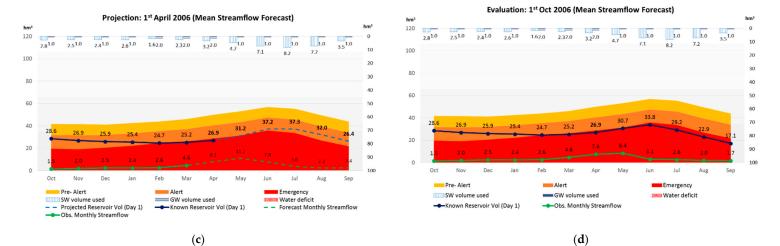
Figure 6. 2018 GRB DMP: Measures taken in April (a,c,e,g,i) and evaluation of the real situation made in October (b,d,f,h,j).

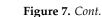
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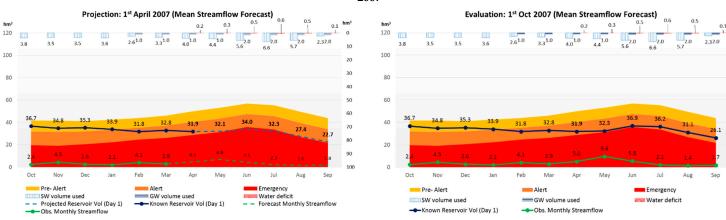
The authors wish to replace the old Figure 7 shown in this paper [1]:















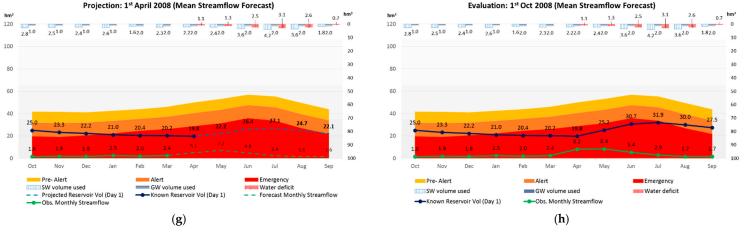


Figure 7. Cont.

hm<sup>3</sup>

(**f**)

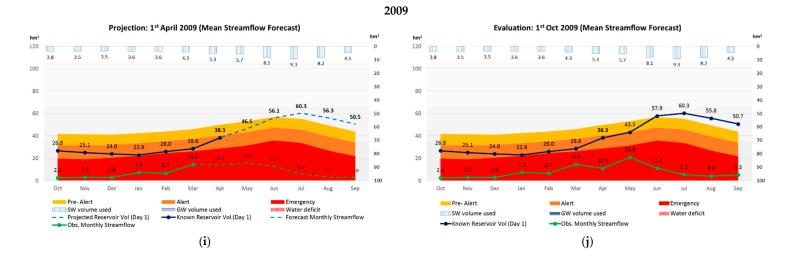
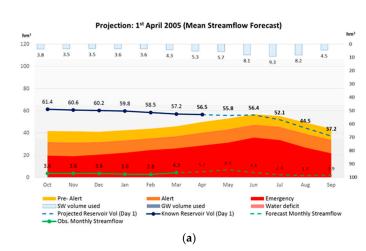
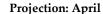


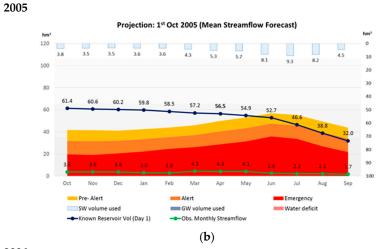
Figure 7. Using streamflow forecast models (in this case, AQUAFOR): Measures taken in April (a,c,e,g,i) and evaluation of the real situation made in October (b,d,f,h,j).

### with the following corrected Figure 7:





#### **Evaluation: October**





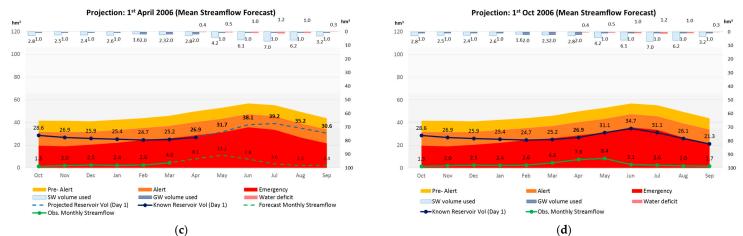
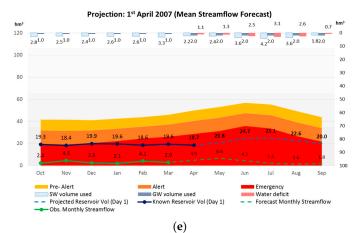
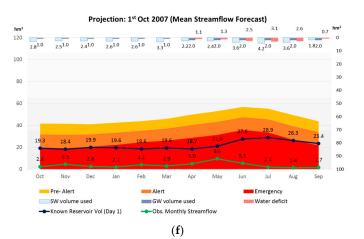


Figure 7. Cont.







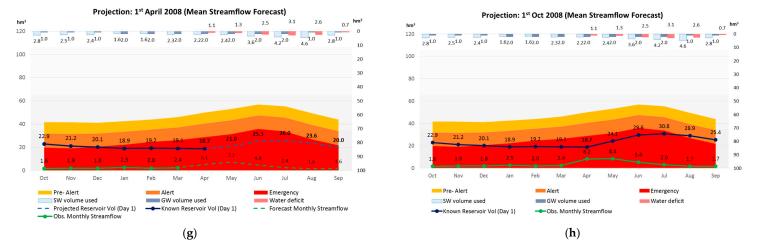


Figure 7. Cont.

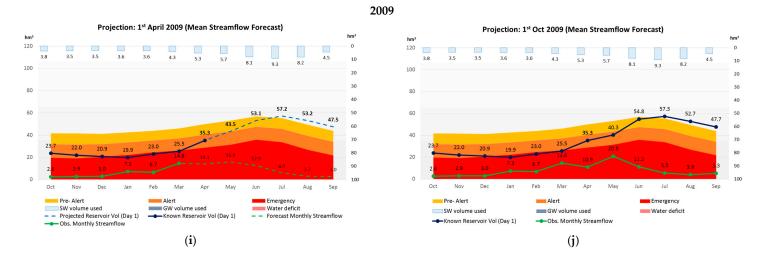


Figure 7. Using streamflow forecast models (in this case, AQUAFOR): Measures taken in April (a,c,e,g,i) and evaluation of the real situation made in October (b,d,f,h,j).

On page 29, the fifth paragraph shown in this paper [1]: "Indeed, the water deficits of the system are considerably reduced (up to 66%), and the use of strategic GW resources is minimized (up to 9%)" should be replaced with the following corrected paragraph: "Indeed, the water deficits of the system are considerably reduced (up to 37%), and the use of strategic GW resources is minimized (up to 9%)".

## Reference

1. Hervás-Gámez, C.; Delgado-Ramos, F. Are the Modern Drought Management Plans Modern Enough? The Guadalquivir River Basin Case in Spain. *Water* **2020**, *12*, 49. [CrossRef]



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