2011 Summary of Seepage Run Flow Measurements on Red Clover Creek
Hoffman, Oct 18, 2012

June 28, 2011

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	2.25	0.65	40.6%	2,820	0.53	1.22	91.68	0.50	7.2
Dixie	5.29	0.45	9.3%	3,475	0.66	0.68	86.73	0.26	0.8
Beartooth	5.77	1.48	34.5%	4,505	0.85	1.73	91.41	-0.43	0.86
McReynolds	10.2	3.48	51.8%	3,298	0.62	5.57	94.58	1.07	1.7
Poco	15.4	1.2	8.5%	2,183	0.41	2.90	94.31	-0.30	

Sept. 7, 2011

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	0.57	0.1	21.3%	2,820	0.53	0.19	88.2		3.9
Dixie	0.11	0.09	450.0%	3,475	0.66	0.14	86.59		1.0
Beartooth	1.3	0.33	34.0%	4,505	0.85	0.39	90.02		-0.14
McReynolds	0.73	-0.16	-18.0%	3,298	0.62	-0.26	94.99		3.9

Oct 3-4, 2011

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dixie							85.48		-0.12
Beartooth	1.03	0.15	17.0%	4,505	0.85	0.18	90.81		-0.65
McReynolds	1.48	-0.28	-15.9%				95.25		4.07

Notes:

1. Assumed streamflow (Q) measurement error is 10% to 15%
2. delta Q is the change in flow rate through the reach (downstream Q - upstream Q)
3. "GW elev" is the elevation of the water table, measured at the upstream end of the reach
   GW elevations provided are not tied from reach to reach, but are provided to show the trend in each well through the flow season
4. "GW elev - stream elev" provides the difference between the water table and the stream surface elevations
   A positive difference means the GW table is higher than the stream surface
5. "AM-PM" equals Q in morning minus Q in afternoon (a measure of ET)

2005 measurements for McReynolds project

June 3, 2005

Reach	Q (cfs)	delta Q	% change Q	length (ft)	length (mi)	delta Q per mi	GW elev	AM-PM
McReynolds - u/s	15.3	-----	-----		-----	-----		
McReynolds - d/s	17.8	2.5	14.0%		2.10	1.19		

July 20, 2005

Reach	Q (cfs)	delta Q	percent	length of	length of	delta Q per mi	GW elev	AM-PM
McReynolds - u/s	1.39	-----	-----		-----	-----		
McReynolds - d/s	1.03	-0.36	-35.0%		2.10	-0.17		

August 10, 2005 (AM)

Reach	Q (cfs)	delta Q	percent	length of	length of	delta Q per mi	GW elev	AM-PM
McReynolds - u/s	0.79	-----	-----		-----	-----		
McReynolds - d/s	1.54	0.75	48.7%		2.10	0.36		

August 10, 2005 (PM)

Reach	Q (cfs)	delta Q	percent	length of	length of	delta Q per mi	GW elev	AM-PM
McReynolds - u/s	1.41	-----	-----		-----	-----		-0.62
McReynolds - d/s	1.14	-0.27	-23.7%		2.10	-0.13		0.40

September 14, 2005

Reach	Q (cfs)	delta Q	percent	length of	length of	delta Q per mi	GW elev	AM-PM
McReynolds - u/s	1.85	-----	-----		-----	-----		
McReynolds - d/s	1.61	-0.24	-14.9%		2.10	-0.11		

2012 Summary of Seepage Run Flow Measurements on Red Clover Creek
Hoffman, Oct 18, 2012

May 16, 2012

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	1.08	0.35	47.9%	2,820	0.53	0.66	91.96		7.51
Dixie	1.97	-0.26	-11.7%	3,475	0.66	-0.40	86.08		0.21
Beartooth	3.99	0.05	1.3%	4,505	0.85	0.06	93.35		2.89
McReynolds - u/s							95.39		4.02
McReynolds - d/s	8.51	0.46	5.7%	3,298	0.62	0.74	93.34		
Poco	8.45	-0.09	-1.1%						

June 13, 2012 - AM

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	0.57	0.17	42.5%	2,820	0.53	0.32	90.91	0.06	6.56
Dixie	1.06	0.15	16.5%	3,475	0.66	0.23	86.04	0.12	0.28
Beartooth	0.98	0.41	71.9%	4,505	0.85	0.48	90.85	0.01	0.67
McReynolds - u/s							95.21		3.93
McReynolds - d/s	1.44	-0.41	-22.2%	3,298	0.62	-0.66	93.11	0.36	0.20
Poco	1.64	0.58	54.7%				92.92	-0.05	1.66

July 11, 2012 - AM

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	0.34	0.09	36.0%	2,820	0.53	0.17	dry	-0.01	-----
Dixie	0.16	0.13	433.3%	3,475	0.66	0.20	85.75	0.03	0.15
Beartooth	0.81	0.11	15.7%	4,505	0.85	0.13	90.17	0.18	0.10
McReynolds - u/s							94.82		3.59
McReynolds - d/s	0.22	-0.13	-37.1%	3,298	0.62	-0.21	92.84	0.01	0.22
Poco	0.15	Flow measured at plug #29; zero flow at Chase Bridge					dry	-0.04	-----

August 15, 2012 - AM

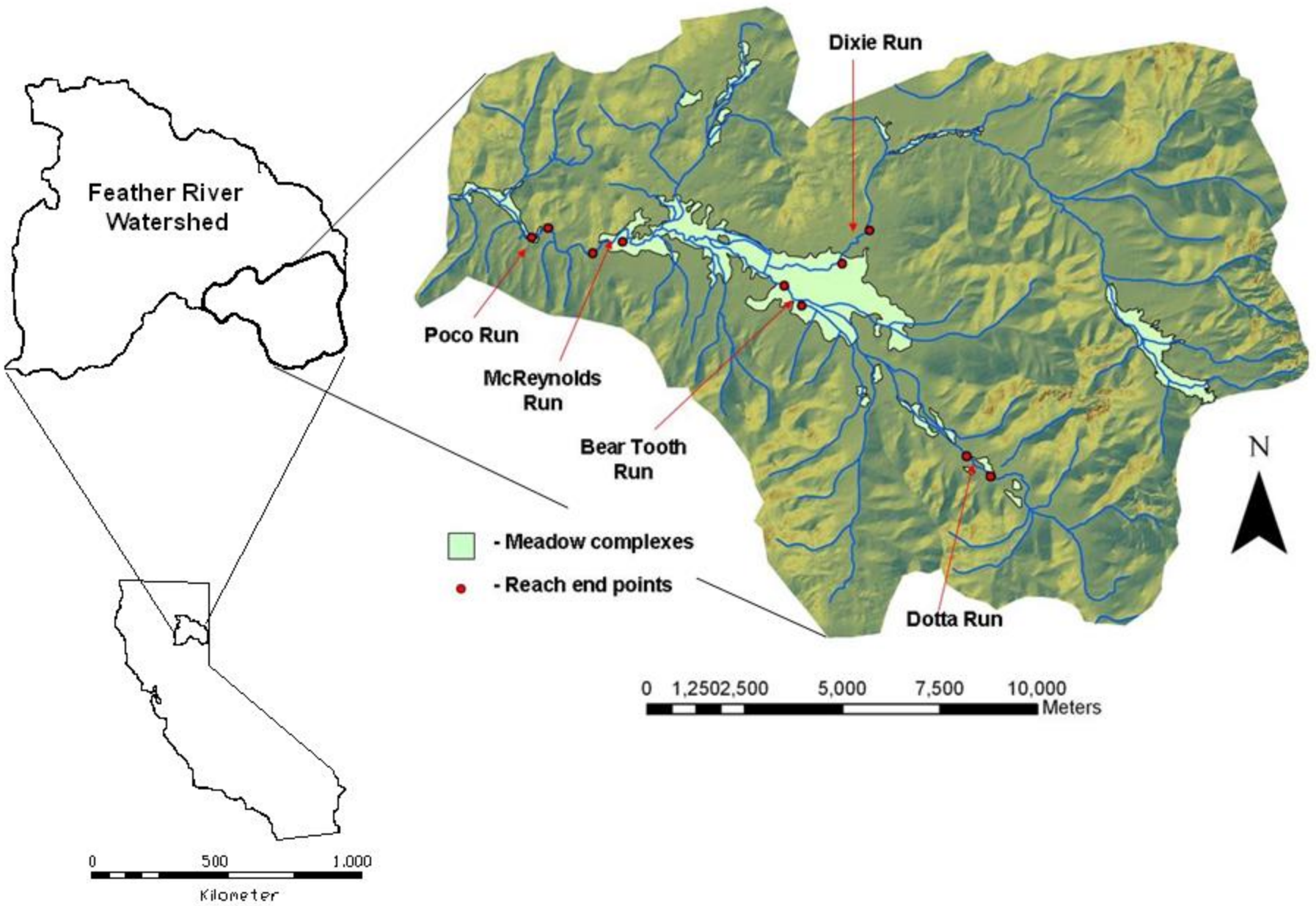
Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	0.16	0	0.0%	2,820	0.53	0.00	dry		-----
Dixie	0.04	0.04	-----	3,475	0.66	0.06	85.71		0.24
Beartooth	0.87	0.31	55.4%	4,505	0.85	0.36	89.79		-0.27
McReynolds - u/s	can't measure: little or no surface flow at this location						94.32		3.97
McReynolds - d/s	0	0	-----	3,298	0.62	0.00	92.55		0.17
Poco	0.05	Flow measured at grade control; zero flow at Chase Bridge					dry		-----

October 10, 2012 - AM

Reach	Q (cfs) downstream	delta Q	percent change Q	length of reach (ft)	length of reach (mi)	delta Q per mi	GW elev	AM-PM	GW elev - stream elev
Dotta	0.06	-0.08	-57.1%	2,820	0.53	-0.15	dry		-----
Dixie	0.05	0.04	400.0%	3,475	0.66	0.06	85.6		0.2
Beartooth	0.74	-0.63	-46.0%	4,505	0.85	-0.74	89.86		-0.12
McReynolds - u/s							95.08		3.95
McReynolds - d/s	0.54	-0.33	-37.9%	3,298	0.62	-0.53	92.99		0.19
Poco	0.05	Flow measured 1000 ft d/s of GCS; zero flow at Chase Bridge					dry		-----

Notes:

1. Assumed streamflow (Q) measurement error is 10% to 15%
2. delta Q is the change in flow rate through the reach (downstream Q - upstream Q)
3. "GW elev" is the elevation of the water table, measured at the upstream end of the reach
   The McReynolds reach has a well at both ends of the reach
   GW elevations provided are not tied from reach to reach, but are provided to show monthly trend
4. "GW elev - stream elev" provides the difference between the water table and the stream surface elevations
   A positive difference means the GW table is higher than the stream surface
5. "AM-PM" equals Q in morning minus Q in afternoon (a measure of ET)


Feather River Watershed
Dixie Run
Poco Run
McReynolds Run
Bear Tooth Run
Dotta Run
- Meadow complexes
- Reach end points
N
0 1,2502,500 5,000 7,500 10,000
Meters
0 500 1,000
Kilometer