Three Lakes Clarity Monitoring Program

May 2015 Report

All data in this report is PROVISIONAL and SUBJECT TO REVISION
Data used is provided by GCWIN, USGS, BOR and NCWCD.
Secchi depths reported are measured using a view scope.

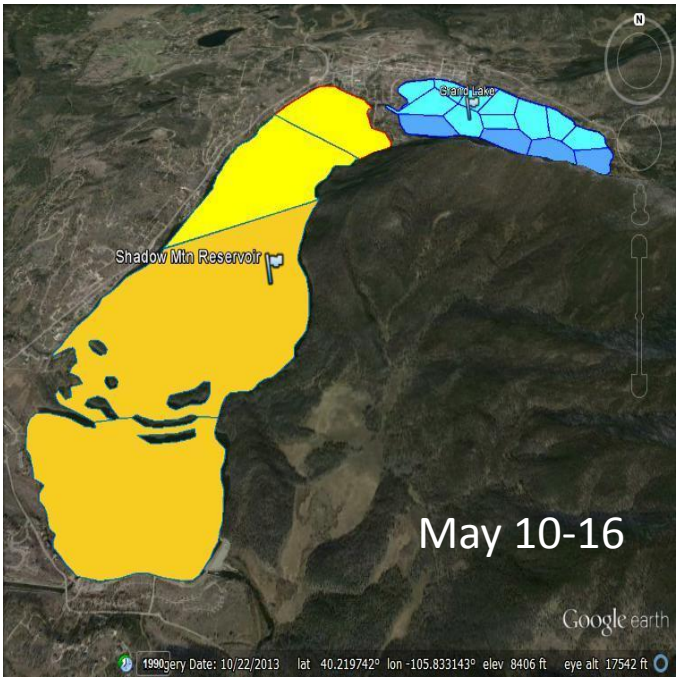
May synopsis

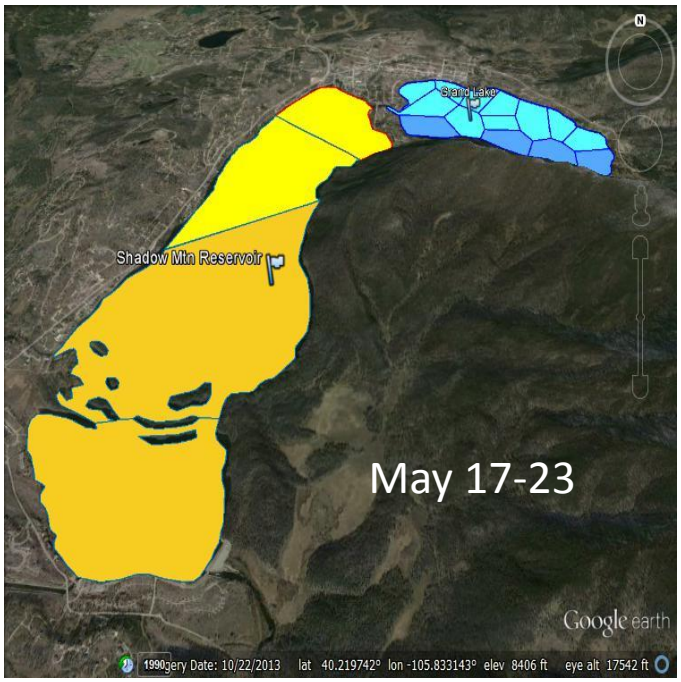
Grand Lake – Clarity averaged 3.94m. Average surface temperature was 45°F. Inflow from the East Inlet fluctuated throughout the month starting at 67cfs and ended at 236cfs. Inflow from the North Inlet fluctuated throughout the month starting at 142cfs and ended at 300cfs. Outflow at Adams Tunnel started at 222cfs and reached a high of 298cfs and ended the month at 1cfs.

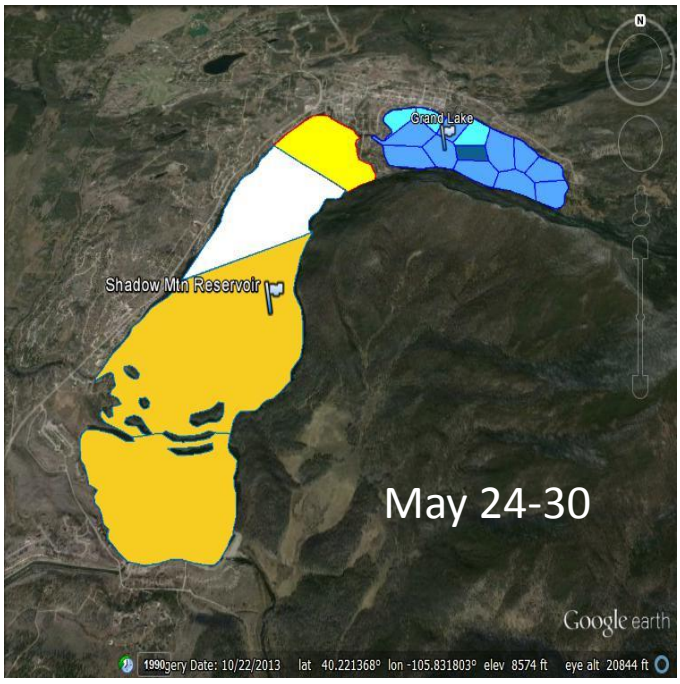
Shadow Mountain Reservoir – Clarity averaged 1.80m. Average surface temperature was 47°F. Inflow from the North Fork increased from 142cfs to 208cfs by the end of the month. Inflow at the Farr Pump was 0cfs for the month of May. Outflow at the Granby Dam increased from 55cfs to 891cfs.

Connecting Channel Flow – Velocity fluctuated, starting at 60cfs reaching a high of 90cfs and ending at -332cfs flowing to Shadow Mountain Reservoir.

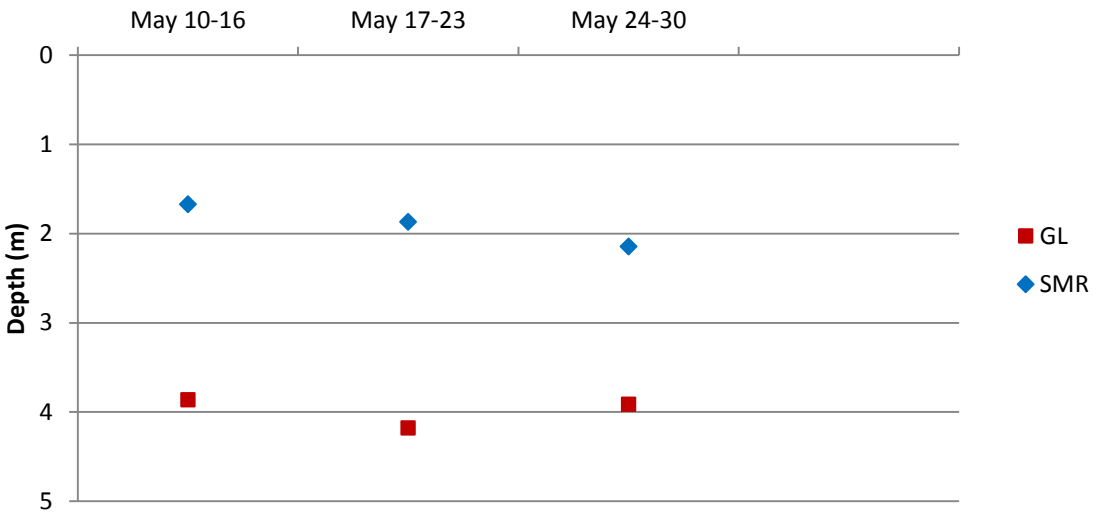
Secchi Depth (m)	
<1.0	4.0 - 4.5
1.0 - 1.5	4.5 - 5.0
1.5 - 2.0	5.0 - 5.5
2.0 - 2.5	5.5 - 6.0
2.5 - 3.0	6.0 - 6.5
3.0 - 3.5	6.5 - 7.0
3.5 - 4.0	> 7.0



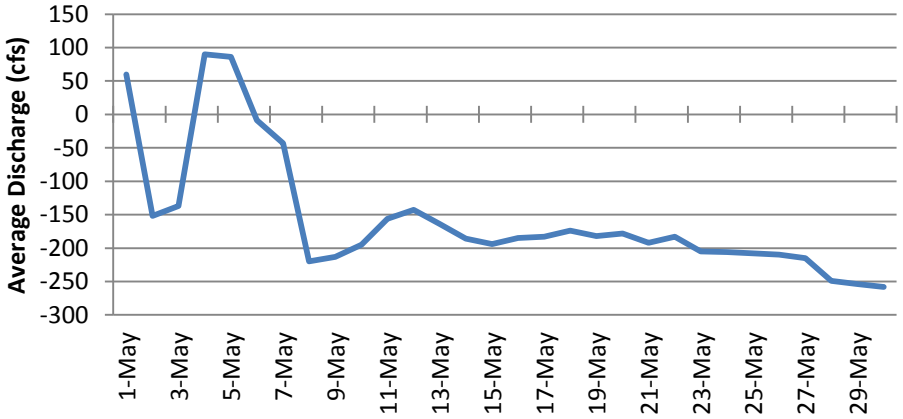




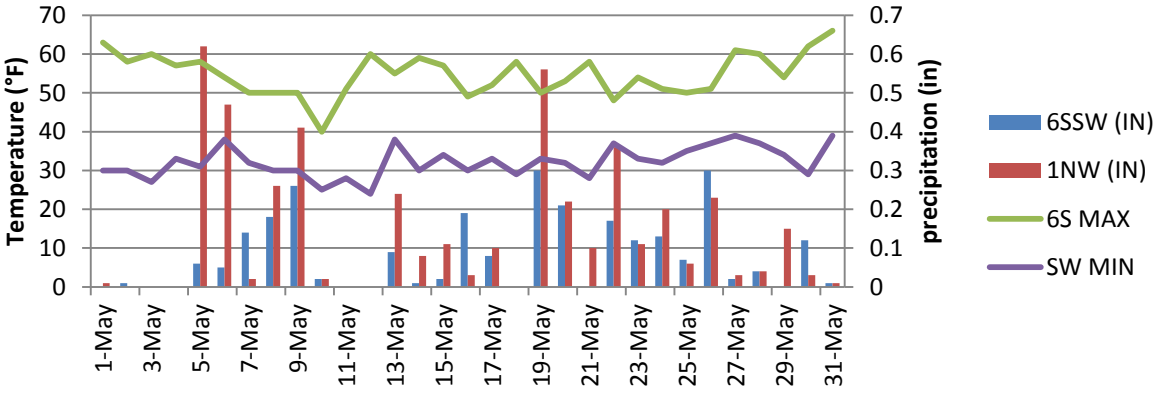
Average Weekly Secchi Depth Chart



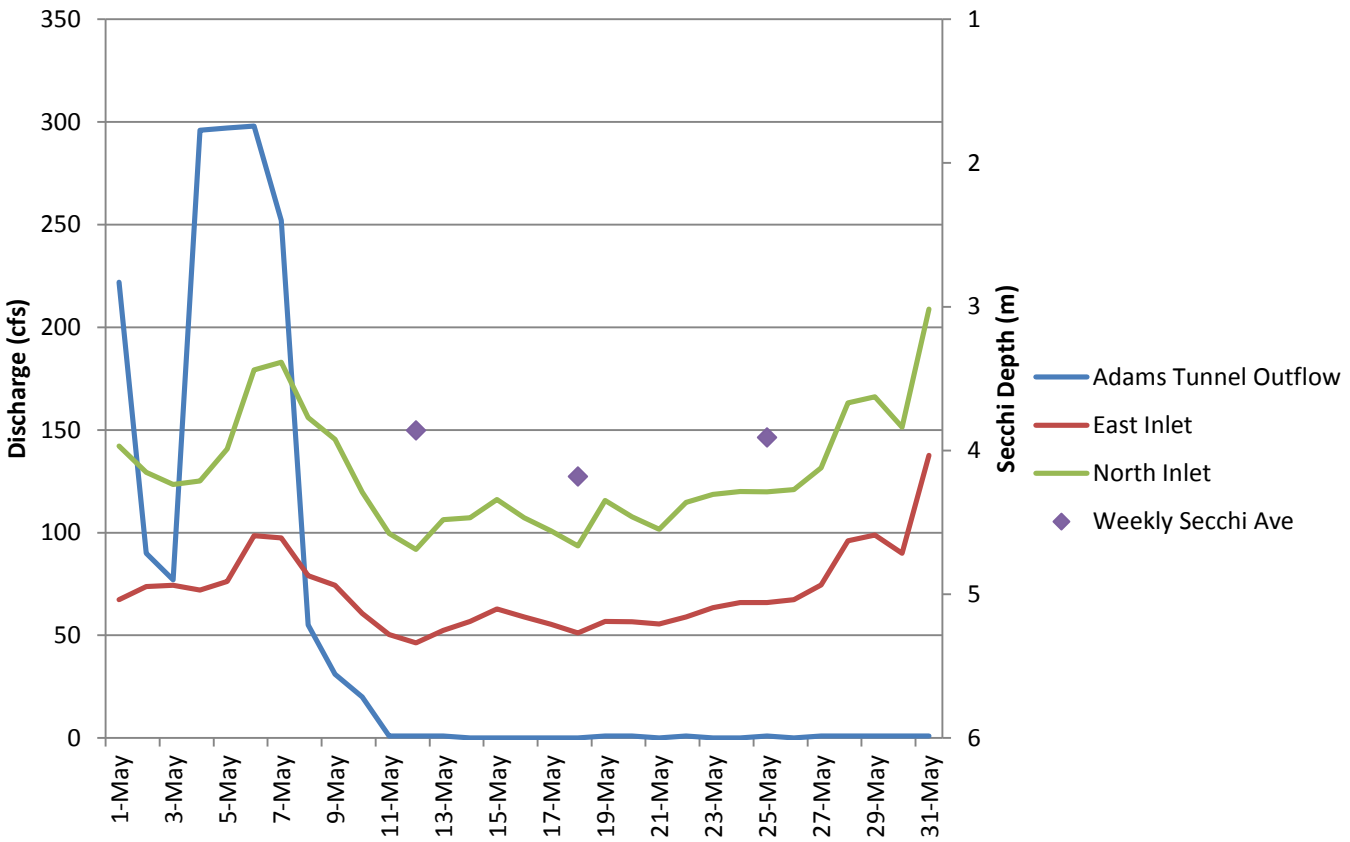
Connecting Channel Flow



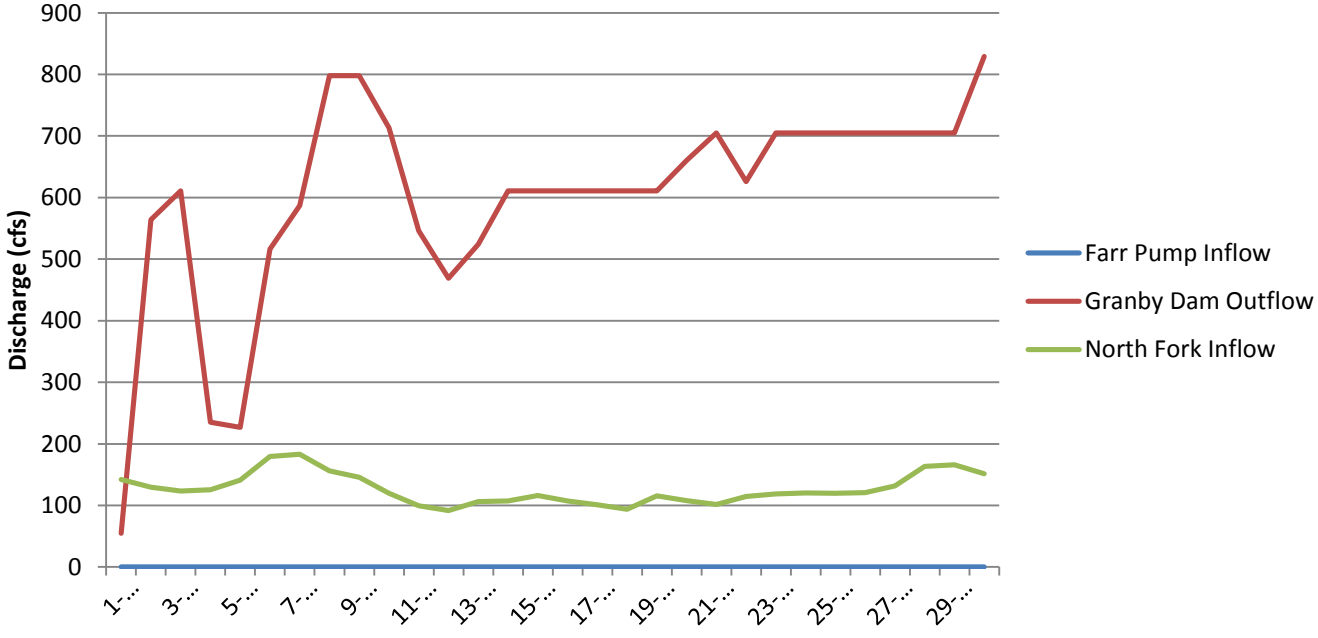
Weather Around Grand Lake



Grand Lake Flows & Secchi



Shadow Mountain Reservoir Flows & Secchi



If you are interested in viewing current conditions, you can check the following links:

- For real-time data on SMR– GL connecting channel: : http://waterdata.usgs.gov/nwis/dv?referred_module=sw&site_no=09014050
- For information on stream inflows: http://www.northernwater.org/WaterProjects/WestSlopeWaterData.aspx?WDType=R
- For five-day archives of Adams Tunnel flows:
- http://www.usbr.gov/gp-bin/hydromet_archives.pl?adatunco
- For Grand County's water resource page: http://co.grand.co.us/408/Water-Resource-Management
- For weather, gages, snow, avalanche reports , and water news: www.crwcd.org
- For water quality data around Grand County http://www.gcwin.org

Three Lakes Clarity Monitoring Program

June 2015 Report

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Secchi depths reported are measured using a view scope.

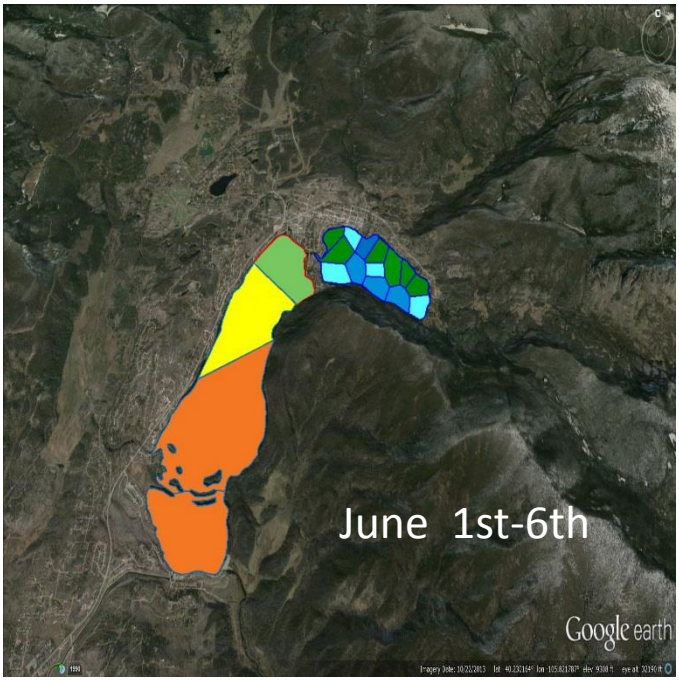
June synopsis

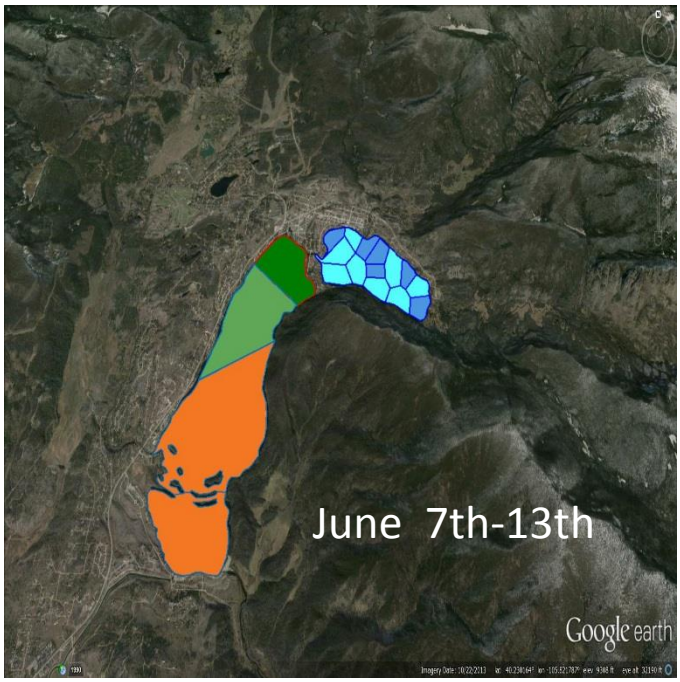
Grand Lake – Clarity averaged 4.37m. Average surface temperature was 49°F. Inflow from the East Inlet fluctuated throughout the month starting at 236cfs and ended at 180cfs. Inflow from the North Inlet fluctuated throughout the month starting at 300cfs and ended at 213cfs. Outflow at Adams Tunnel started at 1cfs and only reached a high of 2cfs and ended the month at 1cfs.

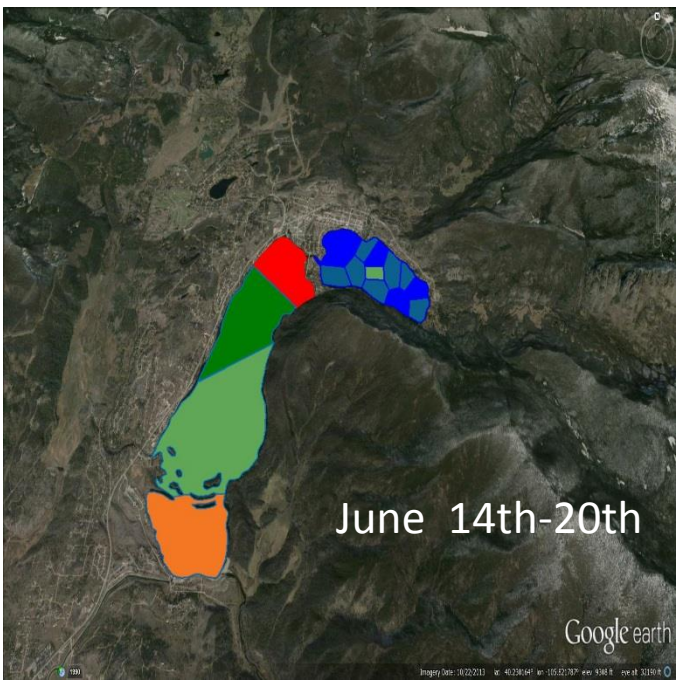
Shadow Mountain Reservoir – Clarity averaged 2.19m. Average surface temperature was 53°F. Inflow from the North Fork decreased from 400cfs to 143cfs by the end of the month. Inflow at the Farr Pump was 0cfs for the month of June. Outflow at the Granby Dam decreased from 1442cfs to 735cfs.

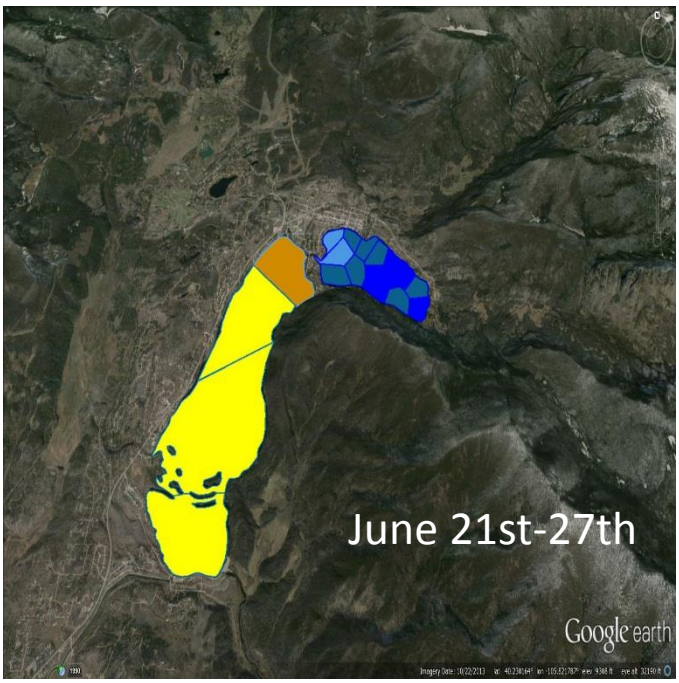
Connecting Channel Flow – Velocity fluctuated, starting at -566cfs reaching a high of 90cfs and ending at -403cfs flowing to Shadow Mountain Reservoir.

Secchi Depth (m)	
<1.0	4.0 - 4.5
1.0 - 1.5	4.5 - 5.0
1.5 - 2.0	5.0 - 5.5
2.0 - 2.5	5.5 - 6.0
2.5 - 3.0	6.0 - 6.5
3.0 - 3.5	6.5 - 7.0
3.5 - 4.0	> 7.0

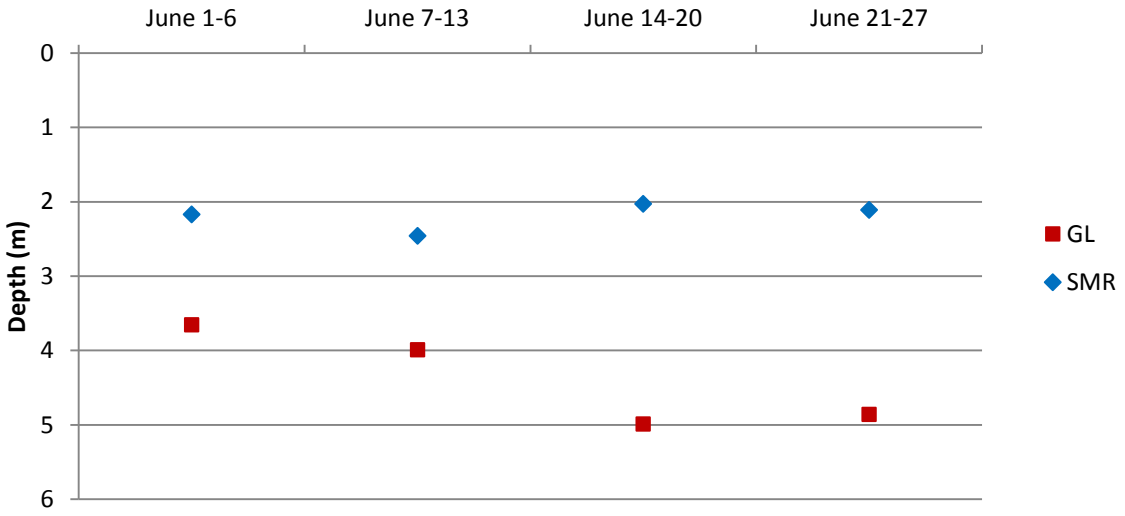




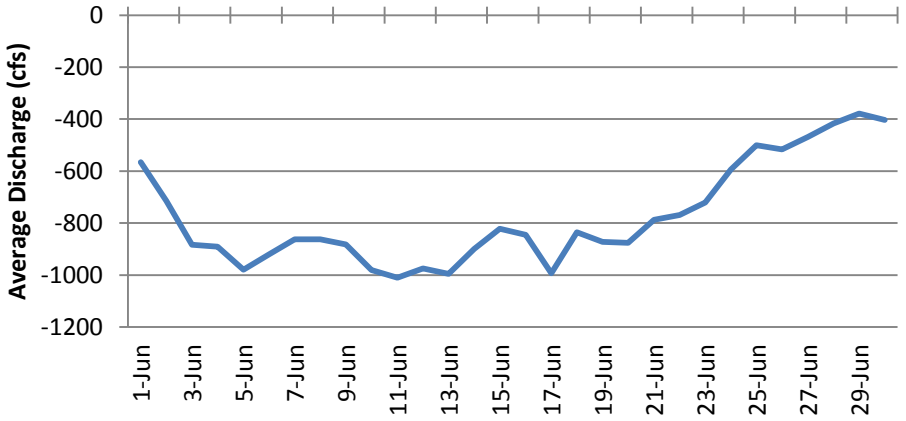




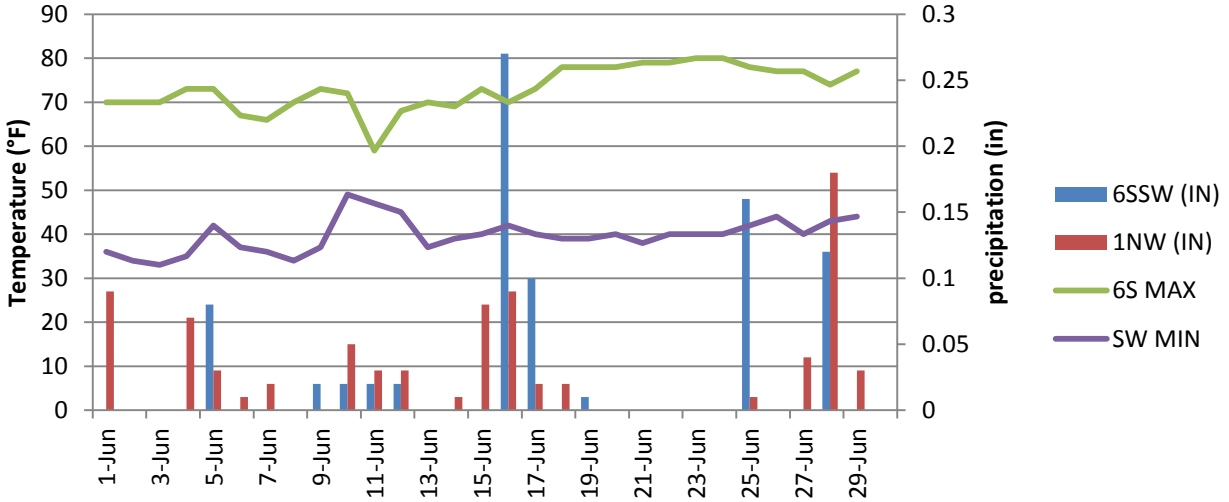
Average Weekly Secchi Depth Chart

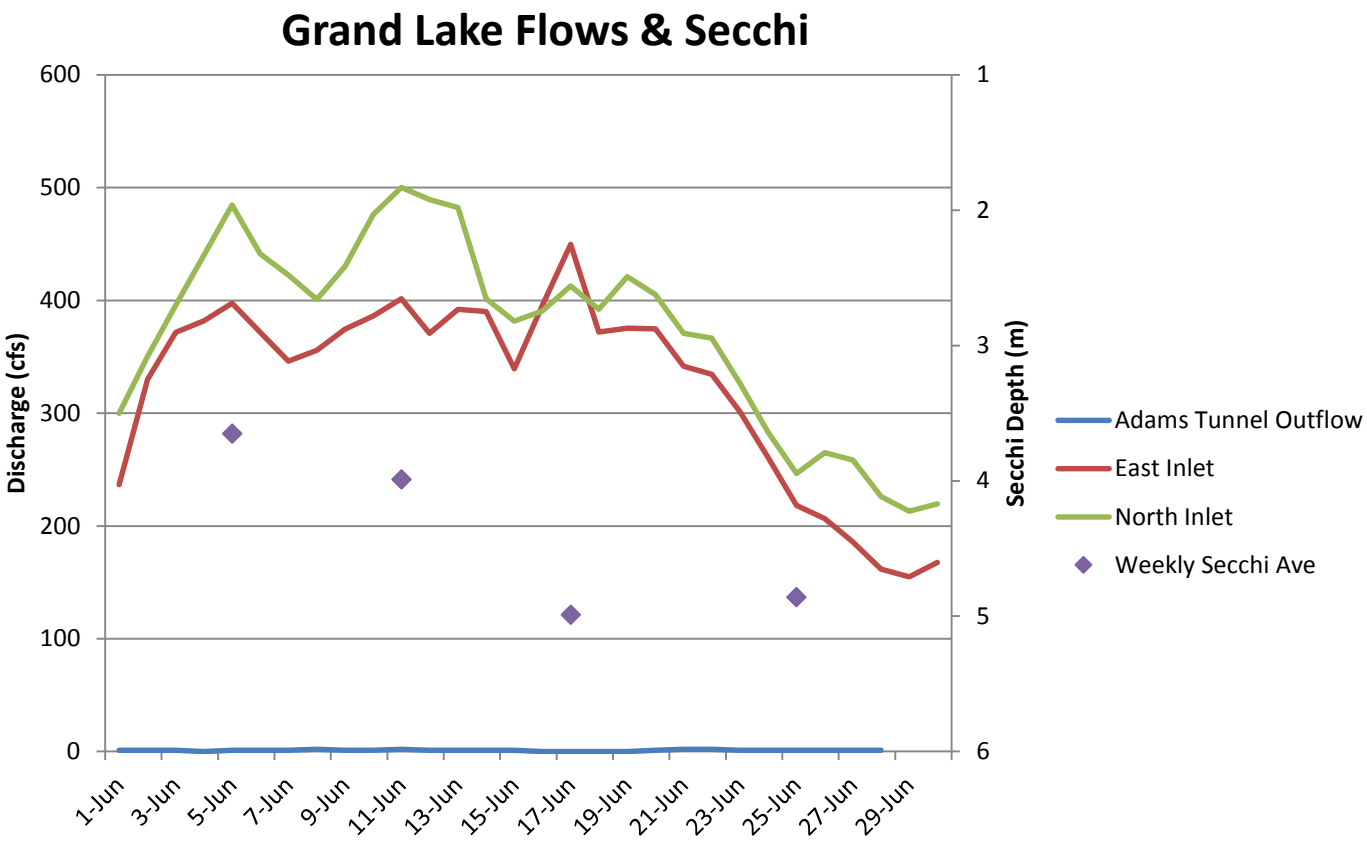


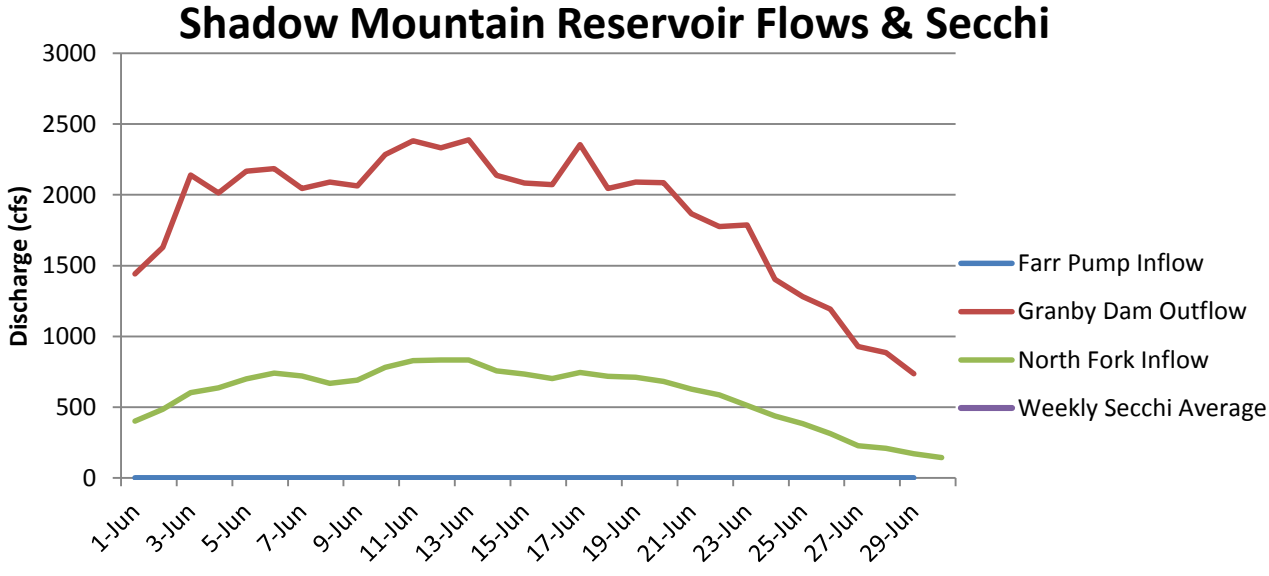
Connecting Channel Flow



Weather Around Grand Lake




Grand Lake Flows & Secchi
Discharge (cfs)
Secchi Depth (m)
600
500
400
300
200
100
0
1
2
3
4
5
6
1-Jun
3-Jun
5-Jun
7-Jun
9-Jun
11-Jun
13-Jun
15-Jun
17-Jun
19-Jun
21-Jun
23-Jun
25-Jun
27-Jun
29-Jun
Adams Tunnel Outflow
East Inlet
North Inlet
Weekly Secchi Ave


Shadow Mountain Reservoir Flows & Secchi
Discharge (cfs)
3000
2500
2000
1500
1000
500
0
1-Jun
3-Jun
5-Jun
7-Jun
9-Jun
11-Jun
13-Jun
15-Jun
17-Jun
19-Jun
21-Jun
23-Jun
25-Jun
27-Jun
29-Jun
Farr Pump Inflow
Granby Dam Outflow
North Fork Inflow
Weekly Secchi Average

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- For five-day archives of Adams Tunnel flows:
- http://www.usbr.gov/gp-bin/hydromet_archives.pl?adatunco
- For Grand County's water resource page: http://co.grand.co.us/408/Water-Resource-Management
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