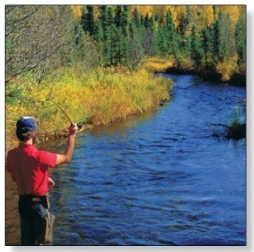
North Ada Technical Working Group

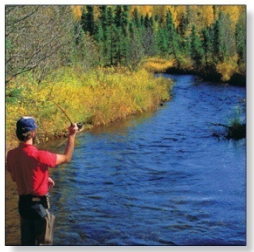
April 8th, 2010



Project Updates

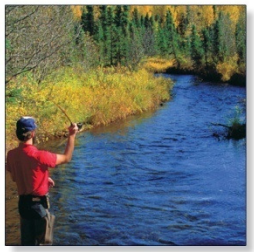
- Surface Water Measurements
- Water level monitoring network
- Monitoring well installation
- Misc. items

Surface Water Investigations

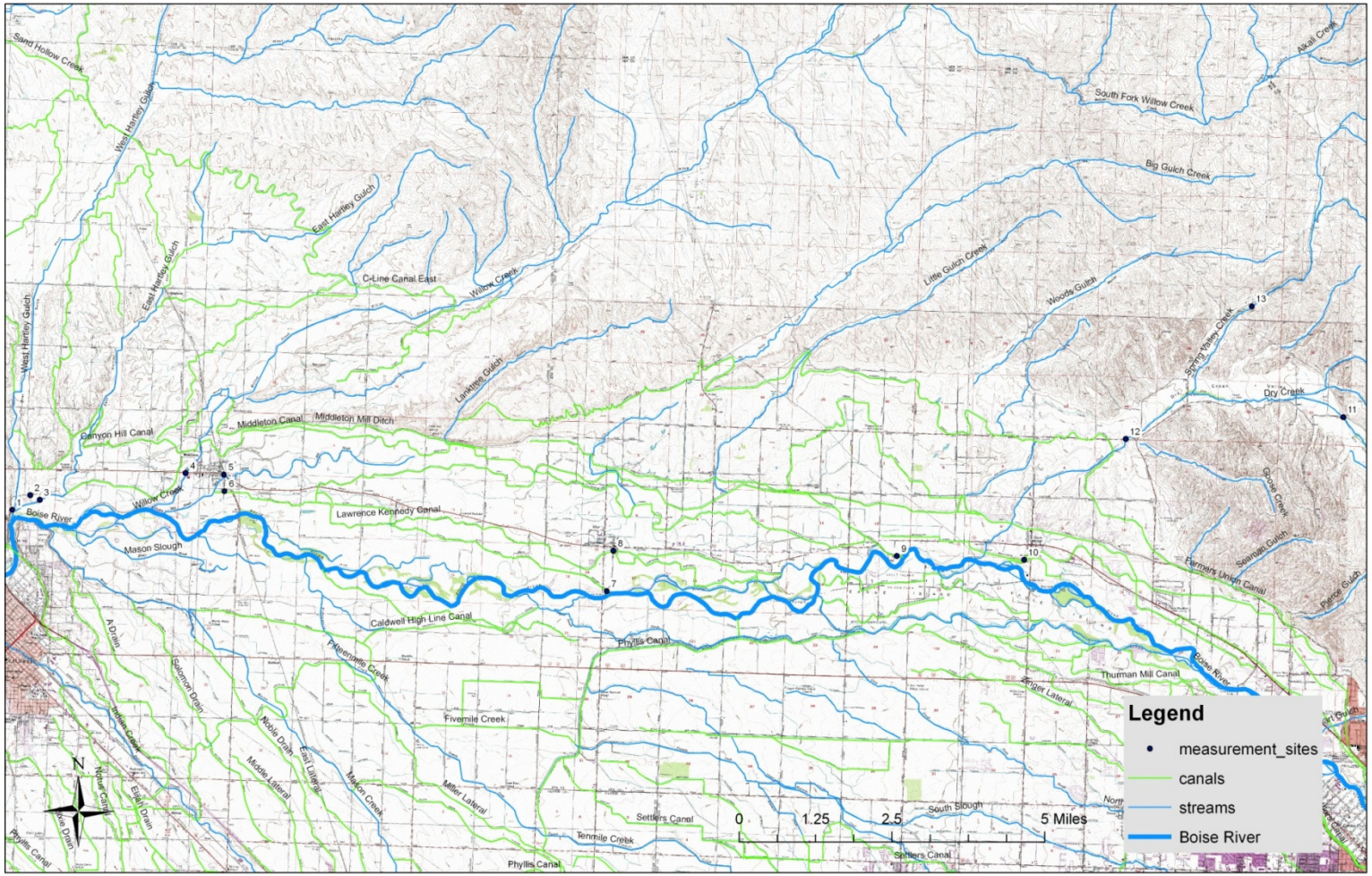


- Drain Return Measurements
  - Currently have 13 sites that were measured throughout the winter.
  - Seven sets of measurements have been collected.
  - Will continue measurements throughout the irrigation season if possible.
  - Include south side of the river in additional measurements.

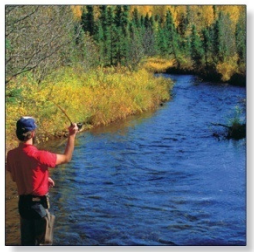
Surface Water Studies



- Drain Return Measurements



Surface Water Investigations



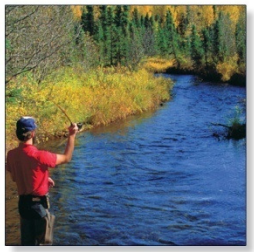
• Drain Return Measurements

- Flows in cfs

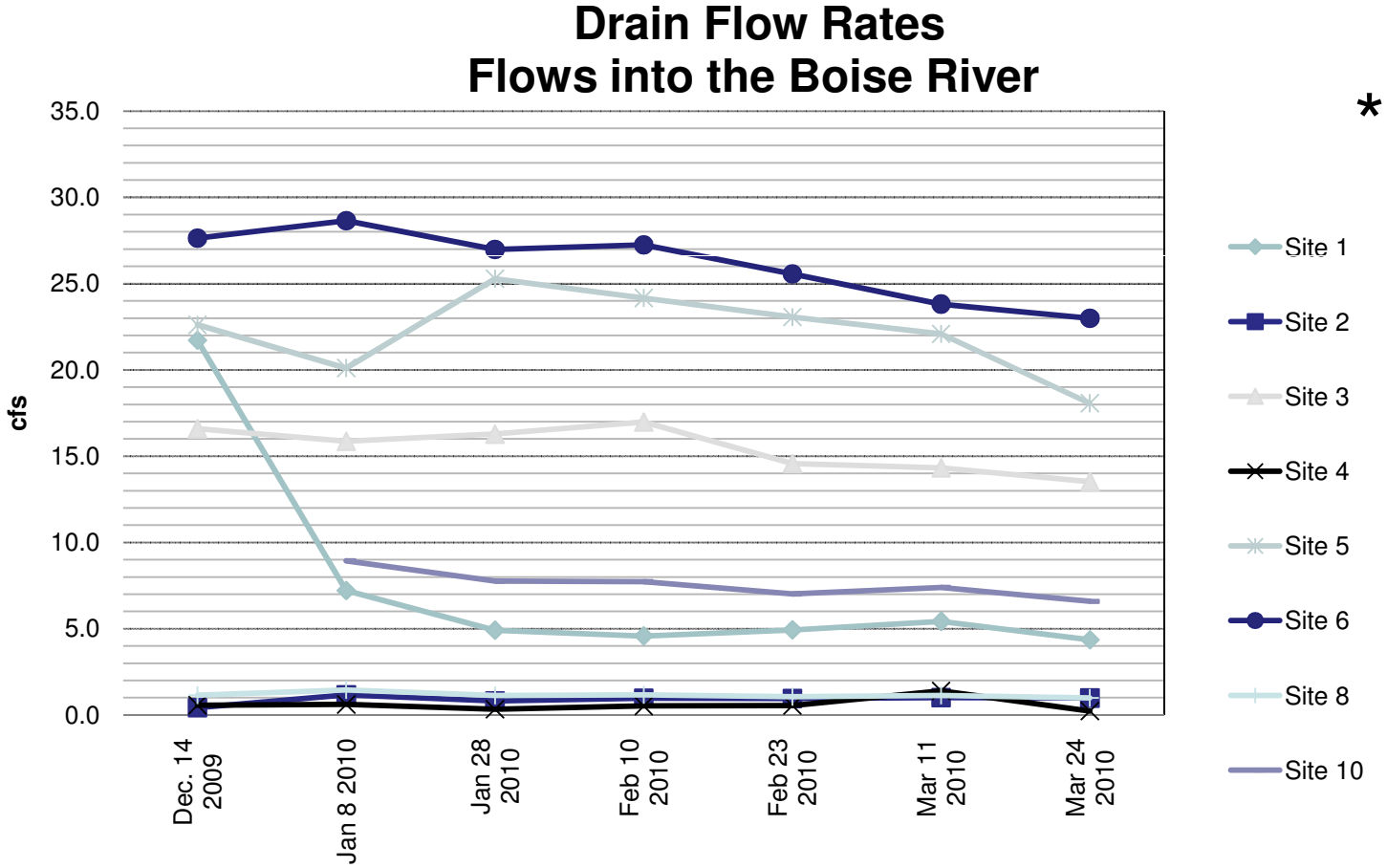
Site	Dec. 14 2009	Jan 8 2010	Jan 28 2010	Feb 10 2010	Feb 23 2010	Mar 11 2010	Mar 24 2010
1	21.7	7.2	4.9	4.6	4.9	5.4	4.4
2	0.4	1.2	0.8	1.0	1.0	1.0	1.0
3	16.6	15.9	16.3	17.0	14.6	14.3	13.5
4	0.6	0.6	0.3	0.5	0.5	1.4	0.2
5*	22.6	20.1	25.3	24.2	23.1	22.1	18.1
6*	27.6	28.7	27.0	27.2	25.6	23.8	23.0
7	0.4	0.5	1.0	0.9	1.1	1.1	1.0
8	1.2	1.5	1.1	1.2	1.1	1.1	1.0
9	0.2	0.7	0.3	1.4	0.4	0.3	0.3
10**		8.9	7.8	7.7	7.0	7.4	6.6
11	0.2	0.6	2.2	3.1	2.5	5.0	6.3
12	0.4	0.3	3.1	3.0	3.6	3.7	5.5
13						1.9	2.0

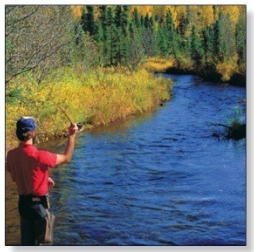
	Dec. 14 2009	Jan 8 2010	Jan 28 2010	Feb 10 2010	Feb 23 2010	March 11 2010	March 24 2010
Outflows	90.7	84.0	83.5	83.4	77.7	76.6	66.7

Surface Water Studies



- Drain Return Measurements

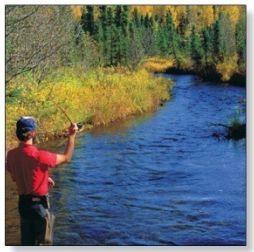




- Future Drain Return Measurements

- South side, Mason Creek where it enters Boise River 35,324 acres
- South side, Indian Creek where it enters Boise River 21,054 acres
- South side, Fifteen Mile Creek where it enters Boise River 22,403 acres
- South side, Ten Mile Creek and Cottonwood (also called Five Mile) Creek where they drain into Fifteen mile Creek.
- South side, Eight Mile Creek where it drains into Cottonwood Creek
- South side, Lower Five Mile drain just before it enters Noble drain
- South side, Noble drain just before it enters Boise River
- South side, North Slough where it enters Boise River 10,446 acres
- South side, Phyllis Drain where it enters Boise River 1,658 acres
- South side, Thurman Drain
- North and South sides, (unnamed) drains on the western end of Dixie Slough where they enter the Boise River 8,486 acres
- North side, Mill slough where it enters Boise river(Middleton drain 7,756 acres
- North side, Parma Drain (Sand Hollow Creek) where it enters Boise river 24,224 acres
- North side, West Hartley Gulch where it enters Boise River 16,716 acres
- North side, Willow Creek where it enters Boise River
- North side, Jensen Wasteway 5,153 acres
- North side, Conway Gulch where it drains into Boise River 6,641 acres
- North side, Eagle Drain 2,011 acres

Surface Water Studies



- Boise River Seepage
  - Two seepage runs have been conducted.
    - November 2009, and February 2010.
    - 11 measurements collected from the Diversion Dam to Glenwood Bridge during each run.
    - Most piezometer measurements showed higher ground water levels than river levels.
    - Net gain indicated in both runs.
    - Next run is scheduled for early May.

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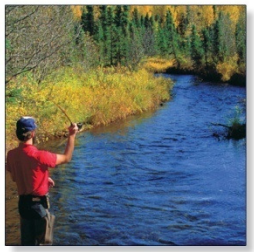
Surface Water Investigations



- USGS Stream Gage Contract
  - Alternate location for Willow Creek
    - Currently looking at the Eagle Drain (Hwy 44/Eagle Road).
    - Water Master maintains gage readings throughout the irrigation season, no winter flows recorded.
    - Flowing approximately 9 cfs (01/08/10).
    - Coordination with Board Members of Drainage District #2 is underway.

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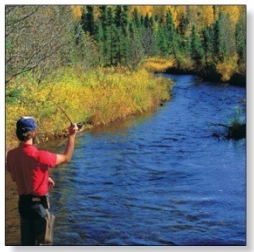
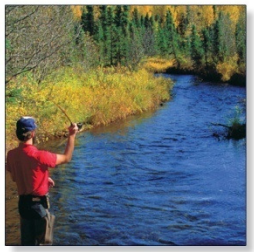
Surface Water Studies



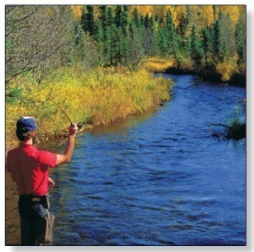
- Stream Gage Installation
  - Dry Creek gage
    - Gage is installed. Data will be available online through the USGS website.
    - Rating curve being established.

Surface Water Studies



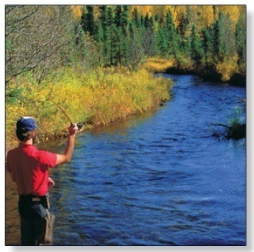
- Stream Gage Installation
  - Spring Valley gage
    - Gage has been installed and is operating.
    - Data collected from the gages can be viewed at the USGS website.
    - Flow measurements being conducted to develop rating curves.

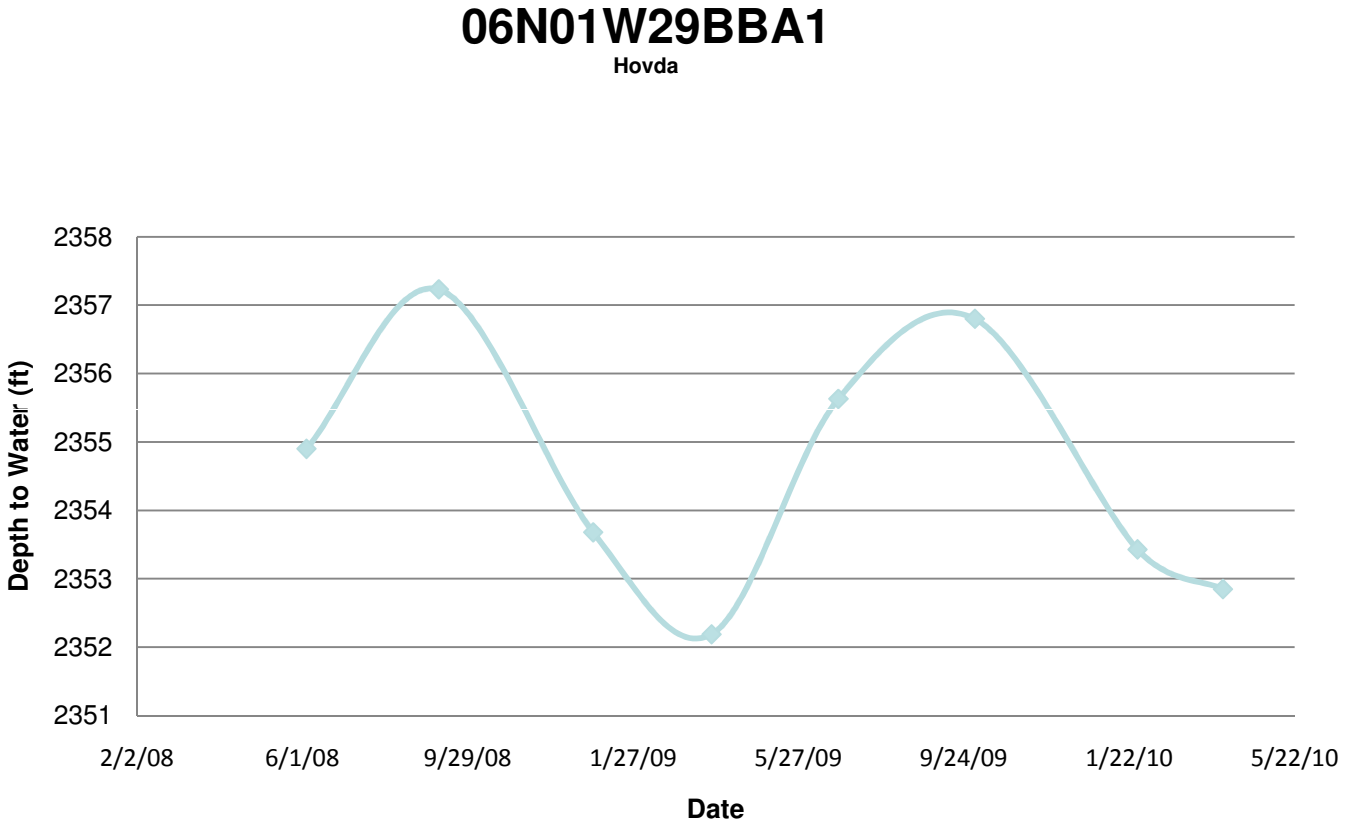
Monitoring Well Results



- 82 wells were measured the last week of March.
- Patterns are developing with respect to the timing of high/low water levels.

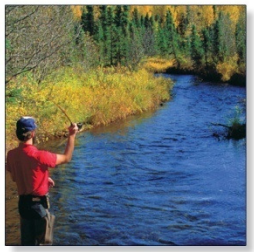
Monitoring Well Results

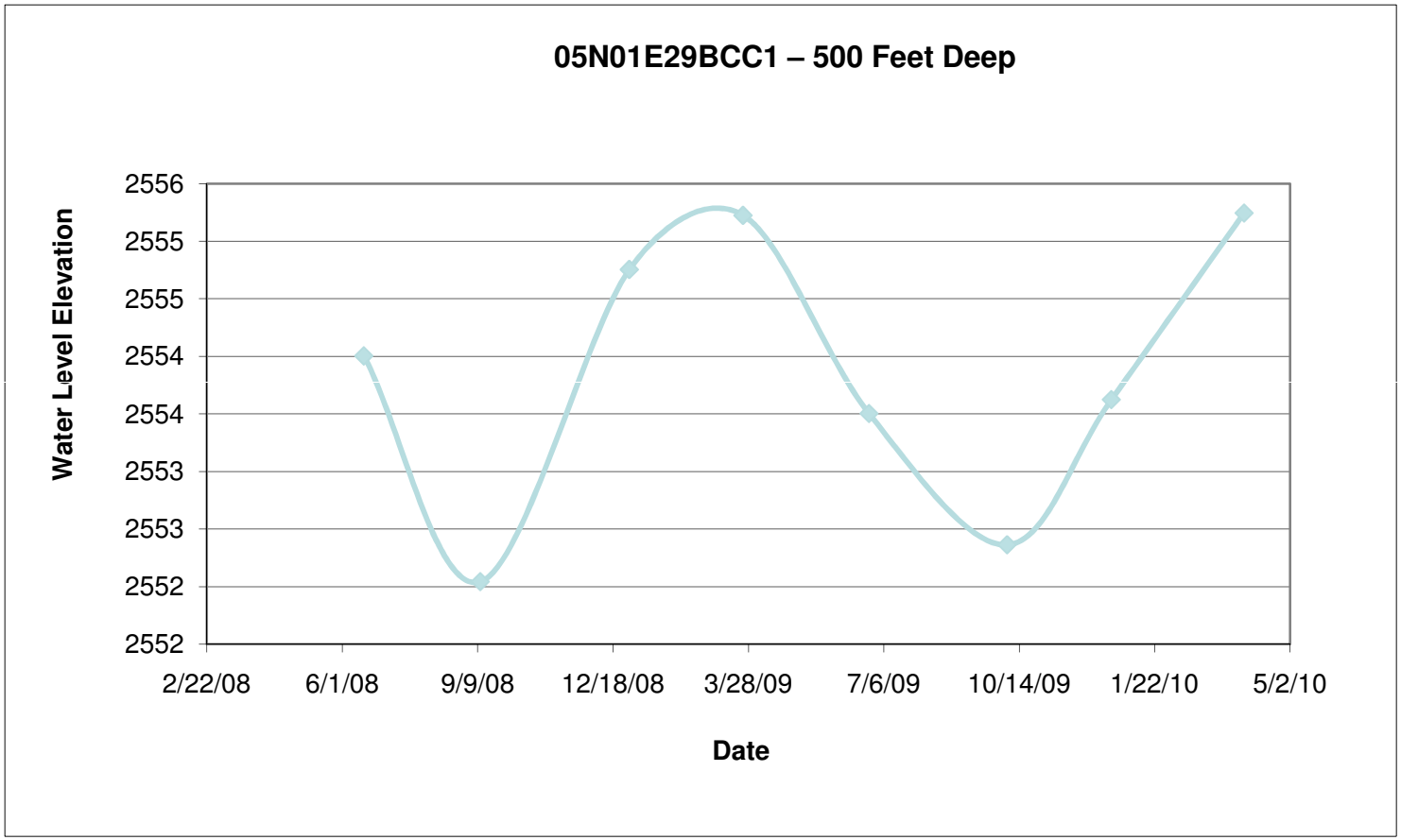




Well is 386 feet deep, along the Freeze Out Grade into Emmett
High water level in the fall, low in the spring

Monitoring Well Results





Well is 500 feet deep, in the foothills north of Eagle
High water level in the spring, low in the fall

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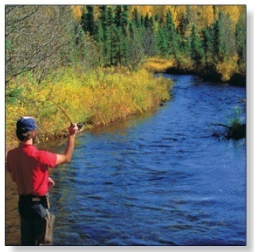
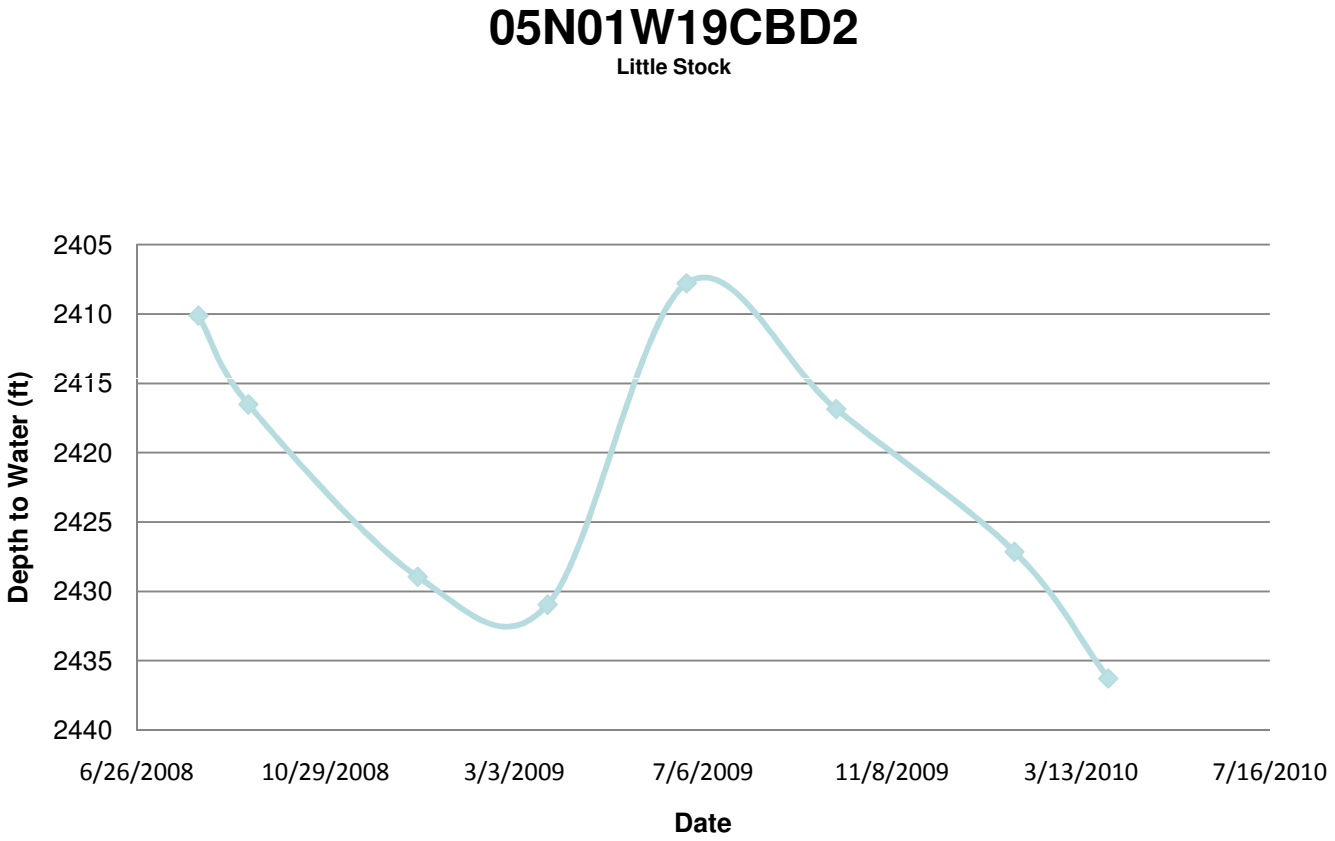
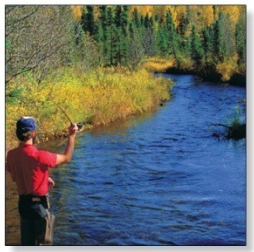
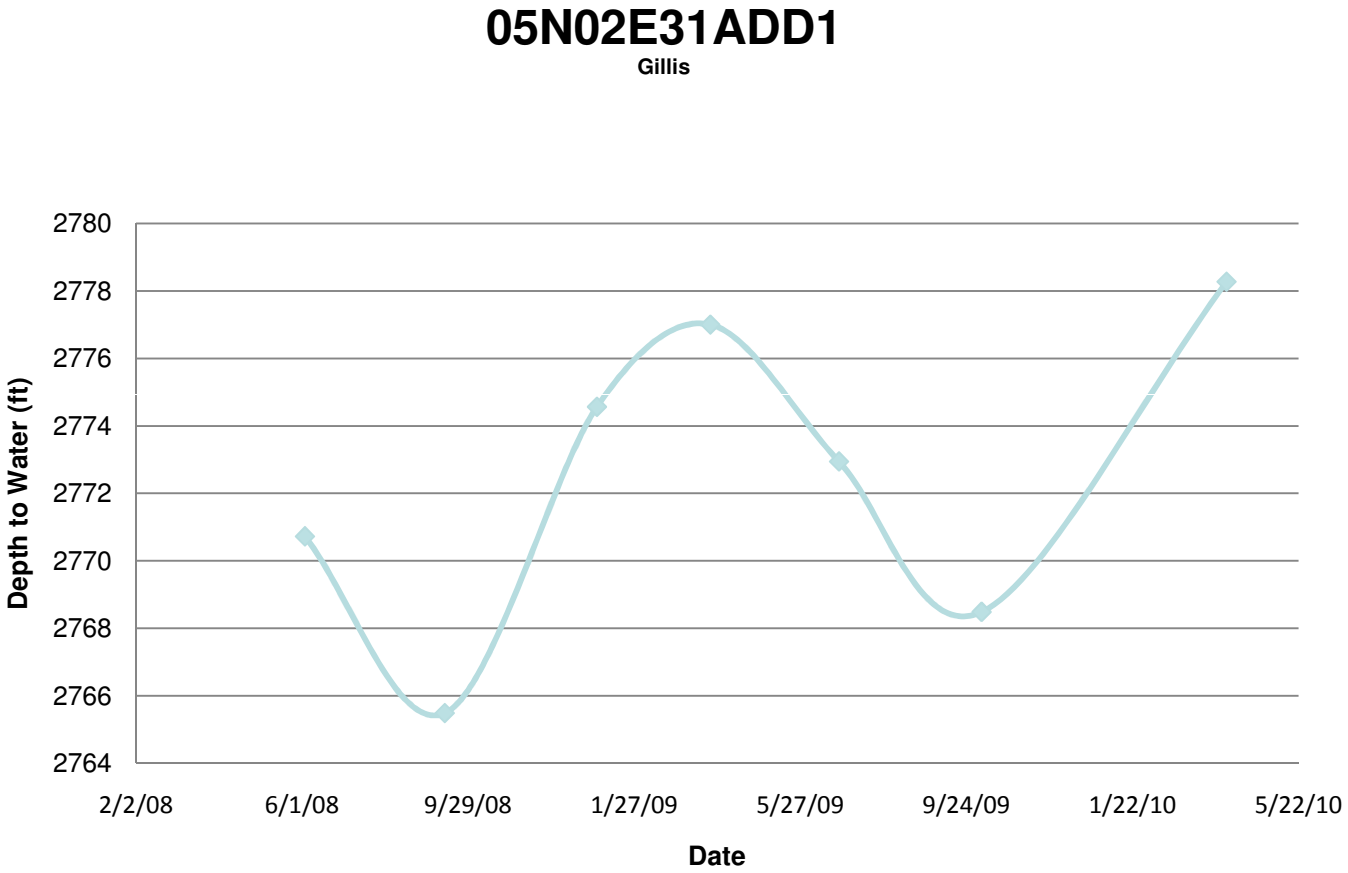




Well is 605 feet deep, west of Hwy 16
High water level in the fall, low in the spring

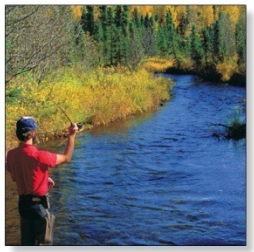
Monitoring Well Results

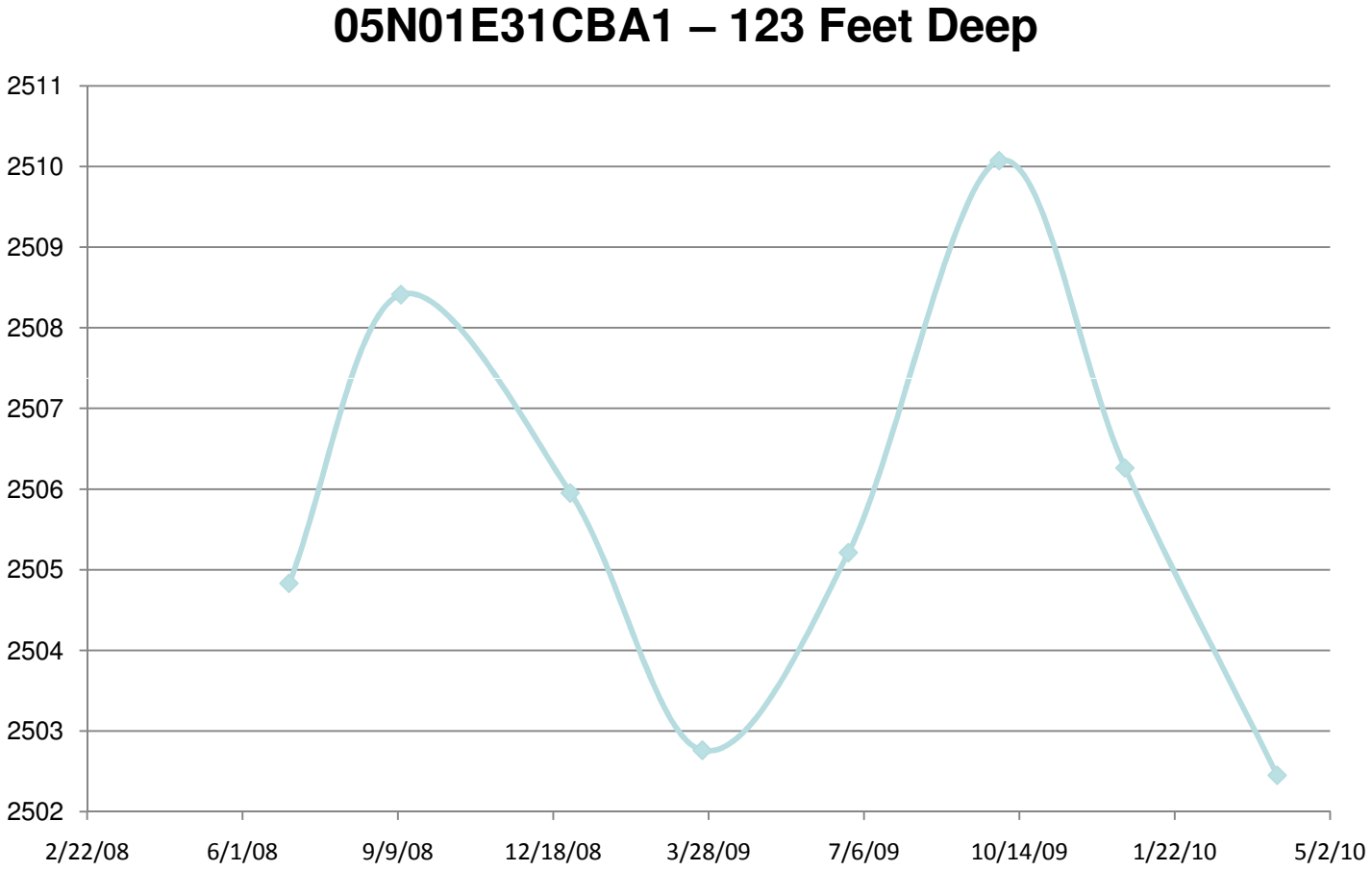




Well is 291 feet deep, in Dry Creek
High water level in the spring, low in the fall

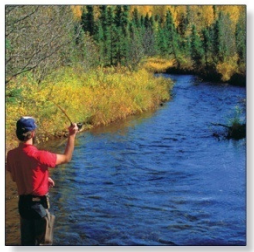
Monitoring Well Results





Well is 123 feet deep, in north Eagle
High water level in the fall, low in the spring

Monitoring Wells



- Bid schedule and technical specifications are ready to release.
- Access agreement is being reviewed by City of Eagle attorneys.
- Bid will be released following formal access from the City.

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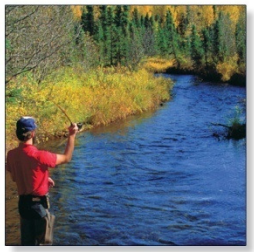
Misc. Items



- East Ada Technical Updates
- Draft reports submitted.
- Online data access.

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