



Transient stage data for the Big Wood River

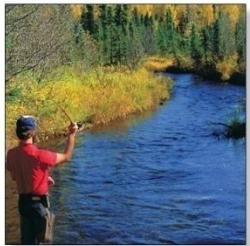
Presented by Allan Wylie, IDWR

Date February 5, 2015

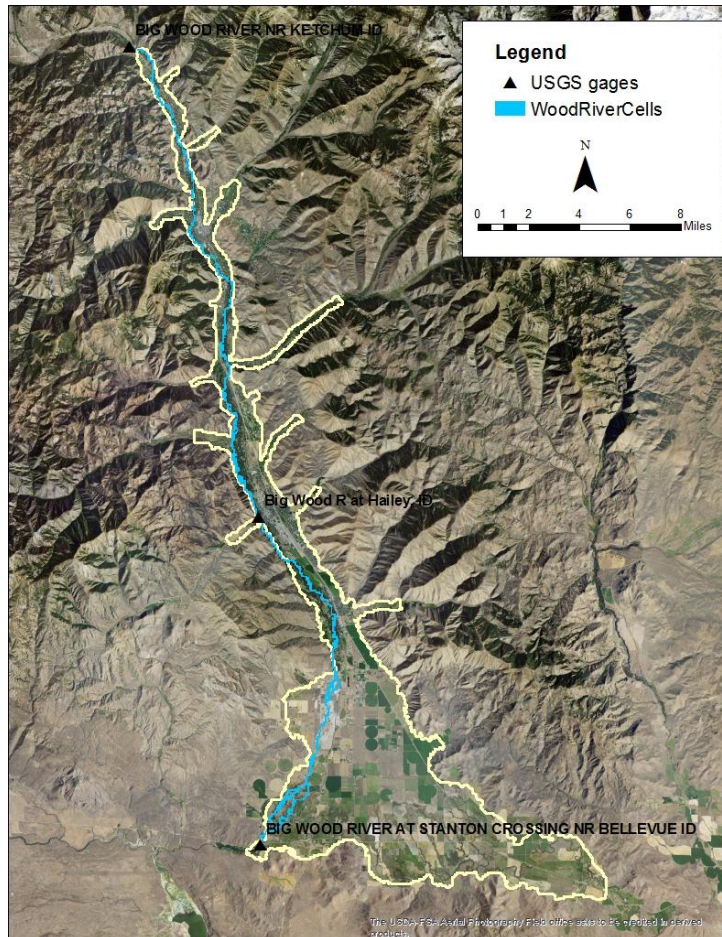


Outline

- Data from USGS
 - 15 minute
- Convert to average daily
 - Plot to check for problems
- Convert to average monthly
- Strategy for including in model



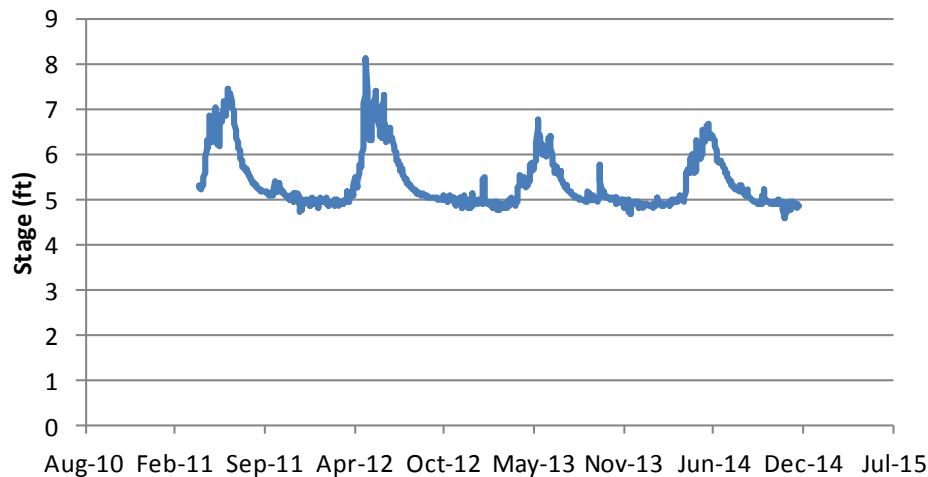
Stream Gages Along Big Wood River



- Nr Ketchum
- At Hailey
- At Stanton Crossing

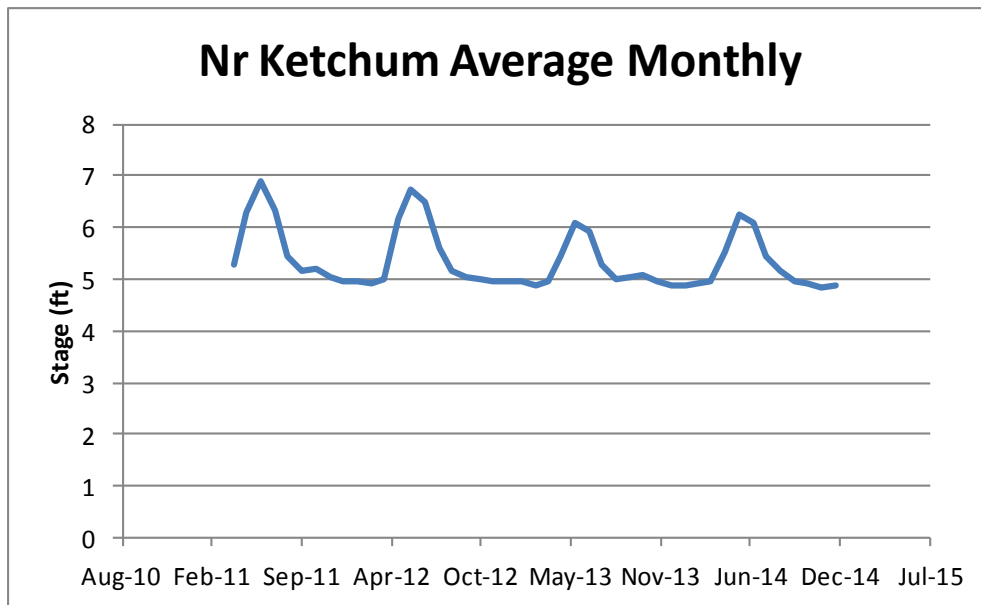
Nr Ketchum average daily

Nr Ketchum Average Daily



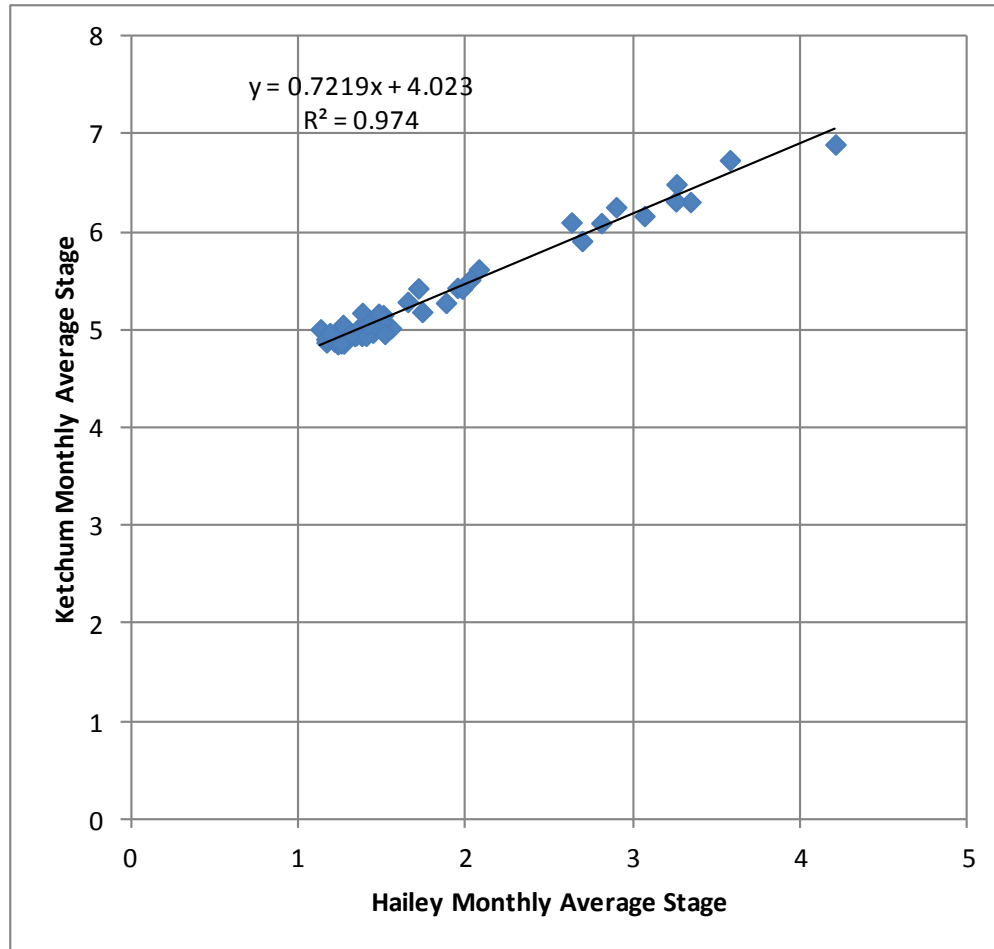
- Short series, does not include the model period

Nr Ketchum average monthly



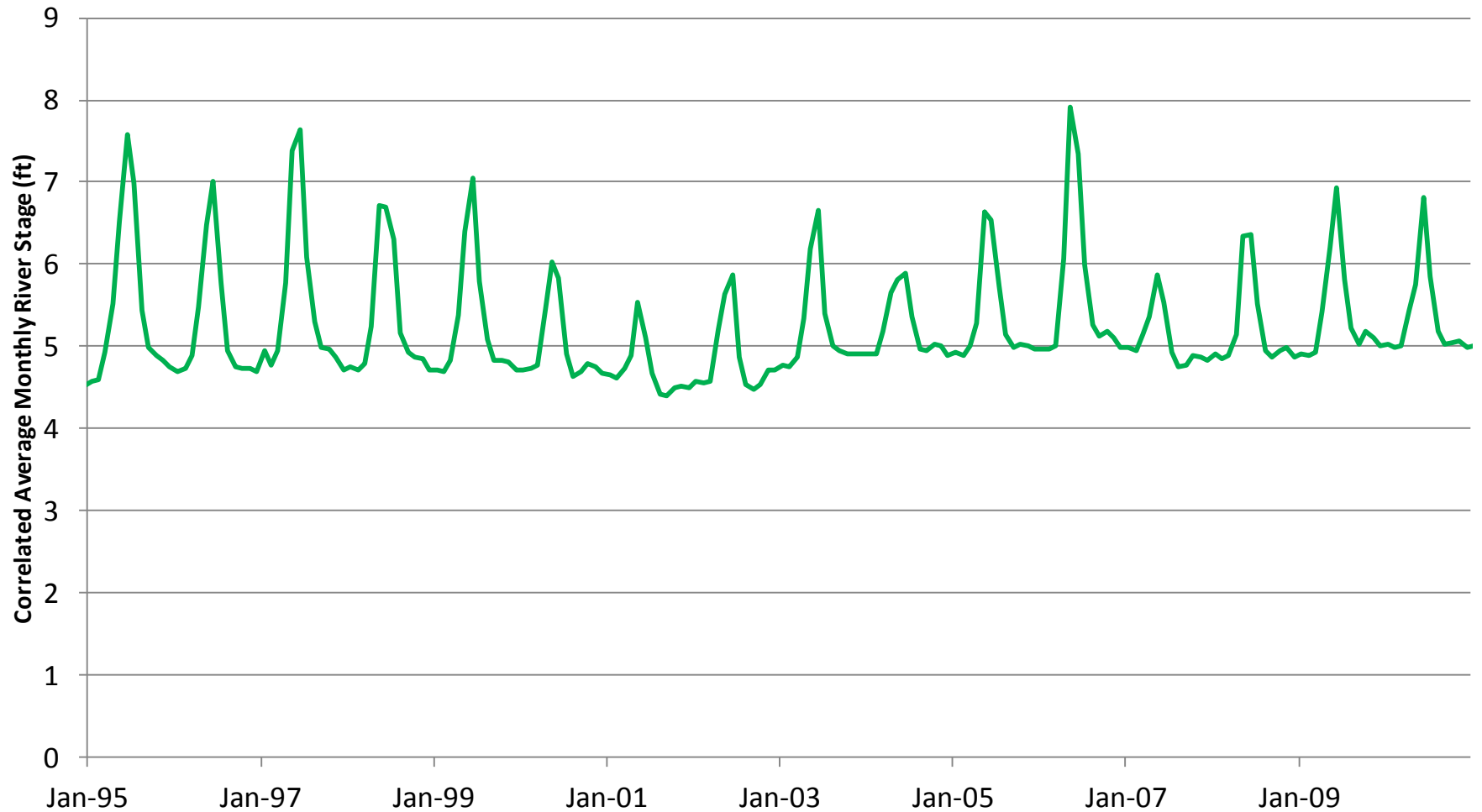
- Short series, does not include the model period

Nr Ketchum average monthly

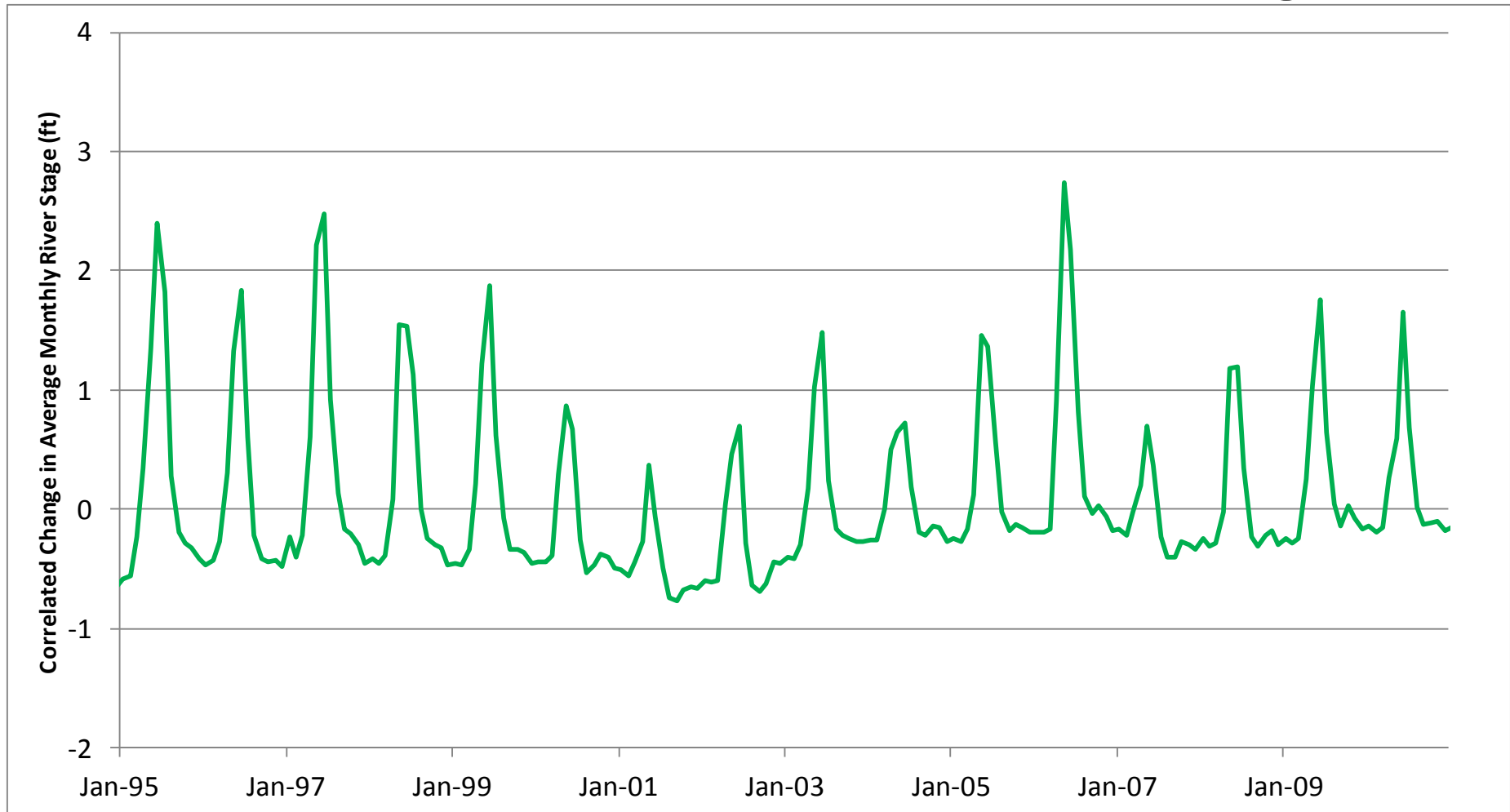


- Correlate Nr Ketchum monthly average with At Hailey monthly average

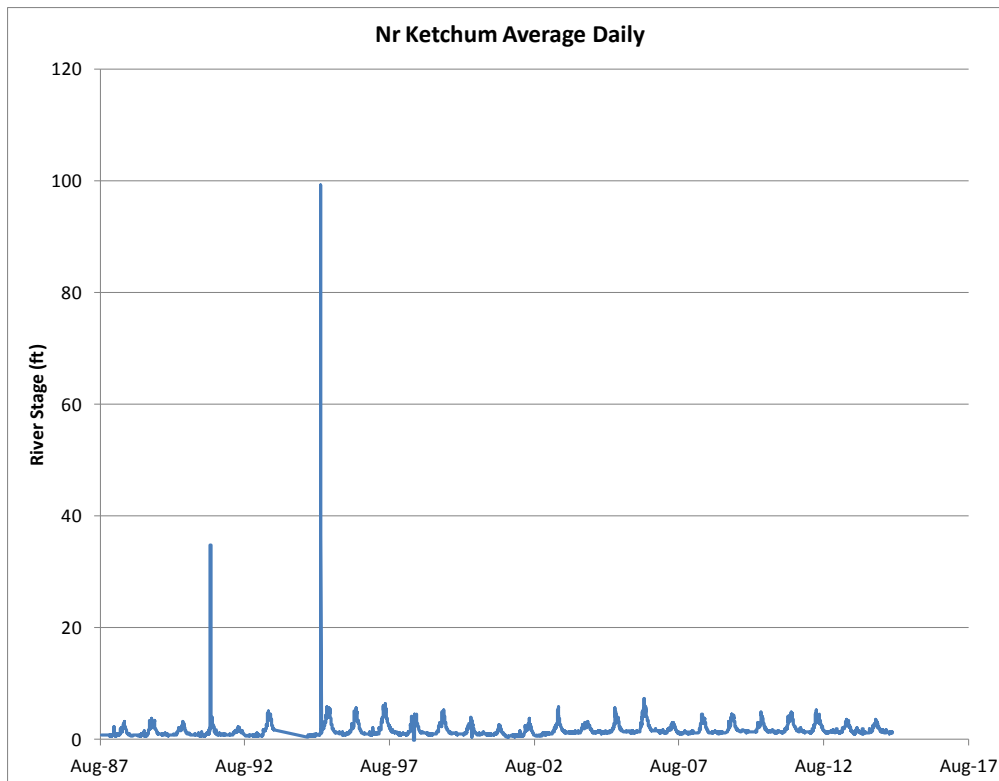
Nr Ketchum average monthly



Nr Ketchum monthly change



At Hailey average daily



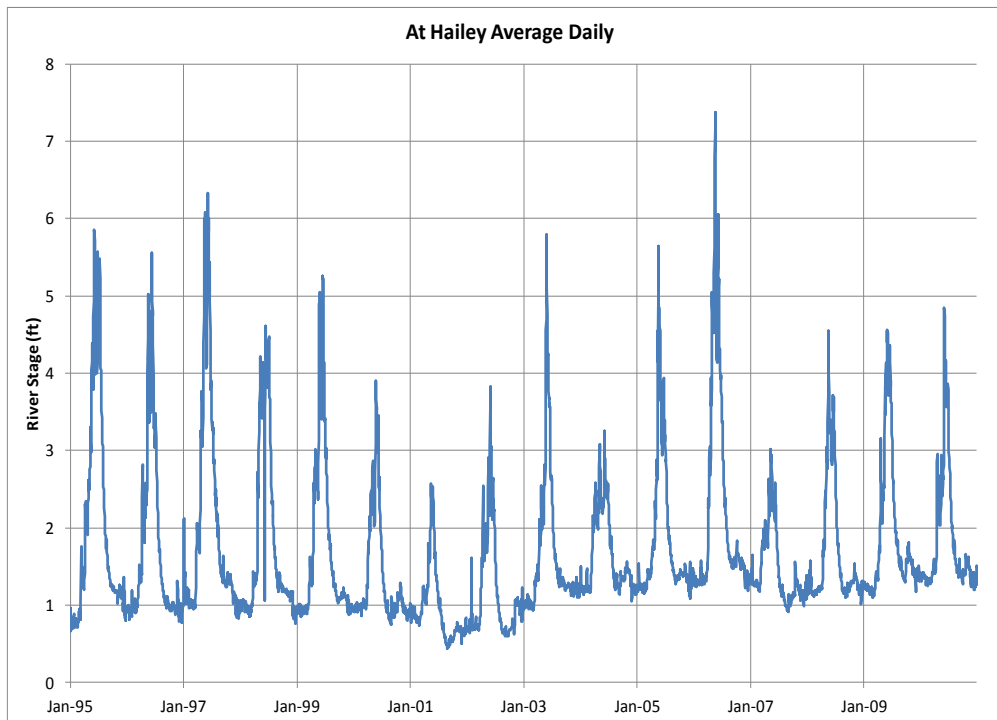
- Evidence of Icing
- Gap Aug 1993 to Oct 1994
- Icing March 14-22, 1995
- Use stage prior to icing as a proxy

At Hailey average daily

| | A | B | C | D | E | F | G | H | I |
|------|-----------|-------------|---------|---|---|---|---|---|---|
| 2301 | 3/8/1995 | 0.8659375 | | | | | | | |
| 2302 | 3/9/1995 | 0.937395833 | | | | | | | |
| 2303 | 3/10/1995 | 1.054375 | | | | | | | |
| 2304 | 3/11/1995 | 1.7571875 | | | | | | | |
| 2305 | 3/12/1995 | 1.7275 | | | | | | | |
| 2306 | 3/13/1995 | 1.4921875 | | | | | | | |
| 2307 | 3/14/1995 | 1.4921875 | 4.99073 | | | | | | |
| 2308 | 3/15/1995 | 1.4921875 | 97.2434 | | | | | | |
| 2309 | 3/16/1995 | 1.4921875 | 99.29 | | | | | | |
| 2310 | 3/17/1995 | 1.4921875 | 99.29 | | | | | | |
| 2311 | 3/18/1995 | 1.4921875 | 99.29 | | | | | | |
| 2312 | 3/19/1995 | 1.4921875 | 99.29 | | | | | | |
| 2313 | 3/20/1995 | 1.4921875 | 99.29 | | | | | | |
| 2314 | 3/21/1995 | 1.4921875 | 67.6142 | | | | | | |
| 2315 | 3/22/1995 | 1.4921875 | 36.7353 | | | | | | |
| 2316 | 3/23/1995 | 1.446979167 | | | | | | | |
| 2317 | 3/24/1995 | 1.394166667 | | | | | | | |
| 2318 | 3/25/1995 | 1.30125 | | | | | | | |
| 2319 | 3/26/1995 | 1.285625 | | | | | | | |

- Evidence of Icing
- Gap Aug 1993 to Oct 1994
- Icing March 14-22, 1995
- Use stage prior to icing as a proxy

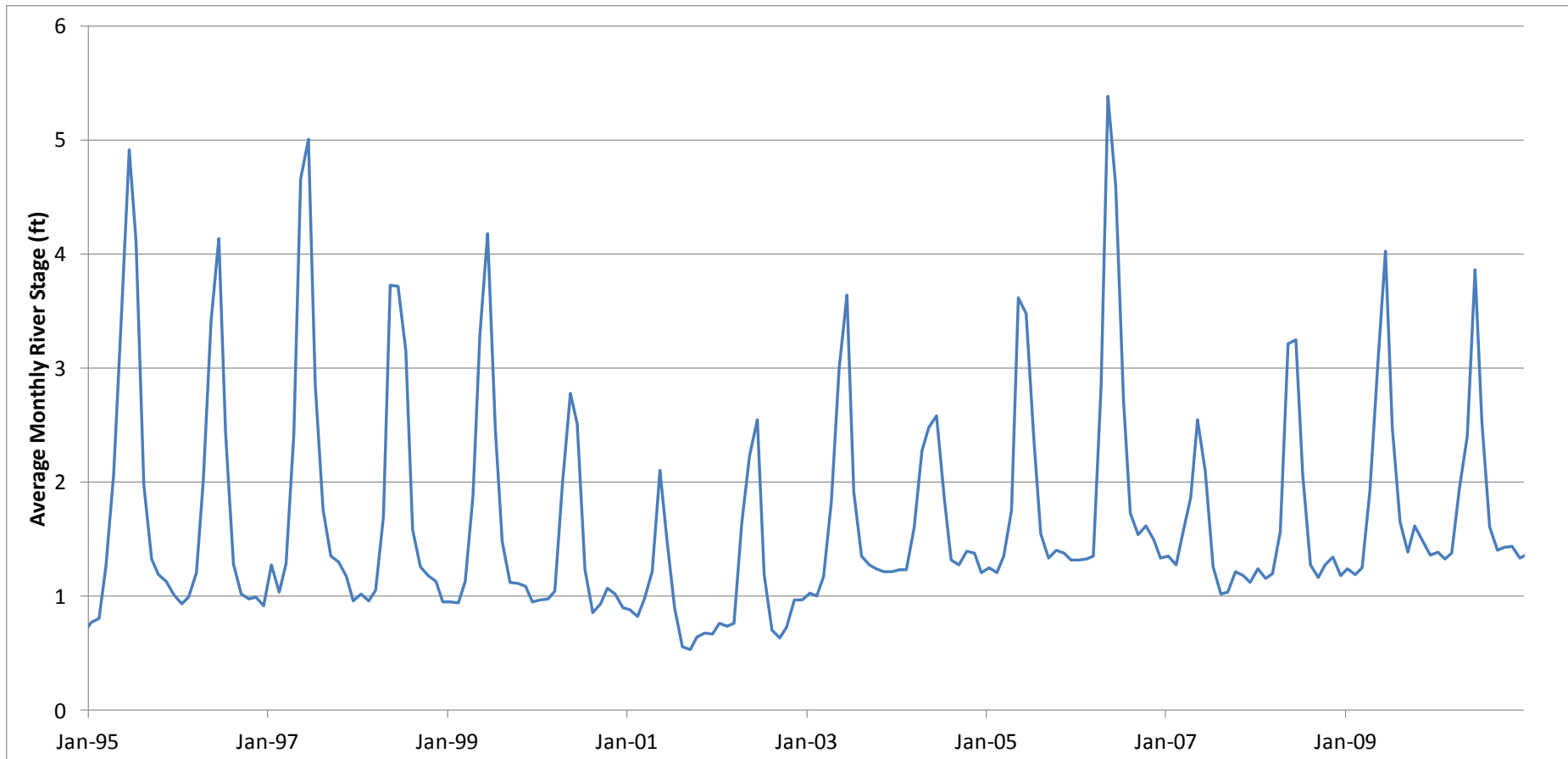
At Hailey average daily



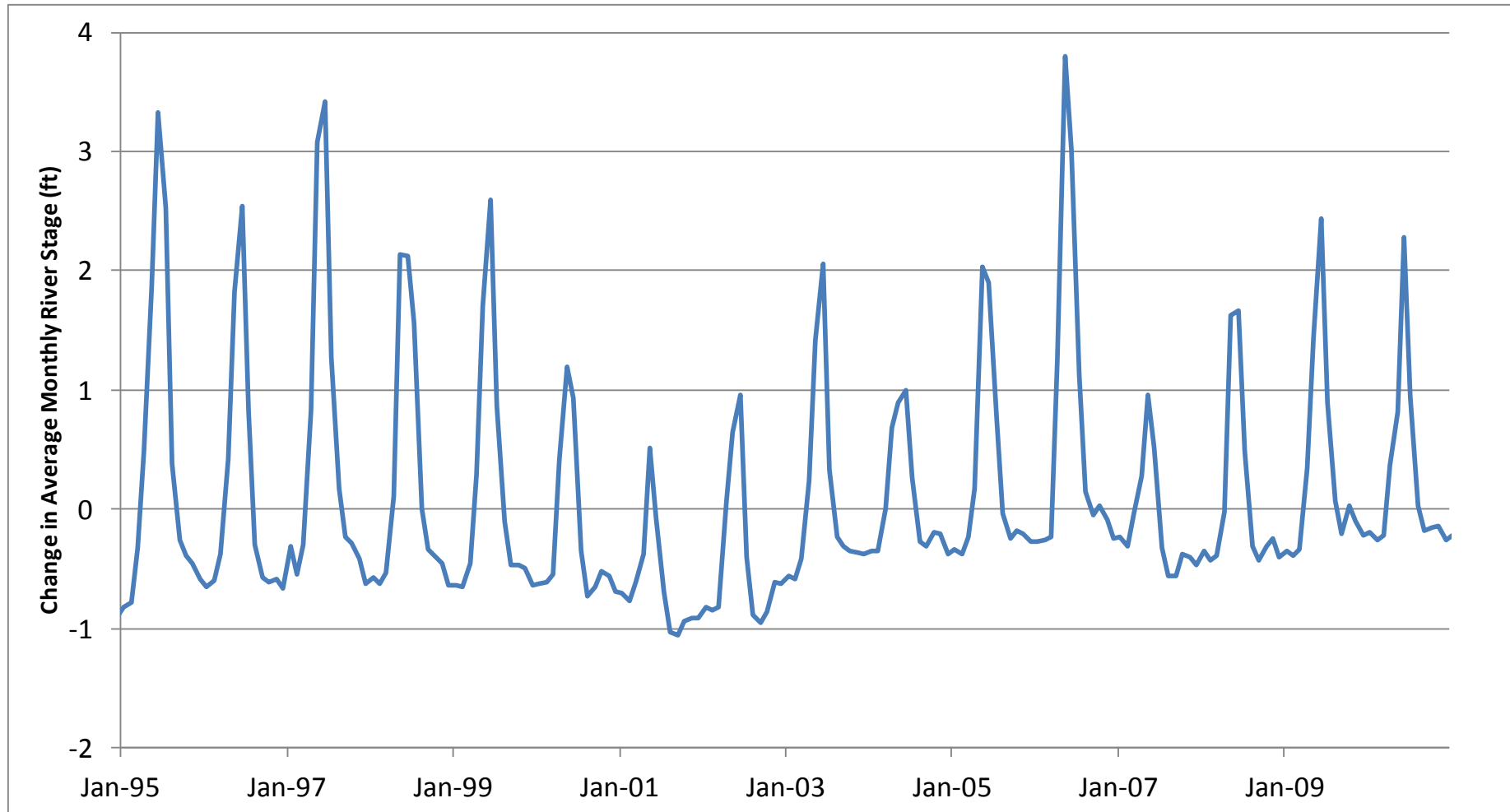
– Evidence of Icing

- Assume prior day's stage is best estimate of stage during icing

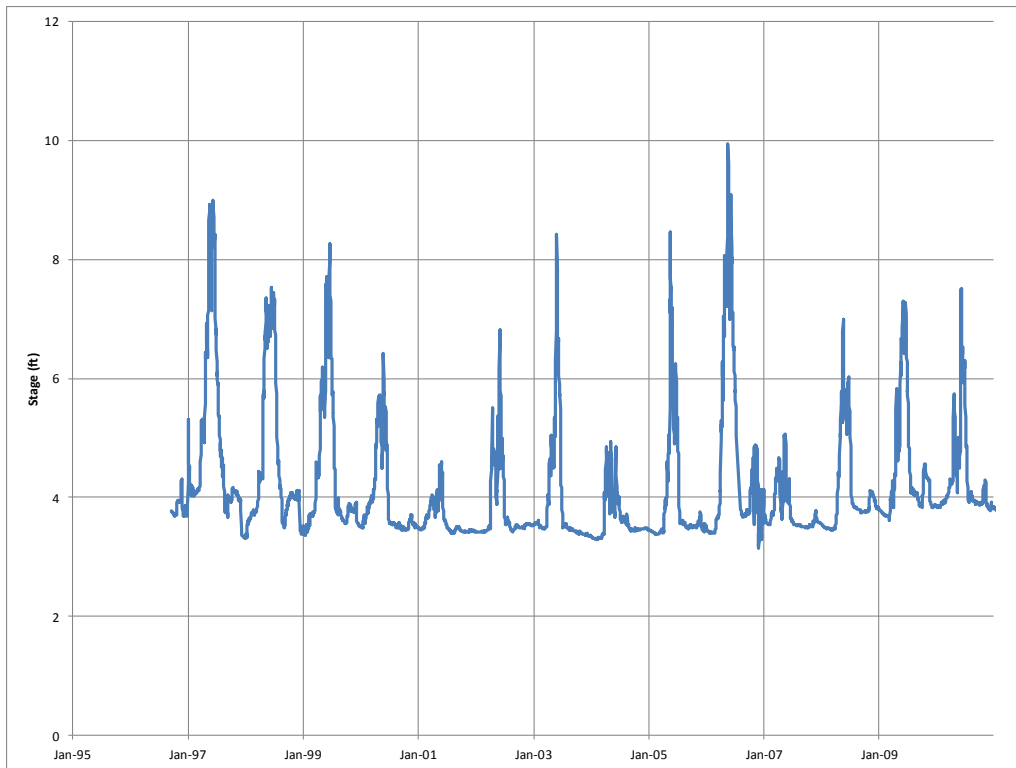
At Hailey average monthly



At Hailey monthly change

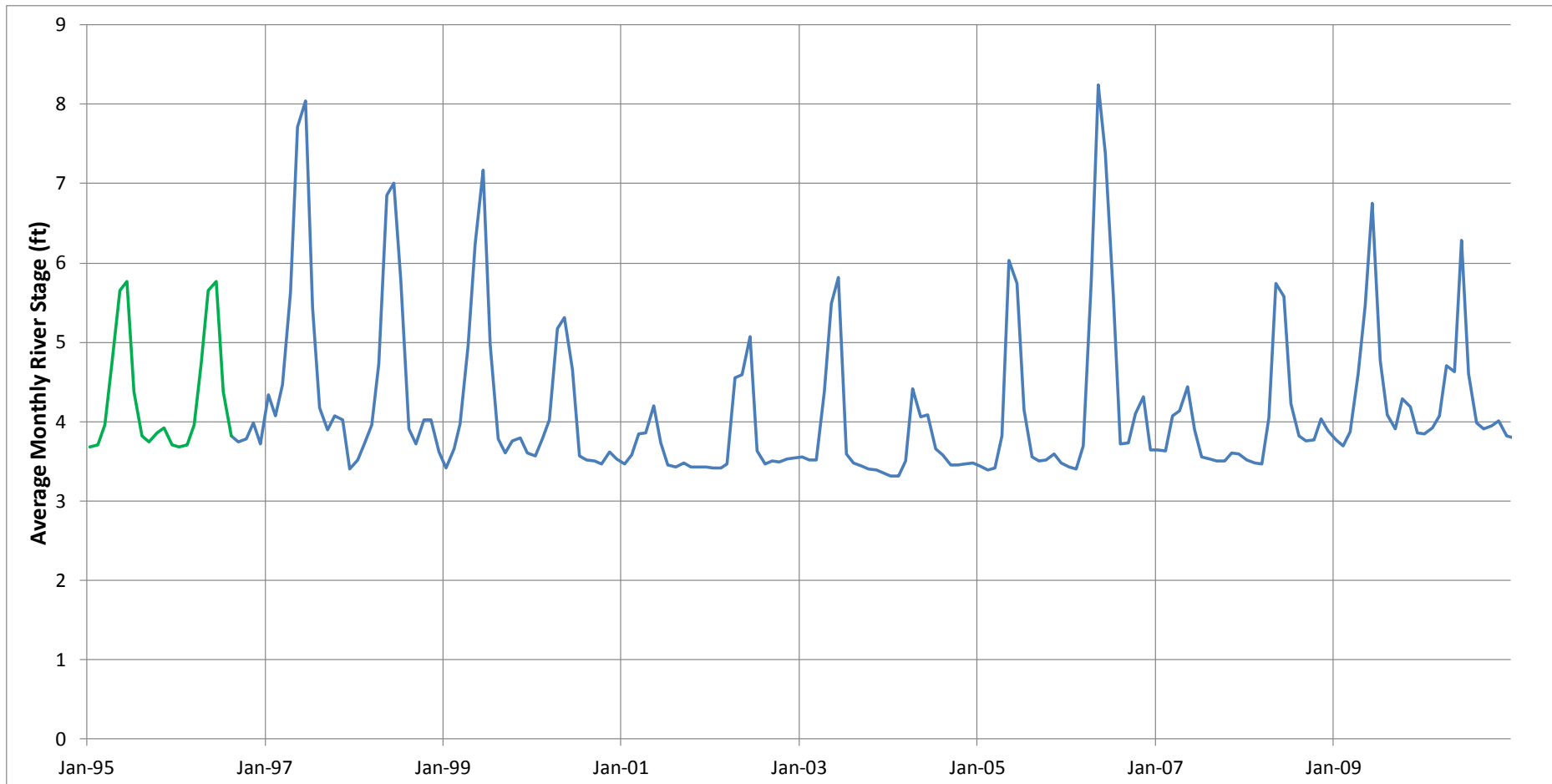


At Stanton Crossing avg daily

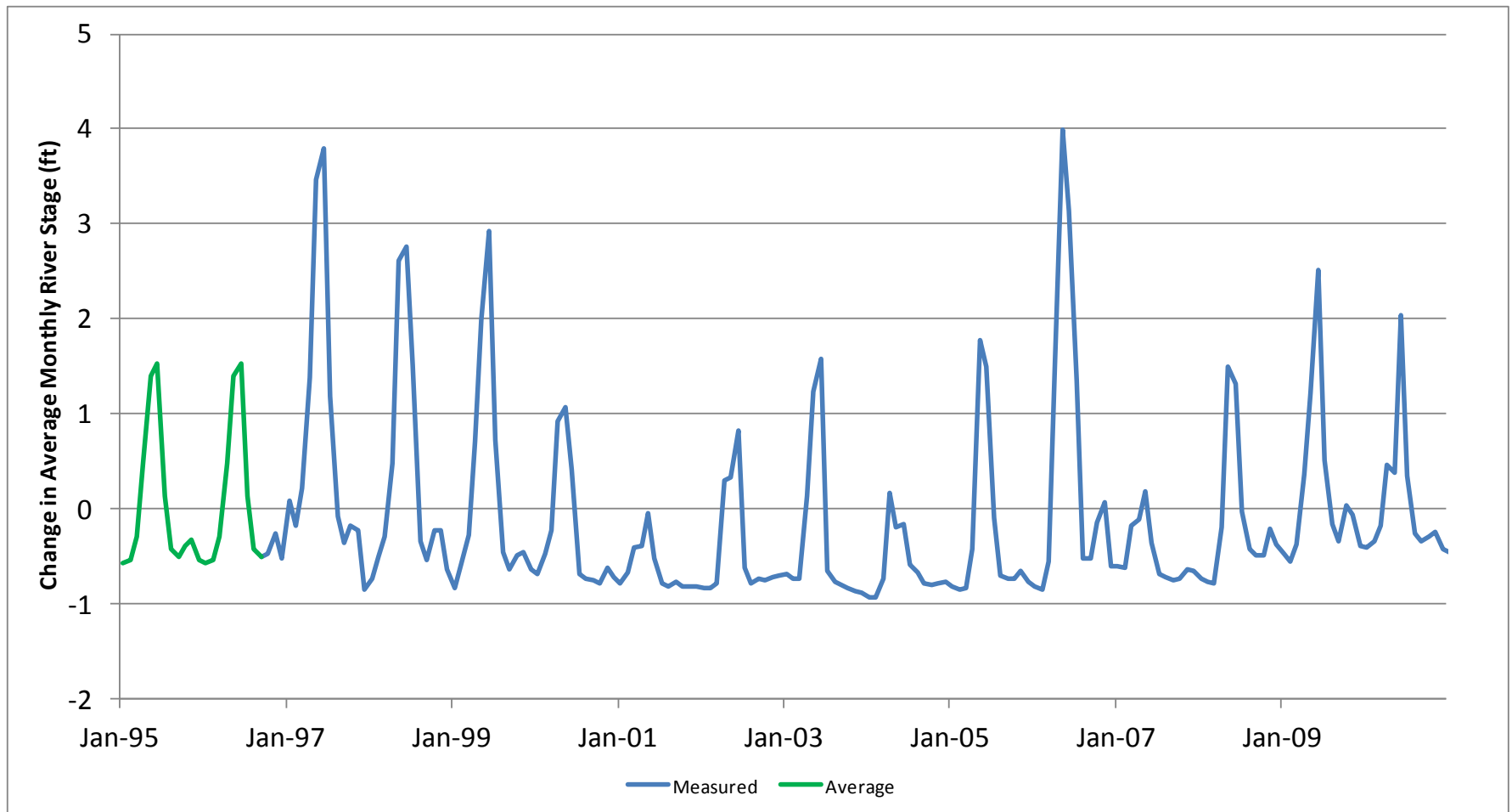


- Does not include data for the entire model period
- Compute average data to substitute for missing data

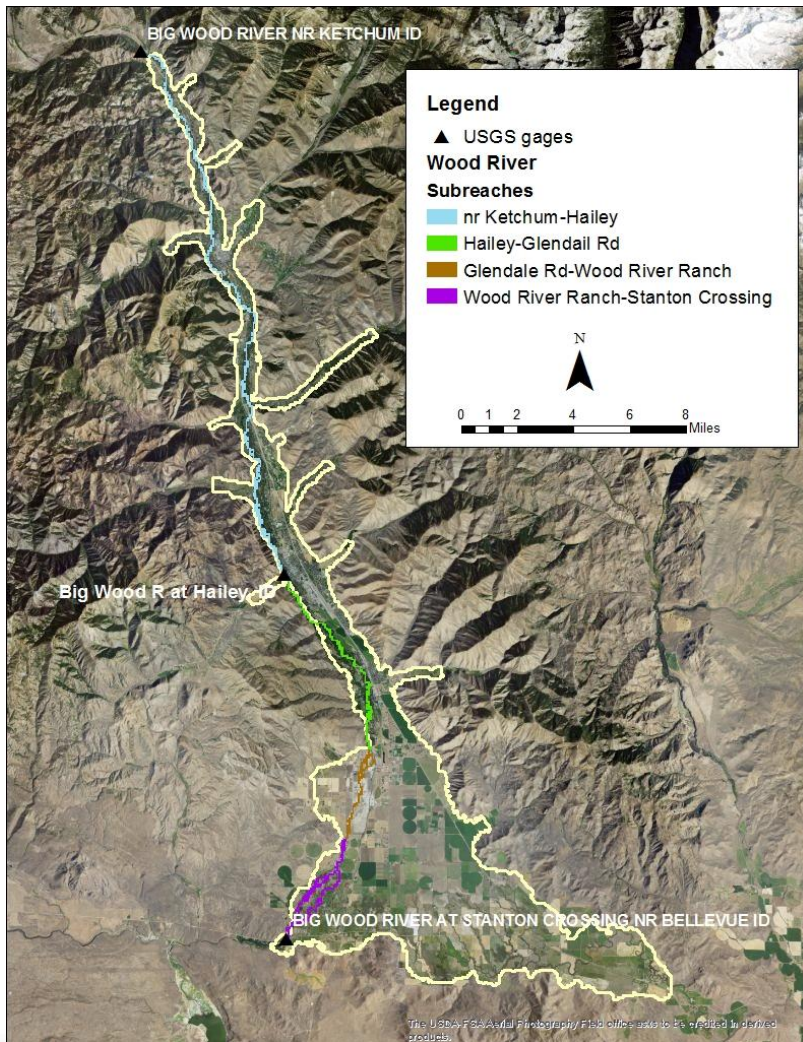
Stanton Crossing avg monthly



Stanton Crossing monthly chng



Recommendation

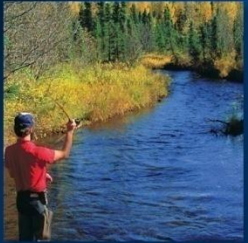
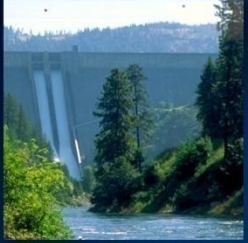


- Nr Ketchum to Hailey
 - Interpolate change between Nr Ketchum and At Hailey
- Hailey to Glendale Rd
 - Use change from At Hailey
- Glendale Rd to Wood River Ranch
 - Use steady state stage when river is not dry
 - Stage = river bottom when dry
- Wood River Ranch to At Stanton Crossing
 - Use At Stanton Crossing change

Recommendation (continued)

- Steady state river file has stage extracted from National Elevation Dataset (NED)
- Add monthly change in stage to stage from NED.





End