

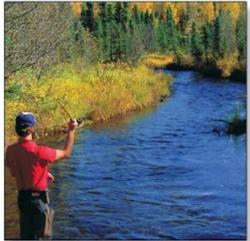


## Reach gains below Milner for calibration of ESPAM 2.0

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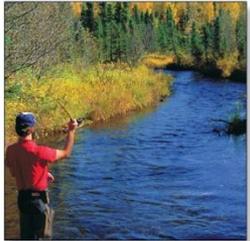
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January 23, 2012





## ESPAM2.0 REACH GAIN TARGETS BELOW MILNER

- Previous targets
  - Kimberly to King Hill
  - Kimberly to Lower Salmon Falls
  - Targets incorporated deduction of south side groundwater contributions between Kimberly and Lower Salmon Falls
- New targets for assignment of underflow
  - Kimberly to King Hill
  - Kimberly to Buhl
  - Buhl to Lower Salmon Falls
  - Deduction for south side groundwater contributions subdivided between Kimberly-Buhl and Buhl-Lower Salmon Falls



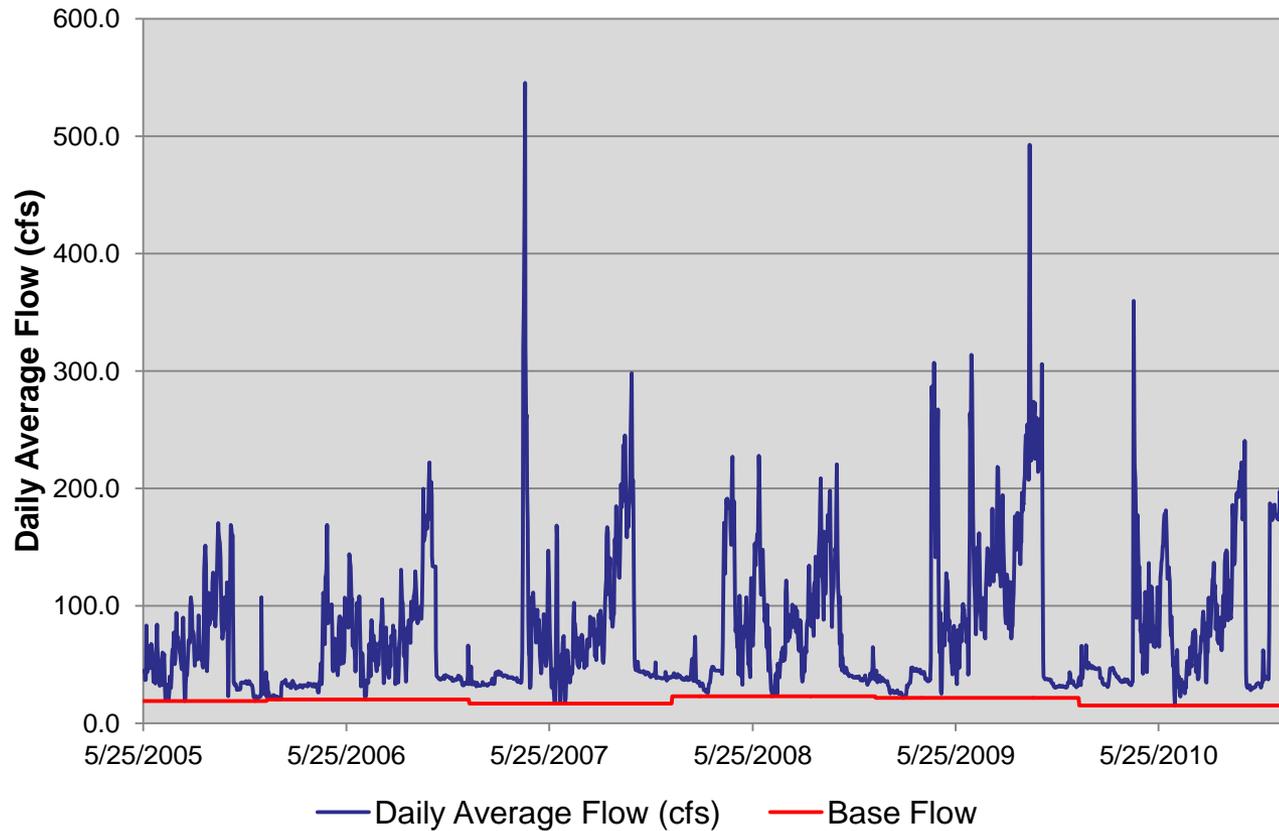
## DEDUCTION OF SOUTH SIDE CONTRIBUTIONS

- Previous targets
  - South side groundwater contribution was calculated using water budget method
  - Assumed to equal annual recharge from Twin Falls tract plus underflow from the Salmon Falls Creek basin and Salmon Falls Creek tract
  - 52% of contribution assigned to Milner to Kimberly reach
  - 48% deducted from Kimberly to Lower Salmon Falls reach gain
- New targets
  - Must split south side contribution to Kimberly-Lower Salmon Falls
  - Between Kimberly and Lower Salmon Falls, groundwater baseflow in measured return flow channels and creeks is a significant portion of south side groundwater discharge

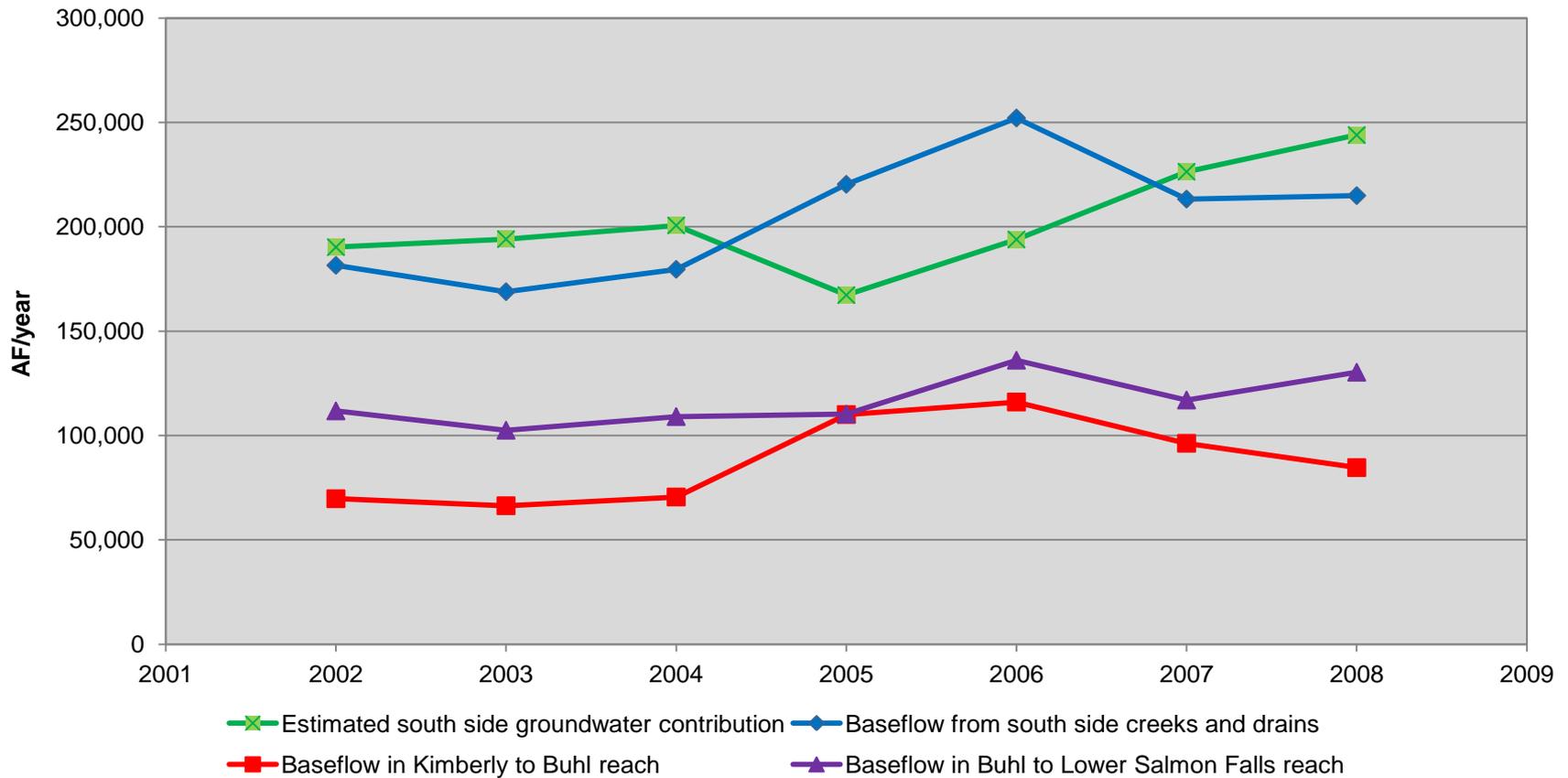


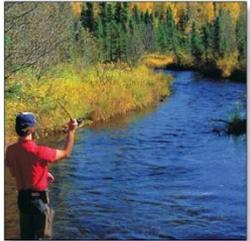
## BASEFLOW EXAMPLE

### Deep Creek



## COMPARISON OF WATER BUDGET CALCULATIONS TO BASEFLOW IN MEASURED RETURNS AND CREEKS





## DEDUCTION OF SOUTH SIDE CONTRIBUTIONS

- New targets
  - Kimberly-LSF south side contribution calculated by water budget method for 2002-2008 averages 2,000 AF/yr (1%) less than baseflow calculated from measured returns and creeks
  - Baseflow contributions in Kimberly to Buhl reach average 42.5% of total baseflow contribution
  - Baseflow contributions in Buhl to LSF reach average 57.5% of total baseflow contribution
  - Deductions for south side contribution to Kimberly-LSF reach calculated by water budget method (1980-2008) were apportioned to Kimberly-Buhl and Buhl-LSF reaches using 42.5%/57.5% split

## REACH GAIN TARGETS

