

2006 BCWD Stream Monitoring Metadata

BCWD

Brown's Creek at McKusick Road

- Rating Curve: $y = 22.276x^2 - 166.74x + 314.12$
- Conductivity and dissolved oxygen data should be used with some caution because of the amount of times that recalibrations could be performed on the data logger
- Probe is placed in stream channel approximately 25 ft upstream of McKusick Road.

Brown's Creek at HWY 96

- Rating Curve: $y = 5.53114(x^5) - 44.4322(x^4) + 122.089(x^3) - 117.815(x^2) + 56.162x - 10.1508$
- Stage data is based on bubbler stage, which is 0.13 ft less than the permanent staff gage.
- Stage was adjusted on the following dates:
 - 2/18/06 8:15 – 2/18/06 12:15
 - 5/9/06 5:00 – 5/10/06 10:30
 - 9/27/06 6:30 – 10/9/06 14:30
- Conductivity was recalibrated on the following dates and the data was adjusted throughout the time periods. Conductivity data should be used with caution.
 - 5/10/06 10:45
 - 6/26/06 9:00
 - 8/10/06 15:00
 - 9/26/06 15:00
- Probe is placed in stream channel approximately 10 ft upstream of culvert under Dellwood Rd.

Brown's Creek at HWY 15

- Rating Curve: $y = 3.096(x^4) - 59.11(x^3) + 415.97(x^2) - 1264.9x + 1402.9$
- Probe is placed in stream channel approximately 100 ft upstream from Highway 15 (Manning Ave.)

Brown's Creek Diversion Structure

- Rating Curve: $y = 5.3423(x^2) - 1.6815x + 0.2423$
- Probe is placed in invert of upstream end of main channel culvert at diversion structure.
- Secondary level logger probe was placed inside the diversion structure itself.

Tributary to Long Lake at 62nd St. (Furgala)

- Rating Curve: $y = 1.952(x+0.193)^2 - 0.653(x+0.193)$
 $y = 0.00062e^{(9.36086(x+0.193))}$ (Low flow)
- Two rating curves were applied, one for low flow situations. Rating curves were based on continuous culvert depth. Actual probe stage for the site is 0.193 ft lower than the culvert depth, and that offset is represented in the rating curves so stage can be applied.
- An offset value of -0.004 was used when applying the low flow rating curve, due to the curve resulting in 0.004 cfs at a stage of zero.
- Probe is placed in stream channel approximately 30 ft upstream of 62nd St.

Tributary to Long Lake at Stillwater Marketplace (Long Lake Inlet 2)

-Discharge was calculated using an area/velocity relationship.

-Probe is placed in culvert approximately 250 ft upstream from Marketplace Pond