Water-Data Report 2012

# 05453510 Coralville Lake near Coralville, IA

Iowa Basin
Middle Iowa Subbasin

LOCATION.--Lat 41°43′29″, long 91°31′40″ referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.22, T.80 N., R.6 W., Johnson County, IA, Hydrologic Unit 07080208, at outlet works near left end of Coralville Dam on the Iowa River, 4.3 mi northeast of Coralville Post Office, 2.3 mi upstream from Rapid Creek, and 81.3 mi upstream from mouth.

DRAINAGE AREA.--3,115 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--Reservoir storage (acre-ft) records from October 1958 to September 2000; elevation records from October 2000 to current year.

GAGE.--Water-stage recorder. Elevation records referenced to National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

COOPERATION.--Records provided by U.S. Army Corps of Engineers.

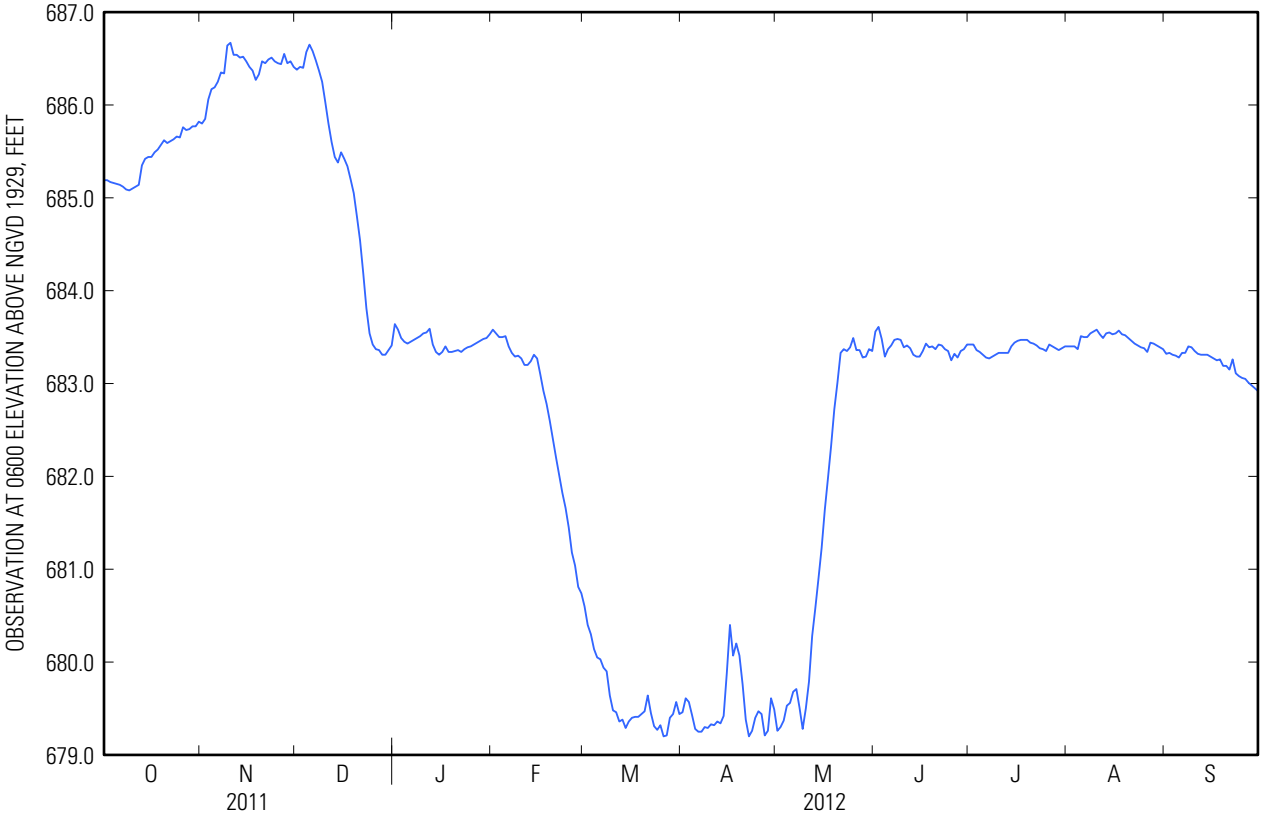
REMARKS.--Reservoir is formed by earthfill dam completed in 1957. Storage began in September 1958. Releases controlled by three gates, 8.33 ft wide and 20 ft high, into forechamber of 23-ft diameter concrete conduit through dam. Inlet invert elevation at 646 ft. No dead storage. Maximum design discharge through gates is 20,000 $ft^3/s$. Ungated spillway is concrete overflow section 500 ft in length at elevation 712 ft, contents 469,000 acre-ft, surface area 24,800 acres. Reservoir is used for flood control, low-flow augmentation, conservation and recreation. Normal operation will lower the elevation from 683 ft (surface area 5,430 acres) on February 15 to 679 ft (surface area 3,270 acres) on March 1, maintaining 679 ft from March 1 to June 15, 683 ft from June 15 to September 15, 686 ft (surface area 7,000 acres) from September 15 to December 15, and 683 ft from December 15 to February 15, with a minimum release of 150 $ft^3/s$, and a maximum release of 10,000 $ft^3/s$ from December 15 to May 1 and 6,000 $ft^3/s$ from May 1 to December 15.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed at 0600 hours, 716.96 ft, June 15, 2008; minimum elevation observed at 0600 hours, 658.77 ft, March 10, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed at 0600 hours, 686.67 ft, November 10; minimum elevation observed at 0600 hours, 679.20 ft, March 26, April 22.

**05453510 Coralville Lake near Coralville, IA—Continued**

**ELEVATION ABOVE NGVD 1929, FEET**
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**
**DAILY OBSERVATION AT 0600 HOURS**

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 685.19 | 685.80 | 686.38 | 683.64 | 683.58 | 680.60 | 679.46 | 679.26 | 683.56 | 683.42 | 683.40 | 683.32 |
| 2 | 685.19 | 685.85 | 686.41 | 683.58 | 683.54 | 680.40 | 679.61 | 679.30 | 683.61 | 683.42 | 683.40 | 683.33 |
| 3 | 685.17 | 686.06 | 686.40 | 683.49 | 683.50 | 680.30 | 679.57 | 679.37 | 683.48 | 683.36 | 683.40 | 683.31 |
| 4 | 685.16 | 686.17 | 686.57 | 683.45 | 683.50 | 680.14 | 679.43 | 679.53 | 683.29 | 683.34 | 683.37 | 683.30 |
| 5 | 685.15 | 686.19 | 686.65 | 683.43 | 683.51 | 680.05 | 679.28 | 679.56 | 683.37 | 683.31 | 683.51 | 683.28 |
| 6 | 685.14 | 686.25 | 686.58 | 683.45 | 683.40 | 680.03 | 679.25 | 679.68 | 683.41 | 683.28 | 683.50 | 683.33 |
| 7 | 685.12 | 686.35 | 686.48 | 683.47 | 683.33 | 679.94 | 679.25 | 679.71 | 683.47 | 683.27 | 683.50 | 683.33 |
| 8 | 685.09 | 686.34 | 686.37 | 683.49 | 683.29 | 679.90 | 679.30 | 679.51 | 683.48 | 683.29 | 683.54 | 683.40 |
| 9 | 685.08 | 686.64 | 686.25 | 683.51 | 683.30 | 679.64 | 679.29 | 679.28 | 683.47 | 683.31 | 683.56 | 683.39 |
| 10 | 685.10 | 686.67 | 686.03 | 683.54 | 683.27 | 679.48 | 679.33 | 679.50 | 683.39 | 683.33 | 683.58 | 683.35 |
| 11 | 685.12 | 686.54 | 685.80 | 683.55 | 683.20 | 679.46 | 679.32 | 679.79 | 683.41 | 683.33 | 683.53 | 683.32 |
| 12 | 685.14 | 686.54 | 685.60 | 683.59 | 683.20 | 679.36 | 679.36 | 680.28 | 683.38 | 683.33 | 683.49 | 683.31 |
| 13 | 685.35 | 686.51 | 685.44 | 683.42 | 683.24 | 679.38 | 679.34 | 680.58 | 683.31 | 683.33 | 683.54 | 683.31 |
| 14 | 685.42 | 686.52 | 685.38 | 683.34 | 683.31 | 679.29 | 679.42 | 680.90 | 683.29 | 683.40 | 683.55 | 683.31 |
| 15 | 685.44 | 686.47 | 685.49 | 683.31 | 683.27 | 679.36 | 679.88 | 681.23 | 683.29 | 683.44 | 683.53 | 683.29 |
| 16 | 685.44 | 686.41 | 685.42 | 683.34 | 683.10 | 679.40 | 680.40 | 681.64 | 683.35 | 683.46 | 683.54 | 683.27 |
| 17 | 685.49 | 686.37 | 685.34 | 683.40 | 682.92 | 679.41 | 680.07 | 681.98 | 683.43 | 683.47 | 683.57 | 683.25 |
| 18 | 685.52 | 686.27 | 685.20 | 683.34 | 682.78 | 679.41 | 680.20 | 682.33 | 683.39 | 683.47 | 683.53 | 683.26 |
| 19 | 685.57 | 686.33 | 685.05 | 683.34 | 682.60 | 679.44 | 680.07 | 682.72 | 683.40 | 683.47 | 683.52 | 683.19 |
| 20 | 685.62 | 686.47 | 684.80 | 683.35 | 682.40 | 679.47 | 679.76 | 683.01 | 683.37 | 683.44 | 683.49 | 683.19 |
| 21 | 685.59 | 686.45 | 684.54 | 683.36 | 682.20 | 679.64 | 679.38 | 683.33 | 683.42 | 683.43 | 683.46 | 683.15 |
| 22 | 685.61 | 686.49 | 684.19 | 683.34 | 682.01 | 679.45 | 679.20 | 683.37 | 683.41 | 683.41 | 683.43 | 683.26 |
| 23 | 685.63 | 686.51 | 683.81 | 683.37 | 681.82 | 679.31 | 679.26 | 683.35 | 683.37 | 683.38 | 683.41 | 683.11 |
| 24 | 685.66 | 686.47 | 683.54 | 683.39 | 681.66 | 679.27 | 679.40 | 683.39 | 683.35 | 683.37 | 683.39 | 683.08 |
| 25 | 685.65 | 686.45 | 683.42 | 683.40 | 681.45 | 679.32 | 679.47 | 683.49 | 683.25 | 683.35 | 683.38 | 683.06 |
| 26 | 685.76 | 686.44 | 683.37 | 683.42 | 681.18 | 679.20 | 679.44 | 683.36 | 683.32 | 683.42 | 683.34 | 683.05 |
| 27 | 685.73 | 686.55 | 683.36 | 683.44 | 681.04 | 679.21 | 679.21 | 683.36 | 683.28 | 683.40 | 683.44 | 683.01 |
| 28 | 685.74 | 686.45 | 683.31 | 683.46 | 680.81 | 679.40 | 679.26 | 683.28 | 683.35 | 683.38 | 683.43 | 682.98 |
| 29 | 685.77 | 686.47 | 683.31 | 683.48 | 680.74 | 679.44 | 679.61 | 683.29 | 683.37 | 683.36 | 683.41 | 682.95 |
| 30 | 685.77 | 686.41 | 683.36 | 683.49 | --- | 679.57 | 679.49 | 683.37 | 683.42 | 683.38 | 683.39 | 682.92 |
| 31 | 685.82 | --- | 683.41 | 683.53 | --- | 679.44 | --- | 683.35 | --- | 683.40 | 683.37 | --- |
| Mean | 685.43 | 686.38 | 685.07 | 683.44 | 682.66 | 679.60 | 679.51 | 681.49 | 683.39 | 683.38 | 683.47 | 683.22 |
| Max | 685.82 | 686.67 | 686.65 | 683.64 | 683.58 | 680.60 | 680.40 | 683.49 | 683.61 | 683.47 | 683.58 | 683.40 |
| Min | 685.08 | 685.80 | 683.31 | 683.31 | 680.74 | 679.20 | 679.20 | 679.26 | 683.25 | 683.27 | 683.34 | 682.92 |

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