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Fisheries Division
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RESERVOIR DISCHARGE INVESTIGATION
AT BARREN RIVER AND NOLIN RIVER RESERVOIRS

Department of Fish and Wildlife Resources

Frankfort, Kentucky

Arnold L. Mitchell, Commissioner

1973

RESERVOIR DISCHARGE INVESTIGATION

AT BARREN RIVER AND NOLIN RIVER RESERVOIRS

[PART II of 3 PARTS]

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WATER QUALITY DETERMINATIONS - 1970

Barren River Reservoir and Tailwater

Nolin River Reservoir and Tailwater

Table 1. (continued)

| Depth (feet) | April 20 - 22 (550') | | | | | | | May 20 - 22 (552') | | | | | | |
|-----------------|-------------------------|------|------|------|------|------|------|-----------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 60.5 | 59.0 | 60.2 | 60.9 | 60.3 | 60.0 | 59.1 | 80.0 | 76.8 | 78.3 | 73.9 | 75.1 | 69.2 | 61.9 |
| 5 | 60.5 | 58.0 | 60.0 | 60.0 | 60.0 | | | 72.5 | 73.9 | 73.4 | 73.5 | 70.0 | | |
| 10 | 60.5 | 57.1 | 58.1 | 59.0 | 60.0 | | | 72.1 | 72.5 | 72.2 | 71.6 | 66.5 | | |
| 15 | 59.0 | 56.2 | 56.5 | 57.8 | 60.0 | | | 70.0 | 70.2 | 69.3 | 69.8 | 65.0 | | |
| 20 | 59.0 | 56.0 | 56.1 | 57.5 | 60.0 | | | 66.6 | 67.1 | 66.9 | 66.4 | 64.7 | | |
| 25 | 57.5 | 55.0 | 56.0 | 57.0 | | | | 64.3 | 64.8 | 65.2 | 63.2 | 64.5 | | |
| 30 | 54.5 | 54.2 | 57.7 | 56.5 | | | | 61.8 | 62.0 | 62.7 | 62.0 | | | |
| 35 | 53.0 | 54.2 | 54.7 | | | | | 60.7 | 60.0 | 59.7 | 59.7 | | | |
| 40 | 52.5 | 53.2 | 53.6 | | | | | 59.5 | 58.5 | 57.8 | 58.3 | | | |
| 45 | 51.5 | | | | | | | 57.6 | | | | | | |
| 50 | 51.0 | | | | | | | 55.8 | | | | | | |
| 55 | 50.5 | | | | | | | 54.3 | | | | | | |
| 60 | 50.0 | | | | | | | 52.6 | | | | | | |
| 65 | 50.0 | | | | | | | 51.6 | | | | | | |

Table 1. (continued)

| Depth (feet) | May 26 - 27* (552') | | | | | | | June 15 - 16* (553') | | | | | | |
|-----------------|------------------------|------|------|------|------|------|------|-------------------------|------|------|------|------|------|------|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 75.2 | 81.1 | 81.1 | 80.6 | 79.3 | 77.0 | 77.0 | 78.4 | 78.8 | 80.2 | 78.8 | 78.8 | 77.0 | 77.0 |
| 5 | 73.4 | 80.2 | 81.1 | 79.7 | 78.8 | 75.2 | | 78.4 | 78.8 | 79.3 | 78.8 | 78.8 | 77.0 | |
| 10 | 71.6 | 73.9 | 79.3 | 77.0 | 72.1 | 73.4 | | 77.9 | 77.9 | 76.6 | 75.7 | 78.4 | 75.2 | |
| 15 | 65.3 | 70.3 | 73.4 | 69.8 | 70.3 | 68.0 | | 75.2 | 76.1 | 73.0 | 73.0 | 77.0 | 71.6 | |
| 20 | 62.6 | 67.6 | 69.8 | 67.6 | 68.5 | 66.2 | | 69.8 | 72.1 | 71.6 | 69.8 | 68.0 | 68.9 | |
| 25 | 62.6 | 66.2 | | | 66.2 | 64.0 | | 64.4 | 70.7 | | | 66.2 | 67.1 | |
| 30 | 59.0 | | | | 64.4 | 62.6 | | 61.7 | | | | 62.6 | | |
| 35 | 59.0 | | | | 63.5 | | | 59.9 | | | | 60.8 | | |
| 40 | 57.2 | | | | 61.7 | | | 58.1 | | | | 59.9 | | |
| 45 | 55.4 | | | | | | | 56.3 | | | | | | |
| 50 | 54.5 | | | | | | | 54.1 | | | | | | |
| 55 | 53.6 | | | | | | | 53.6 | | | | | | |
| 60 | 51.8 | | | | | | | 52.3 | | | | | | |
| 65 | 50.0 | | | | | | | 51.8 | | | | | | |

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Table 1. (continued)

| Depth (feet) | June 17 - 19 (552') | | | | | | | June 30 - July 1* (554') | | | | | | |
|-----------------|------------------------|------|------|------|------|------|------|-----------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 80.0 | 79.2 | 79.5 | 81.8 | 83.9 | 76.5 | 77.8 | 81.1 | 83.3 | 83.3 | 85.1 | 84.2 | 84.2 | 82.0 |
| 5 | 79.9 | 79.2 | 79.5 | 78.0 | 78.0 | | | 78.8 | 82.4 | 82.0 | 80.6 | 80.2 | 82.4 | |
| 10 | 78.2 | 79.2 | 79.0 | 74.6 | 72.3 | | | 78.4 | 79.7 | 79.7 | 80.2 | 79.3 | 77.0 | |
| 15 | 75.7 | 79.0 | 78.0 | 73.0 | 71.0 | | | 77.0 | 77.5 | 77.5 | 78.4 | 77.0 | 73.0 | |
| 20 | 71.4 | 70.0 | 71.9 | 68.7 | 70.0 | | | 73.0 | 74.8 | 73.0 | 74.8 | 72.1 | 71.6 | |
| 25 | 65.2 | 66.8 | 67.0 | 66.8 | | | | 68.0 | 71.2 | | | 68.0 | 71.2 | |
| 30 | 63.3 | 63.5 | 64.1 | 63.6 | | | | 64.4 | | | | 64.4 | 69.8 | |
| 35 | 61.0 | 61.2 | 60.1 | 60.0 | | | | 60.8 | | | | 61.3 | | |
| 40 | 59.1 | 58.3 | 59.2 | 59.1 | | | | 58.6 | | | | 60.8 | | |
| 45 | 57.8 | | | | | | | 56.3 | | | | | | |
| 50 | 56.2 | | | | | | | 55.0 | | | | | | |
| 55 | 54.2 | | | | | | | 53.6 | | | | | | |
| 60 | 53.0 | | | | | | | 53.2 | | | | | | |
| 65 | 52.1 | | | | | | | 53.2 | | | | | | |

*KDFWR

Table 1. (continued)

| Depth (feet) | July 8 - 10 (553') | | | | | | | July 23* (552') | | | | | | |
|-----------------|-----------------------|------|------|------|------|------|------|--------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 81.0 | 81.0 | 80.0 | 81.9 | 82.3 | 74.0 | 79.9 | 76.6 | 78.8 | 78.8 | 78.8 | 77.9 | 79.7 | 75.7 |
| 5 | 81.0 | 81.0 | 79.9 | 81.7 | 80.0 | | | 76.6 | 77.5 | 76.6 | 77.0 | 77.5 | 77.5 | |
| 10 | 81.0 | 80.5 | 79.9 | 80.0 | 78.2 | | | 76.1 | 77.0 | 75.7 | 76.1 | 77.0 | 76.6 | |
| 15 | 79.0 | 80.1 | 79.8 | 78.5 | 75.5 | | | 76.1 | 75.7 | 72.5 | 75.2 | 77.0 | 75.7 | |
| 20 | 74.8 | 74.1 | 75.1 | 72.9 | 73.5 | | | 75.7 | 71.6 | 71.6 | 73.9 | 75.2 | 75.2 | |
| 25 | 68.8 | 69.0 | 69.4 | 70.0 | 73.0 | | | 71.2 | 70.3 | | | 68.5 | 73.0 | |
| 30 | 64.0 | 64.0 | 64.2 | 63.2 | | | | 62.6 | | | | 65.8 | 66.2 | |
| 35 | 61.9 | 62.3 | 61.8 | 62.0 | | | | 59.9 | | | | 61.7 | | |
| 40 | 60.0 | 59.1 | 60.2 | 60.0 | | | | 57.7 | | | | 61.7 | | |
| 45 | 57.7 | | | | | | | 55.9 | | | | | | |
| 50 | 56.0 | | | | | | | 54.5 | | | | | | |
| 55 | 54.9 | | | | | | | 53.6 | | | | | | |
| 60 | 53.9 | | | | | | | 53.2 | | | | | | |
| 65 | 53.1 | | | | | | | 52.7 | | | | | | |

*KDFWR

Table 1. (continued)

| Depth (feet) | July 22 - 24 (552') | | | | | | | August 5 - 7 (552') | | | | | | |
|-----------------|------------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 76.8 | 76.9 | 76.2 | 78.5 | 77.0 | 72.0 | 76.8 | 83.2 | 86.1 | 86.8 | 86.0 | 88.5 | 78.0 | 82.5 |
| 5 | 76.8 | 76.9 | 76.2 | 77.1 | 74.9 | | | 83.2 | 85.0 | 85.0 | 84.9 | 85.9 | | |
| 10 | 76.8 | 76.9 | 76.2 | 77.0 | 73.9 | | | 83.2 | 83.2 | 83.9 | 84.0 | 83.0 | | |
| 15 | 76.8 | 76.9 | 76.2 | 77.0 | 73.5 | | | 81.5 | 79.8 | 79.9 | 81.0 | 79.8 | | |
| 20 | 76.8 | 76.9 | 76.2 | 77.0 | 73.2 | | | 75.1 | 76.0 | 76.1 | 77.0 | 76.9 | | |
| 25 | 74.0 | 73.1 | 69.0 | 71.1 | | | | 71.0 | 71.0 | 73.1 | 72.7 | 76.6 | | |
| 30 | 64.0 | 64.8 | 64.5 | 66.1 | | | | 64.1 | 65.0 | 67.0 | 68.0 | | | |
| 35 | 61.2 | 62.0 | 61.0 | 62.5 | | | | 61.9 | 62.2 | 62.1 | 61.5 | | | |
| 40 | 59.0 | 60.0 | 59.0 | 59.9 | | | | 59.2 | 59.9 | | | | | |
| 45 | 56.8 | 57.1 | | | | | | 57.0 | 58.0 | | | | | |
| 50 | 55.1 | | | | | | | 56.0 | | | | | | |
| 55 | 54.5 | | | | | | | 55.0 | | | | | | |
| 60 | 54.0 | | | | | | | 54.1 | | | | | | |
| 65 | | | | | | | | 53.5 | | | | | | |

Table 1. (continued)

| Depth (feet) | August 11 - 12* (552') | | | | | | | August 19 - 21 (553') | | | | | | |
|-----------------|---------------------------|------|------|------|------|------|------|--------------------------|------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 80.6 | 80.6 | 80.2 | 80.6 | 81.1 | 81.1 | 77.0 | 82.6 | 83.1 | 83.2 | 80.4 | 81.0 | 76.0 | 81.5 |
| 5 | 80.2 | 80.6 | 79.7 | 80.6 | 81.1 | 82.0 | | 82.9 | 82.9 | 83.0 | 81.0 | 81.0 | | |
| 10 | 79.7 | 79.3 | 77.0 | 80.6 | 81.1 | 81.5 | | 82.5 | 82.5 | 83.0 | 80.0 | 78.9 | | |
| 15 | 79.3 | 77.0 | 74.3 | 77.0 | 80.6 | 78.8 | | 80.1 | 81.5 | 80.9 | 76.1 | 75.0 | | |
| 20 | 77.9 | 73.4 | 73.9 | 75.2 | 76.6 | 77.0 | | 76.1 | 77.3 | 76.1 | 74.2 | 74.0 | | |
| 25 | 70.7 | 72.1 | | | 71.6 | 72.5 | | 73.2 | 73.1 | 72.1 | 71.0 | 73.3 | | |
| 30 | 65.3 | | | | 66.2 | 66.2 | | 67.8 | 67.5 | 66.3 | 66.2 | | | |
| 35 | 61.7 | | | | 63.1 | | | 63.6 | 63.6 | 62.9 | 63.3 | | | |
| 40 | 59.0 | | | | 62.2 | | | 60.1 | 60.5 | 60.8 | 59.9 | | | |
| 45 | 57.2 | | | | | | | 57.7 | 58.8 | | | | | |
| 50 | 55.4 | | | | | | | 56.0 | | | | | | |
| 55 | 54.5 | | | | | | | 55.0 | | | | | | |
| 60 | 54.1 | | | | | | | 54.3 | | | | | | |
| 65 | 54.1 | | | | | | | 53.8 | | | | | | |

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Table 1. (continued)

| Depth (feet) | August 26 - 28* (553') | | | | | | | September 2 - 4 (552') | | | | | | |
|-----------------|---------------------------|------|------|------|------|------|------|---------------------------|------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 81.1 | 81.1 | 81.1 | 83.3 | 83.3 | 83.3 | 80.6 | 82.2 | 81.0 | 81.0 | 86.8 | 87.0 | 77.0 | 82.0 |
| 5 | 80.6 | 80.6 | 80.6 | 82.4 | 82.4 | 80.6 | | 82.2 | 81.0 | 81.0 | 83.0 | 83.0 | | |
| 10 | 80.2 | 79.7 | 79.7 | 80.6 | 80.2 | 80.2 | | 82.2 | 81.0 | 81.0 | 82.2 | 80.0 | | |
| 15 | 79.7 | 78.8 | 77.9 | 79.3 | 79.7 | 78.4 | | 82.2 | 81.0 | 81.0 | 79.2 | 76.3 | | |
| 20 | 77.9 | 76.1 | 73.9 | 77.0 | 77.5 | 77.0 | | 77.0 | 80.3 | 78.9 | 76.0 | 75.3 | | |
| 25 | 70.7 | 74.8 | | | 73.4 | 75.2 | | 70.2 | 72.0 | 70.5 | 72.0 | 74.9 | | |
| 30 | 66.2 | | | | 68.0 | 70.7 | | 66.4 | 67.0 | 65.2 | 66.6 | | | |
| 35 | 62.6 | | | | 64.4 | | | 62.0 | 61.6 | 61.9 | 60.3 | | | |
| 40 | 59.9 | | | | 62.6 | | | 59.4 | 59.7 | 60.1 | 59.8 | | | |
| 45 | 57.2 | | | | | | | 57.0 | | 59.0 | | | | |
| 50 | 55.4 | | | | | | | 55.3 | | | | | | |
| 55 | 54.5 | | | | | | | 54.6 | | | | | | |
| 60 | 54.1 | | | | | | | 54.0 | | | | | | |
| 65 | 53.6 | | | | | | | 53.5 | | | | | | |

*KDFWR

Table 1. (continued)

| Depth (feet) | September 10 & 12* (553') | | | | | | | September 21 - 23 (552') | | | | | | |
|-----------------|------------------------------|------|------|------|------|------|------|-----------------------------|------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 81.1 | 81.1 | 82.4 | 80.6 | 78.8 | 79.3 | 80.6 | 82.0 | 81.0 | 80.5 | 80.9 | 77.8 | 72.0 | 69.8 |
| 5 | 81.1 | 77.5 | 74.3 | 79.3 | 78.8 | 78.8 | | 82.0 | 81.0 | 80.5 | 80.0 | 77.0 | | |
| 10 | 80.6 | 77.0 | 69.8 | 78.8 | 78.8 | 78.4 | | 81.5 | 80.8 | 80.1 | 79.4 | 72.4 | | |
| 15 | 79.3 | 75.2 | 68.5 | 77.9 | 78.4 | 77.9 | | 79.8 | 80.1 | 79.5 | 78.1 | 72.0 | | |
| 20 | 76.1 | 74.3 | 68.5 | 74.3 | 77.5 | 77.0 | | 77.9 | 78.2 | 78.3 | 75.0 | 71.9 | | |
| 25 | 71.6 | 73.9 | | | 75.2 | 75.2 | | 74.0 | 75.1 | 71.6 | 73.5 | 71.8 | | |
| 30 | 66.7 | 73.4 | | | 68.0 | 67.6 | | 68.9 | 69.9 | 67.1 | 68.3 | | | |
| 35 | 63.1 | | | | 63.1 | | | 64.0 | 65.0 | 64.0 | 61.7 | | | |
| 40 | 59.9 | | | | 62.2 | | | 61.0 | 62.1 | | 59.9 | | | |
| 45 | 58.1 | | | | | | | 59.0 | 58.9 | | | | | |
| 50 | 55.4 | | | | | | | 57.1 | | | | | | |
| 55 | 55.0 | | | | | | | 56.0 | | | | | | |
| 60 | 53.6 | | | | | | | 54.9 | | | | | | |
| 65 | 53.6 | | | | | | | 53.9 | | | | | | |

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Table 1. (continued)

| Depth (feet) | September 28 - 29* (552') | | | | | | | October 19 - 20* (548') | | | | | | |
|-----------------|------------------------------|------|------|------|------|------|------|----------------------------|------|------|------|------|------|------|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 76.1 | 75.2 | 73.0 | 77.0 | 75.7 | 75.2 | 64.4 | 66.2 | 63.1 | 59.9 | 64.4 | 64.4 | 61.7 | 64.9 |
| 5 | 76.1 | 75.2 | 69.8 | 74.8 | 75.2 | 73.4 | | 66.2 | 62.6 | 59.0 | 63.5 | 64.4 | 61.3 | |
| 10 | 76.1 | 74.3 | 67.1 | 73.4 | 74.3 | 71.6 | | 66.2 | 61.7 | 55.0 | 62.6 | 64.4 | 60.8 | |
| 15 | 75.7 | 73.4 | 63.5 | 72.5 | 74.3 | 71.6 | | 66.2 | 59.0 | 55.4 | 59.0 | 64.4 | 59.9 | |
| 20 | 75.7 | 70.7 | 63.5 | 66.2 | 74.3 | 71.2 | | 66.2 | 56.8 | | 57.2 | 64.4 | 59.9 | |
| 25 | 75.2 | 68.9 | | 66.2 | 73.9 | 71.2 | | 66.2 | 56.8 | | | 64.4 | 59.9 | |
| 30 | 69.4 | 68.9 | | | 71.6 | 69.8 | | 66.2 | 56.8 | | | 64.0 | | |
| 35 | 65.8 | | | | 66.2 | | | 66.2 | | | | 63.5 | | |
| 40 | 60.8 | | | | 64.9 | | | 66.2 | | | | 63.5 | | |
| 45 | 60.4 | | | | 64.9 | | | 66.2 | | | | | | |
| 50 | 58.6 | | | | | | | 65.3 | | | | | | |
| 55 | 56.8 | | | | | | | 59.0 | | | | | | |
| 60 | 55.0 | | | | | | | 56.8 | | | | | | |
| 65 | 53.6 | | | | | | | 57.2 | | | | | | |

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Table 1. (continued)

| Depth (feet) | October 21 - 23 (546') | | | | | | | November 16 - 17 (536') | | | | | | |
|-----------------|---------------------------|------|------|------|------|------|------|----------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 66.8 | 65.0 | 66.2 | 64.1 | 57.5 | 58.9 | 65.3 | 54.8 | 53.1 | 51.0 | 47.3 | 47.0 | 46.2 | 54.8 |
| 5 | 65.5 | 64.9 | 65.0 | 63.3 | 57.5 | | | 55.0 | 53.1 | 51.0 | 47.3 | 47.0 | | |
| 10 | 65.3 | 64.9 | 64.9 | 62.4 | 57.5 | | | 55.0 | 53.0 | 51.0 | 47.0 | | | |
| 15 | 65.3 | 64.9 | 64.8 | 62.0 | 57.5 | | | 55.0 | 53.0 | 51.0 | 47.0 | | | |
| 20 | 65.3 | 64.9 | 64.7 | 61.8 | | | | 54.9 | 53.0 | 51.0 | 47.3 | | | |
| 25 | 65.3 | 64.9 | 64.7 | 61.0 | | | | 54.9 | 53.0 | 50.8 | | | | |
| 30 | 65.3 | 64.9 | 64.7 | 60.0 | | | | 54.9 | | 50.8 | | | | |
| 35 | 65.3 | 64.9 | | 59.8 | | | | 54.9 | | 50.8 | | | | |
| 40 | 65.3 | | | | | | | 54.8 | | 51.0 | | | | |
| 45 | 65.3 | | | | | | | 54.6 | | | | | | |
| 50 | 64.8 | | | | | | | 54.5 | | | | | | |
| 55 | 56.0 | | | | | | | | | | | | | |
| 60 | 54.5 | | | | | | | | | | | | | |

Table 1. (continued)

| Depth (feet) | November 24* (532') | | | | | | | December 16 - 17 (525') | | | | |
|-----------------|------------------------|------|---|---|---|---|------|----------------------------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 5 | T |
| 0 | 50.0 | 42.8 | | | | | 49.6 | 45.8 | 45.6 | 44.5 | 44.0 | 46.0 |
| 5 | 49.6 | 42.8 | | | | | | | | | | |
| 10 | 49.6 | 42.8 | | | | | | 45.7 | 45.6 | 44.5 | | |
| 15 | 49.6 | 42.4 | | | | | | | | | | |
| 20 | 49.6 | 41.9 | | | | | | 45.7 | 45.6 | | | |
| 25 | 49.6 | 41.9 | | | | | | | | | | |
| 30 | 49.6 | | | | | | | 45.5 | | | | |
| 35 | 49.6 | | | | | | | | | | | |
| 40 | 49.6 | | | | | | | 45.5 | | | | |
| 45 | 49.6 | | | | | | | | | | | |

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Table 1. (continued)

| (feet) | December 16 - 17* | | | | | | |
|--------|-------------------|---|---|---|------|---|------|
| | (525') | | | | | | |
| | A | B | C | D | E | F | T |
| 0 | 45.5 | | | | 45.5 | | 46.4 |
| 5 | 45.5 | | | | 45.5 | | |
| 10 | 45.5 | | | | 45.5 | | |
| 15 | 45.5 | | | | 45.5 | | |
| 20 | 45.5 | | | | 45.5 | | |
| 25 | 45.5 | | | | | | |
| 30 | 45.5 | | | | | | |
| 35 | 45.5 | | | | | | |
| 40 | 45.5 | | | | | | |

*KDFWR

Table 2. Dissolved oxygen content at Barren River Reservoir and its tailwater, 1970. Determinations were conducted biweekly in June through September (monthly in May, October, November, and December). Data not asterisked, February through December, were provided by the U. S. Army Corps of Engineers, Louisville District. All values are expressed in parts per million. Normal summer-winter pool elevations were 552-525 feet, respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 16 - 18 (534') | | | | | | | March 25 - 27 (529') | | | | | | |
|-----------------|----------------------------|------|------|---|------|------|------|-------------------------|------|------|---|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 11.0 | 11.2 | 10.8 | | 10.8 | 10.6 | 12.4 | 13.0 | 13.6 | 12.8 | | 12.4 | 12.4 | 14.0 |
| 5 | 11.1 | 11.2 | 10.8 | | | | | | | | | | | |
| 10 | 11.2 | 11.2 | 11.0 | | | | | 13.0 | 13.2 | 12.5 | | | | |
| 15 | 11.4 | 11.3 | 11.0 | | | | | | | | | | | |
| 20 | 11.4 | 11.3 | 11.0 | | | | | 12.6 | 13.0 | | | | | |
| 25 | 11.4 | 11.2 | | | | | | | | | | | | |
| 30 | 11.5 | | | | | | | 12.9 | | | | | | |
| 35 | 11.6 | | | | | | | | | | | | | |
| 40 | 11.6 | | | | | | | 12.6 | | | | | | |
| 45 | 11.6 | | | | | | | | | | | | | |
| 50 | 11.6 | | | | | | | | | | | | | |

Table 2. (continued)

| (feet) | April 20 - 22 (550') | | | | | | | May 20 - 22 (552') | | | | | | |
|--------|-------------------------|------|------|------|-----|------|------|-----------------------|-----|-----|-----|-----|------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 9.7 | 10.0 | 10.2 | 10.1 | 9.8 | 10.0 | 10.3 | 9.1 | 9.6 | 9.1 | 9.6 | 9.9 | 11.2 | 9.5 |
| 5 | 9.8 | 10.0 | 10.5 | 10.3 | 9.6 | | | 9.2 | 9.5 | 9.6 | 9.7 | 9.3 | | |
| 10 | 10.0 | 9.8 | 10.5 | 10.2 | 9.8 | | | 9.2 | 9.5 | 9.8 | 9.2 | 8.0 | | |
| 15 | 10.0 | 9.6 | 9.8 | 9.8 | 9.8 | | | 8.8 | 9.1 | 9.0 | 8.3 | 7.9 | | |
| 20 | 10.0 | 9.5 | 9.8 | 9.8 | 9.8 | | | 8.5 | 7.8 | 8.3 | 6.8 | 7.9 | | |
| 25 | 10.2 | 9.4 | 9.8 | 9.8 | | | | 7.6 | 7.0 | 7.8 | 5.4 | 7.7 | | |
| 30 | 9.4 | 9.5 | 9.9 | 9.6 | | | | 6.8 | 6.0 | 7.3 | 4.7 | | | |
| 35 | 9.4 | 9.6 | 9.2 | | | | | 6.5 | 5.8 | 5.3 | 4.1 | | | |
| 40 | 9.6 | 9.3 | 9.0 | | | | | 6.1 | | 3.4 | | | | |
| 45 | 9.6 | | | | | | | 5.4 | | | | | | |
| 50 | 9.4 | | | | | | | 5.3 | | | | | | |
| 55 | 9.4 | | | | | | | 4.9 | | | | | | |
| 60 | 9.4 | | | | | | | 4.4 | | | | | | |
| 65 | 9.2 | | | | | | | 1.5 | | | | | | |

Table 2. (continued)

| Depth (feet) | May 26 - 27* (552') | | | | | | | June 15 - 16* (553') | | | | | | |
|-----------------|------------------------|------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|------|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 9.3 | 13.3 | 9.5 | 8.4 | 8.7 | 8.8 | 8.0 | 8.0 | 9.2 | 8.7 | 9.1 | 9.6 | 9.9 | 7.5 |
| 5 | 9.5 | 13.0 | 9.5 | 8.4 | 8.8 | 8.9 | | 8.1 | 8.9 | 8.6 | 9.1 | 9.5 | 10.0 | |
| 10 | 9.6 | 9.4 | 9.7 | 8.7 | 9.2 | 9.1 | | 8.1 | 8.4 | 5.8 | 9.0 | 9.6 | 10.0 | |
| 15 | 8.9 | 2.4 | 6.0 | 6.2 | 8.9 | 7.2 | | 8.0 | 6.0 | 5.0 | 6.5 | 9.7 | 7.3 | |
| 20 | 8.0 | 0.4 | 2.9 | 3.2 | 8.1 | 6.6 | | 6.8 | 3.5 | 3.7 | 5.0 | 3.2 | 5.0 | |
| 25 | 6.9 | 0.2 | | | 6.3 | 5.9 | | 5.4 | 3.0 | | | 0.9 | 4.3 | |
| 30 | 6.4 | | | | 4.9 | 6.0 | | 4.4 | | | | 0.1 | | |
| 35 | 5.9 | | | | 4.5 | | | 3.8 | | | | 0.1 | | |
| 40 | 5.5 | | | | 3.3 | | | 3.9 | | | | 0.1 | | |
| 45 | 5.0 | | | | | | | 3.7 | | | | | | |
| 50 | 4.6 | | | | | | | 2.8 | | | | | | |
| 55 | 4.8 | | | | | | | 2.2 | | | | | | |
| 60 | 3.5 | | | | | | | 0.7 | | | | | | |
| 65 | 2.6 | | | | | | | 0.2 | | | | | | |

*KDFWR

*KDFWR

Table 2. (continued)

| Depth (feet) | June 17 - 19 (552') | | | | | | | June 30 - July 1* (554') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 8.4 | 8.9 | 8.9 | 9.9 | 9.3 | 7.1 | 8.5 | 6.7 | 8.9 | 7.7 | 6.7 | 6.8 | 8.2 | 6.6 |
| 5 | 8.7 | 9.0 | 9.0 | 9.4 | 8.2 | | | 7.0 | 8.9 | 7.6 | 7.3 | 7.4 | 8.3 | |
| 10 | 8.9 | 9.0 | 9.0 | 8.0 | 5.7 | | | 7.1 | 6.6 | 6.2 | 7.2 | 7.4 | 8.5 | |
| 15 | 8.6 | 9.0 | 9.1 | 7.8 | 4.9 | | | 7.3 | 3.8 | 4.9 | 5.4 | 6.8 | 5.2 | |
| 20 | 7.3 | 4.4 | 8.1 | 3.5 | 4.2 | | | 5.2 | 2.7 | 4.3 | 1.8 | 2.5 | 4.2 | |
| 25 | 5.8 | 5.2 | 2.1 | 1.5 | | | | 4.5 | 3.7 | | | 0.5 | 3.7 | |
| 30 | 4.9 | 3.0 | 0.8 | 0.3 | | | | 4.2 | | | | 0.2 | 1.9 | |
| 35 | 4.4 | 2.3 | 0.4 | 0.2 | | | | 3.0 | | | | 0.2 | | |
| 40 | 4.0 | 2.0 | 0.3 | 0.3 | | | | 2.3 | | | | 0.2 | | |
| 45 | 3.8 | | | | | | | 1.9 | | | | | | |
| 50 | 3.5 | | | | | | | 1.5 | | | | | | |
| 55 | 2.4 | | | | | | | 0.9 | | | | | | |
| 60 | 0.8 | | | | | | | 0.4 | | | | | | |
| 65 | 0.3 | | | | | | | 0.2 | | | | | | |
| 70 | 0.2 | | | | | | | | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | July 8 - 10 (553') | | | | | | | July 23* (552') | | | | | | |
|-----------------|-----------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 8.5 | 8.0 | 7.7 | 8.1 | 9.2 | 8.0 | 7.9 | 7.6 | 6.9 | 7.5 | 6.1 | 6.8 | 7.6 | 8.2 |
| 5 | 8.3 | 8.0 | 7.7 | 8.2 | 9.0 | | | 7.6 | 6.8 | 6.7 | 5.4 | 6.8 | 7.9 | |
| 10 | 8.3 | 8.0 | 7.6 | 8.3 | 7.0 | | | 7.6 | 6.6 | 5.5 | 6.6 | 6.7 | 6.5 | |
| 15 | 8.1 | 8.0 | 7.4 | 7.4 | 4.6 | | | 7.6 | 6.2 | 6.0 | 6.4 | 6.7 | 6.0 | |
| 20 | 6.0 | 5.4 | 4.7 | 1.5 | 4.2 | | | 7.5 | 0.1 | 5.2 | 5.9 | 1.3 | 5.7 | |
| 25 | 4.7 | 1.5 | 1.0 | 0.4 | 3.6 | | | 4.1 | 0.2 | | | 0.1 | 3.9 | |
| 30 | 3.7 | 1.0 | 0.5 | 0.4 | | | | 1.7 | | | | 0.1 | 1.9 | |
| 35 | 3.2 | 0.7 | 0.5 | 0.4 | | | | 0.9 | | | | 0.1 | | |
| 40 | 2.4 | 0.3 | 0.5 | 0.4 | | | | 0.7 | | | | 0.2 | | |
| 45 | 2.2 | | | | | | | 0.1 | | | | | | |
| 50 | 1.7 | | | | | | | 0.1 | | | | | | |
| 55 | 0.8 | | | | | | | 0.1 | | | | | | |
| 60 | 0.5 | | | | | | | 0.1 | | | | | | |
| 65 | 0.4 | | | | | | | 0.2 | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | July 22 - 24 (552') | | | | | | | August 5 - 7 (552') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|------|------|------|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 8.2 | 8.4 | 7.3 | 7.9 | 9.0 | 9.2 | 8.2 | 8.5 | 8.5 | 8.4 | 9.2 | 9.1 | 9.5 | 8.0 |
| 5 | 7.8 | 8.1 | 7.3 | 7.2 | 8.4 | | | 8.4 | 8.4 | 9.2 | 10.2 | 10.0 | | |
| 10 | 7.8 | 7.9 | 7.3 | 7.0 | 7.7 | | | 8.4 | 8.7 | 10.0 | 11.2 | 8.7 | | |
| 15 | 7.8 | 7.9 | 7.3 | 7.0 | 7.0 | | | 8.5 | 8.8 | 7.5 | 8.2 | 6.0 | | |
| 20 | 7.7 | 7.9 | 7.2 | 6.8 | 6.4 | | | 5.9 | 5.9 | 3.6 | 0.9 | 3.0 | | |
| 25 | 7.4 | 7.4 | 0.5 | 0.7 | | | | 2.9 | 2.9 | 0.8 | 0.3 | 2.6 | | |
| 30 | 3.0 | 2.7 | 0.4 | 0.5 | | | | 1.3 | 0.2 | 0.2 | 0.3 | | | |
| 35 | 1.2 | 0.7 | 0.4 | 0.5 | | | | 1.0 | 0.3 | 0.2 | 0.3 | | | |
| 40 | 1.3 | 0.5 | 0.4 | 0.4 | | | | 0.8 | 0.3 | | | | | |
| 45 | 0.8 | 0.4 | | | | | | 0.6 | 0.3 | | | | | |
| 50 | 0.4 | | | | | | | 0.6 | | | | | | |
| 55 | 0.4 | | | | | | | 0.5 | | | | | | |
| 60 | 0.3 | | | | | | | 0.5 | | | | | | |
| 65 | | | | | | | | 0.5 | | | | | | |

Table 2. (continued)

| Depth (feet) | August 11 - 12* (552') | | | | | | | August 19 - 21 (553') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|--------------------------|------|-----|-----|------|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.7 | 6.9 | 8.5 | 8.1 | 8.2 | 8.2 | 7.9 | 8.5 | 9.6 | 9.2 | 8.8 | 11.2 | 7.6 | 8.3 |
| 5 | 7.8 | 6.5 | 8.5 | 8.1 | 8.2 | 8.1 | | 9.3 | 9.9 | 9.7 | 8.6 | 11.6 | | |
| 10 | 7.8 | 2.5 | 6.4 | 7.9 | 8.2 | 7.5 | | 9.0 | 10.0 | 9.8 | 6.1 | 8.0 | | |
| 15 | 7.8 | 3.0 | 6.0 | 0.1 | 8.2 | 2.8 | | 9.1 | 9.7 | 8.3 | 0.4 | 5.3 | | |
| 20 | 7.6 | 3.8 | 4.9 | 0.6 | 0.1 | 1.4 | | 5.0 | 3.5 | 3.5 | 0.7 | 4.6 | | |
| 25 | 2.2 | 4.2 | | | 0.1 | 0.2 | | 2.7 | 0.1 | 0.1 | 0.3 | 4.2 | | |
| 30 | 0.4 | | | | 0.1 | 2.8 | | 0.2 | 0.1 | 0.1 | 0.1 | | | |
| 35 | 0.1 | | | | 0.1 | | | 0.1 | 0.1 | 0.1 | 0.0 | | | |
| 40 | 0.1 | | | | 0.1 | | | 0.1 | 0.1 | 0.1 | 0.0 | | | |
| 45 | 0.1 | | | | | | | 0.1 | 0.1 | | | | | |
| 50 | 0.1 | | | | | | | 0.0 | | | | | | |
| 55 | 0.2 | | | | | | | 0.0 | | | | | | |
| 60 | 0.2 | | | | | | | 0.0 | | | | | | |
| 65 | 0.2 | | | | | | | 0.0 | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | August 26 - 28* (553') | | | | | | September 2 - 4 (552') | | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|------|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 8.4 | 9.3 | 8.2 | 9.1 | 9.4 | 8.6 | 8.2 | 8.9 | 8.0 | 8.2 | 9.0 | 9.7 | 10.2 | 8.2 |
| 5 | 8.4 | 8.4 | 8.3 | 9.2 | 9.4 | 9.1 | | 8.9 | 8.0 | 8.2 | 9.6 | 9.7 | | |
| 10 | 8.2 | 7.0 | 6.6 | 8.6 | 8.4 | 8.2 | | 9.0 | 8.0 | 8.2 | 9.5 | 6.0 | | |
| 15 | 8.1 | 7.7 | 6.4 | 5.5 | 7.5 | 5.9 | | 9.0 | 8.0 | 8.2 | 2.9 | 4.1 | | |
| 20 | 7.8 | 0.1 | 4.4 | 4.4 | 2.1 | 4.6 | | 5.9 | 7.2 | 3.6 | 0.1 | 2.7 | | |
| 25 | 0.4 | 0.1 | | | 0.1 | 2.7 | | 0.7 | 0.1 | 0.4 | 0.1 | 1.6 | | |
| 30 | 0.2 | | | | 0.1 | 1.5 | | 0.2 | 0.1 | 0.2 | 0.1 | | | |
| 35 | 0.2 | | | | 0.1 | | | 0.1 | 0.1 | 0.2 | 0.1 | | | |
| 40 | 0.2 | | | | 0.1 | | | 0.0 | 0.1 | 0.1 | 0.1 | | | |
| 45 | 0.2 | | | | | | | 0.0 | | 0.1 | | | | |
| 50 | 0.2 | | | | | | | 0.0 | | | | | | |
| 55 | 0.2 | | | | | | | 0.0 | | | | | | |
| 60 | 0.3 | | | | | | | 0.0 | | | | | | |
| 65 | 0.8 | | | | | | | 0.0 | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | September 10 & 12* (553') | | | | | | | September 21 - 23 (552') | | | | | | |
|-----------------|------------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.6 | 8.3 | 7.1 | 7.2 | 5.8 | 6.3 | 7.6 | 7.9 | 8.2 | 7.4 | 7.2 | 8.1 | 6.6 | 7.4 |
| 5 | 7.6 | 5.6 | 5.1 | 7.1 | 5.8 | 5.9 | | 8.0 | 8.1 | 7.4 | 7.1 | 7.8 | | |
| 10 | 7.6 | 5.2 | 5.6 | 6.9 | 5.8 | 5.6 | | 8.0 | 8.0 | 7.3 | 6.3 | 3.8 | | |
| 15 | 5.3 | 0.9 | 6.6 | 6.0 | 5.0 | 5.4 | | 7.9 | 7.9 | 6.7 | 2.2 | 3.1 | | |
| 20 | 1.7 | 1.0 | 6.6 | 3.6 | 4.7 | 2.4 | | 6.8 | 4.0 | 5.6 | 0.2 | 3.1 | | |
| 25 | 0.1 | 1.1 | | | 0.3 | 1.1 | | 0.3 | 0.2 | 0.1 | 0.1 | 3.1 | | |
| 30 | 0.1 | 1.3 | | | 0.1 | 1.1 | | 0.2 | 0.1 | 0.1 | 0.1 | | | |
| 35 | 0.1 | | | | 0.1 | | | 0.1 | 0.1 | 0.0 | 0.1 | | | |
| 40 | 0.1 | | | | 0.2 | | | 0.1 | 0.1 | | 0.1 | | | |
| 45 | 0.1 | | | | | | | 0.1 | 0.1 | | | | | |
| 50 | 0.1 | | | | | | | 0.1 | | | | | | |
| 55 | 0.1 | | | | | | | 0.1 | | | | | | |
| 60 | 0.1 | | | | | | | 0.1 | | | | | | |
| 65 | 0.2 | | | | | | | 0.1 | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | September 28 - 29* (552') | | | | | | | October 19 - 20* (548') | | | | | | |
|-----------------|------------------------------|-----|-----|-----|-----|-----|-----|----------------------------|------|------|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 6.4 | 6.9 | 9.2 | 7.7 | 6.1 | 8.6 | 8.7 | 6.0 | 11.2 | 10.5 | 8.7 | 7.5 | 9.5 | 9.1 |
| 5 | 6.5 | 6.9 | 8.3 | 7.0 | 5.3 | 7.3 | | 6.0 | 10.3 | 9.9 | 9.0 | 7.5 | 9.2 | |
| 10 | 6.3 | 6.6 | 8.4 | 7.2 | 5.2 | 6.8 | | 6.0 | 9.1 | 9.3 | 9.0 | 7.4 | 8.9 | |
| 15 | 6.1 | 6.8 | 8.1 | 7.1 | 4.8 | 6.3 | | 6.0 | 6.3 | 9.3 | 8.4 | 7.2 | 7.3 | |
| 20 | 6.1 | 4.5 | 8.1 | 7.8 | 4.5 | 6.2 | | 5.9 | 5.5 | | 8.7 | 7.2 | 7.6 | |
| 25 | 6.1 | 4.1 | | 8.0 | 4.6 | 6.1 | | 5.8 | 5.4 | | | 7.2 | 7.4 | |
| 30 | 0.1 | 4.1 | | | 1.5 | 4.7 | | 5.8 | 5.4 | | | 6.9 | | |
| 35 | 0.1 | | | | 0.1 | | | 5.7 | | | | 5.9 | | |
| 40 | 0.1 | | | | 0.1 | | | 5.7 | | | | 5.1 | | |
| 45 | 0.1 | | | | 0.1 | | | 5.7 | | | | | | |
| 50 | 0.1 | | | | | | | 5.0 | | | | | | |
| 55 | 0.1 | | | | | | | 0.1 | | | | | | |
| 60 | 0.1 | | | | | | | 0.1 | | | | | | |
| 65 | 0.1 | | | | | | | 0.1 | | | | | | |

*KDFWR

*KDFWR

Table 2. (continued)

| Depth (feet) | October 21 - 23 (546') | | | | | | | November 16 - 17 (536') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|----------------------------|-----|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 6.7 | 6.7 | 7.7 | 9.2 | 8.8 | 9.2 | 9.0 | 8.9 | 9.4 | 10.2 | 10.4 | 10.4 | 10.4 | 11.1 |
| 5 | 6.5 | 6.6 | 7.5 | 9.3 | 8.8 | | | 8.7 | 9.2 | 10.0 | 10.3 | 10.4 | | |
| 10 | 6.3 | 6.6 | 7.2 | 9.2 | 8.8 | | | 8.6 | 9.0 | 9.9 | 10.1 | | | |
| 15 | 6.3 | 6.5 | 7.0 | 8.6 | 7.6 | | | 8.6 | 9.0 | 9.8 | 10.0 | | | |
| 20 | 6.3 | 6.4 | 6.9 | 8.0 | | | | 8.5 | 8.9 | 9.7 | 9.9 | | | |
| 25 | 6.3 | 6.4 | 6.9 | 7.0 | | | | 8.5 | 8.9 | 9.7 | | | | |
| 30 | 6.3 | 6.4 | 6.8 | 4.3 | | | | 8.5 | | 9.6 | | | | |
| 35 | | 6.4 | | 1.7 | | | | 8.4 | | 9.6 | | | | |
| 40 | 6.2 | | | | | | | 8.4 | | 9.5 | | | | |
| 45 | 6.2 | | | | | | | 8.4 | | | | | | |
| 50 | 5.3 | | | | | | | 8.4 | | | | | | |
| 55 | 0.7 | | | | | | | | | | | | | |
| 60 | 0.5 | | | | | | | | | | | | | |

Table 2. (continued)

| Depth (feet) | November 24* (532') | | | | | | | December 16 - 17 (525') | | | | | | |
|-----------------|------------------------|---|---|---|------|---|------|----------------------------|------|------|---|------|---|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 10.0 | | | | 10.6 | | 11.9 | 11.4 | 11.6 | 11.9 | | 11.6 | | 11.7 |
| 5 | 9.9 | | | | 10.6 | | | | | | | | | |
| 10 | 9.9 | | | | 10.6 | | | 11.2 | 11.4 | 11.8 | | | | |
| 15 | 9.9 | | | | 10.6 | | | | | | | | | |
| 20 | 9.9 | | | | 10.6 | | | 11.0 | 11.4 | | | | | |
| 25 | 9.9 | | | | 10.6 | | | | | | | | | |
| 30 | 9.9 | | | | | | | 11.0 | | | | | | |
| 35 | 9.9 | | | | | | | | | | | | | |
| 40 | 9.9 | | | | | | | 11.0 | | | | | | |
| 45 | 9.9 | | | | | | | | | | | | | |

*KDFWR

Table 2. (continued)

| Depth (feet) | December 16 - 17* (525') | | | | | | |
|-----------------|-----------------------------|---|---|---|------|---|------|
| | A | B | C | D | E | F | T |
| 0 | 10.8 | | | | 10.8 | | 10.2 |
| 5 | 10.8 | | | | 11.0 | | |
| 10 | 10.8 | | | | 11.1 | | |
| 15 | 10.8 | | | | 11.1 | | |
| 20 | 10.8 | | | | 11.2 | | |
| 25 | 10.8 | | | | | | |
| 30 | 10.8 | | | | | | |
| 35 | 10.8 | | | | | | |
| 40 | 11.0 | | | | | | |

*KDFWR

Table 3. Total alkalinity content at Barren River Reservoir and its tailwater, 1970. Determinations were conducted biweekly in June through September (monthly in May, October, November, and December). All values expressed in parts per million. Normal summer-winter pool elevations were 552-525 feet, respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | May 26 - 27* (552') | | | | | | | June 15 - 16* (553') | | | | | | | June 30 - July 1* (554') | | | | | | |
|-----------------|------------------------|-----|-----|-----|----|----|----|-------------------------|----|----|----|----|----|----|-----------------------------|----|----|----|----|-----|----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 70 | 79 | 94 | 71 | 68 | 74 | 67 | 75 | 74 | 97 | 77 | 73 | 80 | 70 | 74 | 74 | 85 | 79 | 77 | 96 | 75 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 66 | 88 | 94 | 100 | 70 | 70 | | 72 | 77 | 98 | 78 | 73 | 77 | | 75 | 79 | 89 | 80 | 84 | 82 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 74 | 111 | 119 | 92 | 71 | 80 | | 76 | 81 | 92 | 83 | 74 | 84 | | 78 | 88 | 96 | 85 | 79 | 103 | |
| 25 | | | | | | | | | | | | | | | | | | | | | |
| 30 | 73 | | | | 73 | 83 | | 71 | | | | 78 | 87 | | 80 | | | | 79 | 88 | |
| 35 | | | | | | | | | | | | | | | | | | | | | |
| 40 | 73 | | | | 74 | | | 76 | | | | 81 | | | 79 | | | | 92 | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 50 | 73 | | | | | | | 75 | | | | | | | 77 | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | |
| 60 | 75 | | | | | | | 79 | | | | | | | 78 | | | | | | |

*KDFWR

Table 3. (continued)

| Depth (feet) | July 23* (552') | | | | | | | August 11 - 12* (552') | | | | | | | August 26 - 28* (553') | | | | | | |
|-----------------|--------------------|----|-----|----|-----|----|----|---------------------------|----|----|----|-----|-----|----|---------------------------|----|----|----|-----|----|----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 77 | 83 | 84 | 81 | 76 | 82 | 75 | 79 | 82 | 83 | 85 | 80 | 80 | 78 | 80 | 81 | 82 | 83 | 81 | 81 | 80 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 78 | 82 | 86 | 85 | 82 | 83 | | 79 | 86 | 82 | 84 | 80 | 83 | | 80 | 82 | 83 | 84 | 82 | 84 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 77 | 86 | 109 | 88 | 83 | 84 | | 78 | 94 | 92 | 96 | 84 | 94 | | 80 | 94 | 99 | 88 | 83 | 91 | |
| 25 | | | | | | | | | | | | | | | | | | | | | |
| 30 | 78 | | | | 92 | 97 | | 81 | | | | 102 | 110 | | 83 | | | | 87 | 93 | |
| 35 | | | | | | | | | | | | | | | | | | | | | |
| 40 | 79 | | | | 105 | | | 79 | | | | 110 | | | 81 | | | | 118 | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 50 | 79 | | | | | | | 80 | | | | | | | 82 | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | |
| 60 | 81 | | | | | | | 78 | | | | | | | 85 | | | | | | |

*KDFWR

Table 3. (continued)

| Depth (feet) | September 10 - 12* (553') | | | | | | | September 28 - 29* (552') | | | | | | | October 19 - 20* (548') | | | | | | |
|-----------------|------------------------------|----|----|----|-----|----|----|------------------------------|-----|-----|----|-----|----|----|----------------------------|-----|-----|-----|----|-----|----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 80 | 80 | 66 | 87 | 86 | 90 | 79 | 85 | 88 | 88 | 86 | 85 | 90 | 94 | 84 | 96 | 115 | 89 | 91 | 102 | 87 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 81 | 70 | 72 | 87 | 86 | 88 | | 80 | 85 | 91 | 87 | 83 | 86 | | 84 | 100 | 129 | 92 | 92 | 102 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 80 | 71 | 82 | 86 | 85 | 95 | | 80 | 89 | 111 | 93 | 85 | 92 | | 84 | 125 | | 119 | 92 | 103 | |
| 25 | | | | | | | | | | | | | | | | | | | | | |
| 30 | 83 | | | | 89 | 95 | | 83 | 105 | | | 86 | 93 | | 84 | 150 | | | 93 | | |
| 35 | | | | | | | | | | | | | | | | | | | | | |
| 40 | 82 | | | | 119 | | | 87 | | | | 120 | | | 84 | | | | 94 | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 50 | 82 | | | | | | | 85 | | | | | | | 84 | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | |
| 60 | 87 | | | | | | | 91 | | | | | | | 96 | | | | | | |

*KDFWR

Table 3. (continued)

| Depth (feet) | November 24* (532') | | | | | | | December 16 - 17* (525') | | | | | | | |
|-----------------|------------------------|---|---|---|----|----|----|-----------------------------|---|---|---|---|-----|---|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | |
| 0 | 98 | | | | 87 | | 99 | 104 | | | | | 101 | | 104 |
| 5 | | | | | | | | | | | | | | | |
| 10 | 94 | | | | | 88 | | 104 | | | | | 101 | | |
| 15 | | | | | | | | | | | | | | | |
| 20 | 94 | | | | | 88 | | 104 | | | | | 101 | | |
| 25 | | | | | | | | | | | | | | | |
| 30 | 93 | | | | | | | 104 | | | | | | | |
| 35 | | | | | | | | | | | | | | | |
| 40 | 101 | | | | | | | 104 | | | | | | | |

*KDFWR

Table 4. pH values at Barren River Reservoir and its tailwater, 1970. Determinations were conducted biweekly in June through September (monthly in May and December). Data not asterisked, February through November, were provided by the U. S. Army Corps of Engineers, Louisville District. Normal summer-winter pool elevations were 552-525 feet, respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 16 - 18 (534') | | | | | | | March 25 - 27 (529') | | | | | | |
|-----------------|----------------------------|-----|-----|---|-----|-----|-----|-------------------------|-----|-----|---|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 6.6 | 6.4 | 7.3 | | 6.8 | 6.7 | 6.5 | 8.4 | 8.5 | 8.4 | | 7.3 | 8.1 | 8.3 |
| 5 | | | | | | | | | | | | | | |
| 10 | 6.4 | 6.7 | 7.0 | | | | | 8.4 | 8.4 | 8.4 | | | | |
| 15 | | | | | | | | | | | | | | |
| 20 | 6.5 | 6.6 | 7.0 | | | | | 8.4 | 8.4 | | | | | |
| 25 | | | | | | | | | | | | | | |
| 30 | 6.2 | | | | | | | 8.4 | | | | | | |
| 35 | | | | | | | | | | | | | | |
| 40 | 6.8 | | | | | | | 8.4 | | | | | | |
| 45 | | | | | | | | | | | | | | |
| 50 | 6.8 | | | | | | | | | | | | | |

Table 4. (continued)

| Depth (feet) | April 20 - 22 (550') | | | | | | | May 20 - 22 (552') | | | | | | |
|-----------------|-------------------------|-----|-----|-----|-----|-----|-----|-----------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.3 | 7.6 | 7.8 | 7.8 | 7.2 | 6.9 | 7.5 | 7.4 | 7.1 | 7.6 | 8.0 | 7.5 | 7.3 | 7.0 |
| 5 | 7.6 | 7.6 | 7.8 | 7.8 | 7.2 | | | 7.2 | 6.9 | 7.7 | 8.0 | 7.6 | | |
| 10 | 7.8 | 7.4 | 7.8 | 7.7 | 7.3 | | | 7.2 | 6.8 | 7.7 | 7.9 | 7.1 | | |
| 15 | 7.6 | 7.4 | 7.5 | 7.6 | 7.3 | | | 6.9 | 6.7 | 7.5 | 7.4 | 7.2 | | |
| 20 | 7.3 | 7.3 | 7.4 | 7.7 | 7.3 | | | 6.8 | 6.5 | 7.3 | 7.1 | 7.0 | | |
| 25 | 7.6 | 7.3 | 7.4 | 7.6 | | | | 7.0 | 6.0 | 7.2 | 6.7 | 6.9 | | |
| 30 | 7.2 | 7.5 | 7.5 | 7.2 | | | | 6.9 | 5.8 | 6.8 | 6.5 | | | |
| 35 | 7.4 | 7.5 | 7.2 | | | | | 6.9 | 5.7 | 6.8 | 6.4 | | | |
| 40 | 7.3 | 7.4 | 7.1 | | | | | 6.8 | 5.6 | 6.6 | | | | |
| 45 | 7.2 | | | | | | | 6.6 | | | | | | |
| 50 | 7.3 | | | | | | | 6.5 | | | | | | |
| 55 | 7.2 | | | | | | | 6.4 | | | | | | |
| 60 | 7.2 | | | | | | | 6.3 | | | | | | |
| 65 | | | | | | | | 6.3 | | | | | | |

Table 4. (continued)

| Depth (feet) | May 26 - 27* (552') | | | | | | | June 15 - 16* (553') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 7.3 | 8.9 | 8.0 | 7.4 | 7.2 | 7.6 | 7.7 | 7.5 | 7.9 | 7.9 | 7.8 | 8.1 | 7.9 | 7.4 |
| 5 | | | | | | | | | | | | | | |
| 10 | 7.4 | 8.2 | 7.6 | 7.2 | 7.4 | 7.5 | | 7.6 | 7.6 | 7.9 | 7.5 | 7.7 | 7.7 | |
| 15 | | | | | | | | | | | | | | |
| 20 | 7.0 | 7.0 | 7.0 | 6.7 | 6.9 | 6.8 | | 7.2 | 7.0 | 7.0 | 6.9 | 7.6 | 7.1 | |
| 25 | | | | | | | | | | | | | | |
| 30 | 6.9 | | | | 6.9 | 6.8 | | 6.8 | | | | 6.8 | 6.8 | |
| 35 | | | | | | | | | | | | | | |
| 40 | 6.8 | | | | 6.7 | | | 6.7 | | | | 6.8 | | |
| 45 | | | | | | | | | | | | | | |
| 50 | 6.9 | | | | | | | 6.7 | | | | | | |
| 55 | | | | | | | | | | | | | | |
| 60 | 6.9 | | | | | | | 6.5 | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | June 17 - 19 (552') | | | | | | | June 30, July 1* (554') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 8.0 | 8.4 | 8.5 | 8.5 | 7.8 | 7.7 | 8.5 | 7.1 | 7.9 | 7.7 | 7.7 | 7.6 | 8.3 | 7.7 |
| 5 | 8.1 | 8.5 | 8.5 | 8.5 | 7.7 | | | | | | | | | |
| 10 | 8.0 | 8.4 | 8.4 | 8.0 | 7.4 | | | 7.4 | 7.8 | 8.0 | 7.5 | 7.5 | 8.2 | |
| 15 | 7.9 | 8.4 | 8.4 | 7.7 | 7.4 | | | | | | | | | |
| 20 | 7.5 | 7.5 | 7.6 | 6.8 | 7.3 | | | 7.5 | 7.0 | 7.2 | 7.1 | 7.6 | 7.0 | |
| 25 | 7.2 | 7.5 | 7.3 | 7.2 | | | | | | | | | | |
| 30 | 7.1 | 7.4 | 7.3 | 7.2 | | | | 6.9 | | | | 6.7 | 6.8 | |
| 35 | 7.0 | 7.4 | 7.2 | 7.3 | | | | | | | | | | |
| 40 | 7.0 | 7.3 | 7.2 | 7.3 | | | | 6.8 | | | | 7.7 | | |
| 45 | 7.0 | | | | | | | | | | | | | |
| 50 | 6.9 | | | | | | | 6.8 | | | | | | |
| 55 | 7.0 | | | | | | | | | | | | | |
| 60 | 6.9 | | | | | | | 6.5 | | | | | | |
| 65 | 6.9 | | | | | | | | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | July 8 - 10 (553') | | | | | | | July 23* (552') | | | | | | |
|-----------------|-----------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 8.3 | 8.0 | 8.4 | 8.7 | 8.7 | 7.7 | 8.3 | 7.3 | 7.1 | 7.6 | 7.0 | 7.1 | 7.7 | 7.6 |
| 5 | 8.3 | 8.0 | 8.4 | 8.7 | 8.8 | | | | | | | | | |
| 10 | 8.4 | 8.0 | 8.4 | 8.7 | 8.0 | | | 7.1 | 7.0 | 7.3 | 7.2 | 7.4 | 7.2 | |
| 15 | 8.3 | 8.1 | 8.4 | 8.5 | 7.7 | | | | | | | | | |
| 20 | 7.8 | 7.8 | 7.7 | 7.5 | 7.6 | | | 7.1 | 6.9 | 6.9 | 7.3 | 7.0 | 7.1 | |
| 25 | 7.5 | 7.4 | 7.4 | 7.3 | 7.6 | | | | | | | | | |
| 30 | 7.3 | 7.2 | 7.2 | 7.2 | | | | 7.0 | | | | 6.8 | 7.0 | |
| 35 | 7.2 | 7.1 | 7.2 | 7.2 | | | | | | | | | | |
| 40 | 7.2 | 7.0 | 7.2 | 7.2 | | | | 6.9 | | | | 6.6 | | |
| 45 | 7.1 | | | | | | | | | | | | | |
| 50 | 7.1 | | | | | | | 6.9 | | | | | | |
| 55 | 7.0 | | | | | | | | | | | | | |
| 60 | 7.0 | | | | | | | 6.7 | | | | | | |
| 65 | 7.0 | | | | | | | | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | July 22 - 24 (552') | | | | | | | August 5 - 7 (552') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 8.2 | 8.3 | 7.6 | 8.2 | 8.4 | 8.0 | 8.2 | 8.6 | 8.2 | 8.6 | 8.7 | 8.7 | 8.4 | 8.2 |
| 5 | 8.4 | 8.3 | 8.1 | 8.0 | 8.4 | | | 8.5 | 8.5 | 8.6 | 8.5 | 8.9 | | |
| 10 | 8.2 | 8.3 | 8.1 | 8.1 | 8.2 | | | 8.5 | 8.4 | 8.6 | 8.5 | 8.7 | | |
| 15 | 8.1 | 8.2 | 8.1 | 8.0 | 8.1 | | | 8.5 | 8.3 | 8.1 | 8.0 | 8.0 | | |
| 20 | 8.1 | 8.3 | 8.1 | 7.9 | 8.0 | | | 8.0 | 7.9 | 7.7 | 7.7 | 7.7 | | |
| 25 | 8.0 | 7.7 | 7.7 | 7.5 | | | | 7.7 | 7.8 | 7.5 | 7.5 | 7.6 | | |
| 30 | 7.7 | 7.6 | 7.6 | 7.4 | | | | 7.5 | 7.6 | 7.3 | 7.4 | | | |
| 35 | 7.6 | 7.5 | 7.6 | 7.4 | | | | 7.4 | 7.3 | 7.2 | 7.4 | | | |
| 40 | 7.6 | 7.5 | 7.6 | 7.4 | | | | 7.2 | 7.2 | | | | | |
| 45 | 7.5 | 7.4 | | | | | | 7.2 | | | | | | |
| 50 | 7.5 | | | | | | | 7.1 | | | | | | |
| 55 | 7.5 | | | | | | | 7.1 | | | | | | |
| 60 | 7.5 | | | | | | | 7.1 | | | | | | |
| 65 | | | | | | | | 7.1 | | | | | | |

Table 4. (continued)

| Depth (feet) | August 11 - 12* (552') | | | | | | August 19 - 21 (553') | | | | | | | |
|-----------------|---------------------------|-----|-----|-----|---|-----|--------------------------|-----|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.4 | 8.0 | 7.8 | 7.3 | | 6.7 | 7.5 | 8.2 | 8.6 | 8.5 | 8.5 | 8.7 | 7.8 | 8.5 |
| 5 | | | | | | | | 8.2 | 8.7 | 8.6 | 8.5 | 8.7 | | |
| 10 | 7.2 | 7.6 | 7.9 | 8.0 | | 6.0 | | 8.2 | 8.6 | 8.7 | 8.0 | 8.2 | | |
| 15 | | | | | | | | 8.3 | 8.6 | 8.6 | 7.6 | 7.9 | | |
| 20 | 7.4 | 7.4 | 7.4 | 7.2 | | 6.5 | | 7.8 | 7.8 | 8.2 | 7.6 | 7.8 | | |
| 25 | | | | | | | | 7.6 | 7.5 | 8.1 | 7.5 | 7.8 | | |
| 30 | 7.4 | | | | | | | 7.5 | 7.5 | 8.1 | 7.3 | | | |
| 35 | | | | | | | | 7.5 | 7.3 | 7.9 | 7.2 | | | |
| 40 | 7.2 | | | | | | | 7.5 | 7.2 | 7.7 | 7.3 | | | |
| 45 | | | | | | | | 7.5 | 7.3 | | | | | |
| 50 | 7.3 | | | | | | | 7.5 | | | | | | |
| 55 | | | | | | | | 7.5 | | | | | | |
| 60 | 7.2 | | | | | | | 7.4 | | | | | | |
| 65 | | | | | | | | 7.4 | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | August 26 - 28* (553') | | | | | | | September 2 - 4 (552') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.7 | 7.6 | 7.6 | 8.0 | 7.9 | 8.0 | 7.8 | 8.2 | 8.4 | 8.1 | 8.6 | 8.7 | 8.4 | 8.0 |
| 5 | | | | | | | | 8.4 | 8.5 | 8.1 | 8.7 | 8.7 | | |
| 10 | 7.7 | 7.5 | 7.5 | 7.7 | 7.8 | | | 8.5 | 8.5 | 8.1 | 8.7 | 8.3 | | |
| 15 | | | | | | | | 8.5 | 8.5 | 8.1 | 7.9 | 7.8 | | |
| 20 | 7.4 | 7.1 | 7.1 | 7.0 | 6.4 | 7.2 | | 7.9 | 8.2 | 7.9 | 7.6 | 7.8 | | |
| 25 | | | | | | | | 7.4 | 7.7 | 7.5 | 7.4 | 7.8 | | |
| 30 | 6.8 | | | | 6.8 | 6.9 | | 7.3 | 7.4 | 7.3 | 7.3 | | | |
| 35 | | | | | | | | 7.2 | 7.2 | 7.2 | 7.3 | | | |
| 40 | 6.8 | | | | 6.7 | | | 7.1 | 7.1 | 7.1 | 7.4 | | | |
| 45 | | | | | | | | 7.1 | | 7.1 | | | | |
| 50 | 6.8 | | | | | | | 7.1 | | | | | | |
| 55 | | | | | | | | 7.0 | | | | | | |
| 60 | 6.6 | | | | | | | 6.9 | | | | | | |
| 65 | | | | | | | | 6.9 | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | September 10 & 12* (553') | | | | | | | September 21 - 23 (552') | | | | | | |
|-----------------|------------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.5 | 8.0 | 7.0 | 7.6 | 7.2 | 7.6 | 8.2 | 8.0 | 8.1 | 8.0 | 7.8 | 8.4 | 7.6 | 7.3 |
| 5 | | | | | | | | 8.0 | 8.3 | 8.0 | 8.0 | 8.2 | | |
| 10 | 7.5 | 7.3 | 6.9 | 7.3 | 7.6 | 7.2 | | 8.0 | 8.2 | 8.0 | 8.0 | 8.1 | | |
| 15 | | | | | | | | 8.0 | 8.2 | 8.0 | 7.8 | 8.0 | | |
| 20 | 7.5 | 6.8 | 6.9 | 7.0 | 7.2 | 7.1 | | 8.0 | 7.8 | 7.8 | 7.5 | 7.9 | | |
| 25 | | | | | | | | 7.9 | 7.4 | 7.3 | 7.4 | 8.0 | | |
| 30 | 6.7 | 6.8 | | | 6.9 | 6.9 | | 7.4 | 7.0 | 6.8 | 7.1 | | | |
| 35 | | | | | | | | 7.1 | 6.6 | 6.5 | 7.1 | | | |
| 40 | 6.7 | | | | 6.9 | | | 7.1 | 6.3 | | | | | |
| 45 | | | | | | | | 6.9 | 6.0 | | | | | |
| 50 | 6.8 | | | | | | | 6.9 | | | | | | |
| 55 | | | | | | | | 6.9 | | | | | | |
| 60 | 7.0 | | | | | | | 6.9 | | | | | | |
| 65 | | | | | | | | 6.9 | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | September 28 - 29* (552') | | | | | | | October 21 - 23 (546') | | | | | | |
|-----------------|------------------------------|-----|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.8 | 7.3 | 8.0 | 7.7 | 7.4 | 7.6 | 6.8 | 8.0 | 8.3 | 8.2 | 8.5 | 8.2 | 8.5 | 8.0 |
| 5 | | | | | | | | 8.1 | 8.3 | 8.1 | 8.4 | 8.3 | | |
| 10 | 7.8 | 7.8 | 7.8 | 7.5 | 7.3 | 7.3 | | 8.1 | 8.3 | 8.1 | 8.3 | 8.3 | | |
| 15 | | | | | | | | 8.1 | 8.4 | | 8.3 | 8.1 | | |
| 20 | 7.8 | 7.5 | 7.5 | 7.5 | 7.1 | 7.3 | | 8.1 | 8.2 | | 8.1 | | | |
| 25 | | | | | | | | 8.0 | 8.3 | | 8.0 | | | |
| 30 | 7.5 | 7.5 | | | 7.3 | 7.4 | | 8.1 | 8.1 | | 8.0 | | | |
| 35 | | | | | | | | | 8.2 | | 8.1 | | | |
| 40 | 6.8 | | | | 7.1 | | | 8.1 | | | | | | |
| 45 | | | | | | | | 8.2 | | | | | | |
| 50 | 6.8 | | | | | | | 8.3 | | | | | | |
| 55 | | | | | | | | 8.0 | | | | | | |
| 60 | 6.8 | | | | | | | 7.9 | | | | | | |

*KDFWR

Table 4. (continued)

| Depth (feet) | November 16 - 17 (536') | | | | | | | December 16 - 17 (525') | | | | | | |
|-----------------|----------------------------|-----|-----|-----|-----|-----|-----|----------------------------|-----|-----|---|-----|---|-----|
| | 1. | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 7.7 | 7.6 | 7.8 | 7.8 | 8.0 | 7.8 | 7.7 | 7.5 | 7.2 | 7.5 | | 7.2 | | 7.5 |
| 5 | 7.7 | 7.7 | 7.7 | 7.7 | 8.0 | | | | | | | | | |
| 10 | 7.7 | 7.7 | 7.7 | 7.7 | | | | 7.5 | 7.2 | 7.4 | | | | |
| 15 | 7.8 | 7.6 | 7.7 | 7.7 | | | | | | | | | | |
| 20 | 7.6 | 7.6 | 7.6 | 7.7 | | | | 7.3 | 7.2 | 7.4 | | | | |
| 25 | 7.5 | 7.6 | 7.7 | | | | | | | | | | | |
| 30 | 7.7 | | 7.7 | | | | | 7.4 | | | | | | |
| 35 | 7.7 | | 7.7 | | | | | | | | | | | |
| 40 | 7.7 | | 7.7 | | | | | 7.4 | | | | | | |
| 45 | 7.7 | | | | | | | | | | | | | |

Table 4. (continued)

| Depth (feet) | December 16 - 17* (525') | | | | | | |
|-----------------|-----------------------------|---|---|---|-----|---|-----|
| | A | B | C | D | E | F | T |
| 0 | 7.6 | | | | 7.4 | | 7.7 |
| 5 | | | | | | | |
| 10 | 7.6 | | | | 7.3 | | |
| 15 | | | | | | | |
| 20 | 7.6 | | | | 7.3 | | |
| 25 | | | | | | | |
| 30 | 7.2 | | | | | | |
| 35 | | | | | | | |
| 40 | 7.2 | | | | | | |

*KDFWR

Table 5. Specific conductance at Barren River Reservoir and its tailwater, 1970. Determinations were conducted biweekly in June and July (monthly in May and August). Data not asterisked, February through December, were provided by the U. S. Army Corps of Engineers, Louisville District. Normal summer-winter pool elevations were 552-525 feet, respectively. Conductance values are expressed in micromhos per centimeter. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 16 - 18 (534') | | | | | | | March 25 - 27 (529') | | | | | | |
|-----------------|----------------------------|-----|-----|---|-----|-----|-----|-------------------------|------|------|---|---|----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 215 | 192 | 117 | | 126 | 172 | 220 | 150 | 1.50 | 1.20 | | | 80 | 145 |
| 5 | | | | | | | | | | | | | | |
| 10 | 207 | 198 | 119 | | | | | 145 | 150 | 125 | | | | |
| 15 | | | | | | | | | | | | | | |
| 20 | 207 | 187 | 120 | | | | | 145 | 150 | 130 | | | | |
| 25 | | | | | | | | | | | | | | |
| 30 | 205 | | | | | | | 145 | | | | | | |
| 35 | | | | | | | | | | | | | | |
| 40 | 205 | | | | | | | 145 | | | | | | |
| 45 | | | | | | | | | | | | | | |
| 50 | 204 | | | | | | | | | | | | | |

Table 5. (continued)

| Depth (feet) | April 20 - 22 (550') | | | | | | | May 20 - 22 (552') | | | | | | |
|-----------------|-------------------------|-----|-----|-----|-----|-----|-----|-----------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 190 | 181 | 175 | 170 | 159 | 175 | 205 | 181 | 180 | 180 | 161 | 199 | 203 | 198 |
| 5 | 190 | 180 | 171 | 171 | 160 | | | 181 | 179 | 180 | 161 | 200 | | |
| 10 | 190 | 178 | 173 | 171 | 161 | | | 180 | 181 | 180 | 161 | 199 | | |
| 15 | 185 | 195 | 172 | 166 | 161 | | | 185 | 181 | 180 | 161 | 198 | | |
| 20 | 189 | 194 | 170 | 168 | 160 | | | 189 | 185 | 178 | 179 | 198 | | |
| 25 | 192 | 199 | 180 | 165 | | | | 195 | 182 | 175 | 170 | 196 | | |
| 30 | 205 | 203 | 182 | 171 | | | | 200 | 182 | 179 | 188 | | | |
| 35 | 216 | 204 | 177 | | | | | 203 | 189 | 180 | 253 | | | |
| 40 | 216 | 206 | 183 | | | | | 203 | 192 | 191 | | | | |
| 45 | 216 | | | | | | | 200 | | | | | | |
| 50 | 223 | | | | | | | 208 | | | | | | |
| 55 | 223 | | | | | | | 210 | | | | | | |
| 60 | 230 | | | | | | | 218 | | | | | | |
| 65 | | | | | | | | 225 | | | | | | |

Table 5. (continued)

| Depth (feet) | May 26 - 27* (552') | | | | | | | June 15 - 16* (554') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 255 | 285 | 325 | 270 | 260 | 270 | 270 | 260 | 290 | 350 | 270 | 250 | 265 | 275 |
| 5 | | | | | | | | | | | | | | |
| 10 | 245 | 295 | 325 | 260 | 250 | 270 | | | 285 | 350 | 270 | 250 | 260 | |
| 15 | | | | | | | | | | | | | | |
| 20 | 240 | 360 | 375 | 280 | 245 | 275 | | | 300 | 340 | 270 | 250 | 265 | |
| 25 | | | | | | | | | | | | | | |
| 30 | 240 | | | | 250 | 280 | | | | | | 245 | 265 | |
| 35 | | | | | | | | | | | | | | |
| 40 | 245 | | | | 245 | | | | | | | 245 | | |
| 45 | | | | | | | | | | | | | | |
| 50 | 240 | | | | | | | 250 | | | | | | |
| 55 | | | | | | | | | | | | | | |
| 60 | 250 | | | | | | | 265 | | | | | | |

*KDFWR

*KDFWR

Table 5. (continued)

| Depth (feet) | June 17 - 19 (552') | | | | | | | June 30 - July 1* (554') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 179 | 182 | 182 | 189 | 203 | 230 | 182 | 300 | 295 | 320 | 275 | 290 | 250 | 300 |
| 5 | 181 | 181 | 182 | 181 | 205 | | | | | | | | | |
| 10 | 181 | 181 | 182 | 187 | 202 | | | 295 | 290 | 310 | 265 | 270 | 240 | |
| 15 | 185 | 185 | 185 | 191 | 210 | | | | | | | | | |
| 20 | 195 | 231 | 188 | 205 | 211 | | | 295 | 315 | 350 | 290 | 270 | 245 | |
| 25 | 190 | 200 | 198 | 212 | | | | | | | | | | |
| 30 | 188 | 200 | 195 | 251 | | | | 290 | | | | 260 | 230 | |
| 35 | 200 | 203 | 202 | 470 | | | | | | | | | | |
| 40 | 200 | 203 | 208 | 529 | | | | 270 | | | | 275 | | |
| 45 | 195 | | | | | | | | | | | | | |
| 50 | 200 | | | | | | | 260 | | | | | | |
| 55 | 212 | | | | | | | | | | | | | |
| 60 | 218 | | | | | | | 260 | | | | | | |
| 65 | 230 | | | | | | | | | | | | | |

*KDFWR

Table 5. (continued)

| Depth (feet) | July 8 - 10 (553') | | | | | | | July 23* (552') | | | | | | |
|-----------------|-----------------------|-----|-----|-----|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | A | B | C | D | E | F | T |
| 0 | 195 | 198 | 181 | 185 | 190 | 220 | 200 | 270 | 315 | 330 | 290 | 285 | 285 | 270 |
| 5 | 195 | 198 | 182 | 182 | 193 | | | | | | | | | |
| 10 | 198 | 195 | 181 | 182 | 208 | | | 275 | 315 | 315 | 280 | 280 | 275 | |
| 15 | 198 | 195 | 181 | 185 | 215 | | | | | | | | | |
| 20 | 210 | 202 | 195 | 185 | 215 | | | 270 | 320 | 390 | 280 | 285 | 280 | |
| 25 | 205 | 211 | 191 | 193 | 215 | | | | | | | | | |
| 30 | 198 | 208 | 192 | 225 | | | | 260 | | | | 280 | 335 | |
| 35 | 200 | 230 | 200 | 450 | | | | | | | | | | |
| 40 | 200 | 218 | 210 | 580 | | | | 275 | | | | 280 | | |
| 45 | 200 | | | | | | | | | | | | | |
| 50 | 202 | | | | | | | 260 | | | | | | |
| 55 | 210 | | | | | | | | | | | | | |
| 60 | 219 | | | | | | | 250 | | | | | | |
| 65 | 230 | | | | | | | | | | | | | |

*KDFWR

Table 5. (continued)

| Depth (feet) | July 22 - 24 (552') | | | | | | | August 5 - 7 (552') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 178 | 175 | 182 | 190 | 210 | 220 | 189 | 190 | 180 | 190 | 188 | 200 | 230 | 185 |
| 5 | 180 | 175 | 182 | 191 | 210 | | | 191 | 179 | 190 | 188 | 200 | | |
| 10 | 160 | 175 | 182 | 191 | 210 | | | 191 | 175 | 190 | 188 | 203 | | |
| 15 | 165 | 175 | 182 | 191 | 210 | | | 191 | 180 | 192 | 195 | 215 | | |
| 20 | 165 | 175 | 182 | 191 | 215 | | | 199 | 188 | 195 | 202 | 216 | | |
| 25 | 168 | 190 | 190 | 255 | | | | 199 | 185 | 198 | 230 | 228 | | |
| 30 | 175 | 190 | 200 | 300 | | | | 196 | 182 | 205 | 305 | | | |
| 35 | 180 | 211 | 202 | 480 | | | | 195 | 188 | 220 | 380 | | | |
| 40 | 160 | 209 | 220 | 688 | | | | 195 | 190 | | | | | |
| 45 | 165 | 210 | | | | | | 200 | 190 | | | | | |
| 50 | 170 | | | | | | | 201 | | | | | | |
| 55 | 188 | | | | | | | 209 | | | | | | |
| 60 | 180 | | | | | | | 218 | | | | | | |
| 65 | | | | | | | | 220 | | | | | | |

Table 5. (continued)

| Depth (feet) | August 11 - 12* (552') | | | | | | | August 19 - 21 (553') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|--------------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 290 | 300 | 300 | 275 | 270 | 280 | 275 | 195 | 191 | 191 | 190 | 191 | 225 | 190 |
| 5 | | | | | | | | 192 | 192 | 191 | 191 | 191 | | |
| 10 | 295 | 310 | 305 | 275 | 270 | 275 | | 192 | 192 | 191 | 199 | 201 | | |
| 15 | | | | | | | | 192 | 192 | 195 | 208 | 196 | | |
| 20 | 295 | 335 | 310 | 295 | 280 | 300 | | 209 | 215 | 201 | 192 | 191 | | |
| 25 | | | | | | | | 201 | 232 | 210 | 201 | 191 | | |
| 30 | 285 | | | | 295 | 310 | | 200 | 201 | 209 | 311 | | | |
| 35 | | | | | | | | 200 | 206 | 215 | 420 | | | |
| 40 | 270 | | | | 295 | | | 200 | 218 | 220 | 555 | | | |
| 45 | | | | | | | | 200 | 222 | | | | | |
| 50 | 260 | | | | | | | 210 | | | | | | |
| 55 | | | | | | | | 210 | | | | | | |
| 60 | 295 | | | | | | | 217 | | | | | | |
| 65 | | | | | | | | 225 | | | | | | |

*KDFWR

Table 5. (continued)

| Depth (feet) | September 2 - 4 (552') | | | | | | | September 21 - 23 (552') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 200 | 200 | 200 | 170 | 204 | 230 | 198 | 200 | 200 | 208 | 210 | 190 | 226 | 205 |
| 5 | 200 | 200 | 199 | 162 | 200 | | | 200 | 200 | 203 | 209 | 190 | | |
| 10 | 200 | 200 | 198 | 161 | 219 | | | 198 | 200 | 202 | 208 | 173 | | |
| 15 | 200 | 200 | 199 | 165 | 228 | | | 198 | 200 | 200 | 209 | 173 | | |
| 20 | 210 | 200 | 204 | 180 | 230 | | | 198 | 200 | 200 | 230 | 172 | | |
| 25 | 205 | 225 | 218 | 195 | 232 | | | 190 | 185 | 220 | 256 | 172 | | |
| 30 | 200 | 220 | 220 | 260 | | | | 200 | 212 | 238 | 330 | | | |
| 35 | 200 | 210 | 226 | 640 | | | | 200 | 220 | 242 | 670 | | | |
| 40 | 200 | 215 | 230 | 790 | | | | 195 | 222 | | 810 | | | |
| 45 | 205 | | 235 | | | | | 195 | 235 | | | | | |
| 50 | 215 | | | | | | | 205 | | | | | | |
| 55 | 220 | | | | | | | 205 | | | | | | |
| 60 | 225 | | | | | | | 209 | | | | | | |
| 65 | 240 | | | | | | | 230 | | | | | | |

Table 5. (continued)

| Depth (feet) | October 21 - 23 (546') | | | | | | | November 16 - 17 (536') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | T | 1 | 2 | 3 | 4 | 5 | 6 | T |
| 0 | 200 | 210 | 209 | 230 | 221 | 230 | 200 | 222 | 231 | 251 | 260 | 215 | 212 | 228 |
| 5 | 200 | 208 | 209 | 230 | 221 | | | 221 | 230 | 251 | 260 | 215 | | |
| 10 | 200 | 208 | 209 | 230 | 222 | | | 221 | 230 | 251 | 264 | | | |
| 15 | 200 | 205 | 209 | 230 | 221 | | | 221 | 230 | 250 | 300 | | | |
| 20 | 200 | 205 | 210 | 240 | | | | 221 | 230 | 250 | 329 | | | |
| 25 | 200 | 205 | 210 | 262 | | | | 221 | 230 | 250 | | | | |
| 30 | 200 | 205 | 212 | 560 | | | | 220 | | 250 | | | | |
| 35 | | 205 | | 670 | | | | 222 | | 250 | | | | |
| 40 | 200 | | | | | | | 220 | | 260 | | | | |
| 45 | 200 | | | | | | | 220 | | | | | | |
| 50 | 200 | | | | | | | 230 | | | | | | |
| 55 | 242 | | | | | | | | | | | | | |
| 60 | 250 | | | | | | | | | | | | | |

Table 5. (continued)

| (feet) | December 16 - 17 (525') | | | | | | T |
|--------|----------------------------|-----|-----|---|-----|---|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 0 | 273 | 295 | 371 | | 220 | | 280 |
| 5 | | | | | | | |
| 10 | 273 | 295 | 371 | | | | |
| 15 | | | | | | | |
| 20 | 273 | 295 | 375 | | | | |
| 25 | | | | | | | |
| 30 | 273 | | | | | | |
| 35 | | | | | | | |
| 40 | 273 | | | | | | |

Table 6. Water temperatures (°Fahrenheit) at Nolin River Reservoir and its tailwater, 1970. Temperatures were recorded monthly (biweekly in July and September). Data not asterisked, February through December, were provided by the U. S. Army Corps of Engineers, Louisville District. Normal summer-winter pool elevations were 515-490 feet, respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 9 - 11 (490') | | | | | | March 23 - 27 (494') | | | | | |
|-----------------|---------------------------|------|------|------|------|------|-------------------------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 37.0 | 36.2 | 38.0 | 44.3 | 46.1 | 37.0 | 40.1 | 40.3 | 40.3 | 40.8 | 48.1 | 48.2 |
| 5 | 36.5 | 36.2 | 38.0 | 44.4 | | | | | | | | |
| 10 | 36.8 | 36.4 | 38.0 | 44.3 | | | 40.0 | 40.2 | 40.3 | 40.7 | | |
| 15 | 36.8 | 37.0 | 38.1 | 44.3 | | | | | | | | |
| 20 | 36.8 | 37.0 | 38.2 | 44.3 | | | 40.0 | 40.1 | 40.3 | 40.6 | | |
| 25 | 36.9 | 37.0 | 38.2 | 44.3 | | | | | | 40.6 | | |
| 30 | 36.9 | 37.0 | 38.5 | | | | 40.0 | 40.1 | | 40.3 | | |
| 35 | 36.9 | 37.0 | 38.5 | | | | | | | | | |
| 40 | 36.9 | 37.0 | 38.5 | | | | 40.0 | 40.1 | | | | |
| 45 | 36.9 | 37.0 | 38.5 | | | | | | | | | |
| 50 | 36.9 | 37.0 | | | | | 39.9 | 40.1 | | | | |
| 55 | 36.9 | 37.0 | | | | | | | | | | |
| 60 | 36.9 | 37.0 | | | | | 39.9 | 40.0 | | | | |
| 65 | 36.9 | 37.0 | | | | | | | | | | |
| 70 | 37.1 | | | | | | 39.8 | 40.0 | | | | |

Table 6. (continued)

| Depth (feet) | April 23 - 24 (515') | | | | | | May 18 - 19 (515') | | | | | |
|-----------------|-------------------------|------|------|------|------|------|-----------------------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 58.0 | 60.0 | 62.0 | 62.1 | 59.0 | 51.0 | 71.5 | 74.3 | 83.0 | 76.0 | 59.0 | 59.5 |
| 5 | 57.4 | 60.0 | 60.8 | 62.1 | | | 71.0 | 71.9 | 72.5 | 71.4 | | |
| 10 | 57.0 | 60.0 | 60.6 | 61.9 | | | 69.0 | 70.0 | 70.0 | 71.1 | | |
| 15 | 56.8 | 58.0 | 59.9 | 61.1 | | | 65.2 | 66.1 | 66.1 | 66.7 | | |
| 20 | 55.5 | 55.8 | 58.2 | 59.0 | | | 63.3 | 64.0 | 67.2 | 64.0 | | |
| 25 | 54.4 | 54.0 | 57.8 | 58.3 | | | 62.0 | 62.8 | 63.0 | 63.0 | | |
| 30 | 53.3 | 53.1 | 54.3 | 56.0 | | | 61.5 | 61.9 | 62.0 | 61.8 | | |
| 35 | 52.9 | 52.9 | 53.0 | 54.7 | | | 61.0 | 61.0 | 61.0 | 60.9 | | |
| 40 | 52.0 | 52.0 | 51.8 | 53.8 | | | 60.5 | 60.9 | 60.8 | 60.0 | | |
| 45 | 51.2 | 51.6 | 51.0 | 53.2 | | | 60.1 | 60.2 | 60.1 | 59.9 | | |
| 50 | 50.9 | 50.0 | 50.0 | | | | 60.0 | 60.0 | 59.9 | | | |
| 55 | 50.0 | 48.9 | 49.0 | | | | 60.0 | 60.0 | 59.5 | | | |
| 60 | 49.0 | 48.2 | 49.0 | | | | 59.8 | 59.9 | 59.0 | | | |
| 65 | 48.7 | 48.0 | 49.0 | | | | 59.7 | 59.1 | 59.0 | | | |
| 70 | 47.9 | 47.8 | | | | | 59.2 | 58.5 | 58.9 | | | |
| 75 | 47.7 | 47.3 | | | | | 58.9 | 57.4 | | | | |
| 80 | 47.2 | 47.0 | | | | | 56.0 | 55.1 | | | | |
| 85 | 47.0 | 47.0 | | | | | 53.0 | 53.9 | | | | |
| 90 | 47.0 | 47.0 | | | | | 52.3 | 52.2 | | | | |
| 95 | 47.0 | | | | | | 52.2 | 51.8 | | | | |

Table 6. (continued)

| Depth (feet) | May 19 - 22* (515') | | | | | | | June 15 - 16 (515') | | | | | |
|-----------------|------------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 81.1 | 77.5 | 78.8 | 78.8 | 84.2 | 80.6 | 59.0 | 78.2 | 78.1 | 78.0 | 80.0 | 67.9 | 60.0 |
| 5 | 74.8 | 74.8 | 73.4 | 72.1 | 72.1 | 63.5 | | 75.1 | 78.1 | 78.1 | 79.3 | | |
| 10 | 68.9 | 69.8 | 69.4 | 68.0 | 69.8 | 62.2 | | 72.1 | 76.9 | 78.0 | 75.1 | | |
| 15 | 65.3 | 65.3 | 64.9 | 64.4 | 65.3 | 61.7 | | 68.0 | 70.0 | 71.8 | 72.0 | | |
| 20 | 63.1 | 63.1 | 62.6 | 62.6 | 62.6 | 61.7 | | 64.8 | 66.1 | 67.1 | 68.2 | | |
| 25 | 61.7 | 61.7 | 61.7 | 61.7 | 60.8 | 61.7 | | 63.9 | 64.1 | 65.1 | 66.0 | | |
| 30 | 60.8 | 60.8 | 60.8 | | 60.8 | | | 63.0 | 63.0 | 63.2 | 65.0 | | |
| 35 | 59.9 | 60.4 | 60.4 | | 60.8 | | | 62.0 | 62.1 | 62.0 | 63.2 | | |
| 40 | 59.9 | 59.5 | 59.9 | | | | | 61.8 | 61.8 | 61.8 | 62.8 | | |
| 45 | 59.5 | 59.0 | | | | | | 61.0 | 61.0 | 61.1 | 62.0 | | |
| 50 | 59.5 | 59.0 | | | | | | 60.8 | 60.9 | 60.8 | 61.8 | | |
| 55 | 59.0 | 59.0 | | | | | | 60.6 | 60.6 | 60.2 | | | |
| 60 | 59.0 | 59.0 | | | | | | 60.2 | 60.1 | 60.0 | | | |
| 65 | 59.0 | | | | | | | 60.0 | 59.9 | 59.5 | | | |
| 70 | 59.0 | | | | | | | 59.6 | 59.0 | 57.5 | | | |
| 75 | | | | | | | | 58.8 | 58.5 | | | | |
| 80 | | | | | | | | 58.1 | 58.0 | | | | |
| 85 | | | | | | | | 57.6 | 58.0 | | | | |
| 90 | | | | | | | | 56.4 | 57.0 | | | | |
| 95 | | | | | | | | 54.5 | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | June 23* (515') | | | | | | | July 6 - 7 (515') | | | | | |
|-----------------|--------------------|------|------|------|------|------|------|----------------------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 83.3 | 82.4 | 83.3 | 82.4 | 80.6 | 80.6 | 59.9 | 81.7 | 83.0 | 82.1 | 81.0 | 69.9 | 58.9 |
| 5 | 80.2 | 79.3 | 78.8 | 78.8 | 77.9 | 77.9 | | 81.2 | 82.5 | 80.6 | 81.0 | | |
| 10 | 77.0 | 77.5 | 77.9 | 77.0 | 77.0 | 76.6 | | 81.1 | 80.5 | 80.0 | 81.0 | | |
| 15 | 73.4 | 73.4 | 73.4 | 72.1 | 73.4 | 70.7 | | 74.1 | 76.0 | 74.4 | 75.2 | | |
| 20 | 68.5 | 67.6 | 68.9 | 68.0 | 68.0 | 70.3 | | 68.7 | 69.3 | 70.9 | 71.1 | | |
| 25 | 64.4 | 64.4 | 65.3 | 68.9 | 65.3 | 70.7 | | 65.3 | 65.9 | 67.1 | 66.9 | | |
| 30 | 63.1 | 62.6 | 62.6 | | 64.4 | | | 63.8 | 63.9 | 64.5 | 64.6 | | |
| 35 | 62.2 | 61.7 | 61.7 | | 64.4 | | | 62.5 | 62.8 | 63.0 | 63.9 | | |
| 40 | 61.3 | 60.8 | 60.8 | | | | | 61.8 | 61.9 | 62.0 | 62.9 | | |
| 45 | 60.8 | 60.8 | | | | | | 61.1 | 61.3 | 61.6 | 62.2 | | |
| 50 | 60.8 | 60.4 | | | | | | 60.8 | 61.0 | 61.1 | 61.9 | | |
| 55 | 60.4 | 60.8 | | | | | | 60.5 | 60.9 | 60.5 | | | |
| 60 | 59.9 | | | | | | | 60.2 | 60.3 | 60.0 | | | |
| 65 | 59.9 | | | | | | | 60.0 | 60.0 | 59.8 | | | |
| 70 | 59.9 | | | | | | | 59.8 | 59.2 | | | | |
| 75 | | | | | | | | 59.0 | 58.9 | | | | |
| 80 | | | | | | | | 58.4 | 58.7 | | | | |
| 85 | | | | | | | | 58.0 | 58.2 | | | | |
| 90 | | | | | | | | 57.1 | 57.0 | | | | |
| 95 | | | | | | | | 57.1 | 55.2 | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | July 9* (515') | | | | | | | July 20 - 21 (515') | | | | | |
|-----------------|-------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 80.6 | 82.0 | 82.4 | 83.8 | 82.9 | 84.2 | 60.4 | 79.5 | 79.0 | 79.1 | 82.4 | 70.1 | 59.0 |
| 5 | 80.2 | 80.6 | 81.1 | 81.1 | 82.4 | 82.4 | | 79.5 | 79.0 | 79.5 | 82.7 | | |
| 10 | 77.9 | 79.3 | 80.2 | 80.2 | 78.8 | 79.7 | | 79.5 | 79.0 | 79.5 | 82.2 | | |
| 15 | 75.7 | 73.4 | 77.0 | 77.5 | 70.3 | 75.7 | | 79.5 | 79.0 | 79.2 | 80.0 | | |
| 20 | 69.4 | 68.0 | 68.9 | 72.5 | 69.8 | 72.1 | | 79.3 | 70.9 | 74.1 | 73.5 | | |
| 25 | 65.8 | 64.4 | 64.9 | 67.6 | 66.2 | 72.5 | | 68.3 | 67.8 | 67.0 | 71.2 | | |
| 30 | 62.6 | 62.6 | 64.0 | | 64.4 | | | 64.9 | 65.0 | 65.3 | 66.0 | | |
| 35 | 61.7 | 61.7 | 62.6 | | 64.0 | | | 63.2 | 63.4 | 64.1 | 64.1 | | |
| 40 | 60.8 | 61.3 | 62.2 | | | | | 62.0 | 62.1 | 62.9 | 63.7 | | |
| 45 | 60.8 | 60.8 | | | | | | 61.4 | 61.6 | 62.1 | 62.6 | | |
| 50 | 60.4 | 60.4 | | | | | | 61.0 | 61.0 | 61.3 | 62.0 | | |
| 55 | 59.9 | 60.4 | | | | | | 60.9 | 60.9 | 61.0 | | | |
| 60 | 59.5 | | | | | | | 60.5 | 60.4 | 60.0 | | | |
| 65 | 59.5 | | | | | | | 60.2 | 60.0 | 60.0 | | | |
| 70 | 59.0 | | | | | | | 60.0 | 59.8 | | | | |
| 75 | | | | | | | | 59.9 | 59.0 | | | | |
| 80 | | | | | | | | 59.0 | 58.7 | | | | |
| 85 | | | | | | | | 58.1 | 58.2 | | | | |
| 90 | | | | | | | | 56.9 | 56.9 | | | | |
| 95 | | | | | | | | 56.9 | 55.0 | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | July 27-31* (515') | | | | | | | August 3 - 4 (515') | | | | | |
|-----------------|-----------------------|------|------|------|------|------|------|------------------------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 81.5 | 83.8 | 85.6 | 85.1 | 85.1 | 89.6 | 60.4 | 85.0 | 85.1 | 85.0 | 88.8 | 73.6 | 61.0 |
| 5 | 80.6 | 82.9 | 84.2 | 84.2 | 84.7 | 80.6 | | 85.0 | 85.1 | 85.0 | 87.9 | | |
| 10 | 79.3 | 80.6 | 79.7 | 82.4 | 82.4 | 75.7 | | 84.1 | 80.0 | 84.5 | 83.1 | | |
| 15 | 77.0 | 77.0 | 77.0 | 77.5 | 76.1 | 71.6 | | 82.0 | 77.1 | 77.3 | 78.1 | | |
| 20 | 74.3 | 73.4 | 74.3 | 73.9 | 73.4 | 71.6 | | 75.0 | 75.1 | 74.8 | 75.0 | | |
| 25 | 68.9 | 69.8 | 69.8 | 71.2 | 70.3 | 71.6 | | 70.0 | 71.1 | 70.0 | 71.0 | | |
| 30 | 65.3 | 66.2 | 66.2 | | 68.0 | | | 66.3 | 67.2 | 67.0 | 67.1 | | |
| 35 | 63.5 | 63.5 | 64.4 | | | | | 64.6 | 64.9 | 65.1 | 65.6 | | |
| 40 | 62.6 | 62.6 | 63.5 | | | | | 63.4 | 63.4 | 63.8 | 64.0 | | |
| 45 | 61.3 | 61.7 | | | | | | 62.5 | 62.6 | 62.8 | 63.5 | | |
| 50 | 60.8 | 60.8 | | | | | | 61.9 | 62.1 | 62.0 | 62.5 | | |
| 55 | 60.8 | 60.8 | | | | | | 61.6 | 61.8 | 61.3 | | | |
| 60 | 60.4 | | | | | | | 61.0 | 61.1 | 60.9 | | | |
| 65 | 60.4 | | | | | | | 61.0 | 60.3 | 60.2 | | | |
| 70 | 60.4 | | | | | | | 60.8 | 60.3 | | | | |
| 75 | | | | | | | | 60.1 | 59.9 | | | | |
| 80 | | | | | | | | 59.9 | 59.2 | | | | |
| 85 | | | | | | | | 59.0 | 59.0 | | | | |
| 90 | | | | | | | | 58.2 | 57.9 | | | | |
| 95 | | | | | | | | 58.2 | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | August 13* (515') | | | | | | | August 17 - 18 (515') | | | | | |
|-----------------|----------------------|------|------|------|------|------|------|--------------------------|------|------|------|------|------|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 82.9 | 83.3 | 83.8 | 84.2 | 82.9 | 86.0 | 61.7 | 83.1 | 84.5 | 83.5 | 85.9 | 72.1 | 61.5 |
| 5 | 82.4 | 81.5 | 81.5 | 80.6 | 80.6 | 77.9 | | 82.5 | 84.5 | 83.5 | 85.9 | | |
| 10 | 81.1 | 80.6 | 80.2 | 78.8 | 79.3 | 73.4 | | 81.2 | 81.5 | 81.9 | 81.5 | | |
| 15 | 80.6 | 79.3 | 78.8 | 77.0 | 77.9 | 69.8 | | 78.8 | 79.1 | 78.5 | 79.0 | | |
| 20 | 75.2 | 75.7 | 75.2 | 74.8 | 74.3 | 69.8 | | 75.1 | 75.2 | 75.6 | 75.9 | | |
| 25 | 71.6 | 71.6 | 71.6 | 72.7 | 72.1 | 69.8 | | 71.8 | 72.1 | 72.5 | 72.1 | | |
| 30 | 68.0 | 67.6 | 68.5 | | 69.8 | | | 67.5 | 69.0 | 69.6 | 70.0 | | |
| 35 | 65.8 | 64.9 | 65.8 | | | | | 65.2 | 66.6 | 66.9 | 68.7 | | |
| 40 | 64.4 | 63.1 | 64.4 | | | | | 64.1 | 64.9 | 65.1 | 66.0 | | |
| 45 | 62.6 | 62.6 | | | | | | 63.0 | 63.2 | 64.0 | 64.5 | | |
| 50 | 62.2 | 61.7 | | | | | | 62.1 | 62.9 | 63.0 | 63.3 | | |
| 55 | 61.3 | 61.3 | | | | | | 61.9 | 62.2 | 62.1 | | | |
| 60 | 61.3 | | | | | | | 61.8 | 61.9 | 61.8 | | | |
| 65 | 60.8 | | | | | | | 61.4 | 61.1 | 61.0 | | | |
| 70 | 60.4 | | | | | | | 61.1 | 60.8 | | | | |
| 75 | 59.9 | | | | | | | 60.8 | 60.0 | | | | |
| 80 | | | | | | | | 60.2 | 60.0 | | | | |
| 85 | | | | | | | | 59.5 | 59.7 | | | | |
| 90 | | | | | | | | 59.0 | 58.7 | | | | |
| 95 | | | | | | | | 56.9 | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | August 27 - September 1 (515') | | | | | | September 10 - 11* (515') | | | | | | |
|-----------------|-----------------------------------|------|------|------|------|------|------------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 84.9 | 85.2 | 84.5 | 82.5 | 72.8 | 61.9 | 81.1 | 80.6 | 81.5 | 82.0 | 81.1 | 82.0 | 62.6 |
| 5 | 84.0 | 82.9 | 83.0 | 82.1 | | | 81.1 | 80.6 | 81.1 | 81.1 | 81.1 | 79.7 | |
| 10 | 81.9 | 82.0 | 82.3 | 82.0 | | | 81.1 | 80.6 | 80.6 | 80.2 | 80.6 | 77.9 | |
| 15 | 81.0 | 79.0 | 80.0 | 79.7 | | | 79.3 | 79.7 | 80.2 | 79.3 | 79.3 | 75.2 | |
| 20 | 76.1 | 75.8 | 76.8 | 75.9 | | | 77.0 | 78.4 | 77.0 | 77.9 | 77.0 | 73.9 | |
| 25 | 71.9 | 72.0 | 72.8 | 72.9 | | | 73.4 | 73.0 | 72.1 | 72.5 | 73.4 | 73.9 | |
| 30 | 69.0 | 69.8 | 70.0 | 70.6 | | | 69.8 | 70.3 | 69.8 | | 71.6 | | |
| 35 | 66.6 | 67.0 | 67.9 | 67.6 | | | 67.1 | 68.0 | 67.6 | | 69.8 | | |
| 40 | 64.9 | 65.0 | 65.8 | 66.0 | | | 64.9 | 65.8 | 65.8 | | | | |
| 45 | 63.9 | 63.8 | 64.1 | 64.8 | | | 63.5 | 64.0 | | | | | |
| 50 | 63.0 | 62.8 | 63.4 | | | | 62.6 | 63.1 | | | | | |
| 55 | 62.0 | 62.1 | 62.8 | | | | 62.2 | 62.6 | | | | | |
| 60 | 61.9 | 61.8 | 62.0 | | | | 61.7 | | | | | | |
| 65 | 61.7 | 61.2 | 61.8 | | | | 61.3 | | | | | | |
| 70 | 61.1 | 60.9 | 61.1 | | | | 61.3 | | | | | | |
| 75 | 61.0 | 60.1 | | | | | | | | | | | |
| 80 | 60.3 | 60.0 | | | | | | | | | | | |
| 85 | 59.9 | 59.8 | | | | | | | | | | | |
| 90 | 58.7 | 58.0 | | | | | | | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | September 24 - 25 (514') | | | | | | September 30* (514') | | | | | | |
|-----------------|-----------------------------|------|------|------|------|------|-------------------------|------|------|------|------|---|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 79.8 | 80.0 | 79.9 | 79.9 | 73.0 | 62.7 | 75.2 | 74.8 | 75.7 | 77.0 | 76.1 | | 63.5 |
| 5 | 79.8 | 79.5 | 79.9 | 79.9 | | | 74.8 | 74.8 | 75.7 | 74.8 | 76.1 | | |
| 10 | 79.0 | 79.1 | 79.9 | 79.8 | | | 74.3 | 74.3 | 75.2 | 73.4 | 76.1 | | |
| 15 | 78.8 | 79.0 | 79.7 | 79.8 | | | 74.3 | 74.3 | 74.8 | 73.0 | 74.3 | | |
| 20 | 78.0 | 77.0 | 79.1 | 77.8 | | | 74.3 | 74.3 | 74.3 | 72.1 | 74.3 | | |
| 25 | 74.9 | 73.2 | 73.9 | 75.1 | | | 74.3 | 73.9 | 74.3 | 70.7 | 73.9 | | |
| 30 | 71.8 | 71.5 | 71.3 | 72.3 | | | 71.6 | 71.6 | 73.4 | | 73.4 | | |
| 35 | 69.2 | 69.4 | 69.0 | 70.0 | | | 69.8 | 69.8 | 71.6 | | 71.6 | | |
| 40 | 67.7 | 67.5 | 67.1 | 68.1 | | | 68.0 | 68.0 | 69.8 | | | | |
| 45 | 65.9 | 66.0 | 65.9 | 66.0 | | | 66.2 | 66.7 | | | | | |
| 50 | 64.2 | 64.5 | 64.9 | | | | 65.8 | 65.3 | | | | | |
| 55 | 63.7 | 64.0 | 63.2 | | | | 64.4 | | | | | | |
| 60 | 63.0 | 63.0 | 62.8 | | | | 64.0 | | | | | | |
| 65 | 62.9 | 62.2 | 62.1 | | | | 63.5 | | | | | | |
| 70 | 62.1 | 61.9 | 61.1 | | | | 62.6 | | | | | | |
| 75 | 61.9 | 61.1 | | | | | | | | | | | |
| 80 | 61.1 | 60.9 | | | | | | | | | | | |
| 85 | 60.2 | 60.0 | | | | | | | | | | | |
| 90 | 60.0 | | | | | | | | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | October 19 - 20 (511') | | | | | | October 21 - 22* (510') | | | | | | |
|-----------------|---------------------------|------|------|------|------|------|----------------------------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 66.8 | 66.8 | 65.9 | 64.3 | 53.1 | 66.0 | 67.1 | 66.2 | 65.3 | 64.4 | 64.0 | 57.2 | 65.8 |
| 5 | 67.0 | 66.7 | 65.9 | 64.2 | | | 66.7 | 66.2 | 65.3 | 64.0 | 64.0 | 55.9 | |
| 10 | 67.0 | 66.7 | 65.9 | 64.2 | | | 66.2 | 66.2 | 65.3 | 63.5 | 64.0 | 55.9 | |
| 15 | 67.0 | 66.7 | 65.9 | 64.0 | | | 66.2 | 66.2 | 65.3 | 62.6 | 64.0 | 55.4 | |
| 20 | 67.0 | 66.7 | 65.9 | 63.1 | | | 66.7 | 66.2 | 65.3 | 59.9 | 63.1 | 55.4 | |
| 25 | 67.0 | 66.7 | 65.9 | 61.0 | | | 66.7 | 66.2 | 65.3 | 59.0 | 61.3 | | |
| 30 | 67.0 | 66.7 | 65.9 | 60.0 | | | 66.7 | 66.2 | 64.9 | | 60.8 | | |
| 35 | 67.0 | 66.7 | 65.9 | 59.8 | | | 66.7 | 66.2 | 64.9 | | | | |
| 40 | 67.0 | 66.7 | 65.9 | 59.8 | | | 66.7 | 66.2 | 64.4 | | | | |
| 45 | 67.0 | 66.7 | 65.2 | 59.9 | | | 66.7 | 66.2 | | | | | |
| 50 | 67.0 | 66.7 | 64.4 | | | | 66.7 | 66.2 | | | | | |
| 55 | 67.0 | 66.7 | 64.0 | | | | 66.2 | | | | | | |
| 60 | 67.0 | 66.0 | 64.0 | | | | 66.2 | | | | | | |
| 65 | 66.9 | 64.9 | 63.7 | | | | 66.2 | | | | | | |
| 70 | 65.0 | 64.1 | | | | | 66.2 | | | | | | |
| 75 | 64.0 | 64.0 | | | | | | | | | | | |
| 80 | 63.0 | 63.1 | | | | | | | | | | | |
| 85 | 62.2 | | | | | | | | | | | | |
| 90 | 62.0 | | | | | | | | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | November 18 - 20 (497') | | | | | | November 25* (494') | | | | | | |
|-----------------|----------------------------|------|------|------|------|------|------------------------|------|------|---|---|---|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 56.0 | 54.9 | 52.4 | 48.1 | 45.0 | 55.5 | 50.5 | 48.7 | 45.5 | | | | 50.0 |
| 5 | 56.0 | 54.9 | 52.4 | 48.1 | | | 50.5 | 48.7 | 45.5 | | | | |
| 10 | 56.0 | 54.9 | 52.4 | 48.1 | | | 50.5 | 48.2 | 45.5 | | | | |
| 15 | 56.0 | 54.7 | 52.4 | 48.1 | | | 50.5 | 48.2 | 45.1 | | | | |
| 20 | 56.0 | 54.7 | 52.4 | 48.1 | | | 50.5 | 48.2 | 44.6 | | | | |
| 25 | 56.0 | 54.4 | 52.4 | 48.1 | | | 50.5 | 48.2 | | | | | |
| 30 | 56.0 | 54.4 | 52.4 | 48.0 | | | 50.5 | 48.2 | | | | | |
| 35 | 56.0 | 54.4 | 52.4 | | | | 50.5 | 48.2 | | | | | |
| 40 | 56.0 | 54.4 | | | | | 50.5 | 48.2 | | | | | |
| 45 | 55.9 | 54.4 | | | | | 50.5 | | | | | | |
| 50 | 55.9 | 54.4 | | | | | 50.5 | | | | | | |
| 55 | 55.9 | | | | | | | | | | | | |
| 60 | 55.5 | | | | | | | | | | | | |
| 65 | 55.2 | | | | | | | | | | | | |
| 70 | 55.1 | | | | | | | | | | | | |
| 75 | 55.1 | | | | | | | | | | | | |
| 80 | 55.1 | | | | | | | | | | | | |

*KDFWR

Table 6. (continued)

| Depth (feet) | December 14 - 17 (490') | | | | | | December 16 - 17* (490') | | | | | | |
|-----------------|----------------------------|------|------|------|------|------|-----------------------------|------|------|---|---|---|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 46.0 | 46.0 | 45.3 | 46.0 | 45.4 | 45.9 | 45.5 | 45.1 | 43.7 | | | | 46.4 |
| 5 | | | | 45.9 | | | 45.5 | 45.1 | 43.7 | | | | |
| 10 | 46.0 | 45.9 | 45.5 | 45.9 | | | 45.5 | 45.1 | 43.7 | | | | |
| 15 | | | | 45.9 | | | 45.5 | 45.1 | 43.7 | | | | |
| 20 | 46.0 | 45.9 | 45.5 | 45.9 | | | 45.5 | 45.1 | 43.7 | | | | |
| 25 | | | | | | | 45.5 | 44.6 | | | | | |
| 30 | 46.0 | 45.9 | 45.8 | | | | 45.5 | 44.6 | | | | | |
| 35 | | | | | | | 45.5 | 44.6 | | | | | |
| 40 | 46.0 | 45.9 | 45.8 | | | | 45.5 | 44.6 | | | | | |
| 45 | | | | | | | 45.5 | | | | | | |
| 50 | 46.0 | 46.5 | | | | | 45.5 | | | | | | |
| 55 | | | | | | | 45.5 | | | | | | |
| 60 | 46.0 | | | | | | 45.5 | | | | | | |
| 65 | | | | | | | | | | | | | |
| 70 | 46.0 | | | | | | | | | | | | |

*KDFWR

Table 7. Dissolved oxygen content of Nolin River Reservoir and its tailwater, 1970. Determinations were recorded monthly (biweekly for July and September). Data not asterisked, February through December, were provided by the U. S. Army Corps of Engineers. All values are expressed in parts per million. Normal summer-winter pool elevations were 515-490', respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 9 - 11 (490') | | | | | | March 23 - 27 (494') | | | | | |
|-----------------|---------------------------|------|------|------|------|------|-------------------------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 11.9 | 12.5 | 12.3 | 12.4 | 12.8 | 15.0 | 12.9 | 13.0 | 13.4 | 12.6 | 11.6 | 13.6 |
| 5 | 12.0 | 12.3 | 12.1 | 12.4 | | | | | | | | |
| 10 | 11.9 | 11.9 | 12.0 | 12.4 | | | 12.7 | 12.9 | 13.6 | 12.8 | | |
| 15 | 11.7 | 11.4 | 11.7 | 12.4 | | | | | | | | |
| 20 | 11.2 | 11.3 | 11.4 | 12.2 | | | 12.6 | 12.8 | 13.2 | 12.6 | | |
| 25 | 11.2 | 11.0 | 11.3 | 12.0 | | | | | | 12.4 | | |
| 30 | 11.6 | 10.9 | 11.0 | | | | 12.8 | 12.7 | | 12.9 | | |
| 35 | 11.7 | 10.9 | 10.9 | | | | | | | | | |
| 40 | 11.6 | 10.8 | 10.8 | | | | 12.4 | 12.4 | | | | |
| 45 | 11.5 | 10.8 | 10.8 | | | | | | | | | |
| 50 | 11.5 | 10.7 | | | | | 11.7 | 12.3 | | | | |
| 55 | 11.5 | 10.6 | | | | | | | | | | |
| 60 | 11.5 | 10.6 | | | | | 11.0 | 11.2 | | | | |
| 65 | 11.5 | 10.6 | | | | | | | | | | |
| 70 | 11.5 | | | | | | 10.5 | 10.0 | | | | |

Table 7. (continued)

| Depth (feet) | April 23 - 24 (515') | | | | | | May 18 - 19 (515') | | | | | |
|-----------------|-------------------------|------|------|------|-----|------|-----------------------|------|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 10.7 | 10.1 | 11.4 | 13.1 | 9.0 | 10.6 | 14.5 | 10.6 | 8.3 | 8.2 | 9.3 | 7.9 |
| 5 | 10.4 | 10.0 | 10.5 | 13.0 | | | 11.2 | 10.6 | 7.9 | 7.2 | | |
| 10 | 10.2 | 9.8 | 10.5 | 12.8 | | | 6.0 | 6.5 | 6.8 | 7.4 | | |
| 15 | 10.0 | 8.8 | 10.5 | 12.3 | | | 4.7 | 4.5 | 4.4 | 7.6 | | |
| 20 | 9.6 | 8.3 | 10.0 | 11.6 | | | 4.4 | 4.4 | 4.4 | 7.1 | | |
| 25 | 9.5 | 8.1 | 9.8 | 11.0 | | | 4.4 | 4.5 | 4.6 | 6.7 | | |
| 30 | 9.4 | 8.1 | 8.8 | 8.6 | | | 4.6 | 4.7 | 4.9 | 5.9 | | |
| 35 | 9.2 | 8.1 | 8.4 | 7.4 | | | 4.5 | 4.8 | 5.5 | 4.6 | | |
| 40 | 9.1 | 8.1 | 8.2 | 6.8 | | | 4.5 | 4.8 | 5.6 | 3.5 | | |
| 45 | 9.1 | 8.1 | 8.1 | 6.2 | | | 4.7 | 5.2 | 5.2 | 2.5 | | |
| 50 | 9.1 | 8.0 | 8.1 | | | | 4.7 | 5.3 | 5.2 | | | |
| 55 | 8.9 | 8.0 | 8.4 | | | | 4.7 | 5.2 | 4.8 | | | |
| 60 | 8.7 | 8.0 | 7.3 | | | | 4.6 | 4.8 | 4.6 | | | |
| 65 | 8.6 | 8.0 | 7.3 | | | | 4.6 | 4.2 | 4.4 | | | |
| 70 | 8.4 | 7.9 | | | | | 4.2 | 3.5 | 3.9 | | | |
| 75 | 8.2 | 7.9 | | | | | 3.6 | 2.5 | | | | |
| 80 | 8.0 | 7.8 | | | | | 2.6 | 2.0 | | | | |
| 85 | 7.9 | 7.7 | | | | | 1.9 | 1.7 | | | | |
| 90 | 7.8 | 7.6 | | | | | 1.6 | 0.7 | | | | |
| 95 | 7.7 | | | | | | 1.4 | 0.6 | | | | |

Table 7. (continued)

| Depth (feet) | May 19 - 22* (515') | | | | | | | June 15 - 16 (515') | | | | | |
|-----------------|------------------------|------|------|-----|-----|------|-----|------------------------|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 16.0 | 10.2 | 10.0 | 9.8 | 7.7 | 16.0 | 8.5 | 10.4 | 9.7 | 9.0 | 9.4 | 8.2 | 8.8 |
| 5 | 20.+ | 11.2 | 8.3 | 7.8 | 7.2 | 9.8 | | 9.7 | 9.5 | 8.8 | 9.1 | | |
| 10 | 9.8 | 7.2 | 4.9 | 3.3 | 5.9 | 9.5 | | 6.7 | 6.0 | 8.5 | 6.4 | | |
| 15 | 4.3 | 4.1 | 4.2 | 2.0 | 3.1 | 9.3 | | 0.7 | 1.0 | 4.4 | 3.9 | | |
| 20 | 4.2 | 4.5 | 4.5 | 0.8 | 2.3 | 9.3 | | 0.3 | 0.5 | 1.8 | 4.1 | | |
| 25 | 4.2 | 4.7 | 4.6 | 0.1 | 0.4 | 9.3 | | 0.2 | 1.0 | 2.0 | 3.5 | | |
| 30 | 4.5 | 4.8 | 4.5 | | 0.1 | | | 0.3 | 1.8 | 1.8 | 1.3 | | |
| 35 | 4.5 | 4.8 | 4.0 | | 0.1 | | | 1.2 | 2.2 | 1.8 | 0.5 | | |
| 40 | 4.5 | 4.8 | 2.3 | | | | | 1.2 | 2.6 | 1.8 | 0.2 | | |
| 45 | 4.9 | 4.7 | | | | | | 1.8 | 3.4 | 0.6 | 0.2 | | |
| 50 | 4.9 | 4.8 | | | | | | 3.1 | 3.3 | 0.4 | 0.2 | | |
| 55 | 5.0 | 4.5 | | | | | | 3.3 | 2.4 | 0.3 | | | |
| 60 | 4.6 | 2.3 | | | | | | 3.2 | 1.5 | 0.3 | | | |
| 65 | 4.9 | | | | | | | 2.6 | 0.6 | 0.3 | | | |
| 70 | 4.7 | | | | | | | 2.0 | 0.3 | 0.2 | | | |
| 75 | | | | | | | | 0.4 | 0.3 | | | | |
| 80 | | | | | | | | 0.2 | 0.2 | | | | |
| 85 | | | | | | | | 0.2 | 0.2 | | | | |
| 90 | | | | | | | | 0.1 | 0.2 | | | | |
| 95 | | | | | | | | 0.1 | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | June 23* (515') | | | | | | | July 6 - 7 (515') | | | | | |
|-----------------|--------------------|-----|-----|-----|-----|------|-----|----------------------|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 9.0 | 8.7 | 8.3 | 8.9 | 8.1 | 11.0 | 8.0 | 9.5 | 8.6 | 9.4 | 9.9 | 8.3 | 9.8 |
| 5 | 9.7 | 9.3 | 9.3 | 9.0 | 8.2 | 9.9 | | 9.5 | 8.6 | 9.4 | 9.9 | | |
| 10 | 9.8 | 9.5 | 9.0 | 8.6 | 7.5 | 8.6 | | 9.5 | 8.5 | 9.3 | 9.2 | | |
| 15 | 5.8 | 2.0 | 1.5 | 2.0 | 0.8 | 7.8 | | 5.2 | 2.5 | 5.7 | 2.3 | | |
| 20 | 0.2 | 0.1 | 0.3 | 0.1 | 0.1 | 7.8 | | 0.7 | 1.0 | 0.8 | 1.0 | | |
| 25 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 7.6 | | 0.6 | 0.8 | 0.5 | 0.7 | | |
| 30 | 0.1 | 0.3 | 0.1 | | 0.2 | | | 0.5 | 0.8 | 0.5 | 0.6 | | |
| 35 | 0.1 | 1.0 | 0.2 | | 0.2 | | | 0.5 | 0.8 | 0.5 | 0.6 | | |
| 40 | 0.9 | 1.2 | 0.2 | | | | | 0.5 | 1.4 | 0.5 | 0.6 | | |
| 45 | 1.4 | 1.6 | | | | | | 0.5 | 1.6 | 0.5 | 0.6 | | |
| 50 | 2.5 | 0.6 | | | | | | 1.6 | 1.6 | 0.5 | 0.6 | | |
| 55 | 2.9 | 0.2 | | | | | | 2.2 | 0.8 | 0.5 | | | |
| 60 | 2.5 | | | | | | | 1.7 | 0.6 | 0.5 | | | |
| 65 | 1.6 | | | | | | | 0.8 | 0.6 | 0.5 | | | |
| 70 | 1.1 | | | | | | | 0.5 | 0.6 | | | | |
| 75 | | | | | | | | 0.4 | 0.6 | | | | |
| 80 | | | | | | | | 0.4 | 0.5 | | | | |
| 85 | | | | | | | | 0.4 | 0.5 | | | | |
| 90 | | | | | | | | 0.4 | 0.5 | | | | |
| 95 | | | | | | | | 0.4 | 0.5 | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | July 9* (515') | | | | | | | July 20 - 21 (515') | | | | | |
|-----------------|-------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 6.1 | 6.5 | 7.0 | 7.0 | 7.5 | 8.5 | 7.5 | 8.6 | 8.0 | 8.2 | 9.4 | 7.0 | 9.1 |
| 5 | 6.1 | 6.5 | 7.1 | 6.9 | 7.5 | 8.6 | | 8.5 | 8.0 | 8.2 | 9.2 | | |
| 10 | 5.9 | 6.3 | 7.2 | 6.5 | 7.2 | 5.1 | | 8.4 | 8.0 | 8.2 | 9.0 | | |
| 15 | 2.6 | 1.4 | 3.9 | 3.5 | 0.2 | 7.3 | | 8.4 | 7.8 | 8.2 | 6.8 | | |
| 20 | 0.3 | 0.2 | 0.2 | 0.6 | 0.2 | 7.0 | | 7.8 | 0.6 | 0.9 | 2.4 | | |
| 25 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 6.8 | | 0.8 | 0.4 | 0.7 | 1.9 | | |
| 30 | 0.2 | 0.0 | 0.2 | | 0.2 | | | 0.7 | 0.3 | 0.6 | 0.5 | | |
| 35 | 0.2 | 0.0 | 0.2 | | 0.0 | | | 0.6 | 0.3 | 0.6 | 0.5 | | |
| 40 | 0.2 | 0.2 | 0.2 | | | | | 0.6 | 0.3 | 0.5 | 0.5 | | |
| 45 | 0.2 | 0.4 | | | | | | 0.5 | 0.3 | 0.5 | 0.4 | | |
| 50 | 0.5 | 0.2 | | | | | | 1.0 | 0.3 | 0.5 | 0.4 | | |
| 55 | 0.9 | 0.2 | | | | | | 1.1 | 0.3 | 0.5 | | | |
| 60 | 0.8 | | | | | | | 0.7 | 0.3 | 0.5 | | | |
| 65 | 0.2 | | | | | | | 0.5 | 0.3 | 0.5 | | | |
| 70 | 0.2 | | | | | | | 0.5 | 0.3 | | | | |
| 75 | | | | | | | | 0.4 | 0.3 | | | | |
| 80 | | | | | | | | 0.4 | 0.3 | | | | |
| 85 | | | | | | | | 0.4 | 0.3 | | | | |
| 90 | | | | | | | | 0.4 | 0.3 | | | | |
| 95 | | | | | | | | 0.4 | 0.3 | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | July 27 - 31* (515') | | | | | | | August 3 - 4 (515') | | | | | |
|-----------------|-------------------------|------|------|-----|-----|------|-----|------------------------|------|------|------|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 8.5 | 9.1 | 9.6 | 8.8 | 9.4 | 15.5 | 8.6 | 8.8 | 8.9 | 10.0 | 10.8 | 6.7 | 8.8 |
| 5 | 8.7 | 9.1 | 9.7 | 8.9 | 9.4 | 16.3 | | 8.8 | 9.9 | 10.4 | 11.2 | | |
| 10 | 8.9 | 10.2 | 12.2 | 9.1 | 8.6 | 8.2 | | 9.3 | 11.5 | 10.8 | 11.8 | | |
| 15 | 6.7 | 7.6 | 5.9 | 5.2 | 0.7 | 6.5 | | 9.3 | 8.9 | 8.7 | 5.2 | | |
| 20 | 2.6 | 2.3 | 0.6 | 0.1 | 0.1 | 6.4 | | 4.4 | 4.2 | 0.6 | 2.3 | | |
| 25 | 0.4 | 0.1 | 0.1 | 0.2 | 0.1 | 5.8 | | 0.7 | 1.0 | 0.2 | 0.8 | | |
| 30 | 0.1 | 0.1 | 0.1 | | 0.1 | | | 0.2 | 0.6 | 0.2 | 0.4 | | |
| 35 | 0.1 | 0.1 | 0.1 | | | | | 0.2 | 0.7 | 0.2 | 0.4 | | |
| 40 | 0.1 | 0.1 | 0.1 | | | | | 0.4 | 0.7 | 0.3 | 0.4 | | |
| 45 | 0.1 | 0.1 | | | | | | 0.2 | 0.7 | 0.3 | 0.4 | | |
| 50 | 0.1 | 0.1 | | | | | | 0.2 | 0.7 | 0.3 | 0.4 | | |
| 55 | 0.1 | 0.1 | | | | | | 0.1 | 0.7 | 0.3 | | | |
| 60 | 0.1 | | | | | | | 0.1 | 0.7 | 0.3 | | | |
| 65 | 0.1 | | | | | | | 0.1 | 0.6 | 0.3 | | | |
| 70 | 0.1 | | | | | | | 0.1 | 0.5 | | | | |
| 75 | | | | | | | | 0.1 | 0.5 | | | | |
| 80 | | | | | | | | 0.1 | 0.5 | | | | |
| 85 | | | | | | | | 0.1 | 0.4 | | | | |
| 90 | | | | | | | | 0.1 | 0.4 | | | | |
| 95 | | | | | | | | 0.1 | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | August 13* (515') | | | | | | | August 17 - 18 (515') | | | | | |
|-----------------|----------------------|-----|------|-----|-----|------|-----|--------------------------|------|------|------|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 8.6 | 9.3 | 9.6 | 8.0 | 8.2 | 10.6 | 7.9 | 10.5 | 9.8 | 10.5 | 11.4 | 7.7 | 9.3 |
| 5 | 8.9 | 9.8 | 10.7 | 8.5 | 9.3 | 9.4 | | 11.2 | 10.5 | 11.4 | 12.0 | | |
| 10 | 9.1 | 9.8 | 10.1 | 5.7 | 7.8 | 6.7 | | 10.4 | 11.4 | 12.5 | 10.8 | | |
| 15 | 8.5 | 9.5 | 6.0 | 1.3 | 0.7 | 6.6 | | 8.1 | 7.7 | 5.5 | 4.1 | | |
| 20 | 3.5 | 4.5 | 0.1 | 0.1 | 0.1 | 6.5 | | 3.8 | 2.7 | 0.7 | 0.2 | | |
| 25 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 6.4 | | 0.1 | 0.5 | 0.3 | 1.3 | | |
| 30 | 0.2 | 0.1 | 0.1 | | 0.1 | | | 0.0 | 0.6 | 0.2 | 2.5 | | |
| 35 | 0.2 | 0.1 | 0.2 | | | | | 0.0 | 0.4 | 0.2 | 0.4 | | |
| 40 | 0.2 | 0.1 | 0.2 | | | | | 0.0 | 0.3 | 0.2 | 0.0 | | |
| 45 | 0.2 | 0.1 | | | | | | 0.0 | 0.2 | 0.1 | 0.0 | | |
| 50 | 0.2 | 0.1 | | | | | | 0.0 | 0.2 | 0.1 | 0.0 | | |
| 55 | 0.1 | 0.2 | | | | | | 0.0 | 0.2 | 0.1 | | | |
| 60 | 0.1 | | | | | | | 0.0 | 0.2 | 0.1 | | | |
| 65 | 0.1 | | | | | | | 0.0 | 0.1 | 0.1 | | | |
| 70 | 0.1 | | | | | | | 0.0 | 0.1 | | | | |
| 75 | 0.2 | | | | | | | 0.0 | 0.1 | | | | |
| 80 | | | | | | | | 0.0 | 0.1 | | | | |
| 85 | | | | | | | | 0.0 | 0.1 | | | | |
| 90 | | | | | | | | 0.0 | 0.1 | | | | |
| 95 | | | | | | | | 0.0 | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | August 27 - September 1 (515') | | | | | | September 10 - 11* (515') | | | | | | |
|-----------------|-----------------------------------|-----|-----|-----|-----|-----|------------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 8.7 | 9.0 | 8.7 | 8.7 | 7.0 | 8.7 | 7.6 | 7.0 | 7.3 | 7.5 | 6.9 | 9.2 | 7.7 |
| 5 | 9.0 | 9.2 | 9.1 | 8.2 | | | 7.7 | 7.1 | 7.3 | 7.3 | 6.9 | 8.5 | |
| 10 | 9.3 | 8.8 | 9.0 | 8.3 | | | 7.4 | 7.1 | 7.1 | 6.5 | 6.7 | 6.8 | |
| 15 | 8.7 | 6.1 | 2.9 | 1.9 | | | 5.7 | 6.6 | 6.7 | 5.9 | 6.3 | 5.8 | |
| 20 | 1.8 | 1.6 | 0.4 | 0.1 | | | 2.8 | 1.7 | 0.3 | 3.6 | 0.5 | 5.0 | |
| 25 | 0.4 | 0.1 | 0.2 | 0.2 | | | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 4.6 | |
| 30 | 0.4 | 0.1 | 0.2 | 0.1 | | | 0.1 | 0.1 | 0.1 | | 0.1 | | |
| 35 | 0.3 | 0.1 | 0.1 | 0.0 | | | 0.1 | 0.1 | 0.1 | | 0.2 | | |
| 40 | 0.2 | 0.1 | 0.0 | 0.0 | | | 0.1 | 0.1 | 0.2 | | | | |
| 45 | 0.0 | 0.0 | 0.0 | 0.0 | | | 0.1 | 0.1 | | | | | |
| 50 | 0.0 | 0.0 | 0.0 | | | | 0.1 | 0.2 | | | | | |
| 55 | 0.0 | 0.0 | 0.0 | | | | 0.1 | 0.2 | | | | | |
| 60 | 0.0 | 0.0 | 0.0 | | | | 0.1 | | | | | | |
| 65 | 0.0 | 0.0 | 0.0 | | | | 0.1 | | | | | | |
| 70 | 0.0 | 0.0 | 0.0 | | | | 0.1 | | | | | | |
| 75 | 0.0 | 0.0 | | | | | | | | | | | |
| 80 | 0.0 | 0.0 | | | | | | | | | | | |
| 85 | 0.0 | 0.0 | | | | | | | | | | | |
| 90 | 0.0 | 0.0 | | | | | | | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | September 24 - 25 (514') | | | | | | September 30* (514') | | | | | | |
|-----------------|-----------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|---|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 7.1 | 6.9 | 6.8 | 7.4 | 6.1 | 8.2 | 6.2 | 5.6 | 7.0 | 7.3 | 6.5 | | 7.9 |
| 5 | 7.0 | 6.8 | 6.7 | 7.3 | | | 6.1 | 5.5 | 6.9 | 6.9 | 6.5 | | |
| 10 | 6.9 | 6.8 | 6.5 | 7.1 | | | 6.0 | 5.4 | 6.5 | 7.2 | 6.6 | | |
| 15 | 6.4 | 6.5 | 6.4 | 6.9 | | | 5.9 | 5.5 | 6.2 | 7.1 | 5.5 | | |
| 20 | 4.3 | 1.3 | 6.3 | 0.6 | | | 5.9 | 5.5 | 6.1 | 6.7 | 5.4 | | |
| 25 | 0.4 | 0.1 | 0.3 | 0.1 | | | 5.7 | 5.5 | 6.0 | 5.8 | 4.0 | | |
| 30 | 0.2 | 0.1 | 0.2 | 0.1 | | | 0.1 | 0.1 | 5.5 | | 1.9 | | |
| 35 | 0.1 | 0.1 | 0.2 | 0.1 | | | 0.1 | 0.1 | 0.1 | | 0.1 | | |
| 40 | 0.1 | 0.1 | 0.1 | 0.1 | | | 0.1 | 0.1 | 0.1 | | | | |
| 45 | 0.1 | 0.1 | 0.1 | 0.1 | | | 0.1 | 0.1 | | | | | |
| 50 | 0.1 | 0.1 | 0.1 | | | | 0.1 | 0.2 | | | | | |
| 55 | 0.1 | 0.1 | 0.1 | | | | 0.1 | | | | | | |
| 60 | 0.1 | 0.1 | 0.1 | | | | 0.1 | | | | | | |
| 65 | 0.1 | 0.1 | 0.1 | | | | 0.1 | | | | | | |
| 70 | 0.1 | 0.1 | 0.1 | | | | 0.1 | | | | | | |
| 75 | 0.1 | 0.1 | | | | | | | | | | | |
| 80 | 0.0 | 0.1 | | | | | | | | | | | |
| 85 | 0.0 | 0.1 | | | | | | | | | | | |
| 90 | 0.0 | | | | | | | | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | October 19 - 20 (511') | | | | | | October 21 - 22* (510') | | | | | | |
|-----------------|---------------------------|-----|-----|-----|------|-----|----------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 5.0 | 4.7 | 6.2 | 7.6 | 10.4 | 9.0 | 4.5 | 4.9 | 6.8 | 7.6 | 7.5 | 9.1 | 9.3 |
| 5 | 4.6 | 4.6 | 6.2 | 7.4 | | | 4.3 | 4.9 | 6.8 | 7.6 | 7.5 | 9.2 | |
| 10 | 4.6 | 4.7 | 6.1 | 7.3 | | | 4.3 | 4.9 | 6.7 | 7.8 | 7.4 | 9.3 | |
| 15 | 4.6 | 4.6 | 6.1 | 6.6 | | | 4.2 | 4.9 | 6.6 | 7.8 | 7.5 | 9.3 | |
| 20 | 4.6 | 4.5 | 6.1 | 6.5 | | | 4.2 | 4.9 | 6.5 | 8.0 | 6.8 | 9.3 | |
| 25 | 4.6 | 4.5 | 6.1 | 6.1 | | | 4.2 | 4.9 | 6.5 | 8.1 | 5.8 | | |
| 30 | 4.6 | 4.5 | 6.1 | 6.0 | | | 4.2 | 4.9 | 6.5 | | 5.8 | | |
| 35 | 4.6 | 4.4 | 6.0 | 6.0 | | | 4.2 | 4.9 | 5.7 | | | | |
| 40 | 4.6 | 4.4 | 6.0 | 6.0 | | | 4.2 | 4.9 | 4.2 | | | | |
| 45 | 4.6 | 4.4 | 5.2 | 6.0 | | | 4.2 | 4.9 | | | | | |
| 50 | 4.6 | 4.3 | 4.2 | | | | 4.1 | 5.1 | | | | | |
| 55 | 4.6 | 3.9 | 3.7 | | | | 4.0 | | | | | | |
| 60 | 4.6 | 1.8 | 3.7 | | | | 3.3 | | | | | | |
| 65 | 4.6 | 0.5 | 3.2 | | | | 3.8 | | | | | | |
| 70 | 0.7 | 0.5 | | | | | 0.1 | | | | | | |
| 75 | 0.7 | 0.5 | | | | | | | | | | | |
| 80 | 0.6 | 0.5 | | | | | | | | | | | |
| 85 | 0.5 | | | | | | | | | | | | |
| 90 | 0.5 | | | | | | | | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | November 18 - 20 (497') | | | | | | November 25* (494') | | | | | | |
|-----------------|----------------------------|-----|-----|------|------|------|------------------------|-----|------|---|---|---|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 6.7 | 7.7 | 8.9 | 10.0 | 11.3 | 10.8 | 8.1 | 8.6 | 9.7 | | | | 11.6 |
| 5 | 6.7 | 7.7 | 8.8 | 9.7 | | | 8.1 | 8.6 | 9.7 | | | | |
| 10 | 6.7 | 7.7 | 8.8 | 9.7 | | | 8.1 | 8.6 | 9.8 | | | | |
| 15 | 6.7 | 7.7 | 8.6 | 9.6 | | | 8.1 | 8.6 | 9.8 | | | | |
| 20 | 6.7 | 7.6 | 8.6 | 9.6 | | | 8.1 | 8.6 | 10.0 | | | | |
| 25 | 6.7 | 7.6 | 8.6 | 9.6 | | | 8.1 | 8.6 | | | | | |
| 30 | 6.7 | 7.6 | 8.6 | 9.6 | | | 8.1 | 8.6 | | | | | |
| 35 | 6.7 | 7.6 | 8.5 | | | | 8.1 | 8.6 | | | | | |
| 40 | 6.7 | 7.6 | | | | | 8.1 | 8.6 | | | | | |
| 45 | 6.7 | 7.6 | | | | | 8.1 | | | | | | |
| 50 | 6.7 | 7.5 | | | | | 8.1 | | | | | | |
| 55 | 6.6 | | | | | | | | | | | | |
| 60 | 5.1 | | | | | | | | | | | | |
| 65 | 4.7 | | | | | | | | | | | | |
| 70 | 4.5 | | | | | | | | | | | | |
| 75 | 4.4 | | | | | | | | | | | | |
| 80 | 4.1 | | | | | | | | | | | | |

*KDFWR

Table 7. (continued)

| Depth (feet) | December 14 - 15 (490') | | | | | | December 16 - 17* (490') | | | | | | |
|-----------------|----------------------------|-----|------|------|------|------|-----------------------------|-----|------|---|---|---|------|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 9.1 | 9.3 | 10.4 | 10.6 | 12.6 | 12.1 | 8.4 | 9.4 | 10.1 | | | | 10.4 |
| 5 | | | | 10.3 | | | 8.4 | 9.3 | 10.1 | | | | |
| 10 | 8.9 | 9.2 | 10.1 | 10.2 | | | 8.4 | 9.4 | 10.1 | | | | |
| 15 | | | | 10.0 | | | 8.4 | 9.3 | 10.1 | | | | |
| 20 | 8.7 | 9.1 | 9.7 | 10.0 | | | 8.4 | 9.3 | 10.1 | | | | |
| 25 | | | | | | | 8.4 | 9.2 | | | | | |
| 30 | 8.6 | 9.0 | 9.5 | | | | 8.4 | 9.2 | | | | | |
| 35 | | | | | | | 8.4 | 0.3 | | | | | |
| 40 | 8.6 | 8.9 | 9.4 | | | | 8.4 | 0.3 | | | | | |
| 45 | | | | | | | 8.5 | | | | | | |
| 50 | 8.5 | 8.9 | | | | | 8.2 | | | | | | |
| 55 | | | | | | | 0.2 | | | | | | |
| 60 | 8.5 | | | | | | 0.2 | | | | | | |
| 65 | | | | | | | | | | | | | |
| 70 | 8.5 | | | | | | | | | | | | |

*KDFWR

Table 8. Total alkalinity content at Nolin River Reservoir and its tailwater, 1970. Determinations were recorded monthly (biweekly in July and September). All values expressed in parts per million. Normal summer-winter pool elevations were 515-490', respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | May 19 - 22* (515') | | | | | | | June 23* (515') | | | | | | | July 9* (515') | | | | | | |
|-----------------|------------------------|----|----|----|----|-----|----|--------------------|----|-----|----|-----|-----|-----|-------------------|-----|-----|----|-----|-----|----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 83 | 83 | 78 | 75 | 69 | 130 | 87 | 75 | 77 | 76 | 72 | 74 | 82 | 103 | 75 | 80 | 87 | 77 | 87 | 71 | 99 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 81 | 79 | 77 | 71 | 66 | 151 | | 77 | 81 | 77 | 70 | 76 | 77 | | 78 | 76 | 82 | 78 | 88 | 73 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 79 | 76 | 76 | 69 | 68 | 148 | | 82 | 90 | 93 | 69 | 93 | 143 | | 88 | 93 | 92 | 75 | 98 | 125 | |
| 25 | | | | | | | | | | | | | | | | | | | | | |
| 30 | 79 | 77 | 76 | | 76 | | | 81 | 79 | 109 | | 106 | | | 83 | 106 | 113 | | 124 | | |
| 35 | | | | | | | | | | | | | | | | | | | | | |
| 40 | 83 | 85 | 77 | | | | | 82 | 79 | 95 | | | | | 81 | 86 | 98 | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 50 | 85 | 86 | | | | | | 83 | 86 | | | | | | 76 | 94 | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | |
| 60 | 88 | 93 | | | | | | 66 | | | | | | | 84 | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | | | | |
| 70 | 89 | | | | | | | 92 | | | | | | | 85 | | | | | | |

*KDFWR

Table 8. (continued)

| Depth (feet) | July 27 - 31* (515') | | | | | | | August 13* (515') | | | | | | | September 10 - 11* (515') | | | | | | |
|-----------------|-------------------------|-----|-----|----|-----|-----|----|----------------------|-----|-----|----|----|-----|-----|------------------------------|-----|-----|----|-----|-----|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T |
| 0 | 78 | 83 | 81 | 74 | 77 | 55 | 95 | 80 | 80 | 78 | 76 | 78 | 65 | 107 | 79 | 85 | 81 | 77 | 78 | 67 | 114 |
| 5 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 79 | 84 | 84 | 75 | 77 | 100 | | 79 | 82 | 75 | 76 | 78 | 79 | | 80 | 84 | 81 | 76 | 77 | 68 | |
| 15 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 79 | 89 | 96 | 76 | 84 | 94 | | 81 | 80 | 86 | 69 | 67 | 144 | | 86 | 86 | 84 | 75 | 78 | 103 | |
| 25 | | | | | | | | | | | | | | | | | | | | | |
| 30 | 86 | 118 | 127 | | 119 | | | 87 | 115 | 119 | | 89 | | | 81 | 121 | 120 | | 108 | | |
| 35 | | | | | | | | | | | | | | | | | | | | | |
| 40 | 84 | 99 | 109 | | | | | 83 | 113 | 131 | | | | | 83 | 132 | 134 | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | | |
| 50 | 84 | 85 | | | | | | 89 | 92 | | | | | | 91 | 84 | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | |
| 60 | 84 | | | | | | | 84 | | | | | | | 90 | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | | | | |
| 70 | 67 | | | | | | | 90 | | | | | | | 85 | | | | | | |

*KDFWR

Table 8. (continued)

| Depth (feet) | September 30* (514') | | | | | | | October 21 - 22* (510') | | | | | | | November 25* (494') | | | | | | | |
|-----------------|-------------------------|-----|----|----|----|---|-----|----------------------------|-----|----|----|----|-----|-----|------------------------|-----|-----|---|---|---|---|-----|
| | A | B | C | D | E | F | T | A | B | C | D | E | F | T | A | B | C | D | E | F | T | |
| 0 | 85 | 93 | 90 | 78 | 81 | | 116 | 108 | 106 | 98 | 88 | 89 | 162 | 112 | 101 | 104 | 82 | | | | | 100 |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 84 | 91 | 86 | 77 | 81 | | | 107 | 105 | 97 | 86 | 90 | 165 | | 101 | 104 | 100 | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 88 | 92 | 90 | 76 | 84 | | | 107 | 104 | 97 | 82 | 91 | 164 | | 101 | 104 | 89 | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 84 | 96 | 88 | | 82 | | | 107 | 105 | 99 | | 91 | | | 101 | 104 | | | | | | |
| 35 | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 98 | 126 | 92 | | | | | 106 | 106 | 97 | | | | | 101 | 104 | | | | | | |
| 45 | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 104 | 131 | | | | | | 107 | 105 | | | | | | 101 | | | | | | | |
| 55 | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 103 | | | | | | | 107 | | | | | | | | | | | | | | |
| 65 | | | | | | | | | | | | | | | | | | | | | | |
| 70 | 103 | | | | | | | 109 | | | | | | | | | | | | | | |

*KDFWR

Table 8. (continued)

| Depth (feet) | December 16 - 17* (490') | | | | | | |
|-----------------|-----------------------------|-----|----|---|---|---|-----|
| | A | B | C | D | E | F | T |
| 0 | 111 | 108 | 94 | | | | 109 |
| 5 | | | | | | | |
| 10 | 111 | 108 | 94 | | | | |
| 15 | | | | | | | |
| 20 | 111 | 108 | 94 | | | | |
| 25 | | | | | | | |
| 30 | 111 | 108 | | | | | |
| 35 | | | | | | | |
| 40 | 111 | 108 | | | | | |
| 45 | | | | | | | |
| 50 | 111 | | | | | | |
| 55 | | | | | | | |
| 60 | 111 | | | | | | |

*KDFWR

Table 9. pH values at Nolin River Reservoir and its tailwater, 1970. Determinations were recorded biweekly in July and September (monthly in May, June, August, and December). Data not asterisked, February through December, were provided by U. S. Army Corps of Engineers, Louisville District. Normal summer-winter pool elevations were 515-490 feet, respectively. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 9 - 11 (490') | | | | | | March 23 - 27 (494') | | | | | | April 23 - 24 (515') | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 6.6 | 6.5 | 6.5 | 7.3 | 7.1 | 6.4 | 8.4 | 8.4 | 8.7 | 8.8 | 7.2 | 7.5 | 8.0 | 7.8 | 7.6 | 8.1 | 7.5 | 7.3 |
| 5 | | | | | | | | | | | | | 8.0 | 7.9 | 7.4 | 8.1 | | |
| 10 | 6.4 | 6.4 | 6.7 | 7.2 | | | 8.5 | 8.4 | 8.6 | 8.7 | | | 7.9 | 7.7 | 7.5 | 8.1 | | |
| 15 | | | | | | | | | | | | | 7.9 | 7.0 | 7.4 | 8.0 | | |
| 20 | 6.4 | 6.3 | 6.9 | 7.4 | | | 8.3 | 8.3 | 8.6 | 8.7 | | | 7.7 | 6.8 | 7.2 | 7.8 | | |
| 25 | | | | | | | | | | 8.6 | | | 7.6 | 6.8 | 7.2 | 7.6 | | |
| 30 | 6.4 | 6.5 | 6.6 | | | | 8.2 | 8.3 | | 8.6 | | | 7.6 | 6.4 | 7.0 | 7.1 | | |
| 35 | | | | | | | | | | | | | 7.3 | 6.3 | 6.9 | 6.6 | | |
| 40 | 6.3 | 6.6 | 6.9 | | | | 8.1 | 8.3 | | | | | 7.4 | 6.4 | 6.9 | 6.5 | | |
| 45 | | | | | | | | | | | | | 7.2 | 6.5 | 6.9 | 6.3 | | |
| 50 | 6.3 | 6.5 | | | | | 8.0 | 8.2 | | | | | 7.2 | 6.3 | 6.9 | | | |
| 55 | | | | | | | | | | | | | 7.2 | 6.2 | 6.9 | | | |
| 60 | 6.2 | | | | | | 8.0 | 8.0 | | | | | 7.4 | 6.1 | 6.9 | | | |
| 65 | | 6.4 | | | | | | | | | | | 7.1 | 6.3 | 6.7 | | | |
| 70 | 6.4 | | | | | | 7.8 | 8.0 | | | | | 7.1 | 6.3 | | | | |
| 75 | | | | | | | | | | | | | 7.1 | 6.3 | | | | |
| 80 | | | | | | | | | | | | | 7.1 | 6.3 | | | | |
| 85 | | | | | | | | | | | | | 7.1 | 6.6 | | | | |
| 90 | | | | | | | | | | | | | 7.0 | 6.6 | | | | |
| 95 | | | | | | | | | | | | | 6.9 | | | | | |

Table 9. (continued)

| Depth (feet) | May 18 - 19 (515') | | | | | | May 19 - 22* (515') | | | | | | | June 15 - 16 (515') | | | | | | |
|-----------------|-----------------------|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|---|--|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | |
| 0 | 9.2 | 8.3 | 7.8 | 7.6 | 7.5 | 6.5 | 8.8 | 8.4 | 8.3 | 8.1 | 7.5 | 8.7 | 6.9 | | 8.5 | 8.7 | 8.5 | 7.8 | | |
| 5 | 9.1 | 8.1 | 7.8 | 7.6 | | | | | | | | | | | 8.8 | 8.5 | 8.7 | | | |
| 10 | 8.2 | 7.8 | 7.5 | 7.4 | | | 8.9 | 7.5 | 7.0 | 6.9 | 6.9 | 7.8 | | | 8.6 | 8.5 | 8.2 | | | |
| 15 | 7.4 | 7.0 | 6.9 | 7.5 | | | | | | | | | | | 7.3 | 7.5 | 7.6 | | | |
| 20 | 7.3 | 6.9 | 6.8 | 7.3 | | | 7.3 | 7.1 | 7.1 | 6.6 | 6.4 | 7.9 | | | 7.1 | 7.4 | 7.4 | | | |
| 25 | 7.2 | 6.9 | 6.7 | 7.4 | | | | | | | | | | | 7.1 | 7.3 | 7.4 | | | |
| 30 | 7.3 | 6.8 | 6.7 | 7.2 | | | 7.3 | 7.1 | 7.1 | | 6.5 | | | | 7.1 | 7.2 | 7.3 | | | |
| 35 | 7.2 | 6.9 | 6.8 | 7.1 | | | | | | | | | | | 7.1 | 7.2 | 7.3 | | | |
| 40 | 7.2 | 6.9 | 6.8 | 7.0 | | | 7.1 | 6.9 | 6.9 | | | | | | 7.1 | 7.1 | 7.2 | | | |
| 45 | 7.2 | 6.9 | 6.7 | 7.0 | | | | | | | | | | | 7.1 | 7.1 | 7.2 | | | |
| 50 | 7.3 | 6.9 | 6.7 | | | | 6.9 | 6.9 | | | | | | | 7.1 | 7.2 | 7.0 | | | |
| 55 | 7.2 | 6.9 | 6.7 | | | | | | | | | | | | 7.1 | 7.2 | | | | |
| 60 | 7.2 | 6.9 | 6.8 | | | | 6.7 | 7.0 | | | | | | | 7.0 | 7.2 | | | | |
| 65 | 7.2 | 6.8 | 6.9 | | | | | | | | | | | | 7.0 | 7.2 | | | | |
| 70 | 7.2 | 6.8 | | | | | 7.1 | | | | | | | | 7.1 | 7.2 | | | | |
| 75 | 7.2 | 6.9 | | | | | | | | | | | | | 7.1 | | | | | |
| 80 | 7.1 | 6.8 | | | | | | | | | | | | | 7.1 | | | | | |
| 85 | 7.1 | 6.7 | | | | | | | | | | | | | 7.0 | | | | | |
| 90 | 7.1 | 6.6 | | | | | | | | | | | | | 7.0 | | | | | |
| 95 | 7.1 | 6.6 | | | | | | | | | | | | | | | | | | |

*KDFWR

Table 9. (continued)

| (feet) | June 23* (515') | | | | | | | July 6 - 7 (515') | | | | | | July 9* (515') | | | | | | |
|--------|--------------------|-----|-----|-----|-----|-----|-----|----------------------|-----|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 8.1 | 7.9 | 7.4 | 7.8 | 7.7 | 8.1 | 6.9 | 7.8 | 8.5 | 8.2 | 8.9 | 8.1 | 7.3 | 7.9 | 7.6 | 8.0 | 7.8 | 8.0 | 8.5 | 6.7 |
| 5 | | | | | | | | 8.2 | 8.5 | 8.4 | 8.8 | | | | | | | | | |
| 10 | 8.2 | 7.6 | 6.6 | 7.8 | 7.8 | 7.8 | | 8.2 | 8.5 | 8.3 | 8.8 | | | 7.4 | 7.7 | 7.8 | 7.8 | 8.0 | 7.5 | |
| 15 | | | | | | | | 7.8 | 8.0 | 7.7 | 8.0 | | | | | | | | | |
| 20 | 6.8 | 6.8 | 6.9 | 6.4 | 6.8 | 7.7 | | 7.3 | 7.4 | 7.3 | 7.6 | | | 7.0 | 6.9 | 6.9 | 6.7 | 6.8 | 7.1 | |
| 25 | | | | | | | | 7.0 | 7.1 | 7.1 | 7.4 | | | | | | | | | |
| 30 | 6.8 | 6.8 | 6.7 | | 6.9 | | | 6.9 | 7.0 | 7.0 | 7.2 | | | 6.9 | 6.8 | 6.8 | | 6.7 | | |
| 35 | | | | | | | | 6.8 | 6.9 | 7.0 | 7.2 | | | | | | | | | |
| 40 | 6.8 | 6.5 | 6.5 | | | | | 6.8 | 6.9 | 6.9 | 7.2 | | | 7.1 | 6.6 | 6.8 | | | | |
| 45 | | | | | | | | 6.8 | 6.9 | 6.9 | 7.2 | | | | | | | | | |
| 50 | 6.7 | 6.7 | | | | | | 6.9 | 6.9 | 6.9 | 7.2 | | | 6.9 | 6.7 | | | | | |
| 55 | | | | | | | | 6.9 | 6.8 | 6.9 | | | | | | | | | | |
| 60 | 6.8 | | | | | | | 6.9 | 6.9 | 6.9 | | | | 6.8 | | | | | | |
| 65 | | | | | | | | 6.9 | 6.9 | 6.9 | | | | | | | | | | |
| 70 | 6.7 | | | | | | | 6.9 | 6.9 | | | | | 6.7 | | | | | | |
| 75 | | | | | | | | 6.9 | 6.9 | | | | | | | | | | | |
| 80 | | | | | | | | 6.9 | 6.9 | | | | | | | | | | | |
| 85 | | | | | | | | 6.9 | 6.9 | | | | | | | | | | | |
| 90 | | | | | | | | 6.9 | 6.9 | | | | | | | | | | | |
| 95 | | | | | | | | 6.9 | 6.9 | | | | | | | | | | | |

*KDFWR

Table 9. (continued)

| Depth (feet) | July 20 - 21 (515') | | | | | | July 27 - 31* (515') | | | | | | August 3 - 4 (515') | | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 8.5 | 8.5 | 8.3 | 8.6 | 7.8 | 7.5 | 8.2 | 8.3 | 8.2 | 8.1 | 8.0 | 8.5 | 6.8 | 8.7 | 8.7 | 8.8 | 8.5 | 7.6 | 7.5 |
| 5 | 8.5 | 8.6 | 8.3 | 8.5 | | | | | | | | | | 8.7 | 8.7 | 8.5 | 8.8 | | |
| 10 | 8.4 | 8.7 | 8.3 | 8.4 | | | 8.2 | 8.2 | 7.8 | 7.9 | 7.9 | 7.5 | | 8.6 | 8.8 | 8.6 | 8.7 | | |
| 15 | 8.4 | 8.7 | 8.2 | 8.1 | | | | | | | | | | 8.6 | 8.3 | 8.3 | 7.9 | | |
| 20 | 8.2 | 7.8 | 7.6 | 7.8 | | | 8.1 | 8.0 | 7.3 | 6.9 | 6.6 | 7.1 | | 8.0 | 7.9 | 7.8 | 7.5 | | |
| 25 | 7.8 | 7.5 | 7.5 | 7.6 | | | | | | | | | | 7.7 | 7.6 | 7.4 | 7.3 | | |
| 30 | 7.5 | 7.4 | 7.5 | 7.4 | | | 7.6 | 6.9 | 6.8 | | 6.0 | | | 7.5 | 7.4 | 7.3 | 7.3 | | |
| 35 | 7.4 | 7.4 | 7.4 | 7.3 | | | | | | | | | | 7.3 | 7.3 | 7.3 | 7.2 | | |
| 40 | 7.4 | 7.3 | 7.4 | 7.3 | | | 7.5 | 6.9 | 6.8 | | | | | 7.2 | 7.2 | 7.2 | 7.2 | | |
| 45 | 7.4 | 7.3 | 7.4 | 7.3 | | | | | | | | | | 7.2 | 7.2 | 7.2 | 7.1 | | |
| 50 | 7.4 | 7.4 | 7.4 | 7.3 | | | 7.6 | 6.8 | | | | | | 7.0 | 7.1 | 7.1 | 7.0 | | |
| 55 | 7.4 | 7.3 | 7.4 | | | | | | | | | | | 7.0 | 7.1 | 7.0 | | | |
| 60 | 7.4 | 7.3 | 7.4 | | | | 7.2 | | | | | | | 7.0 | 7.1 | 7.0 | | | |
| 65 | 7.3 | 7.3 | 7.4 | | | | | | | | | | | 6.9 | 7.1 | 7.0 | | | |
| 70 | 7.3 | 7.2 | | | | | 6.6 | | | | | | | 6.9 | 7.0 | | | | |
| 75 | 7.3 | 7.2 | | | | | | | | | | | | 6.9 | 6.9 | | | | |
| 80 | 7.3 | 7.2 | | | | | | | | | | | | 6.8 | 6.9 | | | | |
| 85 | 7.3 | 7.2 | | | | | | | | | | | | 6.8 | 6.9 | | | | |
| 90 | 7.3 | 7.2 | | | | | | | | | | | | 6.8 | 7.0 | | | | |
| 95 | 7.3 | 7.2 | | | | | | | | | | | | | | | | | |

*KDFWR

Table 9. (continued)

| Depth (feet) | August 13* (515') | | | | | | | August 17 - 18 (515') | | | | | | August 27 - September 1 (515') | | | | | |
|-----------------|----------------------|-----|-----|-----|-----|-----|-----|--------------------------|-----|-----|-----|-----|-----|-----------------------------------|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 8.0 | 7.1 | 7.5 | 6.9 | 7.5 | 8.1 | 7.2 | 8.8 | 8.7 | 8.7 | 8.8 | 7.7 | 7.5 | 8.9 | 8.7 | 8.8 | 8.4 | 7.7 | 7.2 |
| 5 | | | | | | | | 8.8 | 8.7 | 8.6 | 8.4 | | | 8.8 | 8.7 | 8.8 | 8.4 | | |
| 10 | 7.9 | 7.5 | 7.4 | 7.0 | 7.1 | 7.3 | | 8.8 | 8.7 | 8.9 | 8.5 | | | 8.7 | 8.7 | 8.8 | 8.6 | | |
| 15 | | | | | | | | 8.5 | 8.2 | 8.2 | 7.8 | | | 8.7 | 8.3 | 8.1 | 8.2 | | |
| 20 | 7.7 | 7.7 | 7.0 | 6.5 | 7.1 | 7.4 | | 7.9 | 7.8 | 7.6 | 7.6 | | | 8.1 | 7.9 | 7.7 | 7.8 | | |
| 25 | | | | | | | | 7.6 | 7.5 | 7.4 | 7.3 | | | 7.9 | 7.6 | 7.6 | 7.6 | | |
| 30 | 7.2 | 7.2 | 6.9 | | 7.0 | | | 7.4 | 7.5 | 7.3 | 7.3 | | | 7.7 | 7.6 | 7.4 | 7.4 | | |
| 35 | | | | | | | | 7.3 | 7.4 | 7.3 | 7.2 | | | 7.5 | 7.5 | 7.3 | 7.3 | | |
| 40 | 7.3 | 7.4 | 6.8 | | | | | 7.3 | 7.4 | 7.3 | 7.0 | | | 7.5 | 7.5 | 7.3 | 7.2 | | |
| 45 | | | | | | | | 7.3 | 7.4 | 7.2 | 6.9 | | | 7.4 | 7.5 | 7.3 | 7.2 | | |
| 50 | 7.1 | 7.3 | | | | | | 7.2 | 7.4 | 7.1 | 6.9 | | | 7.5 | 7.5 | 7.2 | | | |
| 55 | | | | | | | | 7.2 | 7.3 | 7.1 | | | | 7.4 | 7.5 | 7.2 | | | |
| 60 | 7.2 | | | | | | | 7.2 | 7.3 | 7.1 | | | | 7.4 | 7.5 | 7.2 | | | |
| 65 | | | | | | | | 7.2 | 7.2 | 7.1 | | | | 7.3 | 7.3 | 7.1 | | | |
| 70 | 7.3 | | | | | | | 7.2 | 7.2 | | | | | 7.3 | 7.3 | 7.1 | | | |
| 75 | | | | | | | | 7.2 | 7.1 | | | | | 7.3 | 7.2 | | | | |
| 80 | | | | | | | | 7.2 | 7.2 | | | | | 7.2 | 7.2 | | | | |
| 85 | | | | | | | | 7.1 | 7.1 | | | | | 7.2 | 7.2 | | | | |
| 90 | | | | | | | | 7.0 | 7.1 | | | | | 7.1 | 7.2 | | | | |
| 95 | | | | | | | | 7.0 | | | | | | | | | | | |

*KDFWR

Table 9. (continued)

| Depth (feet) | September 10 - 11* (515') | | | | | | | September 24 - 25 (514') | | | | | | September 30* (514') | | | | | | |
|-----------------|------------------------------|-----|-----|-----|-----|-----|-----|-----------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|---|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 7.9 | 7.8 | 8.2 | 7.8 | 7.6 | 8.5 | 7.2 | 8.1 | 8.2 | 8.2 | 7.9 | 7.6 | 6.5 | 7.5 | 7.2 | 7.3 | 7.3 | 7.1 | | 7.0 |
| 5 | | | | | | | | 8.1 | 8.0 | 8.1 | 8.4 | | | | | | | | | |
| 10 | 7.8 | 7.8 | 7.6 | 7.6 | 7.6 | 7.8 | | 8.3 | 8.2 | 8.0 | 8.5 | | | 7.4 | 7.2 | 7.0 | 7.1 | 7.2 | | |
| 15 | | | | | | | | 8.2 | 8.0 | 7.9 | 8.4 | | | | | | | | | |
| 20 | 7.3 | 7.7 | 7.4 | 7.1 | 7.2 | 7.3 | | 7.9 | 7.8 | 7.8 | 7.9 | | | 7.6 | 7.1 | 7.1 | 7.2 | 7.3 | | |
| 25 | | | | | | | | 7.6 | 7.4 | 7.4 | 7.9 | | | | | | | | | |
| 30 | 7.5 | 6.9 | 6.7 | | 6.7 | | | 7.5 | 7.3 | 7.1 | 7.6 | | | 7.3 | 7.3 | 7.1 | | 7.1 | | |
| 35 | | | | | | | | 7.3 | 7.2 | 7.0 | 7.4 | | | | | | | | | |
| 40 | 6.7 | 6.7 | 6.7 | | | | | 7.2 | 7.2 | 7.0 | 7.1 | | | 7.3 | 6.9 | 7.1 | | | | |
| 45 | | | | | | | | 7.1 | 7.2 | 7.0 | 7.0 | | | | | | | | | |
| 50 | 6.6 | 7.4 | | | | | | 7.0 | 7.0 | 6.7 | | | | 7.3 | 6.8 | | | | | |
| 55 | | | | | | | | 6.8 | 7.0 | 6.7 | | | | | | | | | | |
| 60 | 6.7 | | | | | | | 6.9 | 7.4 | 6.6 | | | | 7.2 | | | | | | |
| 65 | | | | | | | | 6.8 | 7.3 | 6.6 | | | | | | | | | | |
| 70 | 6.7 | | | | | | | 6.9 | 6.5 | | | | | 7.2 | | | | | | |
| 75 | | | | | | | | 6.8 | 6.5 | | | | | | | | | | | |
| 80 | | | | | | | | 6.5 | 6.4 | | | | | | | | | | | |
| 85 | | | | | | | | 6.5 | | | | | | | | | | | | |
| 90 | | | | | | | | 6.4 | | | | | | | | | | | | |

*KDFWR

Table 9. (continued)

| Depth (feet) | October 19 - 20 (511') | | | | | | November 18 - 20 (497') | | | | | | December 14 - 15 (490') | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 8.4 | 8.4 | 8.8 | 8.4 | 7.9 | 8.0 | 7.7 | 7.5 | 7.5 | 7.2 | 7.5 | 7.5 | 7.5 | 7.3 | 7.3 | 7.3 | 7.2 | 7.3 |
| 5 | 8.4 | 8.5 | 8.8 | 8.5 | | | | | | | | | | | | | | 7.3 |
| 10 | 8.4 | 8.4 | 8.7 | 8.4 | | | 7.5 | 7.5 | 7.5 | 6.9 | | | 7.5 | 7.3 | 7.3 | 7.3 | | |
| 15 | 8.5 | 8.5 | 8.7 | 8.3 | | | | | | | | | | | | | | 7.3 |
| 20 | 8.5 | 8.6 | 8.5 | 8.3 | | | 7.4 | 7.5 | 7.9 | 6.8 | | | 7.4 | 7.2 | 7.4 | 7.3 | | |
| 25 | 8.5 | 8.5 | 8.4 | 8.1 | | | | | | | | | | | | | | |
| 30 | 8.5 | 8.6 | 8.3 | 8.0 | | | 7.5 | 7.6 | 7.1 | 6.8 | | | 7.4 | 7.3 | 7.4 | | | |
| 35 | 8.5 | 8.4 | 8.4 | 8.1 | | | | | 7.5 | | | | | | | | | |
| 40 | 8.5 | 8.4 | 8.3 | 8.1 | | | 7.7 | 7.6 | | | | | 7.3 | 7.2 | 7.5 | | | |
| 45 | 8.5 | 8.4 | 8.6 | 8.0 | | | | | | | | | | | | | | |
| 50 | 8.5 | 8.4 | 8.4 | | | | 7.6 | 7.5 | | | | | 7.4 | 7.1 | | | | |
| 55 | 8.5 | 8.4 | 8.4 | | | | | | | | | | | | | | | |
| 60 | 8.5 | 8.3 | 8.3 | | | | 7.6 | | | | | | 7.3 | | | | | |
| 65 | 8.4 | 8.2 | 8.2 | | | | 7.7 | | | | | | | | | | | |
| 70 | 8.4 | 8.1 | | | | | 7.1 | | | | | | 7.3 | | | | | |
| 75 | 8.1 | 8.0 | | | | | 7.0 | | | | | | | | | | | |
| 80 | 7.9 | | | | | | 7.1 | | | | | | | | | | | |
| 85 | 7.9 | | | | | | | | | | | | | | | | | |
| 90 | 8.0 | | | | | | | | | | | | | | | | | |

Table 9. (continued)

| Depth (feet) | December 16 - 17* | | | | | | |
|-----------------|-------------------|-----|-----|---|---|---|-----|
| | (490') | | | | | | |
| | A | B | C | D | E | F | T |
| 0 | 7.5 | 7.3 | 7.3 | | | | 7.4 |
| 5 | | | | | | | |
| 10 | 7.5 | 7.3 | 7.2 | | | | |
| 15 | | | | | | | |
| 20 | 7.4 | 7.2 | 7.1 | | | | |
| 25 | | | | | | | |
| 30 | 7.3 | 7.2 | | | | | |
| 35 | | | | | | | |
| 40 | 7.3 | 7.2 | | | | | |
| 45 | | | | | | | |
| 50 | 7.2 | | | | | | |
| 55 | | | | | | | |
| 60 | 7.2 | | | | | | |

*KDFWR

Table 10. Specific conductance values at Nolin River Reservoir and its tailwater, 1970. Determinations were recorded monthly in May, June, and August (biweekly in July). Data not asterisked, February through December, were provided by the U. S. Army Corps of Engineers, Louisville District. Normal summer-winter pool elevations were 515-490 feet, respectively. Conductance values are expressed in micromhos per centimeter. Existing reservoir elevations (msl) are shown in parentheses.

| Depth (feet) | February 9 - 11 (490') | | | | | | March 23 - 27 (494') | | | | | | April 23 - 24 (515') | | | | | |
|-----------------|---------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|---|---|-------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 275 | 282 | 285 | 273 | 270 | 226 | 110 | 105 | 100 | 130 | | | 230 | 207 | 185 | 289 | 310 | 253 |
| 5 | | | | | | | | | | | | | 232 | 206 | 185 | 290 | | |
| 10 | 268 | 282 | 258 | 263 | | | 110 | 110 | 100 | 130 | | | 240 | 204 | 183 | 294 | | |
| 15 | | | | | | | | | | | | | 240 | 198 | 183 | 294 | | |
| 20 | 261 | 282 | 270 | 269 | | | 115 | 110 | 100 | 130 | | | 237 | 195 | 184 | 299 | | |
| 25 | | | | | | | | | | 130 | | | 250 | 207 | 185 | 297 | | |
| 30 | 274 | 283 | 281 | | | | 110 | 110 | | 100 | | | 245 | 208 | 184 | 301 | | |
| 35 | | | | | | | | | | | | | 244 | 214 | 190 | 295 | | |
| 40 | 272 | 283 | 281 | | | | 110 | 110 | | | | | 247 | 218 | 192 | 290 | | |
| 45 | | | | | | | | | | | | | 247 | 225 | 202 | 285 | | |
| 50 | 273 | 282 | | | | | 110 | 110 | | | | | 250 | 235 | 225 | | | |
| 55 | | | | | | | | | | | | | 245 | 243 | 245 | | | |
| 60 | 272 | | | | | | 105 | 110 | | | | | 257 | 260 | 250 | | | |
| 65 | | 282 | | | | | | | | | | | 255 | 258 | 251 | | | |
| 70 | 270 | | | | | | 105 | 110 | | | | | 260 | 257 | | | | |
| 75 | | | | | | | | | | | | | 263 | 260 | | | | |
| 80 | | | | | | | | | | | | | 263 | 258 | | | | |
| 85 | | | | | | | | | | | | | 261 | 260 | | | | |
| 90 | | | | | | | | | | | | | 266 | 260 | | | | |
| 95 | | | | | | | | | | | | | 269 | | | | | |

Table 10. (continued)

| Depth (feet) | May 18 - 19 (515') | | | | | | May 19 - 22* (515') | | | | | | | June 15 - 16 (515') | | | | | |
|-----------------|-----------------------|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 192 | 192 | 180 | 179 | 320 | 210 | 265 | 260 | 270 | 270 | 255 | 375 | 255 | 165 | 175 | 175 | 180 | 332 | 232 |
| 5 | 195 | 193 | 180 | 179 | | | | | | | | | | 178 | 175 | 173 | 181 | | |
| 10 | 199 | 193 | 170 | 270 | | | 250 | 265 | 260 | 245 | 235 | 390 | | 192 | 185 | 172 | 230 | | |
| 15 | 190 | 183 | 160 | 305 | | | | | | | | | | 209 | 185 | 228 | 261 | | |
| 20 | 191 | 180 | 175 | 310 | | | 245 | 245 | 250 | 235 | 235 | 415 | | 198 | 180 | 312 | 289 | | |
| 25 | 190 | 190 | 194 | 300 | | | | | | | | | | 190 | 180 | 270 | 300 | | |
| 30 | 192 | 195 | 220 | 291 | | | 240 | 240 | 250 | | 240 | | | 191 | 185 | 255 | 322 | | |
| 35 | 196 | 203 | 195 | 289 | | | | | | | | | | 191 | 190 | 230 | 339 | | |
| 40 | 200 | 215 | 245 | 289 | | | 245 | 245 | 260 | | | | | 193 | 196 | 226 | 340 | | |
| 45 | 208 | 220 | 235 | 290 | | | | | | | | | | 198 | 200 | 240 | 340 | | |
| 50 | 209 | 225 | 245 | | | | 250 | 250 | | | | | | 200 | 210 | 279 | 350 | | |
| 55 | 210 | 228 | 245 | | | | | | | | | | | 210 | 220 | 280 | | | |
| 60 | 210 | 220 | 248 | | | | 255 | 255 | | | | | | 213 | 225 | 280 | | | |
| 65 | 209 | 218 | 250 | | | | | | | | | | | 219 | 230 | 278 | | | |
| 70 | 208 | 220 | | | | | 260 | | | | | | | 220 | 235 | 280 | | | |
| 75 | 208 | 215 | | | | | | | | | | | | 222 | 238 | | | | |
| 80 | 212 | 212 | | | | | | | | | | | | 230 | 238 | | | | |
| 85 | 219 | 212 | | | | | | | | | | | | 232 | 240 | | | | |
| 90 | 220 | 221 | | | | | | | | | | | | 240 | 245 | | | | |
| 95 | 220 | 280 | | | | | | | | | | | | 250 | | | | | |

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*KDFWR

Table 10. (continued)

| Depth (feet) | June 23* (515') | | | | | | | July 6 - 7 (515') | | | | | | July 9* (515') | | | | | | |
|-----------------|--------------------|-----|-----|-----|-----|-----|-----|----------------------|-----|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T |
| 0 | 275 | 275 | 275 | 255 | 325 | 275 | 270 | 180 | 182 | 191 | 182 | 370 | 250 | 275 | 280 | 280 | 265 | 280 | 245 | 300 |
| 5 | | | | | | | | 180 | 182 | 192 | 182 | | | | | | | | | |
| 10 | 260 | 275 | 265 | 250 | 255 | 275 | | 180 | 182 | 193 | 200 | | | 265 | 270 | 280 | 270 | 285 | 245 | |
| 15 | | | | | | | | 210 | 200 | 249 | 300 | | | | | | | | | |
| 20 | 280 | 275 | 295 | 240 | 290 | 390 | | 210 | 220 | 280 | 339 | | | 275 | 280 | 295 | 255 | 310 | 380 | |
| 25 | | | | | | | | 200 | 215 | 290 | 315 | | | | | | | | | |
| 30 | 260 | 280 | 310 | | 300 | | | 201 | 190 | 280 | 315 | | | 260 | 290 | 320 | | 320 | | |
| 35 | | | | | | | | 201 | 192 | 252 | 331 | | | | | | | | | |
| 40 | 260 | 250 | 280 | | | | | 200 | 200 | 249 | 339 | | | 255 | 250 | 290 | | | | |
| 45 | | | | | | | | 209 | 217 | 255 | 345 | | | | | | | | | |
| 50 | 255 | 270 | | | | | | 211 | 225 | 289 | 490 | | | 250 | 270 | | | | | |
| 55 | | | | | | | | 219 | 230 | 290 | | | | | | | | | | |
| 60 | 270 | | | | | | | 221 | 250 | 290 | | | | 265 | | | | | | |
| 65 | | | | | | | | 228 | 266 | 270 | | | | | | | | | | |
| 70 | 280 | | | | | | | 228 | 270 | | | | | 275 | | | | | | |
| 75 | | | | | | | | 255 | 272 | | | | | | | | | | | |
| 80 | | | | | | | | 260 | 275 | | | | | | | | | | | |
| 85 | | | | | | | | 262 | 280 | | | | | | | | | | | |
| 90 | | | | | | | | 269 | 290 | | | | | | | | | | | |
| 95 | | | | | | | | 340 | 357 | | | | | | | | | | | |

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*KDFWR

Table 10. (continued)

| Depth (feet) | July 20 - 21 (515') | | | | | | July 27 - 31* (515') | | | | | | | August 3 - 4 (515') | | | | | |
|-----------------|------------------------|-----|-----|-----|-----|-----|-------------------------|-----|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 171 | 165 | 190 | 162 | 215 | 220 | 285 | 300 | 300 | 280 | 280 | 280 | 290 | 180 | 181 | 185 | 170 | 248 | 230 |
| 5 | 170 | 170 | 188 | 162 | | | | | | | | | | 180 | 181 | 185 | 170 | | |
| 10 | 170 | 170 | 188 | 165 | | | 285 | 295 | 300 | 260 | 290 | 320 | | 180 | 190 | 185 | 179 | | |
| 15 | 170 | 172 | 188 | 200 | | | | | | | | | | 180 | 201 | 215 | 200 | | |
| 20 | 170 | 190 | 280 | 309 | | | 285 | 305 | 320 | 275 | 290 | 380 | | 190 | 228 | 260 | 259 | | |
| 25 | 190 | 195 | 278 | 320 | | | | | | | | | | 191 | 251 | 288 | 262 | | |
| 30 | 190 | 180 | 250 | 305 | | | 275 | 350 | 370 | | 330 | | | 185 | 251 | 290 | 285 | | |
| 35 | 190 | 165 | 234 | 312 | | | | | | | | | | 188 | 192 | 265 | 320 | | |
| 40 | 185 | 171 | 238 | 325 | | | 260 | 300 | 320 | | | | | 190 | 188 | 261 | 335 | | |
| 45 | 185 | 182 | 249 | 338 | | | | | | | | | | 182 | 191 | 265 | 346 | | |
| 50 | 190 | 198 | 265 | 350 | | | 255 | 270 | | | | | | 185 | 201 | 280 | 380 | | |
| 55 | 199 | 203 | 270 | | | | | | | | | | | 195 | 229 | 292 | | | |
| 60 | 200 | 222 | 270 | | | | 260 | | | | | | | 205 | 243 | 295 | | | |
| 65 | 209 | 238 | 270 | | | | | | | | | | | 215 | 259 | 304 | | | |
| 70 | 220 | 245 | | | | | 275 | | | | | | | 222 | 268 | | | | |
| 75 | 239 | 250 | | | | | | | | | | | | 240 | 275 | | | | |
| 80 | 250 | 250 | | | | | | | | | | | | 258 | 281 | | | | |
| 85 | 253 | 255 | | | | | | | | | | | | 269 | 282 | | | | |
| 90 | 270 | 285 | | | | | | | | | | | | 282 | 300 | | | | |
| 95 | 278 | 300 | | | | | | | | | | | | 290 | | | | | |

*KDFWR

Table 10. (continued)

| Depth (feet) | August 13* (515') | | | | | | | August 17 - 18 (515') | | | | | | August 27 - September 1 (515') | | | | | |
|-----------------|----------------------|-----|-----|-----|-----|-----|-----|--------------------------|-----|-----|-----|-----|-----|-----------------------------------|-----|-----|-----|-----|-----|
| | A | B | C | D | E | F | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 270 | 265 | 275 | 270 | 280 | 240 | 270 | 175 | 179 | 170 | 170 | 329 | 270 | 170 | 170 | 180 | 172 | 369 | 258 |
| 5 | | | | | | | | 175 | 177 | 169 | 169 | | | 170 | 170 | 180 | 172 | | |
| 10 | 275 | 270 | 260 | 270 | 265 | 280 | | 180 | 178 | 170 | 172 | | | 170 | 170 | 180 | 172 | | |
| 15 | | | | | | | | 188 | 199 | 210 | 208 | | | 172 | 198 | 201 | 198 | | |
| 20 | 285 | 280 | 280 | 260 | 245 | 295 | | 195 | 220 | 255 | 271 | | | 201 | 235 | 250 | 290 | | |
| 25 | | | | | | | | 195 | 281 | 270 | 272 | | | 209 | 270 | 279 | 318 | | |
| 30 | 300 | 285 | 320 | | 265 | | | 185 | 280 | 275 | 300 | | | 200 | 285 | 280 | 318 | | |
| 35 | | | | | | | | 190 | 242 | 289 | 296 | | | 191 | 255 | 290 | 305 | | |
| 40 | 285 | 290 | 290 | | | | | 190 | 210 | 280 | 319 | | | 190 | 240 | 285 | 320 | | |
| 45 | | | | | | | | 185 | 200 | 280 | 340 | | | 191 | 210 | 280 | 335 | | |
| 50 | 280 | 285 | | | | | | 186 | 216 | 289 | 381 | | | 190 | 205 | 300 | | | |
| 55 | | | | | | | | 196 | 240 | 303 | | | | 188 | 230 | 310 | | | |
| 60 | 260 | | | | | | | 211 | 259 | 310 | | | | 188 | 245 | 310 | | | |
| 65 | | | | | | | | 224 | 270 | 300 | | | | 220 | 265 | 305 | | | |
| 70 | 275 | | | | | | | 230 | 280 | | | | | 231 | 285 | 305 | | | |
| 75 | | | | | | | | 249 | 289 | | | | | 239 | 290 | | | | |
| 80 | | | | | | | | 261 | 290 | | | | | 277 | 295 | | | | |
| 85 | | | | | | | | 279 | 297 | | | | | 282 | 300 | | | | |
| 90 | | | | | | | | 285 | 315 | | | | | 300 | 321 | | | | |
| 95 | | | | | | | | 305 | | | | | | | | | | | |

*KDFWR

Table 10. (continued)

| Depth (feet) | September 24 - 25 (514') | | | | | | October 19 - 20 (511') | | | | | | November 18 - 20 (497') | | | | | |
|-----------------|-----------------------------|-----|-----|-----|-----|-----|---------------------------|-----|-----|-----|-----|-----|----------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 185 | 200 | 200 | 190 | 400 | 250 | 230 | 230 | 220 | 209 | 310 | 245 | 240 | 231 | 240 | 340 | 350 | 220 |
| 5 | 188 | 200 | 200 | 188 | | | 230 | 230 | 220 | 211 | | | 235 | 231 | 240 | 340 | | |
| 10 | 185 | 200 | 200 | 188 | | | 230 | 230 | 220 | 211 | | | 235 | 231 | 240 | 340 | | |
| 15 | 188 | 200 | 200 | 188 | | | 230 | 230 | 220 | 220 | | | 235 | 231 | 240 | 340 | | |
| 20 | 198 | 230 | 200 | 195 | | | 230 | 230 | 220 | 221 | | | 235 | 231 | 240 | 340 | | |
| 25 | 210 | 260 | 280 | 240 | | | 230 | 230 | 220 | 220 | | | 235 | 231 | 240 | 342 | | |
| 30 | 210 | 270 | 290 | 311 | | | 230 | 230 | 220 | 213 | | | 235 | 231 | 240 | 342 | | |
| 35 | 201 | 280 | 290 | 310 | | | 230 | 230 | 220 | 215 | | | 235 | 231 | 240 | | | |
| 40 | 192 | 275 | 289 | 321 | | | 230 | 230 | 215 | 215 | | | 231 | 231 | | | | |
| 45 | 190 | 260 | 289 | 348 | | | 229 | 230 | 230 | 265 | | | 231 | 230 | | | | |
| 50 | 182 | 245 | 299 | | | | 229 | 230 | 248 | | | | 231 | 230 | | | | |
| 55 | 180 | 248 | 309 | | | | 229 | 230 | 250 | | | | 231 | | | | | |
| 60 | 199 | 265 | 310 | | | | 228 | 255 | 250 | | | | 251 | | | | | |
| 65 | 219 | 272 | 311 | | | | 233 | 280 | 260 | | | | 264 | | | | | |
| 70 | 239 | 290 | 350 | | | | 290 | 295 | | | | | 270 | | | | | |
| 75 | 261 | 295 | | | | | 300 | 300 | | | | | 270 | | | | | |
| 80 | 280 | 300 | | | | | 305 | 300 | | | | | 270 | | | | | |
| 85 | 289 | 300 | | | | | 310 | | | | | | | | | | | |
| 90 | 299 | | | | | | 310 | | | | | | | | | | | |

Table 10. (continued)

| Depth (feet) | December 14 - 15 (490') | | | | | |
|-----------------|----------------------------|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | T |
| 0 | 251 | 249 | 260 | 331 | 254 | 255 |
| 5 | | | | 335 | | |
| 10 | 251 | 249 | 279 | 335 | | |
| 15 | | | | 335 | | |
| 20 | 250 | 249 | 279 | 335 | | |
| 25 | | | | | | |
| 30 | 248 | 247 | 295 | | | |
| 35 | | | | | | |
| 40 | 248 | 247 | 295 | | | |
| 45 | | | | | | |
| 50 | 248 | 247 | | | | |
| 55 | | | | | | |
| 60 | 248 | | | | | |
| 65 | | | | | | |
| 70 | 248 | | | | | |

A P P E N D I X B

BENTHOS PRODUCTION - 1970

Barren River Reservoir

Nolin River Reservoir

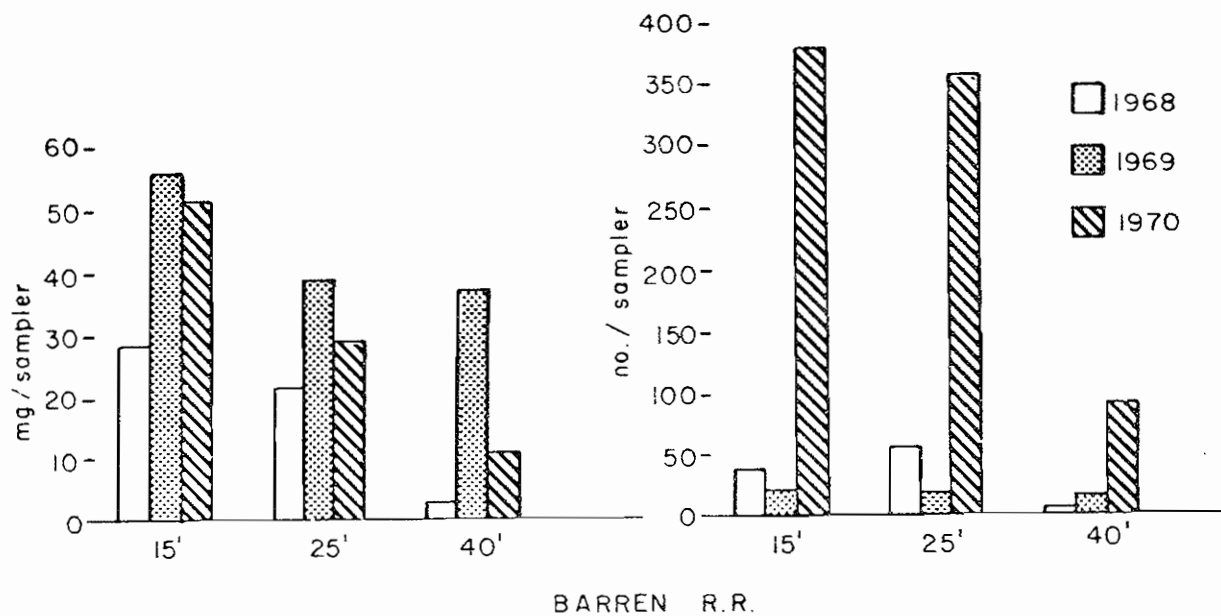
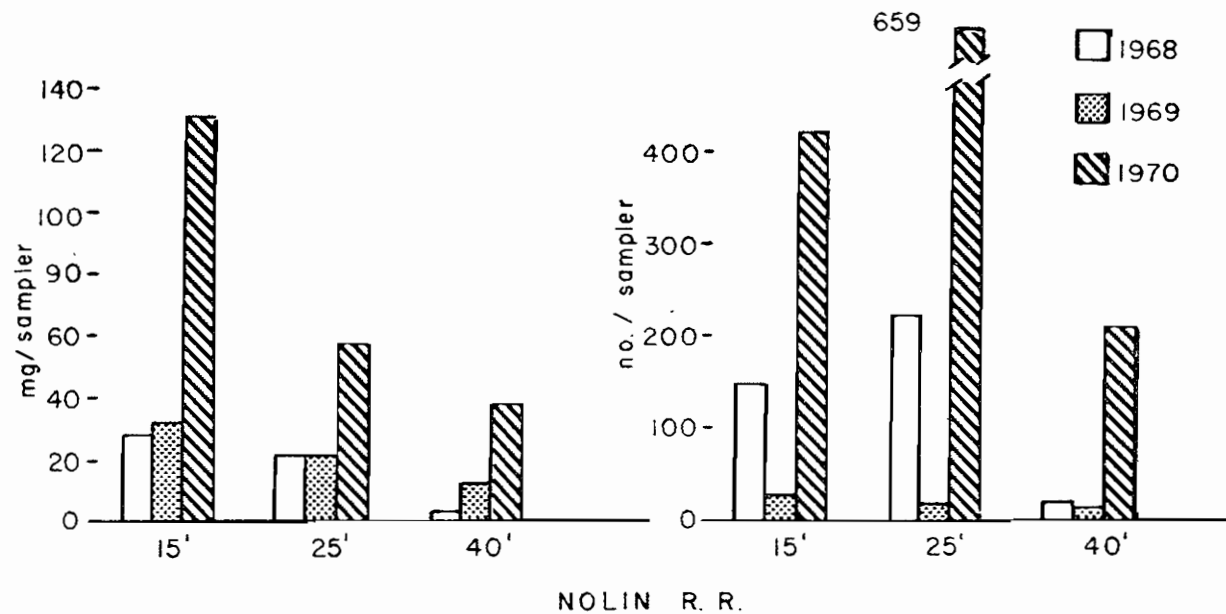


Fig. 1. Weights and Numbers of benthos, 3 depths, 3 years, Barren & Nolin R. Reservoirs.

1

Table 1. Average numbers and dry weights (excluding crayfishes) per sampler and total numbers of taxa for all periods (1, 2, 3), Stations (A, B, C) and depths, Barren River Reservoir, 1970.

| | <u>Numbers Per Sampler</u> | | | | | | | | | | | | <u>Avg. For Period</u> |
|-----|----------------------------|----------|----------|------------|----------------|----------|----------|------------|----------------|----------|----------|------------|------------------------|
| | <u>15 Feet</u> | | | | <u>25 Feet</u> | | | | <u>40 Feet</u> | | | | |
| | <u>A</u> | <u>B</u> | <u>C</u> | <u>Avg</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Avg</u> | <u>A</u> | <u>B</u> | <u>C</u> | <u>Avg</u> | |
| 1 | 265.5 | 48.0 | 87.3 | 150.7 | 193.5 | 26.0 | 28.3 | 93.9 | 71.3 | 12.5 | 3.0 | 39.5 | 98.6 |
| 2 | - | 187.7 | 271.5 | 215.6 | - | 1057.5 | 646.0 | 920.3 | 21.0 | 165.8 | 18.0 | 103.3 | 396.8 |
| 3 | 340.5 | 669.2 | 1059 | 689.9 | 440.5 | 228 | 308.5 | 325.7 | 26.0 | 152.2 | 228.0 | 135.4 | 369.7 |
| Avg | 303.0 | 352.4 | 513.1 | 395.7 | 317.0 | 519.4 | 464.8 | 443.6 | 43.1 | 129.7 | 133.7 | 98.7 | |

Dry Weights (mg) Per Sampler

| | | | | | | | | | | | | | |
|-----|------|------|-------|------|------|------|-------|------|------|------|------|------|------|
| 1 | 31.7 | 9.1 | 8.5 | 17.8 | 17.9 | 4.4 | 4.8 | 10.0 | 12.9 | 6.2 | 2.9 | 8.7 | 12.4 |
| 2 | - | 25.7 | 100.6 | 50.6 | - | 43.8 | 108.8 | 65.4 | 8.7 | 17.5 | 1.5 | 13.7 | 46.9 |
| 3 | 45.5 | 69.5 | 134.0 | 82.9 | 48.9 | 13.8 | 17.4 | 26.7 | 1.9 | 19.5 | 18.4 | 13.2 | 40.9 |
| Avg | 38.5 | 39.8 | 77.0 | 52.7 | 33.4 | 23.9 | 30.6 | 29.0 | 7.7 | 16.0 | 11.5 | 11.6 | |

Total Number of Taxa

| | | | | | | | | | | | | | |
|---|----|----|----|------|----|----|----|------|----|----|----|------|--|
| 1 | 14 | 9 | 13 | 12 | 15 | 7 | 10 | 10.6 | 11 | 7 | 3 | 7 | |
| 2 | - | 17 | 12 | 14.5 | - | 7 | 6 | 6.5 | 2 | 4 | 3 | 3 | |
| 3 | 17 | 20 | 16 | 17.7 | 16 | 13 | 15 | 14.7 | 9 | 10 | 13 | 10.7 | |

Table 2. Average numbers of dominant benthos per sampler for three sampling periods (1, 2, 3), three Stations (A, B, C) and three depths (15', 25', 40'), Barren River Reservoir, April 8 - October 11, 1970. See text for more detail.

| | | 15 Feet | | | | 25 Feet | | | | 40 Feet | | | | Tot. Avg /Period |
|------------------|---|---------|-------|-------|-------|---------|-------|-------|-------|---------|-------|-------|------|---------------------|
| | | A | B | C | Avg | A | B | C | Avg | A | B | C | Avg | |
| DIPTERA | | | | | | | | | | | | | | |
| Chaoborus | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .5 | .1 | .3 |
| | 2 | - | .3 | 0 | .2 | - | 88.8 | .5 | 59.3 | 9.5 | 79.8 | 8 | 49.1 | 37 |
| | 3 | .3 | .5 | 2 | .9 | 1.8 | 4.8 | .8 | 2.4 | .8 | 136 | 119.8 | 85.5 | 29.6 |
| Chironomus | 1 | 25.3 | 15 | 7 | 15.9 | 6.3 | 5 | 3 | 4.7 | 1.0 | 3.5 | 0 | 1.4 | 7.8 |
| | 2 | - | 70 | 54 | 64.7 | - | 24.3 | 9 | 19.2 | 0 | 0 | 1 | .1 | 26.5 |
| | 3 | 27.3 | 59.3 | 75.8 | 58.8 | 31 | 12.8 | 13.5 | 19.1 | .5 | 1 | 5.3 | 2.3 | 26.7 |
| Glyptotendipes | 1 | 6 | 7 | 3.8 | 5.3 | .8 | 0 | 0 | .3 | 0 | 0 | 0 | 0 | 2 |
| | 2 | - | 8.3 | 13 | 9.8 | - | 7 | 9.5 | 7.8 | 0 | 1 | 0 | .6 | 5.8 |
| | 3 | 46 | 126 | 543.5 | 238.5 | 38.8 | 38.3 | 31.5 | 36.2 | 3 | 5 | 19 | 9 | 94.6 |
| TRICHOPTERA | | | | | | | | | | | | | | |
| Cyrmellus | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .8 | 2 | 0 | .9 | .3 |
| | 2 | - | 2.3 | 1.5 | 2 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .6 |
| | 3 | 33.8 | 110.5 | 79.3 | 74.5 | 9.8 | 10 | 6 | 8.6 | 1 | 1.5 | 4 | 2.2 | 28.4 |
| EPHEMEROPTERA | | | | | | | | | | | | | | |
| Stenonema | 1 | 3.3 | 0 | 1.5 | 1.9 | 1.8 | 0 | .3 | .8 | 2.3 | 0 | 0 | .8 | 1.3 |
| | 2 | - | 5 | 12.5 | 7.5 | - | 0 | 0 | 0 | 0 | 7.5 | 0 | 4.3 | 3.9 |
| | 3 | 81 | 33.8 | 67.5 | 60.8 | 30.5 | 14 | 9.5 | 18 | 5.5 | 2.3 | 3.8 | 3.8 | 27.5 |
| Caenis | 1 | 3.5 | .5 | .5 | 1.7 | 2.8 | .5 | 3 | 2.4 | 1.0 | 1 | 0 | .8 | 1.7 |
| | 2 | - | 51.5 | 84 | 62.3 | - | .8 | 0 | .5 | 0 | 0 | 0 | 0 | 19.8 |
| | 3 | 4.3 | 46.3 | 87.3 | 45.9 | 19.8 | 15 | 28.5 | 21.1 | 4.8 | 1 | 12.8 | 6.2 | 24.4 |
| OLIGOCHAETA | 1 | 141 | 1 | 12 | 61.4 | 71 | 3 | 2.5 | 30 | 8.8 | 0 | 0 | 4.4 | 33.9 |
| | 2 | - | 32 | 170 | 78 | - | 935 | 613 | 827.7 | 11.5 | 77.5 | 9 | 48.9 | 304 |
| | 3 | 84.3 | 229.3 | 161.8 | 158.6 | 288.8 | 103.3 | 208.3 | 200.1 | 8.5 | 3.8 | 45.3 | 19.2 | 125.9 |
| CNIDARIA | 1 | 22.5 | 0 | 35.8 | 23.3 | 92.5 | 3 | 15.5 | 43.8 | 53.8 | 0 | 2 | 27.4 | 31.8 |
| | 2 | - | 1.3 | .5 | 1 | - | 0 | 13.5 | 4.5 | 0 | 0 | 0 | 0 | 1.7 |
| | 3 | 29.8 | 9.3 | 2.8 | 13.9 | 4.3 | 13 | 2 | 6.4 | .3 | 0 | 11.3 | 3.8 | 8.1 |
| TOTAL of Station | | 261 | 319 | 499.2 | 378.3 | 299.8 | 509 | 258.8 | 359.9 | 40.9 | 127.8 | 129.6 | 95.7 | |

Table 2A. Average numbers per sampler of certain taxa on web and limestone substrate samplers, Barren River Reservoir, Kentucky, 1970.

| | May 8-June 10 | | | | July 13-Aug. 10 | | | |
|---------------------------|---------------|--------|-----------|--------|-----------------|--------|-----------|--------|
| | Web | | Limestone | | Web | | Limestone | |
| | 15 ft. | 45 ft. | 15 ft. | 45 ft. | 15 ft. | 45 ft. | 15 ft. | 45 ft. |
| <i>Chironomus spp.</i> | 256 | 15 | 4 | 5 | 1061 | 215 | 132 | 25 |
| <i>Glyptotendipes sp.</i> | 10 | 1 | 1 | - | 125 | 53 | 56 | 1 |
| <i>Tanytarsus sp.</i> | 20 | 1 | 6 | - | 29 | 54 | 10 | 7 |
| <i>Stenonema sp.</i> | 1 | 1 | 2 | 1 | 8 | - | 59 | 10 |
| <i>Caenis sp.</i> | 1 | - | t | - | 39 | 21 | 25 | 7 |
| <i>Hyallela azteca</i> | - | t | - | - | - | 6 | - | - |
| Oligochaeta | 913 | 40 | 64 | 20 | 880 | 3546 | 53 | 37 |
| Turbellaria | 28 | - | 30 | - | 169 | 187 | 16 | 79 |
| Gastropoda | 5 | - | t | - | 198 | 219 | 4 | 6 |

Table 3. Average numbers and dry weights (excluding crayfishes) per sampler and total numbers of taxa for all periods (1, 2, 3), Stations (A, B, C) and depths, Nolin River Reservoir, 1970.

| | <u>Numbers Per Sampler</u> | | | | | | | | | | | | <u>Avg. For Period</u> |
|-----|-------------------------------------|--------|--------|--------|----------------|-------|--------|--------|----------------|-------|-------|-------|------------------------|
| | <u>15 Feet</u> | | | | <u>25 Feet</u> | | | | <u>40 Feet</u> | | | | |
| | A | B | C | Avg | A | B | C | Avg | A | B | C | Avg | |
| 1 | 383.3 | 98.5 | 53.5 | 203.4 | 53.8 | 242.0 | 752.0 | 220.3 | 44.5 | 31.0 | 31.0 | 36.4 | 153.4 |
| 2 | 352.5 | 1452.0 | 340.0 | 567.4 | 535.5 | 261.5 | 2820.3 | 1505.0 | 236.5 | - | 789.8 | 513.1 | 863.9 |
| 3 | 423.2 | 1553.5 | 6551.2 | 2842.7 | 560.5 | 361.0 | 455.7 | 459.1 | 104.7 | 249.5 | 138.0 | 169.3 | 1215.1 |
| Avg | 386.3 | 951.2 | 2767.2 | 1306.9 | 381.7 | 245.1 | 1460.8 | 685.7 | 128.6 | 140.3 | 437.0 | 220.0 | |
| | <u>Dry Weights (mg) Per Sampler</u> | | | | | | | | | | | | |
| 1 | 16.7 | 10.5 | 2.8 | 11.3 | 5.9 | 9.4 | 27.0 | 11.5 | 4.4 | 7.2 | 3.2 | 5.5 | 9.6 |
| 2 | 112.0 | 101.1 | 80.3 | 117.3 | 156.0 | 23.8 | 209.7 | 150.0 | 39.6 | - | 136.6 | 88.1 | 118.3 |
| 3 | 108.1 | 176.2 | 438.2 | 244.1 | 49.8 | 34.7 | 225.2 | 35.6 | 20.0 | 38.6 | 9.5 | 29.0 | 112.1 |
| Avg | 82.2 | 115.1 | 207.9 | 131.7 | 53.4 | 22.4 | 98.3 | 58.0 | 21.6 | 22.8 | 83.9 | 39.4 | |
| | <u>Total Number of Taxa</u> | | | | | | | | | | | | |
| 1 | 14 | 9 | 13 | 12 | 15 | 7 | 10 | 10.6 | 11 | 7 | 3 | 7 | |
| 2 | - | 17 | 12 | 14.5 | - | 7 | 6 | 6.5 | 2 | 4 | 3 | 3 | |
| 3 | 17 | 20 | 16 | 17.7 | 16 | 13 | 15 | 14.7 | 9 | 10 | 13 | 10.7 | |

Table 4. Average numbers of dominant benthos per sampler for three sampling periods (1, 2, 3), three Stations (A, B, C) and three depths (15', 25', 40'), Molin River Reservoir, April 8 - October 11, 1970. See text for more detail.

| | | 15 Feet | | | | 25 Feet | | | | 40 Feet | | | | Tot. Avg /Period |
|------------------|---|---------|-------|--------|--------|---------|-------|--------|--------|---------|-------|------|-------|---------------------|
| | | A | B | C | Avg | A | B | C | Avg | A | B | C | Avg | |
| DIPTERA | | | | | | | | | | | | | | |
| Chaoborus | 1 | .3 | 1.0 | 0 | .5 | 0 | .3 | 0 | .1 | 0 | 1.5 | 2.5 | 1.1 | .56 |
| | 2 | .3 | 320.5 | 47.3 | 83.1 | 429 | 259.5 | 2821.5 | 1352.1 | 224.8 | - | 781 | 502.8 | 656.3 |
| | 3 | .3 | .5 | 2.5 | 1.1 | 118.3 | 2 | 0 | 40.1 | 100.5 | 21 | 50 | 58.6 | 31.8 |
| Chironomus | 1 | 3.3 | 10.3 | 4 | 6.2 | .3 | .3 | 1.5 | .5 | 1.5 | .5 | 2.5 | 1.3 | 2.7 |
| | 2 | 86 | 122 | 73.8 | 88.3 | 0 | 1 | 0 | .2 | 1.3 | - | .3 | .8 | 31.8 |
| | 3 | 32.3 | 197.5 | 345.5 | 191.7 | 19.5 | 19 | 32 | 23.5 | .5 | 27.5 | 18 | 14.8 | 80.3 |
| Glyptotendipes | 1 | 0 | .8 | 0 | .1 | 0 | 0 | 0 | 0 | .3 | 0 | 0 | .1 | .1 |
| | 2 | 113.8 | 193 | 197.8 | 163.2 | 0 | 0 | .5 | .2 | 0 | - | .5 | .3 | 58.4 |
| | 3 | 120 | 217.8 | 313.8 | 217.2 | 31.8 | 47.5 | 50.8 | 43.3 | .5 | 18.5 | 18.5 | 11.3 | 95.2 |
| TRICHOPTERA | | | | | | | | | | | | | | |
| Cyrmellus | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 5.8 | 0 | 0 | 2.3 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | .8 |
| | 3 | 34.3 | 77.5 | 23.8 | 45.2 | .3 | 13.8 | 3.5 | 5.8 | 0 | 1 | 1.5 | .7 | 18.2 |
| EPHEMEROPTERA | | | | | | | | | | | | | | |
| Stenonema | 1 | 0 | 3.3 | .5 | 1.4 | 0 | 1 | 1 | .6 | 0 | .5 | 0 | .2 | .7 |
| | 2 | 46.8 | 0 | .3 | 18.8 | 0 | 0 | 0 | 0 | .3 | - | 0 | .1 | 6.8 |
| | 3 | 148.3 | 52 | 20.5 | 73.5 | 7 | 4.5 | 1.8 | 4.4 | 0 | 1.3 | 0 | .5 | 27.7 |
| Caenis | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 13.8 | 0 | 3.3 | 6.8 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2.4 |
| | 3 | 11.3 | 1 | 13.3 | 8.5 | 0 | 1.3 | 1.3 | .8 | 0 | 0 | 0 | 0 | 3.3 |
| OLIGOCHAETA | 1 | 127 | 18 | 10 | 59.9 | 18.5 | 13.8 | 28.5 | 19.6 | 38 | 4.3 | 9 | 20.4 | 33.3 |
| | 2 | 23.5 | 806.5 | 13.3 | 176 | 7 | 1 | 8 | 6.2 | 9.5 | - | 0 | 4.8 | 66.4 |
| | 3 | 50.5 | 982.5 | 5778.8 | 2270.5 | 384.3 | 266 | 365.3 | 338.5 | 3 | 156.5 | 47.5 | 73.3 | 942.4 |
| CNIDARIA | 1 | 292 | 48.3 | 33.5 | 124.8 | 8 | 99.3 | 697 | 182.3 | 3 | 11 | 6 | 6.8 | 104.6 |
| | 2 | 0 | 1.5 | 0 | .3 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | .1 |
| | 3 | .5 | 1.3 | 8 | 3.3 | 2.5 | 0 | 0 | .8 | .3 | .3 | 0 | .2 | 1.5 |
| TOTAL of Station | | 354.8 | 933.1 | 2746.1 | 424.7 | 342.1 | 240.6 | 1459.4 | 659.5 | 127.8 | 124 | 429 | 213.4 | |

A P P E N D I X C

FISH POPULATION STUDIES - 1970

Barran River Reservoir

Nolin River Reservoir

Table 1. Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during May, 1970. Size of cove sampled: 1.50 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|-------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| Largemouth bass | 2 | tr | 19 | 2.4 | 1 | 1.2 | 23 | 3.6 | 2.7 | 3.2 |
| Spotted bass | - | - | 1 | tr | - | - | 1 | tr | 0.1 | tr |
| White crappie | 1 | tr | 3 | 0.3 | 3 | 0.9 | 7 | 1.3 | 0.8 | 1.1 |
| Total | 3 | 0.1 | 23 | 2.8 | 5 | 2.1 | 30 | 4.9 | 3.6 | 4.3 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | - | - | 1 | tr | 1 | 0.6 | 1 | 0.6 | 0.2 | 0.5 |
| Flathead catfish | 1 | tr | 3 | 0.2 | 1 | 1.0 | 5 | 1.2 | 0.6 | 1.1 |
| Total | 1 | tr | 3 | 0.2 | 2 | 1.6 | 6 | 1.8 | 0.7 | 1.6 |
| TOTAL PISCIVOROUS | 3 | 0.1 | 26 | 3.0 | 7 | 3.6 | 36 | 6.7 | 4.3 | 5.9 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 12 | 0.1 | 175 | 6.3 | 53 | 10.9 | 240 | 17.3 | 28.6 | 15.3 |
| Longear sunfish | 8 | 0.1 | 126 | 5.5 | 12 | 1.7 | 146 | 7.3 | 17.4 | 6.4 |
| Warmouth | 1 | tr | 11 | 0.4 | 5 | 0.8 | 17 | 1.2 | 2.0 | 1.1 |
| Total | 21 | 0.2 | 312 | 12.2 | 70 | 13.4 | 403 | 25.8 | 48.1 | 22.8 |

Table 1(continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|----------------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | - | - | - | - | 2 | 2.5 | 2 | 2.5 | 0.2 | 2.2 |
| Spotted sucker | - | - | 9 | 3.8 | 3 | 1.6 | 13 | 5.4 | 1.5 | 4.8 |
| Carp | - | - | 5 | 2.3 | 16 | 18.8 | 21 | 21.1 | 2.5 | 18.6 |
| Total | - | - | 14 | 6.1 | 21 | 22.9 | 36 | 29.0 | 4.2 | 25.6 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | - | - | 151 | 15.1 | 194 | 35.6 | 345 | 50.5 | 41.2 | 44.8 |
| Goldfish | - | - | - | - | 1 | 0.7 | 1 | 0.7 | 0.2 | 0.6 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | 0.2 | tr |
| Logperch | - | - | 8 | 0.2 | - | - | 8 | 0.2 | 1.0 | 0.2 |
| Brook silverside | 1 | tr | 7 | 0.1 | - | - | 7 | 0.1 | 0.9 | 0.1 |
| Total | 2 | tr | 166 | 15.4 | 195 | 36.3 | 363 | 51.7 | 43.4 | 45.7 |
| NON-PISCIVOROUS TOTAL | | | | | | | | | | |
| | 23 | 0.2 | 493 | 33.8 | 286 | 72.5 | 801 | 106.5 | 95.7 | 94.1 |
| GRAND TOTAL | | | | | | | | | | |
| | 26 | 0.3 | 519 | 36.7 | 293 | 76.2 | 838 | 113.2 | 100.0 | 100.0 |

Table 2 . Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during June, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | - | - | 35 | 7.9 | 7 | 2.3 | 42 | 10.2 | 4.4 | 7.3 |
| Largemouth bass | 76 | 0.2 | 32 | 4.6 | 2 | 2.8 | 109 | 7.7 | 11.6 | 5.5 |
| White crappie | - | - | 1 | 0.1 | - | - | 1 | 0.1 | 0.1 | tr |
| Total | 76 | 0.2 | 67 | 12.6 | 9 | 5.1 | 151 | 17.9 | 16.1 | 12.8 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | 1 | tr | 35 | 1.6 | 3 | 0.2 | 38 | 1.8 | 4.1 | 1.3 |
| Total | 1 | tr | 35 | 1.6 | 3 | 0.2 | 38 | 1.8 | 4.1 | 1.3 |
| TOTAL PISCIVOROUS | 76 | 0.2 | 102 | 14.2 | 12 | 5.4 | 189 | 19.8 | 20.2 | 14.2 |
| PANFISHES | | | | | | | | | | |
| Bluegill | - | - | 91 | 2.6 | 32 | 6.1 | 123 | 8.7 | 13.1 | 6.2 |
| Longear sunfish | - | - | 110 | 4.0 | 3 | 0.3 | 112 | 4.2 | 12.0 | 3.0 |
| Warmouth | - | - | 14 | 0.4 | 2 | 0.3 | 16 | 0.7 | 1.7 | 0.5 |
| Total | - | - | 214 | 7.0 | 37 | 6.7 | 251 | 13.7 | 26.7 | 9.8 |

Table 2 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|----------------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Golden redhorse | - | - | - | - | 9 | 8.4 | 9 | 8.4 | 1.0 | 6.0 |
| Spotted sucker | - | - | 11 | 4.1 | 4 | 2.1 | 15 | 6.2 | 1.5 | 4.4 |
| Carp | - | - | 10 | 5.7 | 29 | 30.4 | 39 | 36.1 | 4.2 | 25.9 |
| Yellow bullhead | - | - | 2 | 0.2 | 1 | 0.5 | 3 | 0.7 | 0.3 | 0.5 |
| Total | - | - | 22 | 10.0 | 43 | 41.4 | 65 | 51.4 | 6.9 | 36.8 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | - | - | 181 | 21.5 | 195 | 30.8 | 376 | 52.3 | 40.1 | 37.5 |
| Shiners | 3 | tr | - | - | - | - | 3 | tr | 0.3 | tr |
| Misc. cyprinids | 1 | tr | - | - | 3 | 1.8 | 4 | 1.8 | 0.4 | 1.3 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | 0.1 | tr |
| Studfish | 2 | tr | - | - | - | - | 2 | tr | 0.2 | tr |
| Darters | 19 | 0.1 | 26 | 0.6 | - | - | 45 | 0.6 | 4.7 | 0.4 |
| Brook silverside | - | - | 4 | tr | - | - | 4 | tr | 0.4 | tr |
| Total | 25 | 0.1 | 210 | 22.1 | 198 | 32.6 | 433 | 54.8 | 46.2 | 39.3 |
| NON-PISCIVOROUS TOTAL | 25 | 0.1 | 446 | 39.1 | 278 | 80.6 | 748 | 119.8 | 79.8 | 85.8 |
| GRAND TOTAL | 101 | 0.3 | 547 | 53.3 | 289 | 86.0 | 937 | 139.6 | 100.0 | 100.0 |

Table 3 . Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during July, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 2 | tr | 1 | tr | - | - | 3 | 0.1 | tr | tr |
| Largemouth bass | 130 | 1.8 | 12 | 2.8 | 4 | 5.1 | 146 | 9.7 | 2.4 | 1.9 |
| White crappie | 9 | tr | 37 | 4.3 | 49 | 11.4 | 95 | 15.5 | 1.6 | 3.1 |
| Total | 141 | 1.9 | 49 | 7.2 | 53 | 16.5 | 243 | 25.5 | 4.1 | 4.9 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | - | - | 5 | 0.5 | - | - | 5 | 0.5 | 0.1 | 0.1 |
| Flathead catfish | - | - | 1 | 0.1 | - | - | 1 | 0.1 | tr | tr |
| Total | - | - | 5 | 0.6 | - | - | 5 | 0.6 | 0.1 | 0.1 |
| TOTAL PISCIVOROUS | 141 | 1.9 | 54 | 7.8 | 53 | 16.5 | 248 | 26.1 | 4.2 | 5.1 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 1288 | 1.8 | 256 | 8.3 | 22 | 4.1 | 1566 | 14.2 | 26.2 | 2.7 |
| Longear sunfish | 2 | tr | 132 | 4.3 | 4 | 0.4 | 137 | 4.7 | 2.3 | 0.9 |
| Warmouth | 3 | tr | 52 | 1.8 | 2 | 0.4 | 57 | 2.2 | 0.9 | 0.4 |
| Total | 1292 | 1.8 | 440 | 14.4 | 28 | 4.9 | 1759 | 21.0 | 29.4 | 4.1 |

Table 3 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | - | - | - | - | 4 | 3.9 | 4 | 3.9 | 0.1 | 0.8 |
| Spotted sucker | - | - | 7 | 2.8 | 1 | 0.6 | 8 | 3.4 | 0.1 | 0.7 |
| Carp | - | - | 21 | 9.8 | 15 | 12.3 | 36 | 22.1 | 0.6 | 4.3 |
| Bullheads | 6 | 0.1 | 5 | 0.8 | 2 | 0.7 | 12 | 1.6 | 0.2 | 0.3 |
| Total | 6 | 0.1 | 33 | 13.3 | 21 | 17.5 | 59 | 30.9 | 1.0 | 6.0 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 1 | tr | 3605 | 387.1 | 269 | 48.2 | 3875 | 435.3 | 64.9 | 84.4 |
| Misc. cyprinids | 1 | tr | - | - | 2 | 1.6 | 3 | 1.6 | tr | 0.3 |
| Brindled madtom | 4 | tr | - | - | - | - | 4 | tr | 0.1 | tr |
| Darters | 5 | 0.1 | 8 | 0.4 | - | - | 13 | 0.4 | 0.2 | 0.1 |
| Orangespotted sunfish | 1 | tr | 4 | tr | - | - | 4 | tr | 0.1 | tr |
| Brook silverside | - | - | 11 | 0.1 | - | - | 11 | 0.1 | 0.2 | tr |
| Total | 10 | 0.1 | 3627 | 387.7 | 271 | 49.8 | 3908 | 437.6 | 65.4 | 84.9 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 1308 | 2.0 | 4099 | 415.3 | 320 | 72.2 | 5726 | 489.5 | 95.8 | 94.9 |
| GRAND TOTAL | 1449 | 3.9 | 4153 | 423.1 | 373 | 88.7 | 5974 | 515.6 | 100.0 | 100.0 |

Table 4 . Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during August, 1970. Size of cove sampled: 1.75 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 2 | 0.1 | 3 | 0.3 | - | - | 5 | 0.4 | 0.1 | 0.1 |
| Largemouth bass | 53 | 0.8 | 14 | 1.7 | 3.4 | 3.0 | 71 | 5.6 | 1.2 | 1.6 |
| Spotted bass | 58 | 0.9 | 13 | 1.5 | 1 | 0.4 | 72 | 2.7 | 1.2 | 0.8 |
| Black crappie | 2 | tr | 5 | 0.4 | 3 | 0.7 | 10 | 1.1 | 0.2 | 0.3 |
| White crappie | 5 | tr | 2 | 0.3 | 3 | 0.7 | 10 | 1.1 | 0.2 | 0.3 |
| Total | 119 | 1.8 | 38 | 4.1 | 10 | 4.8 | 168 | 10.7 | 2.8 | 3.2 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | - | - | 11 | 1.3 | 2 | 1.4 | 13 | 2.7 | 0.2 | 0.8 |
| Flathead catfish | 11 | 0.1 | 2 | 0.3 | 2 | 32.0 | 15 | 32.4 | 0.3 | 9.6 |
| Total | 11 | 0.1 | 13 | 1.6 | 4 | 33.5 | 28 | 35.1 | 0.5 | 10.4 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | 1 | 0.1 | - | - | 1 | 0.1 | tr | tr |
| Total | - | - | 1 | 0.1 | - | - | 1 | 0.1 | tr | tr |
| TOTAL PISCIVOROUS | 130 | 1.9 | 52 | 5.9 | 14 | 38.2 | 197 | 46.0 | 3.3 | 13.6 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 1036 | 3.0 | 71 | 4.2 | 73 | 11.4 | 1180 | 18.6 | 20.0 | 5.5 |
| Longear sunfish | 383 | 1.2 | 153 | 7.5 | 51 | 0.6 | 541 | 9.4 | 9.2 | 2.8 |
| Warmouth | 49 | 0.1 | 5 | 0.2 | 2 | 0.3 | 55 | 0.7 | 0.9 | 0.2 |
| Total | 1468 | 4.4 | 228 | 11.9 | 80 | 12.4 | 1776 | 28.6 | 30.1 | 8.5 |

Table 4 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|--------------|--------------------------------|--------------|---------------------|--------------|-----------------------------------|--------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | 1 | tr | 8 | 3.3 | 15 | 13.3 | 24 | 16.6 | 0.4 | 4.9 |
| Spotted sucker | - | - | 30 | 11.0 | - | - | 30 | 11.0 | 0.5 | 3.3 |
| Carp | - | - | 37 | 20.5 | 65 | 60.0 | 101 | 80.5 | 1.7 | 23.8 |
| Yellow bullhead | 3 | tr | 3 | 0.2 | 1 | 0.3 | 7 | 0.6 | 0.1 | 0.2 |
| Total | 3 | tr | 77 | 35.1 | 81 | 73.6 | 162 | 108.7 | 2.7 | 32.1 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 109 | 1.3 | 2965 | 93.3 | 313 | 57.4 | 3388 | 152.0 | 57.4 | 44.9 |
| Shiners | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Misc. cyprinids | 3 | tr | 1 | tr | 2 | 0.8 | 6 | 0.8 | 0.1 | 0.2 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Darters | 282 | 2.1 | 13 | 0.3 | - | - | 295 | 2.4 | 5.0 | 0.7 |
| Brook silverside | 79 | 0.2 | - | - | - | - | 79 | 0.2 | 1.3 | 0.1 |
| Total | 477 | 3.6 | 2979 | 93.5 | 315 | 58.2 | 3771 | 155.4 | 63.9 | 45.9 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 1948 | 8.0 | 3285 | 140.5 | 476 | 144.2 | 5709 | 292.7 | 96.7 | 86.4 |
| GRAND TOTAL | 2078 | 9.9 | 3337 | 146.4 | 490 | 182.4 | 5905 | 338.7 | 100.0 | 100.0 |

Table 5 . Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during September, 1970. Size of cove sampled: 7.16 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|-------------|--------------------------------|-------------|---------------------|-------------|-----------------------------------|------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 37 | 0.9 | 41 | 2.3 | 1 | 0.7 | 79 | 3.9 | 1.3 | 1.0 |
| Walleye | - | - | tr | 0.1 | - | - | tr | 0.1 | tr | tr |
| Largemouth bass | 32 | 0.7 | 32 | 2.5 | 4 | 5.3 | 68 | 8.5 | 1.1 | 2.2 |
| Smallmouth bass | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Spotted bass | 37 | 0.7 | 17 | 0.9 | - | - | 54 | 1.6 | 0.9 | 0.4 |
| White crappie | 204 | 2.6 | 7 | 0.8 | 7 | 1.7 | 218 | 5.1 | 3.7 | 1.3 |
| Total | 309 | 4.9 | 98 | 6.5 | 12 | 7.7 | 419 | 19.2 | 7.0 | 4.9 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | tr | tr | 34 | 4.1 | 3 | 5.9 | 36 | 10.0 | 0.6 | 2.5 |
| Flathead catfish | 1 | tr | 1 | 0.2 | 2 | 3.1 | 3 | 3.2 | tr | 0.8 |
| Total | 1 | tr | 34 | 4.3 | 4 | 8.9 | 39 | 13.2 | 0.7 | 3.4 |
| TOTAL PISCIVOROUS | 310 | 5.0 | 132 | 10.8 | 16 | 16.7 | 458 | 32.4 | 7.7 | 8.2 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 92 | 0.8 | 372 | 14.3 | 40 | 6.5 | 504 | 21.6 | 8.5 | 5.5 |
| Longear sunfish | 128 | 1.3 | 65 | 2.3 | - | - | 193 | 3.5 | 3.2 | 0.9 |
| Redear sunfish | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Warmouth | 70 | 0.7 | 25 | 1.1 | 1 | 0.2 | 96 | 2.1 | 1.6 | 0.5 |
| Total | 289 | 2.8 | 463 | 17.7 | 42 | 6.7 | 793 | 27.3 | 13.3 | 6.9 |

Table 5 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|--------------|--------------------------------|--------------|---------------------|--------------|-----------------------------------|--------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | - | - | - | - | tr | 0.5 | tr | 0.5 | tr | 0.1 |
| Spotted sucker | - | - | 5 | 2.2 | 4 | 2.1 | 9 | 4.3 | 0.1 | 1.1 |
| Carp | - | - | 59 | 27.2 | 29 | 27.1 | 88 | 54.4 | 1.5 | 13.8 |
| Bullheads | 2 | tr | 1 | 0.1 | - | - | 3 | 0.2 | 0.1 | tr |
| Total | 2 | tr | 65 | 29.6 | 33 | 29.7 | 100 | 59.3 | 1.7 | 15.0 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | - | - | 4084 | 222.0 | 367 | 50.8 | 4451 | 272.8 | 74.9 | 69.2 |
| Shiners | 1 | tr | tr | tr | - | - | 1 | tr | tr | tr |
| Goldfish | - | - | - | - | 2 | 1.2 | 2 | 1.2 | tr | 0.3 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Studfish | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Darters | tr | tr | 33 | 0.7 | - | - | 33 | 0.7 | 0.6 | 0.2 |
| Orangespotted sunfish | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Brook silverside | 90 | 0.5 | 14 | 0.1 | - | - | 105 | 0.6 | 1.8 | 0.2 |
| Total | 92 | 0.5 | 4132 | 222.9 | 368 | 52.1 | 4592 | 275.4 | 77.3 | 69.8 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 383 | 3.3 | 4660 | 270.2 | 443 | 88.6 | 5486 | 362.0 | 92.3 | 91.8 |
| GRAND TOTAL | 693 | 8.3 | 4791 | 280.9 | 459 | 105.2 | 5944 | 394.4 | 100.0 | 100.0 |

Table 6 . Species composition, relative abundance, and biomass composition of the fish population in Barren River Reservoir during 1970. Size of cove sampled: 5 coves = 14.41 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|------------|--------------------------------|-------------|---------------------|-------------|-----------------------------------|------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 19 | 0.5 | 26 | 2.3 | 1 | 0.7 | 46 | 3.4 | 1.0 | 1.0 |
| Walleye | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Largemouth bass | 51 | 0.7 | 26 | 2.7 | 3 | 4.2 | 80 | 7.7 | 1.7 | 2.3 |
| Smallmouth bass | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Spotted bass | 25 | 0.5 | 10 | 0.6 | tr | tr | 35 | 1.1 | 0.8 | 0.3 |
| Black crappie | tr | tr | 1 | tr | tr | 0.1 | 1 | 0.1 | tr | tr |
| White crappie | 103 | 1.3 | 9 | 1.1 | 11 | 2.6 | 123 | 5.0 | 2.6 | 1.5 |
| Total | 198 | 3.0 | 72 | 6.7 | 16 | 7.6 | 286 | 17.3 | 6.1 | 5.1 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | tr | tr | 24 | 2.5 | 2 | 3.2 | 26 | 5.7 | 0.5 | 1.7 |
| Flathead catfish | 2 | tr | 1 | 0.1 | 1 | 5.5 | 4 | 5.7 | 0.1 | 1.7 |
| Total | 2 | tr | 24 | 2.6 | 3 | 8.7 | 29 | 11.4 | 0.6 | 3.3 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Total | - | - | tr | tr | - | - | tr | tr | tr | tr |
| TOTAL PISCIVOROUS | 200 | 3.0 | 96 | 9.4 | 19 | 16.3 | 315 | 28.7 | 6.7 | 8.5 |

Table 6 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| PANFISHES | | | | | | | | | | |
| Bluegill | 351 | 1.0 | 259 | 9.8 | 42 | 7.2 | 652 | 17.9 | 13.9 | 5.3 |
| Longear sunfish | 111 | 0.8 | 97 | 3.7 | 3 | 0.3 | 211 | 4.9 | 4.5 | 1.4 |
| Redear sunfish | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Warmouth | 41 | 0.4 | 23 | 1.0 | 2 | 0.3 | 66 | 1.6 | 1.4 | 0.5 |
| Total | 503 | 2.2 | 380 | 14.5 | 46 | 7.8 | 930 | 24.5 | 19.7 | 7.2 |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | tr | tr | 1 | 0.4 | 4 | 3.8 | 5 | 4.2 | 0.1 | 1.2 |
| Spotted sucker | - | - | 10 | 3.8 | 3 | 1.6 | 12 | 5.3 | 0.3 | 1.6 |
| Carp | - | - | 38 | 18.4 | 30 | 28.6 | 68 | 47.0 | 1.5 | 13.8 |
| Bullheads | 2 | tr | 2 | 0.2 | 1 | 0.2 | 5 | 0.5 | 0.1 | 0.1 |
| Total | 2 | tr | 51 | 22.8 | 37 | 34.2 | 90 | 57.0 | 1.9 | 16.8 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 13 | 0.2 | 2926 | 179.7 | 304 | 46.8 | 3243 | 226.6 | 68.9 | 66.8 |
| Shiners | 1 | tr | tr | tr | - | - | 1 | tr | tr | tr |
| Misc. cyprinids | 1 | tr | tr | tr | 2 | 1.3 | 3 | 1.3 | 0.1 | 0.4 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Studfish | tr | tr | tr | tr | - | - | tr | tr | tr | tr |
| Darters | 38 | 0.3 | 23 | 0.5 | - | - | 61 | 0.8 | 1.3 | 0.2 |
| Orangespotted sunfish | tr | tr | 1 | tr | - | - | 1 | tr | tr | tr |
| Brook silverside | 55 | 0.3 | 10 | 0.1 | - | - | 64 | 0.4 | 1.4 | 0.1 |
| Total | 109 | 0.7 | 2960 | 180.3 | 306 | 48.1 | 3374 | 229.1 | 71.7 | 67.5 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 614 | 2.9 | 3390 | 217.6 | 390 | 90.1 | 4394 | 310.6 | 93.3 | 91.5 |
| GRAND TOTAL | 814 | 5.9 | 3486 | 227.0 | 409 | 106.5 | 4709 | 339.3 | 100.0 | 100.0 |

Table 7. Vertical distribution, in relation to depth and dissolved oxygen content, of fishes caught in 4 gill nets (each 300' by 8') fished for 2 consecutive nights (August 10-12, 1970) at Barren River Reservoir near Baileys Point. All nets were set perpendicular to the shoreline; all depths are referenced to the surface; dashed lines indicate maximum depths.

| Depth (feet) | D.O. content (ppm) | Mesh size (bar measure) | | | | Total |
|-------------------|--------------------------|-------------------------|---------------|--------|------------|-------|
| | | 1-inch | 1 1/2-inch | 2-inch | 2 1/2-inch | |
| 0- 5 | 7.9-7.9 | 25 | 14 | 2 | 0 | 41 |
| 5-10 | 7.9-8.0 | 36 | 5 | 5 | 0 | 46 |
| 10-15 | 8.0-7.7 | 9 | 18 | 9 | 0 | 36 |
| 15-20 | 7.7-7.3 | <u> 1 </u> | <u> 11 </u> | 7 | 1 | 20 |
| 20-25 | 7.3-0.4 | | | 0 | 0 | 0 |
| 25-30 | 0.4-0.1 | | | 0 | 0 | 0 |
| Total fish caught | | 71 | 48 | 23 | 1 | 143 |

Table 8. Vertical distribution, in relation to depth and dissolved oxygen content, of fishes caught in 4 gill nets (each 300' by 8') fished for 2 consecutive nights (August 31-September 2, 1970) at Barren River Reservoir near Walnut Creek boat ramp. All nets were set perpendicular to the shoreline; all depths are referenced to the surface; dashed lines indicate maximum depths.

| Depth (feet) | D.O. content (ppm) | Mesh size (bar measure) | | | | Total |
|-------------------|--------------------------|-------------------------|---------------|--------------|--------------|-------|
| | | 1-inch | 1 1/2-inch | 2-inch | 2 1/2-inch | |
| 0- 5 | 8.2-8.3 | 26 | 21 | 19 | 2 | 68 |
| 5-10 | 8.3-8.2 | 8 | 22 | 11 | 4 | 45 |
| 10-15 | 8.2-5.7 | 14 | 35 | 9 | <u> 5 </u> | 63 |
| 15-20 | 5.7-0.1 | 2 | <u> 11 </u> | <u> 0 </u> | | 13 |
| 20-25 | 0.1-0.1 | 0 | | | | 0 |
| 25-30 | 0.1-0.1 | 0 | | | | 0 |
| 30-35 | 0.1-0.1 | 0 | | | | 0 |
| 35-40 | 0.1-0.2 | 0 | | | | 0 |
| Total fish caught | | 50 | 89 | 39 | 11 | 189 |

Table 9 . Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during May, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|-------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | - | - | - | - | 1 | 1.0 | 1 | 1.0 | tr | 0.2 |
| Largemouth bass | 2 | tr | 15 | 1.5 | 7 | 5.4 | 23 | 6.9 | 0.4 | 1.4 |
| Spotted bass | 1 | tr | 2 | 0.2 | 2 | 0.8 | 4 | 1.1 | 0.1 | 0.2 |
| White crappie | 1 | tr | - | - | 2 | 0.6 | 2 | 0.6 | tr | 0.1 |
| Total | 3 | 0.1 | 16 | 1.7 | 11 | 7.8 | 29 | 9.5 | 0.5 | 1.9 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | - | - | - | - | 1 | 1.4 | 1 | 1.4 | tr | 0.3 |
| Flathead catfish | - | - | - | - | 1 | 14.4 | 1 | 14.4 | tr | 2.9 |
| Total | - | - | - | - | 1 | 15.8 | 1 | 15.8 | tr | 3.1 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | 1 | 1.0 | - | - | 1 | 1.0 | tr | 0.2 |
| Total | - | - | 1 | 1.0 | - | - | 1 | 1.0 | tr | 0.2 |
| TOTAL PISCIVOROUS | 3 | 0.1 | 17 | 2.7 | 12 | 23.5 | 31 | 26.3 | 0.7 | 5.2 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 3 | tr | 82 | 2.9 | 33 | 6.8 | 117 | 9.8 | 2.1 | 1.9 |
| Longear sunfish | 2 | tr | 70 | 3.3 | 4 | 0.5 | 75 | 3.8 | 1.4 | 0.8 |
| Redear sunfish | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Warmouth | - | - | 3 | 0.1 | 1 | 0.1 | 4 | 0.2 | 0.1 | tr |
| Total | 5 | tr | 155 | 6.3 | 37 | 7.4 | 196 | 13.8 | 3.6 | 2.7 |

Table 9 . (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | 1 | tr | - | - | 1 | 1.4 | 2 | 1.4 | tr | 0.3 |
| Carp | - | - | 15 | 6.9 | 6 | 6.8 | 21 | 13.6 | 0.4 | 2.7 |
| Black bullhead | - | - | 2 | 0.2 | - | - | 2 | 0.2 | tr | tr |
| Total | 1 | tr | 17 | 7.0 | 7 | 8.2 | 24 | 15.2 | 0.4 | 3.0 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | - | - | 5000 | 404.4 | 226 | 38.1 | 5226 | 442.5 | 95.2 | 88.1 |
| Golden shiner | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Goldfish | - | - | - | - | 6 | 4.2 | 6 | 4.2 | 0.1 | 0.8 |
| Darters | - | - | 4 | 0.1 | - | - | 4 | 0.1 | 0.1 | tr |
| Brook silverside | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Total | 1 | tr | 5004 | 404.6 | 232 | 42.2 | 5237 | 446.8 | 95.4 | 89.0 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 6 | tr | 5175 | 417.9 | 276 | 57.9 | 5456 | 475.8 | 99.4 | 94.8 |
| GRAND TOTAL | 9 | 0.1 | 5192 | 420.6 | 287 | 81.4 | 5487 | 502.1 | 100.0 | 100.0 |

Table 10. Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during June, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 264 | 5.2 | 2 | 0.3 | 1 | 0.2 | 267 | 5.6 | 1.1 | 3.5 |
| Largemouth bass | 276 | 1.2 | 25 | 2.1 | 4 | 3.5 | 304 | 6.8 | 1.3 | 4.2 |
| Spotted bass | 1 | tr | 2 | 0.3 | - | - | 3 | 0.3 | tr | 0.2 |
| White crappie | 20,778 | 34.6 | 9 | 0.6 | - | - | 20,787 | 35.3 | 87.3 | 22.1 |
| Total | 21,319 | 41.0 | 37 | 3.3 | 4 | 3.7 | 21,360 | 47.9 | 89.7 | 30.1 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | 5 | tr | 4 | 0.3 | - | - | 9 | 0.4 | tr | 0.2 |
| Flathead catfish | 4 | tr | 1 | 0.1 | 1 | 0.1 | 6 | 0.3 | tr | 0.2 |
| Total | 9 | 0.1 | 5 | 0.5 | 1 | 0.1 | 14 | 0.7 | 0.1 | 0.4 |
| TOTAL PISCIVOROUS | 21,327 | 41.0 | 42 | 3.8 | 5 | 3.8 | 21,374 | 48.6 | 89.8 | 30.5 |
| PAN FISHES | | | | | | | | | | |
| Bluegill | 104 | 1.0 | 56 | 10.5 | 31 | 6.3 | 702 | 17.7 | 2.9 | 11.1 |
| Green sunfish | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Longear sunfish | 30 | 0.3 | 194 | 7.7 | 15 | 2.0 | 239 | 10.0 | 1.0 | 6.3 |
| Warmouth | 14 | 0.1 | 33 | 1.0 | 2 | 0.4 | 49 | 1.5 | 0.2 | 0.9 |
| Total | 148 | 1.5 | 794 | 19.2 | 48.0 | 8.6 | 990 | 29.3 | 4.2 | 18.4 |

Table 10. (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Golden redhorse | 1 | tr | - | - | 1 | 0.8 | 1 | 0.8 | tr | 0.5 |
| Spotted sucker | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Carp | 1 | tr | 10 | 6.0 | 5 | 4.3 | 16 | 10.3 | 0.1 | 6.4 |
| Total | 1 | tr | 11 | 6.0 | 6 | 5.1 | 17 | 11.1 | 0.1 | 7.0 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 899 | 1.3 | 174 | 17.9 | 275 | 47.4 | 1348 | 66.6 | 5.7 | 41.7 |
| Shiners | 3 | tr | 1 | tr | - | - | 3 | tr | tr | tr |
| Misc. cyprinids | 2 | tr | - | - | 5 | 2.8 | 7 | 2.8 | tr | 1.8 |
| Darters | 35 | 0.5 | 16 | 0.5 | - | - | 51 | 1.0 | 0.2 | 0.6 |
| Brook silverside | 5 | tr | 9 | 0.1 | - | - | 13 | 0.1 | 0.1 | 0.1 |
| Total | 943 | 1.8 | 199 | 18.5 | 279 | 50.2 | 1421 | 70.5 | 6.0 | 44.2 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 1092 | 3.3 | 1004 | 43.7 | 333 | 63.9 | 2428 | 110.9 | 10.2 | 69.5 |
| GRAND TOTAL | 22,419 | 44.3 | 1046 | 47.5 | 337 | 67.7 | 23,801 | 159.5 | 100.0 | 100.0 |

Table 11. Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during July, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|-------------|--------------------------------|-------------|---------------------|-------------|-----------------------------------|-------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| Grass pickerel | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| White bass | 24 | 0.4 | 13 | 0.5 | 4 | 2.1 | 41 | 3.1 | 0.4 | 0.5 |
| Largemouth bass | 348 | 3.2 | 69 | 8.6 | 28 | 18.8 | 442 | 30.7 | 4.3 | 4.8 |
| Spotted bass | 7 | 0.1 | 12 | 1.8 | 2 | 0.9 | 21 | 2.7 | 0.2 | 0.4 |
| White crappie | 321 | 1.8 | 58 | 6.6 | 27 | 8.1 | 405 | 16.5 | 3.9 | 2.6 |
| Total | 698 | 5.5 | 151 | 17.5 | 60 | 30.0 | 909 | 53.0 | 8.7 | 8.2 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | 5 | tr | 8 | 0.7 | 10 | 11.2 | 23 | 11.9 | 0.2 | 1.8 |
| Flathead catfish | 7 | tr | 8 | 0.7 | 1 | 1.5 | 16 | 2.3 | 0.2 | 0.4 |
| Total | 12 | 0.1 | 16 | 1.4 | 11 | 12.7 | 39 | 14.2 | 0.4 | 2.2 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | 1 | 0.1 | - | - | 1 | 0.1 | tr | tr |
| Total | - | - | 1 | 0.1 | - | - | 1 | 0.1 | tr | tr |
| TOTAL PISCIVOROUS | 710 | 5.7 | 167 | 18.9 | 71 | 42.6 | 948 | 67.2 | 9.1 | 10.4 |
| PANFISHES | | | | | | | | | | |
| Bluegill | 421 | 0.9 | 707 | 23.8 | 121 | 24.5 | 1248 | 49.2 | 12.0 | 7.6 |
| Longear sunfish | 75 | 0.2 | 175 | 10.1 | 10 | 1.4 | 260 | 11.6 | 2.5 | 1.8 |
| Warmouth | 79 | 0.1 | 94 | 3.0 | 9 | 1.8 | 181 | 5.0 | 1.7 | 0.8 |
| Total | 575 | 1.2 | 98 | 36.8 | 140 | 27.7 | 1689 | 65.7 | 16.2 | 10.2 |

Table 11. (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | - | - | - | - | 5 | 7.6 | 5 | 7.6 | tr | 1.2 |
| Spotted sucker | 9 | 0.2 | 1 | 0.2 | 1 | 0.3 | 11 | 0.6 | 0.1 | 0.1 |
| Carp | - | - | 53 | 26.0 | 16 | 21.1 | 69 | 47.1 | 0.7 | 7.3 |
| Yellow bullhead | 3 | tr | 1 | 0.1 | 1 | 0.3 | 4 | 0.5 | tr | 0.1 |
| Total | 12 | 0.2 | 55 | 26.3 | 22 | 29.3 | 88 | 55.8 | 0.8 | 8.7 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 1370 | 5.9 | 5765 | 397.8 | 244 | 42.0 | 7379 | 445.8 | 71.0 | 69.2 |
| Misc. cyprinids | 5 | 0.1 | - | - | 11 | 7.1 | 16 | 7.2 | 0.1 | 1.1 |
| Brindled madtom | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Darters | 135 | 1.3 | 25 | 0.6 | - | - | 160 | 1.9 | 1.5 | 0.3 |
| Brook silverside | 109 | 0.2 | 9 | 0.1 | - | - | 117 | 0.3 | 1.1 | tr |
| Total | 1619 | 7.6 | 5799 | 398.5 | 255 | 49.1 | 7672 | 455.2 | 73.8 | 70.7 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 2205 | 8.9 | 6828 | 461.6 | 416 | 106.1 | 9449 | 576.6 | 90.9 | 89.6 |
| GRAND TOTAL | 2915 | 14.6 | 6995 | 480.5 | 487 | 148.7 | 10,397 | 643.9 | 100.0 | 100.0 |

Table 12. Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during August, 1970. Size of cove sampled: 2.00 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|-------------|--------------------------------|-------------|---------------------|-------------|-----------------------------------|-------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 8 | 0.2 | 21 | 1.4 | 3 | 1.9 | 32 | 3.6 | 1.1 | 1.6 |
| Largemouth bass | 61 | 0.5 | 45 | 3.5 | 12 | 10.9 | 118 | 14.8 | 3.9 | 6.7 |
| Spotted bass | 143 | 1.3 | 61 | 6.3 | 4 | 1.6 | 208 | 9.3 | 7.0 | 4.2 |
| White crappie | 6 | 0.1 | 120 | 12.6 | 61 | 14.8 | 187 | 27.5 | 6.3 | 12.4 |
| Total | 218 | 2.1 | 247 | 23.9 | 80 | 29.3 | 544 | 55.2 | 18.2 | 24.8 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | - | - | 4 | 0.6 | 2 | 1.1 | 6 | 1.6 | 0.2 | 0.7 |
| Flathead catfish | 1 | tr | 1 | tr | 1 | 0.9 | 2 | 0.9 | 0.1 | 0.4 |
| Total | 1 | tr | 5 | 0.6 | 3 | 1.9 | 8 | 2.5 | 0.3 | 1.1 |
| TOTAL PISCIVOROUS | 218 | 2.1 | 251 | 24.5 | 82 | 31.2 | 551 | 57.7 | 18.5 | 26.0 |
| PANFISHES | | | | | | | | | | |
| Rock bass | - | - | - | - | 1 | 0.3 | 1 | 0.3 | tr | 0.1 |
| Bluegill | 63 | 0.2 | 310 | 7.5 | 26 | 5.0 | 398 | 12.7 | 13.4 | 5.7 |
| Longear sunfish | 49 | 0.1 | 280 | 9.3 | 5 | 0.7 | 333 | 10.0 | 11.2 | 4.5 |
| Warmouth | 19 | 0.1 | 33 | 2.0 | 8 | 1.3 | 59 | 3.4 | 2.0 | 1.5 |
| Total | 130 | 0.5 | 622 | 18.7 | 40 | 7.2 | 791 | 26.5 | 26.5 | 11.9 |

Table 12. (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|----------------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| COMMERCIAL FISHES | | | | | | | | | | |
| Golden redhorse | - | - | - | - | 1 | 0.6 | 1 | 0.6 | tr | 0.3 |
| Spotted sucker | - | - | 1 | 0.2 | 2 | 0.9 | 2 | 1.1 | 0.1 | 0.5 |
| Carp | - | - | 56 | 32.0 | 16 | 16.6 | 71 | 48.6 | 2.4 | 21.9 |
| Bullheads | 3 | tr | - | - | - | - | 3 | tr | 0.1 | tr |
| Total | 3 | tr | 56 | 32.2 | 18 | 18.1 | 77 | 50.3 | 26 | 22.7 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 526 | 2.6 | 832 | 65.6 | 141 | 17.6 | 1498 | 85.7 | 50.3 | 38.6 |
| Shiners | 1 | tr | - | - | - | - | 1 | tr | tr | tr |
| Goldfish | - | - | - | - | 2 | 1.5 | 2 | 1.5 | 0.1 | 0.7 |
| Darters | 6 | tr | 8 | 0.2 | - | - | 14 | 0.2 | 0.5 | 0.1 |
| Brook silverside | 34 | 0.1 | 13 | 0.1 | - | - | 47 | 0.3 | 1.6 | 0.1 |
| Total | 566 | 2.7 | 853 | 65.9 | 143 | 19.1 | 1561 | 87.8 | 52.4 | 39.5 |
| NON-PISCIVOROUS TOTAL | | | | | | | | | | |
| | 698 | 3.3 | 1531 | 116.8 | 200 | 44.5 | 2429 | 164.5 | 81.5 | 74.0 |
| GRAND TOTAL | | | | | | | | | | |
| | 916 | 5.3 | 1782 | 141.3 | 282 | 75.6 | 2980 | 222.2 | 100.0 | 100.0 |

Table 13. Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during September, 1970. Size of cove sampled: 5.18 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| White bass | 6 | 0.1 | 53 | 4.3 | - | - | 59 | 4.4 | 1.2 | 1.3 |
| Largemouth bass | 47 | 0.6 | 19 | 2.0 | 5 | 5.9 | 71 | 8.5 | 1.4 | 2.4 |
| Spotted bass | 80 | 0.8 | 10 | 1.3 | tr | 0.3 | 90 | 2.4 | 1.8 | 0.7 |
| Black crappie | 1 | tr | - | - | tr | 0.1 | 1 | 0.1 | tr | tr |
| White crappie | 53 | 0.5 | 4 | 0.5 | 7 | 2.3 | 63 | 3.3 | 1.3 | 0.9 |
| Total | 186 | 2.1 | 86 | 8.0 | 13 | 8.6 | 284 | 18.7 | 5.6 | 5.4 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | 1 | tr | 8 | 0.9 | 4 | 7.0 | 14 | 7.9 | 0.3 | 2.3 |
| Flathead catfish | 2 | tr | 2 | 0.2 | 1 | 0.8 | 5 | 1.0 | 0.1 | 0.3 |
| Total | 3 | tr | 11 | 1.0 | 4 | 7.8 | 18 | 8.9 | 0.4 | 2.6 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | tr | 0.1 | - | - | tr | 0.1 | tr | tr |
| Total | - | - | tr | 0.1 | - | - | tr | 0.1 | tr | tr |
| TOTAL PISCOVOROUS | 189 | 2.1 | 97 | 9.1 | 17 | 16.4 | 303 | 27.7 | 6.0 | 7.9 |

Table 13. (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|------------|---------------------------------|--------------|--------------------------------|-------------|---------------------|--------------|-----------------------------------|--------------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| PANFISHES | | | | | | | | | | |
| Bluegill | 111 | 0.4 | 234 | 9.3 | 19 | 3.3 | 365 | 13.1 | 7.2 | 3.7 |
| Longear sunfish | 278 | 1.4 | 247 | 10.0 | 6 | 0.7 | 531 | 12.1 | 10.5 | 3.5 |
| Redear sunfish | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Warmouth | 40 | 0.2 | 26 | 1.4 | 3 | 0.6 | 69 | 2.2 | 1.4 | 0.6 |
| Total | 428 | 2.1 | 508 | 20.7 | 29 | 4.7 | 965 | 27.4 | 19.1 | 7.9 |
| COMMERCIAL FISHES | | | | | | | | | | |
| Golden redbreast | - | - | - | - | tr | 0.3 | tr | 0.3 | tr | 0.1 |
| Spotted sucker | tr | tr | 3 | 0.3 | tr | 0.1 | 3 | 0.4 | 0.1 | 0.1 |
| Carp | - | - | 56 | 29.6 | 13 | 18.4 | 69 | 47.9 | 1.4 | 13.7 |
| Yellow bullhead | - | - | 1 | 0.1 | tr | 0.1 | 1 | 0.2 | tr | tr |
| Total | tr | tr | 59 | 30.0 | 14 | 18.9 | 73 | 48.8 | 1.5 | 14.0 |
| <u>Above forage size</u> | | | | | | | | | | |
| FORAGE FISHES | | | | | | | | | | |
| Gizzard shad | 515 | 3.7 | 2536 | 186.1 | 294 | 47.8 | 3345 | 237.6 | 66.2 | 68.1 |
| Shiners | - | - | 1 | tr | - | - | 1 | tr | tr | tr |
| Goldfish | - | - | tr | tr | 9 | 5.8 | 9 | 5.9 | 0.2 | 1.7 |
| Brindled madtom | 5 | tr | - | - | - | - | 5 | tr | 0.1 | tr |
| Darters | 57 | 0.3 | 47 | 0.8 | - | - | 104 | 1.1 | 2.1 | 0.3 |
| Brook silverside | 248 | 0.5 | 2 | tr | - | - | 250 | 0.5 | 4.9 | 0.1 |
| Total | 826 | 4.5 | 2586 | 186.9 | 303 | 53.7 | 3715 | 245.1 | 73.5 | 70.2 |
| NON-PISCIVOROUS | | | | | | | | | | |
| TOTAL | 1254 | 6.5 | 3153 | 237.6 | 346 | 77.2 | 4753 | 321.3 | 94.0 | 92.1 |
| GRAND TOTAL | 1443 | 8.6 | 3249 | 246.7 | 363 | 93.6 | 5055 | 349.0 | 100.0 | 100.0 |

Table 14. Species composition, relative abundance, and biomass composition of the fish population in Nolin River Reservoir during 1970. Size of cove sampled: 5 coves = 13.18 acres.

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|-------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| GAME FISHES | | | | | | | | | | |
| Grass pickerel | tr | tr | - | - | - | - | tr | tr | tr | tr |
| White bass | 47 | 0.9 | 26 | 2.0 | 1 | 0.8 | 75 | 3.7 | 0.9 | 1.0 |
| Largemouth bass | 122 | 1.0 | 31 | 3.2 | 10 | 8.2 | 163 | 12.3 | 1.9 | 3.3 |
| Spotted bass | 54 | 0.5 | 16 | 1.8 | 1 | 0.6 | 71 | 3.0 | 0.8 | 0.8 |
| Black crappie | tr | tr | - | - | tr | tr | tr | 0.1 | tr | tr |
| White crappie | 3223 | 5.7 | 30 | 3.2 | 16 | 4.5 | 3269 | 13.4 | 38.6 | 3.6 |
| Total | 3447 | 8.2 | 102 | 10.2 | 28 | 14.1 | 3578 | 32.5 | 42.3 | 8.8 |
| FOOD FISHES | | | | | | | | | | |
| Channel catfish | 2 | tr | 6 | 0.6 | 3 | 4.8 | 11 | 5.4 | 0.1 | 1.5 |
| Flathead catfish | 3 | tr | 2 | 0.2 | 1 | 2.9 | 6 | 3.1 | 0.1 | 0.8 |
| Total | 5 | 0.1 | 8 | 0.8 | 4 | 7.7 | 16 | 8.5 | 0.2 | 2.3 |
| PREDATORY FISHES | | | | | | | | | | |
| Longnose gar | - | - | tr | 0.2 | - | - | tr | 0.2 | tr | 0.1 |
| Total | - | - | tr | 0.2 | - | - | tr | 0.2 | tr | 0.1 |
| TOTAL PISCIVOROUS | 3452 | 8.2 | 110 | 11.2 | 32 | 21.8 | 3595 | 41.2 | 42.5 | 11.2 |

Table 14. (continued)

| GROUP/species | Fingerling size (per acre) | | Intermediate size (per acre) | | Harvestable size (per acre) | | Total (per acre) | | Percentage of total population | |
|--------------------------|-------------------------------|--------|---------------------------------|--------|--------------------------------|--------|---------------------|--------|-----------------------------------|---------|
| | Number | Pounds | Number | Pounds | Number | Pounds | Number | Pounds | Number | Biomass |
| PANFISHES | | | | | | | | | | |
| Rock bass | - | - | - | - | tr | tr | tr | tr | tr | tr |
| Bluegill | 133 | 0.5 | 345 | 10.4 | 40 | 7.8 | 517 | 18.7 | 6.1 | 5.1 |
| Green sunfish | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Longear sunfish | 133 | 0.6 | 206 | 8.5 | 8 | 1.0 | 346 | 10.1 | 4.1 | 2.7 |
| Redear sunfish | - | - | tr | tr | - | - | tr | tr | tr | tr |
| Warmouth | 32 | 0.2 | 35 | 1.5 | 4 | 0.8 | 71 | 2.4 | 0.8 | 0.6 |
| Total | 298 | 1.3 | 586 | 20.4 | 51 | 9.6 | 935 | 31.3 | 11.1 | 8.5 |
| COMMERCIAL FISHES | | | | | | | | | | |
| Redhorses | tr | tr | - | - | 1 | 1.7 | 1 | 1.7 | tr | 0.5 |
| Spotted sucker | 2 | tr | 1 | 0.2 | tr | 0.2 | 3 | 0.4 | tr | 0.1 |
| Carp | tr | tr | 42 | 22.4 | 12 | 14.6 | 54 | 37.0 | 0.6 | 10.0 |
| Bullheads | 1 | tr | 1 | 0.1 | tr | 0.1 | 2 | 0.2 | tr | tr |
| Total | 3 | tr | 44 | 22.6 | 13 | 16.6 | 60 | 39.3 | 0.7 | 10.7 |
| FORAGE FISHES | | | | | | | | | | |
| | | | | | <u>Above forage size</u> | | | | | |
| Gizzard shad | 62.6 | 2.9 | 2783 | 207.5 | 250 | 40.8 | 3659 | 251.3 | 43.2 | 68.1 |
| Shiners | 1 | tr | tr | tr | - | - | 1 | tr | tr | tr |
| Misc. cyprinids | 1 | tr | tr | tr | 7 | 4.7 | 8 | 4.7 | 0.1 | 1.3 |
| Brindled madtom | 2 | tr | - | - | - | - | 2 | tr | tr | tr |
| Darters | 49 | 0.4 | 27 | 0.5 | - | - | 76 | 0.9 | 0.9 | 0.3 |
| Brook silverside | 120 | 0.2 | 6 | tr | - | - | 125 | 0.3 | 1.5 | 0.1 |
| Total | 799 | 3.6 | 2815 | 208.1 | 257 | 45.5 | 3871 | 257.2 | 45.8 | 69.7 |
| NON-PISCIVOROUS TOTAL | 1100 | 4.9 | 3445 | 251.2 | 322 | 71.7 | 4866 | 327.8 | 57.5 | 88.9 |
| GRAND TOTAL | 4552 | 13.2 | 3555 | 262.2 | 354 | 93.5 | 8461 | 369.0 | 100.0 | 100.0 |

Table 15. Vertical distribution, in relation to depth and dissolved oxygen content, of fishes caught in 4 gill nets (each 300' by 8') fished for 2 consecutive nights (August 12-14, 1970) at Nolin River Reservoir near the island above the dam. All nets were set perpendicular to the shoreline; all depths are referenced to the surface; dashed lines indicate maximum depths.

| Depth (feet) | D.O. content (ppm) | Mesh size (bar measure) | | | | Total |
|-------------------|--------------------------|-------------------------|--------------|--------------|--------------|-------|
| | | 1-inch | 1 1/2-inch | 2-inch | 2 1/2-inch | |
| 0- 5 | 8.9-9.2 | 8 | 7 | 3 | 0 | 18 |
| 5-10 | 9.2-9.3 | 4 | 5 | 4 | 0 | 13 |
| 10-15 | 9.3-8.9 | 7 | 14 | 11 | 1 | 33 |
| 15-20 | 8.9-5.6 | 3 | 3 | 3 | 0 | 9 |
| 20-25 | 5.6-0.2 | 1 | 6 | <u> 1 </u> | <u> 0 </u> | 8 |
| 25-30 | 0.2-0.1 | 1 | <u> 6 </u> | | | 7 |
| 30-35 | 0.1-0.1 | 2 | | | | 2 |
| 35-40 | 0.1-0.2 | 2 | | | | 2 |
| 40-45 | 0.2-0.2 | 1 | | | | 1 |
| Total fish caught | | 29 | 41 | 22 | 1 | 93 |

Table 16. Vertical distribution, in relation to depth and dissolved oxygen content, of fishes caught in 4 gill nets (each 300' by 8') fished for 2 consecutive nights (September 2-4, 1970) at Nolin River Reservoir in the Conoloway Creek arm. All nets were set perpendicular to the shoreline; all depths are referenced to the surface; dashed lines indicate maximum depths.

| Depth (feet) | D.O. content (ppm) | Mesh size (bar measure) | | | | Total |
|-------------------|--------------------------|-------------------------|--------------|--------------|------------|-------|
| | | 1-inch | 1 1/2-inch | 2-inch | 2 1/2-inch | |
| 0- 5 | 7.7-7.6 | 18 | 31 | 8 | 2 | 59 |
| 5-10 | 7.6-7.6 | 17 | 17 | 4 | 2 | 40 |
| 10-15 | 7.6-7.6 | 20 | 12 | 2 | 3 | 37 |
| 15-20 | 7.6-7.5 | 14 | 5 | 1 | 1 | 21 |
| 20-25 | 7.5-0.1 | 8 | 5 | 0 | 0 | 13 |
| 25-30 | 0.1-0.2 | <u> 3 </u> | <u> 1 </u> | <u> 0 </u> | 1 | 5 |
| 30-35 | 0.2-0.1 | | | | 0 | 0 |
| Total fish caught | | 80 | 71 | 15 | 9 | 175 |