**Supplementary Material A2: Resulting condition indices (*CI*concrete) of concrete check dams.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***CY*** | ***T*** | ***SI*right wing** | ***SI*spillway** | ***SI*left wing** | ***CI*** | ***CG*** |
| 1986a | 31 | 2.3 | 2.0 | 5.0 | 2.5 | C |
| 1986b | 31 | 4.2 | 3.2 | 4.4 | 3.5 | C |
| 1988 | 29 | 2.9 | 2.3 | 3.4 | 2.4 | D |
| 1989 | 28 | 3.7 | 3.3 | 3.7 | 3.4 | C |
| 1992b | 25 | 4.0 | 3.6 | 3.2 | 3.3 | C |
| 1992c | 25 | 5.0 | 2.7 | 5.0 | 3.1 | C |
| 1993a | 24 | 4.0 | 3.0 | 3.2 | 3.2 | C |
| 1993b | 24 | 2.2 | 1.5 | 2.3 | 1.5 | D |
| 1994a | 23 | 2.8 | 3.5 | 2.8 | 2.9 | C |
| 1995 | 22 | 4.0 | 3.0 | 4.0 | 3.2 | C |
| 1996a | 21 | 3.2 | 2.9 | 4.0 | 3.1 | C |
| 1996b | 21 | 4.0 | 3.1 | 5.0 | 3.5 | B |
| 1997a | 20 | 4.3 | 2.3 | 5.0 | 2.8 | C |
| 1997b | 20 | 4.9 | 3.2 | 5.0 | 3.6 | B |
| 1997c | 20 | 4.4 | 4.0 | 4.4 | 4.1 | B |
| 1999a | 18 | 5.0 | 3.7 | 5.0 | 4.0 | B |
| 1999b | 18 | 5.0 | 3.0 | 5.0 | 3.4 | C |
| 2000a | 17 | 5.0 | 3.1 | 4.0 | 3.5 | B |
| 2001a | 16 | 5.0 | 4.4 | 4.9 | 4.6 | A |
| 2001b | 16 | 4.9 | 3.1 | 5.0 | 3.6 | B |
| 2002a | 15 | 4.5 | 3.0 | 3.7 | 3.3 | C |
| 2002c | 15 | 5.0 | 4.1 | 5.0 | 4.3 | B |
| 2003a | 14 | 3.2 | 2.3 | 3.0 | 2.4 | D |
| 2003b | 14 | 3.1 | 3.1 | 2.3 | 2.5 | D |
| 2003c | 14 | 5.0 | 4.4 | 4.9 | 4.6 | A |
| 2004a | 13 | 5.0 | 3.4 | 5.0 | 3.8 | B |
| 2004b | 13 | 5.0 | 3.3 | 5.0 | 3.7 | B |
| 2006a | 11 | 3.0 | 3.4 | 2.4 | 2.6 | C |
| 2007 | 10 | 5.0 | 3.4 | 5.0 | 3.8 | B |
| 2013 | 4 | 5.0 | 4.9 | 5.0 | 4.9 | A |

a Definitions: *CY*, construction year; *T*, service time of check dam; *SI*right wing and *SI*left wing, condition index obtained from wing parts; *SI*spillway, condition index obtained from spillway part; *CI*, condition Index; *CG*, condition grade.