

APPENDIX M

WV DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER AND WASTE MANAGEMENT DAM SAFETY PROGRAM

LIST OF DEFICIENT DAMS

INTRODUCTION

A deficient dam is a structure that exhibits one or more design or maintenance problems that may adversely affect the performance of the dam during a major storm, or over a period of time, resulting in a potential for loss of life or property.

The WV Department of Environmental Protection (DEP), Division of Water and Waste Management (DWWM), Dam Safety Program maintains an inventory of dams in West Virginia within the jurisdiction size of the Dam Control and Safety Act (W. Va. Code 22-14). With several exceptions, DWWM regulates dams 25 feet or more in height and capable of impounding 15 or more acre-feet of water; OR 6 feet or more in height and capable of impounding 50 or more acre-feet of water. For additional information, please refer to W. Va. Code 22-14-3(e) or 47CSR34-2.10. Information is also available at DEP's webpage: <http://www.wvdep.org>

The DWWM Dam Safety program inventory includes approximately 350 dams of jurisdiction size. Of the 350 jurisdictional dams, 38 dams (10.8 percent) are considered deficient at the present time.

DWWM Dam Safety offered a List of Deficient Dams in response to a request for additional analysis from the WV Legislature's Joint Committee on Government Operations, Performance Evaluation and Research Division, on June 13, 2000. The program intends to issue updated lists periodically to reflect progress in identification of deficient dams and in the evaluation criteria utilized to prioritize the list.

To prioritize the dams, Dam Safety evaluates the following factors:

- storm capacity of the dam – percent of design storm handled by the dam;
- spillway condition;
- factor of safety – structural deficiencies;
- embankment or concrete structure condition;

- reservoir volume – magnitude of loss;
- downstream population – magnitude of loss;
- proximity of downstream population to the dam; and
- highway traffic – traffic density and speed limit.

A numeric score is assigned to each dam for each factor. The scores range from 20 (worst score) to 0 (best score). The cumulative score for the above factors is used to list the dams in priority order.

NOTE: Despite our best efforts and research, Dam Safety is not able to document all of the listed factors for all of the dams. Where information is lacking for a given factor, Dam Safety assigns that factor a value of “0*.” A score of “0*” ensures that no weight is given to that factor without the necessary information. A “0” score is reflected in the appropriate tables as a factor with sufficient information to have no weight.

Name of Dam	ID	Percent PMP Score (a)	Spillway Condition Score (b)	Factor of Safety Score (c)	Embankment Condition Score (d)	Reservoir Volume Score (e)	Height of Dam Score (f)	Downstream Population Score (g)	Population Proximity Score (h)	Highway Traffic Score (i)	Posted Speed Score (j)	Cumulative Score (a)+(b)+(c)+(d) +(e)+(f)+ (g)+(h)+(i)+(j)	Rank
Lower Salem Dam	03314	5	7	1	4	7	7	20	10	2	1	64	1
Upper Salem Dam	03301	5	7	2	4	9	6	12	4	4	5	58	2
Lake Washington Dam	07906	10	4	0*	7	9	4	8	10	3	3	58	3
Lough Lake Dam	06115	8	10	10	10	2	5	2	8	1	1	57	4
Burch Run Dam	05101	8	7	8	7	6	5	4	10	1	1	57	5
Deegan Lake Dam	03322	10	4	6	4	5	5	10	6	3	3	56	6
B & O Dam	07715	7	7	6	4	4	6	10	8	2	1	55	7
Charles Fork Dam	08705	1	1	0	4	10	9	20	8	2	0*	55	8
Hinkle Lake Dam	03328	9	7	0	4	2	4	12	10	3	3	54	9
Lynch Lake Dam	06116	9	10	8	8	2	5	2	8	1	1	54	10
Rock Lake Dam	04917	9	4	6	4	6	5	10	8	0	0	52	11
Bluewell # 2 Dam	05520	9	4	0	1	5	6	20	2	0	3	50	12
Bluewell # 1 Dam	05519	8	4	0	1	5	6	20	2	0	3	49	13
Old Keyser Dam	05722	6	7	0*	4	3	6	8	8	1	5	48	14
Upper Smith Dam	10705	10	7	0*	4	3	7	8	8	1	0*	48	15
Lake of Eden Dam	01102	10**	7	10	10	1	4	2	0*	4	0*	48	16
Scott Lake Dam	08304	3	4	6	1	3	4	6	10	3	5	45	17
Hurricane WS Dam	07909	8	4	10	4	3	2	4	8	0	0	43	18
Flat Top Lake Dam	08101	8	1	0	1	10	7	8	6	0*	1	43	19
Berwind Lake Dam	04702	9	4	0	1	8	6	4	6	1	3	42	20
Long Branch Dam	08903	6	1	2	4	7	6	14	0	0	0	40	21
Lake Trotter Dam	08704	7	7	10	7	3	5	0	0	1	0*	40	22
Poffenbarger # 1 Dam	03904	9	7	0	7	2	6	4	2	3	0*	40	23
Buffalo Lake Dam	03305	4	0	0	0	10	7	4	10	2	3	40	24

Moncove Lake	06301	4	4	2	5	10	6	4	0	1	3	39	25
Name of Dam	ID	Percent PMP Score (a)	Spillway Condition Score (b)	Factor of Safety Score (c)	Embankment Condition Score (d)	Reservoir Volume Score (e)	Height of Dam Score (f)	Downstream Population Score (g)	Population Proximity Score (h)	Highway Traffic Score (i)	Posted Speed Score (j)	Cumulative Score (a)+(b)+(c)+(d)+(e)+(f)+(g)+(h)+(i)+(j)	Rank
Maple Lake Dam	03327	7	4	0	1	5	5	4	6	2	3	37	26
Hatfield Lake Dam	01105	10	4	0	1	2	5	6	8	1	0*	37	27
Cacapon Res Dam	06502	1	1	10	4	4	5	0*	8	1	1	35	28
Bear Rock # 2 Dam	06902	6	4	8	4	5	4	4	0	0*	0	35	29
Cherry Lake Dam	02903	0*	7	0*	4	0*	4	6	6	3	5	35	30
Sun Valley Dam	08904	10	10	0	4	3	2	6	0	0	0	35	31
Old Bramwell Dam	05524	6	4	5	5	2	4	4	0	0	0	30	32
Cacapon Park Dam	06503	0*	4	0*	4	0*	5	0*	8	3	5	29	33
Lees Fishing Dam	04301	5	0*	4	0*	1	5	2	10	0*	0*	27	34
Bear Rock # 1 Dam	06901	6	4	2	4	3	4	2	0	0	3	28	35
Bear Rock # 3 Dam	06903	6	4	2	4	2	4	2	0	0	3	28	36
Asbury Lake Dam	09905	0*	5	0*	0*	2	4	10	4	0*	0*	25	37
New Bramwell Dam	05501	5	1	0	1	2	6	4	4	0	0	23	38
* no information													
** based on 100 year storm													

Name of Dam	ID	Downstream Town/County	Owner
Lake of Eden Dam	01102	Barboursville/Cabell	William T. Workman
Hatfield Lake Dam	01105	Barboursville/Cabell	Raymond G. Cyrus
Cherry Lake Dam	02903	New Cumberland/Hancock	Paul Settle
Upper Salem Dam	03301	Salem/Harrison	City of Salem
Buffalo Lake Dam	03305	Clarksburg/Harrison	City of Clarksburg
Lower Salem Dam	03314	Salem/Harrison	City of Salem
Deegan Lake Dam	03322	Bridgeport/Harrison	City of Bridgeport
Maple Lake Dam	03327	Bridgeport/Harrison	Maple Lake Club
Hinkle Lake Dam	03328	Bridgeport/Harrison	City of Bridgeport
Poffenbarger # 1 Dam	03904	Cross Lanes/Kanawha	Solco, Inc.
Lees Fishing Dam	04301	Mahoney Creek/Lincoln	Oren Johnston
Berwind Lake Dam	04702	Berwind/McDowell	WVDNR Wildlife Res
Rock Lake Dam	04917	Hammond/Marion	Rock Lake Club, Inc.
Burch Run Dam	05101	Wheeling/Marshall	WVDNR Wildlife Res
New Bramwell Dam	05501	Bramwell/Mercer	City of Bramwell
Bluewell # 1 Dam	05519	Bluewell/Mercer	Bluewell PSD
Bluewell # 2 Dam	05520	Bluewell/Mercer	Bluewell PSD
Old Bramwell Dam	05524	Bramwell/Mercer	City of Bramwell
Old Keyser Dam	05722	Keyser/Mineral	City of Keyser
Lough Lake Dam	06115	Osgood/Monongalia	Robert Lough
Lynch Lake Dam	06116	Osgood/Monongalia	Elza Hunt
Moncove Lake Dam	06301	Gap Mills/Monroe	WVDNR Parks & Rec
Cacapon Res Dam	06502	Sleepy Creek/Morgan	WVDNR Parks & Rec
Cacapon Park Dam	06503	Sleepy Creek/Morgan	WVDNR Parks & Rec
Bear Rock # 1 Dam	06901	Middle Creek/Ohio	WVDNR Wildlife Res
Bear Rock # 2 Dam	06902	Middle Creek/Ohio	WVDNR Wildlife Res
Bear Rock # 3 Dam	06903	Middle Creek/Ohio	WVDNR Wildlife Res
B & O Dam	07715	Newburg/Preston	City of Newburg
Lake Washington Dam	07906	Hurricane/Putnam	O'Dell

Hurricane WS Dam	07909	Winfield/Putnam	City of Hurricane
Flat Top Lake Dam	08101	Ghent/Raleigh	Flat Top Lake Assoc, Inc.
Scott Lake Dam	08304	Beverly/Randolph	Scott Lake Corporation
Lake Trotter Dam	08704	Spencer/Roane	City of Spencer
Charles Fork Dam	08705	Spencer/Roane	City of Spencer
Long Branch Dam	08903	Pipestem/Summers	WVDNR Parks & Rec
Sun Valley Dam	08904	Pipestem/Summers	Unknown
Asbury Lake Dam	09905	Dunlow/Wayne	Garry Harper
Tennants Farm Dam	10703	Tallyho/Wood	Tim Moore
Upper Smith Dam	10705	Parkersburg/Wood	Henry Oldaker

FACTORS AND ASSUMPTIONS USED TO RANK PRIORITY LIST

Storm Capacity of the Dam - Percent PMP Storm Score - Column (a)

The National Dam Inspection Program (NDIP) reports conducted by the US Army Corps of Engineers from 1978 – 1982 were utilized as the best existing source of information regarding a dam’s capacity to handle storms. The NDIP studied watershed runoff characteristics and spillway capacity of dams, however, the NDIP generally used storms less than those required by current regulations.

Current regulation requirements begin at the national standard of 100 percent Probable Maximum Precipitation (PMP – 27.5 inches of rain in six hours is average for West Virginia). With some provisions, high hazard potential (where loss of life is likely if the dam fails) dams are required to pass through spillways, or store in the reservoir, the PMP storm amount of water. The NDIP used 80 percent of the PMP (22 inches of rain in six hours) and, in some cases, the 100 year storm (4.5 inches of rain in six hours). As a result, the NDIP information is not accurate for current requirements, but in many cases is the best information available.

The ratio of peak inflow (flow into the reservoir) versus the maximum capacity of the spillways (flow out of the reservoir) was calculated to produce a percentage of storm water handling capability. The percentage of capability was then assigned a numeric score based upon ranges of values (see Table 1) to allow comparison. Higher numbers denote greater deficiency than lower numbers.

TABLE 1 – Percent of PMP Score for Column (a)

Percent of PMP	Numeric Score
0 – 10	10 (more deficient)
11 – 20	9
21 – 30	8
31 – 40	7
41 – 50	6
51 – 60	5
61 – 70	4
71 – 80	3
81 – 90	2
91 – 99	1 (less deficient)
100	0
No Information	0*

Spillway Condition Score – Column (b)

Spillway condition may vary depending upon:

- type of spillway (pipe, open channel, concrete chute);
- alignment problems;
- erosion in, under, or around the spillway;
- vegetation growth;
- blockage of spillways; and
- maintenance problems

The spillway condition score is assigned according to observations of the spillway, or spillways, at the dam. The inspecting engineer judges the overall condition of all spillways at the dam and assigns a condition score based upon a range of values (see Table 2) to allow comparison. Higher numbers denote greater deficiency than lower numbers.

TABLE 2 – Spillway Condition Score – Column (b)

Overall Spillway Condition	Score
Failed	10 (more deficient)
Poor	7
Adequate	4
Good	1
Excellent	0 (not deficient)
No information	0*

Slope Stability – Factor of Safety Score – Column (c)

The National Dam Inspection Program (NDIP) assumed conservative embankment strength parameters without benefit of subsurface investigation or laboratory documentation to calculate a slope stability factor of safety. The NDIP factor of safety value was assigned a numeric score based upon ranges of values (see Table 3) to allow comparison. Higher numbers denote greater deficiency than lower numbers.

TABLE 3 – Factor of Safety Score for Embankment Dams - Column (c)

Factor of Safety	Numeric Score
= 1.0	10 (more deficient)
1.0 – 1.1	8
1.11 – 1.2	6
1.21 – 1.3	4
1.31 – 1.4	2
1.41 – 1.49	1 (less deficient)
= 1.5	0

No Information	0*
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TABLE 3A – Sliding Factor of Safety Score for Concrete Gravity Dams - Column (c)

Factor of Safety	Numeric Score
= 1.0	10 (more deficient)
1.01 – 1.25	8
1.26 – 1.50	6
1.51 – 2.00	4
2.01 – 2.25	3
2.26 – 2.50	2
2.51 – 2.99	1
= 3.0	0 (not deficient)
No information	0*

Condition of Embankment or Structure – Embankment Condition Score – Column (d)

The condition of the structure is an important consideration in the overall deficiency of a dam. Earthen structures may be affected by:

- seepage;
- piping (internal erosion of embankment materials);
- slipping;
- sinkholes;
- vegetation growth;
- animal burrows; and
- erosion

Concrete structures may be affected by:

- misalignment of structures or sections;
- erosion;
- cracking or spalling;
- vegetation growth;
- seepage through cracks or around abutments; and
- lack of maintenance

The embankment or structure condition score is assigned according to observations of the embankment or concrete structure at the dam. The inspecting engineer judges the overall condition of the embankment or structure of the dam and assigns a condition score based upon a range of values (see Table 4) to allow comparison. Higher numbers denote greater deficiency than lower numbers.

TABLE 4 – Embankment/Structure Condition Score – Column (d)

Overall Structure Condition	Score
Serious Problem	10 (more deficient)
Poor	7
Adequate	4
Good	1
Excellent	0 (not deficient)
No information	0*

Reservoir Volume Score – Column (e)

A dam break analysis was not attempted for the prioritization. Effects from a potential dam break were estimated using several factors. The first factor used was the maximum water storage volume of the reservoir to show the raw amount of water that could be released by dam failure. The reservoir volume was assigned a numeric score based upon ranges of values (see Table 5) to allow comparison. Higher numbers represent more damage potential than lower numbers.

TABLE 5 – Reservoir Volume for Column (e)

Max Reservoir in Acre-Feet	Numeric Score
> 700	10 (more potential damage)
601 – 700	9
501 – 600	8
401 – 500	7
301 – 400	6
201 – 300	5
101 – 200	4
51 – 100	3
26 – 50	2
15 – 25	1 (less potential damage)
No Information	0*

Height of Dam Score – Column (f)

The height of the dam determines the kinetic energy of water released by a dam failure. Assuming the reservoir is at or above the embankment crest upon failure, a score was assigned to the dam based upon the height of the dam measured from the downstream toe of the embankment at the natural bed of the stream or watercourse, vertically to the crest of the dam (excluding spillways). The score (see Table 6) begins at six feet in height (the lowest height defined as a “dam” and extends to 100 feet in height or greater. The average height of all non-coal dams is approximately 33 feet. The maximum height is 267 feet (Conner Run Dam, Marshall County).

TABLE 6 – Height of Dam for Column (f)

Dam Height in Feet	Numeric Score
> 100	10 (more consequence)
81 – 100	9
61 – 80	8
41 – 60	7
31 – 40	6
26 – 30	5
21 – 25	4
16 – 20	3
11 – 15	2
6 – 10	1 (less consequence)
No Information	0*

Downstream Population Score – Column (g)

The next factor related to potential for loss of life was an estimation of the number of people living downstream in the inundation area. Dam Safety counted the number of houses within one mile downstream from the dam at the dam crest elevation or below using available USGS maps last updated in the mid-1970's. We then assumed two-person occupancy per house and assigned a numeric score based upon the total number of people living below the dam (see Table 7) to allow comparison. Scores are weighted to emphasize human life factor. Higher numbers represent higher loss of life potential than lower numbers.

TABLE 7 – Downstream Population for Column (g)

Estimated Number of People	Numeric Score
> 80	20 (higher loss of life potential)
71 – 80	18
61 – 70	16
51 – 60	14
41 – 50	12
31 – 40	10
21 – 30	8
11 – 20	6
6 – 10	4
1 – 5	2 (lesser loss of life potential)
0	0
No Information	0*

Proximity of Population Score – Column (h)

The downstream hazard potential of each dam is determined upon the presence of dwellings, businesses, roadways, railroads, and utilities in the potential flood wave, assuming the dam fails. A flood released by a failing dam will decrease in magnitude as it progresses downstream due to gravity spreading over distance, widening of the valley, or decrease in gradient. Conversely, obstructions, curves in the stream, narrowing of the valley or a steeper gradient may cause the flood wave to deepen or gain in velocity.

The proximity of population score is assigned according to observations of the relative position of the dam to downstream dwellings, roads, or other structures. The inspecting engineer measures the overall distance from the dam to downstream structures and assigns a condition score based upon a range of values (see Table 8) to allow comparison. Higher numbers denote greater deficiency than lower numbers.

TABLE 8 – Proximity of Population for Column (h)

Distance to First Structure in Feet	Score
< 500	10 (more proximate)
501 – 1000	8
1001 – 2000	6
2001 – 3000	4
3001 – 4000	2
4001 – 5000	1 (less proximate)
> 5000	0
No information	0*

Highway Traffic Score – Column (i)

Another factor related to potential for loss of life was the possible overtopping of highways downstream due to failure of an upstream dam. If a downstream highway may overtop, a score was assigned based upon the West Virginia Division of Highways (WVDOH) Traffic Count Maps completed in 1993 using ranges of people per unit time (see Table 9). If there is no downstream highway that will be affected, the score must be zero. Higher numbers represent higher loss of life potential than lower numbers.

TABLE 9 – Highway Traffic Score for Column (i)

Traffic Count (Number of Vehicles per Day)	Numeric Score
>20,000	5 (higher loss of life potential)
10,001 – 20,000	4
5,001 – 10,000	3
1,001 – 5,000	2
101 – 1,000	1 (lesser loss of life potential)
< 100	0
No Information	0*

Posted Speed Limit Score – Column (j)

The last factor related to loss of life was the posted highway speed limit (see Table 10). According to WVDOH, cars will hydroplane when tire tread depth is exceeded by the depth of water on the road above speeds of approximately 20 miles per hour. The faster the car is traveling, the more unlikely it is that the driver will have sufficient time to react before driving into water. Assuming the presence of a downstream highway that may be overtopped, a score was assigned based upon the posted speed limit at the bridge or road fill crossing the stream below the dam. If there is no downstream highway that will be affected, the score must be zero. Higher scores reflect decreased driver reaction time.

TABLE 10 – Highway Posted Speed Limit Score for Column (j)

Posted Speed Limit (mph)	Numeric Score
> 40	5 (less reaction time)
30 – 40	3
20 – 25	1
< 15	0 (more reaction time)
No Information	0*

HISTORY OF DEFICIENT DAMS LIST

The number of deficient dams through time depends upon when counting begins. The Deficient Dams List was started in approximately 1995 using the Corps of Engineers National Dam Inspection Program (NDIP) conclusions as an initial determination. If the NDIP report determined the dam was high hazard potential, unsafe - or high hazard potential, needs additional investigation – Dam Safety placed the dam on the deficient dams list. In 1995, there were approximately 50 dams on the list. If the count had started in 1982, approximately 68 dams would have been on the list. Just after the Buffalo Creek Disaster in 1973, the list would have additionally included approximately 100 coal related dams.

Although Dam Safety did not list deficient dams prior to 1995, non-coal dams with NDIP reports that would have met the selection criteria through time are listed in Table 11. After repair or removal was completed (usually about one year after Dam Safety issued approval), the dam was removed from the list (or would have been removed, if there had been a list prior to 1995). Table 11 is organized by county location and includes the approximate date the dam would have been removed from the deficient dams list. Table 12 provides the same information sorted by removal date.

TABLE 11 – History of Deficient Dams - by County

Dam Name	ID	Town/County	Approx Removal Date	Number
Teter Creek Dam	00101	Nestorville/Barbour	01/10/02	1
Belington WS Dam	00102	Streamtown/Barbour	06/15/98	2
Sleepy Creek Dam	00301	Michaels Chapel/Berkeley	05/15/85	3
Sleepy Hollow Dam	00303	Hedgesville/Berkeley	07/17/02	4
Castleman Run Dam	00916	Bethany/Brooke	01/18/96	5
Lakeview Dam	01104	Barboursville/Cabell	12/20/90	6
Plum Orchard Dam	01902	Mossy/Fayette	11/13/91	7
Boley Lake Dam	01907	Glen Ferris/Fayette	06/25/98	8
Warden Lake Dam	03101	Wardensville/Hardy	10/18/94	9
Lake Floyd Dam	03319	Marshville/Harrison	05/03/02	10
Lake Dinty Moore Dam	03915	Mill Creek/Kanawha	03/01/93	11
Lake Chaweva Dam	03901	Cross Lanes/Kanawha	02/15/02	12
Poffenbarger #2 Dam	03916	Cross Lanes/Kanawha	9/2000	13
Mod Branch #1 Dam	04709	Hemphill/McDowell	06/14/96	14
Twin Branch #1 Dam	04711	Davy/McDowell	10/16/90	15
Rachel H&F Dam	04904	Rachel/Marion	10/20/83	16
Mannington Dam	04921	Mannington/Marion	09/30/86	17

Dam Name	ID	Town/County	Approx Removal Date	Number
Four States Dam	04930	Four States/Marion	01/07/83	18
Jimmy Lewis Dam	05521	Pinnacle/Mercer	07/16/91	19
Ada Dam	05522	Ada/Mercer	03/31/82	20
Laurel Lake Dam	05901	Canterbury/Mingo	1979	21
Watoga Dam	07501	Seebert/Pocahontas	08/17/98	22
Lake O Woods Dam	07703	Bruceton Mills/Preston	09/15/86	23
Terra Alta Lake Dam	07721	Terra Alta/Preston	06/07/99	24
Ranch Lake Estates Dam	07910	Fraziers Bottom/Putnam	3/1996	25
Pennsboro #2 Dam	08511	Pennsboro/Ritchie	08/12/80	26
Miletree #2 Dam	08703	Spencer/Roane	10/06/87	27
Thomas Reservoir Dam	09306	Thomas/Tucker	01/27/82	28
Thomas Dam	09307	Thomas/Tucker	11/2000	29
Lake Washington Dam	10701	Belleville/Wood	05/18/92	30
A & O Dam	10704	Murphytown	03/21/00	31

TABLE 12 – History of Deficient Dams - by Date Removed from List

Dam Name	ID	Town/County	Approx Removal Date	Number
Laurel Lake Dam	05901	Canterbury/Mingo	1979	1
Pennsboro #2 Dam	08511	Pennsboro/Ritchie	08/12/80	2
Thomas Reservoir Dam	09306	Thomas/Tucker	01/27/82	3
Ada Dam	05522	Ada/Mercer	03/31/82	4
Four States Dam	04930	Four States/Marion	01/07/83	5
Rachel H&F Dam	04904	Rachel/Marion	10/20/83	6
Sleepy Creek Dam	00301	Michaels Chapel/Berkeley	05/15/85	7
Lake O Woods Dam	07703	Bruceton Mills/Preston	09/15/86	8
Mannington Dam	04921	Mannington/Marion	09/30/86	9
Miletree #2 Dam	08703	Spencer/Roane	10/06/87	10
Twin Branch #1 Dam	04711	Davy/McDowell	10/16/90	11
Lakeview Dam	01104	Barboursville/Cabell	12/20/90	12
Jimmy Lewis Dam	05521	Pinnacle/Mercer	07/16/91	13
Plum Orchard Dam	01902	Mossy/Fayette	11/13/91	14
Lake Washington Dam	10701	Belleville/Wood	05/18/92	15
Lake Dinty Moore Dam	03915	Mill Creek/Kanawha	03/01/93	16

Dam Name	ID	Town/County	Approx Removal Date	Number
Warden Lake Dam	03101	Wardensville/Hardy	10/18/94	17
Castleman Run Dam	00916	Bethany/Brooke	01/18/96	18
Ranch Lake Estates Dam	07910	Fraziers Bottom/Putnam	3/1996	19
Mod Branch #1 Dam	04709	Hemphill/McDowell	06/14/96	20
Belington WS Dam	00102	Streamtown/Barbour	06/15/98	21
Boley Lake Dam	01907	Glen Ferris/Fayette	06/25/98	22
Watoga Dam	07501	Seebert/Pocahontas	08/17/98	23
Terra Alta Lake Dam	07721	Terra Alta/Preston	06/07/99	24
A & O Dam	10704	Murphytown/Wood	03/21/00	25
Poffenbarger #2 Dam	03916	Cross Lanes/Kanawha	9/2000	26
Thomas Dam	09307	Thomas/Tucker	11/2000	27
Teter Creek Dam	00101	Nestorville/Barbour	01/10/02	28
Lake Chaweve Dam	03901	Cross Lanes/Kanawha	02/15/02	29
Lake Floyd Dam	03319	Marshville/Harrison	05/03/02	30
Sleepy Hollow Dam	00303	Hedgesville/Berkeley	07/17/02	31

If you have questions regarding the List of Deficient Dams, please contact:

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