



Dam Safety in the United States

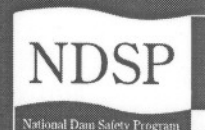
A Progress Report on the National Dam Safety Program

Fiscal Years 2006 and 2007

FEMA P-759 / February 2009



FEMA



Appendix C: Table 4: Summary Status of Dams for Federal Agencies (FY 2006–2007)

DEPT. Agency	DAM INVENTORY				PERIODIC INSPECTIONS			
	Total	Hazard Classification			Total	Since Last Report		
		High	Sig.	Low		Formal	Inter.	Spec/Const
USDA (Total)	28333	2142	2407	22333	18556	673	11284	6599
ARS	1	0	0	1	0	0	0	0
USFS	1042 ¹	51	113	878	-	-	-	-
NRCS	27211 ²	2091	2294	22333	18555 ³	673	11283	6599
RHS	25 ⁴	-	-	-	-	-	-	-
RUS	55 ⁵	-	-	-	-	-	-	-
DOD (Total)	875	495	152	226	397	335	62	0
USACE	608	453	122	33	254	214	40	0
Army	213	35	22	156	117	95	22	0
Navy	31	5	3	21	16	16	0	0
Air Force	23	2	5	16	10	10	0	0
DOE	15	2	1	12	15	15	0	0
DOI (Total)	2697	474	139	2084	1017	237	292	318
BIA	859	92	34	733	273	46	30	197
BLM	590	8	1	581	183	0	183	0
BOR ⁶	479	334	41	104	242	84	78	80
USFWS	193 ⁷	15	18	160	88	88	- ⁸	40 ⁹
NPS	502	16	33	453	19	19	0	0
OSM	73	8	12	53	210	0	0	0
USGS	1	1	0	0	2	0	1	1
FERC	2528	758	199	1571	4297	366	3287	299/345
IBWC	7	3	1	3	430¹⁰	6 ¹¹	424	0
MSHA (Total)	2254	352	222	1680	0	0	6826 ¹³	0
Coal	650	221	68	361	3128	0	3128	0
M/NM	1604	131	154	1319	3698	0	3698	0
NRC	9	0	0	9	7	7	0	0
TVA	49¹⁴	34	11	4	375¹⁵	120	245	10 ¹⁶

1 Dams owned by FS; approximately 1,330 non-FS dams are also on FS lands.

2 Dams designed and/or funded by NRCS, includes dams with unknown hazard classifications.

3 Inspections are performed by NRCS and non-NRCS organizations.

4 Dams with active loans in RHS portfolio.

5 Dams financed by RUS.

6 Reclamation also performed 174 annual site examinations in FY 2006 and an estimated 165 will be completed in FY 2007.

7 FWS has identified approximately 60 additional impoundments that are included in the NID and owned by FWS that will be inspected and added to the Bureau's dam inventory after verifying that the dams meet inventory size criteria in accordance with NDSP and Department definitions.

8 Inspections are performed by FWS station personnel on a continuing basis.

9 FWS performs quality assurance and construction administration activities on an ongoing basis for all dams and dam construction activities. FWS conducted 15 post flood inspections at Wichita Mountains WR in May 2007.

10 Amistad, Falcon, Anzalduas, and Retamal are inspected weekly. Quarterly inspections are performed at Falcon Dam.

11 Performed formal inspections at Morelos Dam and American Dam in 2006 and Amistad, Falcon, Retamal, and Anzalduas Dams in 2007.

INVESTIGATIONS & STUDIES		DAM SAFETY MODS.		DAMS WITH EAP'S	
'06-07	Active	'06-07	Active	High	Sig.
46	82	18	55	815	182
0	0	0	0	0	0
-	-	-	-	-	-
46	82	18	55	815	182
-	-	-	-	-	-
-	-	-	-	-	-
10	27	5	25	482	72
6	20	3	23	450	56
0	0	1	1	31	16
4	4	1	1	1	0
0	3	0	0	0	0
0	0	1	0	2	1
196	88	23	24	212	87
42	22	3	9	65	33
12	0	0	0	2	1
123	58	12	5	334	41
15	7	6	2	15	18
1	1	2	8	16	25
3	0	0	0	8	10
0	0	0	0	1	0
99	169	44	74	758	199
4 ¹²	0	0	0	3	1
16	0	0	0	109	21
7	0	0	0	102	2
9	0	0	0	7	19
0	0	0	0	0	0
4 ¹⁷	2	1 ¹⁸	1	34 ¹⁹	11

- 12 Performed the following studies: 1) evaluate the gates operations for Penstock Gate No. 4 for Anzalduas Dam; 2) structural analysis of spillway bridge deck for Amistad Dam; 3) technical evaluation and analysis for the dam power plants for Amistad and Falcon Dams; and 4) apron and structural analysis and evaluation for American Dam.
- 13 Inspections performed by dam-safety engineers and by mine inspectors who have been trained to recognize signs of instability and other potentially hazardous conditions.
- 14 Includes only main dam projects. Total, including associated saddle dams and dikes, is 82.
- 15 Includes Civil, Mechanical, and Electrical Inspections. Number of monthly inspections (Civil, Mechanical, and Diesel Generator) by site staff is 2696.
- 16 Ten special inspections (not periodic) performed in FY 2006-2007 are included in the total.
- 17 The four studies include Wilson Main Lock Gate Block (active); Bear Creek Dam Seepage (active); Chickamauga Dam Spillway AAR; and Fontana Dam AAR.
- 18 Blue Ridge Dam penstock repair, intake tower, and embankment seismic strengthening.
- 19 Saddle dams and dikes are included in main dam EAP's.