



McGaffey Lake: Decommissioning Procedures and Alternatives

January 15, 2015

New Mexico State Game Commission Meeting

Santa Fe, NM

The seal of the Tennessee Wildlife Resources Agency is located in the top left corner. It features a central illustration of a bear's head, surrounded by a circular border containing the text "TENNESSEE WILDLIFE RESOURCES AGENCY" and "GAME & FISH".

History

Office of State Engineer: Dam Safety Bureau

- In 2005 the Dam Safety Rules and Regulations were changed.
- Required dam owners to have an Emergency Action Plan and an Operation and Maintenance Manual on dams classified as high and significant hazard dams.
- Required dam owners to address undersized spillway capacities and other deficiencies through annual inspections.



State Requirements to breach or decommission

Office of State Engineer: Dam Safety Bureau

- Must submit a plan for approval by the Office of State Engineer as per 19.25.12.19.B
- Must have a professional licensed engineer prepare a breach plan.
- Must evaluate the potential effects of the breach on life, property and environment downstream.

New Mexico Environment Department

- Would require State and Federal Clean Water Act permitting

Federal Requirements

National Environmental Policy Act (NEPA)

- Environmental Impact Statement and Biological Opinion.
- National Historic Properties Act.
- Clean Water Act. (401 and 404 permitting)
- Wildlife and Sport Fish Restoration (Federal Aid) grants and effects determinations.

US Forest Service

- Department would be required to follow stipulations in permit for structures on Forest Service Lands. ie: Removal of structures and restoration of the site.

Estimated Costs:

- **Engineering Breach or rehab Plan: \$150K to \$300K.**
- **NEPA (EIS, Biological Opinion): \$150K to \$200K. (high estimate)**
- **Must meet approvals of State Engineer and US Fish and Wildlife Service.**



Other Options for McGaffey Lake Dam



Questions?

Department Owned Dams and Associated Angler Use, Stocking, and Economic Value

Water	Angler days/year*	Economic value to NM**	Fish stocked per year***
Lake Roberts	36,333	\$2,179,980	22,500 rainbow trout, 3,550 channel catfish
Bear Canyon	21,720	\$1,303,200	13,750 rainbow trout, 1,100 channel catfish
Snow Lake	11,509	\$690,540	10,000 rainbow trout
Quemado Lake	41,101	\$2,466,060	20,000 rainbow trout, tiger muskie as needed
Clayton Lake	20,624	\$1,237,440	20,000 rainbow trout, 4,400 channel catfish, 200,000 walleye fry, occasional largemouth bass
Eagle Nest Lake	122,639	\$7,358,340	600,000 rainbow trout, 200,000 kokanee salmon
Fenton Lake	67,401	\$4,044,060	29,300 rainbow trout
McGaffey Lake	3,802	\$228,120	16,900 rainbow trout, channel catfish. No longer stock since lake is dry
Laguna del Camp	2,660	\$159,600	4,950 rainbow trout
Hopewell Lake	6,300	\$378,000	11,130 rainbow trout
Jackson Lake	9,253	\$555,180	15,500 rainbow trout

*Average angler days from 1998 to 2004

**Based upon USFW 2011 Survey of Fishing, Hunting, and Wildlife Associated Recreation of \$60 per angler day

***As scheduled in the FIMS



Annual Average Maintenance Costs

Quarterly inspections – 1 person – 1 day X 4 = **\$1000.00**

Semi-annual Maintenance - 2 people – 4 days = **\$2000.00**

Rodent Control - semi-annual contracted service = = **\$1000.00**

Total = \$4,000.00