

## Coopers Mills Dam - Rock Ramp Proposal – Option B

The Coopers Mills Dam on the Sheepscot River, owned by the Town of Whitefield, is in significant disrepair and no longer consistently provides adequate water for fire protection or fish passage. During the last several years, several groups have considered the problem:

- The Town of Whitefield selectmen have identified maintaining a fire water supply and minimizing costs as key concerns to the town.
- The Coopers Mills Fire Department requires dependable water for fire protection.
- Natural resource agencies and conservation groups have identified fish habitat and fish passage as key issues.
- The Coopers Mills Dam Committee has considered the option of hydropower development.

All of these groups agree that improving fire protection and fish passage is important. All agree that: “Doing nothing is not an option.”

### Dam Condition

Dam inspections conducted by five engineers have identified significant structural problems at the dam. Repairs in the 1980’s have not held up well and similar repairs are unlikely to provide a long term solution. Problems identified by the engineers include: leaking gates, a leaking crack in the east abutment, deteriorated concrete on the upstream face and concrete cap of the dam and deteriorated masonry.

### Proposed Solution

Representatives of the Coopers Mills Fire Department (Tim Yorks and Scott Higgins), Trout Unlimited (TU), US Fish and Wildlife Service (USFWS) and the Sheepscot River Watershed Council (SRWC), have been working to identify a solution to these issues.

On November 15, 2007, the Town of Whitefield will vote between two options concerning the Coopers Mills Dam:

- Option A is to repair the dam in order to improve fire protection and fish passage.
- Option B is to remove the dam and build a rock ramp in order to improve fire protection and fish passage.

### **Option B, the removal of the dam and the construction of a rock ramp:**

- Provides dependable water supply for fire protection and improves access for fire protection equipment, to the satisfaction of the Coopers Mills Fire Department.
- Provides more reliable and natural fish passage than dam repair, and will require less maintenance at less cost.
- Can be funded entirely with a combination of grants dedicated to fisheries restoration. \$300,000 in funding has already been pledged for the project, if the town votes for the rock ramp proposal. In contrast, dam repair is likely to be funded primarily by the town, and the cost of operation and maintenance is higher.

**For these reasons, this report recommends that the Town of Whitefield vote to:**

- **Remove the Coopers Mills Dam and build a rock ramp.**

## Alternatives Analysis & Cost to Town

Alternative	Construction Costs	Annual Maintenance Costs	Fire Protection	Fish Passage	Funding Available From Sources Other than Whitefield	TOTAL 30 year costs to Town residents
Dam Repair and Fish Ladder Repair  (full 30 year repair per Kleinschmidt specifications)	\$192,000 for dam repair  \$26,000 for fishway repair	\$6,000	Water supply for fire fighting consistently available.	Fish passage more reliable than current conditions, but not ideal for all species. Repairs may impair passage for American eel.	None  May be possible to apply for grants for fish ladder repairs.	Up to \$ 372,000
Dam Removal w/ Rock Ramp & Hydrant Upstream  (per Kleinschmidt specifications and paid for by 3 <sup>rd</sup> parties)	\$266,000	\$2,800  *Similar structures constructed in Maine have not required annual maintenance	Water supply for fire fighting consistently available. According to fire department staff, project will improve access and increase number of fire trucks that can use dry hydrant at the same time.	Fish passage restored to more natural conditions; fish passage may not be ideal for some species.	\$200,000 from Maine Yankee Natural Resources Damage Settlement  \$100,000 from USFWS  Matching funds for Maine Yankee Settlement may be available from NOAA Fisheries Service	Up to \$ 84,000