

Dam Advisory Committee  
October 17, 2011

In attendance: Mac Ray, Rob and Mitzie Turnbull, Scotty Kilbreth, Polly Bussinere, Gary Dougherty, and Judy Hamilton

**Bowman Constructors/Construction Change Directive**

Terry Ann Stevens (CDBG), the Canton selectmen, Mac Ray, Kevin Cooley (Kleinschmidt) and Bowman signed off on a change in the construction design of the new dam when excavation failed to find bedrock well below the 10' expected levels. Kleinschmidt engineer, Kevin Cooley, redesigned the structure using "keyways" to anchor the dam's foundation instead of pursuing bedrock. The overall costs previously believed necessary because of increased excavation are now expected to be "a wash" with the new engineering designs for the dam's foundation. "Keyways", two 3' deep trenches across the streambed, filled with rebar and concrete, will anchor the foundation and prevent water flow from undercutting the new structure. First the excavated hole was filled with a cement-like material called "flowable fill" raising the stream bottom, further preventing undercutting of the dam and decreasing the foundation thickness requirements. The first snag has been resolved, everyone is working together keep construction on schedule and the cost increase is considerably less than originally expected.

The "keyways" require clean excavation and use no forms for rebar and cement. Bowman is prepared to pour these on Tuesday, the 18<sup>th</sup>. The longer the rain holds off the easier this will be to accomplish. Once the "keyway" anchor trenches are completed, the foundation and the concrete dam will follow.

Water levels in the lake are considerably higher than the traditional drawdown levels expected at this time of year because of the rain and the dewatering requirements for construction. Everything is being done to redirect the flow around the construction site and pass water from and lower water levels in the lake with the use of a large culvert, numerous pipes and multiple water pumps.

Sheet piling was driven over the weekend to form the dam abutments to secure the dam to the stream embankments. Sheet piling will prevent water from cutting into the banks and keep water flow in the stream.

The old dam is down, the powerhouse has been filled with riprap and concrete wall from the old dam will remain to direct the flow downstream. The old spillway gate has been opened up to allow increased downstream flow in times of high water.

**Donation of trees** - Sue Gammon secured free trees for the dam and trail sites in Canton. Nineteen or twenty of these trees were planted in Mark Blanchette's garden until the dam property is ready for landscaping. The total donation of trees to Canton is valued at \$10,000 + which will be used as match for one of the project grants. Delivery charges for the trees, approximately \$600, will come from project funding and also be used for match.

**EPA cleanup grant** – The required public notification and comment period for the federal cleanup funds ended last week and Canton is waiting for the letter, which releases the \$200K grant funds and start date for the cleanup project.

Brian Beneski, DEP Brownfields manager, is organizing a meeting with Canton, state Brownfields officials and the EPA officials assigned to the Canton project. Mac is working to arrange this kickoff meeting for the next dam Advisory Committee meeting on November 7<sup>th</sup>. Along with a project schedule, issues of Canton's participation in the Voluntary Response Action Program to limit liability and landscaping of the stream embankments to control sumac and vegetation in riprap are proposed. Mac will check with Canton Code Enforcement officer, Jack Plumley, regarding what can be done on the embankments and what permitting is required.

The large pile of hay-covered material on site is silt and clean fill from the streambed excavation. Some of this material will be used to back fill the stream banks and the rest will be used for the 8" marker barrier cover required in the tannery cleanup project. This becomes part of the required EPA grant match and thus can be seen as "selling this fill to the feds". Much of the piles of rocks and boulders will also be used in the stream riprap up and downstream of the new dam and wherever such material is needed –to meet match requirements for one grant or another.

**Dam finances and budget** – With construction of the replacement dam to be completed by December, funds will be needed to complete payment of construction bills. CDBG funds, MOHF grant and the lake association capital campaign fundraising to bridge the gap between grants and total costs will be used. Canton selectmen, Scotty Kilbreth and Jackie Conant, will secure a loan from Bangor Savings Bank as approved by Canton voters on November 5, 2009 for approximately \$70,000 in anticipation of these billing invoices over currently available funds. The loan will be repaid as the lake association fundraising pledges and donations come in. Canton resident and lake association treasurer, Gary Dougherty, has agreed to assist Canton grant administrator, Kathy Hutchins, while she is out on medical leave. Gary will keep this committee informed with periodic project financial reports.

Mac requested that the lake association provide this group with an idea of the area needed for commemoration of memorials and donations to the capital campaign. Appropriate space needs to be reserved for this purpose as these various projects near completion.

**Multipurpose bridge project** – Sue Gammon has agreed to help Polly Bussiere with the Recreational Trails Program grant to cover the cost of building materials. Bridge design engineer and Hartford resident, Kevin Chamberlain, has provided a revised budget for the project, which includes design/engineering services, construction, equipment rental, materials, labor, and project administration. The grant will cover the cost of materials and construction labor is to come from volunteers. Kevin Cooley (Kleinschmidt engineer for IF&W) will be asked to provide pictures of the boat ramp project to include with the grant application to give an inclusive picture of how the bridge is an integral part of the dam property projects.

**Next meeting will be Monday, November 7, 2011** at 6:30 at the Canton town office. The proposed agenda is the kickoff meeting for the EPA cleanup grant project.

Submitted by,  
Judy Hamilton, Advisory Committee secretary

