

LBWID Operations Director's Report

(Nov. 2010 – Jan. 2011)

Engineering/Projects

Concrete restoration for the dam (update)

- In early January 2011 the Virginia Division of Dam Safety's regional engineer, Rob Vanlier, gave verbal approval of the preliminary design plan for the concrete restoration of the dam.
- The next step in the approval process is for WR&A to complete the detailed design plans and submit them to the Division of Dam Safety for final approval.
 - WR&A is now estimating that they will have the final design plans completed by mid to late February 2011
 - The Virginia Division of Dam Safety has stated that once received they can have the final plans approved and a restoration permit issued in as little as two weeks.
- In addition to the final design plans WR&A is continuing to make progress developing the bid solicitation documents and all other documents needed for the design phase. WR&A is anticipating having all these documents completed by the late March to mid April 2011.
- The aforementioned schedule will still give a cushion of at least 5 months before the project is actually advertised for bid.
 - We are planning to advertise the project for bid in mid September 2011, have the project awarded by mid to late December 2011, and actual construction starting mid March to early April 2012.

Cathodic protection system interference with lake level sensor # 1 (new)

- With assistance from Marty Mandelberg (Lake Barcroft resident and electrical engineer) LBWID was able to resolve an electrical interference to lake level sensor #1 caused by the dam's cathodic protection system.
 - The cathodic protection system's rectifier converts AC current to DC current. The DC current then is sent to the cathodic protection system's sacrificial anodes that are placed under water along the bascule gate, trash rack, and small spillway. The rectifier was still allowing a fair amount of unfiltered AC current to be sent out to the anodes. It was the AC current that was causing interference to lake level sensor #1.
 - Lake level sensor #1 is located in the cathodic protection field.
 - The solution to the problem was to install what is called a "filter choke" on the output of the rectifier to drastically reduce the amount of AC current being sent to the anodes and the cathodic protection field.
 - The cost of the fix was \$250.00.
 - Mr. Mandelberg kindly volunteered his time to LBWID.

Dam hydraulic cylinder testing program (update)

- LBWID is continuing to perform the hydraulic cylinder testing sessions once a month.
 - Each test session lasts 6 hours.
 - The data from these tests will help LBWID and WR&A determine the condition of the hydraulic cylinders internal piston rings.
- The LBWID will continue conducting these tests until April of this year (2011) and then send all collected data to WR&A for analysis.

Operations

FY-2010 Financial Audit (new)

- LBWID has submitted all FY-2010 financial records to Jones and McIntyre PLLC for auditing.
 - LBWID is anticipating getting Jones and McIntyre's audit report by mid to late February 2011.
 - Once the audit report is completed a copy will be sent to the Northern Virginia Soil and Water Conservation District for their review.
 - A copy will also be on file at LBWID for anyone to review.

Winch conversion on Covemaster dredging barge (new)

- LBWID staff has been working this winter on removing electric (12 volt) powered winches that raises and lowers the Covemaster anchoring poles (spuds) and installing new hydraulic powered winches.
 - It had become increasingly difficult to keep the 12 volt batteries that powered the electric winches charged, and there was no way to charge them from the mini-excavator that is mounted to the barge without interfering with the mini-excavators ability to rotate 360 degree.
 - Less than fully charged batteries will cause damage to the electric winches and drastically shorten their normal useful lifespan.
 - The new hydraulic winches can be powered by the mini-excavator by diverting the machines hydraulic power that drives the machine's track motors to the new hydraulic winches.
 - This is accomplished by installing 2 selector valves (one for each track motor) on the undercarriage of the mini-excavator and re-plumbing some of the factory hydraulic lines.
 - The selector valves will allow hydraulic fluid to be diverted away from the 2 track drive motors to the 2 new winches. The operator of the barge mounted mini-excavator will be able to use the in cab

track control levers to then operate the tracks or winches, depending on which one the selector valves are set to operate.

- Once the mini-excavator is secured to the barge the track drive motors are not in use.
- The cost of this project is expected to be \$5,000.00 (hydraulic winches and parts)
 - LBWID staff is doing all the work in house.

Dam Emergency Action Plan Orientation Seminar (new)

- On November 22, 2010 LBWID held its annual Dam Emergency Action Plan Orientation Seminar.
 - In attendance were:
 - Davis Grant, LBWID Operations Director
 - Charles de Seve, LBWID Trustee Chairman
 - Mark Penn, City of Alexandria Emergency Management Coordinator
 - Davis McKernan, Fairfax County Emergency Management Coordinator
- The purpose of the seminar is to bring together the plan's participating agencies to insure that they are familiar with the plan and to review the information in the plan and make any needed changes to keep it accurate and workable.
- Overall the seminar went very well and as a result a revised emergency action plan was issued to all participating agencies and persons earlier this month.
 - The revisions were mostly centered on updating contact persons and telephone numbers on the plan's two notification charts.
- In addition to the aforementioned seminar LBWID staff held an Emergency Action Plan staff training session on January 20, 2011.

Preparations for 2011 spring /summer season (new)

- LBWID staff has been working hard during this winter season to prepare for the 2011 spring and summer season.
 - Tools and equipment is being serviced and or repaired.
 - Supplies are being inventoried and or ordered.
 - LBWID compound is being cleaned and organized
 - Evaluation of previous year's performance.
 - Projects are being planned and budgeted for.
 - Continued employee training on various aspects of LBWID.

2011 LBWID Annual Dinner Meeting (new)

- The next LBWID public meeting will be the 2011 LBWID Annual Dinner Meeting.
 - Once the date (normally late April), time, and location for this meeting have been determined the information will be posted on Lakelink, in the Lake Barcroft Newsletter, and on the LBWID's and LBA's websites.

Other Matters

2011 LBWID No-Phosphorous Fertilizer Program *(new)*

- Due the common availability of no-phosphorous fertilizer at the local home and garden stores LBWID will no longer be distributing it to the residents of Lake Barcroft.
 - The original reason for the LBWID's no-phosphorous fertilizer program was that it was difficult to purchase it locally and LBWID wanted to make it available to the residents because it was better for the lake.
- The LBWID's no-phosphorous fertilizer program will still be active but it is transitioning to an informational/education program.
 - Periodically LBWID will distributing informational to the residents of Lake Barcroft regarding the best practices of lawn and garden maintenance while keeping the health of the Lake and watershed in mind.
 - LBWID will be recruiting members of the community to volunteer to help with this program.

Respectfully,
Davis Grant
LBWID Operations Director