

Upper Delaware Council  
**WATER USE/RESOURCE MANAGEMENT COMM. MEETING MINUTES**  
**June 15, 2010**

Committee Members Present: Serio, Chase, Boyar, Keesler, Rando, Ritter  
Committee Members Absent: McKay, Shafer  
NPS Partner: K. Szupillo  
Advisory Members: None  
Staff: Douglass, Soete, Coney, Ramie  
Guests: A. Willard

The UDC's Water Use/Resource Management Committee held its monthly meeting on Tuesday, June 15, 2010 at the Council office in Narrowsburg, NY. Chairperson Jim Serio called the meeting to order at 7:05 p.m. A motion by Boyar seconded by Chase to approve the May 18 meeting minutes was carried. There was no public comment on the agenda.

**Old Business**

**Delaware River Sojourn Update:** Ramie reported the Delaware River Sojourn Steering Committee held its last two meetings on June 1 and 15 in preparation for the Delaware River Sojourn commencing June 20. The Early Bird discount on registrations was extended to June 18; save \$10. The preliminary numbers for participants for the first three days of the event in the Upper Delaware Section is running from 70 to 80 each day. The maximum accepted per day is 100. Ramie will be doing numerous tasks and land support before and during the event.

**Upper Delaware Scenic Byway, Inc. Update:** Ramie reported the Byway met on May 24. The consultant for the Rt. 97 landscape survey project did a windshield survey of prospective areas for vista clearing on the Byway route which amounted to 50 sites; reviewed and reduced to 14, with the final number at 7 total sites. Property owners will be contacted to seek permission to allow selective cutting which would be handled through a memorandum of understanding. An arborist will mark the trees to come down. A grant was secured for this project and the project deadline is Aug. 31, 2010.

On May 20 and June 4, prospective bidders for the visitor center feasibility study and design project at the county-owned Fort Delaware site in Narrowsburg were allowed to do a site visit prior to their bid submission. The proposals are due to Sullivan County Planning by June 18.

The Byway group discussed the Upper Delaware Council's providing of support services to the Byway given the new rulings the Council must follow under its cooperative agreement with the NPS-Upper Delaware. The discussion resulted in the Byway requesting the Council's Operations Committee to approve issuing a letter of support for continued services from the UDC. The Council has approved that letter.

The Byway approved a four-color ad in the July 2010 issue of New York City-based "Resident" magazine. A remaining grant of \$25,000 from NYS has not been allocated yet and member towns are being polled for their input on an appropriate use of the funding based on the criteria that the project would promote the Byway communities.

The next meeting of the Byway group is June 28.

**Pond Eddy Bridge Update:** Douglass reported PennDOT held a Project Committee teleconference regarding the Pond Eddy Bridge project. Major funding has been generally reduced from the state. However, PennDOT will do necessary maintenance work on the structure shortly.

**Lackawaxen River Sojourn:** Ramie reported she took pictures of one of the activities during the first-ever Lackawaxen River Sojourn that she'll put in the Council's next newsletter in recognition of the Lackawaxen being designated Pennsylvania's River of the Year for 2010. Many local dignitaries attended a luncheon the last day of the Sojourn. Many activities are planned to celebrate the River's designation over the next few months and the Sojourn was one such event.

## New Business

**Draft FY11 Committee Work Plan:** The committee discussed its draft work plan that was handed out at the last meeting for review. There was discussion again about the new process and funding timeline the UDC is following under its cooperative agreement with NPS. Following discussion, a motion by Rando seconded by Keesler to recommend Council approval of the draft work plan was carried. The functional budgets will be added to the document later.

**Recommended Improvements to the Flexible Flow Management Program – [Presentation by Jim Serio](#):** The committee was tasked with discussing and evaluating thermal stress and coldwater releases in the main stem Upper Delaware River at the June 3 UDC meeting and to report back to the full Council on its findings. Toward that end, Jim Serio as committee chairperson had provided to the committee previous to the meeting a copy of the NYS Dept. of Environmental Conservation/PA Fish and Boat Commission's Bureau of Fisheries white paper, "Recommended Improvements to the Flexible Flow Management Program for Coldwater Ecosystem Protection in the Delaware River Tailwaters" as a background piece for the committee's information.

Serio told the committee that he prepared a slide program for them based on the work that he did with Peter Kolesar of Columbia University on a plan that calls for higher releases when anticipated diversions are lower, precisely because such a policy converts wasteful spills to ecologically useful flows.

*(In Brief)* Serio began by explaining there are four states in the Delaware River basin. The Supreme Court decision in 1954 rendered the following: New York City could divert up to 800 mgd from the basin waters; a minimum flow target of 1750 cfs was established at the Montague gauge; and any changes to policies must be passed by a unanimous vote of the Decree Parties. The Delaware River Basin Commission and the Upper Delaware River Master was formed to maintain everything. To make a distinction, the Delaware River Basin Commission is made up of the four basin states (NY-NJ-PA-Delaware) and the federal government. The Decree Parties are the four basin states and the City of New York. New York City obtains nearly half of its municipal water supply from its three Delaware River Basin reservoirs – Cannonsville, Pepacton, and Neversink. All three reservoirs basically contribute to the Montague flow target.

In 2002, as part of a flow management study for the DRBC, HydroLogics, Inc. developed a new version of the daily flow model under the trade name OASIS. The model has been tweaked over the years. The Decree Parties and the DRBC consider the OASIS model the primary tool for comparing alternative reservoir operating rules and releases programs. PPL cannot be called upon to meet the Montague target unless we're in drought conditions. PPL usually does not release water on weekends. The River Master looks at all reservoir releases two days in advance to call for water to meet the target at Montague. Generally it takes 40 hours for reservoir flow to reach Montague. The River Master also looks at weather.

Discussions have been had with the parties about the Montague flow target. When the 1750 cfs target was set up, it involved the down-basin states. The Upper River was not included in criteria as to watershed size, etc. New York City was concerned with a sustainable water supply, full reservoirs by June 1, and no increase in declared drought situations. Serio commented that trout need coldwater. The trout population also serves as the "canary in the coal mine" if there is a water quality or quantity problem in the River. There is also the concern with flooding issues.

So we asked, what went wrong. The minimum conservation release is too low; unworkable thermal banks; releases not keyed to water in storage; no mitigation for flooding; releases designed assuming New York City diversions were its 800 mgd entitlement rather than what it actually used—about 550 mgd; rigid interpretation of Montague flow 1750 cfs target induces yo-yoing of flows.

On the discussion table now is some sort of averaging for Montague flow target if Lake Wallenpaupack is releasing Monday through Friday. The Flexible Flow Management Program (FFMP) tried to balance the three issues: sustainable water supply; increase in trout habitat; and flood mitigation. The critical system facts, using years 1982 through 2004, were New York City extracted 54% of water; dams can only hold 64% of inflow; and 25% of water was spilled (waster). We wanted to convert spill to useful releases. That was one of the goals.

We needed to measure results. We needed a method to model habitat changes as a result of different releases. The USGS habitat model was developed that did just that. We could do an OASIS model and plug output from OASIS into the USGS model and you'd get a change in habitat. Our breakthrough was the adaptive release policy. The version of FFMP that was implemented has 7 release

levels and 9 seasons. The release level ranges are keyed to NYC DEP drought curves. We looked at 68°, 72°, and 75° water temperature levels for trout habitat.

So now, what to do? Release more water when more water in reservoir. Release less when things get dry. Have the system flexible to be able to change when conditions change and new information becomes available.

The Cannonsville minimum releases during normal conditions: Revision 1 – 45 cfs until June 15; 325 cfs June 15 to Aug. 15; then down to 45 cfs. A thermal bank was established. Revision 7 – use the same amount of water and come up with a better plan. We kept the 45 cfs in summer and up to 160 cfs. The thermal bank was increased but it often was not used.

The New York State Division of Water told New York State Fisheries to come up with a plan that was best for the rivers and fisheries without previously imposed restrictions. So, NYS Dept. of Environmental Conservation and PA Fish and Boat Commission Bureau of Fisheries did a white paper, “Recommended Improvements to the Flexible Flow Management Program for Coldwater Ecosystem Protection in the Delaware River Tailwaters”. The white paper indicated Cannonsville minimum release (When system in normal condition) went up to 400 cfs in spring; summer 525 cfs; minimum release in winter was higher at 150 cfs. This was based on about 600 mgd (based on average use over ten years) New York City water use instead of the 800 mgd. FFMP keeps the river bottom wet. Most likely New York City will not go along with the 600 mgd since they want the 800 mgd to remain even though they don’t use 800 mgd.

The FFMP and the white paper don’t have thermal banks as it uses that water in a better way. As curve of releases goes up, there is a point that thermal banks would not be needed. The Cannonsville Reservoir has a bigger drainage area and smaller capacity so there is more spill. Releases from Cannonsville are the biggest benefit to the main stem. If you believe in thermal banks, the white paper may be a disadvantage. But we’re using the bank water in a better way.

Chase said it should be put in the meeting minutes what a great job Serio did in explaining all this.

Serio offered that some time soon, within six months, UDC should send a letter of support for the white paper to the Regulated Flow Advisory Committee if that’s what the committee decides since the new plan for FFMP is to be formulated within the next couple of months. The current FFMP runs out May 2011. They’ll either revise and renew or drop, and if it’s dropped, we might go back to Revision 1.

The committee felt a letter of support was possible. They also wanted to see an economic study of the impacts of the fishing industry on the local economy. The last study was done about 10-years ago. Boyar asked Serio to put the Kolesar/Serio, Florida presentation version into a 45-minute format, which Serio said could be done.

**Delaware River Basin Commission news release - natural gas exploratory wells need approval:** The committee was provided with copy of a Delaware River Basin Commission news release issued June 14, 2010. The release noted in part: “DRBC Executive Director Carol R. Collier today announced that she has supplemented her May 19, 2009 Determination to include natural gas exploratory wells. ‘My 2009 Determination that sponsors of natural gas extraction projects in shale formations must obtain commission approval before commencing such projects expressly did not cover wells intended solely for exploratory purposes’, Collier said. ‘Today, I am extending the provisions of my 2009 Determination to include exploratory wells, subject to reservations for exploratory well projects already approved by the states on or before June 14, 2010.’ By this supplemental determination, all natural gas well project sponsors, including the sponsors of natural gas well projects intended solely for exploratory purposes, must first apply for and obtain Commission approval before commencing any natural gas well project for the production from or exploration of shale formations within the drainage area of Special Protection Waters in the Delaware River Basin.”

**TH-Record article May 31, 2010 – “New rules aim to reduce drownings as life jacket requirements get more stringent on Delaware”:** The committee received copy of an article in the May 31 *Times Herald-Record* dealing with National Park Service river safety issues, including life jacket use. The NPS rules of the Upper Delaware River as outlined in the article include the following:

- Anyone under 12 is required to wear a well-fitted life jacket when in or on the river
- When the river measures 6 feet at the Barryville gauge, everyone in or on the river from the north side of the Callicoon Bridge down to the Number 2 Bridge in Sparrowbush is required to wear a life jacket

- When the river measures 6 feet at the Callicoon gauge, everyone in or on the river from the north side of the Callicoon Bridge up to Hancock is required to wear a life jacket
  - At all other times, adults are required to have a life jacket easily accessible when in or on the river
- The Upper Delaware River hotline for river conditions is 845-252-7100.  
Serio commented that the same gauge height (6 ft) for each river gauge does not mean the same level of risk.

**Public Comment**

~ Anne Willard added her kudos to Serio as well for a great presentation on a very involved issue.

**Adjournment** A motion by Boyar seconded by Ritter to adjourn the meeting at 9:18 p.m. was carried.

Carol Coney, Office Manager