

**DELAWARE RIVER BASIN COMMISSION
REGULATED FLOW ADVISORY COMMITTEE
MEETING SUMMARY
April 5, 2016**



The April 5, 2016 Regulated Flow Advisory Committee (RFAC) meeting was held at the Lake Wallenpaupack Environmental Learning Center in Hawley, Pennsylvania. Mr. Hoss Liaghat of PADEP chaired the meeting. All presentations, statements and meeting materials are located on the DRBC's RFAC website: http://www.nj.gov/drbc/about/advisory/RFAC_index.html. This summary, while prepared by DRBC, does not reflect the views of the DRBC staff or Commissioners except as expressly noted.

Committee Business

The summary of the last RFAC meeting, held on December 3, 2015, was approved as drafted.

Background on RFAC and Meeting Expectations

Steve Tambini, DRBC Executive Director, gave a brief presentation on DRBC's role in flow management. RFAC is an advisory committee of DRBC, charged with advising the Commission on matters related to operations of the major reservoirs in the basin. RFAC also provides a public forum for discussion of flow management issues, engaging interest groups and other resource management agencies. Steve also discussed expectations for this particular committee meeting, which was attended by four of the Decree Party Principals. He noted that the meeting was not a public hearing nor a negotiation session on the FFMP, but a public forum on flow management issues. Steve emphasized that the Decree Party Principals do not need to attend RFAC meetings, since their representatives are committee members and report back to them after each RFAC meeting.

DWCC 2016 Fair Share Requests

Jeff Skelding, Executive Director of Friends of the Upper Delaware River (FUDR) gave a presentation on the 2016 Fair Share requests advocated by the Delaware Watershed Conservation Coalition (DWCC). The Fair Share requests are outlined in his presentation. Jeff noted that watershed protection requires collaboration and compromise among all stakeholders.

Garth Pettinger, representing Trout Unlimited, said the Decree Parties have been unable to reach agreement on the implementation of any changes to the FFMP since 2011. In his opinion, this resulted in multiple cases of avoidable damage to the ecology and economy of the region during periods of high air/water temperatures, dewatering events, and low flow conditions. He endorsed the request for three interim procedures outlined in the Fair Share document to be put into effect while the Decree Parties continue their negotiations.

Thermal Relief in the Upper Main Stem of the Delaware River

Professor Peter Kolesar of Columbia University presented a proposal for thermal relief releases from Cannonsville reservoir. Earlier versions of this proposal were presented to RFAC in 2012, 2013 and 2015. He believes the thermal stress events could be mitigated by pulsed releases of cold water from Cannonsville reservoir. The objective is to keep maximum water temperature in the river below 75° F down to Lordville, NY. His calculations indicate that the water needed for this program would be available, except in very dry years. Peter requested that an experimental thermal stress relief protocol be implemented.

Economic Benefits of River Protection and Effective Water Management

Matt Batschelet, representing the Upper Delaware River Business Coalition (UDRBC) gave a presentation on the tourism-based economy of the Upper Delaware region, which is highly dependent on adequate river flows. Tourism has grown and area businesses experienced steady growth during 2006-2014, which he attributed to adequate flows on the West Branch Delaware River. However, in 2015, low spring flows and the incident at Cannonsville reservoir, resulted in a 15-25% loss in reported business revenues. Matt stated that the businesses operating below the reservoirs system earn a majority (up to 50%) of their annual revenue during the months of April, May and June. In his opinion, inadequate reservoir releases can be catastrophic to the regional economy. Matt requested implementation of a 300-cfs minimum release from Cannonsville reservoir during April, May and June and for the Decree Parties to work with FUDR to implement a revised flow plan.

Delaware River Master (USGS) Update on FFMP

Robert Mason, USGS Delaware River Master, gave an update on Decree Party negotiations towards the next FFMP agreement. He provided a brief history of how the diversions and releases from the three NYC Delaware basin reservoirs were managed over time, leading to the current FFMP. He said the River Master serves as to ensure compliance with the terms of the 1954 Supreme Court Decree, checking on reservoir diversions and releases, and directing releases to meet the Montague flow objective. He stated that the Principals represent some of the same interests of those that come before RFAC, but with different priorities. He noted that they are trying to achieve a balance among the competing objectives. He said the 2016 FFMP is likely to be similar to the 2015 FFMP.

Decree Party Principals Listening Session

Twenty-two members of the public made brief statements during the listening session, which lasted approximately an hour. Although not in attendance, representatives from the State of New York were provided with a video of the comment session. Public comments were focused on the cold-water fishery, economics of the region, and flood mitigation. The comments reflect the views of public. A brief summary of the comments follows.

General

- The public want the Principals to agree to incremental changes to the FFMP while they work out other details that are holding up a long-term agreement. The opinion

of many is that the improvements requested can be made without significant change in the risk to water supply and river flows.

- The opinions of the public are that there is more water that can be released for fisheries protection and flood mitigation. Some felt NYC should use more Hudson water and include the Croton System when evaluating water availability. Opposition was expressed to out-of-basin transfers of Delaware River water from NYC and NJ.
- The impacts of the FFMP are felt basin-wide. Decree Party Principals should have an open and transparent process to obtain public approval.
- A letter from Congressman Gibson was read at the meeting. It requested that the next FFMP incorporate a number of features including additional spill mitigation, thermal relief releases, more gradual reductions in releases, use of Pepacton and Neversink reservoirs in addition to Cannonsville for directed releases, and more water available from NYC reservoirs due to Croton system availability.

Fisheries

- Water for thermal mitigation should be provided when temperatures in the river might exceed 75 degrees F. A protocol should be included in the next FFMP to proactively and systematically provide thermal relief during periods of sustained high water temperatures.
- Some members of the public stated that trout can experience negative effects well below the 75 degrees F threshold and that efforts should be made to keep water temperatures below 68 degrees F whenever possible.
- When directed releases are discontinued such that a large drop in the release from Cannonsville reservoir would occur, the release rate should be changed more gradually to avoid large drops in flow on the West Branch and mainstem.
- Directed releases should be made from all three NYC reservoirs. Releases from Lake Wallenpaupack should not be counted towards the Montague flow target to help maintain adequate flow and temperature conditions in the main stem Delaware River above the confluence with the Lackawaxen River.
- Reservoir release rates should not have been dropped so suddenly prior to the beginning of the trout season on April 1.

Economics

- The Upper Delaware fishery has been estimated to bring about \$220 M a year to the region. Tailwater fisheries in New York are a great draw for the whole surrounding area. The area depends heavily on the economic activity related to fishermen that come to visit.
- The Upper Delaware is the busiest stretch of recreational river in the US, spanning from Narrowsburg to Port Jervis. The current Montague flow objective of 1750 cfs does not always guarantee good conditions for canoeing at Barryville. The recreational industry is at risk of being lost without better summer releases.
- Riegelsville's economy is very much affected by Delaware River flows; in the recent major floods (2004, 2005, and 2006) lost about six weeks of work each year; the FFMP should balance other needs with protection of river towns from flooding.

Flooding

- Flood management should only address the needs of communities located immediately downstream from the reservoirs.

- DRBC's Flood Analysis Model showed impacts would have been less if reservoir storage voids had existed prior to the recent floods. The NYC Delaware reservoirs should operate with year-round 10% storage voids.
- FFMP should implement the flood mitigation improvements that have been on the table for the last four years.

Decree Party Principals Statements and Responses

Four Decree Party Principals were in attendance: David Wunsch (DE), Daniel Kennedy (NJ), Paul Rush (NYC) and Kelly Heffner (PA). All Principals made brief statements in response to some of the issues raised during the meeting by presenters and members of the public. A common theme was that the Principals work closely with their representatives on the RFAC (committee members) to always be abreast of the issues discussed at RFAC meetings. They are regularly informed about the on-going discussions and proposed potential improvements to the FFMP. The Principals also stressed their commitment to work together to improve the flow management of the Delaware Basin waters. However, they must consider the basin as a whole, from the headwaters to the estuary, and find a balance among various concerns and objectives. There are limitations to what can be achieved and not all of the objectives can be met to everyone's satisfaction. Not all of the parties agree on the amount of water available, how it should be used, and how water availability could or should impact the incremental changes being proposed. New Jersey recommended finding out how much water there is to share.

REGULATED FLOW ADVISORY COMMITTEE (RFAC)

April 5, 2016

ATTENDANCE LIST

The April 5, 2016 RFAC meeting was well attended: 138 people signed their names on the attendance list. The list below only contains the names of those that signed the attendance record.

| NAME | AFFILIATION |
|-----------------------|--|
| ACKERMAN, Jeff | Driftstore Campground |
| ALAGU, Nichols (sp?) | FUDR |
| ALDRIDGE, Wayne | River of Life Outdoor Adventure, Deposit, NY |
| ANDERSON, Kelly | Phila. Water Dept. |
| ANDERSON, Zachary | |
| ASSELSTINE, James | Trout Unlimited |
| AXT, Rick | TU |
| BACHMAN, Bob | Pa. Fish & Boat Comm. |
| BAKER, Scott | |
| BARTHOLOMEW, Art | FUDR |
| BATSCHULET, Matt | UDRBC |
| BAXTER, Stefanie | Univ. Delaware |
| BERKER, Peter | The News Eagle |
| BONOS, Mary | ACU |
| BOOK, Kristin | |
| BOUSBUGH, Craig | FUDR |
| BOVE, D | EWC |
| BOYAR, Andrew | TN of Highland & TU Local Chapter |
| BRADY, Bridget | Delaware Riverkeeper Network |
| BROW, Peter | Wayne Co. |
| BROWNE, Lillian | The Reporter |
| CARDELLINO, Tom | Trout Unlimited |
| CARTECHINE, Mike | FUDR |
| CAUCCI, Al | FUDR |
| CEBALLOS, Joseph | TGF |
| CERRUTI, Bobby | |
| CERRUTI, Emma | |
| CHARLESWORTH, Charles | PA Trout Limited |
| CLARK, Larry | Delaware River Club |
| CONWAY, Debra | UDC |
| COWAN, Philip | |
| DALEY, Nina | |
| DECKER, Sam | Int'l. Federation of Fly Fishers |

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|-----------------------|------------------------------|
| DECKER, Wayne | |
| DETRICK, Maureen | Tammany Flats, Damascus, PA |
| DIFRENNA, Vincent | USGS |
| DINUNZIO, Nick | Broome County |
| DOMBER, Steven | NJ DEP |
| ERIKSON, Glenn | WTF |
| EVANS, Richard | NPS |
| GARIGLIANO, Jennifer | DEP |
| GENDER, Fred | PA Trout Unlimited |
| GIBBONS, Kate | Penn Future |
| GIUFFRIDA, Mauro | |
| GOODRICH, Devon | |
| GRAND, Stanley | FUDR |
| GRIMBILAS, Peter | NJOA |
| GROSSMANN, Mike | Homeowner - White Twp., NJ |
| GRUSZKIEWICZ, Joe Jr. | |
| GUDMUNDSSON, August | NJ Fish & Game Council |
| HAMILTON, Don | NPS |
| HARTLE, Mark | Pa. Fish & Boat Comm. |
| HEFFNER, Kelly | PADEP |
| HEINICKE, Karl | DRBC |
| HELFELD, Iris | Narrowsburg |
| HESSON, Molly | Phila. Water Dept. |
| HUDGENS, Richard | |
| HUHNER, Kurt | |
| HUNT, Karen | Wayne Co. |
| JEFFER, Bob | |
| JEFFER, Pat | |
| JONES, David | Kittatinny Canoes |
| JONN, Amanda | Nat'l Parks Cons Assoc |
| KELCHNER, George | DRC |
| KELLUM, Holly | Epoch Times Newspaper |
| KENNEDY, Dan | NJDEP |
| KNECHT, Jamie | Wayne C P |
| KOLESAR, Peter | Columbia Univ. |
| KREHUL, Jana | |
| KREHUL, Vaclav | |
| LAUBACH, Robert | PA TU R.B. Winter Chapter |
| LEWY, John | Wayne Pike TV |
| LIAGHAT, Hoss | PA DEP |
| LYLE, Justin | |
| LYON, Fred | Trout Unlimited - Lackawanna |
| MASON, Robert | USGS - Delaware River Master |

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|---------------------|-------------------------------------|
| McDONALD, Roland | Catskills Mountains Trout Unlimited |
| McGUIRE, Meg | Delaware Currents |
| MERRILL, Art | Town of Colchester |
| MIRI, Joe | NJ DEP |
| MROZINSKI, Mike | Pike Co. Planning |
| MURALIDHAR, D. | Hazen & Sawyer |
| NEWBERN, Jessica | NPS/UPDE |
| O'CONNOR, John J. | |
| OLIVER, Molly | |
| OLIVIO, Dana | NYC DEP |
| PADUA, Evan | Sweetwater Guide Service |
| PADUA, Mike | Sweetwater Guide Service |
| PEDRICK, Gail | ACU |
| PETTINGER, Garth | Trout Unlimited |
| PIATT, Paula | Outdoor News Pub. |
| PICKERING, Joe | |
| PICKERING, Kim | |
| PLUMMER, Dan | FUDR |
| POWELL, Jim | Narrowsburg |
| POWELL, Susan E. | Narrowsburg |
| QUAGLIO, Greg | |
| QUINODOZ, Hernan | DRBC |
| RAMIE, Laurie | Upper Del. Council |
| RESTI, Sherri | FUDR |
| RINALDI, Emily | Pike County Conservation |
| RINKER, Ben | |
| RINKER, Cindy | |
| RITTER, Tony | |
| RIVERA, Megan | HydroLogics |
| RODGERS, Peter | |
| ROULSTON, Gary | FUDR |
| ROWER, Samuel N. | |
| RUPERT, Clarke | DRBC |
| RUSH, Paul | NYC DEP |
| SALVIA, Amy | Indian Head Canoes |
| SCANNAPIECO, Alycia | |
| SERIO, Jim | Dela. River Foundation |
| SHALLCROSS, Amy | DRBC |
| SHEER, Dan | HydroLogics |
| SKELDING, Jeff | FUDR |
| STEVER, Deb | |
| STOKES, Dr. Gregory | Mayor Riegelsville Borough |
| TAGGART, Steve | Trout Bound Guide Service |

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|--------------------|---|
| TAMBINI, Steve | DRBC |
| THARP, Diane | NorDel Conservancy |
| THOMAS, Richard | Trout Unlimited |
| TISHUK, Arlene | |
| TRU (sp?), Chester | |
| TUTALO, Ken | |
| URBAN, Ron | NY Council TU |
| URBISH, Madeline | Coalition for the Delaware River Watershed (CDRW) |
| VERNOLD, Jerry | Town of Hancock |
| VIGLIOTTA, Maxine | Trout Unlimited |
| VIGLIOTTA, Tom | Trout Unlimited |
| WAGNER, Brian | |
| WILLIAMS, Keith | North Bay |
| WISHNESKI, Matt | |
| WOOD, Chris | Nat'l. Trout Unlimited |
| WUNSCH, David | Delaware Geological Survey |
| ZAIMES, Dimitri | Two River Junction |
| Illegible | Private Citizen |
| Illegible | New Hope |