



Duck River Development Agency  
Comprehensive Regional Water Supply Plan

**Meeting Minutes**  
Workshop No. 6  
Henry Horton State Park  
August 11, 2010

**Meeting Participants**

Name	Organization	E-Mail	Telephone
George Rest	O'Brien & Gere	<a href="mailto:george.rest@obg.com">george.rest@obg.com</a>	301.731.1160
Tom Dumm	O'Brien & Gere	<a href="mailto:thomas.dumm@obg.com">thomas.dumm@obg.com</a>	301.731.1162
Doug Murphy	Duck River Agency	<a href="mailto:doug@duckriveragency.org">doug@duckriveragency.org</a>	931.684.7820
Linda Justice	Duck River Agency	<a href="mailto:linda@duckriveragency.org">linda@duckriveragency.org</a>	931.684.7820
Patricia Clemens	Friends of Short Springs	<a href="mailto:patclemens@bellsouth.net">patclemens@bellsouth.net</a>	931.455.8850
Caryl Giles	City of Spring Hill	<a href="mailto:cgiles@springhilltn.org">cgiles@springhilltn.org</a>	931.384.0626
Joe Bishop	CTI Engineers, Inc.	<a href="mailto:jbishop@ctiengr.com">jbishop@ctiengr.com</a>	615.834.8300
Tom Moss	TDEC	<a href="mailto:tom.moss@tn.gov">tom.moss@tn.gov</a>	615.532.0190
Kelly Powell	CPWS	<a href="mailto:kelly.powell@cpws.com">kelly.powell@cpws.com</a>	931.375.7646
Susan Hutson	U.S. Geological Survey	<a href="mailto:shutson@usgs.gov">shutson@usgs.gov</a>	901.753.8643
Anne Choquette	U.S. Geological Survey	<a href="mailto:achog@usgs.gov">achog@usgs.gov</a>	615.837.4774
Larry Jones	Duck River Agency Board	<a href="mailto:larry417@att.net">larry417@att.net</a>	931.359.1355
Richard Quin	Duck River Watershed Association	<a href="mailto:rquin@bellsouth.net">rquin@bellsouth.net</a>	931.797.5541
Sherry Beard	Duck River Watershed Association	<a href="mailto:tnpinkkayaker@msn.com">tnpinkkayaker@msn.com</a>	615.426.4572
David McKinney	TWRA	<a href="mailto:dave.mckinney@state.tn.us">dave.mckinney@state.tn.us</a>	615.781.6577
Michael Bradley	USGS	<a href="mailto:mbradley@usgs.gov">mbradley@usgs.gov</a>	615.837.4703
Steven Barnes	TVA	<a href="mailto:sebarnes@tva.gov">sebarnes@tva.gov</a>	423.751.6436
Scott Young	Tulahoma Utilities Board (TUB)	<a href="mailto:syoung@tub.net">syoung@tub.net</a>	931.455.4515



<b>Name</b>	<b>Organization</b>	<b>E-Mail</b>	<b>Telephone</b>
Joanne Pogue	Duck River Agency Board	<a href="mailto:jpogue_2000@yahoo.com">jpogue_2000@yahoo.com</a>	931.381.2169
Tom Peebles	Duck River Agency Board	<a href="mailto:tpeebles@wallerlaw.com">tpeebles@wallerlaw.com</a>	931.698.7772
Randal Braker	Duck River Utility Commission	<a href="mailto:manager@druc.org">manager@druc.org</a>	931.455.6458
Justin Adams	Trauger & Tuke	<a href="mailto:jadams@tntlw.net">jadams@tntlw.net</a>	615.256.8585
David Money	TDEC	<a href="mailto:david.money@tn.gov">david.money@tn.gov</a>	931.840.4172
Paul Myatt	Duck River Agency Board		931.670.0682
Ryan Owens	TDEC	<a href="mailto:ryan.owens@tn.gov">ryan.owens@tn.gov</a>	931.490.3941
Elaine Boyd	TDEC	<a href="mailto:elaine.boyd@tn.gov">elaine.boyd@tn.gov</a>	615.532.0288
Robert Foster	Retired	<a href="mailto:rober2t@aol.com">rober2t@aol.com</a>	
Paul Davis	TDEC / WPC	<a href="mailto:paul.estill.davis@tn.gov">paul.estill.davis@tn.gov</a>	615.532.0632
Scott Gain	USGS	<a href="mailto:wscottgain@usgs.gov">wscottgain@usgs.gov</a>	
Greg Seaford	GS&P – MCWS	<a href="mailto:greg_sanford@gspnet.com">greg_sanford@gspnet.com</a>	
Don Gallagher	Duck River Agency Board	<a href="mailto:don@gallagherguitar.com">don@gallagherguitar.com</a>	
Ben Smith	Farmer –Marshall County (TACIR)	<a href="mailto:bensmith@united.net">bensmith@united.net</a>	
Alex Wyss	TNC	<a href="mailto:awyss@tnc.org">awyss@tnc.org</a>	
Randy Kerr	AMEC Earth & Environmental	<a href="mailto:randy.kerr@amec.com">randy.kerr@amec.com</a>	
Troy Watkins	HB&TS Utility District	<a href="mailto:twatkins@hbtsud.com">twatkins@hbtsud.com</a>	
Duane Thorpe	TUB	<a href="mailto:duanethorpe@hightube.net">duanethorpe@hightube.net</a>	
Dean Dickey	City of Columbia Mayor	<a href="mailto:dean.dickey@columbiatn.com">dean.dickey@columbiatn.com</a>	
Larry Chunn	Maury County Water System	<a href="mailto:lchunn@maurycounty-TN.gov">lchunn@maurycounty-TN.gov</a>	
John Freeman	Shelbyville Water & Sewer	<a href="mailto:jfreeman@shelbyvillepower.com">jfreeman@shelbyvillepower.com</a>	
Rob Lantz	Garver	<a href="mailto:rmlantz@garverusa.com">rmlantz@garverusa.com</a>	
Stephanie Chance	US FWS	<a href="mailto:stephanie_chance@fws.gov">stephanie_chance@fws.gov</a>	



Name	Organization	E-Mail	Telephone
Matt Hart	NRCS	<a href="mailto:mike.hart@tn.usda.gov">mike.hart@tn.usda.gov</a>	
Mary Jennings	US Fish & Wildlife Service	<a href="mailto:mary_e_jennings@fws.gov">mary_e_jennings@fws.gov</a>	931.528.6481
Marjorie Collier	Duck River Watershed Association / Friends of Short Springs	<a href="mailto:marcollier@lighttube.net">marcollier@lighttube.net</a>	931.455.4186
Leslie Colley	The Nature Conservancy	<a href="mailto:lcolley@tnc.org">lcolley@tnc.org</a>	931.840.8881
Sally Palmer	The Nature Conservancy	<a href="mailto:spalmer@tnc.org">spalmer@tnc.org</a>	615.383.9909
Lee Morrison	Duck River Agency Board	<a href="mailto:morr2142@bellsouth.net">morr2142@bellsouth.net</a>	931.703.4044
Lee Keck	TDEC	<a href="mailto:lee.keck@tn.gov">lee.keck@tn.gov</a>	615.532.0517
Tom Puckett	HB&TS Utility District, Williamson County	<a href="mailto:tpuckett_hbts@bellsouth.net">tpuckett_hbts@bellsouth.net</a>	615.794.7796
Kenneth Carr	Lewisburg Water & Wastewater	<a href="mailto:kenneth@lewisburgwater.org">kenneth@lewisburgwater.org</a>	931.359.6831
Richard Young	BDY Environmental	<a href="mailto:ryoung@bdy-inc.com">ryoung@bdy-inc.com</a>	615.772.6327
Neil Loeffler	NLLA / DRUC	<a href="mailto:lefler@cafes.net">lefler@cafes.net</a>	931.393.3539

**Attachments:** Agenda, MS PowerPoint presentation

A summary of the discussion follows:

- Participant comment: For the Williamsport intake, note that there is no impact to Centerville because Centerville obtains water from a tributary to Duck River. Add a bullet to Slide 20 to make it clear what (if any) potential impacts might be downstream of the Williamsport intake due to withdrawal. People need to realize that the Duck River does not end at Columbia and we need to make it clear what we know about impacts that might occur downstream. TDEC identified that there is more water in the Duck River near Williamsport compared to Columbia due to the inflows from tributaries between Columbia and Williamsport.
- Participant comment: The Williamsport intake alternative benefits the entire Duck River system because it reduces reliance on Normandy Reservoir.
- Participant comment: Are you saying we would move the Columbia intake downstream or is this new intake at Williamsport? Team response: This is a new intake at Williamsport. Both could be kept active and it's a matter of how TDEC would link the intakes and regulate the withdrawals. If the future water treatment



plant is located near Williamsport, then this intake at Williamsport would be the primary intake.

- Participant comment: O&M costs (life cycle costs) need to be developed to calculate the net present value of each alternative. Team response: Including the O&M cost would further support selection of the intake over selection of Pond 15 because the O&M costs for pumping would be roughly the same and the O&M costs for the dam and structures at Pond 15 would be significantly higher. In addition, O&M and life cycle analyses would be very different if a finished water system was constructed because the water would likely be treated near the intake. In this case, the facilities would be used 365 days per year. The life cycle cost will also depend on the timing for construction and implementation of the raw water facilities. The O&M cost for Pond 15 is much more than the O&M for the intake.
- Participant comment: What about the water quality issues associated with going downstream of Big Bigby due to Mt. Pleasant wastewater discharge? Perception is that there is poor water quality downstream of Big Bigby. Team response: A feasibility study will need to be conducted to identify the location of the water intake near Williamsport. A number of factors will need to be considered including: intake design, water depth, etc. We believe that either location (upstream or downstream of Big Bigby Creek) would meet the supply objectives.
- Participant comment: Would TDEC reduce releases from Normandy Reservoir because Columbia would now have up to an additional 20 mgd in the river? No. Normandy Reservoir's required release and the river constraint at Columbia are not linked.
- Participant comment: For Slide 21, the Friends of Short Springs identified that they strongly object to raising Normandy Reservoir because it is possible that the water level in the Summer pool could be raised in the future. In addition, it is not clear how much this alternative would help Columbia. Team response: TVA identified that raising the Summer pool at Normandy Reservoir in the future would require a NEPA review process.
- Participant comment: For Slide 23, would TVA be able to control the temperature of the release from Normandy Reservoir? Team response: Yes, water could be released from different levels in the reservoir.
- Participant comment: Not sure I understand bullet on downstream habitat. How will operational changes to the release/flood guide curve be addressed? Team response: Having a larger volume of water would allow releases from Normandy Reservoir to continue further into a drought which should benefit downstream habitat. It is possible that TVA's operating policies for Normandy Reservoir would change with the increase in storage volume. Could use the OASIS model to assist with changes in reservoir operation.



- Participant comment: Consider adding a bullet on the additional benefits of raising Normandy Reservoir on the public health and welfare.
- Participant comment: Clarify "avoids" inundation of hiking trails for Short Springs. Team response: This is a comparison with the alternative as configured in the TVA 2000 study not a comparison to existing conditions. Bullet will be removed to avoid confusion.
- Participant comment: Count on regulatory change for water treatment.
- Participant comment: What about the nickel fees collected in Trust B? Team response: For the Normandy Reservoir project, \$5.7M was owed to TVA and the debt was written off when the Columbia Dam was not completed. Money in Water Supply Escrow Fund Trust will be used to fund any future water supply infrastructure projects.
- Participant comment: What is the "ballpark" figure for the one-time system development charge for new customers or larger services? Team response: "Ballpark" figure might be \$600 per household.
- Participant comment: How many new connections were used to estimate the system development charge? Team response: 100,000 new connections
- Participant comment: Do any of the listed funding arrangements include contributions from outside funding sources such as grants, revolving state funds, etc? Team response: No. This is very affordable and reasonable compared to other water supply projects around the US. DRA is working on obtaining a financial consultant for guidance on financing options. Implementing the components in phases can save the Duck River users lots of money through the years. This is one project with three components: baseline alternatives, raise Normandy Reservoir, and construct new Williamsport intake. Need to consider increasing water supply at Normandy Reservoir first. DRA has some money to pay for a portion of the project which will keep the increase in the withdrawal fee down.
- Participant comment: WRC would be interested in providing input on the implementation schedule.
- Participant comment: Might consider leaving more options on the table such as Pond 15 until the recommendations are implemented.
- Participant comment: Will customers served by wells that are then connected to the public water system be subject to the system development charge under the Growth Pays for Growth strategy? Team response: Yes, because they will put an additional demand on the water source.
- Participant comment: What is optimization of releases from Normandy Reservoir? Team response: A number of factors limit TVA's ability to closely match the required release from Normandy Reservoir to meet the flow constraint at Shelbyville (18 hours travel time) including withdrawals for irrigation between



Normand Dam and Shelbyville, inflows from tributaries, etc. Optimizing releases could include installation of stream gages on tributaries and other improvements.

- Participants were asked to review the Fact Sheet and Doug identified that comments on the Fact Sheet are due by Monday August 16<sup>th</sup>.
- Participant comment: Have you verified that Normandy Dam can be raised? Team response: No. Additional investigations will be needed to confirm ability to raise dam, but no fatal flaws have been identified to-date.
- Participant comment: Can more investigation of Alt. #5 be conducted because it can provide the most environmental benefits? Team response: Yes.
- Participant comment: What permit process will be required for raising Normandy Dam? Team response: The permit is not clearly defined at this time but a NEPA review will be performed.
- Participant comment: DRA and the Team did a good job of getting information out to the stakeholders and public.
- Participant comment: TDEC identified that compared with other programs this solution is affordable.
- Participant comment: Baseline alternatives will be critical to the program. Consider all the scenarios and solicit agency input on the programs. The water efficiency use program is really important. DRA and Team will need to collect good information to justify programs, set up triggers, and defend and justify the implementation timeline. The plan should include triggers for implementation of various phases of the project/alternatives.
- Participant comment: The report for the Comprehensive Regional Water Supply Plan should be provided to the WRC for review.
- Participant comment: Doug has shown great leadership throughout the study.