

ORIGINAL

FERC MEETING 1/27/2005

AEP Re-licensing for Smith Mountain Lake (SML)

Personal input for FERC consideration

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-3 PH 2:13
FEDERAL ENERGY
REGULATORY COMMISSION

The basis for my input includes personal observations at SML for 15 years, available technical data, prior experience with low-flow lakes and planning, zoning and subdivision requirements.

- **SML is a very fragile ecosystem due to very low flow rates compared to lake volume and area (attached: summer flow rate chart for seven years (USGS data).**
- **Quality of stream water entering the lake has significant issues**
- **Many long narrow coves with minimal or no fresh water sources**
- **High-density development in long "stagnant" coves represents significant runoff- water issues with no remediation processes available.**
- **Water quality and allocation issues will increase with municipal pumping from SML in addition to: power generation, down-stream releases and lake level control**

Therefore my recommendations are:

AEP represents the best alternative for exercising good stewardship of SML based on having the least conflicts of interest in establishing and executing long-range plans and procedures to manage the lake. AEP should be the control agency for Shoreline development.

AEP should be the control organization for municipal and commercial withdrawal of water from SML.

AEP and the three counties should form a consortium to implement health, safety, water-quality and quality of life requirements so that SML will be always be a good place to live, work and play.

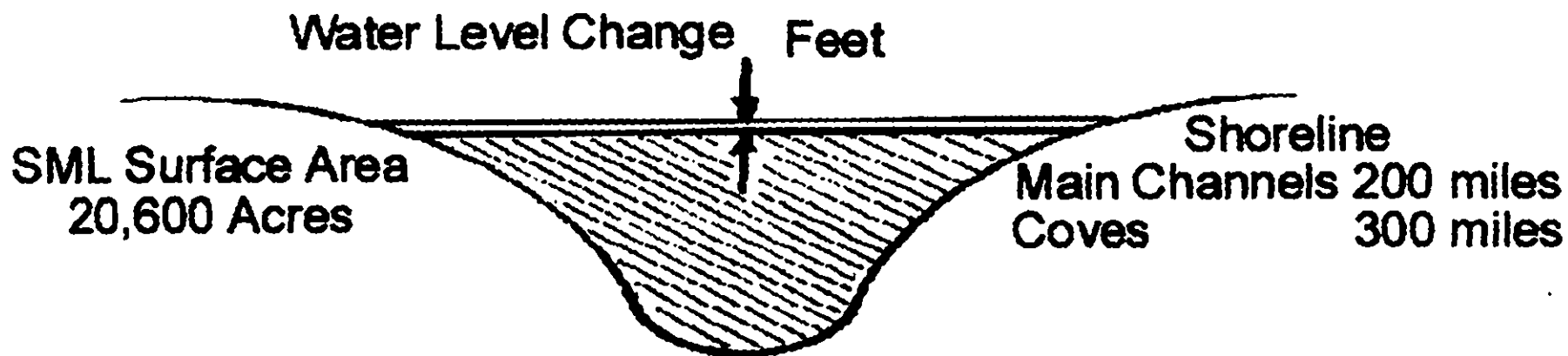
Lars Hagen
6347 Scruggs Rd
Moneta, Va, 24121
Franklin County SML Property Owner 15 years
Franklin County SML Resident 10 years

SML Summer Inlet-Flow vs Lake Level

Roanoke + Blackwater Rivers

LAKE LEVEL INCREASE (with no release)
FEET OF WATER

	JUNE	JULY	AUG
1996	3.4	1.1	1.9
1997	2.4	0.9	0.6
1998	1.5	0.9	0.9
1999	0.5	0.6	0.5
2000	0.8	0.9	1.1
2001	1.0	0.6	0.6
2002	0.6	0.5	0.4
AVERAGE	1.4	0.8	0.9



SUMMER WATER FLOW INTO SML (ROANOKE + BLACKWATER)			
USGS 02056000 ROANOKE RIVER AT NIAGARA,			
http://nwis.waterdata.usgs.gov/va/nwis/monthly/?site_no=02056000			
Monthly mean streamflow, in cu-ft/sec			
	Jun	Jul	Aug
1996	910	314	523
1997	675	246	184
1998	433	258	257
1999	135	189	158
2000	230	265	293
2001	287	188	180
2002	143	149	108
USGS 02056900 BLACKWATER RIVER NEAR ROCKY MOUNT			
http://nwis.waterdata.usgs.gov/va/nwis/monthly/?site_no=02056900			
Monthly mean streamflow, in cu-ft/sec			
	Jun	Jul	Aug
1996	275	76.5	125
1997	153	67	38.6
1998	93.7	53.9	47.8
1999	26.1	28.4	19.7
2000	48	37.4	70.5
2001	51.1	28.5	30.5
2002	17.1	25.1	13.1
Sum of Roanoke + Blackwater			
Monthly mean streamflow, in cu-ft/sec			
	Jun	Jul	Aug
1996	1185	390.5	648
1997	828	313	222.6
1998	526.7	311.9	304.8
1999	161.1	217.4	177.7
2000	278	302.4	363.5
2001	338.1	216.5	210.5
2002	160.1	174.1	121.1

	Convert to cu-ft/month			
	$(\text{cu-ft/sec}) \times 60 \times 60 \times 24 \times 30 =$			
	Monthly mean streamflow, in cu-ft/month			
		Jun	Jul	Aug
1996		3071520000	1012178000	1879816000
1997		2148178000	811298000	578979200
1998		1385208400	808444800	790041600
1999		417571200	583500800	480598400
2000		715392000	783820800	942192000
2001		876355200	581168000	545616000
2002		414979200	451267200	313891200
	SML Area = 20,600 acres = 20,600 x 43,284 = square-feet			
	SML Area =	891238400 square-feet		
	Depth of streamflow water covering 20,600 acre lake			
	Depth (feet) = Volume streamflow / Area lake			
	Based on NO water released from SML dam during month			
		Jun	Jul	Aug
1996		3.4	1.1	1.9
1997		2.4	0.9	0.8
1998		1.5	0.9	0.9
1999		0.5	0.6	0.5
2000		0.8	0.9	1.1
2001		1.0	0.6	0.6
2002		0.5	0.5	0.4
AVERAGE		1.4	0.8	0.9
	Notes:			
	Data obtained from USGS web site			
	Data for three summer months for seven years			
	Data for two rivers added together and converted to monthly quantities			
	Data converted to vertical feet based on 20,600 acres surface			
	Data assumes no releases, pump out or back during the month shown			
	Data assumes other minor stream flows approximates surface evaporation			
	CONCLUSIONS:			
	SML is a very fragile ecosystem due to its very low flow rate			
	Quality of water entering lake has significant issues			
	Many long narrow coves have no visible fresh water source			
	Runoff and leaching represents issues and not solutions			
	High density development in coves represents significant water quality issues			
	Significant conflicts in allocation of water.			
		Downstream release		
		Municipal water supply (Bedford & Franklin)		
		Power Generation		
		Lake level control		
	Lars Hagen 6347 Scruggs Rd, Moneta, Va, 24121			

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FERC Scoping Meeting
TCRC Handout #1

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05 FEB -3 PM 2:12
REGULATORY COMMISSION

- The Tri-County Re-licensing Committee (TCRC) is made up of Bedford, Franklin, and Pittsylvania Counties, which represent a total of 174,000 residents.
- A formal motion was approved by each County to form the TCRC. The TCRC members include 2 Supervisors and 1 alternate appointed by each County. The 3 County Administrators and some County staff attend each meeting, as well as a County Attorney. A shared common budget was established.
- The TCRC has been empowered to develop a single, unified position for all 3 Counties on re-licensing issues. The TCRC also acts as the single point of contact for the FERC and AEP. We may seek outside expert help and may negotiate for the Counties on all re-licensing issues.
- The TCRC is of mutual benefit to the Counties, the FERC, and AEP because we can expedite the re-licensing process.
- The TCRC believes the aging of the lakes is one of the significant environmental and socio-economic issues related to the proposed project (SD-1, 2.1, Page 3). Sedimentation, erosion, and water quality are major factors in the aging of the lakes.
- The TCRC proposes several expanded uses of the lakes including water intake, recreation, and fire safety.
- In response to SD-1, 5.0, Information Requested, there is no prior socio-economic study. The TCRC requests a socio-economic be done by jointly selecting an outside agency or consultant. The selection of 4 existing socio-economic studies analogous to Smith Mountain Project is recommended with 2 of these studies being from outside the AEP projects.

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TCRC Handout #2

- The TCRC recommends that all of the studies that are identified in the PAD should be conducted and that the information gained from the studies should be applied to the appropriate topic(s).
- The TCRC strongly requests that several of the studies identified in the PAD should be updated throughout the duration of the license.
- Many of the proposed studies in the PAD are parts of another study, and many other studies are derived only from existing data. The TCRC asks that all studies be based on up to date information, and if existing data is not available, AEP should be required to collect new data and conduct the study.
- Only one of the proposed studies will last for more than 1 year. The TCRC believes there are many studies that should last for more than one year if data is to be obtained that can be used as trend data and therefore used to make future projections.
- Only four studies in the PAD are identified as a "relicensing issue". The TCRC believes that there are many other studies that should be included in the relicensing process.
- All studies that relate to the Shoreline Management Plan have been marked as "adequately addressed". The TCRC strongly disagrees with this designation. We call for a Technical Conference on the SMP and we believe additional studies related to shoreline management issues are necessary.
- The TCRC believes that the navigation system and shoal and buoy markers on both lakes should become the responsibility of the licensee. Studies of the navigation system on both lakes must be included in relicensing subjects.
- The TCRC believes that debris removal and containment should be the responsibility of the licensee. Studies that examine best practices and debris removal requirements – not just historic debris removal requirements – should be included in relicensing subjects.
- AEP should be required to study and address potential conflicts between the licensee's activities and County comprehensive and infrastructure plans.
- The TCRC believes that the licensee should not be allowed to make the determination of cumulative impact analysis alone and that many local and state agencies should also participate in such a critical decision.
- Studies must be conducted on every aspect of change in project operation that will affect the project and/or the surrounding and down stream communities, including deregulation, RTO participation, and future industry trends.
- The TCRC asserts that it is critical that an independent socio-economic impact analysis of the project on the surrounding communities be included in the relicensing subjects.

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TCRC Handout #3

- **The TCRC submits that there are many studies not mentioned in the PAD that should be conducted.**
- **The TCRC believes new studies need to be conducted to assure that the relicensing conditions are shaped to reflect community development needs.**
- **A new study is needed to assess the socioeconomic impact of the project and its operation on the communities around the lake.**
- **The TCRC recommends a study to assess the environmental impact of the project and its operation on water quality, fish, and communities.**
- **Additional studies to evaluate and address governance procedures of the SMP and to evaluate the economic impact of the SMP must be conducted.**
- **The TCRC requests a study to project the long-range water needs of the three counties, adjacent jurisdictions, and other communities that might seek water from the Roanoke/Staunton River and its potential effect on the project and our Counties.**
- **AEP should study the impact of invasive aquatic vegetation and non-vegetative invasive species on both lakes and plan for treatment and preventative strategies.**
- **The TCRC requests a study to evaluate the adequacy of public access, boating opportunities, recreational use of both lakes and downstream, and public safety, including installation and maintenance of navigation aids.**
- **A study is needed to assess the sources, removal, and funding of removal of debris.**
- **AEP should assess the possible change in mode of operation and association with an RTO and its impact on the communities around the lakes.**
- **The TCRC recommends a study of water level fluctuation and water release protocol and its effect on the lake and downstream communities.**
- **TCRC asserts that flood and drought control are affected by the operation of the project and requests that a study be made of the issue, including how the counties can participate in the management of these issues.**
- **TCRC believes that the future of the three counties is very much dependent on the management of the two lakes and that there are many questions that still need to be answered through the preparation of studies in order to assure that the relicensing process addresses the issues that are critical to the future of the Counties, and to serve as a basis for appropriate license conditions in the new license.**

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TCRC Handout #4

- The TCRC requests that the FERC permit a Technical Conference to attempt to resolve lingering issues and concerns with the filed SMP. We view this as a win-win-win situation for the FERC, AEP, and the 174,000 citizens of the 3 counties represented by their elected officials.
- If the FERC finds that an SMP needs to be approved in the near future, it should only be approved for the term of the current license. An SMP for the upcoming license should reflect the results of the studies and analysis executed for the ILP, as well as the updated Comprehensive Plans of the counties.
- The TCRC believes the filed SMP is an AEP plan, was prepared with only the “participation” of the stakeholders, and in our opinion, is unduly slanted to influences by governmental resource agencies viewing the project as a natural body of water, as opposed to a manmade project, at the expense of the interests of local citizens as represented by their local officials.
- The 3 counties have worked together closely on common lake interests and issues since the 1970’s and have set up the TCRC as a single focal point for the duration of the relicensing process to work cooperatively with the FERC and AEP.
- We recognize the ILP is a new process that, like most, will have its startup issues but we feel many issues with the SMP can be settled early on to meet the ILP goals of speed and efficiency.
- The TCRC believes the extent of sedimentation and movement of the 800’ contour must be identified, followed by mitigation and prevention measures, including BMP dredging. Also, more flexible stabilization techniques must be allowed, including bulkheading.
- The TCRC believes “Lake Care” issues of debris, invasive vegetation and species, NAV systems, stabilization, and water level management must be conditions of the new license.
- The TCRC believes the classifications should merge with the Counties updated Comprehensive Plans and the impacts of the classifications studied.
- Map and classification inaccuracies should be permitted by AEP. Also, redress is needed for “takings” and sedimentation buildup not mitigated.
- A comprehensive socioeconomic study must be done.
- The TCRC advocates vegetative cover flexibility (BMP fit to the site) and fair governance in respect to buffers.
- The TCRC believes there should be an interpretation and appeals body with a local voice, such as including a dispute resolution process in the license conditions.
- A local voice is needed when determining boat densities and carrying capacity.
- Another concern of the TCRC is the issue of fees.
- AEP should respond in a timely manner on permits and variances.
- Permits must transfer with the property when the property is transferred.
- Public access needs to be addressed, especially on the lower Blackwater.
- Private ramps should be permitted by right on larger parcels and lots.
- The TCRC recommends classifying mobile home parks as high density.
- The TCRC believes the proposed woody debris regulations in the SMP are unrealistic and that floating debris is a safety issue and should be removed.