A REPORT TO

THE HONORABLE ROBERT F. McDONNELL, GOVERNOR,

AND

THE GENERAL ASSEMBLY OF VIRGINIA

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE

2012 ANNUAL REPORT

Virginia Roanoke River Basin Advisory Committee
Executive Summary

The Virginia Roanoke River Basin Advisory Committee (VRRBAC) was established in the executive branch of state government as an advisory committee to the Virginia delegation to the Roanoke River Basin Bi-State Commission. VRRBAC assists the delegation in fulfilling its duties and carrying out the objectives of the Commission pursuant to Virginia Code §62.1-69.39.

VRRBAC hosted several presentations at meetings with topics of interest to the basin, including uranium mining.

This report provides information regarding VRRBAC's activities during the 2012 calendar year in accordance with Virginia Code § 62.1-69.35:2.

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Introduction

The Virginia Roanoke River Basin Advisory Committee (VRRBAC) was established as an advisory committee to the Virginia delegation to the Roanoke River Basin Bi-State Commission. VRRBAC assists the Virginia delegation in fulfilling its duties and carrying out the objectives of the Commission pursuant to Va. Code § 62.1-69.39. VRRBAC is composed of 23 members that include one ex-officio U. S. Representative, six ex-officio Virginia legislative members, 13 non-legislative citizen members, and three ex-officio members from North Carolina. The planning district commissions (PDCs) located in the Roanoke River Basin (Basin) recommended 11 of the non-legislative citizen members of the advisory committee, while the Senate Committee on Rules and the Speaker of the House each appointed one non-legislative citizen member. These non-legislative citizen members reside within the Basin's watershed, represent the diversity of interests within the Basin area, and have demonstrated interest, experience, or expertise in water-related Basin issues.

The Roanoke River Basin Bi-State Commission was established as a bi-state commission composed of members from the Commonwealth of Virginia and the State of North Carolina. The purpose of the Commission is to:

1. Provide guidance, conduct joint meetings, and make recommendations to local, state and federal legislative and administrative bodies, and to others as it deems necessary and appropriate, regarding the use, stewardship, and enhancement of the Basin's water and other natural resources;

2. Provide a forum for discussion of issues affecting the Basin's water quantity, water quality, and other natural resources;

3. Promote communication, coordination, and education among stakeholders within the Basin;

4. Identify Basin-related problems and recommend appropriate solutions; and

5. Undertake studies and prepare, publish, and disseminate information through reports and other communications related to water quantity, water quality, and other natural resources of the Basin.

Meetings and Locations

VRRBAC meets throughout the Basin in an effort to make the meetings available to all Basin constituents. This year, the VRRBAC held three meetings, in Danville, Charlotte Court House, and Boydton. Meeting agendas and presentations can be found in Appendix B.

Organization

Mike McEvoy of Roanoke was elected by the membership to serve as Chairman of the Virginia Roanoke River Basin Advisory Committee. Read Charlton of Charlotte Court House and Tim Pace of Collinsville were elected by the membership to serve as Vice Chairmen of the Advisory Committee.

Current Membership of VRRBAC

There are currently 20 members on the VRRBAC. North Carolina is permitted by Virginia statute to provide three ex-officio members to the VRRBAC. To date, these members have not been appointed. A list of current members is provided below.

Senator William Stanley
Senator Frank M. Ruff
Delegate James Edmunds, II
Delegate Thomas C. Wright, Jr.
Delegate Charles Poindexter
Delegate Onzlee Ware
Representative Robert Hurt
Mike McEvoy, Chairman, Roanoke
Mark Wagner, Huddleston
Bill Lindenmuth, Bracey
Joe Rogers, Chatham
John H. Feild, Mecklenburg
Haywood J. Hamlet, Phenix
Evelyn Janney, Floyd
Bob Jean, Brookneal
Russell Johnson, Wirtz
John Lindsey, Penhook
Billy Martin, Blue Ridge
Tim Pace, 2nd Vice Chair, Collinsville
Read Charlton, 1st Vice Chair, Charlotte Court House

Non-legislative Delegates to the Roanoke River Basin Bi-State Commission

Mike McEvoy, John Feild, and Haywood Hamlet were recommended by the Advisory Committee to serve as the non-legislative delegates to the Roanoke River Basin Bi-State Commission and were appointed by the Governor.

Subcommittees

The VRRBAC has six subcommittees that mirror those established by the Roanoke River Basin Bi-State Commission: Agriculture, Forestry, and Soil and Water Conservation Districts; Lake Interests; Public Officials and Government Entities; Permit Holders; River Interests; and Basin Interests. These subcommittees are set up to parallel the structure of the North Carolina counterpart so that the groups can easily interface. The subcommittees are designed to bring together the most knowledgeable people on an issue to accomplish the work of VRRBAC. An effort is made to maintain a geographical and urban/rural balance. VRRBAC members serve as the chairs and vice-chairs of these subcommittees. Other members may serve as their particular skills are needed. No subcommittee met in 2012.

The current composition of the subcommittees is listed below.

Agriculture, Forestry Sub-Committee
Members: Haywood Hamlet - Chairman; Evelyn Janney - Vice-Chairman; Walter Coles, Robert Conner, Mark Wagner, and Billy Martin.
Responsibility: Farm, livestock, and silviculture practices; pesticide / herbicide management; land conservation programs; biosolids, manure, and nutrient management; bio-fuels development; dam and impoundment safety; soil conservation, economic development and agricultural tourism.
Sub-Committee Member Criteria: Agricultural and forestry interests throughout the Basin and representatives from the soil and water conservation districts. Examples: farmers, ranchers, wood products producers, state and federal forestry managers, agricultural agency representatives, dam safety engineers, extension agents, soil and water conservation officials; land conservation agencies; and trusts.

Lake Interests Sub-Committee
Members: Russ Johnson - Chairman; Bob Conner; Mark Wagner; Bill Lindenmuth; Olga Kolotushkina; Tim Pace.
Responsibility: Swimming standards; lake recreational uses, fishing and tourism; debris and sedimentation management; invasive species control; lake water quality standards and monitoring; water level management; marina, dock, and shoreline regulations; boat waste management; navigational aids; and boating safety.
Sub-Committee Member Criteria: Lake interest groups. Examples: Shoreline property owners, boating organizations, citizen lake association representatives, fishing advocates and fishery managers, environmental organizations, lake management and public safety officials, recreation and tourism officials, environmental protection agencies.

Permit Holders Sub-Committee
Members: John Lindsey - Chairman; Mike McEvoy; Read Charlton; Barry Dunkley, William Johnson, Maureen Castern, C.J. Mitchem, Willie Jones, Mike Ward, and Bill Reidenbach.
Responsibility: Water conservation, water recycling, and wastewater reuse; water quality standards and emerging contaminates; environmental laboratory requirements; water withdrawal rights; construction practices and low impact development; solid and hazardous waste management; fuel storage; air quality; power generation, mining and renewable energy.
Sub-Committee Member Criteria: Those entities that hold permits issued by a federal, state or local regulatory agency pertaining to the water of the Basin. Examples: Industrial facility representatives; commercial, development, and mining interests; manufacturing advocacy organizations; permitting agency representatives; water and wastewater management agencies; landfill operators; fuel supply and power generation interests; and consulting engineers.

Public Officials and Government Entities Sub-Committee
Members: Tim Pace - Chair; Delegate Charles Poindexter; John Feild; Jean McCarter; Billy Martin; Bob Jean; Andrew Lester; and Brian McCrodden.
Responsibility: Water supply planning; water public health; flood control, flood plain regulation, storm water management, emergency response, and water resource financing; land development planning and use requirements; erosion and sediment programs; waste

disposal requirements; transportation impacts to watershed; economic development; and disputes between jurisdictions.
Sub-Committee Member Criteria: Representatives of each county, city, and town and any other governmental entities that the Commission deems appropriate as provided by statute. Examples: Elected officials (local, state, or federal) local government managers, state environmental regulatory representatives, state and local health department representatives, council of governments or planning district commission members, economic development officials, local government advocacy organizations, and federal agency representatives.

Roanoke River Basin Interests Sub-Committee
Members: Read Charlton - Chairman; Bud LaRoche, Virginia Division of Game and Inland Fisheries; Pamela Kent Pettus; Maureen Castern; J. T. Davis; Jerry Lovelace, Tom Stutts, and Bob Jean.
Responsibility: Scenic river designations; river water quality standards and monitoring; species protection and restoration; in-stream recreational uses, greenway development and tourism; stream bank restoration; and minimum in-stream flows.
Sub-Committee Member Criteria: River interest groups. Examples:
Riparian landowners, fishing advocates and fishery managers, environmental organizations, canoeing and kayaking interests, citizen watershed monitoring groups, environmental protection agencies, recreation and tourism officials, game management agencies, watershed managers, and consultants.

Issues and Other Pertinent Topics

Uranium Mining
The VRRBAC had a presentation and heard public comment regarding lifting the ban on uranium mining in Virginia. At the August 27, 2012 meeting, the VRRBAC passed a resolution advising the Virginia Delegation to the Roanoke River Basin Bi-State Commission on the Mining and Milling of Uranium in Virginia (Appendix C).

Weed Control
The VRRBAC heard two presentations about noxious weed control in two lakes and anticipate more presentations in the future, as the problem continues to worsen in the basin.

2012 Presentations to the Committee

The following presentations can be found in Appendix B. Mr. Cataldo's presentation was not received for inclusion in this report.

- *Uranium Mining in Virginia*, prepared by the National Academy of Sciences Committee, presentation by Dr. Paul Locke and David Feary to VRRBAC May 14, 2012
- *Lake Gaston Weed Program*, by John Cataldo, member of the Brunswick County Board of Supervisors, May 14, 2012
- *Weed Control Program for Smith Mountain Lake*, by John Lindsey, May 14, 2012

Appendix A - Chapters 5.4 and 5.5 of Title 62.1 of the Code of Virginia

Chapter 5.4

§ 62.1-69.34. Virginia Roanoke River Basin Advisory Committee established; purpose; membership; terms; meetings.

A. The Virginia Roanoke River Basin Advisory Committee, hereinafter referred to as the "Committee," is hereby established in the executive branch of state government as an advisory committee to the Virginia delegation to the Roanoke River Basin Bi-State Commission. The Committee shall assist the delegation in fulfilling its duties and carrying out the objectives of the Commission, pursuant to § 62.1-69.39. The advisory committee shall be composed of 23 members as follows: two members of the Senate, whose districts include a part of the Virginia portion of the Roanoke River Basin, to be appointed by the Senate Committee on Rules; four members of the House of Delegates, whose districts include a part of the Virginia portion of the Roanoke River Basin, to be appointed by the Speaker of the House of Delegates in accordance with the principles of proportional representation contained in the Rules of the House of Delegates; one nonlegislative citizen member at large appointed by the Senate Committee on Rules; one nonlegislative citizen member at large appointed by the Speaker of the House of Delegates; 11 nonlegislative citizen members selected by the legislative members of the advisory committee such that two are chosen from recommendations of each of the following: the Central Virginia Planning District Commission, the West Piedmont Planning District Commission, the Southside Planning District Commission, the Piedmont Planning District Commission, and the Roanoke Valley Alleghany Planning District Commission; and one member selected by the legislative members of the advisory committee from among recommendations submitted by the New River Valley Planning District Commission; and the Virginia member of the United States House of Representatives, whose district includes the largest portion of the Basin, or his designee, and three representatives of the State of North Carolina appointed in a manner as the General Assembly of North Carolina may determine appropriate. Except for the representatives of North Carolina, all nonlegislative citizen members shall be citizens of the Commonwealth of Virginia. The Virginia member of the United States House of Representatives, the members of the Virginia General Assembly, and the representatives of North Carolina shall serve ex officio without voting privileges. Of the recommendations submitted by planning district commissions authorized to recommend two members, one member shall be a nonlegislative citizen who resides within the respective planning district. However, the New River Valley Planning District Commission may recommend either one nonlegislative citizen at large who resides within the planning district or one member, who at the time of the recommendation, is serving as an elected member or an employee of a local governing body, or one member of the board of directors or an employee of the planning district commission. All persons recommended by the planning district commissions to serve as members of the advisory committee shall reside within the Basin's watershed, represent the diversity of interests in

the jurisdictions comprising the respective planning district commissions, and demonstrate interest, experience, or expertise in water-related Basin issues.
B. State and federal legislative members and local government officials appointed to the advisory committee shall serve terms coincident with their terms of office. Nonlegislative citizen members appointed by the Senate Committee on Rules and the Speaker of the House of Delegates to serve on the advisory committee, and ex officio members representing the State of North Carolina shall serve a term of two years. Initially, planning district commissions authorized to recommend two nonlegislative citizen members to the advisory committee shall recommend one member for a term of two years and one member for a term of one year. However, the nonlegislative citizen member recommended to serve on the advisory committee by the New River Valley Planning District Commission shall serve a term of one year. After the initial staggering of terms, the term of office of nonlegislative citizen members recommended by the planning district commissions shall be for two years. Nonlegislative citizen members recommended by planning district commissions shall be eligible for reappointment, if such members shall have attended at least one-half of all meetings of the Commission during their current term of service. Nonlegislative citizen members shall serve for no more than three consecutive two-year terms. Appointments to fill vacancies, other than by expiration of a term, shall be made for the unexpired terms. Vacancies shall be filled in the same manner as the original appointment. The remainder of any term to which a nonlegislative citizen member is appointed to fill shall not constitute a term in determining the member's eligibility for reappointment.
The advisory committee shall elect a chairman and a vice-chairman from among its voting members. A majority of the voting members shall constitute a quorum. The meetings of the advisory committee shall be held at the call of the chairman or whenever the majority of the voting members so request.

§ 62.1-69.35. Compensation and expenses.
Legislative members of the advisory committee shall receive such compensation as provided in § 30-19.12, and non-legislative members shall receive such compensation for the performance of their duties as provided in § 2.2-2813. All members shall be reimbursed for all reasonable and necessary expenses incurred in the performance of their duties as provided in §§ 2.2-2813 and 2.2-2825. Funding for the costs of compensation and expenses of members shall be paid from such funds as may be provided to the Department of Environmental Quality in the appropriations act for this purpose.

§ 62.1-69.35:1. Staffing.
The Department of Environmental Quality shall provide staff support to the advisory committee. All agencies of the Commonwealth shall provide assistance to the advisory committee, upon request.

§ 62.1-69.35:2. Chairman's executive summary of activity and work of the advisory committee.
The chairman of the advisory committee shall submit to the Governor and the General Assembly an annual executive summary of the interim activity and work of the advisory committee no later than the first day of each regular session of the General Assembly.

The executive summary shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

Chapter 5.5

§ 62.1-69.36. Definitions.
As used in this chapter, unless the context requires a different meaning:
"Basin" means the Roanoke River Basin.
"Roanoke River Basin" means that land area designated as the Roanoke River Basin by the Virginia State Water Control Board, pursuant to § 62.1-44.38, and the North Carolina Department of Environment and Natural Resources.

§ 62.1-69.37. Roanoke River Basin Bi-State Commission established; purpose.
The Roanoke River Basin Bi-State Commission is hereby established as a bi-state commission composed of members from the Commonwealth of Virginia and the State of North Carolina and hereinafter referred to as the Commission. The Commission shall:
1. Provide guidance, conduct joint meetings, and make recommendations to local, state and federal legislative and administrative bodies, and to others as it deems necessary and appropriate, regarding the use, stewardship, and enhancement of the Basin's water and other natural resources;
2. Provide a forum for discussion of issues affecting the Basin's water quantity, water quality, and other natural resources;
3. Promote communication, coordination and education among stakeholders within the Basin;
4. Identify Basin-related problems and recommend appropriate solutions; and
5. Undertake studies and prepare, publish, and disseminate information through reports, and other communications, related to water quantity, water quality and other natural resources of the Basin.

§ 62.1-69.38. Membership; terms.
A. The Commission shall be composed of 18 voting members that include nine members representing the Commonwealth of Virginia and nine members representing the State of North Carolina. The Virginia delegation shall consist of the six legislative members appointed to the Virginia Roanoke River Basin Advisory Committee, and three nonlegislative citizen members appointed to the Virginia Roanoke River Basin Advisory Committee, who represent different geographical areas of the Virginia portion of the Roanoke River Basin, to be appointed by the Governor of Virginia. The North Carolina delegation to the Commission shall be appointed as determined by the State of North Carolina. All members appointed to the Commission by the Commonwealth of Virginia and the State of North Carolina shall reside within the Basin's watershed. Members of the Virginia House of Delegates and the Senate of Virginia, the North Carolina House of Representatives and Senate, and federal legislators, who have not been appointed to the Commission and whose districts include any portion of the Basin, shall serve as nonvoting ex officio members of the Commission.

B. Legislative members of the Virginia delegation, federal legislators, and local government officials, whether appointed or ex officio, shall serve terms coincident with their terms of office. Nonlegislative citizen members shall be appointed to serve two-year terms, unless the member is reappointed by the appointing authorities of each state. Appointments to fill vacancies, other than by expiration of a term, shall be made for the unexpired terms. Vacancies shall be filled in the same manner as the original appointment.
C. Each state's delegation to the Commission may meet separately to discuss Basin-related issues affecting their state, and may report their findings independently of the Commission. A majority of the voting members shall constitute a quorum.

§ 62.1-69.39. Roanoke River Basin Bi-State Commission powers and duties.
A. The Commission shall have no regulatory authority.
B. To perform its duties and objectives, the Commission shall have the power to:
1. Develop rules and procedures for the conduct of its business or as may be necessary to perform its duties and carry out its objectives, including, but not limited to, selecting a chairman and vice-chairman, rotating chairmanships, calling meetings and establishing voting procedures. Rules and procedures developed pursuant to this subdivision shall be effective upon an affirmative vote by a majority of the Commission members;
2. Establish standing and ad hoc advisory committees, which shall be constituted in a manner to ensure a balance between recognized interests. The purpose of each advisory committee shall be determined by the Commission;
3. Seek, apply for, accept and expend gifts, grants and donations, services and other aid from public or private sources. With the exception of funds provided by the planning district commissions and funds appropriated by the General Assemblies of Virginia and North Carolina, the Commission may accept funds only after an affirmative vote by a majority of the members of the Commission or by following such other procedures as may be established by the Commission for the conduct of its business;
4. Establish a nonprofit corporation to assist in the details of administering its affairs and in raising funds;
5. Enter into contracts and execute all instruments necessary or appropriate; and
6. Perform any lawful acts necessary or appropriate for the furtherance of its work.

§ 62.1-69.40. Standing and ad hoc committees.
To facilitate communication among stakeholders in the Roanoke River Basin, and to maximize participation by all interested parties, the Commission shall establish both standing and ad hoc committees. The Commission shall appoint the members of the standing and ad hoc committees, in accordance with guidelines adopted by the Commission. The standing committees shall include, but not be limited to, the following:
1. Permit holders. The Commission shall identify those entities that hold permits issued by a federal, state or local regulatory agency pertaining to the water of the Basin. Such entities may recommend a representative to be appointed to the committee by the Commission;
2. Roanoke River Basin interest groups. The Commission shall identify interest groups that may recommend a representative to be appointed to the committee by the Commission;

3. Public officials and government entities. The committee shall be composed of representatives of each county, city and town located completely or partially within the Basin, and any other governmental entities that the Commission deems appropriate may recommend one member to be appointed to the committee by the Commission. The committee may also include the U.S. Senators from Virginia and North Carolina or their designees, and any member of the U.S. House of Representatives or his designee, whose district includes any portion of the Basin, if such members elect to serve on the committee; and
4. Agriculture, forestry and soil and water conservation districts. The Commission shall identify persons who represent agricultural and forestry interests throughout the Basin and representatives from the soil and water conservation districts within the Basin and shall appoint representatives from these groups to the committee.

§ 62.1-69.41. Staffing and support.
The Virginia Department of Environmental Quality and the North Carolina Department of Environment and Natural Resources shall provide staff support to the Commission. Additional staff may be hired or contracted by the Commission through funds raised by or provided to it. The duties and compensation of such additional staff shall be determined and fixed by the Commission, within available resources. All agencies of the Commonwealth of Virginia and the State of North Carolina shall cooperate with the Commission and, upon request, shall assist the Commission in fulfilling its responsibilities. The Virginia Secretary of Natural Resources and the North Carolina Secretary of the Department of Environment and Natural Resources or their designees shall each serve as the liaison between their respective state agencies and the Commission.

§ 62.1-69.42. Funding.
A. The Commission shall annually adopt a budget, which shall include the Commission's estimated expenses. Funding for the Commission shall be shared and apportioned between the Commonwealth of Virginia and the State of North Carolina. The appropriation of public funds to the Commission shall be provided through each state's regular process for appropriating public funds. The Virginia planning district commissions within the Basin shall bear a proportion of Virginia's share of the expenses, which may be in the form of in-kind contributions.
B. The Commission shall designate a fiscal agent.
C. The accounts and records of the Commission showing the receipt and disbursement of funds from whatever source derived shall be in such form as the Virginia Auditor of Public Accounts and the North Carolina State Auditor prescribe, provided that such accounts shall correspond as nearly as possible to the accounts and records for such matters maintained by similar enterprises. The accounts and records of the Commission shall be subject to an annual audit by the Virginia Auditor of Public Accounts and the North Carolina State Auditor or their legal representatives, and the costs of such audit services shall be borne by the Commission. The results of the audits shall be delivered to the appropriate legislative oversight committees in each state.

§ 62.1-69.43. Compensation and expenses.

A. Legislative members of the Virginia delegation to the Commission shall receive such compensation as provided in § 30-19.12, and non-legislative members shall receive such compensation for the performance of their duties as provided in § 2.2-2813. All voting members shall be reimbursed for all reasonable and necessary expenses incurred in the performance of their duties as provided in § § 2.2-2813 and 2.2-2825. However, all such expenses shall be paid from existing appropriations and funds provided to the Commission or, if unfunded, shall be approved by the Joint Rules Committee.
Members of the Virginia House of Delegates and the Senate of Virginia, and members of the Virginia Congressional delegation, who have not been appointed to the Commission, whose districts include any portion of the Basin, and who serve as nonvoting ex officio members of the Commission shall serve without compensation and expenses.
Nonlegislative citizen members appointed to any standing committees or ad hoc committees shall serve without compensation and expenses.
B. The North Carolina members of the Commission shall receive per diem, subsistence, and travel expenses as follows:
1. Ex officio legislative members who are members of the General Assembly at the rate established in North Carolina G.S. 138-6;
2. Commission members who are officials or employees of the State or of local government agencies at the rate established in North Carolina G.S. 138-6; and
3. All other members at the rate established in North Carolina G.S. 138-5.

§ 62.1-69.44. Annual report required.
The Commission shall submit an annual report, including any recommendations, to the Governor and General Assembly of Virginia and the Governor and General Assembly of North Carolina.

Appendix B – Meeting Agendas and Presentations

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE

Meeting Agenda
Tuesday, March 20, 2012
1:00 p.m. until 2:00 p.m.
Danville, VA

A. Call meeting to order

B. Welcome; Recognition of Members and Guests

C. Consider Minutes of August 31, 2011 Meeting

D. Sub-Committee Reports
- Agriculture and Forestry Sub-Committee - Haywood Hamlet, Chair
- Lake Interests Sub-Committee - Russ Johnson, Chair
- Permit Holders Sub-Committee - John Lindsey, Chair
- Public Officials and Government Entities Sub-Committee - Tim Pace, Chair
- Roanoke River Interests Sub-Committee - Read Charlton, Chair

E. National Academy of Sciences, Uranium Mining in Virginia – assignment of chapters for future discussion – Mike McEvoy
http://dls.virginia.gov/commissions/cec/files/NAS_study.pdf

F. Virginia's SB 425 regarding Interbasin Transfers

F. Next Meeting Date/Topic/Location

G. Other Business

H. Adjournment

Committee Members

Senator William M. Stanley, Jr.
Senator Frank M. Ruff
Delegate Kathy J. Byron
Delegate Thomas C. Wright, Jr
Delegate Onzlee Ware
Delegate Charles D. Poindexter
Congressman Robert Hurt
Mike McEvoy, Chairman, Roanoke
Tim Pace, Collinsville, 2nd Vice-Chair
Bill Lindenmuth, Bracey
Senator Bill Stanley, Jr.

Walter Coles, Sr., Chatham
John H. Feild, Mecklenburg
Haywood J. Hamlet, Phenix
Evelyn Janney, Floyd
Bob Jean, Brookneal
Russ Johnson, Wirtz
John Lindsey, Penhook
Billy Martin, Sr., Blue Ridge
Mark Wagner, Huddleston
Read Charlton, 1st Vice-Chair, Charlotte Court House

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE

Meeting Agenda
Monday, May 14, 2012
10:00 a.m. until 12:00 p.m.
Charlotte Court House, VA

A. Call meeting to order

B. Welcome; Recognition of Members and Guests

C. Consider Minutes of March 20, 2012 Meeting

D. Presentations
   1. Dr. Paul Locke - National Academy of Sciences, UraniumMining in Virginia
      http://dls.virginia.gov/commissions/cec/files/NAS_study.pdf

E. Subcommittee Reports
   1. Agriculture and Forestry Sub-Committee - Haywood Hamlet, Chair
   2. Lake Interests Sub-Committee - Russ Johnson, Chair
      Weeds programs at various lakes (presentations)
   3. Permit Holders Sub-Committee - John Lindsey, Chair
   4. Public Officials and Government Entities Sub-Committee - Tim Pace, Chair
   5. Roanoke River Interests Sub-Committee - Read Charlton, Chair

F. Other Business

G. Next Meeting Date/Topic/Location

H. Adjournment

Committee Members

Senator William M. Stanley, Jr.
Senator Frank M. Ruff
Delegate Kathy J. Byron
Delegate Thomas C. Wright, Jr
Delegate Onzlee Ware
Delegate Charles D. Poindexter
Congressman Robert Hurt
Mike McEvoy, Chairman, Roanoke
Tim Pace, Collinsville, 2nd Vice-Chair
Bill Lindenmuth, Bracey
Senator Bill Stanley, Jr.
Walter Coles, Sr., Chatham
John H. Feild, Mecklenburg
Haywood J. Hamlet, Phenix
Evelyn Janney, Floyd
Bob Jean, Brookneal
Russ Johnson, Wirtz
John Lindsey, Penhook
Billy Martin, Sr., Blue Ridge
Mark Wagner, Huddleston
Read Charlton, 1st Vice-Chair, Charlotte Court House

JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH

Uranium Mining in Virginia – Potential Environmental Effects
The National Academies Report

Paul A. Locke, JD, DrPH (Committee Chair)

10 April 2012

Protecting Health, Saving Lives—*Millions at a Time*

Snapshot of this Presentation

- (Brief) Overview of NAS report
  - Statement of Task
  - Committee Process and Public Engagement
- Caveats and Disclosures
- Key Background Information
- Environmental Considerations
  - Human Health Effects
  - Ecological/Environmental Effects
  - Laws and regulations
- Best Practices
- Conclusion

(Brief) Overview of NAS report

3

NAS Statement of Task (SOT)

- Full statement of task and committee members at www.nationalacademies.org (search "uranium virginia")
- Key points:
  - examine scientific, technical, environmental, human health and safety, and regulatory aspects of uranium mining, milling and processing as they relate to the Commonwealth of Virginia
  - for the purpose of assisting the Commonwealth to determine whether uranium mining, milling and processing can be undertaken in a manner that safeguards the environment, natural and historic resources, agricultural lands, and the health and well-being of its citizens.
- Excluded from SOT
  - Site specific assessments
  - Conclusion regarding whether uranium mining should/should not be undertaken in Virginia

4

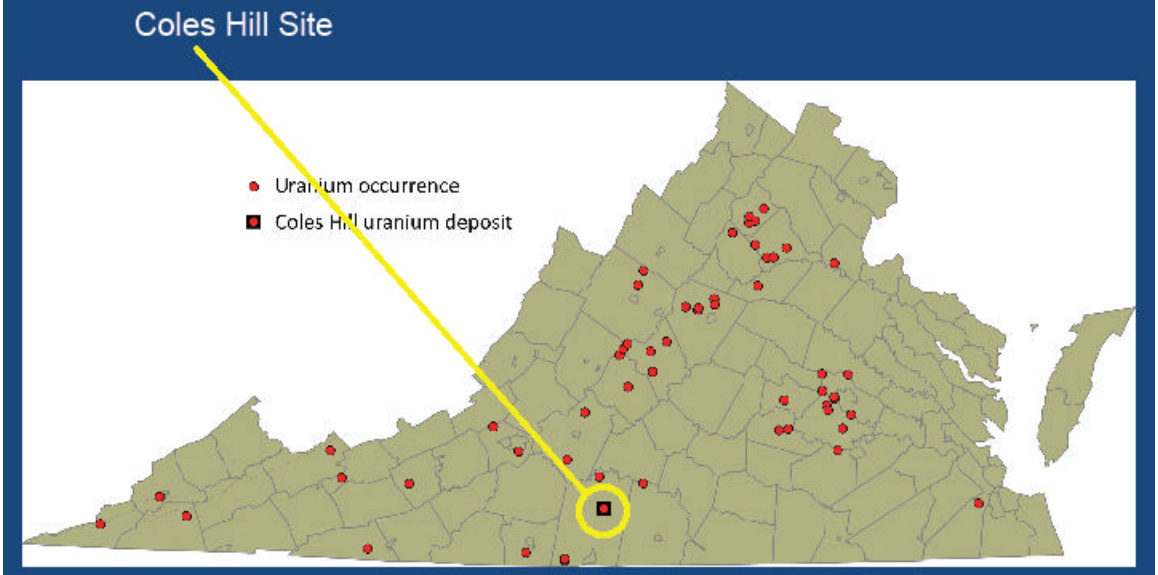
Committee Process and Public Engagement

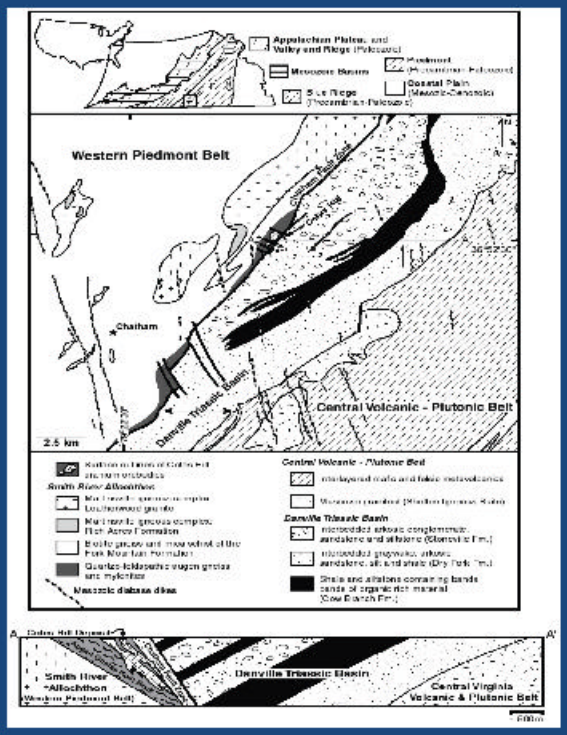
- Meetings
  - 11 months, 7 meetings, 19+ full days
  - All meetings (except the last one) had open and closed sessions
  - 44 experts provided testimony
  - Extensive committee deliberation at and between meetings
- Public Engagement (pre-release)
  - 2 Town Hall sessions to take testimony from public
  - Approximately 150 people spoke
- Public Engagement (post-release)
  - Briefing before the Virginia Legislature's Coal and Energy Commission
  - 5 Public hearings throughout the Commonwealth

Caveats and Disclosures

Key Background Information

Uranium Occurrances in Virginia (figure 3)

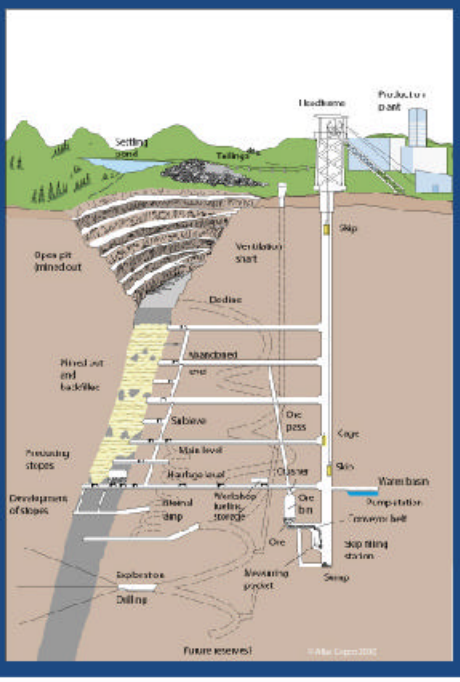




Coles Hill Site, Pittsylvania County Virginia (figure 3.13)

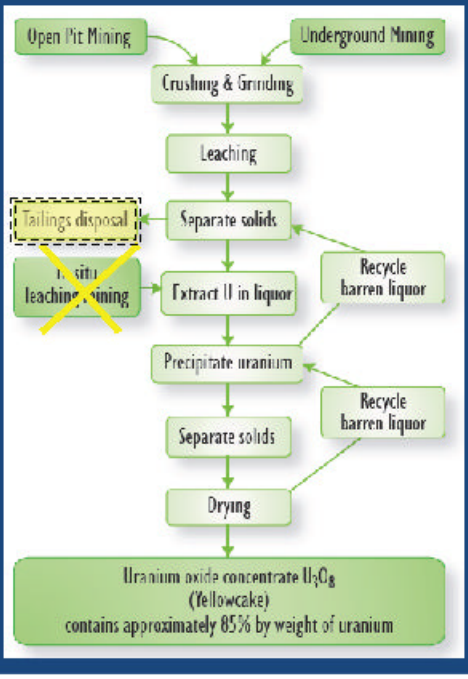
Only deposits at the Coles Hill site seem to be potentially economically viable at present.

Combined Underground and Open Pit Mine (figure 4.1)

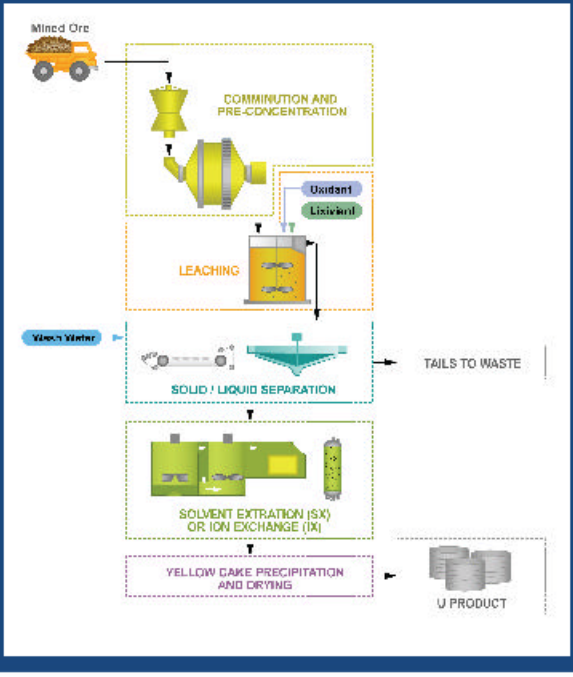


N

Uranium Processing Flow Diagram (figure 4.7)



Conventional Agitated Leach Process (figure 4.9)

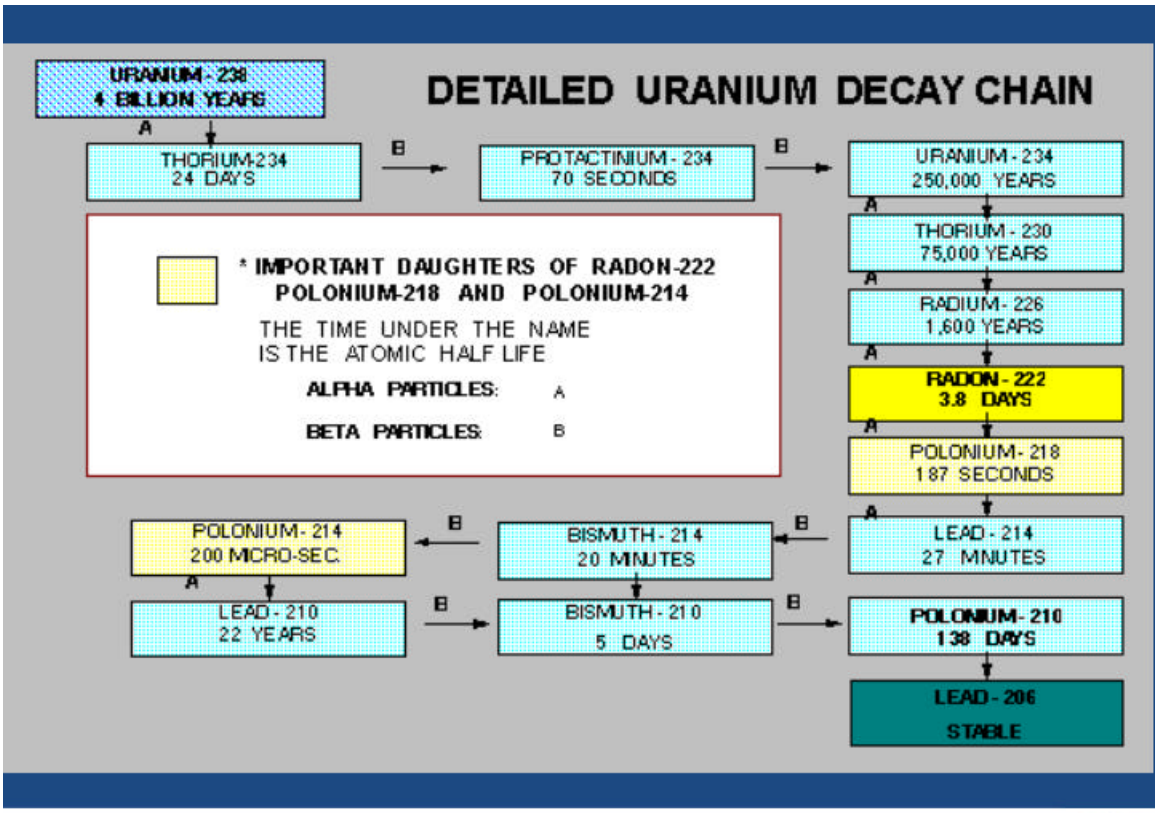


O

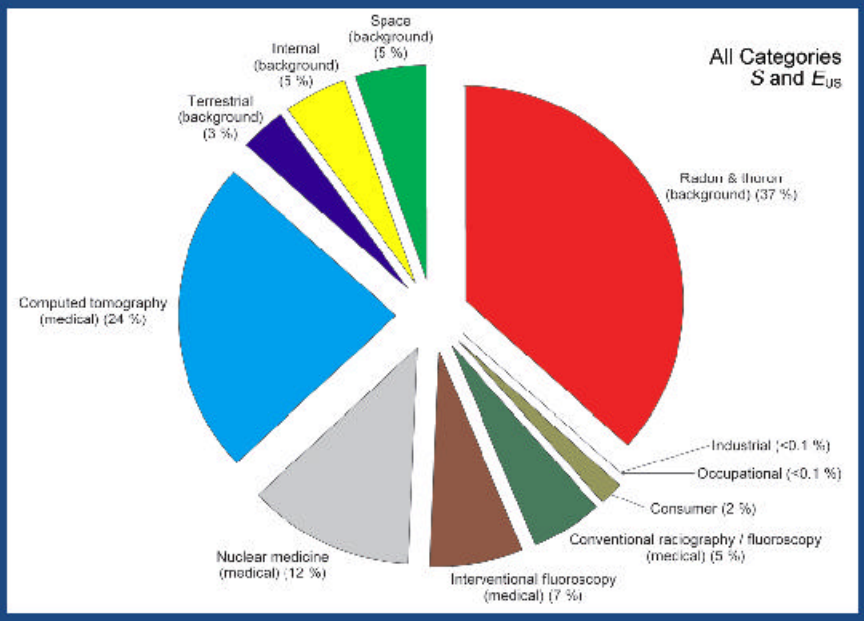
Environmental Considerations

Human Health Effects

- Health risk for workers
  - Non-radiation risks are similar to construction and mining
  - Work-related physical trauma (including electrical injury)
  - Protracted radon exposure is largest radiological risk
  - Silica dust and diesel exhaust exposure create/exacerbate lung cancer risk
- Off-site health risks to communities
  - Tailings risks – radiation and chemical exposure potential
  - Radiation decay products provide a constant source of radiation for thousands of years (beyond our regulatory experience)
  - Site specific conditions and project management are critical

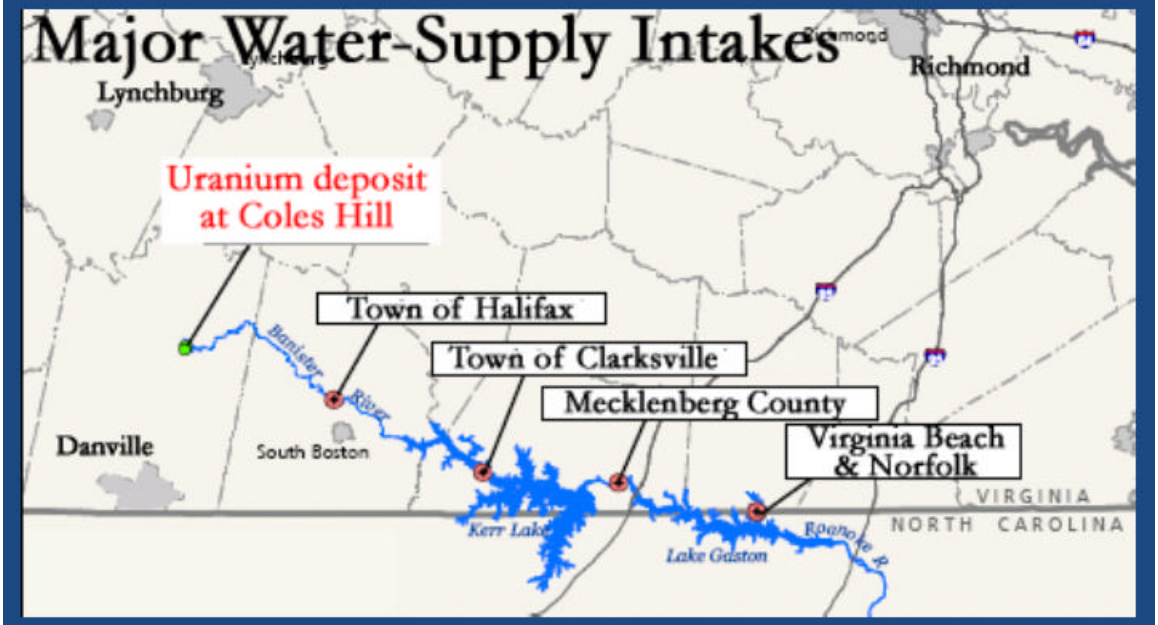


Contribution to Radiation Dose (Total Effective Dose Equivalent) per person (Figure 4)



Ecological and Environmental Effects

- Impact on water
  - Surface water quantity and quality
  - Ground water quantity and quality
- Tailings disposal sites
  - Potential sources of contamination for thousands of years
  - Long term risks are poorly defined
- Extreme natural events and failures in management could create significant potential risks
  - Hurricanes, earthquakes, intense rainfall, drought
  - Poorly designed facilities and waste management errors
- Applying best practices, near to moderate term effects should be substantially reduced
- There is limited data to confirm long-term effectiveness of best practices



Source: Virginia League of Conservation Voters

R

Laws and Regulations

- Patchwork of federal and state laws and regulations cover mining, processing, reclamation, long-term stewardship
- Virginia has no experience regulating uranium mining and no existing regulatory structure specifically for uranium mining
- No federal law applies to mining on non-federal lands
  - State laws would cover mining activities
  - Federal environmental laws would cover air, water land contamination
  - Federal laws would cover worker health and safety
- US Government has only limited recent experience regulating conventional uranium processing and reclamation
- Federal agencies have limited experience applying laws and regulations in positive water balance situations
- Opportunities for meaningful public involvement are fragmented and limited.

US Uranium Mills and Plants, 1996 - 2011

Table 2. Number of uranium mills and plants producing uranium concentrate in the United States

Uranium Concentrate Processing Facilities	End of 1996	End of 1997	End of 1998	End of 1999	End of 2000	End of 2001	End of 2002	End of 2003	End of 2004	End of 2005	End of 2006	End of 2007	End of 2008	End of 2009	End of 2010	4th Quarter 2011
Mills - conventional milling [1]	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	1
Mills - other operations [2]	2	3	2	2	2	1	1	0	0	1	1	1	0	1	0	0
In-Situ-Leach Plants [3]	5	6	6	4	3	3	2	2	3	3	5	5	6	3	4	5
Byproduct Recovery Plants [4]	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**9**	**11**	**9**	**7**	**6**	**4**	**3**	**2**	**3**	**4**	**6**	**6**	**7**	**4**	**5**	**6**

[1] Milling uranium bearing ore
[2] Not milling ore, but producing uranium concentrate from other (non ore) materials.
[3] Not including in-situ-leach plants that only produced uranium concentrate from restoration
[4] Uranium concentrate as a byproduct from phosphate production.
Source: U.S. Energy Information Administration Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."

Best Practices

- Three overarching best practices
  - Require a complete life cycle approach, front-loaded during project planning
  - Use expertise and experience of professionals familiar with internationally accepted best practices
  - Engage in meaningful and timely public participation throughout the life cycle of the project
- Other relevant best practices
  - Apply ALARA to enhance regulations
  - Create a proactive, well designed and executed monitoring program, and make it available to the public
  - Use personal dosimetry for workers and a national radiation dose registry
  - Adopt NIOSH recommended exposure limits

NRC NEWS

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Blog: http://public-blog.nrc-gateway.gov

No. 11-104 June 14, 2011

NRC ISSUES FINAL SAFETY CULTURE POLICY STATEMENT

"Safety culture refers to an organization's collective commitment, by leaders and individuals, to emphasize safety as an overriding priority to competing goals and other considerations to ensure protection of people and the environment."

Conclusion

- If the Commonwealth of Virginia rescinds the existing moratorium on uranium mining, there are steep hurdles to be surmounted before mining and/or processing could be established within a regulatory environment that is appropriately protective of the health and safety of workers, the public, and the environment.
- There is only limited experience with modern underground and open pit uranium mining and processing practices in the wider United States, and no such experience in Virginia.
- At the same time, there exist internationally accepted best practices, founded on principles of openness, transparency, and public involvement in oversight and decision-making, that could provide a starting point for the Commonwealth of Virginia were it to decide that the moratorium should be lifted.
- After extensive scientific and technical briefings, substantial public input, reviewing numerous documents, and extensive deliberations, the committee is convinced that the adoption and rigorous implementation of such practices would be necessary if uranium mining, processing, and reclamation were to be undertaken in the Commonwealth of Virginia.

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Thank you !

Paul A. Locke
plocke@jhsph.edu

Protecting Health, Saving Lives—*Millions at a Time*

U

Neither of the following presentations was available for inclusion in this Annual Report:

- *Lake Gaston Weed Program*, by John Cataldo, member of the Brunswick County Board of Supervisors
- *Weed Control Program for Smith Mountain Lake*, by John Lindsey

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE

Meeting Agenda

Monday, August 27, 2012

11:00 a.m. until 12:00 p.m.

Visitor's Center at John H. Kerr Dam & Reservoir
1930 Mays Chapel Road
Boydton, VA 23917

A. Call meeting to order

B. Welcome; Recognition of Members and Guests

C. Consider Minutes of May 14, 2012 Meeting

D. Resolution
Consider resolution regarding Virginia's moratorium on Uranium Mining

E. Other Business

F. Next Meeting Date/Topic/Location

G. Adjournment

Committee Members

Senator William M. Stanley, Jr.
Senator Frank M. Ruff
Delegate James Edmunds, II
Delegate Thomas C. Wright, Jr
Delegate Onzlee Ware
Delegate Charles D. Poindexter
Congressman Robert Hurt
Mike McEvoy, Chairman, Roanoke
Tim Pace, Collinsville, 2nd Vice-Chair
Bill Lindenmuth, Bracey
Joe Rogers, Chatham
John H. Feild, Mecklenburg
Haywood J. Hamlet, Phenix
Evelyn Janney, Floyd
Bob Jean, Brookneal
Russ Johnson, Wirtz
John Lindsey, Penhook
Billy Martin, Sr., Blue Ridge
Mark Wagner, Huddleston
Read Charlton, 1st Vice-Chair, Charlotte Court House

Appendix C – Resolution Advising the Virginia Delegation to the Roanoke River Basin Bi-State Commission on the Mining and Milling of Uranium in Virginia

A Resolution Advising the Virginia Delegation to the Roanoke River Basin Bi-State Commission on the Mining and Milling of Uranium in Virginia

WHEREAS, the Virginia Roanoke River Basin Advisory Committee has been established in the executive branch of state government as an advisory committee to the Virginia Delegation of the Roanoke River Basin Bi-State Commission for the purpose of assisting the Delegation in fulfilling its duties and carrying out the objectives of the Commission, pursuant to Virginia Code § 62.1-69.39; and

WHEREAS, the Roanoke River Basin Bi-State Commission is a body created by legislation enacted by the Commonwealth of Virginia and the State of North Carolina, Virginia Code §62.1-69.37 and N.C.G.S. §77-91, in part to provide guidance, conduct joint meetings, and make recommendations to local, state and federal legislative and administrative bodies, and to others as it deems necessary and appropriate, regarding the use, stewardship, and enhancement of the Basin's water and other natural resources; and

WHEREAS, the Commonwealth of Virginia has deposits of uranium in various regions, including deposits located in the Roanoke River Basin, including the Coles Hill deposit, the mining of which has been prohibited by legislative moratorium since 1982 by an act of the Virginia General Assembly; and

WHEREAS, at the request of the Virginia Coal and Energy Commission, the National Academics of Sciences (NAS) has completed a study entitled *Uranium Mining in Virginia: Scientific, Technical, Environmental, Human Health and Safety, and Regulatory Aspects of Uranium Mining and Processing in Virginia* which, along with other reports sponsored by various interested parties, have explored the risks and benefits of uranium mining; and

WHEREAS, significant opposition to the mining and milling of uranium has been expressed by local governments, citizen organizations, and landowners in the Roanoke River Basin;

NOW, THEREFORE, THE VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE RESOLVES TO ADVISE THE VIRGINIA DELEGATION TO THE ROANOKE RIVER BI-STATE COMMISION THAT:

1. Uranium mining and milling in Virginia has unique challenges associated with extreme natural events. The Commonwealth's climate and hydrology are expected to support positive water balances at specific mining sites.

2. Virginia has experience regulating hard rock and coal mining, as well as monitoring electrical production at nuclear power plants, but the Commonwealth has no regulatory structure to address uranium mining and no experience with such operations. The federal agency with oversight responsibilities for uranium milling has little experience at locations with a positive water balance.

3. The long term risks of tailings disposal are poorly defined. An off-site release of radioactive compounds or heavy metals from the operation proposed at the Coles Hill site would negatively impact communities that rely on the Roanoke River Basin's water resources for potable water, tourism and agricultural production as well as basin's fisheries and wildlife. Such impacts are likely to be a combination of actual damages and public perception of contamination.

4. These risks, as well as others highlighted in the NAS report, support a conclusion that the prohibition on uranium mining in Virginia should remain in place. The Virginia Delegation should work cooperatively with their counterparts from North

Carolina to express to the Virginia General Assembly support for preservation of the uranium mining prohibition.

Adopted this the 27th day of August 2012.