



***Fairfax Water's Study of Potential Water
Supply Impacts from Uranium Mining and
Milling***

**MWCOG Water Resources Technical
Committee
November 7, 2013**

About Fairfax Water

- **The largest water supplier in the Commonwealth, serving nearly 1.7 million people in Northern Virginia**
- **Single-purpose utility, focused only on drinking water.**
- **Two water sources, the Potomac River at the northern end of Fairfax County and the Occoquan Reservoir at the southern end, feeding into a single interconnected transmission and distribution system.**
- **While we had historically we no longer operate any well systems.**
- **Active in source water protection**

Context

- **Mineral leases obtained in late 1970s and early 1980s; efforts focused on Coles Hill**
- **1982 moratorium**
- **Uranium prices dropped in 1980s and 1990s**
- **Changing economics have made uranium development in Virginia more attractive**
- **Virginia Uranium renewed exploration at Coles Hill in 2007; moratorium must be lifted to allow mining**
- **General Assembly Action required to lift moratorium**
- **A number of studies done looking at this issue**

Potential Water Supply Impacts from Uranium Mining and Milling

- Study looked at:
 - Uranium mining data for Virginia
 - Overview of mining and milling process
 - Mining and milling wastes
 - Regulatory overview
 - Potential for acute and chronic impacts to Fairfax Water
 - Recommended actions



Watershed Engineering Services Basic Ordering Contract, RFP 11-07

TASK ORDER NO. 1 – ASSESSMENT OF
POTENTIAL WATER SUPPLY IMPACTS FROM
URANIUM MINING IN VIRGINIA

December 12, 2011

Prepared by:

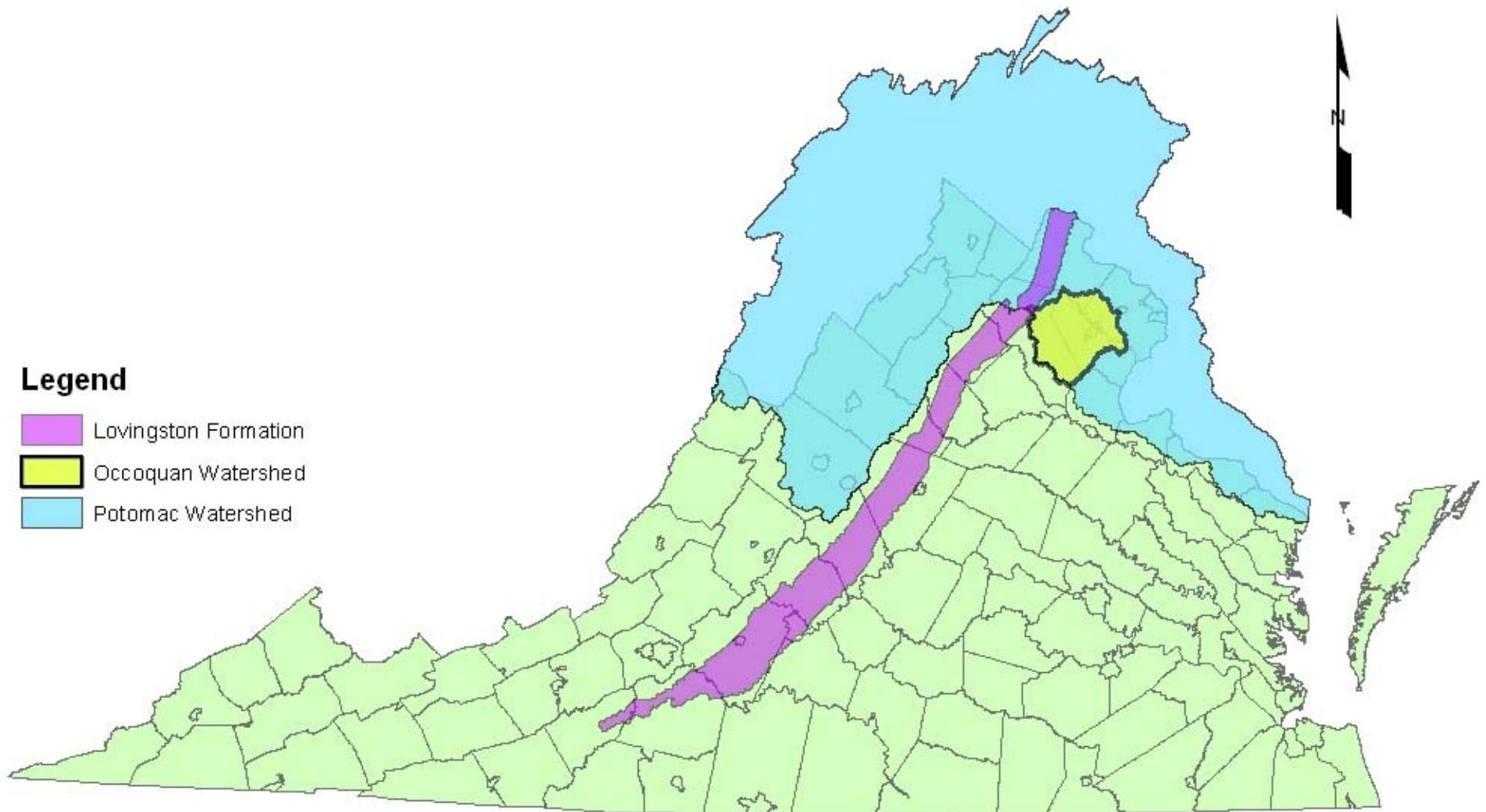
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Geologic Terrain with Potential for Elevated Uranium



Critical Uncertainties

- **Fairfax Water's risk exposure will be related to the following uncertainties:**
 - **Discharge rates and concentrations**
 - **Drainage plans / design storm**
 - **Proximity to surface water**
 - **Landslide potential**
 - **Structural design**
 - **Below- vs. above-grade construction**
 - **Quality control during construction**
 - **Structural inspections and maintenance**

Recommendations

- **Work to promulgate regulations protective of water resources**
- **Pursue continued moratorium on mill facilities in the Occoquan watershed**
- **Track exploratory drilling in the watershed**
- **Review regulations in other states to help inform comments on Virginia regulations**
- **Observe the progression of the Coles Hill development**
- **More specific recommendations in the event of renewed interest in uranium in the Potomac or Occoquan watersheds**

***For more information and Copy of
FW Board Resolution***

http://www.fairfaxwater.org/current/uranium_mining.htm

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