

## Letter of Interest in Serving as a San Juan County, Utah, Library Board Member

**To:** Nicole Perkins, Library Board Director; Ramona Chamberlain, Library Board Chairman; and Mack McDonald, San Juan County Administrator

**From:** Barry Lee Woolley, San Juan County, Utah, resident. My contact information being: e-mail at [blwoolley@hotmail.com](mailto:blwoolley@hotmail.com), with my telephone number being (435) 678-7865. Today's date is September 26, 2023.

- **Some Pertinent Facts:** Over the last fifty years my wife and I have averaged slightly more than one visit per week to libraries across the continent. Of primary interest for recent events, this includes visits to what is now called the City University of New York Library. The libraries have been corporate and government, college and university, foundation, private, and public ones. Our interests encompass both research and general information (and internet use). Attention has been focused at times on child education at all levels for all topics; books purchased have also been from parochial and internet sources. We own and continually use a Nook. We were early users of Worldcat and have been constant users of the Interlibrary Loan services.
- **Educational Background:** I have degrees or advanced degrees from the University of California and the California Institute of Technology. I was the top person in my class at Colorado School of Mines having, among others, scholarships from the Society of Explorational Geophysicists Foundation. Lifelong learning has been pursued in mathematics, geology and geophysics, oceanography, archeology, and history.
- **Possibly Relevant Work Experience:** I have worked at various United States Naval laboratories on both the Pacific and Atlantic coasts, at an aerospace company in California, and at a very small think tank called Marine Acoustics, Incorporated. Approximately half my work experience has been for the United States government; the other half has been with private companies and on my own. I have worked both as an engineer and as a physicist, predominately on research projects, but also on applied and system engineering ones.
- **Partial List of Accomplishments:** I pioneered a mathematical method (involving the theory of equations and physical phase diagrams) for developing differential equations. This introduced method allowed me to create five or six different equations for the structural motion of plates (or aesthenospheres), doubling and tripling the number of modes that can be accurately modeled for both flexural and compressional waves in them. I was the lead researcher or modeler for the world's first effort to mathematically simulate the interaction of weapons (*viz.*, torpedoes and submarines). I solely developed an active classification scheme for detecting submarines in all environments, including background-noise-dominated ones. I proposed and mathematically worked out a Duffing equation explanation for climate and other earth-related behavior. I directed and helped in the modeling of Paleozoic Lycopods, and the understanding of the fossil fish assemblages of the Green River Formation, *etc.* As my father often said, "All that and ten cents [not inflation adjusted] will buy you a cup of coffee."