Land use and watershed science: a 30-year perspective on lessons learned and what we should be worrying about?

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Abstract. For over 30 years I've been working on natural resource science and management issues, with a primary focus on water and watershed management. A combination of luck and perseverance has allowed me to work and travel in over 50 countries on all seven continents, and I've also had the good fortune to have been associated with a wide range of talented mentors, colleagues, and students. The first objective of this talk are to summarize key lessons with respect to hydrology and watershed science, and these include: 1) why hydrology and watershed science are both simple and impossibly complex; 2) the most critical principle of watershed management; 3) why most watershed problems are really cumulative effects, and how these can be best addressed; 4) spatial and temporal scales; 5) the importance of connectivity; 6) what is noise, and what is real, particularly in forested areas; and 7) where our future efforts might best be focused. The shorter, second portion of the talk will present a series of more personal lessons and principles. The hope is that these lessons will stimulate thought and provide some useful guidance for people at all stages in their careers.