Exam II
(100 points)

(6 pts) 1. Would you argue that "water marketing" and "water pricing" are applicable to the same goods? That is, in any given water resource setting, might these two policies be good substitutes for one another in bettering the efficiency of water use? Why/why not?

(6 pts) 2. U.S. requirements pertaining to the cost-benefit analysis of water projects establish two "accounts", NED and RED, into which all economically appraised impacts are to be tallied. What are these accounts?, how do they differ in content?, and what is the decision-making power of each?

(12 pts) 3. "Alternative costs" is an easily abused method of estimating the benefits of a prospective public water action that will increase the water supply. (i) Explain an example situation in which this method might be used by an analyst, and explain why this analyst is overestimating benefits for the setting. (ii) Describe, with the benefit of a graphic, an appropriate approach for estimating the increase in benefits. (iii) Why do you think this abuse tends to occur for public water actions but not private water actions?

(25 pts) 4. Could market failures be sufficiently severe in some surface water scenarios that you would not be in favor of transferable water rights as a means to improve efficiency? Discuss the types of market failures that sometimes exist for surface water within your answer, and provide a well reasoned argument.

(25 pts) 5. Describe the 3 nonaccounting opportunity costs that might enter rates and the 3 primary pricing tools. If prices are optimally established, which of the opportunity costs might affect which of the pricing tools and how/why?

(26 pts) 6. As the state water agency employee designated to work with and advise a particular Local Water Authority (LWA #8), you are the lone source of brilliance on the issue of areas of origin. LWA #8 does not own or directly handle any water. It is a water governing body consisting of locally elected council members, and this council may establish certain regulations pertaining to water use and water right owners within its jurisdiction. Suppose the State has established transferable surface water rights while granting LWAs the power to limit permanent water right exports. If they so choose, LWAs can require that x% of local water rights remain in the LWAs at the end of every year as compared to the amount at the beginning of the year.

LWAs are allowed to place x as high as 98, and they can also choose x=0 (no regulation), so $0 \leq x \leq 98$. If a "tight" rule is selected, such as $x>90$, then #8 will also need a procedure for selecting which trades will be approved because more trades will be proposed than can be accepted. How will you advise #8's board members on (a) the selection of x and (b) how to allocate limited trading if $x>90$?