Experimental results on individuals preferences for temporal sequences of outcomes related to air quality and near-shore ocean water quality are discussed and compared to previous research on the preferences for sequences of health and money outcomes. Generally, participants gave significantly lower ratings to environmental sequences (with equal means) that worsened over time, relative to the ratings they gave to sequences that either remained the same or improved over time. This pattern is reversed when facing sequences with monetary outcomes. This preference structure held for both short (5-year) and long (50-year) time horizons, and was confirmed with the choice data. A relationship between expectations and choices was also found. A model proposed by Loewenstein and Prelec for the valuation of sequences of outcomes was applied to the current data set and compared to the traditional discounting model. In all cases, the model that incorporated "gestalt" features of the sequence (slope and uniformity) performed better than the Net Present Value discounting model at predicting the median ratings for the sequences in the different domains.