The Economics of Erosion

In the last year, the economic down turn has been at the forefront both locally and nationally. The recession has hit both private and public sectors, requiring managers to readjust priorities and simplify budgets. The Las Vegas Wash Coordination Committee as well as other projects related to the Las Vegas Wash have not been immune to the economic instability.

One of the biggest projects to be affected by the economic situation was the Systems Conveyance and Operations Program (SCOP) Project proposed by the Clean Water Coalition (CWC). The project would divert the majority of treated wastewater directly from valley water treatment facilities in an underground pipe into the Boulder Basin of Lake Mead.

Most of the anticipated $860 million project was to be funded by connection fees driven by new construction. With little development occurring, these revenues have fallen far short of original estimates. The immediate need for the SCOP project, to accommodate a growing population and potential water quality issues in Lake Mead, has decreased since it was proposed. The CWC Management Board is currently re-evaluating the future role of the CWC and as well as the eventual implementation of the SCOP project, which has been moved back to 2012.

Erosion control projects for the Wash also have been affected by the recession. Although most of the construction costs in the near future will be covered by grants, a significant portion of future funding for these projects will come from the quarter-cent sales tax approved by voters in 1998. Funds from the tax are generally a reliable source, but the recession has required residents to cut back on spending, reducing the amount available. Although some adjustments have been made to cut costs, the installation of the multi-million dollar weirs along the Las Vegas Wash are dictated by progressing erosion points called head-cuts. If left unchecked, an advancing head-cut could endanger existing infrastructure and compromise any of the 12 existing weirs. On the upside, construction projects that are able to move forward have taken advantage of the very competitive construction market. A few Las Vegas Wash erosion control projects that have gone out to bid have received return bids at nearly 50 percent of the engineers estimate.

Pittman Wash Pilot Wetlands Demolished

After four years of service and providing data on water quality, the Pittman Wash Pilot Wetlands were demolished last month. At one third of an acre, the site was constructed in 2005 in Pittman Wash to test whether constructed wetlands could be used to improve the water quality of urban runoff before it enters the Las Vegas Wash. Urban runoff and non-point source pollution is one of the greatest threats to water quality of the Las Vegas Wash and Lake Mead. Water quality and vegetation monitoring began in 2007.

Preliminary results indicated that although there were slight decreases in concentrations from the inlet to the outlet, constructed wetlands can play a limited role in improving several water quality parameters. However, this design was likely too small to produce significant reductions. The construction was coordinated with the City of Henderson to return the channel to its pre-existing condition. Grant funding provided by the Bureau of Reclamation covered the costs of the construction, monitoring and demolition.