

Tim,

I had Chris McComb, P.E., civil engineer with AMC Design Group, and Tucker Rose, ASLA with Circle V Landscape Architecture look at the cost differences associated with a standard sedimentation / filtration pond compared to a biofiltration pond for a ½ acre site and also a 5-acre site. Assuming all things being equal relating to the actual construction of the pond itself (such as walls and splitter boxes), these items are not factored into the costs as these are equal across both pond types. The added costs above and beyond a standard sed/fil pond on a site developed with a biofiltration pond are:

- 1) For a ½ acre site with 80% impervious cover –
 - a) Soil media to support plants - \$18,300
 - b) Plants - \$2,300
 - c) Temporary irrigation to keep the plants alive until established - +/- \$45,000. There is also ongoing maintenance for plant replacements due to drought and potential ongoing irrigation requirements for the replacement plants.
 - d) Total cost above standard sed/fil pond - \$65,600**
- 2) For a 5-acre site with 80% impervious cover –
 - a) Soil media to support plants - \$61,000
 - b) Plants - \$22,900
 - c) Temporary irrigation to keep the plants alive until established - +/- \$93,730. There is also ongoing maintenance for plant replacements due to drought and potential ongoing irrigation requirements for the replacement plants.
 - d) Total cost above standard sed/fil pond - \$177,630**

Important to note that the above assumes a 3' deep pond to handle the stormwater. If the outfall is higher, then the pond is shallower, and this drives up the cost of the bio pond because of additional soil media and additional planting and additional temporary irrigation.

Every regulation costs money to the end user and takes vital land away from development. The small Mom & Pop users pay the highest price – always because the percentage of land lost or cost per acre is more impactful on the smaller sites. There is recognition that these regulations have an environmental benefit, that is unquestionable. But at these levels of \$ impacts with no offsets for relief / enhancements, is it worth it when looking back at all the regulations over the past 38 years and the costs to develop, especially on the smallest of end users. Regs are designed for Walmart and not the Mom & Pop.

Be smart. Be safe. Be kind.

Ron Thrower

