

**Kenny, Ann**

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**From:** Stockdale, Erik  
**Sent:** Friday, April 06, 2001 9:04 AM  
**To:** Kenny, Ann; 'Walters, Katie'; Hellwig, Raymond  
**Cc:** 'Whiting, Kelly (King County WLRD)'  
**Subject:** stormwater volume perspectives

I emailed Mike Dunwiddie at the KC Aquatic Center in Federal Way and asked him how much water the pool held. Here's what he said:

*"Our 50 meter competition pool (25 yards wide, depth 9-10.5 feet) holds 1 million gallons. A more typical, 25 yard, six lane pool holds about a quarter of that."*

1 million gallons = 3.07 acre feet.

So, if we compare this world-class swimming pool to the ponds that are being considered at the 3RW:

Pond D: Volume = 38.3 acre feet = 12.47 Aquatic Center pools

Pond F: Volume = 10.3 acre feet = 3.35 Aquatic Center pools

The mother of all vaults = 88 acre ft = 28.66 Aquatic Center pools

Kelly Whiting also provided the following:

"Erik -

We discussed ways to put flow and storage numbers in perspective. Thank you for the information on the olympic size swimming pool. Here are a couple more numbers for perspective.

My hydrology instructor always referred to the football field at husky stadium as being an acre. I never knew exactly what part he meant. An NCAA regulation football field is 300 feet by 160 feet (from goalline to goalline and sideline to sideline, no endzones, no sideline areas and no track). This works out to be 48,000 square feet, or 1.1 acres. Therefore an 88 acre-foot vault would be 80 feet of water over the field. If a building story is assumed at 10 feet, this would be an 8 story building in the stadium. For perspective, the top of the stadium (press box) is reportedly 185 feet above the playing surface.

Secondly, the rate of discharge from a typical garden hose is about 8 gallons per minute, depending on pressure and hose size. This works out to be about 0.02cfs. Therefore, 0.1 cfs is about 5 garden hoses running full."

I thought you might find these comparisons helpful.

Erik

**AR 025066**

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