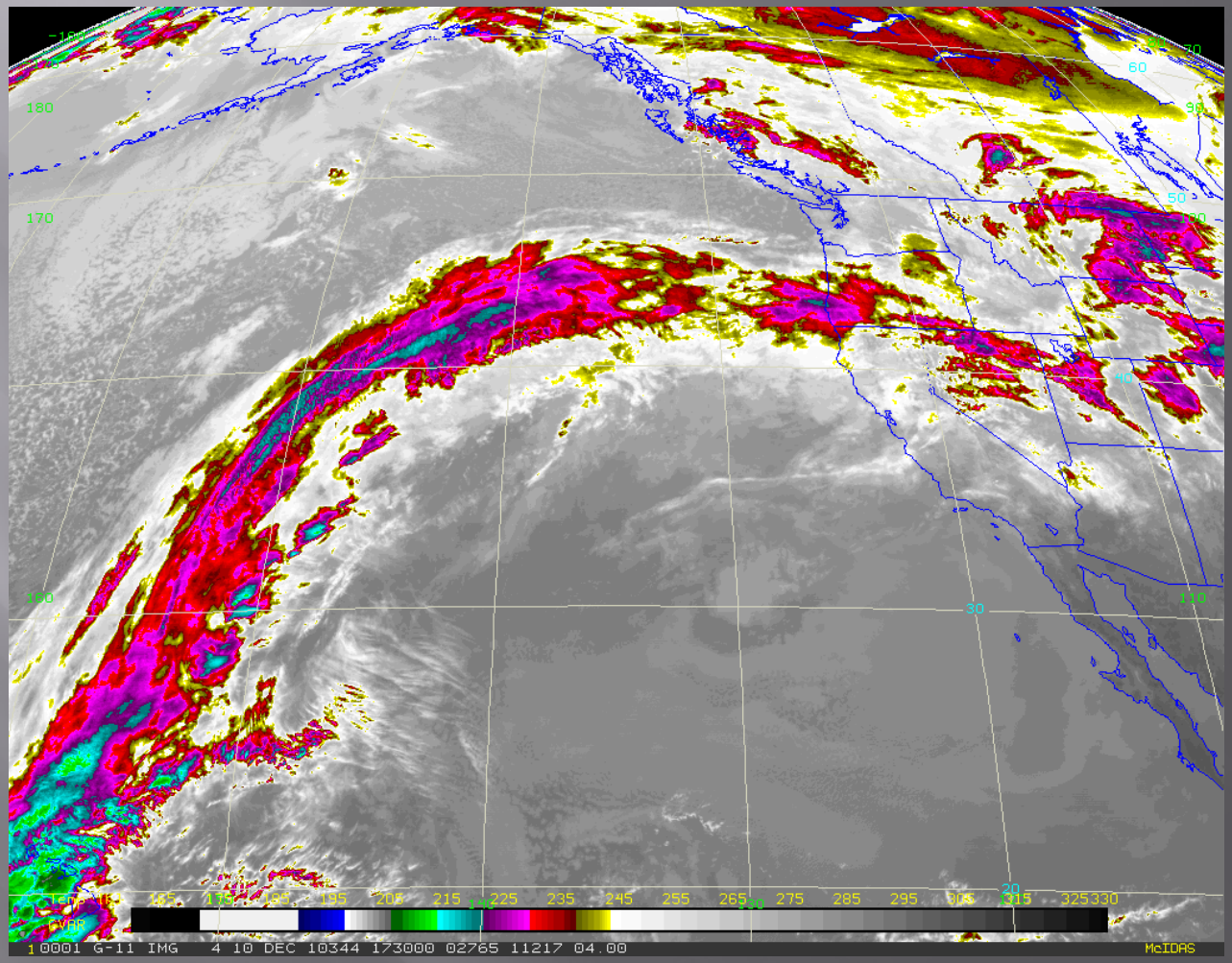
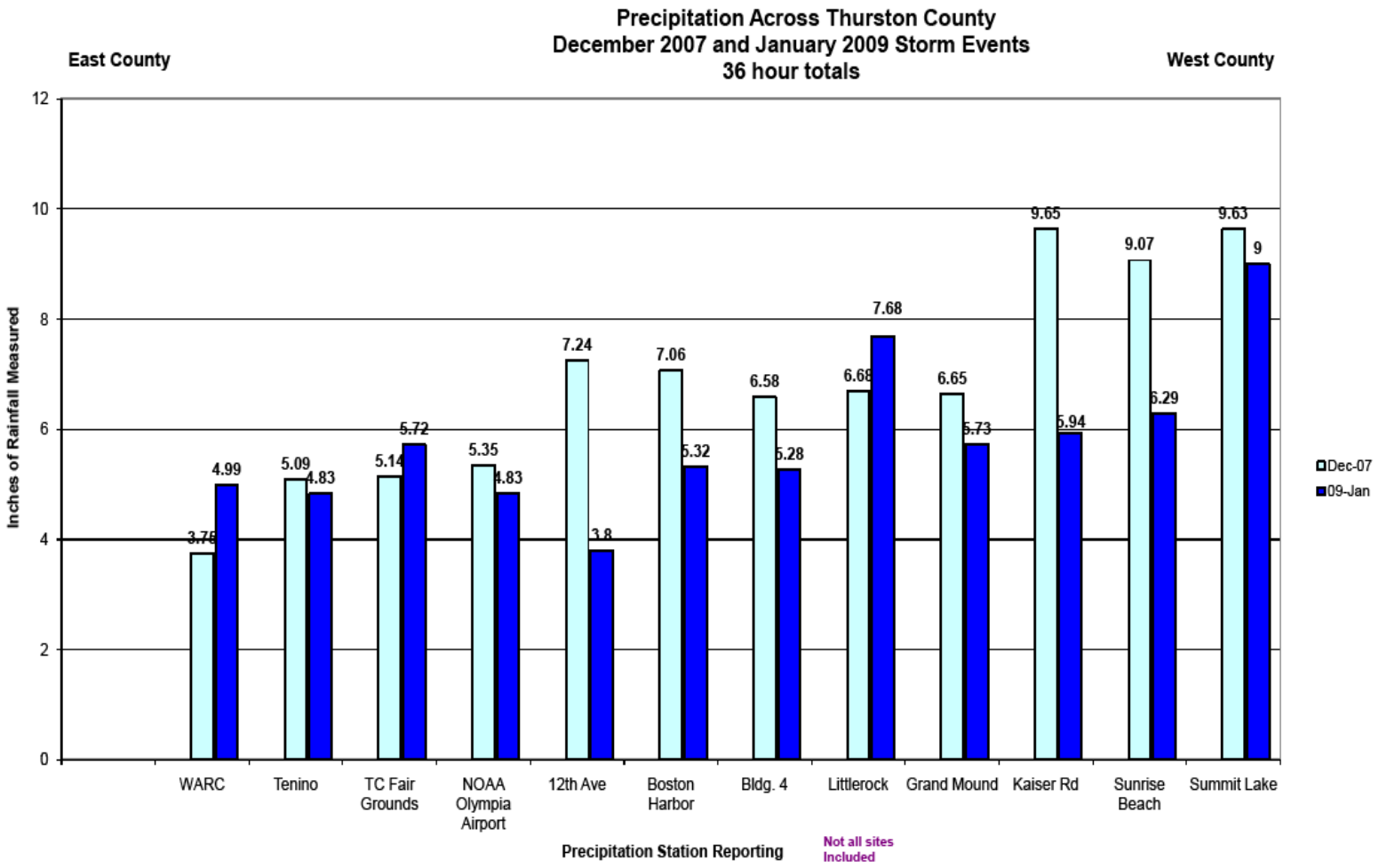
THURSTON COUNTY ENVIRONMENTAL MONITORING PROGRAM TOUR

M. Biever and H. Hama

March 3, 2011

Precipitation




Precipitation Across Thurston County
December 2007 and January 2009 Storm Events
36 hour totals
East County
West County
Inches of Rainfall Measured
0
2
4
6
8
10
12
3.76
4.99
5.09
4.83
5.14
5.72
5.35
4.83
7.24
3.8
7.06
5.32
6.58
5.28
6.68
7.68
6.65
5.73
9.65
5.94
9.07
6.29
9.63
9
WARC
Tenino
TC Fair Grounds
NOAA Olympia Airport
12th Ave
Boston Harbor
Bldg. 4
Littlerock
Grand Mound
Kaiser Rd
Sunrise Beach
Summit Lake
Precipitation Station Reporting
Not all sites Included
Dec-07
09-Jan

Groundwater


ESN

DRAFT

Evergreen Terrace
(In front of 8938 9th Way SE)

February 27, 2007

1 of 6

method: Hollow Stem Auger
6" Dia - 2" Dia SPT

ET-1(A) *Automated Datalogger Station

Depth (ft)	Material Graphic	Material Description	
0-4		roots and fill Brown silty GRAVEL (GW) with fine sand; moist Loose, gravels are round to 2": Cobbles >3"	est fines ~10%
4-8 S-1			
8-12		Gray, silty GRAVEL(GW) with sand; moist sand is fine to med, gravel < 2" trace clay	est fines ~10%
S-2 12-16		Gray silty Gravel (GW) with sand and Cobbles Loose, wet Cobbles and gravel are round 2-4" dia	est fines ~15%
16-20 GW 17.6		Gray silty GRAVEL (GW) with sand; loose, wet Cobbles (drilling becomes more difficult at 18') trace clay	est fines ~10-15%

Well Detail

Stainless Steel Transducer 20.0' bgs

* Specifications for Automated Datalogger on Following Sheet

Terminated Boring at 20' BGS : Constructed 2" dia # 40 slot screen PVC to 5' bgs with silica sand backfill
2" Solid wall PVC from 5' to Surface, bentonite to 1', concrete to surface mon
12" dia locking steel surface mon.
1" Dia conduit to Automated Groundwater Collection Datalogger

Driller Notes: Water level could not be determined (bgs)
Cobbles are variable may be as large as > 6"
Drilling becomes difficult at 18.5 to 20; likely cobbles

Lab Sampling: Bag Samples S-1 and S-2 Collected for Lab Analysis
Composit samples from auger castings 4-16'

Evergreen Terrace
(In front of 8938 9th Way SE)

February 27, 2007
method: Hollow Stem Auger
6" Dia - 2" Dia

Well Construction

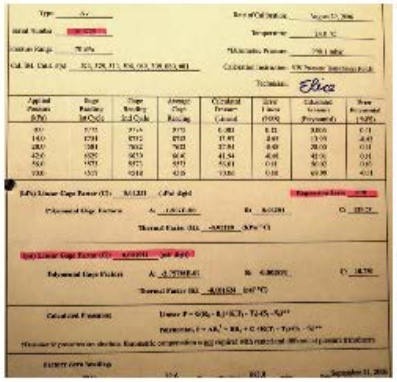
0-5 Feet Solid Wall PVC 2-In Dia
5-20 feet # 40 Slotted 2-In Dia PVC
20 feet solid end cap
Coarse Silica Sand Backfill from 20 to 2 ft BGS

ET-1(A) *Automated Datalogger Station
Radio Data Collection and Communication

Automated Groundwater Collection Station
During Construction

Automated Groundwater Collection Station
After Construction

Sensor Calibration Information



Radio Access Station
Datalogger: Network ADDRESS # 4

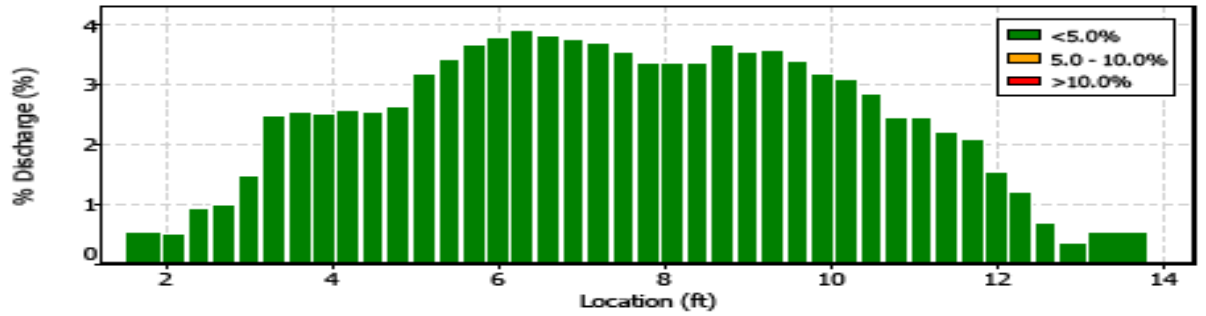

VUE AVE SW
CRK DR SW 11500

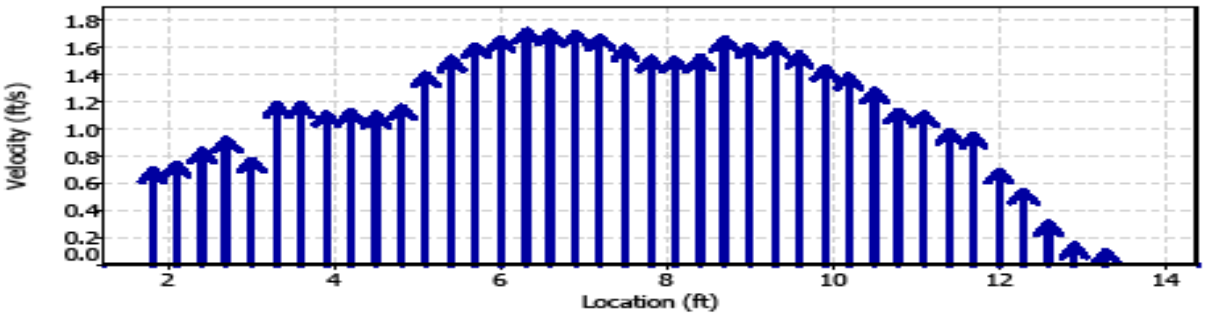
Streamflow

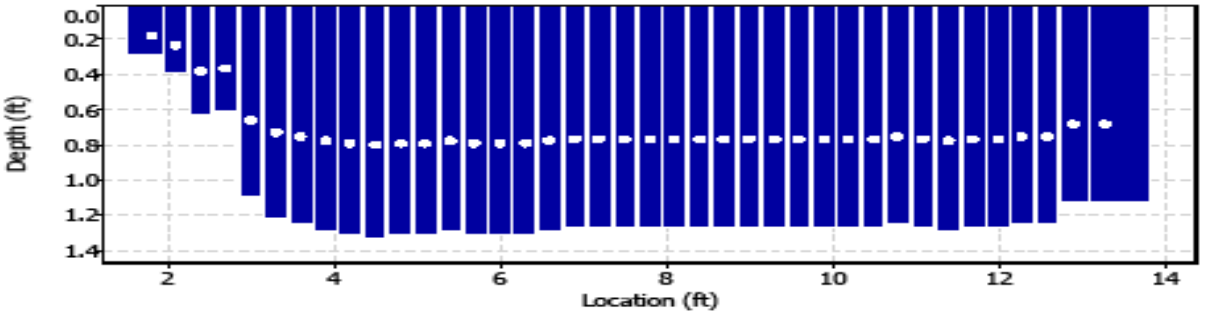
Discharge Measurement Summary

Date Generated: Mon Dec 28 2009

File Information		Site Details	
File Name	23B1221.14.WAD	Site Name	PERCIVAL CK 122109
Start Date and Time	2009/12/21 14:15:58	Operator(s)	HYH





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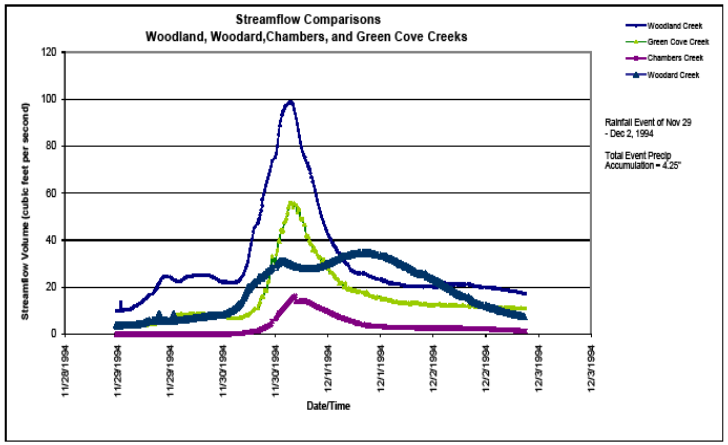
1.10

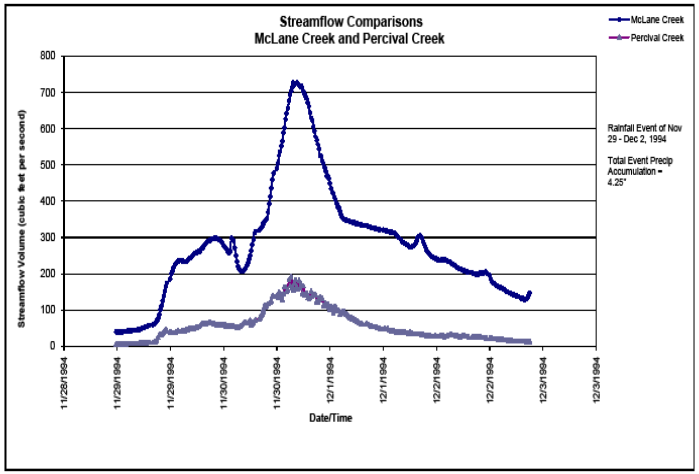

KEN GRANT
360-412 3215
2210

Streamflow Data

COMPARISON OF LOW FLOW STREAMS



COMPARISON OF HIGHER FLOW STREAMS



Landslides


01.16.2009 13:36


320C

Earthquakes – Olympia Nisqually 2001


SEATTLE 206-763-6929
ympia (360) 709-2769
2nd SAVES
WA. CONT. #SECONUBOTINS


CAPITOL WAY

Closing –

We monitor our environment to understand what is happing around us so we can build a safer and smarter tomorrow

japan_landslide.wmv