



# Quarterly Project Status

## October 25, 2006

Vashon-Maury Island  
Water Resources Evaluation

October 25, 2006



# Quarterly Review

- Ongoing monitoring overview
- WRE reports update
- Modeling update
- Budget
- Next Quarter

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# Island Monitoring

- Stream and Precipitation gauging continuing...weather station soon
- WL measurements continued in 2006
  - new self-monitoring volunteers (currently have 7)
- Dedicated monitoring wells
  - Leveloggers (continuous WL)
  - WQ sampling to start in 2007

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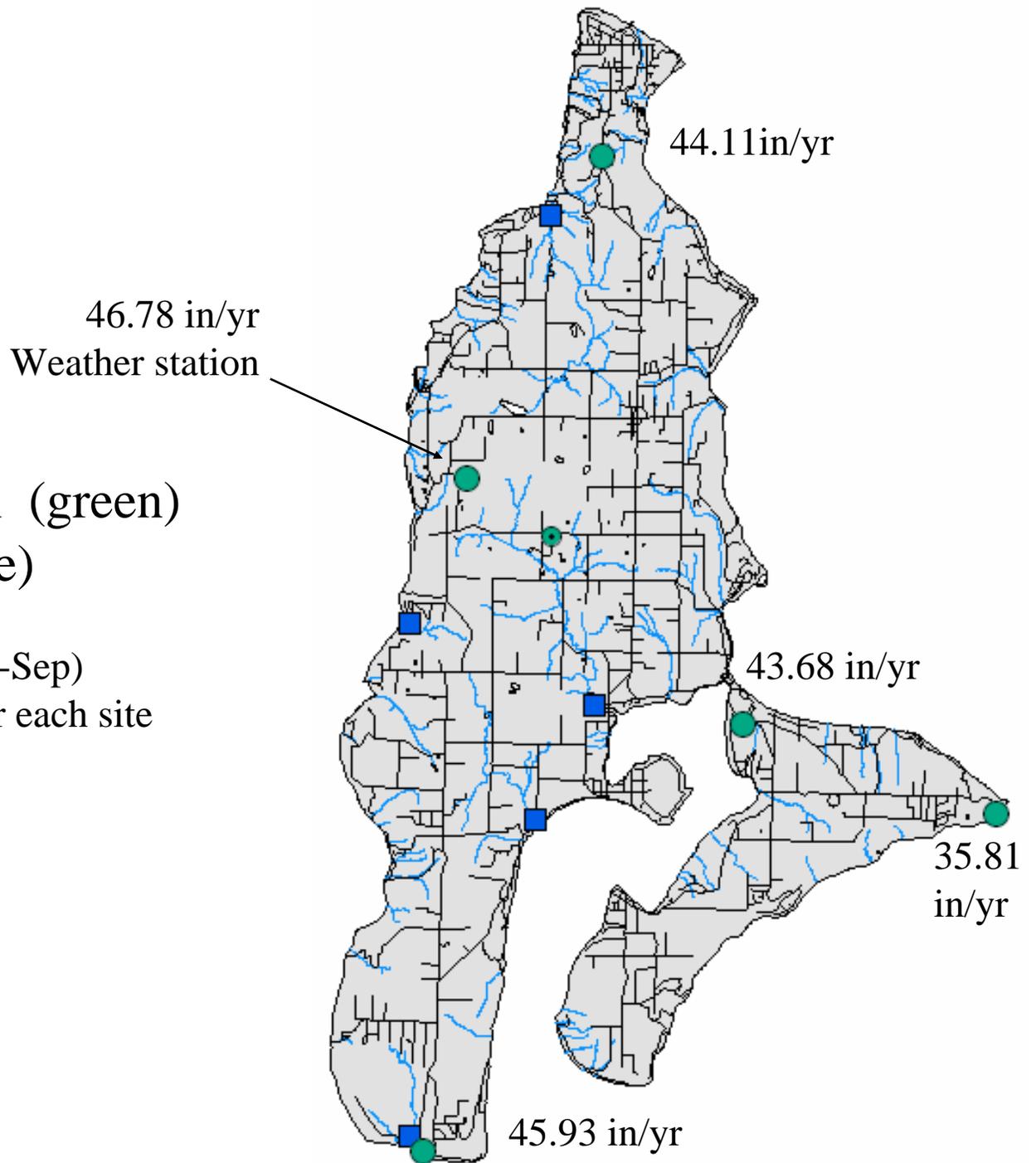


# VMI WRE Stream & Precipitation Stations

- 5 – Precipitation (green)
- 5 – Stream (blue)

2006 Water year (Oct-Sep)  
precipitation totals for each site

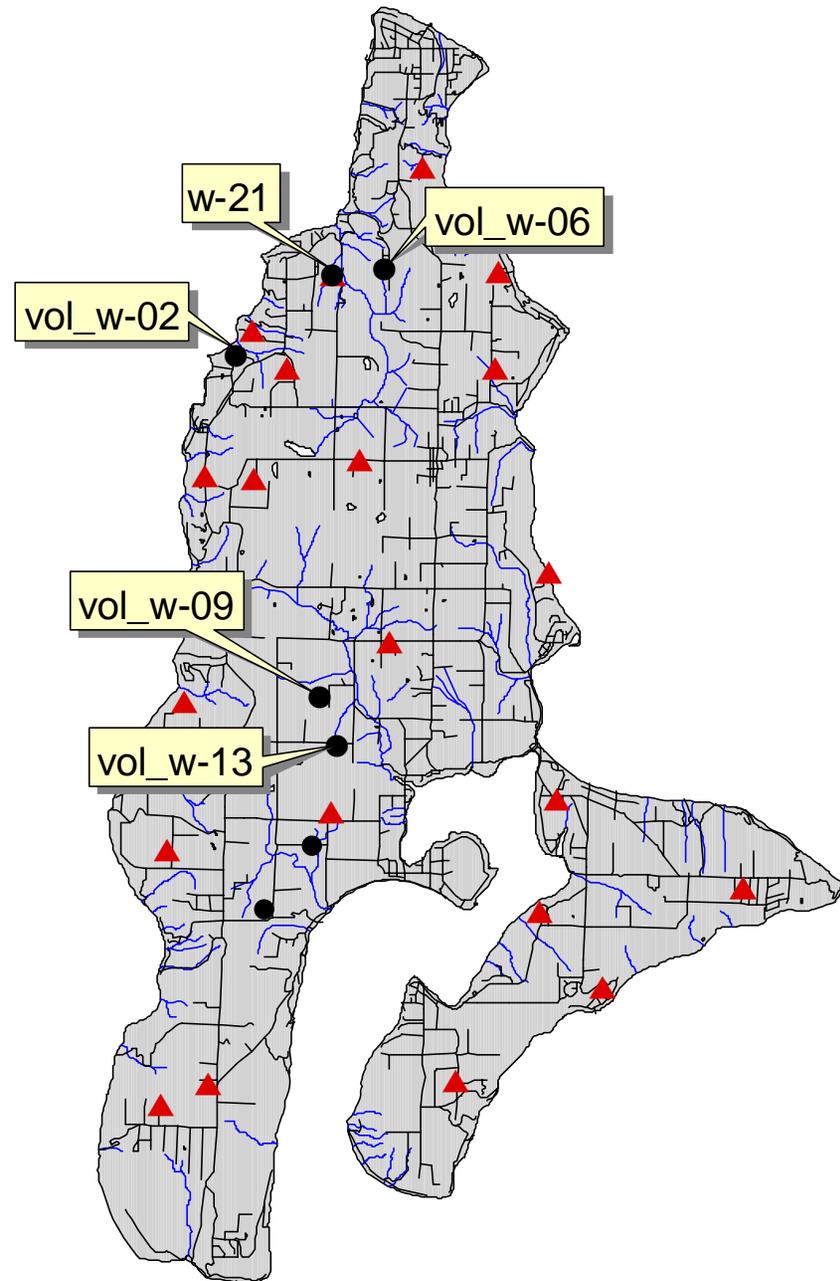
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# VMI Volunteer WL sites

Circles = active volunteer WL sites  
[2 new sites in 2006]

Triangles = active WQ sites



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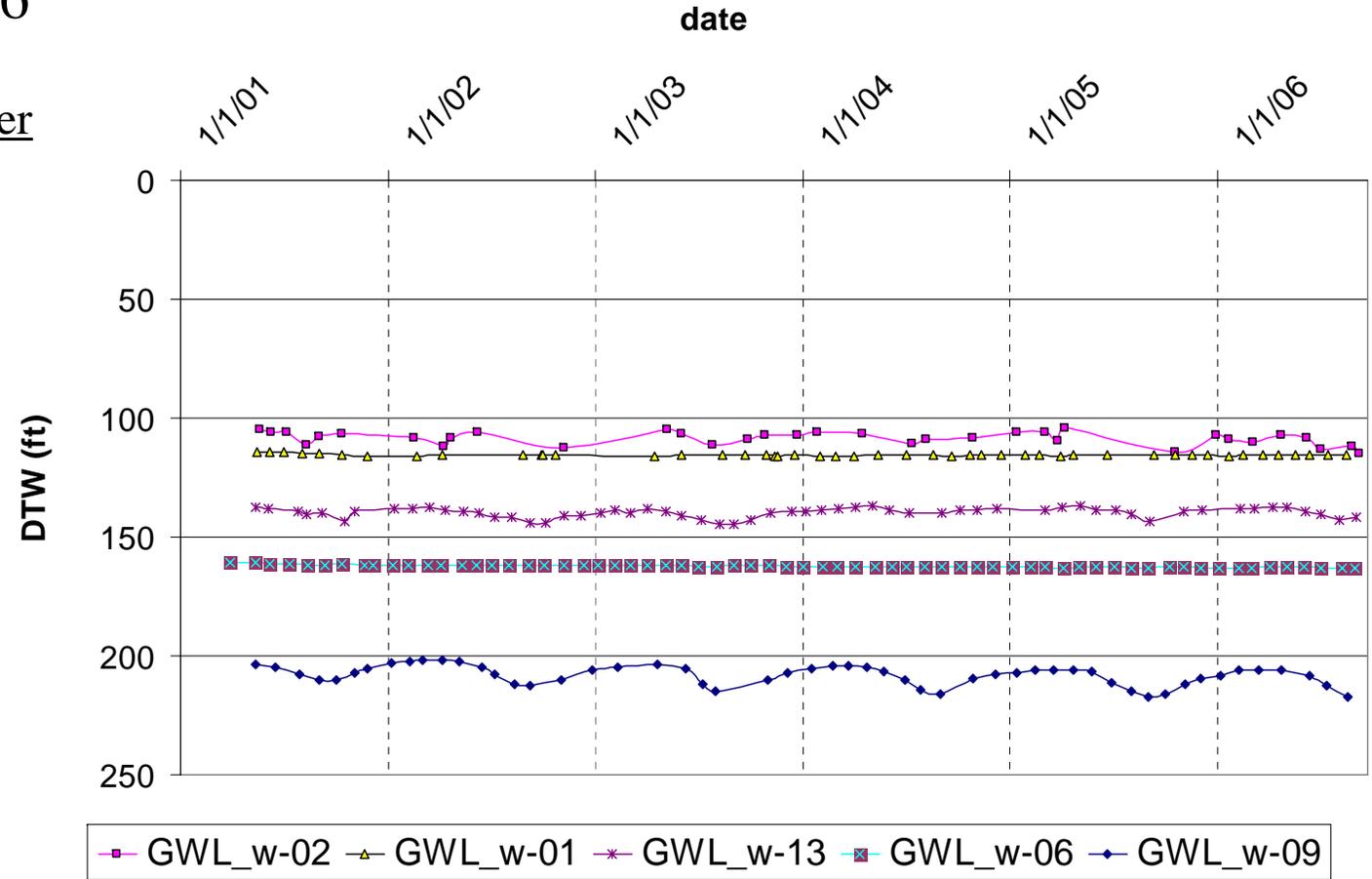




# Volunteer Water Level Data 2001-2006

Depth to Water

- GWL\_w-02
- GWL\_w-01
- GWL\_w-13
- GWL\_w-06
- GWL\_w-09



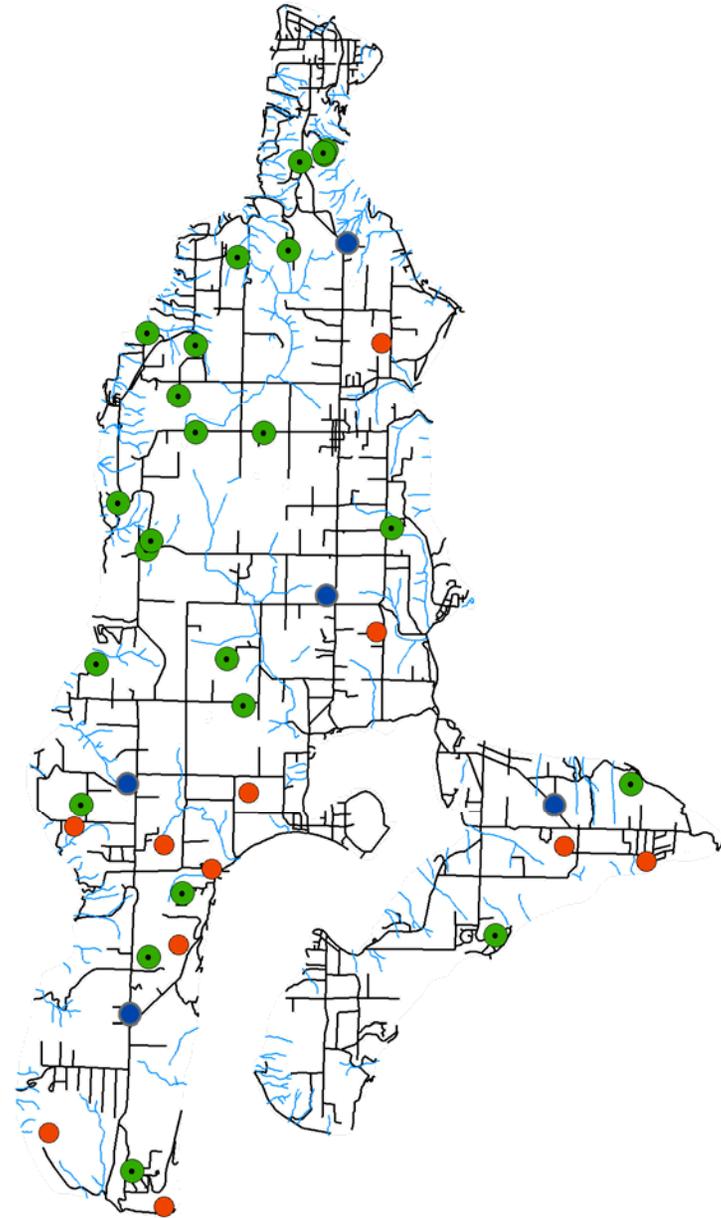
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# WL survey sites

24 Existing WL locations (green)

10 Potential WL locations (orange)  
[5 sites did not work]

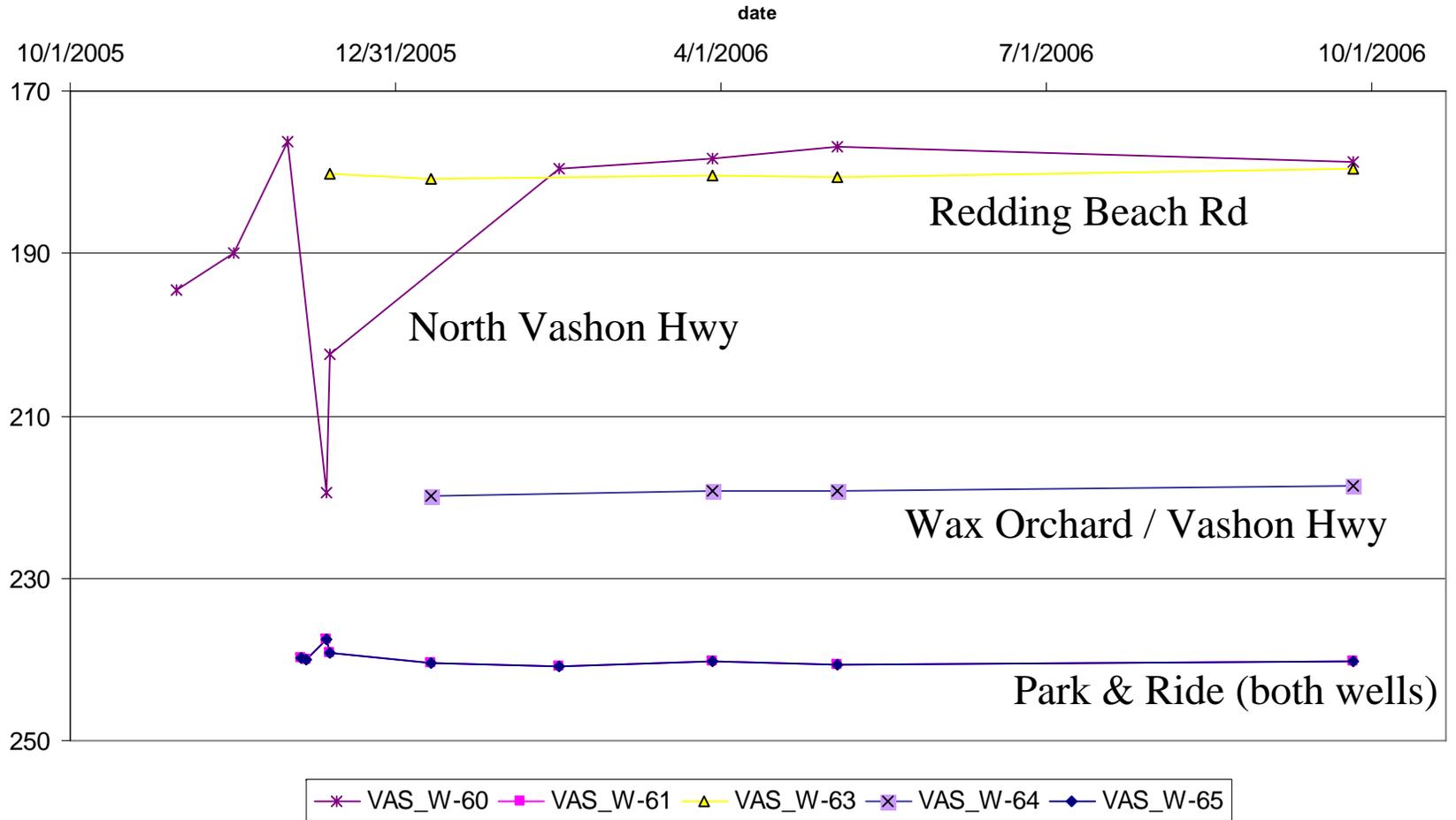
6 Monitoring Well locations (blue)



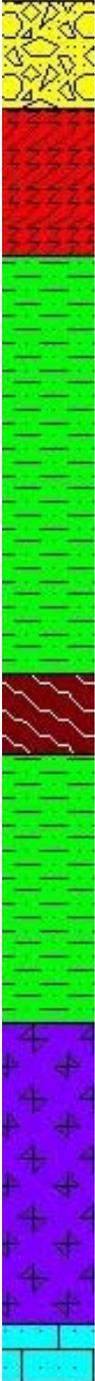
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# VMI Monitoring Wells: Water Table elevations



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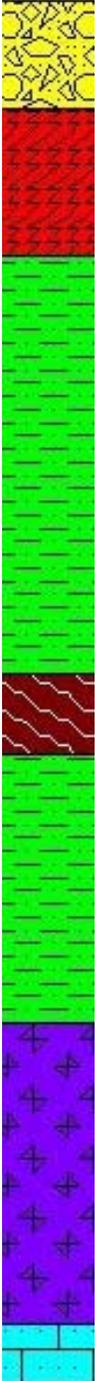
# Island Monitoring con't

## ■ Judd Creek Monitoring

- Monthly
  - conventional and microbiologic parameters
- Quarterly or twice annually
  - Organics (not EDC's)
  - Low level metals

## ■ Marine Monitoring in Quarter Master Harbor (not WRE funded)

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# WRE Reports Update

- 2005 Well Data Report...completed.
  - Available via the web within 2 weeks
  - Copies given to GWPC members
- Next report
  - 2006 Water Resources Data report
    - Plan to be completed by April meeting

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# Grant support

- DOE WRIA 15 grant support
  - 5 tasks listed within the grant
    - Susie K helping with initial 2 tasks
    - WRE staff time to help implement other 3 tasks
  - Exempt Well Flow Determination (part of task 4)
    - Public campaign for volunteers to have exempt well monitored for usage. A goal of 6-8 different (spatial and aquifer zones) systems.
    - Obtain metering equipment
    - Hire well system designer/repair person to install equipment
    - Monthly or quarterly readings of usage
  - Organic parameter sampling (pesticides and fertilizers) of selected

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# WRE Modeling

## ■ Phase II updates

- Initial surface water model developed (Mike-11)
  - Island-wide
- Phase I GW model converted into Mike-SHE
  - Simplified GW model (less layers)
  - SW model on top of GW

## ■ Timeline:

- Spring 2007 - Integrated model done
- Fall 07 - Transient model / scenarios

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Initial surface  
water model  
developed (Mike-  
11)

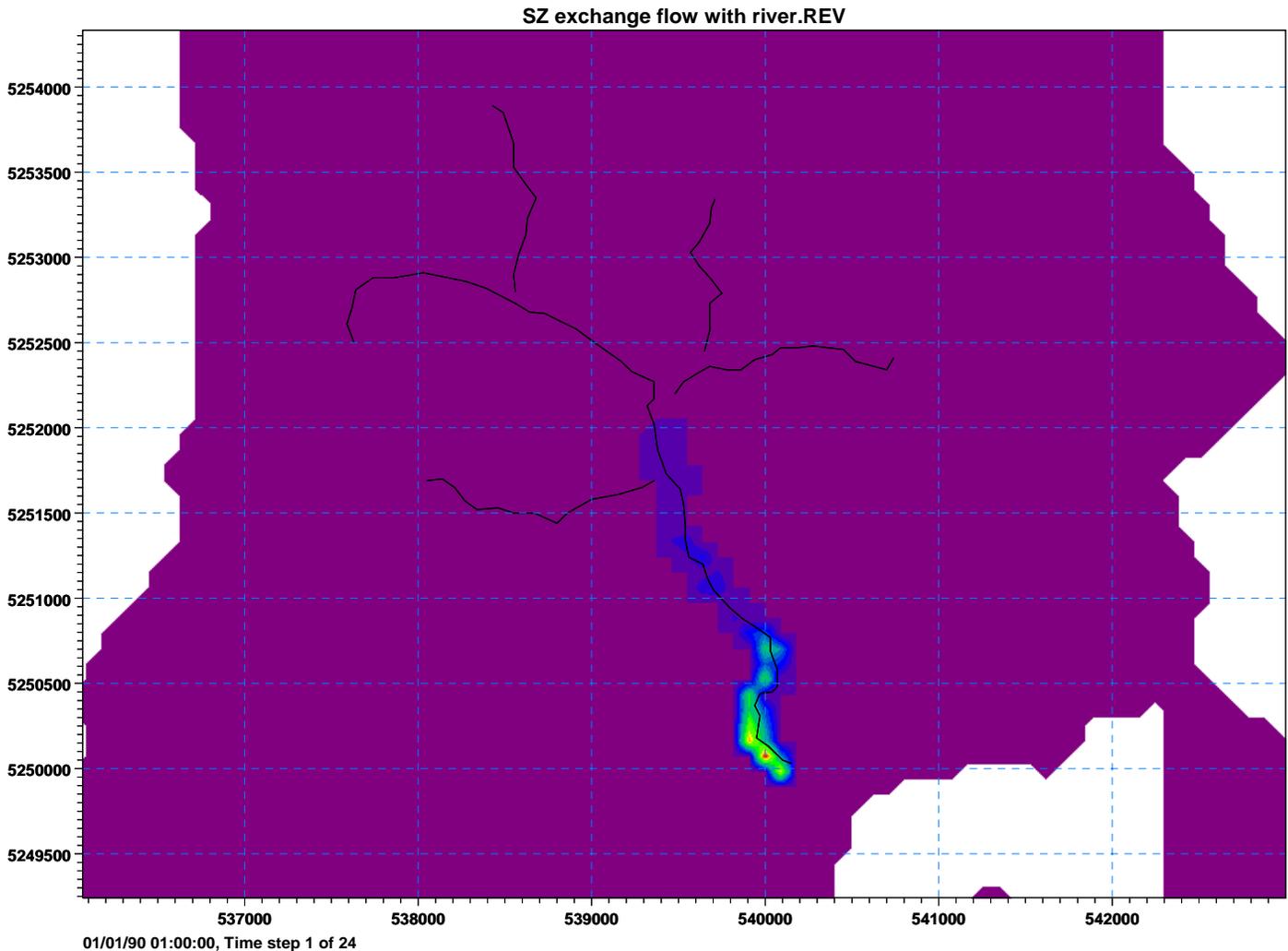
Island-wide

18 streams

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# Example of Areas of direct surface-subsurface connection: Judd Creek



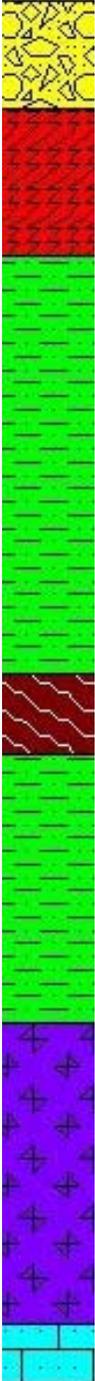
Graphical Items  
 x Color point  
 x Width point

Palette

0.07 -	0.075
0.065 -	0.07
0.06 -	0.065
0.055 -	0.06
0.05 -	0.055
0.045 -	0.05
0.04 -	0.045
0.035 -	0.04
0.03 -	0.035
0.025 -	0.03
0.02 -	0.025
0.015 -	0.02
0.01 -	0.015
0.005 -	0.01
2.91e-010 -	0.005
Below	2.91e-010
Undefined Value	

01/01/90 01:00:00, Time step 1 of 24

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## 2006 Budget

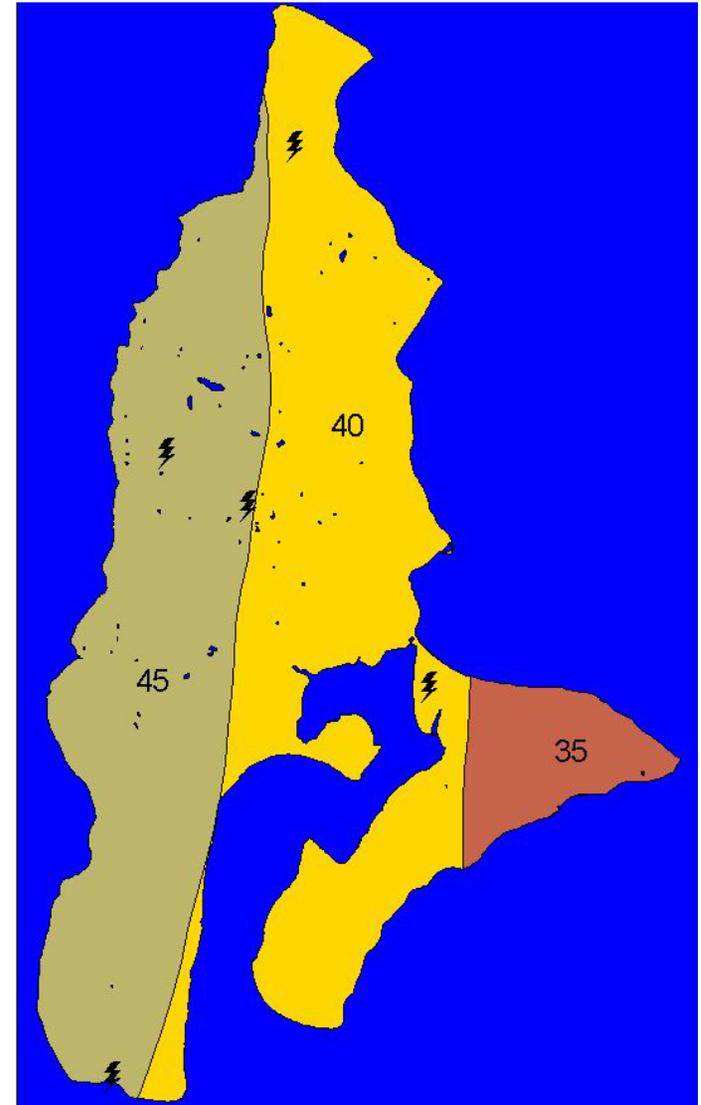
- Expenses (to date) for 2006: \$170,220
- Project budget for 2006 is \$211,630
  - Previously reported ~177K (January).
  - Previously reported ~177K (April).
  - Previously reported ~156K (July).
  - New total budget total resulted from a mid-year adjustment of capital accounts
    - Purchasing monitoring equipment

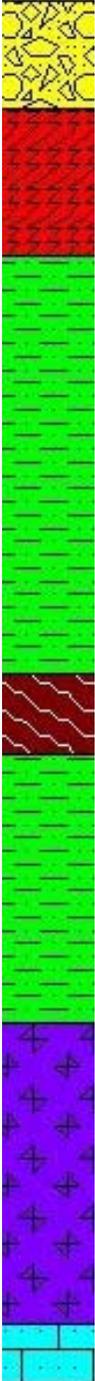
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# Next Quarter

- Precipitation Data analysis map
- Water table contour map
- Grant support
  - Exempt Well Flow task update
- Continued activities
  - Gauging
  - WL data
  - Modeling

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# GWPP websites

## ■ Groundwater link

– <http://dnr.metrokc.gov/groundwater>

## ■ VMI WRE page:

– <http://dnr.metrokc.gov/wlr/WQ/vashon-island/index.htm>

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